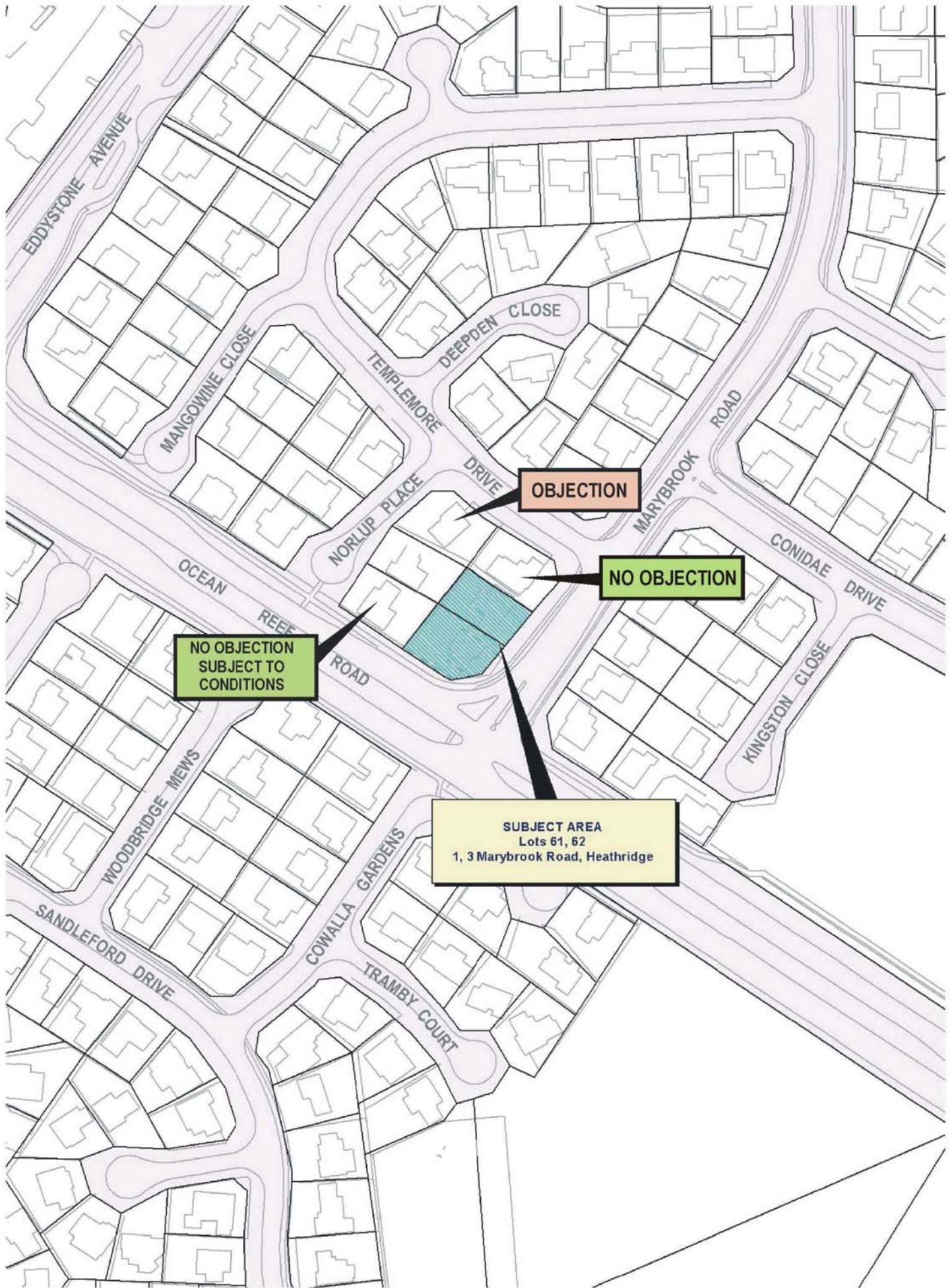


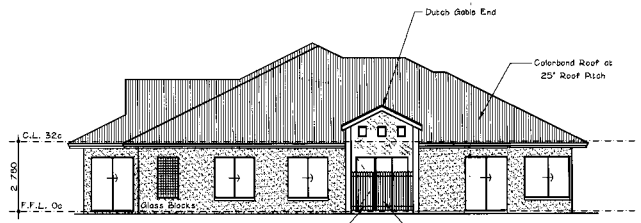




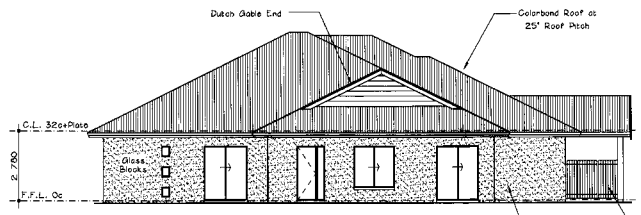
**SUBJECT AREA**  
Lots 61, 62  
1, 3 Marybrook Road, Heathridge



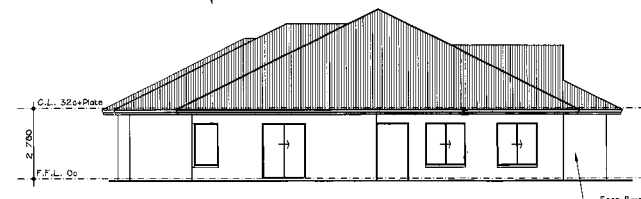




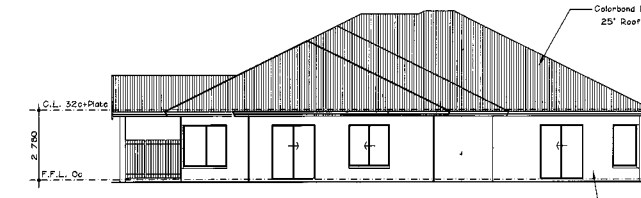
Front Elevation 1



Elevation 2

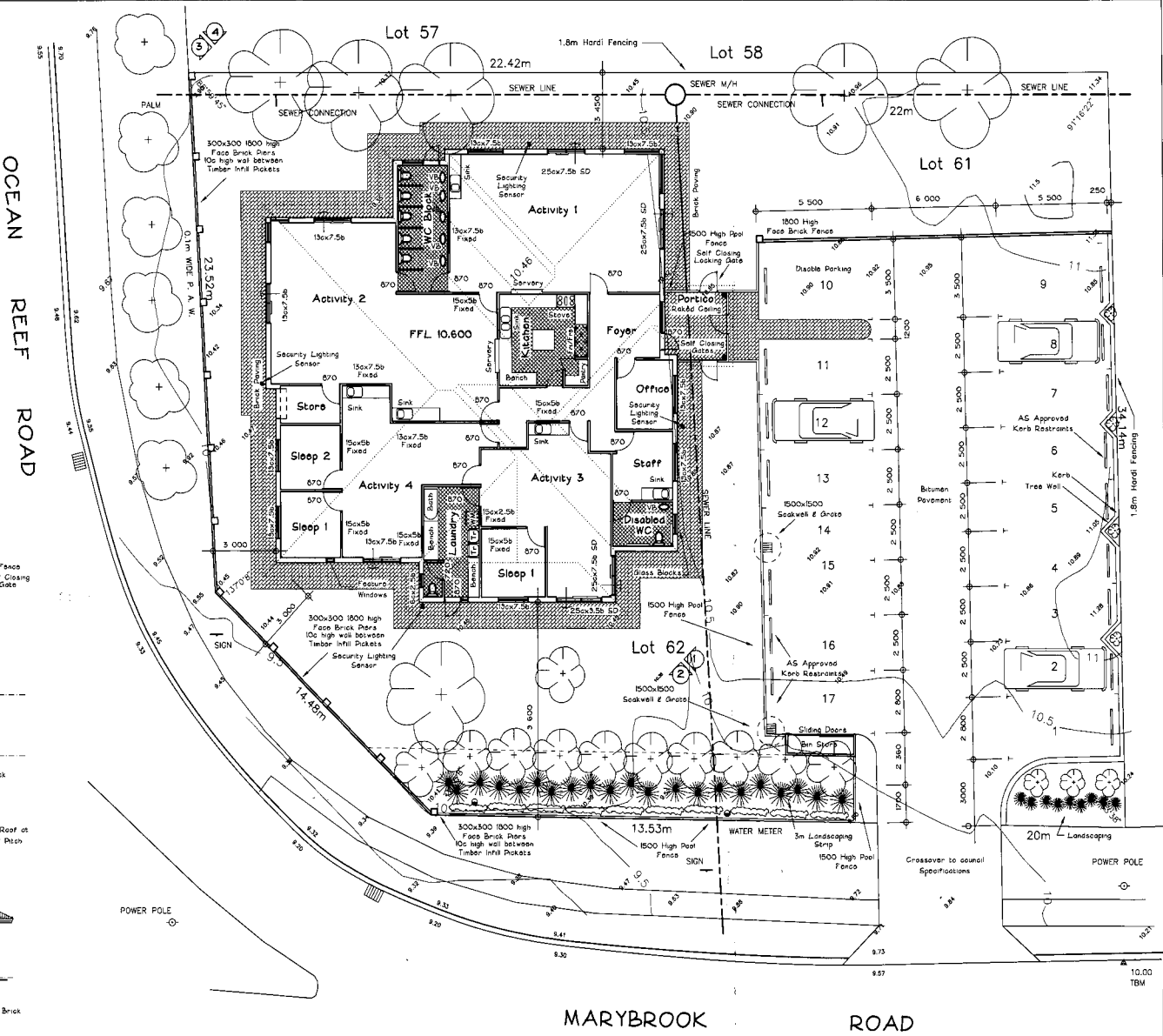


Elevation 3



Elevation 4

**Construction Notes**  
 Colorbond Roof at 25° Pitch with 600 soave overhang  
 Ceiling at 32m = Walk Plats  
 Total Outdoor Centre =  
 Activity 1 = 67m2  
 Activity 2 = 70m2  
 Activity 3 = 42m2  
 Activity 4 = 55m2  
 External Play Area = 624m2



Site Plan  
 Scale: 1:100

Date	Revision
31/5/05	Modify as per council requirements.

Proposed Childcare Centre  
 Lot 61 & 62 Marybrook Road

**Frank Macri Design Consultant**  
 50 Main Street Osborne park  
 Phone/Fax 2444 3523  
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Drawn: FS  
 File: marybrook  
 Date: Mar 05  
 Scale: 1:100  
 Sheet 1 of

**L MILLAR & ASSOCIATES**  
Traffic Engineering and Transport Planning Consultants



**CHILD CARE CENTRE  
LOTS 61 & 62 MARYBROOK  
ROAD, HEATHRIDGE**  
Traffic Impact Study

**Jellybeans Child Care**

*June 2005*

LMA Job Ref J0522RP1

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## SUMMARY AND CONCLUSIONS

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A child care centre is proposed on Lots 61 and 62 Marybrook Road near the intersection with Ocean Reef Road in Heathridge. The development involves the construction of a building, a play area and a car park for 17 cars.

Marybrook Road is a wide residential road and has the characteristics of a Local Distributor road which is preferred for the location of child care centres according to the City of Joondalup Policy Manual. The existing traffic volume on Marybrook Road is about 3 000 veh/day and the speed limit is 50 km/h.

The child care centre will be licensed for 63 children and will employ seven adult and four junior staff members. It will operate from 7 am to 6 pm. The traffic volume generated by the centre is estimated to be a maximum of 211 vehicle trips per day with 63 trips occurring during the peak hour.

The main traffic concerns addressed in this report are:

***Proximity to the Intersection of Marybrook Road and Ocean Reef Road:***

The proposed driveway on Marybrook Road is about 45 metres from the intersection with Ocean Reef Road and is located as far as practical from the intersection. There is more than sufficient sight distance from the driveway to approaching vehicles. The road width outside the driveway is 14 metres which easily allows a vehicle to pass another vehicle slowing down to turn left into the child care centre without crossing into the opposing traffic. The proposed driveway is considered to be safer than the existing arrangement because it will replace the two existing residential driveways which are both closer to the intersection and the design of the car park enables vehicles to exit in the forward direction instead of reversing.

***Traffic Increase on Marybrook Road:***

The child care centre is expected to increase the daily traffic volume on Marybrook Road north of the child care centre by about 63 vehicle movements which is only a 2% increase. This traffic increase will have minimal impact on the amenity and safety of the road which already provides access to the adjoining residential area from Ocean Reef Road.

***Impact on the Intersection of Marybrook Road and Ocean Reef Road:***

The intersection of Marybrook Road and Ocean Reef Road has left and right turn lanes and a wide median on Ocean Reef Road to facilitate right turn movements. Therefore, the small increase in traffic entering the intersection (estimated to be about 148 vehicle movements a day) is unlikely to have any effect on its operation or safety.

***Parking:***

There should be no parents parking outside the centre because adequate on-site parking is provided and street parking is discouraged by requiring all visitors to enter the building from the car park.

## **SUMMARY AND CONCLUSIONS**

---

***Safety of Children:***

It is expected that very few children will walk to the child care centre; most arrive and are collected by car. The children that do walk will be escorted by their parents.

It is concluded that the impact of the proposed child care centre on the surrounding area will be acceptable in terms of traffic safety, traffic operation and residential amenity.



**INTRODUCTION 1**

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L Millar & Associates has been commissioned by Jellybeans Child Care to undertake a traffic impact study of a proposed child care centre on Lots 61 and 62 Marybrook Road, Heathridge.

The need for the study has resulted from concerns from the City of Joondalup over the proximity of the driveway to the intersection with Ocean Reef Road.

This report addresses the traffic and road safety issues associated with the proposed development. It describes the existing traffic conditions, the proposed development and the likely traffic impact that will result.

## EXISTING AND FUTURE CONDITIONS 2

### 2.1 Site Location

The site for the proposed child care centre is on Lots 61 and 62 Marybrook Road near the intersection with Ocean Reef Road. The site is located in the suburb of Heathridge within the municipality of the City of Joondalup. A location plan of the general area is shown in Figure 2.1.



Source: 2005 StreetSmart

Figure 2.1: Location Plan

The development site is on two lots which are zoned as residential. An application has been made for a discretionary land use as a child care centre.

The land use adjoining and opposite the site is residential. Eddystone Primary School is located less than one kilometre away along Eddystone Avenue.

Both lots contain houses which would be demolished to allow for the construction of the centre.

Photographs of the site are shown in Photos 2.1 and 2.2.

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**EXISTING AND FUTURE CONDITIONS 2**

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*Photo 2.1: View of Site Facing North from Ocean Reef Road*



*Photo 2.2: View of Site Facing West from Marybrook Road*

## EXISTING AND FUTURE CONDITIONS 2

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### 2.2 Road Network

The roads in the vicinity of the development site have been given the following functional classifications (source: "Perth Metropolitan Area Functional Road Hierarchy", Main Roads WA, August 1999):

Primary Distributor	-	Mitchell Freeway.
District Distributor A	-	Ocean Reef Road.
District Distributor B	-	Eddystone Avenue.
Access Road	-	Marybrook Road.

The City of Joondalup Policy Manual (refer to Appendix A) recommends that child care centres should be located on Local Distributor roads. Although Marybrook Road is classified by Main Roads WA as an Access Road, it serves a similar function to a Local Distributor because it is the only road between Mitchell Freeway and Eddystone Avenue that provides access to the residential development to the north of Ocean Reef Road. This traffic role is reinforced by the 14 metre width of the road and the traffic volume in the order of 3 000 veh/day.

The three-way intersection of Ocean Reef Road and Marybrook Road is unsignalised. There are left and right turn lanes to provide shelter for vehicles turning off Ocean Reef Road and the wide median provides a safe refuge for vehicles turning right out of Marybrook Road.

### 2.3 Traffic Flows

The traffic volume on Marybrook Road is estimated to be about 3 000 veh/day. The only traffic count recorded by the City of Joondalup was 2183 veh/day in September 1993.

On Ocean Reef Road, the traffic volume recorded by Main Roads WA in April 2005 was 20 900 veh/day west of Craigie Drive.

### 2.4 Traffic Speeds

The speed limit on Marybrook Road is the default built-up speed limit of 50 km/h and on Ocean Reef Road is 70 km/h.

### 2.5 Crash Data

Crash data recorded by Main Roads WA at the intersection of Ocean Reef Road and Marybrook Road indicates that there have been five crashes over the five-year period to December 2003 including two right angle and two rear end crashes. The number and type of crashes are not

**EXISTING AND FUTURE CONDITIONS 2**

---

considered to be atypical for this type of intersection with these traffic volumes. A copy of the crash summary report is contained in Appendix B.

## PROPOSED DEVELOPMENT 3

### 3.1 The Development

The proposed child care development comprises a building, a play area and a car park. A plan of the proposed development is shown in Appendix A.

The child care centre will be licensed for 63 children and will serve the surrounding residential area. The main catchment area is Heathridge although it is expected to attract some children from surrounding suburbs.

The following staff will be employed at the centre:

- 6 full-time staff members
- 4 junior trainee staff members (15-17 years old)
- 1 part-time cook/coordinator

The centre will be open for parents to drop off and pick up children between 7 am and 6 pm. The busiest times will be between 7 – 8.30 am and between 4 – 5.30 pm when parents go to and come back from work. However, part-time working parents and non-working parents who use the centre for respite care will arrive throughout the day.

### 3.2 Vehicle Access

Vehicle access to the car park is from Marybrook Road. The driveway is about 45 metres from the intersection with Ocean Reef Road and is located as far from the intersection as possible while still providing an efficient car park layout.



*Photo 3.1: View along Marybrook Road from the intersection with Ocean Reef Road.  
The location of the proposed driveway is just behind the parked car.*

### PROPOSED DEVELOPMENT 3

---

Concerns have been raised by the City of Joondalup over the proximity of the driveway to the intersection, possibly due to design of the intersection which has a sweeping left turn and permits left and right turning vehicles to enter Marybrook Road at the same time.

Although it is desirable to have a driveway set back from the intersection as far as possible, the proposed location is considered to be acceptable when taking into account the following factors:

- The sight distance from the proposed car park exit to vehicles approaching from Ocean Reef Road is about 45 metres (refer to Photo 3.2) which exceeds the minimum sight distance requirement of 30 m for speeds less than 45 km/h (Ref: AS 2890.2-1993 Off-Street Parking Facilities).
- The road width outside the proposed driveway is 14 metres which easily allows a vehicle to pass another vehicle slowing down to turn left into the child care centre without crossing into the opposing traffic.



*Photo 3.2: View from Proposed Driveway towards Intersection at Ocean Reef Road*

The proposed driveway is considered to be safer than the existing arrangement for the following reasons:

- The driveway will replace the two existing residential driveways which are both closer to the intersection.
- The design of the car park enables vehicles to exit in the forward direction instead of reversing out which improves the visibility to vehicles on Marybrook Road and avoids vehicles being stopped on the road.

The crash history does not appear to indicate that there is a problem at the intersection, even though the two existing driveways to the residential properties are closer to the intersection.

### PROPOSED DEVELOPMENT 3

Should the City of Joondalup consider the intersection to be unsafe, then consideration should be given to modifying the intersection by increasing the approach angle of the left turn on Ocean Reef Road and placing it under Give Way control. However, the crash history does not appear to indicate that there is a problem at the intersection (refer to Section 2.5).

#### 3.3 Parking

The City of Joondalup Policy Manual (refer to Appendix B) requires a minimum of one parking bay for each of the 7 staff members and a minimum of eight parking bays for 63 children. In addition, at least one of the required parking bays must conform to ACROD standards.

The car park proposed with the development provides 17 parking bays (including one disabled bay) which is two more bays than the minimum parking requirement.

#### 3.4 Traffic Generation and Distribution

The traffic generation is based on the following assumptions provided by the developer and from experience of similar child care centres:

- The child care is operating at capacity with a maximum of 63 children at any one time.
- 90% of children will arrive by car and 10% of children will arrive on foot.
- One in six parents have two children at day care.
- Each parent taking their child (or children) by car generates 4 trips<sup>1</sup> per day.
- 7 adult staff members are assumed to arrive by car and occupy a car space. The juniors will be either dropped off by car (assume two of the four), arrive by public transport or walk if they live nearby.
- Each staff member arriving and leaving by car generates 2 trips per day.
- 4 service trips per day involving cleaners, nappy delivery (1/month), maintenance, etc.

Daily traffic generation = (63 children x 90% x 5/6 x 4 trips) + ((7 adult staff + 2 junior staff) x 2 trips) + 4 service trips  
= 211 vehicle trips

Assuming 30% of trips occur in the morning and afternoon peak hours:

Peak hour traffic generation = 211 trips x 30%  
= 63 trips

<sup>1</sup> A trip is a one-way vehicular movement. Therefore, taking a child to a child care centre involves an arrival and departure which is two trips.



**PROPOSED DEVELOPMENT 3**

---

The child care centre will service the surrounding residential area. Based on the relative size of the areas to be serviced, it is expected that in the morning about 70% of vehicles will enter the child care centre from the direction of Ocean Reef Road and the other 30% from the north of the child care centre. Most of the departures from the child care centre in the morning are expected to be towards Mitchell Freeway. In the afternoon, the movement will be reversed.

**3.5 Public Transport**

Parents using child care centres do not tend to use public transport because of the problems with managing very young children. However, there are bus stops on Ocean Reef Road opposite and just to the north of Marybrook Road for those parents who do not have their own transport and for the junior staff members.

## TRAFFIC IMPACT 4

---

### 4.1 Adjoining Roads

As indicated in Section 3.4, the child care centre is expected to generate a maximum of 211 trips during the day with about 148 vehicle movements (70%) originating from Ocean Reef Road and 63 vehicle movements (30%) from the north of the child care centre. Therefore, the increase in traffic on Marybrook Road north of the child care centre, which currently carries about 3 000 veh/day, will be in the order of 2%. This increase is expected to have minimal impact on the amenity and safety of the road which already has a traffic role in providing access to the residential area north of Ocean Reef Road.

The traffic entering the intersection of Ocean Reef Road is likely to increase by about 148 vehicle movements a day (70% of vehicles generated by the centre) or more if some of the vehicles originating from north of the centre continue through the intersection to Mitchell Freeway. Out of these movements, only about 30% will be in the peak hour which will have negligible impact on the operation of the intersection which has left and right turn lanes and a median which serves as a refuge for right turn movements out of Marybrook Road.

### 4.2 Adjoining Development

The adjoining residential development is not expected to be adversely affected by the development from vehicles parking outside the houses because:

- the on-site parking satisfies the City of Joondalup policy requirements for child care centres; and
- the design of the development requires all visitors to enter from the parking area before entering the building and therefore there would not be any advantage in parking on the road or verge.

### 4.3 Pedestrians and Cyclists

There is a footpath along both sides of Marybrook Road. Outside the proposed child care centre, the two residential crossovers will be replaced by a single crossover. Although there will be more vehicles crossing the footpath than previously, the additional movements are not expected to cause any unnecessary impediment on the movement of pedestrians and cyclists on the footpath.

## Intersection Crash Ranking Interactive Report

home	intersection query	ranking query	definitions	help
------	--------------------	---------------	-------------	------

\* denotes a result higher than expected. Some categories may overlap, eg: some crashes may have occurred both at night and in the wet.

L = Local Road  
S = State Road

State Frequency Rank No. 2911      State Cost Rank No. 4659      Intersection No. 62679

Summary of Intersection Crashes			
Street 1	OCEAN REEF RD	Authority Name	JOONDALUP (C)
Street 2	MARYBROOK RD	Region	METROPOLITAN
Street 3		Cost	\$151,361
Intersection Classification	Local Road Only	Total Crashes	5

Crash Details										
Rear End	Side Swipe	Right Angle	Right Thru	Wet	Night	Ped	Cycle	Truck	Motorcycle	Casualty
2	0	2	0	0	1	0	0	0	0	2

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N.D. ENGINEERING trading for N.D. ENGINEERING ENTERPRISES PTY LTD est 1994 ABN 27 079 198 922

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#### REPORT No 0505067 Revision 0 NOISE ASSESSMENT of a PROPOSED CHILDCARE CENTRE LOT 61 & 62 MARYBROOK ROAD HEATHRIDGE WA 6027

**References:** A. Environmental Protection (Noise) Regulations 1997.

1.1 ND Engineering was commissioned to provide an acoustic assessment of the potential noise emanating from the proposed child care centre.

#### **Site and Noise Description**

2.1 Refer to Annex A 'Site Plans'.

2.2.1 The site is on the corner of Marybrook Road and Ocean Reef Road with the nearest residential boundaries located as follows:

- a. NW - Lots 57 and 58 adjacent residences along a rear boundary (*both of these residences have their backyards containing a swimming pool backing onto the child care centre*);
- b. N - Lots 59 adjacent corner residence at the junction of the two rear boundaries (*this residence has a backyard with a shed backing onto the junction of the two rear boundaries*);
- c. NE - Lots 60 adjacent residence along a rear boundary (*the backyard of this residence backs onto the rear corner play area while the house itself backs onto the carpark area bays 1 to 9*);
- d. SE - Lots 65 & 66, residences across Marybrook Road;
- e. SW - Lot 268, residence across Ocean Reef Road.

2.2.2 The main residences of interest are the adjacent rear residences Lots 57 to 60.

2.3 The main equipment noise sources at the site are expected to comprise:

- a. Ducted reverse cycle air conditioning systems;
- b. Kitchen exhaust fan located in the ceiling space discharging through the roof located over the kitchen area. It is understood that the discharge will have a cone cowl located on top;
- c. Toilet and Staff room exhaust fans comprising ceiling mounted fans ducted to the exterior through the roof for Staff/disabled toilets and Children's toilets.

2.4 The main non equipment noise source at the site will be:

- a. Music for children in the 0 to 6 year age group with the music non impulsive by nature.

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- b. Children's voices in particular the Kindy (40 No) age group. The Babes (12 No) and Toddlers (12 No) groups are generally very low noise producing. Children, weather permitting, are allowed outside to play for less than 2 hours per day being typically 0930 to 1030 hours and 1500 to 1530 hours. This low number of outdoor hours is also due to current sun exposure policies.

2.5 The child care centre is expected, to cater for at sixty four children under the age of six and, to be operational between 0700 to 1800 hours Monday to Saturday inclusive but excluding public holidays.

#### Assigned Noise Levels

3.1 The assigned noise level, as determined by Reference A, comprises a base level and an adjustment to take into consideration noise from nearby features such as major roads, industrial and commercial premises. The following table shows the calculation for the adjustments to the base noise levels for the nearest residences to the childcare centre.

INFLUENCING FACTOR CRITERIA			ASSESSMENT			
Item	Criteria	Value	Criteria	Value	Totals	
<b>Major Road within the</b>						
- 100 m radius inner circle	veh/day > 15000	6 dB	Ocean Reef Road	6	6 ( Transport Factor ≤ 6)	
- 450 m radius outer circle	veh / day > 15000	2 dB	-	0		
<b>Minor Road within the</b>						
- 100 m radius inner circle	15k > veh/day > 6k	2 dB	-	0	0 ( ≤ 30)	
<b>Type A 'Industrial and Utility premises' within the</b>						
- 100 m radius inner circle	1/10 x Area%	≤ 10	0 %	0		
- 450 m radius outer circle	1/10 x Area%	< 10	0 %	0		
<b>Type B 'Commercial premises' within the</b>						
- 100 m radius inner circle	1/20 x Area%	≤ 5	0 %	0	0	
- 450 m radius outer circle	1/20 x Area%	≤ 5	< 5 %	0		
<b>INFLUENCING FACTOR = 6.0 dB(A)</b>						

3.2 The assigned noise levels at receiving premises, residential in the vicinity of the noise source, as allowed under Reference A are shown in the following table.

	Time of day	Time of day	Assigned Noise Levels dB(A)		
			LA10	LA1	LAmx
Noise sensitive premises at locations within 15 m of a building directly associated with a noise sensitive use	Day	0700-1900 hrs Monday to Saturday	51	61	71
		0900-1900 hrs Sunday, Public holidays	46	56	61
	Evening	1900-2200 hrs all days			
	Night	2200-0700 hrs Monday to Saturday 2200-0900 hrs Sunday, Public holidays	41	51	
Noise sensitive premises at locations greater than 15 m from a building directly associated with a noise sensitive use	All hours	All hours	60	75	80
Commercial	All hours	All hours	60	75	80

3.3 The measurement criteria LA10 represents the 10 percentile highest A weighted sound pressure level over a required measurement period of not less than 15 minutes and not more than 4 hours. The LA10 measurement criteria provides a reasonable indication of the objectionable noise as any unwanted noise events form a small and insignificant component of the criteria. The LA1 and LAmx criteria are not utilised for this assessment.

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## ASSESSMENT

### General - Assessment

4.0 Noise emissions from the child care centre are expected to occur Monday to Saturday between 0700 to 1800 hours and mainly during the two hours of outdoor play per day weather permitting for the Kindy group. This means that for evenings, night time, public holidays and Sundays there is expected to be no noise emissions from the child care centre at all. Anecdotal evidence indicates this is a desirable situation sought by some residences when purchasing properties adjacent to a child care centre.

### Mechanical Services - Assessment

4.1.1 The kitchen and toilet exhaust fans are unlikely to pose a problem and are not assessed in detail. In the unlikely event that these exhaust discharges through the roof do present some objectionable noise this can be easily overcome by the insertion of some additional acoustic flexible duct into the discharge line. Some recommendations are however made in the recommendations section of this report.

4.1.2 The main potential noise source are the air conditioning units and the requirements for these units are contained in the recommendations section of this report.

### Children - Assessment

4.2.1 The noise levels created by small groups of children, in the Babes 0 to 2 years old age group and Toddlers 2 to 3 year old age groups, is unlikely to cause a problem for any of the surrounding residences due to the:

- a. Masking effect of Ocean Reef Road;
- b. Low noise output of this age group; and
- c. Short duration of outdoor play times, typically less than one hour at a time, especially if the weather is not mild.

4.2.2.1 The childcare centre was not operational at the time of assessment so measurement data from the Jellybeans Greenwood childcare centre was utilised. The noise data shows that a group of fifteen children, in the Kindy age group, will produce a sound pressure level of LA10 = 59 dB(A) at a nominal 10 metres based on a representative measurement duration of 4 hours which includes over 1 hours of outdoor play.

4.2.2.2 The LA1 measurement could not be made due to traffic noise however the LAmax due to Kindy aged children varied from 77 dB(A) to 83 dB(A) depending on how close the child was to the microphone which could be any where from 3 metres to 15 metres. Either way with a 10 dB(A) reduction due to existing boundary fences the LAmax is expected to be reduced down to 67 to 73 dB(A) on the other side of the property boundary. This sound pressure range of 67 to 73 dB(A) is essentially centered on the assigned daytime LAmax = 71 dB(A). ND Engineering's opinion is that this complies with the assigned daytime noise level for the adjacent residences.

4.2.3.1 A site inspection shows that with separation distance of at least 25 to 50 metres from the play areas to the residences on Marybrook Road and Ocean Reef Road the noise level is calculated to be less than 51 dB(A) to 45 dB(A) respectively, a reduction of at least 8 and 13 dB(A) respectively, which complies with the daytime assigned noise levels. Therefore no further assessment is undertaken for residences on Marybrook Road and Ocean Reef Road

4.2.3.2 The rear boundary fence is expected to provide a 10 dB(A) reduction reducing the LA10 measurement from 59 dB(A) down to 49 dB(A) on the other side of the property boundary. This sound pressure level is less than the assigned daytime LA10 = 51 dB(A). ND Engineering's opinion is that this complies with the assigned daytime noise level for the rear residences being Lots 57 to 60.

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#### **Music - Assessment**

4.3.1 Typically music produced within child care centres is at a low volume as small children will typically not be able to follow instructions in rooms with a high noise background. Basically music levels will need to be kept at about 60 dB(A) or lower within the room which is equivalent to the noise level produced by a conversational adult male voice at 1 metre. The music is typically non impulsive, minimal bass, thus minimizing the main source of complaint typically associated with music.

4.3.2 The reduction in noise levels to the nearest residential boundary has been calculated to be at least 20 dB(A) as a result of attenuation due to the transmission loss of the glass. Essentially with all external doors and windows closed the noise level due to music at the nearest residential boundary will be about 40 dB(A) which with all adjustments included is well below the daytime assigned noise level of 51 dB(A).

4.3.3 Additional reductions due to distance and boundary fence reductions have not been included in the preceding calculation and are expected to be at least another 10 dB(A) just for the fence alone.

#### **Conclusions**

5.1 N.D. Engineering's opinion is that the proposed child care centre will comply with Reference A, during the daytime periods of 0700-1800 hrs Monday to Saturday, subject to implementation of the recommendations contained in the 'Recommendations' section.

ND ENGINEERING Consulting Chartered Engineers  
Acoustics, Noise & Vibration - Air Conditioning & Ventilation - Energy

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### Recommendations

- 6.1 The recommendations presented in this report are in outline format only and require:
- a. Detailed final design of components by appropriately experienced persons in accordance with the current relevant editions of Australian Standards, Regulations, Gas Installation Code/s and the Building Code of Australia.
  - b. Completion of minor details, including acoustic/vibration details, on site by competent and qualified tradesmen and technicians.
  - c. New materials and equipment to be installed in accordance with the manufacturer's and/or supplier's instructions.
  - d. New materials and equipment to comply with, and be installed in accordance with, the Building Code of Australia.
  - e. Installer of materials and/or equipment to comply with:
    - (1) Regulatory safety requirements.
    - (2) The safety procedures on the relevant Materials Safety Data Sheets (MSDS).
    - (3) The site safety requirements including the wearing of protective clothing such as safety boots, safety glasses, safety goggles and hard hats.
  - f. A site inspection to fully determine the extent of the work and the nature of the site.
- 6.2 The following recommendations are made:
- a. Exhaust systems:
    - (1) Roof, window and wall mounted exhaust fans are not permitted; and
    - (2) All exhaust fans shall be contained within the roof space or ceiling and shall be ducted to the exterior.
  - b. Air conditioning systems:
    - (1) Do not locate the air conditioning unit/s on the side of the child care centre facing the adjacent NW residences; and
    - (3) Locate the air conditioning units at ground level on either the SW, SE or NE side of the child care centre at least 6 metres from the residential boundary.
    - (4) Provide air conditioning condenser units with Sound Power Levels (Lw) not exceeding:
      - (a) Lw = 76 dB(A) on either heating or cooling cycle for only one condenser;
      - (b) Lw = 73 dB(A) on either heating or cooling cycle for two condensers.

This sound power level is based on the air conditioning units being greater than 6 metres from any residential boundary. This may require the use of inverter air conditioning units or modification to standard non inverter units including the use of automatic head pressure controllers and compressor lead vinyl jackets .
  - c. Play areas:
    - (1) Fixed play equipment should be plastic. If metal fixed play equipment is used then hollow metal sections shall be filled with expanding foam or sand.
    - (2) Concrete or brick paved areas should be minimised and where practicable covered with synthetic grass carpet to minimise noise of play equipment on the hard surfaces.

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- (3) Locate and segregate play areas as follows:
- (a) Position any concentrated play areas for the Kindy groups such as a 'fort' as far as practicable from the boundary fences; and
  - (b) Restrict the total amount of external play time during suitable weather to 2 hours per day being typically 0930 to 1030 hours and 1500 to 1530 hours.
- d. Music:
- (1) Keep external windows and doors closed; and
  - (2) Do not play music outdoors.
- d. Parking:
- (1) Restrict staff parking to the use of car bays 1 to 9.

**End of Report**

7. If you have any queries please call me.

Yours Sincerely



1 June 2005



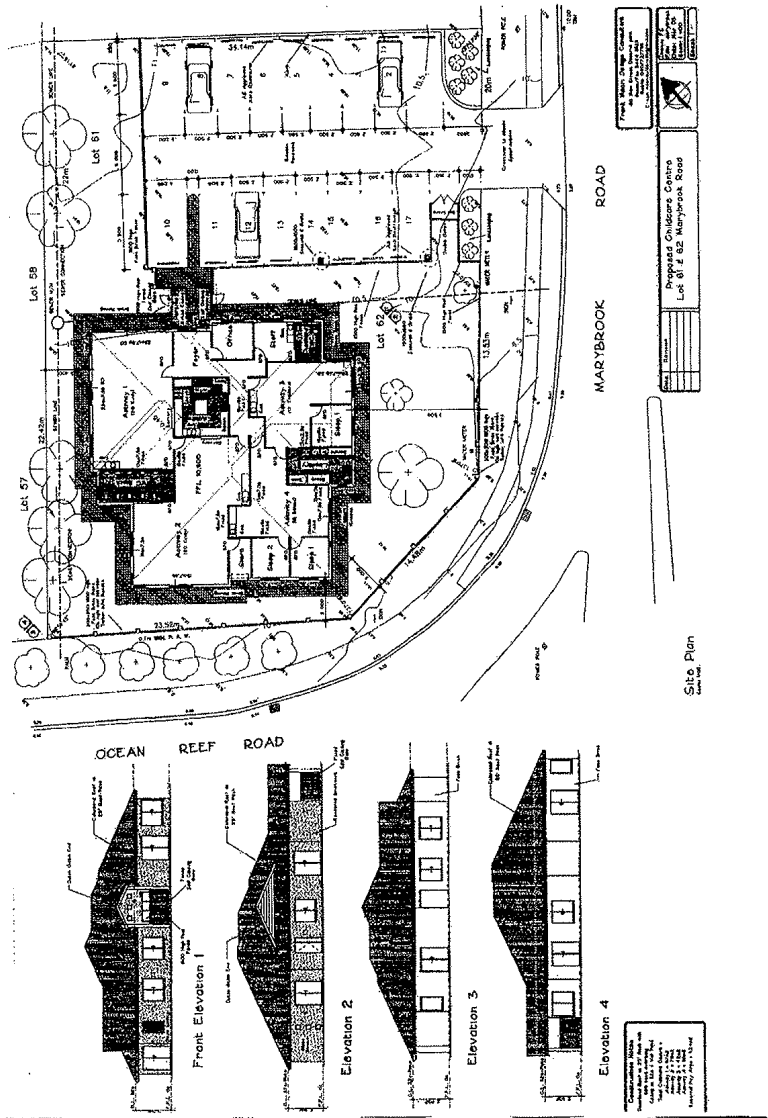
Annex A – Site Plans.

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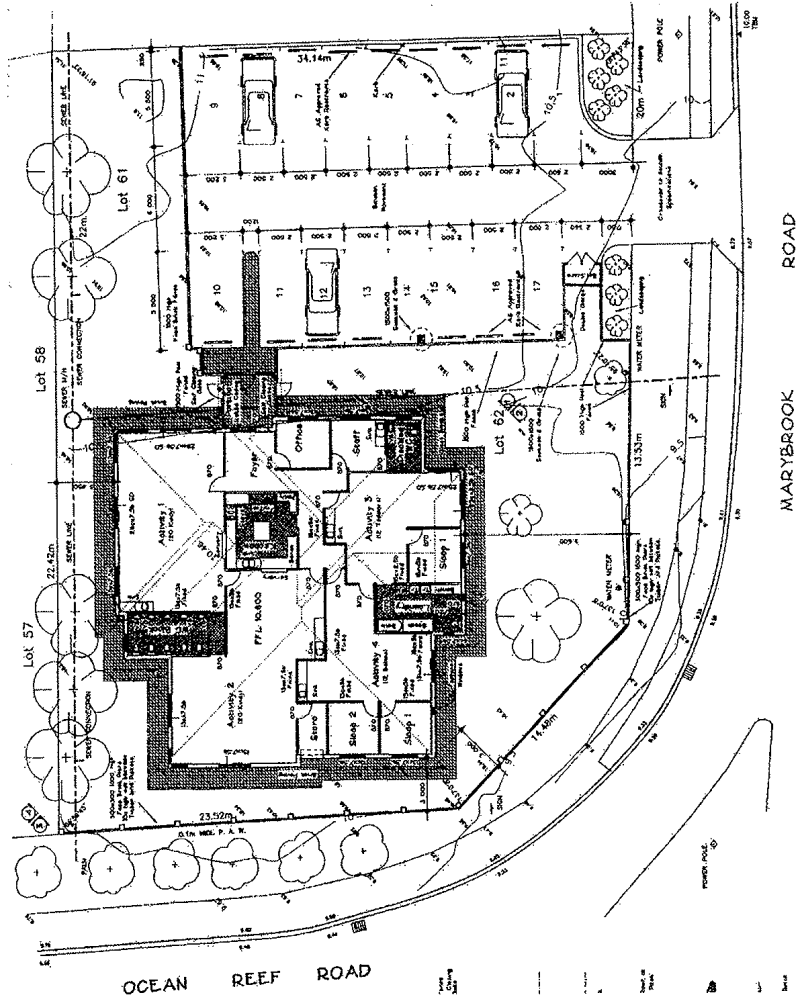
Annex A - Site Plans



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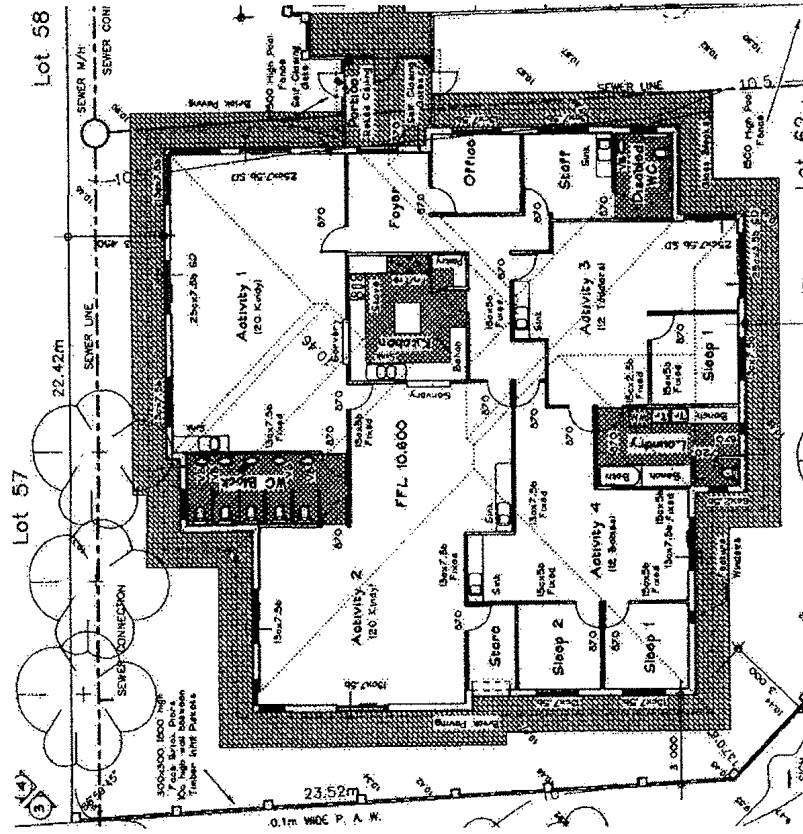
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End of Annex A

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 Section 3.1 – Development Services
 

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POLICY 3.1.1 - CHILD CARE CENTRES
**OBJECTIVE**

The purpose of this policy is to provide guidance for the location and development of Child Care Centres to maximise user convenience and maintain a high level of amenity in residential areas.

**STATEMENT****Relevant Legislation***District Planning Scheme No.2 Clause 1.9:*

*CHILD CARE CENTRE means premises used for the daily or occasional care of children in accordance with the Community Services (Child Care) Regulations 1988.*

*Table No 1 Zoning Table*

The use class **Child Care Centre** is a 'D' use in the Residential, Mixed Use, Business, Commercial, Civic and Cultural, Private Clubs/Recreation and Special Residential Zones. A 'D' use is a use that is not permitted, but the Council may grant its approval after following the procedures of the scheme that relate to matters to be considered by Council and advertising. The use is not permitted in the Service Industrial and Rural zones.

## TABLE 6

USE	NUMBER OF CARS
Child Care Centre	Not less than 5 and 1 per staff member

**Related Legislation And Policies**

Community Services (Child Care) Regulations 1988 (Government Gazette 25/11/1988)

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**Section 3.1 – Development Services**

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**Location****1 Road Hierarchy**

Child Care Centres are reasonably high traffic generators and therefore should not be located on Primary District Distributors where the primary function is to cater for through traffic or on Local Distributors in close proximity to District Distributors or in or adjacent to Access Roads in residential areas where amenity, safety and aesthetics must take priority. Accordingly, these Centres should be located on Local Distributor roads in such a fashion that they will not conflict with traffic control devices and will not encourage the use of nearby Access Roads for turning movements.

**2 Neighbouring Uses**

Wherever possible it is preferred to locate Child Care Centres adjacent to non-residential uses such as Shopping Centres, Medical Centres/Consulting Rooms, School Site, Parks and Community Purpose Buildings to minimise the impact such Centres will have on the amenity of residential areas.

**3 Existing Child Care Centres**

When submitting an Application for Approval to Commence Development for a new child care centre, the proponents should demonstrate their awareness of the number, size and location of existing or approved centres within the locality.

**Parking****1 Location**

All parking areas should be located in front of buildings or at least be easily visible from the entry to the site so that patrons are encouraged to use the on-site parking and not the road verges. Any difficult to use or access parking bays should be allocated to staff.

**2 Design**

Parking areas should preferably be designed to allow traffic to flow through using entry and exit crossovers so that traffic conflicts and congestion do not unnecessarily restrict the use of the parking area. For the purposes of determining parking requirements, designs incorporating through flow are referred to as **Type 1** and those accessed only by a two-way crossover as a **Type 2**. In certain circumstances, detailed below, Type 2 designs require more parking bays than Type 1 designs.

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**Section 3.1 – Development Services**

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**3 Number - Children And Staff**

All Child Care Centres must provide a minimum of one parking bay for each staff member and at least five parking bays for up to 25 children. For Centres with more than 25 children the required parking bays are determined by reference to the attached figure. The actual parking requirement for Centres in this category varies with the configuration of the parking area and the number of children.

At least one parking bay must conform to ACROD standards and be set aside for that purpose.

**Setbacks****1 Street**

In residential areas all buildings should be set back from the street boundary at least as far as the lesser of the two adjoining residences and if the adjoining lots are vacant should be set back a minimum of six metres.

**2 Other**

Side and rear setbacks should generally be in accordance with the Residential Planning Codes for residential buildings. Care should be taken to ensure outdoor play areas are not located adjacent to private open space or living areas.

**Landscaping****1 Onsite**

All street frontages of the site to a depth of three metres are required to be suitably landscaped and reticulated to assist to preserve the character of residential areas.

**2 Verge**

The verge area in front of all Child Care Centres is required to be suitably landscaped and reticulated and maintained to discourage patrons from parking on the verge instead of using the parking areas provided. Under no circumstances is the verge to be paved or sealed as this would encourage its use for parking and detract from the amenity of the area.

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**Section 3.1 – Development Services**

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**Advertising****1 Application**

Because of the possible detrimental effect Child Care Centres can have on the amenity, safety and aesthetics of residential areas, all applications must be advertised for public comment prior to consideration for approval.

Approved Child Care Centres can display only one advertising sign approved by the Chief Executive Officer. The maximum lettering height is 20cm. Where letters or numerals are individually fixed to walls, the Chief Executive Officer shall approve the colours and materials. Where signboards are used the board shall not exceed 50cm in height and 100cm in length, and lettering shall be black on a gold/bronze background. Signs shall not be illuminated after 8.00pm each night.

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Previous Policy No.	DS1
Amendments	CJ213-06/99, CJ318-09/01
Issued	October 2001
Related Documentation:	Delegated Authority Manual



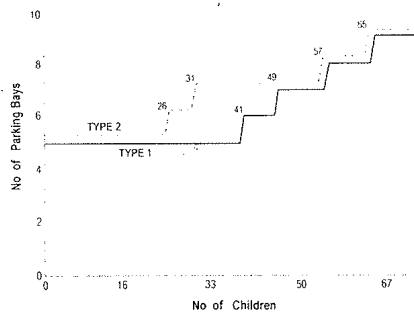
Section 3.1 – Development Services

**PARKING FOR CHILDCARE CENTRES**

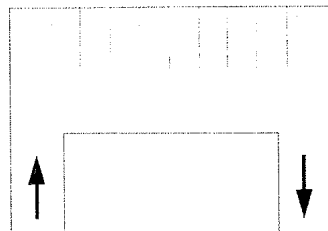
TYPE 1 PARKING		TYPE 2 PARKING	
CHILDREN	BAYS	CHILDREN	BAYS
< 40	5	< 25	5
41 - 48	6	26 - 30	6
49 - 56	7	31 - 56	7
57 - 64	8	57 - 64	8
65 - 72	9	65 - 72	9

NOTE: ABOVE BAYS ARE FOR NUMBERS OF CHILDREN ONLY ADDITIONAL BAYS ARE REQUIRED FOR EACH STAFF MEMBER

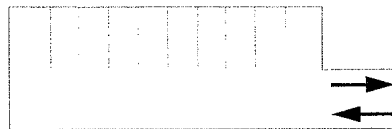
**CHILDCARE PARKING**



**PARKING LAYOUTS**



**TYPE 1**



**TYPE 2**

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