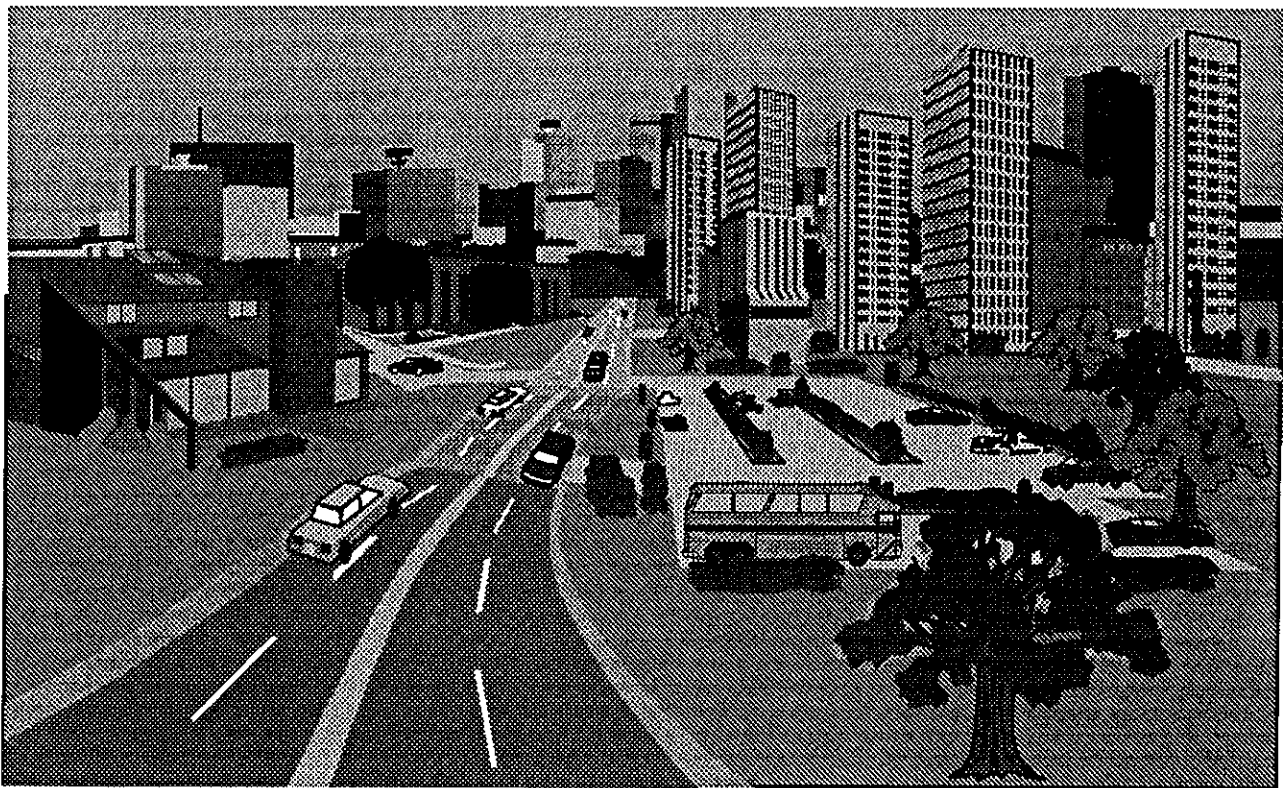


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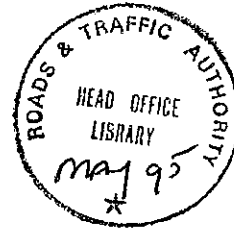
Land Use Traffic Generation Data and Analysis 26

Plant Nurseries



Roads and Traffic Authority
New South Wales
1994

ROADS AND TRAFFIC AUTHORITY



LAND USE TRAFFIC GENERATION
DATA AND ANALYSIS 26
- PLANT NURSERIES



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APPENDIX

1 INTRODUCTION

1.01 Colston Budd Hunt and Twiney Pty Ltd in association with Project Planning Associates Pty Ltd have been commissioned by the Roads and Traffic Authority to conduct surveys and analysis of the traffic generation characteristics of "Plant Nurseries".

1.02 The definition of "Plant Nursery" for the purpose of this study is any place at which horticultural stock is propagated for the purpose of sale. Horticultural stock means tree, vine, plant, shrub or other vegetation.

1.03 The study required an extensive data collection exercise of fifteen plant nursery sites predominantly located in the Sydney Metropolitan Area. We would like to thank the various plant nursery operators/managers for their assistance in undertaking the study and for allowing us to survey the operation of their plant nursery facilities.

1.04 The findings of the study are set down through the following chapters:

- ☐ Chapter 2 - discussing survey procedures;
- ☐ Chapter 3 - setting down survey results and analysis for the various nurseries; and
- ☐ Chapter 4 - summarising the study findings.

2 SURVEY LOCATION

2.01 The surveys were aimed at collecting relevant traffic and parking data concerning the operation of the various plant nurseries. The primary parameters that would be used in the assessment of proposed plant nurseries are as follows:

- ☐ Peak Vehicle Trip (PVT) generation;
- ☐ Peak Person Trip (PPT) generation; and
- ☐ Peak Parking Accumulation (PPA).

2.02 The surveys were therefore aimed at quantifying these parameters. Information was also collected on the physical characteristics of the plant nurseries including their location, size, parking provision, customer facilities, display area etc.

Definitions

2.03 A number of technical terms are used throughout this report. The definition of these terms are set out below:

- | | |
|--|--|
| <input type="radio"/> Site Area | Total gross floor area of plant nursery, including production area, display area, storage area, parking area, customer facilities etc; |
| <input type="radio"/> Landscape Area | Gross floor area of landscaping supply section; |
| <input type="radio"/> Production Area | Gross floor area used for the propagation of plants for the purpose of sale. This area is generally inaccessible to public; |

-
- | | |
|---------------------------------------|--|
| ○ Display Area | Gross floor area (covered and uncovered) used for the display of plants for the purpose of sale. This area is accessible to the public; |
| ○ Frontage Streets (number) | Number of streets to which the plant nursery has immediate frontage, but not necessarily access; |
| ○ Access Driveways (number) | Number of vehicular driveways providing access to the plant nursery; |
| ○ Peak Vehicle Trip Generation | The maximum number of vehicles entering and departing the plant nursery in a one hour period on the day of observation (Note: total two-way generation); |
| ○ Peak Person Trip Generation | The maximum number of people entering and departing the plant nursery in a one hour period on the day of observation (Note: total two-way generation); |
| ○ Parking Capacity | The number of formal and informal off-street parking spaces; |
| ○ Parking Accumulation | The number of vehicles parked in association with the plant nursery every 15 minutes over the survey period; |
| ○ Peak Parking Accumulation | The maximum number of vehicles parked in association with the plant nursery during the period identified; |
-

-
- | | |
|---|---|
| <input type="radio"/> Time of Peak Site Visits | The hour during which peak site generation occurred; |
| <input type="radio"/> Vehicle Occupancy | The average number of people present within each vehicle arriving at the plant nursery during the day of observation; and |
| <input type="radio"/> Other Uses | The number and types of other uses and activities within the development together with the plant nursery activities in the complex. |

Site Selection

- 2.04 It was required that a total of fifteen plant nurseries be surveyed in order to provide a sufficient range of data to allow confidence in the results. It was essential therefore to develop site groups with similar size and composition characteristics and to select sites which could be surveyed effectively. It was decided to predominantly concentrate on plant nurseries located in the Sydney Metropolitan Area so as to achieve a good geographical spread and representation.
- 2.05 The choice of sites was determined by a desire to survey plant nurseries with a range of characteristics. The main parameters that were taken into account in the selection process were:
- ☐ geographic spread;
 - ☐ local population (local residents and working population);
 - ☐ the size of plant nursery;
 - ☐ the location (free standing or mixed with retail or wholesale activities);
 - ☐ different road frontage conditions.

2.06 Some plant nurseries are combined with other uses (eg. nursery and hardware store or nursery and fruit store) and as such may have different traffic generation characteristics. At least three of the 15 selected plant nurseries were required to incorporate, to some degree, a combination of other uses.

2.07 The selected plant nurseries were as follows:

- Wagon Wheel Nursery - Baulkham Hills;
- Blacktown City Garden Centre - Blacktown;
- Clarke and Walker - Cammeray;
- Hargraves Nursery - Dural;
- Flower Power Nursery - Enfield;
- Hornsby Garden Centre - Hornsby;
- Lakeview Nursery - Kingsford;
- Drive-In Garden Centre - Kingswood;
- Flower Power Nursery - Moorebank;
- Sherringhams Nursery - North Ryde;
- All Seasons Garden Centre - Ourimbah;
- Peakhurst Garden Centre - Peakhurst;
- Flower Power Nursery - Taren Point;
- Bonds Nursery - Terrey Hills; and
- Flower Power Nursery - Warriewood.

2.08 The plant nurseries which incorporated other uses were:

- Clarke and Walker - Cammeray;
- Hargraves Nursery - Dural; and
- Flower Power Nursery - Enfield.

2.09 Clarke and Walker, Cammeray, is predominantly a hardware store incorporating a plant nursery. This site also provides a drive through building supplies section. Clarke and Walker is located on the south-west corner of the intersection of Miller Street and Amherst Street, Cammeray. The plant nursery occupies some 300m² of the northern section of the facility and provides open display area as well as covered

display area. Off-street parking is provided by a formal car park of some 47 spaces off Amherst Street, which is shared by the hardware store and plant nursery.

- 2.10 The Flower Power Nursery, Enfield, is located on the southern side of Mitchell Street opposite Henley Park. The site incorporates, along with the nursery, a pet store, fruit market and a landscape supply centre. These facilities are not associated with the nursery but share the central 166 space off-street car park. The plant nursery itself has a gift shop, a cafe and open space gardens. The surrounding land-use is generally residential with Henley Park located opposite the nursery in Mitchell Street.
- 2.11 Hargraves Nursery, Dural, is a plant nursery but also incorporates a large tropical butterfly house and animal/bird enclosures. These facilities are located at the rear of the nursery with access provided by a lane adjacent to the nursery. A car park is located adjacent to these facilities and an outdoor picnic area is also available for visitors. Hargraves Nursery organise tours through the butterfly house for small groups as well as school visits. A cafe is available for light luncheons and a gift shop is also available.

Survey Times and Tasks

- 2.12 Surveys were conducted at the various selected plant nurseries on both a Saturday and Sunday period. These days were identified by the nursery operators/managers to be the busiest times of the week. The surveys were generally undertaken between 10.00am and 3.00pm on both days. Some surveys were however extended to 4.00pm so as to ensure that the entire peak period was covered during the survey period.
- 2.13 Site inspections were carried out of the various plant nurseries. During these inspections, sketch layouts of each site were prepared and the following data collected:
- ☐ site area;
 - ☐ gross leasable floor area;
 - ☐ days and hours of operation;
 - ☐ number and types of other uses and activities;
 - ☐ number of employees;

- ☐ number of on-site parking spaces;
- ☐ on-street parking availability;
- ☐ number of frontage streets;
- ☐ number of access driveways; and
- ☐ general site characteristics.

2.14 The surveys at the plant nurseries took two main forms, direct observation and interviews. Direct observation was used to measure the following parameters:

- ☐ vehicle movements into the site;
- ☐ vehicle movements out of the site;
- ☐ vehicle occupancy;
- ☐ person movement in and out of the plant nursery; and
- ☐ on-site parking demand.

2.15 The interview surveys were primarily undertaken to establish mode of travel, group size, length of stay, purpose of trip and if travelled by car where did they park.

Analysis Methodology

2.16 The data has been analysed in order to attempt to establish the formulation of relationships or models which could be used to both explain observed behaviour and to test sensitivity to relevant parameters.

2.17 The statistical technique used for the analysis is multiple linear regression. The multiple regression equation is of the form:

$$Y = a(0) + a(1) X (1) + a(2) X (2) + \dots + a(k) X (k)$$

where Y is the dependent variable - the particular parameter it is wished to predict, and X(1) to X(k) are the independent variables used for the prediction. It is an important point to remember that the equation is only valid within the ranges of values

of the independent variables which were used to derive it. Thus although $a(0)$ may be non-zero in a given equation it does not imply that the equation is valid when all the independent variables are zero.

- 2.18 The degree of accuracy of the regression equations is represented by the coefficient of determination, R^2 , where:

$$R^2 = A/B$$

where

A = variation in Y explained by the combined linear influence of the independent variables;

B = total variation in Y.

- 2.19 Thus if the R^2 for an equation is 0.85 then it means that 85 per cent of the variation in the dependent variable can be explained by the independent variables. An R^2 of 1.0 is a perfect fit. R^2 is a useful indicator of the relative accuracy of a model, when compared with other models using the same dependent variable. The independent variables must not be highly intercorrelated. If this condition exists there is no acceptable way of performing a regression analysis with the given set of independent variables.

- 2.20 Statistical analysis of the survey data has been undertaken using the CSS:STATISTICA computer package. This package provides an integrated system combining statistical data processing, data base management and graphics system. Simple regression and multiple regression have been used to develop descriptive relationships between dependent and independent variables for plant nurseries.

2.21 The analysis process was as follows:

- development of data management system;
- preparation of correlation matrix;
- simple linear regression;
- stepwise multiple linear regression.

2.22 *Data Management System* - a data management system was firstly prepared which tabulated the dependent and independent variables for the respective plant nurseries for each of the survey periods.

2.23 *Correlation Matrix* - the data management system was then used to prepare correlation matrices which indicate the degree to which independent variables are related to dependent variables (correlation co-efficient, R). These matrices were prepared for each of the survey periods in order to determine which of the independent variables were highly correlated with the dependent variables, as well as to determine the intercorrelation between independent variables.

2.24 *Simple Regression* - simple linear regression describes the mathematical relationship between one independent variable to one dependent variable. Scatter plots were prepared between each of the dependent variables against their most highly correlated independent variable so as to view the general form of the relationship between the variables. The scatter plots incorporated regression lines through the points as well as the 95 per cent confidence interval for the regression line.

2.25 The most significant relationship between particular variables identified from these scatter plots, will be discussed in detail in Chapter 3. It should be noted that in some cases "outliers" have been removed from the scatter plots in order to investigate the variation in the regression equation and to determine the significance in the improvement to the correlation coefficient.

2.26 The mathematical relationships between dependent and independent variables is only valid within the ranges of values of the independent variables which were used to derive the regression equation.

- 2.27 *Multiple Regression* - multiple linear regression was undertaken for each of the dependent variable against various combinations of independent variables, which were not highly intercorrelated. The process which was used was forward stepwise multiple linear regression.
- 2.28 Independent variables were entered into the regression analysis one by one in order to determine if there was any significant improvement in the mathematical relationship for the dependent variable. The order of inclusion was dependent upon the respective contribution of each variable to the explained variance, by the use of the respective F-ratio. Independent variables were entered into the regression analysis until the addition of one more variable did not significantly improve the overall fit of the model.
- 2.29 The next chapter discusses the survey results and analysis for the plant nurseries.

3 SURVEY RESULTS AND ANALYSIS FOR PLANT NURSERIES

3.01 The plant nurseries selected for the survey were as follows:

- ☐ Wagon Wheel Nursery - Baulkham Hills;
- ☐ Blacktown City Garden Centre - Blacktown;
- ☐ Clarke and Walker - Cammeray;
- ☐ Hargraves Nursery - Dural;
- ☐ Flower Power Nursery - Enfield;
- ☐ Hornsby Garden Centre - Hornsby;
- ☐ Lakeview Nursery - Kingsford;
- ☐ Drive-In Garden Centre - Kingswood;
- ☐ Flower Power Nursery - Moorebank;
- ☐ Sherringtons Nursery - North Ryde;
- ☐ All Seasons Garden Centre - Ourimbah;
- ☐ Peakhurst Garden Centre - Peakhurst;
- ☐ Flower Power Nursery - Taren Point;
- ☐ Bonds Nursery - Terrey Hills; and
- ☐ Flower Power Nursery - Warriewood.

3.02 The choice of sites was determined by a desire to survey plant nurseries with a range of characteristics. The main parameters that were taken into account in the selection process were:

- ☐ geographic spread;
- ☐ local population (local residents and working population);
- ☐ the size of plant nursery;
- ☐ the location (free standing or mixed with retail or wholesale activities);
and
- ☐ different road frontage conditions.

3.03 The main features of the plant nurseries are summarised in Table 3.1 and their locations are shown on Figure 1. It can be seen from Figure 1 that a good geographic spread has been obtained. The plant nurseries selected ranged in size from some 1,300m² to some 33,900m² with on-site parking ranging from 0 to some 180 spaces. Hornsby Garden Centre and Peakhurst Garden Centre do not provide any on-site parking.

3.04 The selected plant nurseries could generally be categorised by size into the following four groups:

- ☐ Group 1 consisting of plant nurseries with site area less than 2,000m². Plant nurseries include Blacktown, Hornsby and Peakhurst;
- ☐ Group 2 consisting of plant nurseries with site area ranging from 5,000m² to 10,000m². Plant nurseries include Baulkham Hills, Cammeray and Ourimbah;
- ☐ Group 3 consisting of plant nurseries with site area ranging from 10,000m² to 20,000m². Plant nurseries include Enfield, Kingsford, Kingswood, Taren Point and Warriewood; and
- ☐ Group 4 consisting of plant nurseries with site area greater than 20,000m². Plant nurseries include Dural, North Ryde, Moorebank and Terrey Hills.

TABLE 3.1: SUMMARY DESCRIPTION FOR PLANT NURSERIES

Parameter	Baulkham Hills	Blacktown	Cammeray	Dural	Enfield	Hornsby	Kingsford	Kingswood	Moorebank	North Ryde	Ourimbah	Peakhurst	Taren Point	Terrey Hills	Warriewood
Site Area (m ²)	5230	1480	4080	27940	19300	1270	13500	17750	22510	30680	9870	1480	18570	33860	19880
Display Area (m ²)	2950	960	300	4400	10020	1160	7500	9130	13770	17650	5720	1390	13580	12200	9570
Landscape Area (m ²)	1160	N/A	N/A	N/A	1180	N/A	820	1200	1320	3300	1100	N/A	920	3140	3680
Production Area (m ²)	N/A	N/A	N/A	10300	N/A	N/A	N/A	N/A	N/A	N/A	750	N/A	N/A	12700	4200
No. of parking spaces	26	12	47	155	166	0	82	52	179	102	79	0	65	140	49
On-street parking availability	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of frontage streets	2	1	2	1	2	2	1	1	1	3	2	1	2	3	1
No. of access driveways	2	2	2	3	2	0	1	1	3	2	4	0	2	3	2
Average no. of employees present	8	5	4	10	11	2	10	2	10	17	8	4	8	18	5
Peak Period	Sun	Sun	Sat	Sun	Sun	Sat/Sun	Sun	Sun	Sun	Sun	Sun	Sat	Sun	Sun	Sun

- 3.05 The majority of the plant nurseries surveyed provided a landscaping section and only 3 of the 15 nurseries provided a formal production area. Each of the plant nurseries surveyed provided a mixture of open and covered display area of varying sizes, for the presentation of saleable plants. The majority of the nurseries are located along busy roads. It is therefore considered that the selected plant nurseries are a representative sample of plant nurseries predominantly located in the Sydney Metropolitan Area. All Seasons Garden Centre, Ourimbah, was the only plant nursery located outside the Sydney Metropolitan Area. Sketches of the site layouts for each of the fifteen plant nurseries selected are shown in Appendix A.
- 3.06 Following discussions with the operators/managers of the selected plant nurseries, regarding the operation of their facilities, it was indicated that Saturday and Sunday are the busiest days of the week. It was therefore decided to carry out surveys on these two days. The busiest times on these days were generally identified as being between 11.00am and 2.00pm. The surveys were therefore undertaken continuously over the period 10.00am to 3.00pm on both days. Some surveys were however extended to 4.00pm so as to ensure that the entire peak period was covered during the survey period.

Survey Results

- 3.07 The main results of the surveys are set out in Appendix A and summarised in Tables 3.2 to 3.5. These tables deal with the following aspects:
- ☐ Table 3.2 - vehicle trips per hour by time of day;
 - ☐ Table 3.3 - person trips per hour by time of day;
 - ☐ Table 3.4 - peak parking accumulation by time of day; and
 - ☐ Table 3.5 - summary of major traffic parameters.

- 3.08 Table 3.2 sets out the number of vehicles generated by the fifteen plant nurseries for each hour surveyed on the Saturday and Sunday. These figures are equivalent to the two-way traffic generation, that is the sum of arrivals and departures. It can be seen from Table 3.2 that the number of vehicles generated by the various plant nurseries is generally higher on the Sunday than on the Saturday.
- 3.09 Overall the number of vehicles generated by the plant nurseries, during the survey period, ranged from some 15 vehicles per hour to some 220 vehicles per hour two-way on the Saturday, and from some 10 vehicles per hour to 330 vehicles per hour two-way on Sunday.
- 3.10 Table 3.3 sets out the number of people generated by the fifteen plant nurseries for each hour surveyed on the Saturday and Sunday. As expected, person trip generation exhibits a similar pattern to that of vehicle trip generation, with person trips being higher on the Sunday than on the Saturday. The number of people generated by the plant nurseries, during the survey period, ranged from some 25 persons per hour to some 420 persons per hour two-way on the Saturday, and from some 20 persons per hour to some 600 persons per hour two-way on Sunday.
- 3.11 Table 3.4 sets out the maximum number of cars parked in association with the plant nurseries for each hour surveyed on the Saturday and Sunday. The figures set out the maximum number of vehicles observed to be parked in association with the plant nurseries at any time during the defined hour. Thus for much of the time the number of parked vehicles would be less than the recorded maximum for that particular hour.
- 3.12 It can be seen from Table 3.4 that the peak parking accumulation for the various plant nurseries ranged from some 5 vehicles to some 110 vehicles during the Saturday and Sunday survey periods. The peak parking accumulation of some 110 vehicles was observed at Enfield during the Sunday and at Terrey Hills during both the Saturday and Sunday survey periods.

TABLE 3.2: VEHICLE TRIPS PER HOUR ⁽¹⁾ BY TIME OF DAY FOR PLANT NURSERIES																
Time of Day	Baulkham Hills		Blacktown		Cammeray		Dural		Enfield		Hornsby		Kingsford		Kingswood	
	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun
10.00-11.00am	84	122	25	39	64	55	78	81	120	192	15	19	71	123	22	30
11.00-12.00pm	89	120	28	44	63	64	80	116	111	324	14	24	128	150	22	38
12.00-1.00pm	37	95	22	35	89	57	53	164	153	233	13	15	128	162	22	40
1.00-2.00pm	78	106	27	37	81	65	73	71	151	281	34	11	115	161	30	30
2.00-3.00pm	89	136	32	25	68	91	76	129	171	311	18	33	109	174	36	50
3.00-4.00pm	--	--	--	--	--	74	114	64	--	--	--	13	--	130	--	--

TABLE 3.2: VEHICLE TRIPS PER HOUR ⁽¹⁾ BY TIME OF DAY FOR PLANT NURSERIES (CONT.)														
Time of Day	Moorebank		North Ryde		Ourimbah		Peakhurst		Taren Point		Terrey Hills		Warriewood	
	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun
10.00-11.00am	108	182	137	163	61	85	35	46	85	116	156	191	37	42
11.00-12.00pm	150	270	165	229	72	151	54	43	149	151	156	203	66	97
12.00-1.00pm	165	236	136	210	68	86	51	45	103	164	218	255	64	101
1.00-2.00pm	163	207	126	217	64	97	36	37	96	140	175	214	69	85
2.00-3.00pm	159	172	200	270	38	124	32	44	98	128	212	262	100	111
3.00-4.00pm	--	--	168	272	--	--	--	--	--	--	--	127 ⁽³⁾	--	85

- (1) Vehicle trips per hour - number of vehicles entering and departing the plant nursery during the defined hour
- (2) Vehicle trips for a 30 minute interval

TABLE 3.3: PERSON TRIPS PER HOUR ⁽¹⁾ BY TIME OF DAY FOR PLANT NURSERIES																
Time of Day	Baulkham Hills		Blacktown		Camberay		Dural		Enfield		Hornsby		Kingsford		Kingswood	
	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun
10.00-11.00am	186	281	53	88	103	91	146	175	218	348	27	35	151	247	48	65
11.00-12.00pm	197	278	59	99	101	106	147	251	201	588	25	44	223	296	48	82
12.00-1.00pm	82	220	41	79	143	94	99	351	278	423	24	27	225	329	48	87
1.00-2.00pm	173	246	57	83	130	107	136	154	275	510	62	21	202	323	66	68
2.00-3.00pm	198	320	68	56	110	150	141	278	312	564	60	60	193	351	79	108
3.00-4.00pm	--	--	--	--	--	122	212	139	--	--	--	28	--	257	--	--

TABLE 3.3: PERSON TRIPS PER HOUR ⁽¹⁾ BY TIME OF DAY FOR PLANT NURSERIES (CONT.)														
Time of Day	Moorebank		North Ryde		Ourimbah		Peakhurst		Taren Point		Terrey Hills		Warriewood	
	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun
10.00-11.00am	213	367	236	301	111	188	69	88	131	187	282	378	72	78
11.00-12.00pm	296	550	286	426	132	312	105	81	232	243	288	398	126	197
12.00-1.00pm	329	475	234	393	129	176	99	85	158	264	406	499	124	193
1.00-2.00pm	336	420	229	413	128	217	71	70	148	229	334	423	134	166
2.00-3.00pm	313	346	353	512	69	260	62	84	151	210	413	518	198	209
3.00-4.00pm	--	--	288	509	--	--	--	--	--	--	--	248 ⁽²⁾	--	177

(1) Person trips per hour -number of people entering and departing the plant nursery during the defined hour

(2) Person trips for a 30 minute interval

TABLE 3.4: PEAK PARKING ACCUMULATION ⁽¹⁾ BY THE TIME OF DAY FOR PLANT NURSERIES																
Time of Day	Baulkham Hills		Blacktown		Cammeray		Dural		Enfield		Hornsby		Kingsford		Kingswood	
	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun
10.00-11.00am	21	21	6	8	38	29	28	23	79	105	7	6	24	40	13	9
11.00-12.00pm	14	32	8	11	40	28	19	39	77	112	4	5	37	45	14	14
12.00-1.00pm	11	28	9	11	41	33	15	29	77	87	3	6	46	55	12	16
1.00-2.00pm	20	35	12	10	41	34	20	31	82	94	6	8	44	52	14	12
2.00-3.00pm	20	42	13	12	43	32	18	36	92	96	10	11	48	56	15	15
3.00-4.00pm	--	--	--	--	--	31	14	28	--	--	--	7	--	61	--	--
Maximum Capacity	21	42	13	12	43	34	28	39	92	112	10	11	48	61	15	16
	26	26	12	12	47	47	155	155	166	166	0	0	82	82	52	52

TABLE 3.4: PEAK PARKING ACCUMULATION ⁽¹⁾ BY TIME OF DAY FOR PLANT NURSERIES (CONT.)														
Time of Day	Moorebank		North Ryde		Ourimbah		Peakhurst		Taren Point		Terrey Hills		Warriewood	
	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun
10.00-11.00am	49	64	38	45	20	39	16	18	28	35	67	86	21	15
11.00-12.00pm	53	86	58	70	24	53	20	21	33	63	81	89	27	22
12.00-1.00pm	51	70	48	63	34	50	19	19	25	65	92	101	37	22
1.00-2.00pm	51	49	46	71	38	67	18	21	12	60	95	91	44	18
2.00-3.00pm	48	11	75	77	44	74	17	24	20	57	109	108	49	18
3.00-4.00pm	--	--	53	71	--	--	--	--	--	--	--	109	--	20
Maximum Capacity	53	86	75	77	44	74	20	24	33	65	109	109	49	22
	179	179	102	102	79	79	0	0	65	65	140	140	49	49

(1) Peak parking accumulation - maximum number of observed vehicles parked in association with the plant nursery at any time during the defined hour

TABLE 3.5: SUMMARY OF MAJOR TRAFFIC PARAMETERS FOR PLANT NURSERIES

Parameters	Baulkham Hills		Blacktown		Cammeray		Dural		Enfield		Hornsby		Kingsford		Kingswood	
	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun
Peak vehicle trips per hour (PVT) ⁽¹⁾	94	139	32	49	99	93	114	162	171	331	33	33	145	176	36	50
Peak person trips per hour (PPT) ⁽²⁾	210	320	68	112	159	151	212	351	312	602	60	60	253	352	79	108
Time of peak site visits - vehicle visits	10.45-11.45am	2.00-3.00pm	2.00-3.00pm	10.30-11.30am	1.30-2.30pm	2.30-3.30pm	3.00-4.00pm	12.00-1.00pm	2.00-3.00pm	1.30-2.30pm	2.00-3.00pm	2.00-3.00pm	12.30-1.30pm	12.30-1.30pm	2.00-3.00pm	2.00-3.00pm
Peak parking accumulation (PPA) ⁽³⁾	21	42	13	12	16	17	28	39	92	112	10	11	48	61	15	16
Vehicle occupancy	1.97	2.13	1.84	2.02	1.44	1.49	1.86	2.16	1.77	1.76	1.70	1.70	1.74	1.92	2.19	2.16

TABLE 3.5: SUMMARY OF MAJOR TRAFFIC PARAMETERS FOR PLANT NURSERIES (CONT.)

Parameters	Moorebank		North Ryde		Ourimbah		Peakhurst		Taren Point		Terrey Hills		Warriewood	
	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun	Sat	Sun
Peak vehicle trips per hour (PVT) ⁽¹⁾	165	270	217	272	76	151	57	49	149	174	218	285	100	115
Peak person trips per hour (PPT) ⁽²⁾	337	550	375	509	139	312	111	93	232	280	413	563	198	229
Time of peak site visits - vehicle visits	12.00-1.00pm	11.00-12.00pm	2.30-3.30pm	3.00-4.00pm	10.30-11.30am	11.00-12.00pm	10.45-11.45am	11.30-12.30pm	11.00-12.00pm	11.45-12.45pm	12.00-1.00pm	2.15-3.15pm	2.00-3.00pm	11.45-12.45pm
Peak parking accumulation (PPA) ⁽³⁾	53	86	75	77	44	74	20	24	33	65	109	109	49	22
Vehicle occupancy	1.97	2.01	1.71	1.84	1.83	2.01	1.80	1.70	1.54	1.61	1.78	1.95	1.94	1.83

(1) Peak vehicle trips per hour - maximum number of vehicles entering and departing the plant nursery per hour

(2) Peak person trips per hour - maximum number of people entering and departing the plant nursery per hour

(3) Peak parking accumulation - maximum number of observed vehicles parked in association with the plant nursery (ie. not including other uses)

3.13 The major traffic related parameters of the plant nurseries are summarised in Table 3.5. This table sets out the following parameters:

- ☐ Peak Vehicle Trip (PVT) generation;
- ☐ Peak Person Trip (PPT) generation;
- ☐ Time of peak site generation;
- ☐ Peak Parking Accumulation (PPA); and
- ☐ Vehicle occupancy.

Survey Analysis

3.14 The independent variables which have been used in the regression analysis are:

- ☐ site area;
- ☐ display area;
- ☐ landscape area; and
- ☐ on-site parking provision.

3.15 The variables satisfy two main important criteria. Firstly they are each thought to influence the magnitude of the dependent variables. Secondly, they can be easily measured on a consistent basis.

3.16 The correlation matrix, which best illustrates the degree of relationship between these variables (R), is given in Table 3.6.

**TABLE 3.6: CORRELATION MATRIX FOR INDEPENDENT VARIABLES
FOR PLANT NURSERIES**

	Site Area	Display Area	Landscape Area	Parking Provision
Site Area	1.00			
Display Area	0.85	1.00		
Landscape Area	0.68	0.45	1.00	
Parking Provision	0.56	0.51	0.04	1.00

- 3.17 As can be seen from Table 3.6 there is a high correlation between site area and display area. There is also some correlation between landscape area and site area, as well as between landscape area and on-site parking provision. The lowest correlation between the independent variables was observed to be between on-site parking provision and landscape area. It should be noted that independent variable with high correlation should not be used in combination in the prediction equations.
- 3.18 The results of the analysis for predicting the dependent variable are set out below. For each of the dependent variables, the simple regression equation has been given for the independent variable that gives the highest R^2 value, representing the best explanation of the variation in the dependent variable. Where appropriate the multiple regression equations have also been given.

Peak Vehicle Trip (PVT) Generation

- 3.19 It can be seen from Table 3.5 that the Peak Vehicle Trip (PVT) generation ranged from some 30 vehicles per hour two-way to some 220 vehicles per hour two-way during the Saturday peak hour period. During the Sunday peak hour period the Peak Vehicle Trip (PVT) generation was generally higher than that observed on the Saturday and ranged from some 30 vehicles per hour two-way to some 330 vehicles per hour two-way.
- 3.20 As expected the nurseries with the lower vehicle trip generation tended to be the smaller nurseries and those with the higher vehicle trip generation generally tended to be the larger nurseries.
- 3.21 Table 3.5 indicates that plant nurseries with site areas less than 2,000m², which consisted of Blacktown, Hornsby and Peakhurst generally had Peak Vehicle Trip (PVT) generations of some 30 to 60 vehicles per hour two-way. Plant nurseries with site areas ranging from 5,000m² to 10,000m², which consisted of Baulkham Hills, Cammeray and Ourimbah generally had Peak Vehicle Trip (PVT) generations of some 90 to 150 vehicles per hour two-way. Plant nurseries with site areas ranging from 10,000m² to 20,000m², which consisted of Enfield, Kingsford, Kingswood, Taren

Point and Warriewood generally had Peak Vehicle Trip (PVT) generations of some 150 to 180 vehicles per hour two-way. Finally plant nurseries with site area greater than 20,000m², which consisted of Dural, North Ryde, Moorebank and Terrey Hills generally had Peak Vehicle Trip (PVT) generations of some 200 to 300 vehicles per hour. It should be noted however, that some nurseries produced Peak Vehicle Trip (PVT) generations outside these ranges. These nurseries include Dural, Kingswood and Warriewood which produced vehicle trip generations generally lower than expected and Enfield which on the Sunday generated significantly more traffic than expected, some 330 vehicles per hour two-way.

- 3.22 Equations were developed to predict the vehicle trip generation during the Saturday and Sunday on-site peak using four independent variables. Simple regression equations using each of the variables gave the following R² values:

	Saturday	Sunday
Site area	0.54	0.32
Display area	0.47	0.27
Landscape area	0.16	0.03
Parking provision	0.44	0.75

- 3.23 Hence, for the Saturday period, using site area in a simple regression equation gives the highest explanation of variation (54%) in Peak Vehicle Trips (PVT), followed by display area (47%) and on-site parking provision (44%). For the Sunday period, on-site parking provision (75%) was observed to give the highest explanation of variation followed by site area (32%).

- 3.24 If the outliers Cammeray, Kingswood and Warriewood are removed for the Saturday, and outliers Enfield, Kingswood and Warriewood are removed for the Sunday, the highest R² values were achieved using the site area. For the Saturday period the R² for site area increased to 0.88 and for the Sunday period the R² for site area increased to 0.87.

3.25 Multiple regression produced R^2 of 0.86 and 0.93 for the Saturday and Sunday periods respectively. Hence the multiple regression analysis only improved the R^2 for the Sunday peak period.

3.26 The simple regression equations, shown on Figures 2 and 3 are as follows:

☐ **Saturday**

$$\text{Peak Vehicle Trips (PVT) per hour} = 42 + 0.5 \times \text{site area}/100$$

$$(R^2 = 0.88)$$

☐ **Sunday**

$$\text{Peak Vehicle Trips (PVT) per hour} = 57 + 0.7 \times \text{site area}/100$$

$$(R^2 = 0.87)$$

3.27 The preceding simple regression equations, for predicting Peak Vehicle Trip (PVT) generation, were tested with the following range of site areas for plant nurseries:

PEAK VEHICLE TRIP GENERATION (VEH/HR)

Site Area (m ²)	Saturday	Sunday
1500	50	68
7500	80	110
15000	117	162
30000	192	267

3.28 The results, on comparison with the surveys for the respective days, indicate that the simple regression equations slightly over estimate the Peak Vehicle Trips (PVT) for the small nurseries, however overall the predictions are considered to be good. Sunday Peak Vehicle Trip (PVT) generation is higher than Saturday.

3.29 The multiple regression equation for the Sunday period is as follows:

□ Sunday

$$\text{Peak Vehicle Trips (PVT) per hour} = 86 + 0.4 \times \text{site area}/100 + 0.5 \times \text{parking provision} \quad (R^2 = 0.93)$$

3.30 Review of the multiple regression equation for Peak Vehicle Trip (PVT) generation indicated that the equation generally over estimated vehicle trips for the small nurseries and under estimated vehicle trips for the large nurseries. Hence the prediction is good for medium and medium to large sized nurseries.

Peak Person Trip (PPT) Generation

3.31 It can be seen from Table 3.5 that the Peak Person Trip (PPT) generation ranged from some 60 persons per hour two-way to some 420 persons per hour two-way during the Saturday peak hour period. During the Sunday peak hour period the Peak Person Trip (PPT) generation ranged from some 60 persons per hour two-way to some 600 persons per hour two-way.

3.32 The simple regression equations using each of the four independent variables gave the following R^2 values:

	Saturday	Sunday
Site area	0.52	0.28
Display area	0.38	0.19
Landscape area	0.18	0.03
Parking provision	0.50	0.75

- 3.33 Hence, for the Saturday period, using site area in a simple regression equation gives the highest explanation of variation (52%) in Peak Person Trips (PPT), followed by on-site parking provision (50%). For the Sunday period, on-site parking provision (75%) followed by site area (28%) were observed to give the highest explanation of variation in person trips.
- 3.34 If outliers Cammeray, Kingswood and Warriewood are removed for the Saturday and outliers Enfield, Kingswood and Warriewood are removed for the Sunday, the highest R^2 values were achieved using site area. For the Saturday period the R^2 for site area increased to 0.85 and for the Sunday period the R^2 for site area increased to 0.82. Multiple regression equations did not improve R^2 values.
- 3.35 The simple regression equations shown on Figures 4 and 5 are as follows:

☐ **Saturday**

$$\text{Peak Person Trips (PPT) per hour} = 84 + 1.0 \times \text{site area}/100$$

$$(R^2 = 0.85)$$

☐ **Sunday**

$$\text{Peak Person Trips (PPT) per hour} = 117 + 1.4 \times \text{site area}/100 \quad (R^2 = 0.82)$$

- 3.36 The preceding simple regression equations, for predicting Peak Person Trips (PPT), were tested with the following range of site areas for plant nurseries:

Site Area (m ²)	Peak Person Trip Generation (veh/hr)	
	Saturday	Sunday
1500	99	138
7500	159	222
15000	234	327
30000	384	537

- 3.37 The results, on comparison with surveys for the respective days, indicated that the simple regression equations generally over estimate the Peak Person Trip (PPT) generation for the small nurseries and slightly over estimate the Peak Person Trip (PPT) generation for the large nurseries. Sunday Peak Person Trip (PPT) generation is higher than Saturday.

Peak Parking Accumulation (PPA)

- 3.38 It can be seen from Table 3.5 that the Peak Parking Accumulation (PPA), for the various plant nurseries surveyed, ranged from some 10 vehicles to some 110 vehicles for both the Saturday and Sunday peak periods.
- 3.39 Simple regression equations using each of the four independent variables gave the following R^2 values:

	Saturday	Sunday
Site area	0.53	0.21
Display area	0.21	0.13
Landscape area	0.24	0.00
Parking provision	0.54	0.70

- 3.40 Hence, for the Saturday period using on-site parking provision in a simple regression equation gives the highest explanation of variation (54%) in Peak Parking Accumulation (PPA), followed closely by site area (53%). For the Sunday period on-site parking provision (70%) was observed to give the highest explanation of variation.
- 3.41 If outliers are removed for the Saturday and Sunday periods the highest R^2 values were achieved using site area. For the Saturday period the R^2 for site area increased to 0.87. For the Sunday period the R^2 for site area increased to 0.83, compared to the R^2 for parking provision which only increased to 0.75. Multiple regression equations did not improve R^2 values.

3.42 The simple regression equations shown on Figures 6 and 7 are as follows:

☐ **Saturday**

$$\text{Peak Parking Accumulation} = 10 + 0.2 \times \text{site area}/100 \quad (R^2 = 0.87)$$

☐ **Sunday**

$$\text{Peak Parking Accumulation} = 20 + 0.3 \times \text{site area}/100 \quad (R^2 = 0.83)$$

3.43 The preceding simple regression equations, for predicting Peak Parking Accumulation (PPA), were tested with the following range of site areas for plant nurseries:

Site Area (m ²)	Peak Person Trip Generation (veh/hr)	
	Saturday	Sunday
1500	13	25
7500	25	43
15000	40	65
30000	70	110

3.44 The results, on comparison with surveys for the respective days, indicated that the simple regression equation developed for the Saturday generally under estimated the Peak Parking Accumulation (PPA) for the small and large nurseries. The simple regression equation developed for the Sunday generally predicted Peak Parking Accumulation (PPA) similar to those surveyed at the various plant nurseries. Sunday Peak Parking Accumulation (PPA) is higher than Saturday.

4 SUMMARY OF STUDY FINDINGS

4.01 This chapter summarises the study findings through the following sections:

- ☐ size of plant nurseries;
- ☐ maximum observed demands; and
- ☐ results of regression analysis.

Size of Plant Nurseries

4.02 Table 4.1 indicates the ranges in size of the plant nurseries surveyed in terms of site area, display area, landscape area and on-site parking provision.

TABLE 4.1: SIZE OF PLANT NURSERIES		
	Range	Average
Site Area - square metres	1270-33860	15160
Display Area - square metres	300-17650	7350
Landscape Area - square metres ⁽¹⁾	820-3680	1780
Parking Provision - no. of spaces	0-179	77

(1) Only nurseries which provided landscape facilities

4.03 The fifteen plant nurseries surveyed have site areas ranging from 1,270m² to 33,860m², with an average size of 15,160m². The display area ranged from 300m² to 17,650m², with an average of 7,350m².

4.04 Of the fifteen plant nurseries surveyed, ten provided a landscaping section. The landscaping area of these ten nurseries ranged in size from 820m² to 3,680m², with an average of 1,780m². On-site car parking provision ranged in size from 0 to 179 spaces, with an average of 77 spaces. Hornsby Garden Centre and Peakhurst Garden Centre do not provide any on-site parking.

4.05 The fifteen selected plant nurseries were generally categorised by size into the following four groups:

- ☐ Group 1 consisting of plant nurseries with site area less than 2,000m². Plant nurseries include Blacktown, Hornsby and Peakhurst;
- ☐ Group 2 consisting of plant nurseries with site area ranging from 5,000m² to 10,000m². Plant nurseries include Baulkham Hills, Cammeray and Ourimbah;
- ☐ Group 3 consisting of plant nurseries with site area ranging from 10,000m² to 20,000m². Plant nurseries include Enfield, Kingsford, Kingswood, Taren Point and Warriewood; and
- ☐ Group 4 consisting of plant nurseries with site area greater than 20,000m². Plant nurseries include Dural, North Ryde, Moorebank and Terrey Hills.

Maximum Observed Demands

4.06 Surveys of the fifteen selected plant nurseries indicated that the maximum observed traffic generation and peak parking demands generally occurred during the Sunday period. Table 4.2 shows the ranges in maximum observed demands of the major traffic parameters for the selected plant nurseries.

**TABLE 4.2: RANGES OF MAXIMUM OBSERVED DEMANDS OF
MAJOR TRAFFIC PARAMETERS**

	Selected Plant Nurseries	
	Saturday	Sunday
Peak Vehicle Trip (PVT) Generation		
- vehicles per hour two-way	32-218	33-331
Peak Person Trip (PPT) Generation		
- persons per hour two-way	60-413	60-602
Peak Parking Accumulation (PPA)		
- number of vehicles	10-109	11-112

4.07 The ranges in the maximum observed demands at the fifteen plant nurseries were as follows:

- Peak Vehicle Trip (PVT) Generation - Peak Vehicle Trips (PVT) varied between 32 to 218 vehicles per hour two-way on the Saturday and between 33 to 331 vehicles per hour two-way during the Sunday. General range of Peak Vehicle Trip (PVT) generation for the selected plant nurseries (outliers omitted) were found to be:

Group 1 30 to 60 vehicles per hour two-way;
 Group 2 90 to 150 vehicles per hour two-way;
 Group 3 150 to 180 vehicles per hour two-way; and
 Group 4 200 to 300 vehicles per hour two way.

- Peak Person Trip (PPT) Generation - Peak Person Trips (PPT) varied between 60 to 413 persons per hour two-way on the Saturday and between 60 to 602 persons per hour two-way during the Sunday. General range of Peak Person Trip (PPT) generation for the selected plant nurseries (outliers omitted) were found to be:

Group 1	60 to 110 persons per hour two-way;
Group 2	150 to 320 persons per hour two-way;
Group 3	250 to 350 persons per hour two-way; and
Group 4	400 to 600 persons per hour two way.

- ☐ Peak Parking Accumulation (PPA) - observed parking accumulation varied between 10 to 109 vehicles on the Saturday and between 11 to 112 vehicles on the Sunday. General range of Peak Parking Accumulation for the selected plant nurseries (outliers omitted) were found to be:

Group 1	10 to 25 vehicles;
Group 2	25 to 50 vehicles;
Group 3	40 to 80 vehicles; and
Group 4	80 to 110 vehicles.

Results of Regression Analysis

- 4.08 In Chapter 3, for each of the dependent variables the simple regression equation has been given for the independent variable that gives the highest R^2 value, representing the best explanation of variation in the dependent variable. Where appropriate, the multiple regression equations have also been given.
- 4.09 The regression equations developed for the major traffic parameters for the Sunday predicted higher traffic and parking demands for the plant nurseries compared to the regression equations developed for the Saturday. Results of the regression analysis for the major traffic parameters, for the Sunday peak period, are as follows:

- ☐ Peak Vehicle Trips (PVT) per hour
- simple regression equation (based on Sunday analysis)

$$\text{Peak Vehicle Trips (PVT) per hour} = 57 + 0.7 \times \text{site area}/100 \quad (R^2 = 0.87)$$

- multiple regression equation (based on Sunday analysis)

$$\text{Peak Vehicle Trips (PVT) per hour} = 86 + 0.4 \times \text{site area}/100 + 0.5 \times \text{parking provision} \quad (R^2 = 0.93)$$

- The analysis indicated that the simple regression equation for the prediction of Peak Vehicle Trips (PVT) is generally good and could be used in preference to the multiple regression equation. The multiple regression equation was found to generally over estimate vehicle trips for the small nurseries and under estimate vehicle trips for the large nurseries.

☐ Peak Person Trips (PPT) per hour

- simple regression equation (based on Sunday analysis)

$$\text{Peak Person Trips (PPT) per hour} = 117 + 1.4 \times \text{site area}/100 \quad (R^2 = 0.82)$$

☐ Peak Parking Accumulation (PPA)

- simple regression equation (based on Sunday analysis)

$$\text{Peak Parking Accumulation} = 20 + 0.3 \times \text{site area}/100 \quad (R^2 = 0.83)$$

4.10 A suggested format of the preceding analysis of plant nurseries, for the inclusion in The Guide to Traffic Generating Developments, is shown over the page.

SECTION 3

LAND USE

TRAFFIC GENERATION

PLANT NURSERIES

A Plant Nursery is any place at which horticultural stock is propagated for the purpose of sale. Horticultural stock means tree, vine, plant, shrub or other vegetation.

Plant Nurseries have a peak traffic generation during the weekend period. The peak generation generally occurs during the Sunday midday period.

Rates

Peak hour vehicle trips two-way (PVT) = 57 vehicles plus 0.7 vehicles per 100m² of site area.

Factors

Variables include staff, delivery, service and on-street movements such as taxis and pick-up/set-down.

The variables also include the vehicle generation of supplementary services such as refreshment, gift and landscaping facilities but not that of auxiliary facilities such as retail, hardware, fruit market etc. Refer to the appropriate guidelines for vehicle generation rates of auxiliary facilities with appropriate allowance for dual or complementary use.

Surveys

The report *Land Use Traffic Generation - Data and Analysis 26 - Plant Nurseries*, outlines research undertaken on the traffic and parking characteristics of plant nurseries.

SECTION 5

PARKING REQUIREMENTS

FOR SPECIFIC LAND USES

PLANT NURSERIES

DEFINITION

A "Plant Nursery" is any place at which horticultural stock is propagated for the purpose of sale. Horticultural stock means tree, vine, plant, shrub or other vegetation.

PARKING

Off-street car parking should be provided to accommodate peak parking periods at the facility.

The recommended number of off-street parking spaces for plant nurseries should be the greater of:

- ☐ 0.5 spaces per 100m² of site area;
- ☐ minimum of 15 spaces.

Parking provision for auxiliary facilities associated with a plant nursery are not included in these figures. Refer to appropriate guidelines for parking provision rates of auxiliary facilities with appropriate allowance for dual or complementary use.

Provision ought to be made for car/trailer combinations at strategic locations.

Driveways

See Tables 6.1 and 6.2 for information relating to driveways.

Parking Area and Internal Road Design

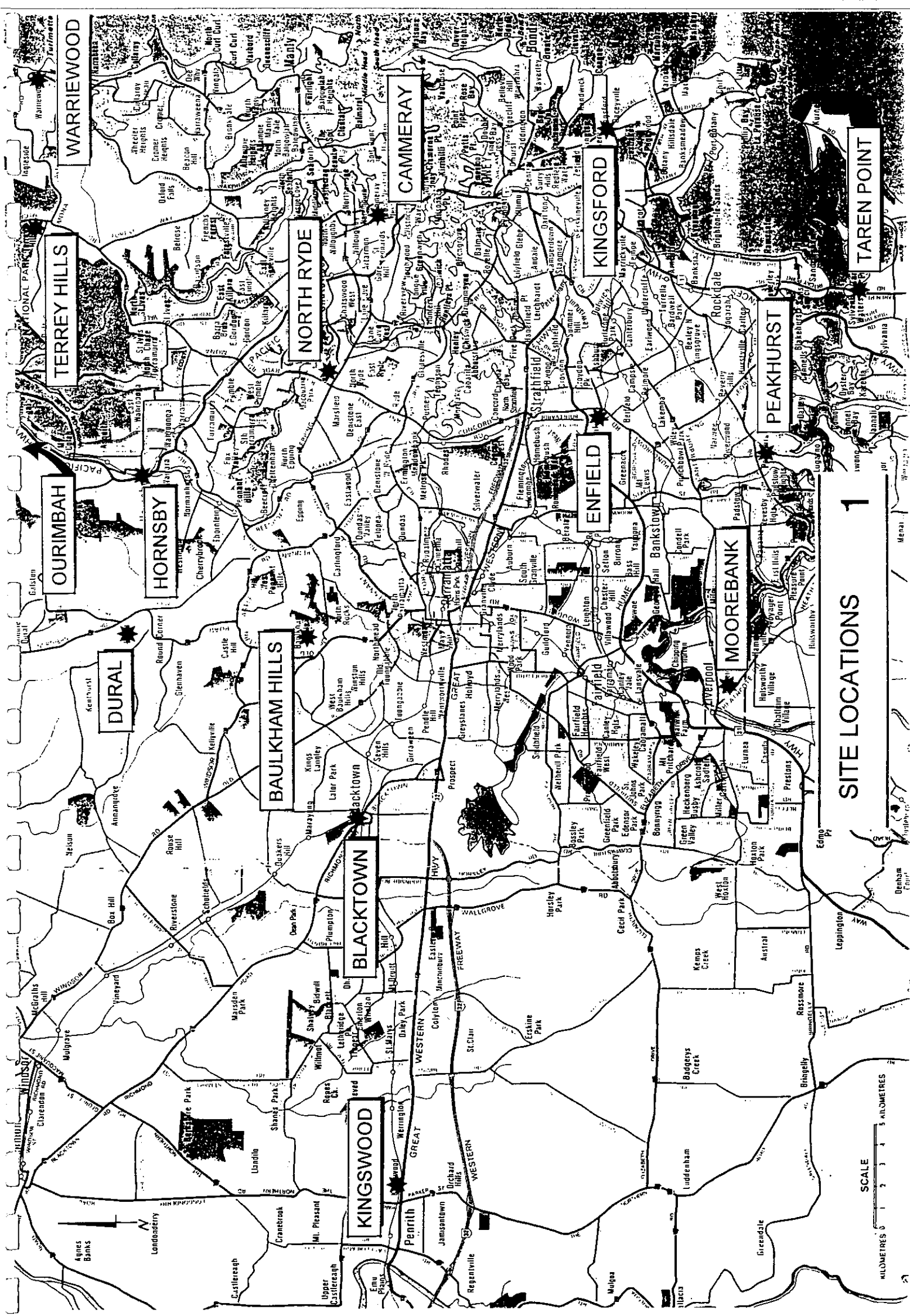
Consideration should be given to the type of service vehicles requiring access and their geometric movement requirements. It is recommended that the Australian Standard 2890.2 be consulted for further information on service area design.

The development should be planned in such a way as to provide a high level of protection for pedestrians. In particular, building entry/exit doors should be clear from any obstruction by parked vehicles.

Consideration should be given to providing sufficient area within the car park for the manoeuvring of trolleys and for the loading/unloading of goods from trolleys.

Surveys

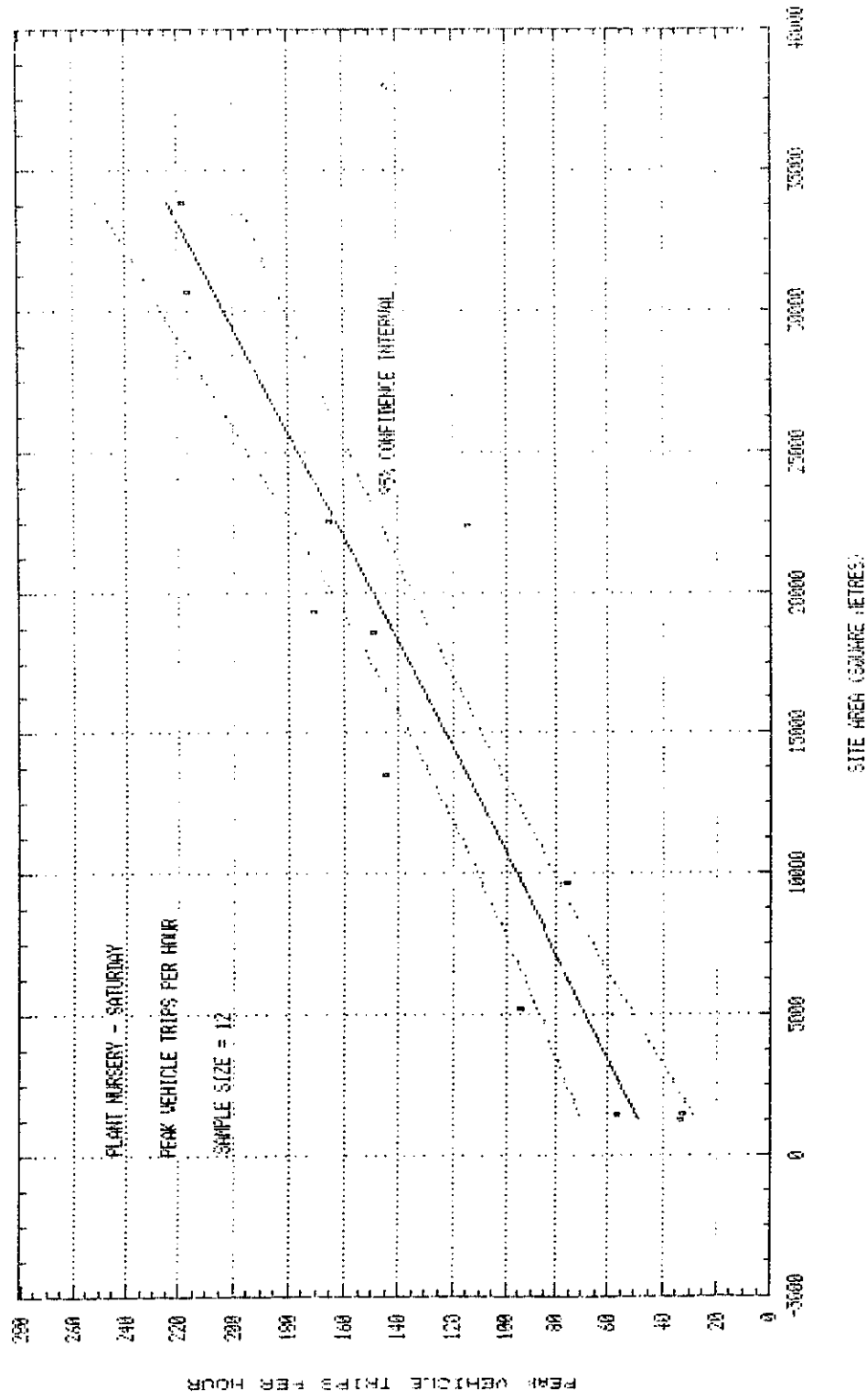
The report - *Land Use Traffic Generation - Data and Analysis 26 - Plant Nurseries*, outlines research undertaken on the traffic and parking characteristics of plant nurseries.



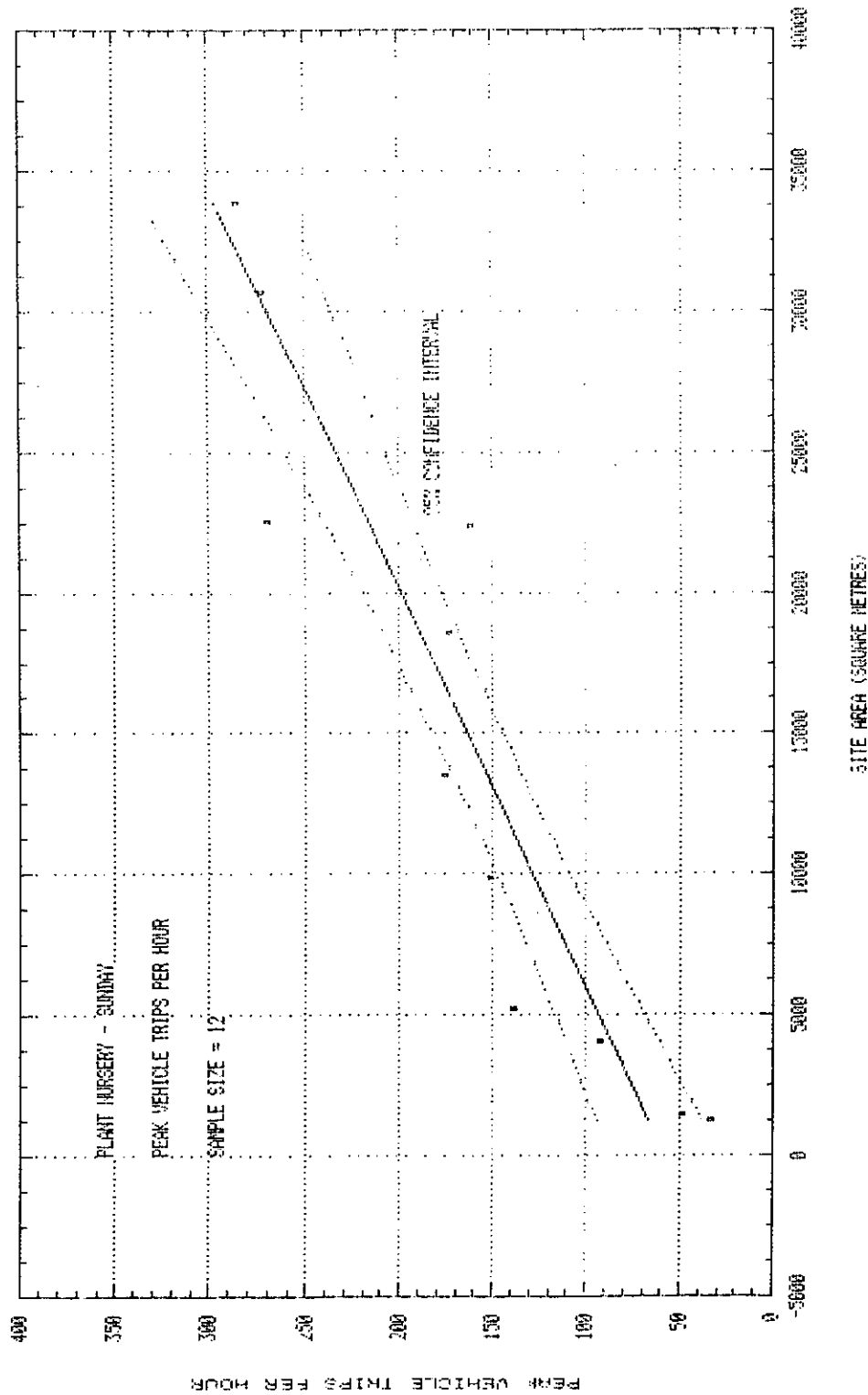
SITE LOCATIONS 1

SCALE
KILOMETRES 0 1 2 3 4 5

SITE AREA vs. PEAK VEHICLE TRIPS - SATURDAY
 PEAK VEHICLE TRIPS = $42 + 0.54 \times \text{SITE AREA}/100$
 Correlation $r = 0.94$

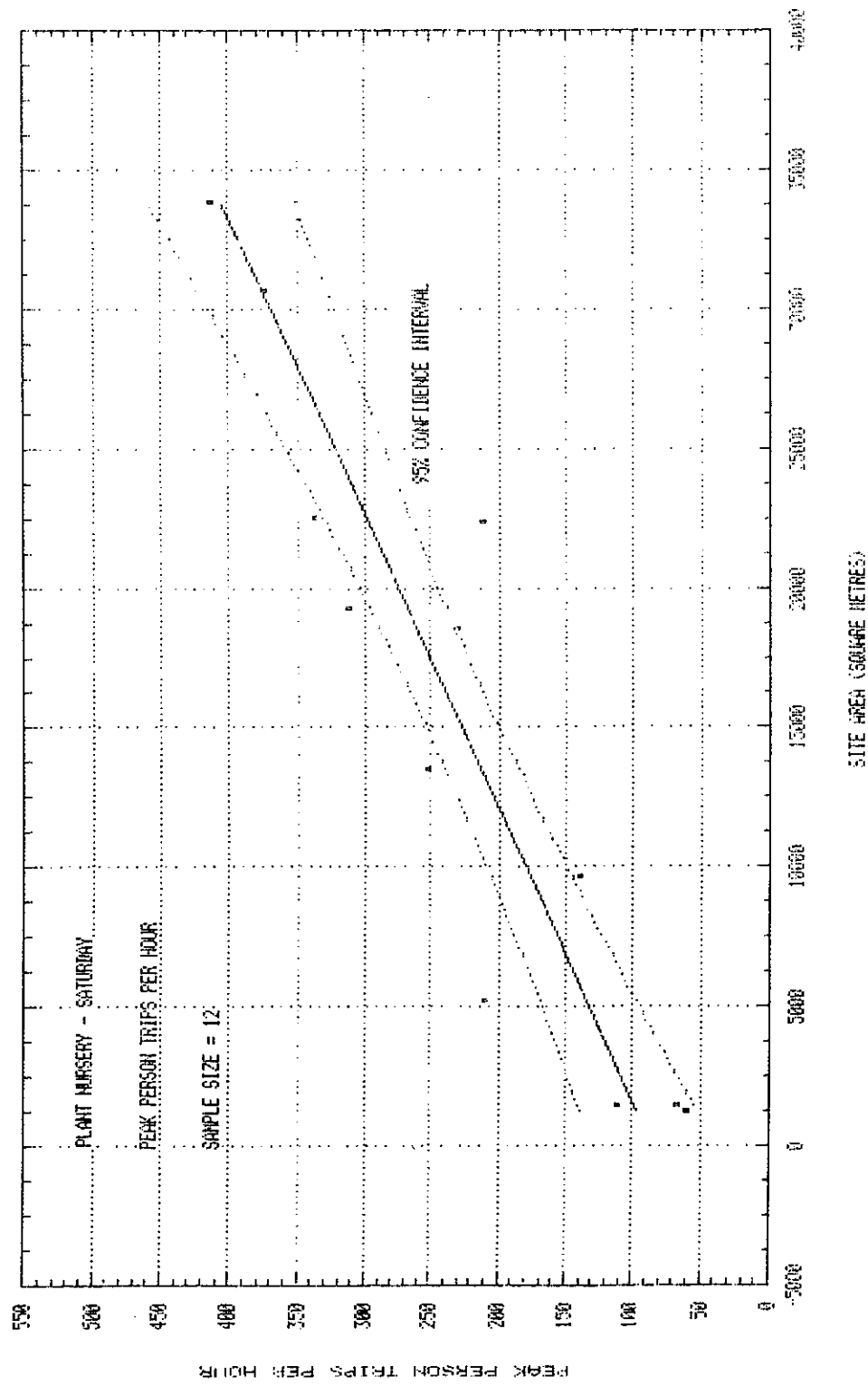


SITE AREA vs. PEAK VEHICLE TRIPS (SUNDAY)
 PEAK VEHICLE TRIPS = $52 + 0.71 \times \text{SITE AREA}/100$
 Correlation: $r = 0.933$

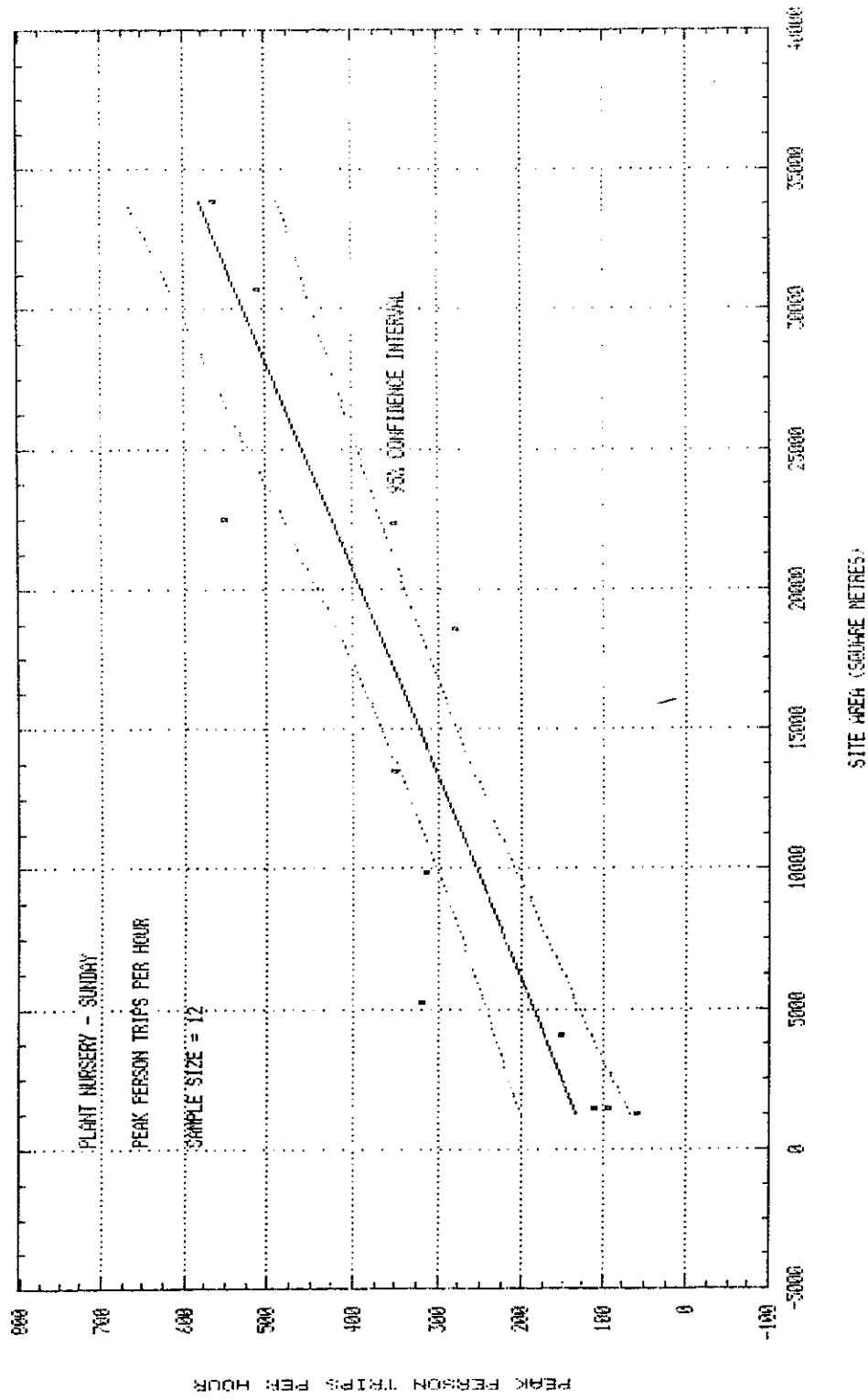


PLANT NURSERY - SUNDAY
 PEAK VEHICLE TRIPS
 PER HOUR

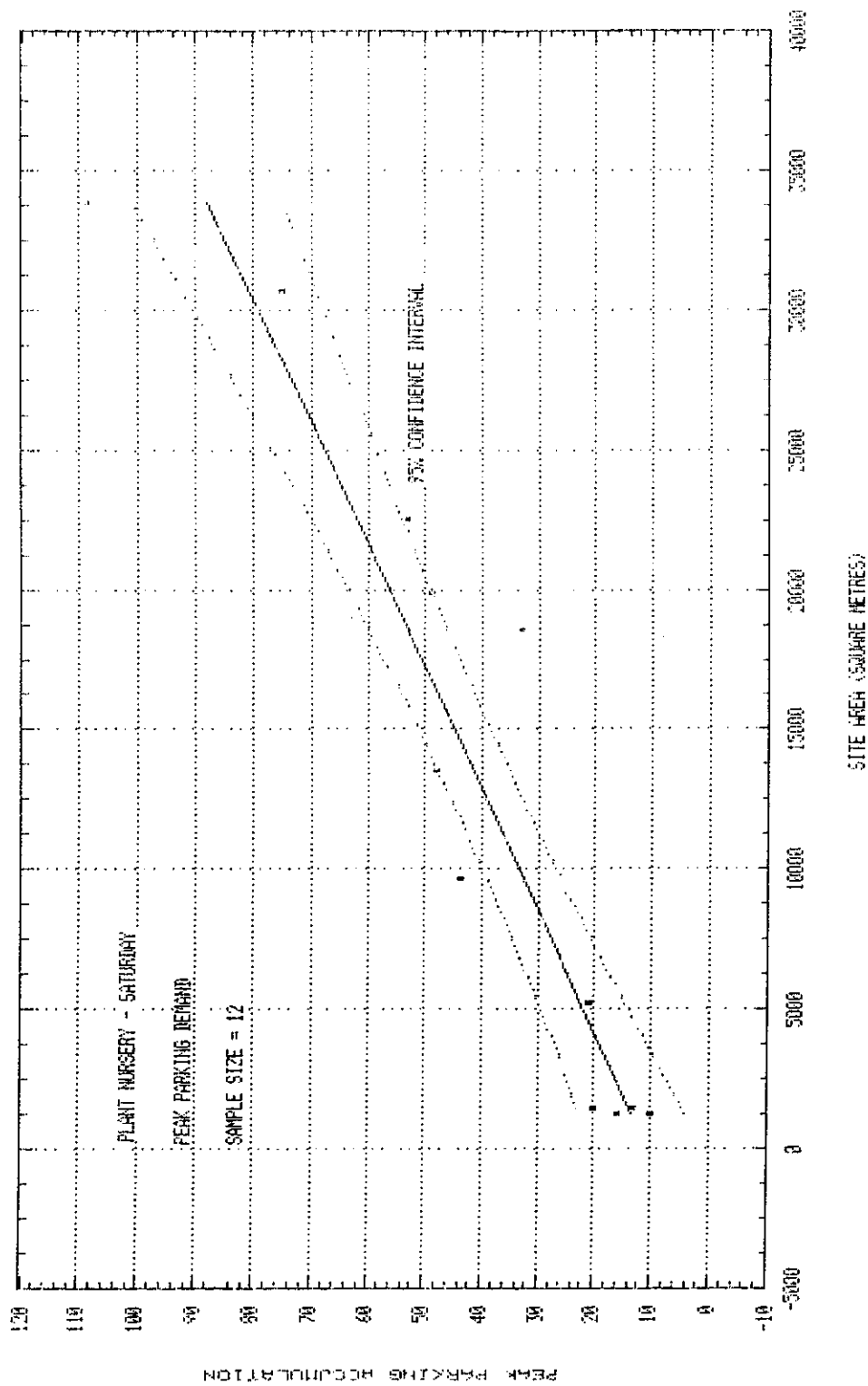
SITE AREA vs. PEAK PERSON TRIPS / SATURDAY
 PEAK PERSON TRIPS = $84 + 0.95 \times \text{SITE AREA} / 100$
 Correlation: $r = 0.92$



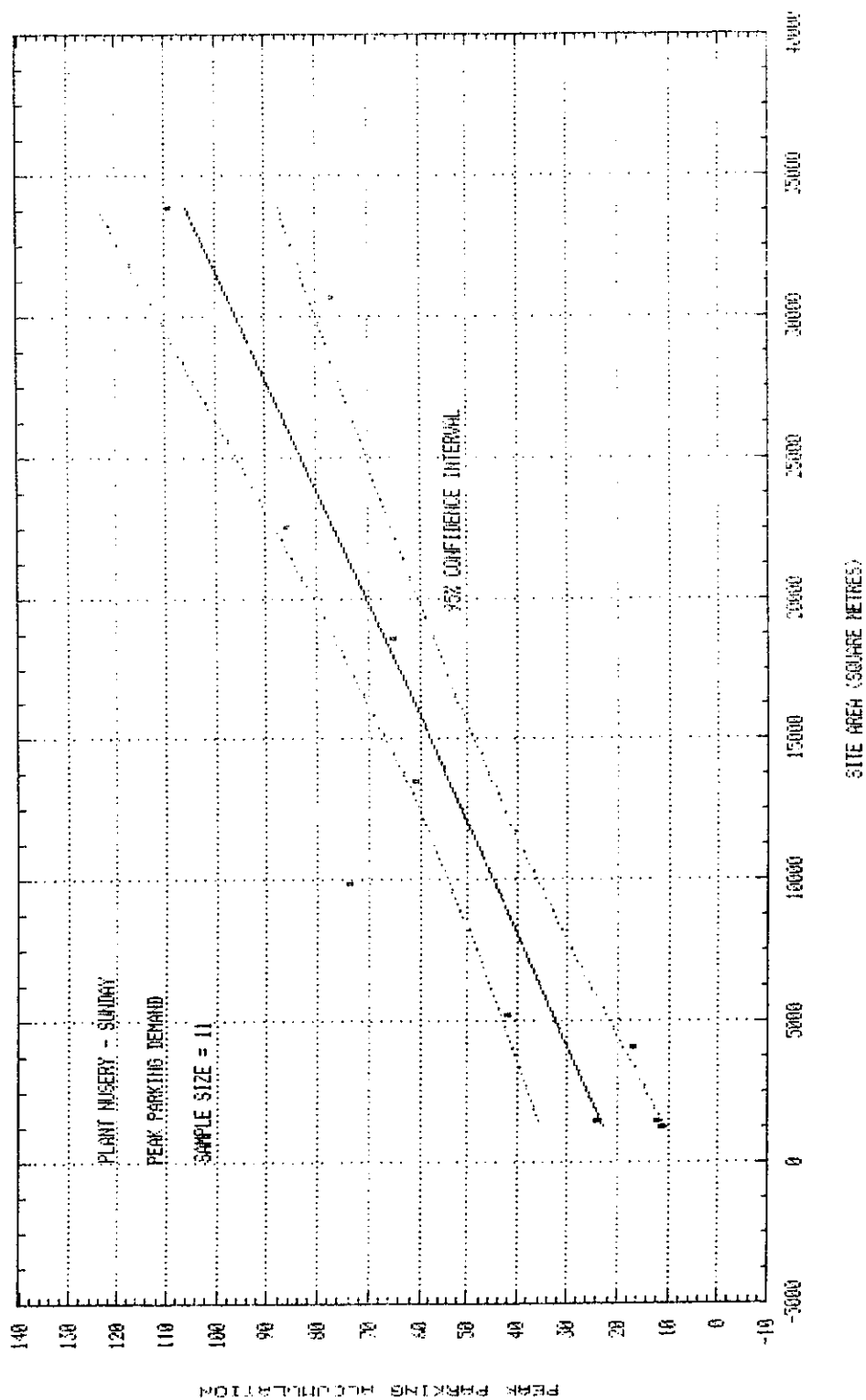
SITE AREA vs. PEAK PERSON TRIPS (SUNDAY)
 PEAK PERSON TRIPS = $117 + 1.36 \times \text{SITE AREA}/100$
 Correlation: $r = 0.994$



SITE AREA vs. PEAK PARKING ACCUMULATION CORRELATION
 PEAK PARKING ACCUMULATION = $10 + 0.25 \times \text{SITE AREA}$
 Correlation: $r = 0.931$



SITE AREA vs. PEAK PARKING ACCUMULATION (CONT.)
 PEAK PARKING ACCUMULATION = $20 + 0.25 \times \text{SITE AREA}$
 Correlation: $r = 0.91$



APPENDIX A
SITE CHARACTERISTICS

PLANT NURSERY

WAGON WHEEL NURSERY - BAULKHAM HILLS

General Site Description

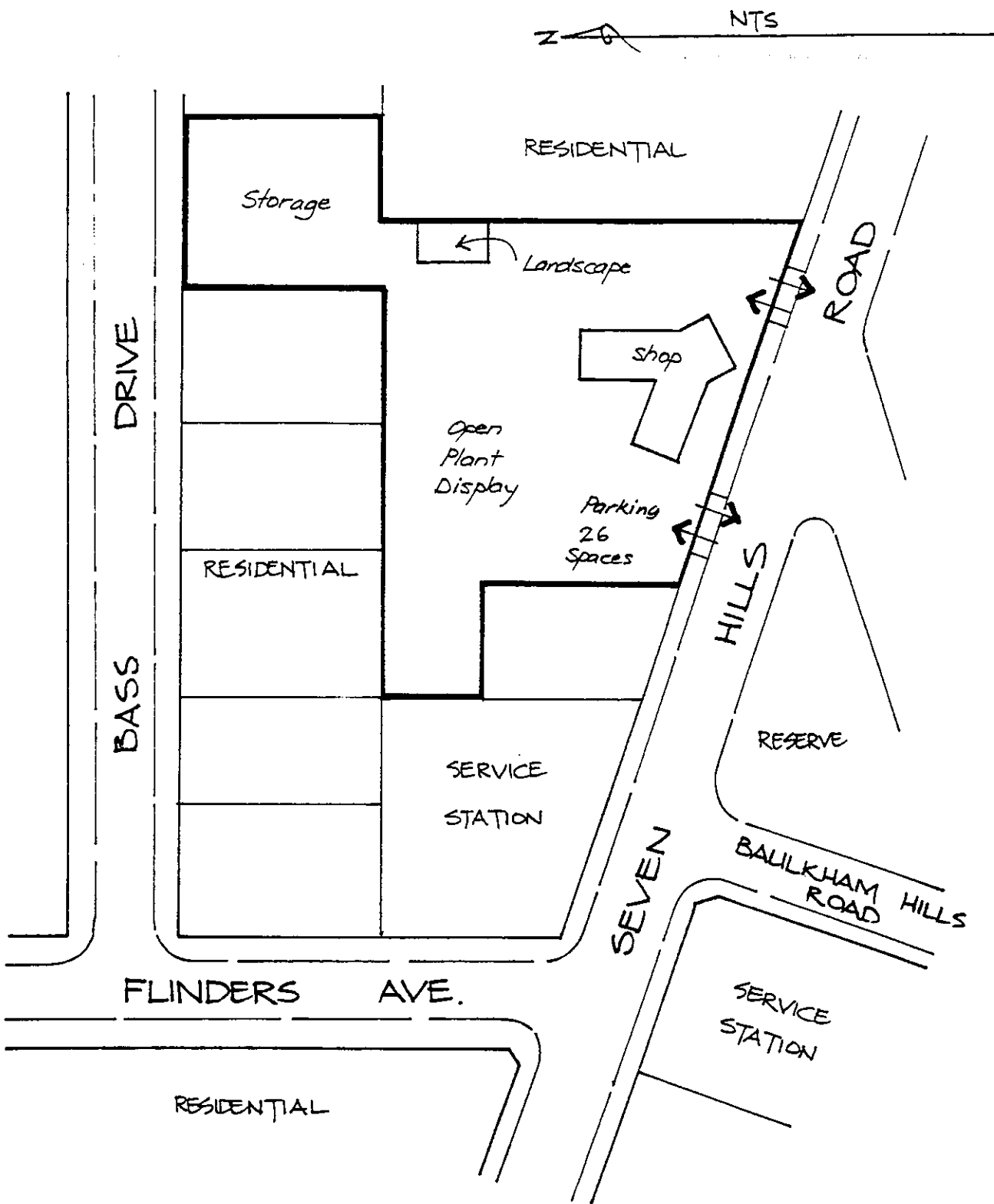
Wagon Wheel Nursery is located on the northern side of Seven Hills Road just east of its intersection with Gooden Drive, Baulkham Hills. Vehicle access is gained off Seven Hills Road from two points. The main access leads to a formal car park, in the south-eastern corner, with a capacity of 26 vehicles. A vacant allotment directly south of the nursery, accessed from Seven Hills Road, is used by staff and nursery vehicles and sometimes customers when the car park is at capacity. On-street parking is available along Seven Hills Road adjacent to the nursery. The nursery provides landscaping supplies and has a small shop selling garden related products. The surrounding land-use is generally low-density residential and a service station adjoins the nursery to the west.

Date and Time of Survey

- | | | |
|--------------------------|------------------------|-------------------|
| <input type="checkbox"/> | Saturday 12 March 1994 | 10.00am to 3.00pm |
| <input type="checkbox"/> | Sunday 13 March 1994 | 10.00am to 3.00pm |

Site Data

- | | | |
|--------------------------|-----------------------------|----------------------|
| <input type="checkbox"/> | Area of site | 5,230m ² |
| <input type="checkbox"/> | Display area | 2,950m ² |
| <input type="checkbox"/> | Landscape area | 1,160m ² |
| <input type="checkbox"/> | Production area | N/A |
| <input type="checkbox"/> | Access driveways | 2 |
| <input type="checkbox"/> | On-site parking supply | 26 spaces |
| <input type="checkbox"/> | Number of employees present | 8 staff |
| <input type="checkbox"/> | Peak period | weekends |
| <input type="checkbox"/> | Other uses | Landscaping supplies |



'WAGON WHEEL
NURSERY'

SEVEN HILLS ROAD,
BAULKHAM HILLS

PLANT NURSERIES

WAGON WHEEL NURSERY - BAULKHAM HILLS

VEHICLE TRIP GENERATION (TWO-WAY)

TIME	SATURDAY			SUNDAY			TOTAL	
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	SATURDAY	SUNDAY
10:00 - 11:00	84			122			84	122
11:00 - 12:00	89			120			89	120
12:00 - 13:00	37			95			37	95
13:00 - 14:00	78			106			78	106
14:00 - 15:00	89			139			89	139
15:00 - 16:00	-			-				

PEAK HOUR (BY 15 MINUTES)

TIME	BY CLASSIFICATION						BY DIRECTION					
	SATURDAY			SUNDAY			SATURDAY			SUNDAY		
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	IN	OUT	TOT	IN	OUT	TOT
SATURDAY 10:45 - 11:45	94						42	52	94			
SUNDAY 14:00 - 15:00				139						72	67	139

PERSON TRIP GENERATION

TIME	SATURDAY			SUNDAY			VEHICLE OCCUPANCY	
	IN	OUT	TOTAL	IN	OUT	TOTAL	(SURVEYED FROM ALL INBOUND VEHICLES)	
10:00 - 11:00	89	97	186	151	130	281	1.97	2.13
11:00 - 12:00	89	108	197	142	136	278		
12:00 - 13:00	41	41	82	108	112	220		
13:00 - 14:00	93	80	173	126	120	246		
14:00 - 15:00	100	98	198	167	153	320		
15:00 - 16:00	-	-	-	-	-	-		

PEAK HOUR (BY 15 MINUTES)

TIME	SATURDAY			SUNDAY			VEHICLE OCCUPANCY	
	IN	OUT	TOTAL	IN	OUT	TOTAL	(SURVEYED FROM ALL INBOUND VEHICLES)	
SATURDAY 10:45 - 11:45	98	112	210				1.97	2.13
SUNDAY 14:00 - 15:00				167	153	320		

PLANT NURSERIES

WAGON WHEEL NURSERY - BAULKHAM HILLS

VEHICLE CARPARK ACCUMULATION

TIME	SATURDAY			SUNDAY		
	Inbound	Outbound	Accum.	Inbound	Outbound	Accum.
10:00 - 10:15	7	14	(22*)15	15	15	(17*)17
10:15 - 10:30	8	6	17	11	16	12
10:30 - 10:45	15	11	21	19	16	15
10:45 - 11:00	11	12	20	18	12	21
11:00 - 11:15	7	14	13	15	15	21
11:15 - 11:30	10	9	14	16	13	24
11:30 - 11:45	15	17	12	21	13	32
11:45 - 12:00	7	10	9	11	16	27
12:00 - 12:15	5	3	11	14	15	26
12:15 - 12:30	6	6	11	11	9	28
12:30 - 12:45	4	5	10	10	12	26
12:45 - 13:00	3	6	7	13	11	28
13:00 - 13:15	19	7	19	16	9	35
13:15 - 13:30	5	8	16	13	14	34
13:30 - 13:45	12	8	20	14	17	31
13:45 - 14:00	6	13	13	13	10	34
14:00 - 14:15	15	8	20	18	20	32
14:15 - 14:30	8	12	16	20	14	38
14:30 - 14:45	10	10	16	21	17	42
14:45 - 15:00	11	15	12	10	19	33
15:00 - 15:15						
15:15 - 15:30						
15:30 - 15:45						
15:45 - 16:00						

*Number of vehicles at commencement of survey

PLANT NURSERY

BLACKTOWN CITY GARDEN CENTRE - BLACKTOWN

General Site Description

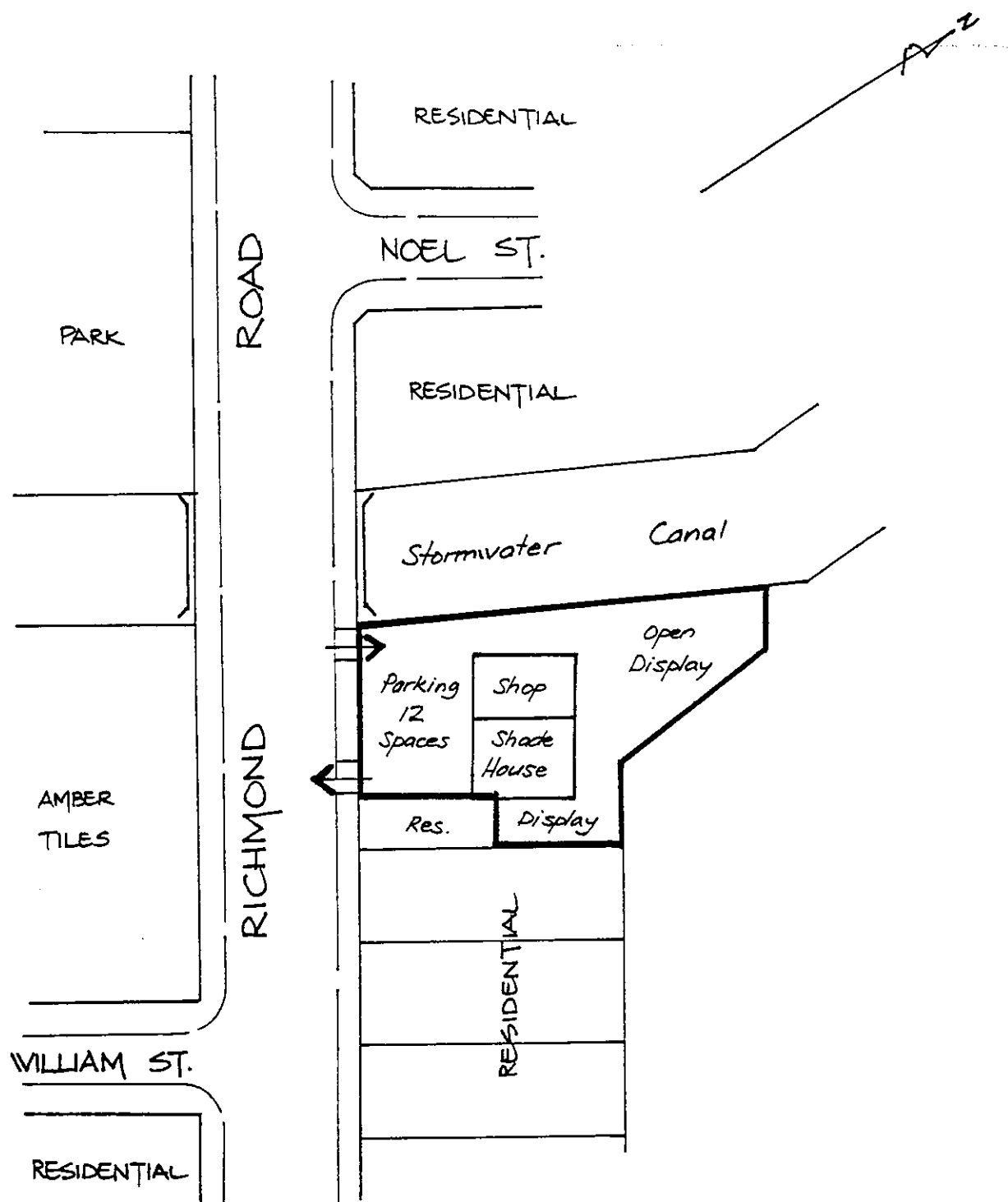
Blacktown City Garden Centre is located on the northern side of Richmond Road adjacent to the Ashlar Golf Course, Blacktown. Vehicle and pedestrian access to the nursery is gained from two access points along Richmond Road. Off-street car parking is available in a formal car park with 12 spaces. On-street parking is also available along the northern side of Richmond Road. The surrounding land-use is generally low-density residential, a paving centre is located across Richmond Road. A number of parks, including the Ashlar Golf Course and the Blacktown Showground, are located in the area.

Date and Time of Survey

- | | | |
|--------------------------|------------------------|-------------------|
| <input type="checkbox"/> | Saturday 19 March 1994 | 10.00am to 3.00pm |
| <input type="checkbox"/> | Sunday 20 March 1994 | 10.00am to 3.00pm |

Site Data

- | | | |
|--------------------------|-----------------------------|---------------------|
| <input type="checkbox"/> | Area of site | 1,480m ² |
| <input type="checkbox"/> | Display area | 960m ² |
| <input type="checkbox"/> | Landscape area | N/A |
| <input type="checkbox"/> | Production area | N/A |
| <input type="checkbox"/> | Access driveways | 2 |
| <input type="checkbox"/> | On-site parking supply | 12 spaces |
| <input type="checkbox"/> | Number of employees present | 5 staff |
| <input type="checkbox"/> | Peak period | weekends |
| <input type="checkbox"/> | Other uses | N/A |



'BLACKTOWN CITY
GARDEN CENTRE'

RICHMOND ROAD,
BLACKTOWN

PLANT NURSERIES

BLACKTOWN CITY GARDEN CENTRE - BLACKTOWN

VEHICLE TRIP GENERATION (TWO-WAY)

TIME	SATURDAY			SUNDAY			TOTAL					
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	SATURDAY	SUNDAY				
10:00 - 11:00	22	2	1	34	5	0	25	39				
11:00 - 12:00	28	0	0	42	2	0	28	44				
12:00 - 13:00	20	2	0	35	0	0	22	35				
13:00 - 14:00	25	2	0	35	2	0	27	37				
14:00 - 15:00	27	5	0	25	0	0	32	25				
15:00 - 16:00	-	-	-	-	-	-	-	-				
PEAK HOUR (BY 15 MINUTES)												
	BY CLASSIFICATION						BY DIRECTION					
TIME	SATURDAY			SUNDAY			SATURDAY			SUNDAY		
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	IN	OUT	TOT	IN	OUT	TOT
SATURDAY												
14:00 - 15:00	27	5	0				18	14	32			
SUNDAY												
10:30 - 11:30				42	7	0				27	22	49

PERSON TRIP GENERATION

TIME	SATURDAY			SUNDAY					
	IN	OUT	TOTAL	IN	OUT	TOTAL	VEHICLE OCCUPANCY		
10:00 - 11:00	31	22	53	46	42	88	(SURVEYED FROM ALL INBOUND VEHICLES)		
11:00 - 12:00	29	30	59	49	50	99			
12:00 - 13:00	23	18	41	43	36	79			
13:00 - 14:00	29	28	57	44	39	83	SATURDAY	SUNDAY	
14:00 - 15:00	39	29	68	24	32	56			
15:00 - 16:00	-	-	-	-	-	-			
1.84									2.02

PEAK HOUR (BY 15 MINUTES)								
TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL		
SATURDAY								
14:00 - 15:00	39	29	68					
SUNDAY								
10:30 - 11:30				62	50	112		

PLANT NURSERIES

BLACKTOWN CITY GARDEN CENTRE - BLACKTOWN

VEHICLE CARPARK ACCUMULATION

TIME	SATURDAY			SUNDAY		
	Inbound	Outbound	Accum.	Inbound	Outbound	Accum.
10:00 - 10:15	2	1	(1*)2	3	4	(7*)6
10:15 - 10:30	5	2	5	5	5	6
10:30 - 10:45	5	5	5	7	8	5
10:45 - 11:00	3	2	6	5	2	8
11:00 - 11:15	1	4	3	7	5	10
11:15 - 11:30	8	3	8	8	7	11
11:30 - 11:45	4	4	8	3	7	7
11:45 - 12:00	1	3	6	4	3	8
12:00 - 12:15	5	2	9	3	5	6
12:15 - 12:30	3	4	8	8	3	11
12:30 - 12:45	1	4	5	3	6	8
12:45 - 13:00	3	0	8	5	2	11
13:00 - 13:15	2	3	7	7	10	8
13:15 - 13:30	5	3	9	6	4	10
13:30 - 13:45	4	1	12	2	4	8
13:45 - 14:00	2	6	8	3	1	10
14:00 - 14:15	2	2	8	4	4	10
14:15 - 14:30	8	3	13	2	2	10
14:30 - 14:45	2	6	9	5	3	12
14:45 - 15:00	6	3	12	1	4	9
15:00 - 15:15						
15:15 - 15:30						
15:30 - 15:45						
15:45 - 16:00						

* Number of vehicles at commencement of survey

PLANT NURSERY

CLARKE AND WALKER - CAMMERAY

General Site Description

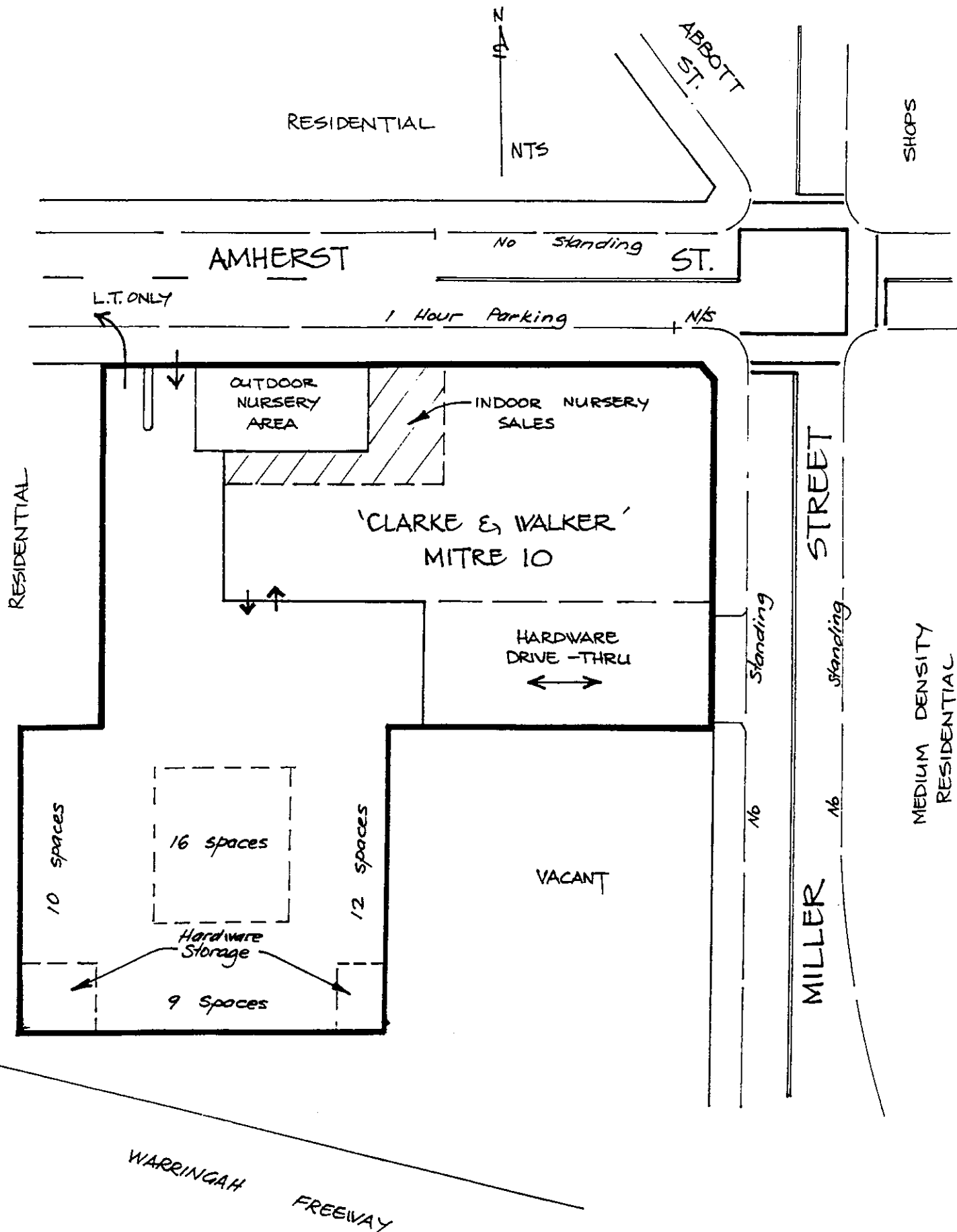
Clarke and Walker is located on the south-west corner of the intersection of Miller Street and Amherst Street, Cammeray. The main vehicle access point is located along Amherst Street and a minor access is located along Miller Street which is restricted to left-in and left-out only. Off-street parking is provided by a formal car park of some 47 spaces. On-street parking is available along Amherst Street and was frequently used by customers over the survey period. The nursery occupies the northern section of the facility which also includes a hardware store and a building supplies section. The surrounding land-use is a mixture of residential housing and commercial business to the north and east along the main roads.

Date and Time of Survey

- | | | |
|--------------------------|-----------------------|-------------------|
| <input type="checkbox"/> | Saturday 9 April 1994 | 10.00am to 3.00pm |
| <input type="checkbox"/> | Sunday 10 April 1994 | 10.00am to 4.00pm |

Site Data

- | | | |
|--------------------------|-----------------------------|--|
| <input type="checkbox"/> | Area of site | 4,080m ² |
| <input type="checkbox"/> | Display area | 300m ² (nursery only) |
| <input type="checkbox"/> | Landscape area | N/A |
| <input type="checkbox"/> | Production area | N/A |
| <input type="checkbox"/> | Access driveways | 2 |
| <input type="checkbox"/> | On-site parking supply | 47 spaces |
| <input type="checkbox"/> | Number of employees present | 4 staff |
| <input type="checkbox"/> | Peak period | weekends |
| <input type="checkbox"/> | Other uses | Hardware (main store)
Drive through building supplies (landscaping materials - minimal) |



'CLARKE & WALKER'

CNR MILLER & AMHERST STS
CAMMERAY

PLANT NURSERIES

CLARKE & WALKER - CAMMERAY

VEHICLE TRIP GENERATION (TWO-WAY)

TIME	SATURDAY			SUNDAY			TOTAL	
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	SATURDAY	SUNDAY
10:00 - 11:00	53	9	2	53	2	0	64	55
11:00 - 12:00	58	5	0	61	2	1	63	64
12:00 - 13:00	82	7	0	54	3	0	89	57
13:00 - 14:00	74	7	0	61	4	0	81	65
14:00 - 15:00	61	7	0	83	8	0	68	91
15:00 - 16:00	-	-	-	68	5	1	-	74

PEAK HOUR (BY 15 MINUTES)

	BY CLASSIFICATION						BY DIRECTION					
TIME	SATURDAY			SUNDAY			SATURDAY			SUNDAY		
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	IN	OUT	TOT	IN	OUT	TOT
SATURDAY												
13:30 - 14:30	90	9	0				48	51	99			
SUNDAY												
14:30 - 15:30				85	8	0				46	47	93

PERSON TRIP GENERATION

TIME	SATURDAY			SUNDAY			VEHICLE OCCUPANCY	
	IN	OUT	TOTAL	IN	OUT	TOTAL	(SURVEYED FROM ALL INBOUND VEHICLES)	
10:00 - 11:00	50	53	103	46	45	91		
11:00 - 12:00	52	49	101	55	51	106		
12:00 - 13:00	71	72	143	49	45	94	SATURDAY	SUNDAY
13:00 - 14:00	67	63	130	57	50	107	1.44	1.49
14:00 - 15:00	47	63	110	71	79	150		
15:00 - 16:00	-	-	-	59	63	122		

PEAK HOUR (BY 15 MINUTES)

TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL		
SATURDAY								
13:30 - 14:30	77	82	159					
SUNDAY								
14:30 - 15:30				75	76	151		

PLANT NURSERIES

CLARKE & WALKER - CAMMERAY

VEHICLE CARPARK ACCUMULATION

TIME	SATURDAY			SUNDAY		
	Inbound	Outbound	Accum.	Inbound	Outbound	Accum.
10:00 - 10:15	5	7	(39*)37	6	4	(24*)26
10:15 - 10:30	8	7	38	7	5	28
10:30 - 10:45	11	11	38	10	9	29
10:45 - 11:00	7	8	37	5	9	25
11:00 - 11:15	11	10	38	10	8	27
11:15 - 11:30	6	5	39	9	9	27
11:30 - 11:45	7	6	40	9	10	26
11:45 - 12:00	8	9	39	6	4	28
12:00 - 12:15	16	14	41	4	3	29
12:15 - 12:30	13	17	37	12	8	33
12:30 - 12:45	4	4	37	7	9	31
12:45 - 13:00	11	9	39	7	7	31
13:00 - 13:15	6	7	38	6	4	33
13:15 - 13:30	9	6	41	7	8	32
13:30 - 13:45	15	19	37	11	9	34
13:45 - 14:00	11	8	40	10	10	34
14:00 - 14:15	15	12	43	10	13	31
14:15 - 14:30	7	12	38	11	10	32
14:30 - 14:45	6	14	30	14	14	32
14:45 - 15:00	1	1	30	9	12	29
15:00 - 15:15				10	11	28
15:15 - 15:30				13	10	31
15:30 - 15:45				4	4	31
15:45 - 16:00				9	13	27

* Number of vehicles at commencement of survey
(includes vehicles using other site facilities)

PLANT NURSERY

HARGRAVES NURSERY - DURAL

General Site Description

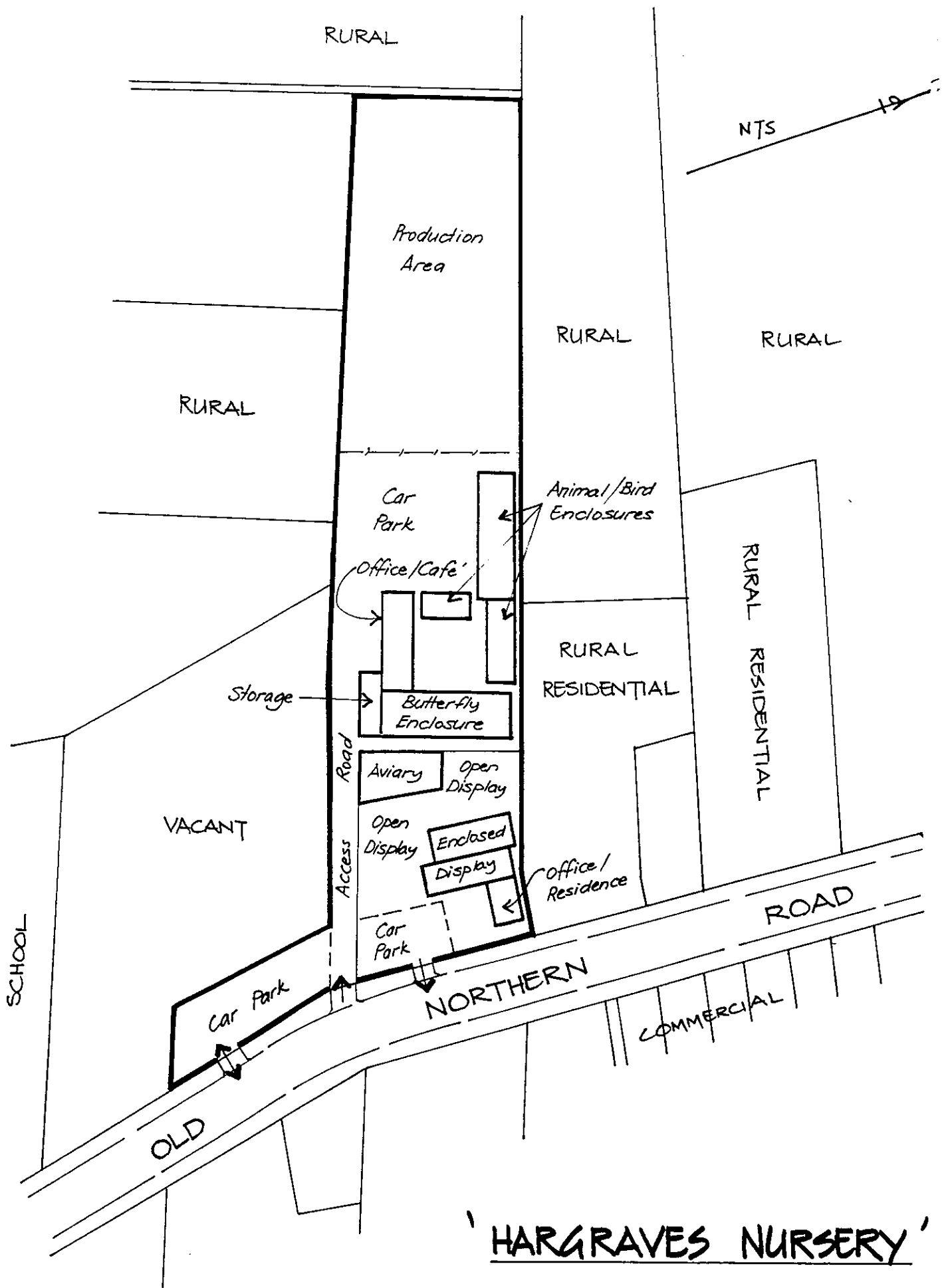
Hargraves Nursery is located along the western side of Old Northern Road, south of its intersections with Galston Road, Dural. Three vehicle access points are located along Old Northern Road with most vehicle movements occurring through the two northern driveways. Off-street car parking is provided for some 155 vehicles. The majority of these spaces are located within the adjacent vacant block. Customer amenities include a cafe, childrens play area, animal/bird enclosures and a butterfly display. The surrounding land-use is generally rural with a number of other nurseries in the area. A shopping strip is located to the north along Old Northern Road before the intersection with Galston Road.

Date and Time of Survey

- | | | |
|--------------------------|------------------------|-------------------|
| <input type="checkbox"/> | Saturday 19 March 1994 | 10.00am to 4.00pm |
| <input type="checkbox"/> | Sunday 20 March 1994 | 10.00am to 4.00pm |

Site Data

- | | | |
|--------------------------|-----------------------------|--|
| <input type="checkbox"/> | Area of site | 27,940m ² |
| <input type="checkbox"/> | Display area | 4,400m ² |
| <input type="checkbox"/> | Landscape area | N/A |
| <input type="checkbox"/> | Production area | 10,300m ² |
| <input type="checkbox"/> | Access driveways | 3 |
| <input type="checkbox"/> | On-site parking supply | 155 spaces |
| <input type="checkbox"/> | Number of employees present | 7-10 staff |
| <input type="checkbox"/> | Peak period | weekends |
| <input type="checkbox"/> | Other uses | Animal/bird enclosures
Butterfly enclosures
Open space area
Cafe/Tea house
Gift Shop |



OLD NORTHERN ROAD,
DURAL

PLANT NURSERIES

HARGRAVES NURSERY - DURAL

VEHICLE TRIP GENERATION (TWO-WAY)

TIME	SATURDAY			SUNDAY			TOTAL	
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	SATURDAY	SUNDAY
10:00 - 11:00	78	0	0	80	0	1	78	81
11:00 - 12:00	76	2	2	115	0	1	80	116
12:00 - 13:00	51	2	0	164	0	0	53	164
13:00 - 14:00	72	1	0	71	0	0	73	71
14:00 - 15:00	75	0	1	129	0	0	76	129
15:00 - 16:00	114	0	0	64	0	0	114	64

PEAK HOUR (BY 15 MINUTES)

	BY CLASSIFICATION						BY DIRECTION					
TIME	SATURDAY			SUNDAY			SATURDAY			SUNDAY		
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	IN	OUT	TOT	IN	OUT	TOT
SATURDAY 15:00 - 16:00	114	0	0				48	66	114			
SUNDAY 12:00 - 13:00				162	0	0				77	85	162

PERSON TRIP GENERATION

TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL	VEHICLE OCCUPANCY (SURVEYED FROM ALL INBOUND VEHICLES)	
10:00 - 11:00	78	68	146	104	71	175		
11:00 - 12:00	56	91	147	144	107	251		
12:00 - 13:00	55	44	99	163	188	351	SATURDAY	SUNDAY
13:00 - 14:00	71	65	136	79	75	154	1.86	2.16
14:00 - 15:00	71	70	141	137	141	278		
15:00 - 16:00	90	122	212	67	72	139		

PEAK HOUR (BY 15 MINUTES)

TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL		
SATURDAY 15:00 - 16:00	90	122	212					
SUNDAY 12:00 - 13:00				163	188	351		

PLANT NURSERIES

HARGRAVES NURSERY - DURAL

VEHICLE CARPARK ACCUMULATION

TIME	SATURDAY			SUNDAY		
	Inbound	Outbound	Accum.	Inbound	Outbound	Accum.
10:00 - 10:15	7	5	(20*)22	9	9	(9*) 9
10:15 - 10:30	14	8	28	10	6	13
10:30 - 10:45	8	12	24	10	9	12
10:45 - 11:00	13	11	26	19	9	23
11:00 - 11:15	8	16	18	15	11	27
11:15 - 11:30	12	11	19	13	7	33
11:30 - 11:45	5	9	15	26	20	39
11:45 - 12:00	6	13	8	11	13	37
12:00 - 12:15	5	7	6	13	21	29
12:15 - 12:30	7	6	7	19	22	26
12:30 - 12:45	11	4	14	14	27	13
12:45 - 13:00	7	6	15	32	16	29
13:00 - 13:15	9	7	17	8	10	27
13:15 - 13:30	12	10	19	9	7	29
13:30 - 13:45	11	10	20	10	8	31
13:45 - 14:00	6	8	18	9	10	30
14:00 - 14:15	9	12	15	13	12	31
14:15 - 14:30	8	7	16	15	10	36
14:30 - 14:45	13	8	21	12	17	31
14:45 - 15:00	8	11	18	25	25	31
15:00 - 15:15	20	16	22	5	8	28
15:15 - 15:30	5	13	14	7	7	28
15:30 - 15:45	16	17	13	5	10	23
15:45 - 16:00	8	19	2	13	9	27

*Number of vehicles at commencement of survey
(includes vehicles using other site facilities)

PLANT NURSERY

FLOWER POWER NURSERY - ENFIELD

General Site Description

Flower Power Nursery, Enfield is located on the southern side of Mitchell Street opposite Henley Park. The main vehicle access to the nursery is located off Mitchell Street with a minor secondary access located at the rear off Tangarra Street East. This minor access enters the landscape supplies centre, and is used mainly by their customers. Off-street parking is available in a large formal car park for some 166 spaces. The compound includes, along with the nursery, a pet shop, fruit market and the above mentioned landscape supplies centre. These are not associated with the nursery but share the on-site car parking facility. The nursery itself has a cafe and open space gardens. The surrounding land-use is generally residential with Henley Park located opposite the nursery in Mitchell Street.

Date and Time of Survey

- | | | |
|--------------------------|------------------------|-------------------|
| <input type="checkbox"/> | Saturday 26 March 1994 | 10.00am to 3.00pm |
| <input type="checkbox"/> | Sunday 27 March 1994 | 10.00am to 3.00pm |

Site Data

- | | | |
|--------------------------|-----------------------------|---|
| <input type="checkbox"/> | Area of site | 19,300m ² |
| <input type="checkbox"/> | Display area | 10,020m ² |
| <input type="checkbox"/> | Landscape area | 1,180m ² |
| <input type="checkbox"/> | Production area | N/A |
| <input type="checkbox"/> | Access driveways | 2 |
| <input type="checkbox"/> | On-site parking supply | 166 spaces |
| <input type="checkbox"/> | Number of employees present | 10 staff |
| <input type="checkbox"/> | Peak period | weekends |
| <input type="checkbox"/> | Other uses | Cafe/Tea House
Artificial plants
Gift shop
Fruit shop
Pet store
Landscape supplies |

PARK



27 MITCHELL STREET,
ENFIELD.

PLANT NURSERIES

FLOWER POWER NURSERY - ENFIELD

VEHICLE TRIP GENERATION (TWO-WAY)

TIME	SATURDAY			SUNDAY			TOTAL	
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	SATURDAY	SUNDAY
10:00 - 11:00	113	6	1	177	15	0	120	192
11:00 - 12:00	107	4	0	308	16	0	111	324
12:00 - 13:00	145	8	0	219	14	0	153	233
13:00 - 14:00	136	15	0	228	53	0	151	281
14:00 - 15:00	157	14	0	286	25	0	171	311
15:00 - 16:00	-	-	-	-	-	-	-	-

PEAK HOUR (BY 15 MINUTES)

	BY CLASSIFICATION						BY DIRECTION					
TIME	SATURDAY			SUNDAY			SATURDAY			SUNDAY		
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	IN	OUT	TOT	IN	OUT	TOT
SATURDAY												
14:00 - 15:00	158	14	0				85	86	171			
SUNDAY												
13:30 - 14:30				268	63	0				171	160	331

PERSON TRIP GENERATION

TIME	SATURDAY			SUNDAY			VEHICLE OCCUPANCY	
	IN	OUT	TOTAL	IN	OUT	TOTAL	(SURVEYED FROM ALL INBOUND VEHICLES)	
10:00 - 11:00	116	102	218	214	134	348		
11:00 - 12:00	100	101	201	283	305	588		
12:00 - 13:00	145	133	278	195	228	423	SATURDAY	SUNDAY
13:00 - 14:00	142	133	275	275	235	510	1.77	1.76
14:00 - 15:00	156	156	312	274	290	564		
15:00 - 16:00	-	-	-	-	-	-		

PEAK HOUR (BY 15 MINUTES)

TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL		
SATURDAY								
14:00 - 15:00	156	156	312					
SUNDAY								
13:30 - 14:30				310	292	602		

PLANT NURSERIES

FLOWER POWER NURSERY - ENFIELD

VEHICLE CARPARK ACCUMULATION

TIME	SATURDAY			SUNDAY		
	Inbound	Outbound	Accum.	Inbound	Outbound	Accum.
10:00 - 10:15	8	8	(63*)63	17	8	(61*)70
10:15 - 10:30	33	20	76	20	15	75
10:30 - 10:45	12	9	79	36	14	96
10:45 - 11:00	12	19	72	45	36	105
11:00 - 11:15	17	12	77	28	33	100
11:15 - 11:30	14	17	74	45	34	111
11:30 - 11:45	10	17	67	46	45	112
11:45 - 12:00	14	10	71	37	56	93
12:00 - 12:15	30	27	74	21	28	86
12:15 - 12:30	8	12	70	35	41	80
12:30 - 12:45	19	18	71	37	30	87
12:45 - 13:00	23	17	77	14	28	73
13:00 - 13:15	17	19	75	29	39	63
13:15 - 13:30	19	16	78	35	29	69
13:30 - 13:45	20	24	74	46	45	70
13:45 - 14:00	22	14	82	41	17	94
14:00 - 14:15	30	25	87	39	37	96
14:15 - 14:30	14	21	80	45	61	80
14:30 - 14:45	28	16	92	29	31	78
14:45 - 15:00	13	24	81	39	30	87
15:00 - 15:15						
15:15 - 15:30						
15:30 - 15:45						
15:45 - 16:00						

*Number of vehicles at commencement of survey
(includes vehicles using other site facilities)

PLANT NURSERY

HORNSBY GARDEN CENTRE - HORNSBY

General Site Description

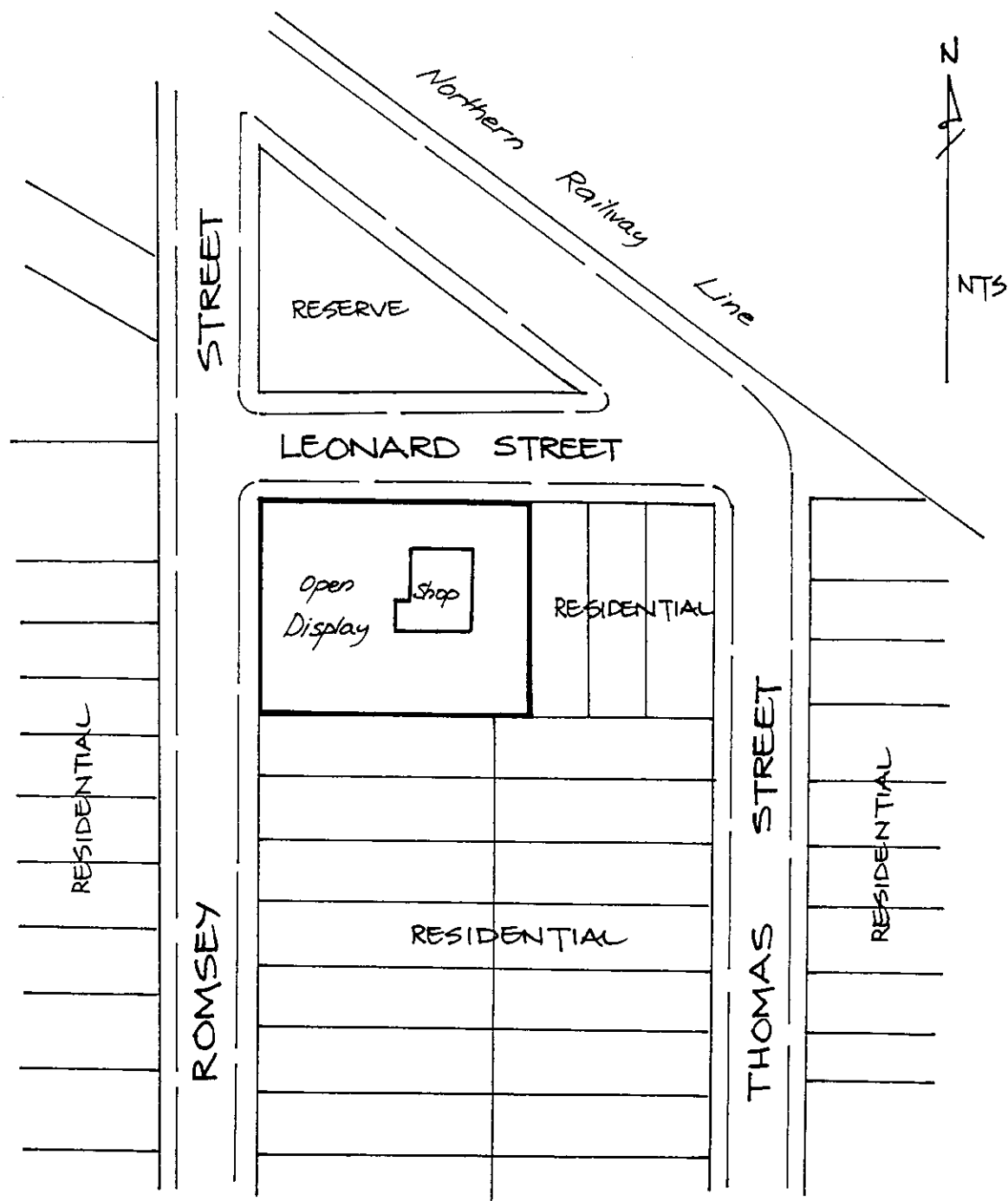
The Hornsby Garden Centre is located on the north-west corner of Romsey Street and Leonard Street, Hornsby. There is no vehicular access to the nursery, the pedestrian access lies off Leonard Street. Parking is limited to on-street along both sides of Romsey Street and Leonard Street and a vacant allotment to the west of the nursery accessed from Leonard Street. The nursery has a small childrens playground, and provides landscaping services and gardening seminars to customers. Residential housing surrounds the site which is in close proximity to the commercial centre of Hornsby and businesses along the Pacific Highway.

Date and Time of Survey

- | | | |
|--------------------------|------------------------|-------------------|
| <input type="checkbox"/> | Saturday 19 March 1994 | 10.00am to 3.30pm |
| <input type="checkbox"/> | Sunday 20 March 1994 | 10.00am to 4.00pm |

Site Data

- | | | |
|--------------------------|-----------------------------|---------------------|
| <input type="checkbox"/> | Area of site | 1,270m ² |
| <input type="checkbox"/> | Display area | 1,160m ² |
| <input type="checkbox"/> | Landscape area | N/A |
| <input type="checkbox"/> | Production area | N/A |
| <input type="checkbox"/> | Access driveways | 0 |
| <input type="checkbox"/> | On-site parking supply | 0 spaces |
| <input type="checkbox"/> | Number of employees present | 2 staff |
| <input type="checkbox"/> | Peak period | weekends |
| <input type="checkbox"/> | Other uses | N/A |



'HORNSBY GARDEN
CENTRE'

CNR. ROMSEY & LEONARD
STREETS,
HORNSBY.

PLANT NURSERIES

HORNSBY GARDEN CENTRE - HORNSBY

VEHICLE TRIP GENERATION (TWO-WAY)

TIME	SATURDAY			SUNDAY			TOTAL	
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	SATURDAY	SUNDAY
10:00 - 11:00	16	-	-	20	-	-	16	20
11:00 - 12:00	14	-	-	24	-	-	14	24
12:00 - 13:00	14	-	-	15	-	-	14	15
13:00 - 14:00	28	-	-	12	-	-	28	12
14:00 - 15:00	33	-	-	33	-	-	33	33
15:00 - 16:00	-	-	-	14	-	-	-	14

PEAK HOUR (BY 15 MINUTES)

BY CLASSIFICATION							BY DIRECTION					
TIME	SATURDAY			SUNDAY			SATURDAY			SUNDAY		
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	IN	OUT	TOT	IN	OUT	TOT
SATURDAY 14:00 - 15:00	33						15	18	33			
SUNDAY 14:00 - 15:00				33						16	17	33

PERSON TRIP GENERATION

TIME	SATURDAY			SUNDAY			VEHICLE OCCUPANCY	
	IN	OUT	TOTAL	IN	OUT	TOTAL	(SURVEYED FROM ALL INBOUND VEHICLES)	
10:00 - 11:00	18	9	27	20	15	35		
11:00 - 12:00	9	16	25	20	24	44		
12:00 - 13:00	12	12	24	16	11	27	SATURDAY	SUNDAY
13:00 - 14:00	28	24	52	10	11	21	1.70	1.70
14:00 - 15:00	27	33	60	29	31	60		
15:00 - 16:00	-	-	-	15	13	28		

PEAK HOUR (BY 15 MINUTES)

TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL		
SATURDAY 14:00 - 15:00	27	33	60					
SUNDAY 14:00 - 15:00				29	31	60		

PLANT NURSERIES

HORNSBY GARDEN CENTRE - HORNSBY

NO CARPARK ON-SITE

TIME	SATURDAY			SUNDAY		
	Inbound	Outbound	Accum.	Inbound	Outbound	Accum.
10:00 - 10:15	1	1	(3*)3	4	3	(3*)4
10:15 - 10:30	2	1	4	2	0	6
10:30 - 10:45	4	2	6	2	2	6
10:45 - 11:00	3	2	7	3	4	5
11:00 - 11:15	2	5	4	3	3	5
11:15 - 11:30	0	2	2	3	4	4
11:30 - 11:45	1	0	3	4	5	3
11:45 - 12:00	2	2	3	1	1	3
12:00 - 12:15	2	3	2	3	1	5
12:15 - 12:30	3	2	3	2	2	5
12:30 - 12:45	1	1	3	1	1	5
12:45 - 13:00	1	1	3	3	2	6
13:00 - 13:15	4	1	6	1	2	5
13:15 - 13:30	6	8	4	3	0	8
13:30 - 13:45	2	1	5	1	1	8
13:45 - 14:00	3	3	5	1	3	6
14:00 - 14:15	2	4	3	4	3	7
14:15 - 14:30	4	1	6	7	3	11
14:30 - 14:45	8	4	10	3	3	11
14:45 - 15:00	1	9	2	2	8	5
15:00 - 15:15				4	2	7
15:15 - 15:30				2	2	7
15:30 - 15:45				1	2	6
15:45 - 16:00				0	1	5

*Number of vehicles at commencement of survey

PLANT NURSERY

LAKEVIEW NURSERY - KINGSFORD

General Site Description

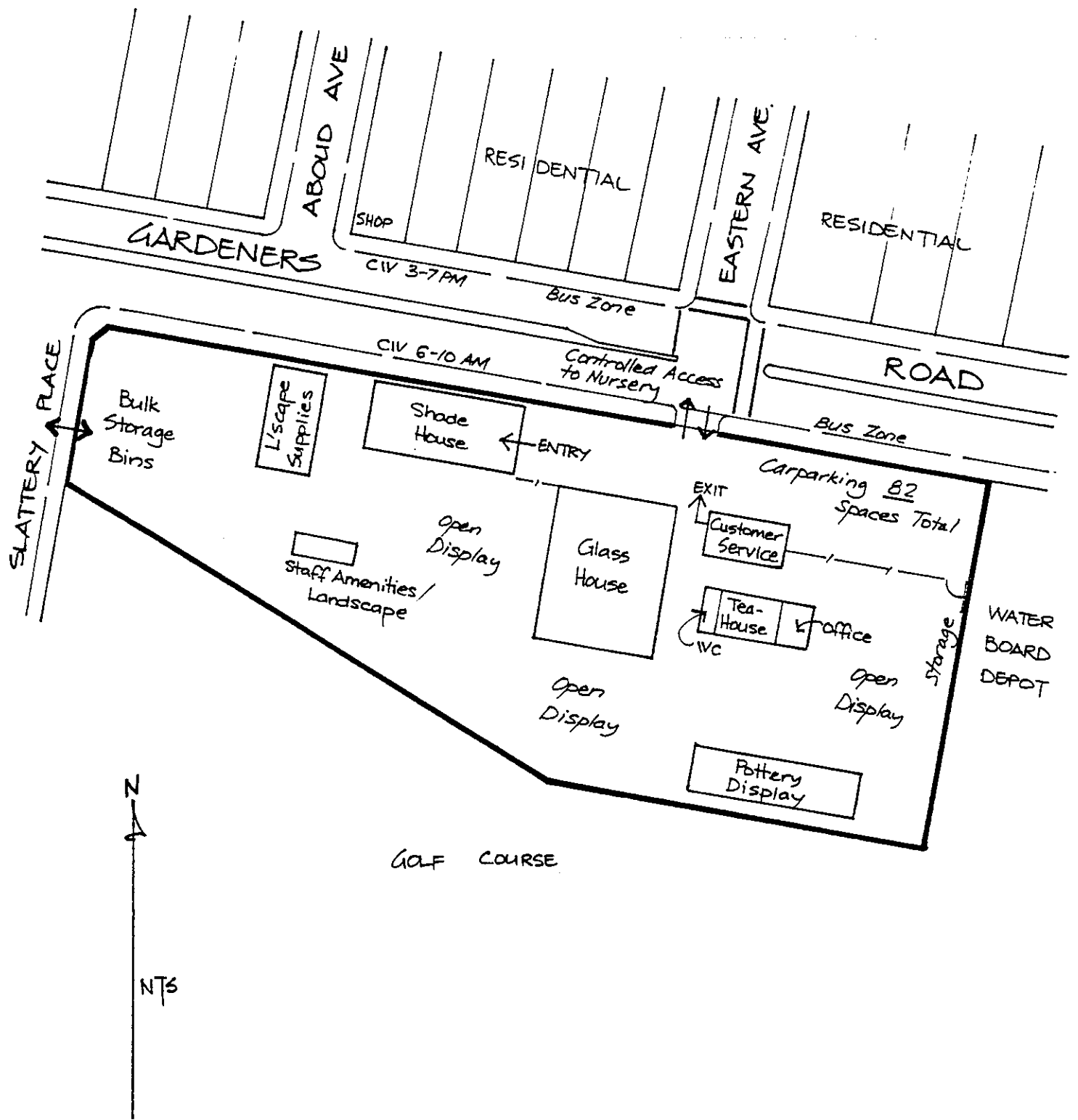
Lakeview Nursery is located on the south side of Gardeners Road at its intersection with Eastern Avenue. Vehicle access is gained from this signalised intersection allowing access from both directions along Gardeners Road and from Eastern Avenue. Off-street parking is available in a formal car park, at the front of the nursery, with some 82 spaces. The nursery includes a landscaping supplies section and a cafe. The surrounding land-use is generally residential. To the south of the nursery lies the Eastlakes Golf Course and a set of corner shops are located at the intersection of Gardeners Road and Aboud Avenue.

Date and Time of Survey

- | | | |
|--------------------------|------------------------|-------------------|
| <input type="checkbox"/> | Saturday 16 April 1994 | 10.00am to 3.00pm |
| <input type="checkbox"/> | Sunday 17 April 1994 | 10.00am to 4.00pm |

Site Data

- | | | |
|--------------------------|-----------------------------|---|
| <input type="checkbox"/> | Area of site | 13,500m ² |
| <input type="checkbox"/> | Display area | 7,500m ² |
| <input type="checkbox"/> | Landscape area | 820m ² |
| <input type="checkbox"/> | Production area | N/A |
| <input type="checkbox"/> | Access driveways | 1 |
| <input type="checkbox"/> | On-site parking supply | 82 spaces |
| <input type="checkbox"/> | Number of employees present | 10 staff |
| <input type="checkbox"/> | Peak period | weekends |
| <input type="checkbox"/> | Other uses | Cafe/Tea house
Artificial plants
Landscaping supplies |



'LAKEVIEW NURSERY'

GARDENERS ROAD,
KINGSFORD

PLANT NURSERIES

LAKEVIEW NURSERY - KINGSFORD

VEHICLE TRIP GENERATION (TWO-WAY)

TIME	SATURDAY			SUNDAY			TOTAL					
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	SATURDAY	SUNDAY				
10:00 - 11:00	64	5	2	111	12	0	71	123				
11:00 - 12:00	120	6	2	125	25	0	128	150				
12:00 - 13:00	126	1	1	149	13	0	128	162				
13:00 - 14:00	107	4	4	154	7	0	115	161				
14:00 - 15:00	106	1	2	168	6	0	109	174				
15:00 - 16:00	-	-	-	129	1	0	-	130				
PEAK HOUR (BY 15 MINUTES)												
	BY CLASSIFICATION						BY DIRECTION					
TIME	SATURDAY			SUNDAY			SATURDAY			SUNDAY		
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	IN	OUT	TOT	IN	OUT	TOT
SATURDAY												
12:30 - 13:30	142	2	1				72	73	145			
SUNDAY												
12:30 - 13:30				163	13	0				86	90	176

PERSON TRIP GENERATION

TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL	VEHICLE OCCUPANCY (SURVEYED FROM ALL INBOUND VEHICLES)	
10:00 - 11:00	90	61	151	134	113	247		
11:00 - 12:00	125	98	223	158	138	296		
12:00 - 13:00	121	104	225	171	158	329		
13:00 - 14:00	91	111	202	163	160	323		
14:00 - 15:00	105	88	193	177	174	351		
15:00 - 16:00	-	-	-	126	131	257	SATURDAY	SUNDAY
							1.74	1.92
PEAK HOUR (BY 15 MINUTES)								
TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL		
SATURDAY								
12:30 - 13:30	126	127	253					
SUNDAY								
12:30 - 13:30				174	178	352		

PLANT NURSERIES

LAKEVIEW NURSERY - KINGSFORD

VEHICLE CARPARK ACCUMULATION

TIME	SATURDAY			SUNDAY		
	Inbound	Outbound	Accum.	Inbound	Outbound	Accum.
10:00 - 10:15	11	11	(17*) 17	19	11	(24*) 32
10:15 - 10:30	11	4	24	15	11	36
10:30 - 10:45	4	10	18	15	11	40
10:45 - 11:00	11	9	20	18	23	35
11:00 - 11:15	25	13	32	19	13	41
11:15 - 11:30	15	10	37	18	18	41
11:30 - 11:45	15	24	28	19	22	38
11:45 - 12:00	17	9	36	24	17	45
12:00 - 12:15	8	5	39	27	20	52
12:15 - 12:30	16	11	44	15	14	53
12:30 - 12:45	21	29	36	21	19	55
12:45 - 13:00	24	14	46	20	26	49
13:00 - 13:15	11	13	44	24	23	50
13:15 - 13:30	16	17	43	21	22	49
13:30 - 13:45	11	17	37	16	13	52
13:45 - 14:00	15	15	37	21	21	52
14:00 - 14:15	20	22	35	20	24	48
14:15 - 14:30	14	8	41	21	20	49
14:30 - 14:45	18	15	44	19	23	45
14:45 - 15:00	8	4	48	29	18	56
15:00 - 15:15				19	21	54
15:15 - 15:30				21	19	56
15:30 - 15:45				15	10	61
15:45 - 16:00				9	16	54

*Number of vehicles at commencement of survey

PLANT NURSERY

DRIVE-IN GARDEN CENTRE - KINGSWOOD

General Site Description

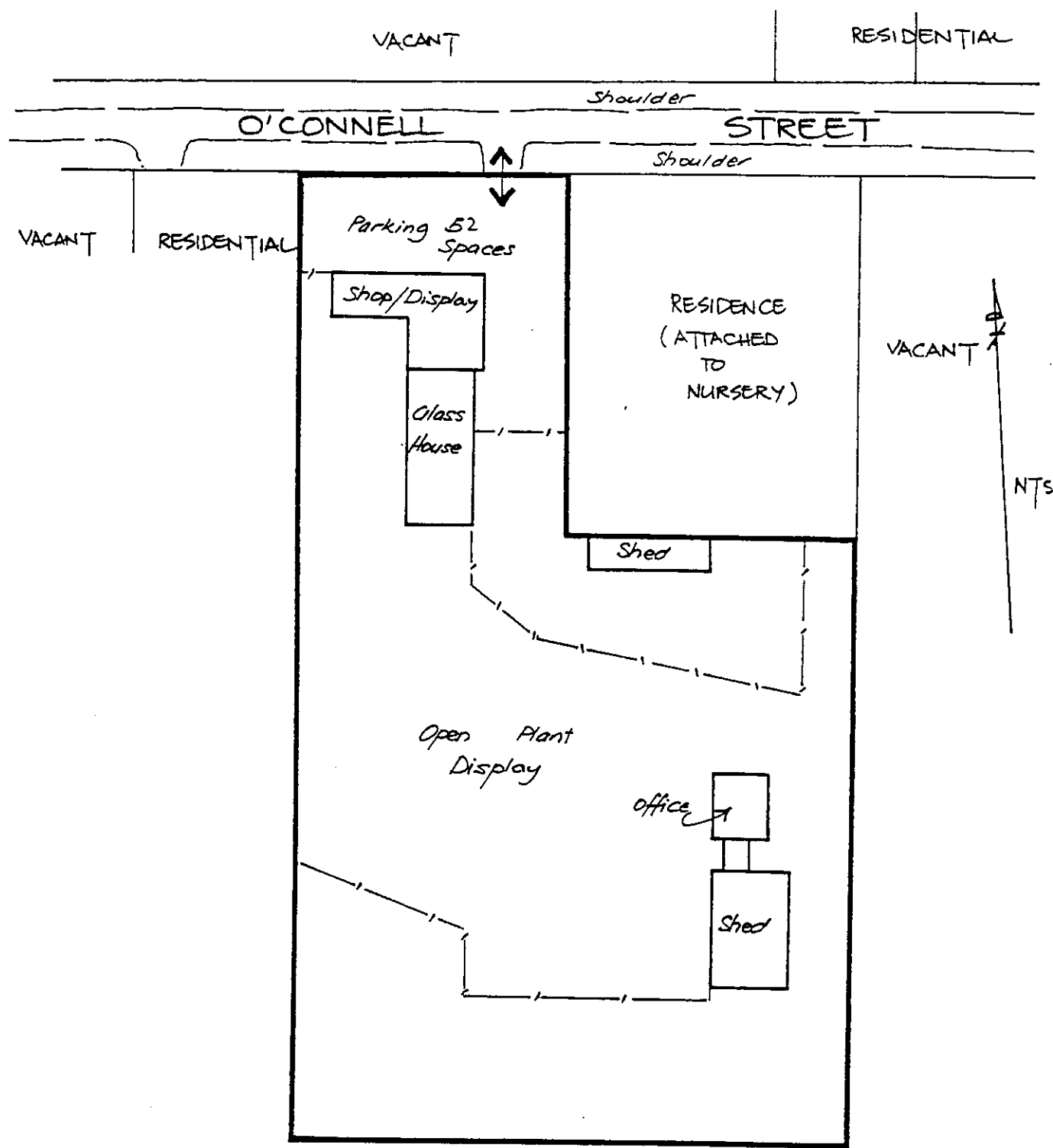
The Drive-In Garden Centre is located on the south side of O'Connell Street west of the NSW Government Archives. A single vehicle access leads off O'Connell Street to a formal car park of some 50 spaces. A landscaping supplies section is located in the south-east corner of the site. The surrounding land-use is generally rural, a large residential estate is found at the eastern end of O'Connell Street, and the University of Western Sydney lies to the west.

Date and Time of Survey

- | | | |
|--------------------------|------------------------|-------------------|
| <input type="checkbox"/> | Saturday 19 March 1994 | 10.00am to 3.00pm |
| <input type="checkbox"/> | Sunday 20 March 1994 | 10.00am to 3.00pm |

Site Data

- | | | |
|--------------------------|-----------------------------|----------------------|
| <input type="checkbox"/> | Area of site | 17,750m ² |
| <input type="checkbox"/> | Display area | 9,130m ² |
| <input type="checkbox"/> | Landscape area | 1,200m ² |
| <input type="checkbox"/> | Production area | N/A |
| <input type="checkbox"/> | Access driveways | 1 |
| <input type="checkbox"/> | On-site parking supply | 52 spaces |
| <input type="checkbox"/> | Number of employees present | 2 staff |
| <input type="checkbox"/> | Peak period | weekends |
| <input type="checkbox"/> | Other uses | Landscape supplies |



'DRIVE-IN GARDEN CENTRE'

O'CONNELL STREET,
KINGSWOOD

PLANT NURSERIES												
DRIVE-IN GARDEN CENTRE - KINGSWOOD												
VEHICLE TRIP GENERATION (TWO-WAY)												
TIME	SATURDAY			SUNDAY			TOTAL					
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	SATURDAY	SUNDAY				
10:00 - 11:00	13	7	2	25	5	0	22	30				
11:00 - 12:00	14	8	0	32	6	0	22	38				
12:00 - 13:00	18	4	0	38	2	0	22	40				
13:00 - 14:00	26	4	0	23	7	0	30	30				
14:00 - 15:00	26	8	2	40	10	0	36	50				
15:00 - 16:00	-	-	-	-	-	-	-	-				
PEAK HOUR (BY 15 MINUTES)												
	BY CLASSIFICATION						BY DIRECTION					
TIME	SATURDAY			SUNDAY			SATURDAY			SUNDAY		
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	IN	OUT	TOT	IN	OUT	TOT
SATURDAY												
14:00 - 15:00	26	8	2				19	17	36			
SUNDAY												
14:00 - 15:00				40	10	0				26	24	50

PERSON TRIP GENERATION								
TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL	VEHICLE OCCUPANCY (SURVEYED FROM ALL INBOUND VEHICLES)	
10:00 - 11:00	24	24	48	35	30	65		
11:00 - 12:00	24	24	48	50	32	82		
12:00 - 13:00	26	22	48	39	48	87	SATURDAY	SUNDAY
13:00 - 14:00	33	33	66	34	34	68	2.19	2.16
14:00 - 15:00	42	37	79	56	52	108		
15:00 - 16:00	-	-	-	-	-	-		
PEAK HOUR (BY 15 MINUTES)								
TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL		
SATURDAY								
14:00 - 15:00	42	37	79					
SUNDAY								
14:00 - 15:00				56	52	108		

PLANT NURSERIES

DRIVE-IN GARDEN CENTRE - KINGSWOOD

VEHICLE CARPARK ACCUMULATION

TIME	SATURDAY			SUNDAY		
	Inbound	Outbound	Accum.	Inbound	Outbound	Accum.
10:00 - 10:15	0	1	(10*) 9	7	2	(4*) 9
10:15 - 10:30	5	5	9	2	4	7
10:30 - 10:45	5	1	13	6	5	8
10:45 - 11:00	1	4	10	1	3	6
11:00 - 11:15	4	2	12	6	6	6
11:15 - 11:30	1	2	11	5	4	7
11:30 - 11:45	6	3	14	4	0	11
11:45 - 12:00	0	4	10	8	5	14
12:00 - 12:15	4	4	10	6	6	14
12:15 - 12:30	3	3	10	3	3	14
12:30 - 12:45	2	1	11	7	5	16
12:45 - 13:00	3	2	12	2	8	10
13:00 - 13:15	3	3	12	4	4	10
13:15 - 13:30	6	6	12	6	4	12
13:30 - 13:45	5	3	14	3	5	10
13:45 - 14:00	1	3	12	2	2	10
14:00 - 14:15	5	2	15	7	3	14
14:15 - 14:30	6	6	15	9	8	15
14:30 - 14:45	6	6	15	7	7	15
14:45 - 15:00	2	3	14	3	6	12
15:00 - 15:15						
15:15 - 15:30						
15:30 - 15:45						
15:45 - 16:00						

*Number of vehicles at commencement of survey

PLANT NURSERY

FLOWER POWER NURSERY - MOOREBANK

General Site Description

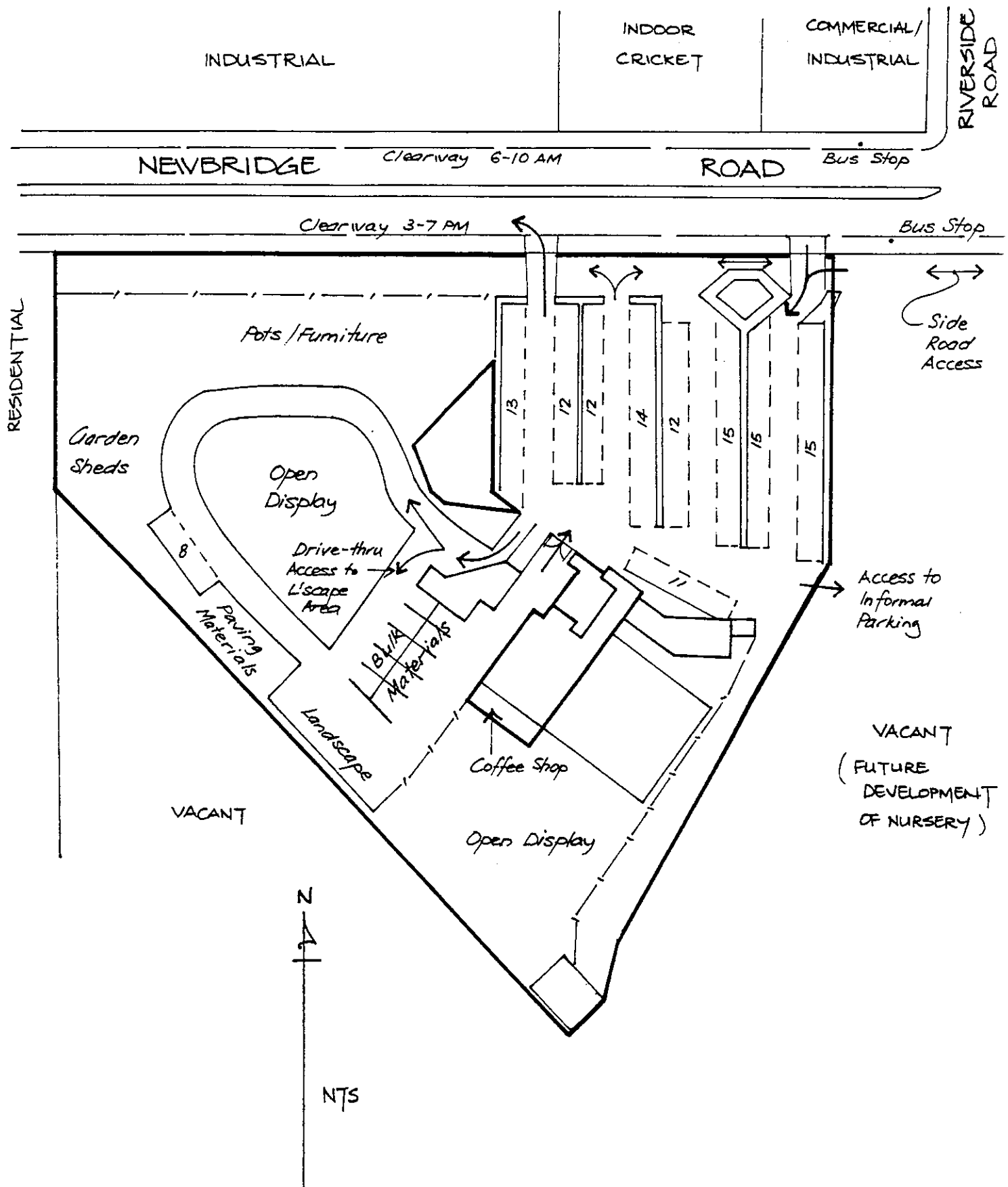
Flower Power Nursery, Moorebank is located on the southern side of Newbridge Road in the vicinity of Riverside Road. Vehicle access to the nursery is provided via 2 driveways off Newbridge Road and a side access road off Davy Robinson Drive. Off-street parking is provided by a formal car park of some 149 spaces and a smaller informal car park. The nursery includes a landscaping supplies section, a cafe and a pet store. The site is immediately adjacent to vacant land to the south and east. To the west of the site land-use is generally made up of residential development. Commercial/light industrial development is generally located to the north on the opposite side of Newbridge Road.

Date and Time of Survey

- | | | |
|--------------------------|-----------------------|-------------------|
| <input type="checkbox"/> | Saturday 9 April 1994 | 10.00am to 3.00pm |
| <input type="checkbox"/> | Sunday 10 April 1994 | 10.00am to 3.00pm |

Site Data

- | | | |
|--------------------------|-----------------------------|---|
| <input type="checkbox"/> | Area of site | 22,510m ² |
| <input type="checkbox"/> | Display area | 13,770m ² |
| <input type="checkbox"/> | Landscape area | 1,320m ² |
| <input type="checkbox"/> | Production area | N/A |
| <input type="checkbox"/> | Access driveways | 3 |
| <input type="checkbox"/> | On-site parking supply | 179 spaces |
| <input type="checkbox"/> | Number of employees present | 10 staff |
| <input type="checkbox"/> | Peak period | weekends |
| <input type="checkbox"/> | Other uses | Mower sales/repairs
Cafe
Artificial Plans
Aviary
Landscaping supplies |



'FLOWER POWER'

NEVBRIDGE ROAD,
MOOREBANK.

PLANT NURSERIES

FLOWER POWER NURSERY - MOOREBANK

VEHICLE TRIP GENERATION (TWO-WAY)

TIME	SATURDAY			SUNDAY			TOTAL					
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	SATURDAY	SUNDAY				
10:00 - 11:00	91	8	9	166	14	2	108	182				
11:00 - 12:00	127	20	3	231	28	11	150	270				
12:00 - 13:00	152	12	1	217	15	4	165	236				
13:00 - 14:00	143	15	5	185	19	3	163	207				
14:00 - 15:00	144	12	3	155	14	3	159	172				
15:00 - 16:00	-	-	-	-	-	-	-	-				
PEAK HOUR (BY 15 MINUTES)												
	BY CLASSIFICATION						BY DIRECTION					
TIME	SATURDAY			SUNDAY			SATURDAY			SUNDAY		
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	IN	OUT	TOT	IN	OUT	TOT
SATURDAY												
12:00 - 13:00	152	11	2				75	90	165			
SUNDAY												
11:00 - 12:00				231	28	11				131	139	270

PERSON TRIP GENERATION

TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL	VEHICLE OCCUPANCY	
10:00 - 11:00	132	81	213	217	150	367	(SURVEYED FROM ALL INBOUND VEHICLES)	
11:00 - 12:00	152	144	296	267	283	550		
12:00 - 13:00	150	179	329	197	278	475	SATURDAY	SUNDAY
13:00 - 14:00	175	161	336	189	231	420	1.97	2.01
14:00 - 15:00	144	169	313	159	187	346		
15:00 - 16:00	-	-	-	-	-	-		
PEAK HOUR (BY 15 MINUTES)								
TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL		
SATURDAY								
12:30 - 13:30	166	171	337					
SUNDAY								
11:00 - 12:00				267	283	550		

PLANT NURSERIES

FLOWER POWER NURSERY - MOOREBANK

VEHICLE CARPARK ACCUMULATION

TIME	SATURDAY			SUNDAY		
	Inbound	Outbound	Accum.	Inbound	Outbound	Accum.
10:00 - 10:15	6	6	(23*) 23	22	16	(30*)36
10:15 - 10:30	17	6	34	28	20	44
10:30 - 10:45	18	16	36	33	23	54
10:45 - 11:00	26	13	49	25	15	64
11:00 - 11:15	22	19	52	31	19	76
11:15 - 11:30	14	26	40	33	28	81
11:30 - 11:45	15	12	43	32	37	76
11:45 - 12:00	26	16	53	35	25	86
12:00 - 12:15	18	20	51	22	38	70
12:15 - 12:30	18	26	43	32	38	64
12:30 - 12:45	18	23	38	19	40	43
12:45 - 13:00	21	21	38	25	22	46
13:00 - 13:15	19	18	39	27	24	49
13:15 - 13:30	24	22	41	15	28	36
13:30 - 13:45	24	14	51	28	31	33
13:45 - 14:00	18	24	45	23	31	25
14:00 - 14:15	19	16	48	14	36	3
14:15 - 14:30	20	25	43	14	12	5
14:30 - 14:45	17	22	38	27	25	7
14:45 - 15:00	17	23	32	24	20	11
15:00 - 15:15						
15:15 - 15:30						
15:30 - 15:45						
15:45 - 16:00						

*Number of vehicles at commencement of survey

PLANT NURSERY

SHERRINGHAMS NURSERY - NORTH RYDE

General Site Description

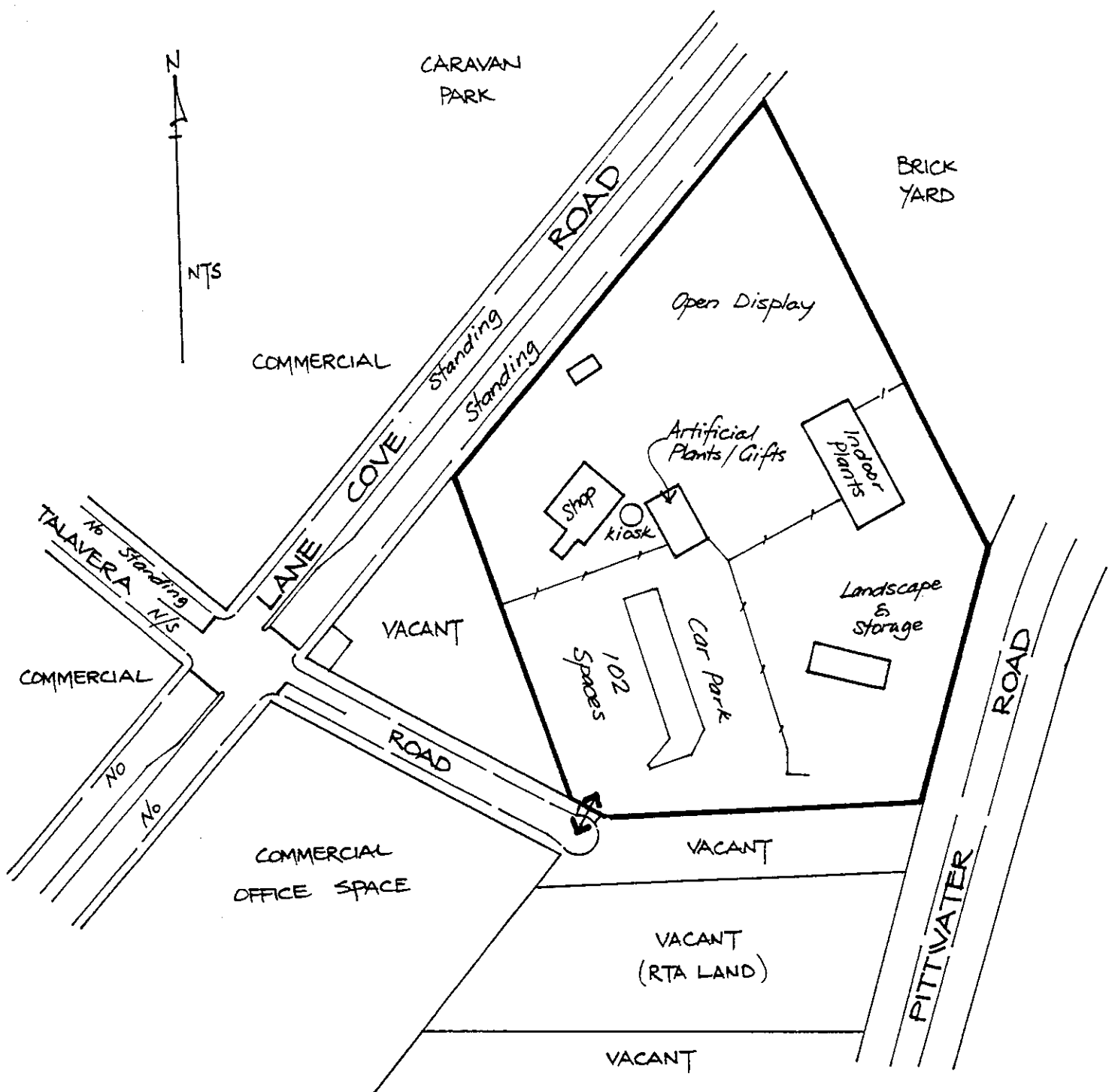
Sherringham's Nursery is located on the north-eastern corner of Lane Cove Road and Talavera Road, North Ryde. The main vehicle access to the nursery is located off Talavera Road with a minor secondary access available off Pittwater Road. The secondary access is infrequently used and provides an alternative entry and exit to the landscape supplies. Off-street parking is available within two adjoining car parks. The upper car park, adjacent to the main entrance to the nursery, provides some 73 formal parking spaces and the lower car park provides for informal parking. The surrounding land-use incorporates a number of office parks together with a group of local shops on Lane Cove Road.

Date and Time of Survey

- | | | |
|--------------------------|------------------------|-------------------|
| <input type="checkbox"/> | Saturday 12 March 1994 | 10.00am to 4.00pm |
| <input type="checkbox"/> | Sunday 13 March 1994 | 10.00am to 4.00pm |

Site Data

- | | | |
|--------------------------|-----------------------------|---|
| <input type="checkbox"/> | Area of site | 30,680m ² |
| <input type="checkbox"/> | Display area | 17,650m ² |
| <input type="checkbox"/> | Landscape area | 3,300m ² |
| <input type="checkbox"/> | Production area | N/A |
| <input type="checkbox"/> | Access driveways | 2 |
| <input type="checkbox"/> | On-site parking supply | 102 spaces |
| <input type="checkbox"/> | Number of employees present | 17 staff |
| <input type="checkbox"/> | Peak period | weekends |
| <input type="checkbox"/> | Other uses | Gift shop
Garden pools
Tea house
Artificial plants
Landscape supplies |



'SHERRINGHAM'S NURSERY'

LANE COVE ROAD,
NORTH RYDE

PLANT NURSERIES

SHERRINGHAMS NURSERY - NORTH RYDE

VEHICLE TRIP GENERATION (TWO-WAY)

TIME	SATURDAY			SUNDAY			TOTAL	
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	SATURDAY	SUNDAY
10:00 - 11:00	137			163			137	163
11:00 - 12:00	165			229			165	229
12:00 - 13:00	136			210			136	210
13:00 - 14:00	126			217			126	217
14:00 - 15:00	200			270			200	270
15:00 - 16:00	168			272			168	272

PEAK HOUR (BY 15 MINUTES)

	BY CLASSIFICATION						BY DIRECTION					
TIME	SATURDAY			SUNDAY			SATURDAY			SUNDAY		
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	IN	OUT	TOT	IN	OUT	TOT
SATURDAY												
14:30 - 15:30	217						109	108	217			
SUNDAY												
15:00 - 16:00				272						104	168	272

PERSON TRIP GENERATION

TIME	SATURDAY			SUNDAY			VEHICLE OCCUPANCY	
	IN	OUT	TOTAL	IN	OUT	TOTAL	(SURVEYED FROM ALL INBOUND VEHICLES)	
10:00 - 11:00	141	95	236	161	140	301		
11:00 - 12:00	153	133	286	238	188	426		
12:00 - 13:00	115	119	234	185	208	393	1.71	1.84
13:00 - 14:00	109	120	229	227	186	413		
14:00 - 15:00	187	166	353	263	249	512		
15:00 - 16:00	140	148	288	194	315	509		

PEAK HOUR (BY 15 MINUTES)

TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL		
SATURDAY								
14:30 - 15:30	186	189	375					
SUNDAY								
15:00 - 16:00				194	315	509		

PLANT NURSERIES

SHERRINGHAMS NURSERY - NORTH RYDE

VEHICLE CARPARK ACCUMULATION

TIME	SATURDAY			SUNDAY		
	Inbound	Outbound	Accum.	Inbound	Outbound	Accum.
10:00 - 10:15	16	9	(11*)18	16	17	(49*) 42
10:15 - 10:30	27	10	35	17	15	45
10:30 - 10:45	17	18	34	25	28	35
10:45 - 11:00	22	18	38	29	16	45
11:00 - 11:15	27	26	39	29	21	53
11:15 - 11:30	24	23	40	30	24	59
11:30 - 11:45	26	8	58	32	31	60
11:45 - 12:00	11	20	49	36	26	70
12:00 - 12:15	18	20	47	42	49	63
12:15 - 12:30	17	18	46	8	8	63
12:30 - 12:45	23	21	48	25	31	57
12:45 - 13:00	9	10	47	23	24	56
13:00 - 13:15	15	16	46	26	18	64
13:15 - 13:30	10	17	39	25	34	55
13:30 - 13:45	20	13	46	34	23	66
13:45 - 14:00	16	19	43	31	26	71
14:00 - 14:15	23	14	52	35	31	75
14:15 - 14:30	20	24	48	40	39	76
14:30 - 14:45	47	20	75	29	28	77
14:45 - 15:00	17	35	57	32	36	73
15:00 - 15:15	21	32	46	40	47	66
15:15 - 15:30	24	21	49	24	19	71
15:30 - 15:45	20	18	51	27	33	65
15:45 - 16:00	17	15	53	13	69	9

*Number of vehicles at commencement of survey

PLANT NURSERY

ALL SEASONS GARDEN CENTRE - OURIMBAH

General Site Description

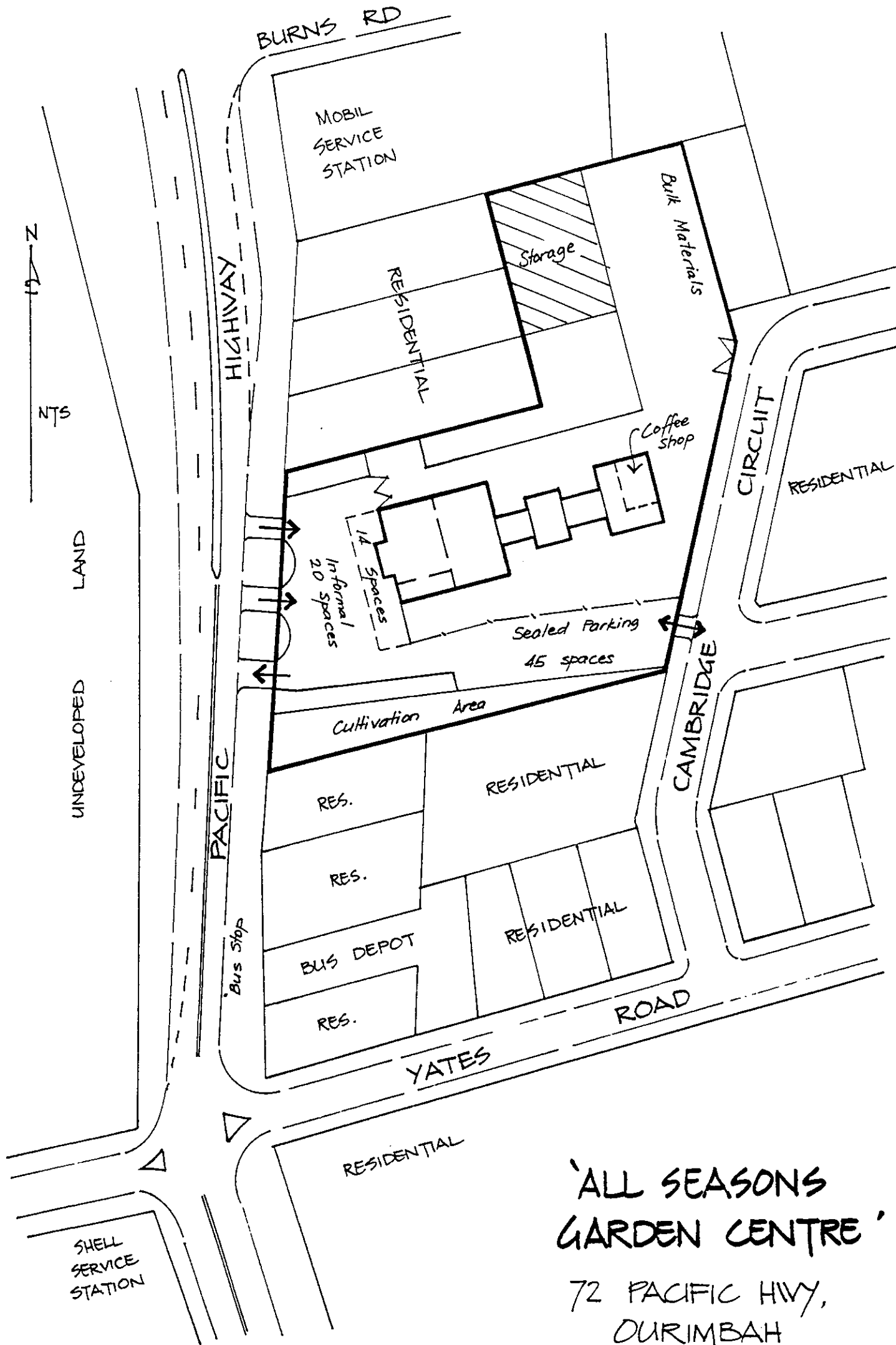
All Seasons Garden Centre is located on the Pacific Highway north of Ourimbah about 100 metres south of its intersection with the Sydney/Newcastle Expressway. Main access to the site is off the Pacific Highway, and a minor access is available off Cambridge Circle at the rear of the nursery. This rear entrance is used mainly by pedestrians from nearby residential areas. A delivery access off Cambridge Circle exists, however this was locked for the duration of the survey. Car parking is available in a formal car park of some 60 spaces located at the front and a smaller informal car park at the southern side of the site. The nursery incorporates a landscape supplies section, coffee shop, a childrens playground and an aviary. The surrounding land-use is primarily residential, with a service station located north of the site and vacant land on the western side of the highway.

Date and Time of Survey

- | | | |
|--------------------------|------------------------|-------------------|
| <input type="checkbox"/> | Saturday 16 April 1994 | 10.00am to 3.00pm |
| <input type="checkbox"/> | Sunday 20 March 1994 | 10.00am to 3.00pm |

Site Data

- | | | |
|--------------------------|-----------------------------|--|
| <input type="checkbox"/> | Area of site | 9,870m ² |
| <input type="checkbox"/> | Display area | 5,720m ² |
| <input type="checkbox"/> | Landscape area | 1,100m ² |
| <input type="checkbox"/> | Production area | 750m ² |
| <input type="checkbox"/> | Access driveways | 4 |
| <input type="checkbox"/> | On-site parking supply | 79 spaces |
| <input type="checkbox"/> | Number of employees present | 8 staff |
| <input type="checkbox"/> | Peak period | weekends |
| <input type="checkbox"/> | Other uses | Landscape supplies
Artificial plants
Coffee shop
Aviary |



'ALL SEASONS GARDEN CENTRE'

72 PACIFIC HWY,
OURIMBAH

PLANT NURSERIES

ALL SEASONS GARDEN CENTRE - OURIMBAH

VEHICLE TRIP GENERATION (TWO-WAY)

TIME	SATURDAY			SUNDAY			TOTAL	
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	SATURDAY	SUNDAY
10:00 - 11:00	56	5	0	78	7	0	61	85
11:00 - 12:00	65	7	0	148	3	0	72	151
12:00 - 13:00	63	5	0	77	9	0	68	86
13:00 - 14:00	57	7	0	84	13	0	64	97
14:00 - 15:00	34	4	0	116	8	0	38	124
15:00 - 16:00	-	-	-	-	-	-	-	-

PEAK HOUR (BY 15 MINUTES)

	BY CLASSIFICATION						BY DIRECTION					
TIME	SATURDAY			SUNDAY			SATURDAY			SUNDAY		
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	IN	OUT	TOT	IN	OUT	TOT
SATURDAY 10:30 - 11:30	68	8	0				40	36	76			
SUNDAY 11:00 - 12:00				148	3	0				81	70	151

PERSON TRIP GENERATION

TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL	VEHICLE OCCUPANCY (SURVEYED FROM ALL INBOUND VEHICLES)	
10:00 - 11:00	56	55	111	113	75	188		
11:00 - 12:00	70	62	132	166	146	312		
12:00 - 13:00	66	63	129	85	91	176		
13:00 - 14:00	77	51	128	125	92	217	1.83	2.01
14:00 - 15:00	38	31	69	134	126	260		
15:00 - 16:00	-	-	-	-	-	-		

PEAK HOUR (BY 15 MINUTES)

TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL		
SATURDAY 10:30 - 11:30	73	66	139					
SUNDAY 11:00 - 12:00				166	146	312		

PLANT NURSERIES

ALL SEASONS GARDEN CENTRE - OURIMBAH

VEHICLE CARPARK ACCUMULATION

TIME	SATURDAY			SUNDAY		
	Inbound	Outbound	Accum.	Inbound	Outbound	Accum.
10:00 - 10:15	4	6	(19*)17	5	6	(22*) 21
10:15 - 10:30	6	7	16	14	10	25
10:30 - 10:45	16	12	20	18	13	30
10:45 - 11:00	5	5	20	14	5	39
11:00 - 11:15	10	11	19	24	10	53
11:15 - 11:30	9	8	20	24	31	46
11:30 - 11:45	10	6	24	16	18	44
11:45 - 12:00	9	9	24	17	11	50
12:00 - 12:15	4	8	20	11	12	49
12:15 - 12:30	13	6	27	9	8	50
12:30 - 12:45	15	8	34	12	15	47
12:45 - 13:00	3	11	26	9	10	46
13:00 - 13:15	8	6	28	9	5	50
13:15 - 13:30	12	5	35	15	14	51
13:30 - 13:45	7	7	35	16	9	58
13:45 - 14:00	11	8	38	19	10	67
14:00 - 14:15	8	2	44	13	8	72
14:15 - 14:30	3	3	44	17	19	70
14:30 - 14:45	6	6	44	22	18	74
14:45 - 15:00	4	6	42	12	15	71
15:00 - 15:15						
15:15 - 15:30						
15:30 - 15:45						
15:45 - 16:00						

*Number of vehicles at commencement of survey

PLANT NURSERY

PEAKHURST GARDEN CENTRE - PEAKHURST

General Site Description

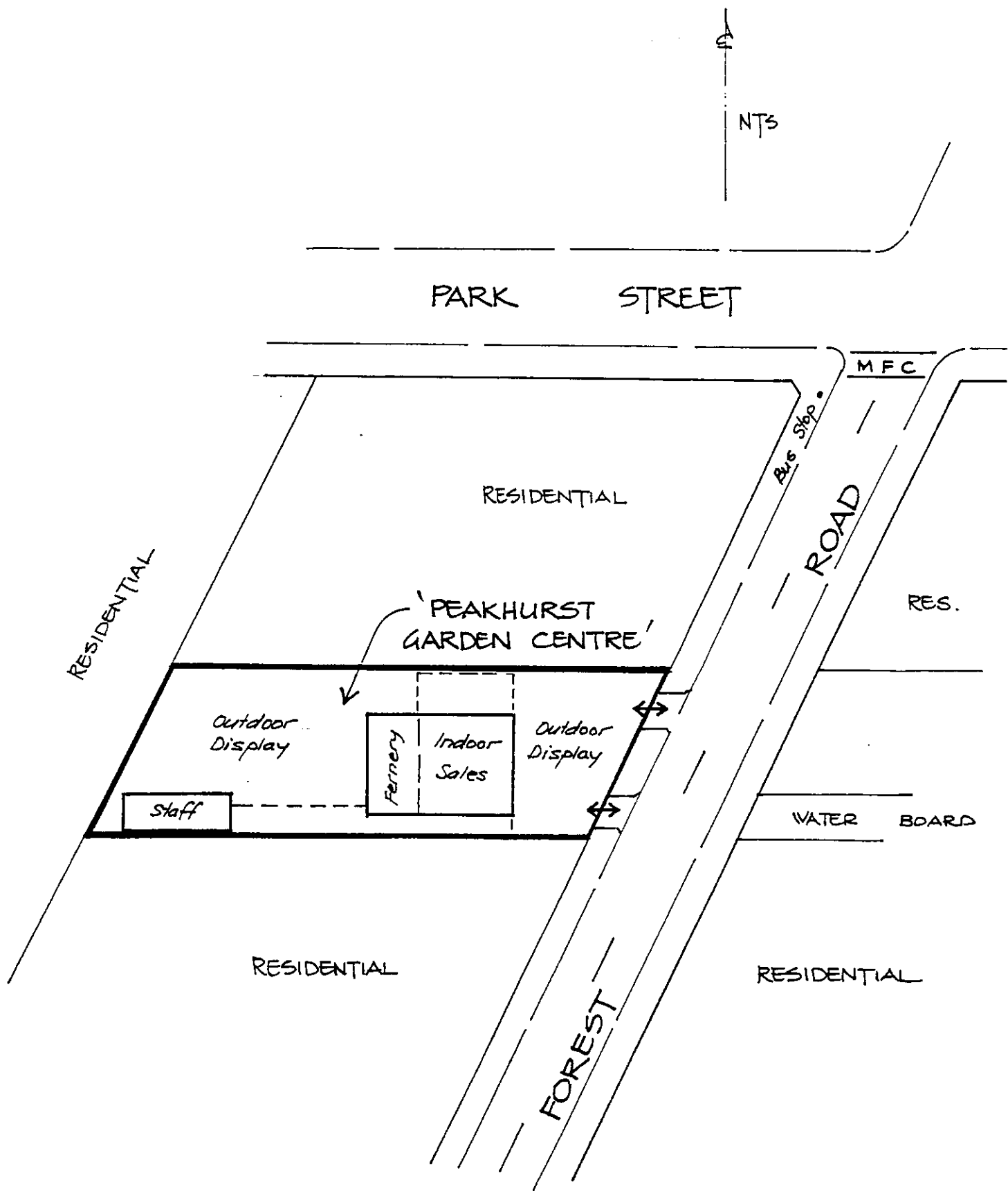
The Peakhurst Garden Centre is located on the western side of Forest Road between Park Street and Samuel Street, Peakhurst. There is no vehicle access to the site, pedestrian access is via two gates along Forest Road. Parking is available on-street along Forest Road. The surrounding land-use is generally residential and a set of local shops are located on the corner of Forest Road and Park Street.

Date and Time of Survey

- | | | |
|--------------------------|-----------------------|-------------------|
| <input type="checkbox"/> | Saturday 9 April 1994 | 10.00am to 3.00pm |
| <input type="checkbox"/> | Sunday 10 April 1994 | 10.00am to 3.00pm |

Site Data

- | | | |
|--------------------------|-----------------------------|---------------------|
| <input type="checkbox"/> | Area of site | 1,480m ² |
| <input type="checkbox"/> | Display area | 1,390m ² |
| <input type="checkbox"/> | Landscape area | N/A |
| <input type="checkbox"/> | Production area | N/A |
| <input type="checkbox"/> | Access driveways | 0 |
| <input type="checkbox"/> | On-site parking supply | 0 spaces |
| <input type="checkbox"/> | Number of employees present | 4 staff |
| <input type="checkbox"/> | Peak period | weekends |
| <input type="checkbox"/> | Other uses | N/A |



'PEAKHURST GARDEN
CENTRE'

874 FOREST RD.
PEAKHURST

PLANT NURSERIES

PEAKHURST GARDEN CENTRE - PEAKHURST

VEHICLE TRIP GENERATION (TWO-WAY)

TIME	SATURDAY			SUNDAY			TOTAL	
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	SATURDAY	SUNDAY
10:00 - 11:00	35			46			35	46
11:00 - 12:00	54			43			54	43
12:00 - 13:00	51			45			51	45
13:00 - 14:00	36			37			36	37
14:00 - 15:00	32			44			32	44
15:00 - 16:00							0	0

PEAK HOUR (BY 15 MINUTES)

	BY CLASSIFICATION						BY DIRECTION					
TIME	SATURDAY			SUNDAY			SATURDAY			SUNDAY		
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	IN	OUT	TOT	IN	OUT	TOT
SATURDAY 10:45 - 11:45	57						30	27	57			
SUNDAY 11:30 - 12:30				49						25	24	49

PERSON TRIP GENERATION

TIME	SATURDAY			SUNDAY			VEHICLE OCCUPANCY	
	IN	OUT	TOTAL	IN	OUT	TOTAL	(SURVEYED FROM ALL INBOUND VEHICLES)	
10:00 - 11:00	40	29	69	49	39	88		
11:00 - 12:00	53	52	105	44	37	81		
12:00 - 13:00	46	53	99	38	47	85	SATURDAY	SUNDAY
13:00 - 14:00	36	35	71	39	31	70	1.80	1.70
14:00 - 15:00	30	32	62	42	42	84		
15:00 - 16:00	-	-	-	-	-	-		

PEAK HOUR (BY 15 MINUTES)

TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL		
SATURDAY 10:45 - 11:45	58	53	111					
SUNDAY 11:30 - 12:30				48	45	93		

PLANT NURSERIES

PEAKHURST GARDEN CENTRE - PEAKHURST

NO CARPARK ON-SITE

TIME	SATURDAY			SUNDAY		
	Inbound	Outbound	Accum.	Inbound	Outbound	Accum.
10:00 - 10:15	4	2	(10*)12	4	2	(12*)14
10:15 - 10:30	4	5	11	6	4	16
10:30 - 10:45	6	3	14	11	9	18
10:45 - 11:00	7	6	16	4	5	17
11:00 - 11:15	11	8	18	3	4	16
11:15 - 11:30	7	6	20	5	5	16
11:30 - 11:45	5	8	17	9	5	20
11:45 - 12:00	5	5	16	6	5	21
12:00 - 12:15	7	8	15	4	6	19
12:15 - 12:30	10	6	19	6	7	18
12:30 - 12:45	2	6	15	3	6	14
12:45 - 13:00	5	7	13	7	5	17
13:00 - 13:15	3	3	13	1	3	14
13:15 - 13:30	7	2	18	6	6	14
13:30 - 13:45	6	7	17	5	4	15
13:45 - 14:00	3	7	13	9	4	21
14:00 - 14:15	3	3	13	5	9	17
14:15 - 14:30	5	4	14	5	4	18
14:30 - 14:45	6	4	17	9	3	24
14:45 - 15:00	2	6	12	3	6	21
15:00 - 15:15						
15:15 - 15:30						
15:30 - 15:45						
15:45 - 16:00						

*Number of vehicles at commencement of survey

PLANT NURSERY

FLOWER POWER NURSERY - TAREN POINT

General Site Description

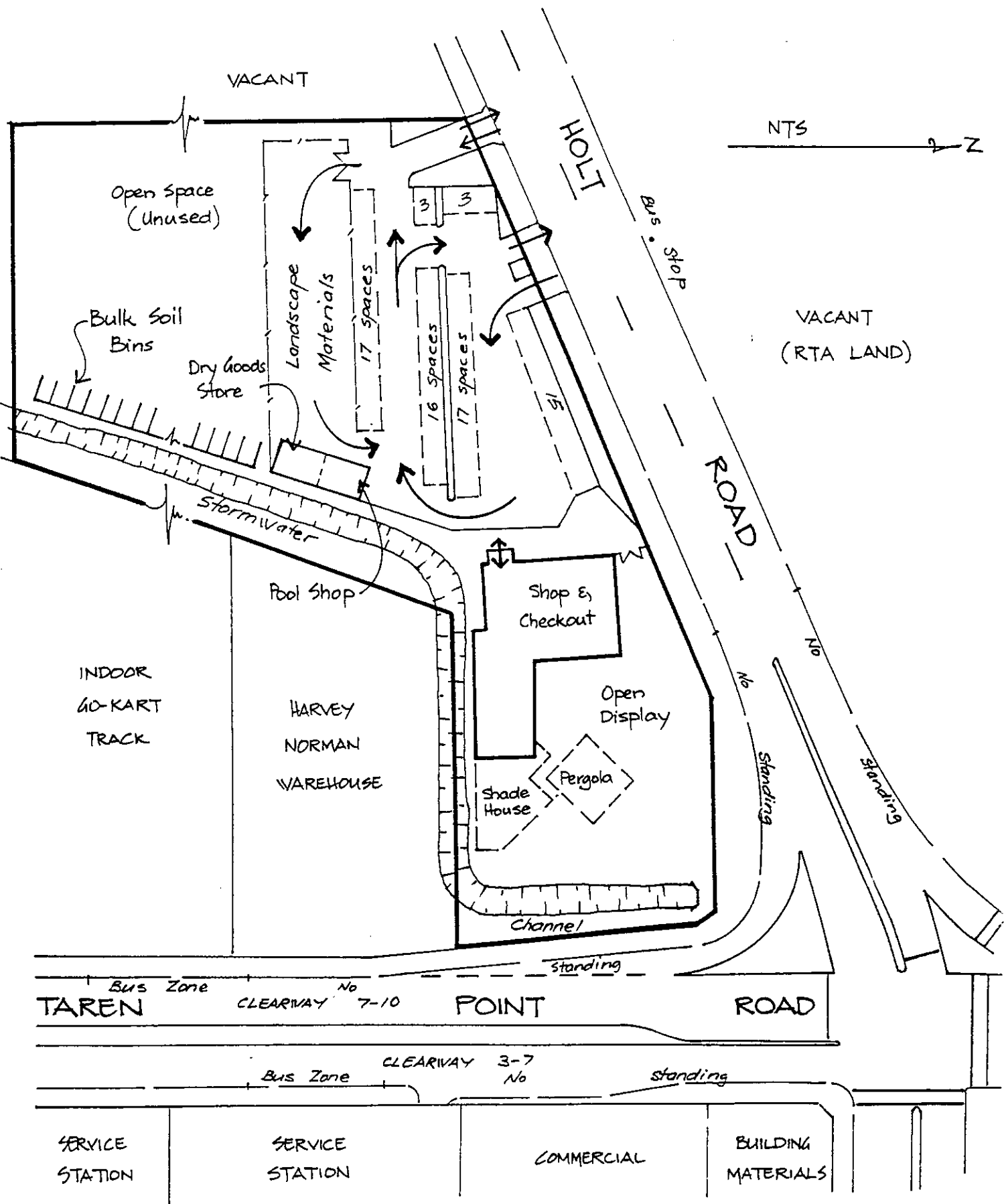
Flower Power Nursery, Taren Point is located on the south-western corner of the intersection of Taren Point Road and Holt Road. Vehicle access to the site is provided by 2 entry/exit driveways on Holt Road. Off-street parking is provided by a formal car park of some 65 spaces and an informal parking area within the landscape supplies section used for pick ups and deliveries. The surrounding land-use is generally commercial and light industrial. A public school is also located to the north-east of the site and vacant land is located to the north and to the west.

Date and Time of Survey

- | | | |
|--------------------------|------------------------|-------------------|
| <input type="checkbox"/> | Saturday 26 March 1994 | 10.00am to 3.00pm |
| <input type="checkbox"/> | Sunday 27 March 1994 | 10.00am to 3.00pm |

Site Data

- | | | |
|--------------------------|-----------------------------|---------------------------------|
| <input type="checkbox"/> | Area of site | 18,570m ² |
| <input type="checkbox"/> | Display area | 13,580m ² |
| <input type="checkbox"/> | Landscape area | 920m ² |
| <input type="checkbox"/> | Production area | N/A |
| <input type="checkbox"/> | Access driveways | 2 |
| <input type="checkbox"/> | On-site parking supply | 65 spaces |
| <input type="checkbox"/> | Number of employees present | 8 staff |
| <input type="checkbox"/> | Peak period | weekends |
| <input type="checkbox"/> | Other uses | Pool shop
Landscape supplies |



'FLOWER POWER'

CNR TAREN POINT ROAD &
HOLT ROAD,
TAREN POINT

PLANT NURSERIES

FLOWER POWER NURSERY - TAREN POINT

VEHICLE TRIP GENERATION (TWO-WAY)

TIME	SATURDAY			SUNDAY			TOTAL	
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	SATURDAY	SUNDAY
10:00 - 11:00	83	1	1	101	14	1	85	116
11:00 - 12:00	140	5	4	138	11	2	149	151
12:00 - 13:00	94	6	3	144	16	4	103	164
13:00 - 14:00	96	0	0	129	10	1	96	140
14:00 - 15:00	98	0	0	120	6	2	98	128
15:00 - 16:00	-	-	-	-	-	-	-	-

PEAK HOUR (BY 15 MINUTES)

TIME	BY CLASSIFICATION						BY DIRECTION					
	SATURDAY			SUNDAY			SATURDAY			SUNDAY		
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	IN	OUT	TOT	IN	OUT	TOT
SATURDAY 11:00 - 12:00	140	5	4				77	72	149			
SUNDAY 11:45 - 12:45				154	16	3				87	87	174

PERSON TRIP GENERATION

TIME	SATURDAY			SUNDAY			VEHICLE OCCUPANCY	
	IN	OUT	TOTAL	IN	OUT	TOTAL	(SURVEYED FROM ALL INBOUND VEHICLES)	
10:00 - 11:00	69	62	131	103	84	187		
11:00 - 12:00	121	111	232	142	101	243		
12:00 - 13:00	63	95	158	127	137	264	SATURDAY	SUNDAY
13:00 - 14:00	74	74	148	121	108	229	1.54	1.61
14:00 - 15:00	82	69	151	104	106	210		
15:00 - 16:00	-	-	-	-	-	-		

PEAK HOUR (BY 15 MINUTES)

TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL		
SATURDAY 11:00 - 12:00	121	111	232					
SUNDAY 11:45 - 12:45				140	140	280		

PLANT NURSERIES

FLOWER POWER NURSERY - TAREN POINT

VEHICLE CARPARK ACCUMULATION

TIME	SATURDAY			SUNDAY		
	Inbound	Outbound	Accum.	Inbound	Outbound	Accum.
10:00 - 10:15	6	7	(21*)22	16	14	(23*) 25
10:15 - 10:30	8	9	21	18	8	35
10:30 - 10:45	13	10	24	12	13	34
10:45 - 11:00	18	14	28	18	17	35
11:00 - 11:15	16	17	27	25	14	46
11:15 - 11:30	25	20	32	27	10	63
11:30 - 11:45	11	18	25	10	13	60
11:45 - 12:00	25	17	33	26	26	60
12:00 - 12:15	10	18	25	25	20	65
12:15 - 12:30	6	22	9	15	20	60
12:30 - 12:45	12	5	16	21	21	60
12:45 - 13:00	13	17	12	18	24	54
13:00 - 13:15	16	18	10	17	16	55
13:15 - 13:30	11	11	10	19	16	58
13:30 - 13:45	9	10	9	16	22	52
13:45 - 14:00	12	9	12	21	13	60
14:00 - 14:15	17	12	17	3	15	48
14:15 - 14:30	9	10	16	25	16	57
14:30 - 14:45	15	11	20	16	19	54
14:45 - 15:00	12	12	20	18	16	56
15:00 - 15:15						
15:15 - 15:30						
15:30 - 15:45						
15:45 - 16:00						

*Number of vehicles at commencement of survey

PLANT NURSERY

BONDS NURSERY - TERREY HILLS

General Site Description

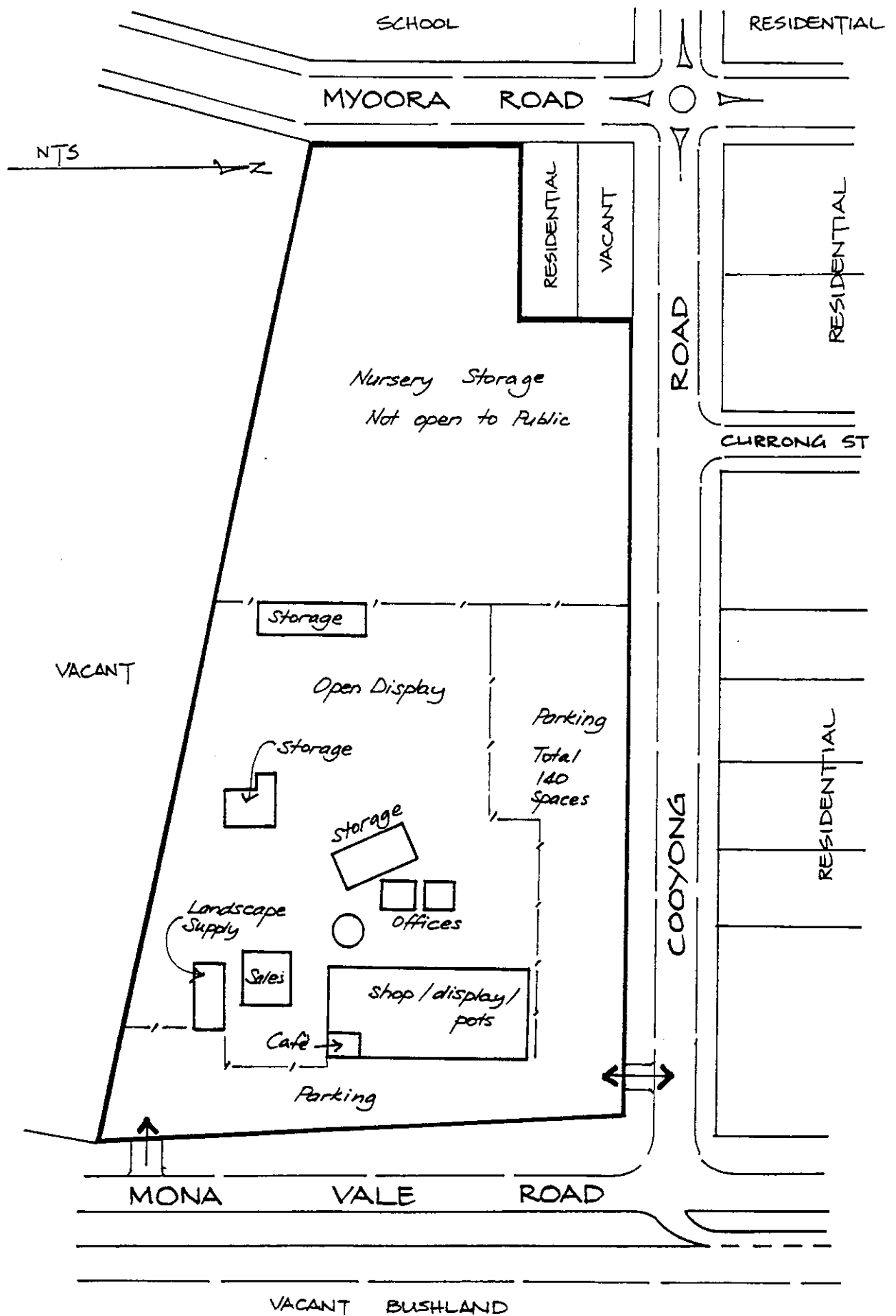
Bonds Nursery is located on the north-western corner of Mona Vale Road and Cooyong Road, Terrey Hills. Vehicular access to the nursery is available from Mona Vale Road and Cooyong Road with the Mona Vale Road access restricted to left in and left out only. Off-street car parking is available within two adjoining car parks. The first car park, located adjacent to Mona Vale Road, provides some 70 spaces and the second car park, located adjacent to Cooyong Road, provides an informal overflow facility for the first car park. the nursery provides a large landscaping supply section which is located at the southern end of the site. The surrounding land-use incorporates residential area to the north of the site and large urban lots are located to the west and south of the site.

Date and Time of Survey

- | | | |
|--------------------------|------------------------|-------------------|
| <input type="checkbox"/> | Saturday 12 March 1994 | 10.00am to 3.00pm |
| <input type="checkbox"/> | Sunday 13 March 1994 | 10.00am to 3.30pm |

Site Data

- | | | |
|--------------------------|-----------------------------|---|
| <input type="checkbox"/> | Area of site | 33,860m ² |
| <input type="checkbox"/> | Display area | 12,200m ² |
| <input type="checkbox"/> | Landscape area | 3,140m ² |
| <input type="checkbox"/> | Production area | 12,700m ² |
| <input type="checkbox"/> | Access driveways | 3 |
| <input type="checkbox"/> | On-site parking supply | 140 spaces |
| <input type="checkbox"/> | Number of employees present | 16 to 20 staff |
| <input type="checkbox"/> | Peak period | weekends |
| <input type="checkbox"/> | Other uses | Shop/cafe
Landscape supplies
Garden pools |



'BONDS NURSERY'

MONA VALE ROAD.
TERREY HILLS

PLANT NURSERIES

BONDS NURSERY - TERREY HILLS

VEHICLE TRIP GENERATION (TWO-WAY)

TIME	SATURDAY			SUNDAY			TOTAL					
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	SATURDAY	SUNDAY				
10:00 - 11:00	156	-	-	191	-	-	156	191				
11:00 - 12:00	156	-	-	203	-	-	156	203				
12:00 - 13:00	218	-	-	255	-	-	218	255				
13:00 - 14:00	175	-	-	214	-	-	175	214				
14:00 - 15:00	212	-	-	262	-	-	212	262				
15:00 - 15:30	-	-	-	127	-	-	-	127				
PEAK HOUR (BY 15 MINUTES)												
	BY CLASSIFICATION						BY DIRECTION					
TIME	SATURDAY			SUNDAY			SATURDAY			SUNDAY		
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	IN	OUT	TOT	IN	OUT	TOT
SATURDAY 10:00 - 13:00	218	-	-				105	113	218			
SUNDAY 14:00 - 15:15				285	-	-				149	136	285

PERSON TRIP GENERATION

TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL	VEHICLE OCCUPANCY	
10:00 - 11:00	156	126	282	235	143	378	(SURVEYED FROM ALL INBOUND VEHICLES)	
11:00 - 12:00	158	130	288	194	204	398		
12:00 - 13:00	194	212	406	262	237	499		
13:00 - 14:00	183	151	334	208	215	423	SATURDAY	SUNDAY
14:00 - 15:00	211	202	413	270	248	518		
15:00 - 15:30	-	-	-	115	133	248		
PEAK HOUR (BY 15 MINUTES)								
TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL		
SATURDAY								
14:00 - 15:00	211	202	413					
SUNDAY								
14:15 - 15:15				292	271	563		

PLANT NURSERIES

BONDS NURSERY - TERREY HILLS

VEHICLE CARPARK ACCUMULATION

TIME	SATURDAY			SUNDAY		
	Inbound	Outbound	Accum.	Inbound	Outbound	Accum.
10:00 - 10:15	27	16	(51*)62	22	7	(39*)54
10:15 - 10:30	22	17	67	33	17	70
10:30 - 10:45	16	22	61	19	17	72
10:45 - 11:00	21	15	67	45	31	86
11:00 - 11:15	20	20	67	32	29	89
11:15 - 11:30	18	13	72	17	25	81
11:30 - 11:45	19	24	67	27	20	88
11:45 - 12:00	28	14	81	23	30	81
12:00 - 12:15	41	33	89	30	23	88
12:15 - 12:30	23	20	92	42	29	101
12:30 - 12:45	21	30	83	28	29	100
12:45 - 13:00	20	30	73	34	40	94
13:00 - 13:15	22	14	81	19	22	91
13:15 - 13:30	18	15	84	14	33	72
13:30 - 13:45	30	19	95	39	26	85
13:45 - 14:00	24	33	86	32	29	88
14:00 - 14:15	37	14	109	27	19	96
14:15 - 14:30	14	22	101	41	29	108
14:30 - 14:45	15	32	84	42	42	108
14:45 - 15:00	44	34	94	28	34	102
15:00 - 15:15				38	31	109
15:15 - 15:30				21	37	93
15:30 - 15:45						
15:45 - 16:00						

* Number of vehicles at commencement of survey

PLANT NURSERY

FLOWER POWER NURSERY - WARRIEWOOD

General Site Description

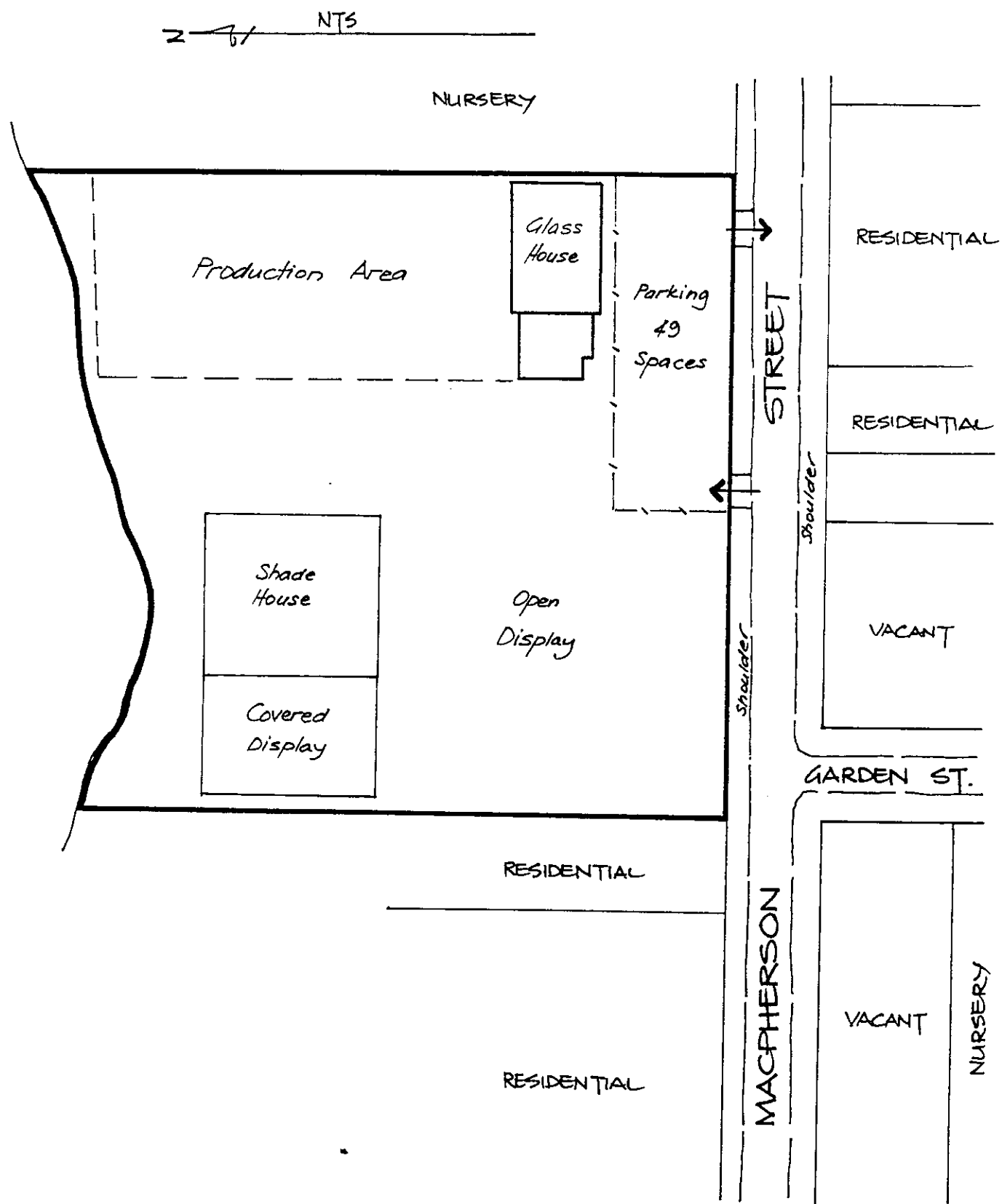
Flower Power Nursery, Warriewood is located on the eastern side of MacPherson Street opposite its intersection with Garden Street. Vehicle access is provided from MacPherson Street via two one-way driveways. Off-street car parking is available in a semi-formal car park located in the southwest corner of the site, for some 49 vehicles. On-street parking is available along MacPherson Street. The nursery provides landscape supplies which are located in a central compound which also serves as the staff and nursery vehicle parking area. The surrounding land-use is generally a mixture of rural and residential. Other nurseries are located in the area with the closest located to the east, adjacent to the site.

Date and Time of Survey

- | | | |
|--------------------------|------------------------|-------------------|
| <input type="checkbox"/> | Saturday 16 April 1994 | 10.00am to 3.00pm |
| <input type="checkbox"/> | Sunday 17 April 1994 | 10.00am to 4.00pm |

Site Data

- | | | |
|--------------------------|-----------------------------|----------------------|
| <input type="checkbox"/> | Area of site | 19,880m ² |
| <input type="checkbox"/> | Display area | 9,570m ² |
| <input type="checkbox"/> | Landscape area | 3,680m ² |
| <input type="checkbox"/> | Production area | 4,200m ² |
| <input type="checkbox"/> | Access driveways | 2 |
| <input type="checkbox"/> | On-site parking supply | 49 spaces |
| <input type="checkbox"/> | Number of employees present | 6 staff |
| <input type="checkbox"/> | Peak period | weekends |
| <input type="checkbox"/> | Other uses | Landscape supplies |



'FLOWER POWER'

MACPHERSON STREET,
WARRIEWOOD

PLANT NURSERIES

FLOWER POWER NURSERY - WARRIEWOOD

VEHICLE TRIP GENERATION (TWO-WAY)

TIME	SATURDAY			SUNDAY			TOTAL	
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	SATURDAY	SUNDAY
10:00 - 11:00	31	2	4	38	4	0	37	42
11:00 - 12:00	53	10	2	91	6	0	65	97
12:00 - 13:00	61	2	1	99	2	0	64	101
13:00 - 14:00	61	8	0	77	8	0	69	85
14:00 - 15:00	95	5	0	106	5	0	100	111
15:00 - 16:00	-	-	-	76	9	0	-	85

PEAK HOUR (BY 15 MINUTES)

	BY CLASSIFICATION						BY DIRECTION					
TIME	SATURDAY			SUNDAY			SATURDAY			SUNDAY		
	CAR	VAN/UTE	TRUCK	CAR	VAN/UTE	TRUCK	IN	OUT	TOT	IN	OUT	TOT
SATURDAY												
14:00 - 15:00	95	5	0				40	60	100			
SUNDAY												
11:45 - 12:45				112	3	0				54	61	115

PERSON TRIP GENERATION

TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL	VEHICLE OCCUPANCY (SURVEYED FROM ALL INBOUND VEHICLES)	
10:00 - 11:00	43	29	72	44	34	78		
11:00 - 12:00	70	56	126	108	89	197		
12:00 - 13:00	72	52	124	89	104	193		
13:00 - 14:00	74	60	134	84	82	166	1.94	1.83
14:00 - 15:00	80	118	198	100	109	209		
15:00 - 16:00	-	-	-	97	80	177		

PEAK HOUR (BY 15 MINUTES)

TIME	SATURDAY			SUNDAY				
	IN	OUT	TOTAL	IN	OUT	TOTAL		
SATURDAY								
14:00 - 15:00	80	118	198					
SUNDAY								
11:45 - 12:45				107	122	229		

PLANT NURSERIES

FLOWER POWER NURSERY - WARRIEWOOD

VEHICLE CARPARK ACCUMULATION

TIME	SATURDAY			SUNDAY		
	Inbound	Outbound	Accum.	Inbound	Outbound	Accum.
10:00 - 10:15	2	3	(13*) 12	7	9	(9*) 7
10:15 - 10:30	8	3	17	6	3	10
10:30 - 10:45	8	4	21	6	2	14
10:45 - 11:00	4	5	20	5	4	15
11:00 - 11:15	9	2	27	17	13	19
11:15 - 11:30	13	16	24	5	8	16
11:30 - 11:45	4	4	24	12	8	20
11:45 - 12:00	10	7	27	18	16	22
12:00 - 12:15	7	5	29	16	16	22
12:15 - 12:30	5	8	26	10	12	20
12:30 - 12:45	17	7	36	10	17	13
12:45 - 13:00	8	7	37	12	8	17
13:00 - 13:15	13	7	43	6	14	9
13:15 - 13:30	7	6	44	16	11	14
13:30 - 13:45	6	15	35	6	10	10
13:45 - 14:00	12	3	44	15	7	18
14:00 - 14:15	10	5	49	11	11	18
14:15 - 14:30	12	30	31	16	19	15
14:30 - 14:45	12	8	35	13	15	13
14:45 - 15:00	6	17	24	12	14	11
15:00 - 15:15				14	7	18
15:15 - 15:30				9	11	16
15:30 - 15:45				9	8	17
15:45 - 16:00				15	12	20

*Number of vehicles at commencement of survey