

# ARCHITECT'S CERTIFICATION

## **ARCHITECT'S CERTIFICATION**

**PROJECT:** Child Care Centre  
14 – 18 Boondah Road  
Warriewood

**CLIENT:** Karimbla Constructions Services (NSW) P/L  
Level 11  
528 Kent Street  
Sydney NSW 2000

**DATE:** 3<sup>rd</sup> June, 2013

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## 1.0 INTRODUCTION

On behalf of our clients and developer of the project, Karimbla Constructions Services (NSW) Pty Ltd, (the Client), we hereby lodge the architect's certification as part of a development application for the proposed new two-storey child care centre.

The site is located at 14 – 18 Boondah Road, Warriewood.

The site is located in the local government area of the Pittwater Council.

We hereby confirm that the design and documentation of the proposed child care centre for up to one-hundred (100) children, aged between 0 and 5 years of age, has been completed and is in accordance with the requirements of the **Education and Care Services National Regulations** (Regulations) under the **Education and Care Services National Law** (Law), including the **Children (Education and Care Services) Supplementary Provisions Regulation 2012**.

The development application seeks development consent for the following work :-

- The construction of a two-storey child care centre with a total capacity for one-hundred (100) children, aged between 0 to 5 years of age;
- The fit-out of the new premises to accommodate internal play areas, external play areas, a lift, internal stairs, staff area, kitchen, laundry, public amenities, children's amenities, cot room, storage areas and lunch room, as shown in the architectural drawings attached;
- The construction of twenty-five (25) car spaces including two (2) spaces allocated for the disabled or visitors with prams and a shared zone for accessibility;
- Vehicular access to be provided from the existing private road, over Part Lot 503 to the proposed car parking area, which will be elevated above the existing storm-water overland flow area formed on Lot 503;
- Construction of a pedestrian access path along the side boundary of Lot 502 with landscaping, security fencing and external works required for the child care centre.

The proposed building will have a Building Classification of Class 9(b), with a rise of two (2) storeys and a Type C Construction, under the Building Code of Australia (BCA).

## 2.0 SITE INFORMATION

### 2.1 The Site

The site is formed by the original sub-division of Lot 20 in DP 1080979, being the corner of Macpherson Street and Boondah Road, Warriewood. The subject site comprises of Lot 502 (872 square metres) and Part Lot 503 – Public Reserve (total of 8,920 square metres) in DP 1175520.

Lot 502 has a street frontage of 19.405 metres to Macpherson Street, a splayed corner of 7.545 metres, a second street frontage of 35.765 to the private road, indent of 2.315 metres and a final segment of 31.335 metres. The western side boundary is formed by one segment of 77.285 metres.

The site area of Lot 502 is 872 square metres.

The proposed elevated car parking area occupies approximately 83 metres of the eastern side boundary (shared with Lot 502) and a width of 16.02 metres, generating an area of approximately 1,328 square metres (of Lot 503).

The property is adjacent to a multi-storey residential development to the east, currently under construction by Karimbla Constructions Services (NSW) Pty Ltd.

### 3.0 PROPOSED DEVELOPMENT

#### 3.1 General Description of Project

The design of the proposed child-care centre development has been influenced by the performance criteria and design controls contained in the new **Education and Care Services National Regulations** (Regulations) under the **Education and Care Services National Law (Law), 2012**, including the **Children (Education and Care Services) Supplementary Provisions Regulation 2012**.

The Law and Regulations now supersede the original Children Services Regulation - 2004 and take precedence in all child care centre designs and management policies.

The Development Application seeks Council's approval for the following accommodation for children in the centre :-

• Indoor Play Room #1	83.6 sqm	( 24 children aged 0 to 2 years)
• Indoor Play Room #2	70.0 sqm	( 18 children aged 2 to 3 years)
• Indoor Play Room #3	53.0 sqm	( 14 children aged 2 to 3 years)
• Indoor Play Room #4	89.0 sqm	( 25 children aged 3 to 5 years)
• Indoor Play Room #5	70.0 sqm	( 19 children aged 3 to 5 years)
• Total Play Areas	365.6 sqm	(100 children aged 0 to 5 years)

The maximum capacity is one-hundred (100) children, however, based upon a net floor area of 3.25 square metres of indoor play area per child, the centre has the capacity of providing 3.65 square metres per child.

The total outdoor playing area being provided will be formulated by :-

• Outdoor Play Area #1	448.0 sqm	
• Outdoor Play Area #2	253.0 sqm	
• Total Play Areas	701.0 sqm	(Total for 100 children)

The maximum capacity is one-hundred (100) children, with the following accommodation :-

- 24 children aged 0 to 2 years with a cot room for 9 children;
- 32 children aged 2 to 3 years;
- 44 children aged 3 to 5 years;
- A maximum capacity of 100 children aged 0 to 5 years;
- Associated internal amenities and facilities;
- Car parking for twenty-five (25) vehicles to accommodate four (4) visitors with disabilities by providing two (2) shared zones.

The required staffing levels for the centre will require the following :-

- 6 staff for the 24 children aged 0 to 2 years (1 per 4 children);
- 4 staff for the 32 children aged 2 to 3 years (1 per 8 children);
- 5 staff for the 44 children aged 3 to 5 years (1 per 10 children);

The Law and Regulations establishes the minimum operating requirements for education and care services, relating to matters such as staffing, physical environment and educational programs.

The framework of the Regulations is very extensive and comprehensive. The Regulations include the centre-based service provisions, under **Chapter 4 – Operation Requirements** and specifically for New South Wales requirements are specified under **Part 7.3**.

The Department of Community Services (DOCS) now requires the designer, preferably a registered architect, to certify that the child care centre is in accordance with the appropriate regulations. The writer is a qualified architect, registered in New South Wales and Queensland as such and has designed and constructed over fifty (50) child-care centres in the last ten (10) years.

The final design was therefore developed after past experiences with the Department of Community Services and ultimately developed as presented in the following documentation to form the development application now submitted to Council.

### **3.1 Design**

The design objectives were to develop a centre, which accommodated the client's needs and preferences in terms of child-care accommodation, space for play areas, administration and energy efficiency, while complimenting the physical constraints and site characteristics.

#### **Floor Layout**

The proposed internal floor layouts will provide indoor play areas, storage spaces, children's amenities, kitchen, laundry, staff room, staff amenities, reception area and lobby area for visitors.

The design of the indoor play rooms allows for the division of the areas into a number of smaller areas for specific groups of children, undertaking a variety of educational and recreational activities. The floor area illustrated excludes access areas, storage space and doorways.

The net floor areas proposed achieve or exceed the prescribed requirements where the indoor play area should be at least 3.25 square metres per child and the outdoor play area should be at least 7.0 square metres per child.

The child-care centre has been designed to accommodate one-hundred (100) children.

The building has been designed as a cavity-brick external wall structure, with concrete slab floors and a concrete slab ceiling and aluminium framed windows and doors. The exterior walls are constructed of face-brick work with a contrasting window walls and glazing to reduce the appearance of bulk and height.

#### **Parking Area**

The elevated car parking spaces for the proposed development are proposed to be positioned over an existing overland flow path for storm-water drainage (Lot 503 in DP 1175520). The parking area will be accessible from the private road, leading into the residential development from Macpherson Street and is designed to accommodate twenty-five (25) car spaces, with intersecting landscaped strips and perimeter landscaping screens.

Fifteen (15) car spaces are allocated to the fifteen (15) staff estimated to be required as a maximum at any one time. The remaining ten (10) car spaces are allocated to visitors and parents.

Four (4) car spaces are provided with two (2) shared zones for access for the disabled or parents with prams. Each car space is 2.6 metres in width by 5.4 metres in length.

A turning bay has been provided at the end of the driveway in case no car parking spaces are available or for short-term deliveries.

A pedestrian access pathway, 1.5 metres in width, provides access from the car parking area to the main entrance of the centre.

Assessment of the proposed parking facilities is contained in the traffic and parking report submitted with the development application.

## Hours of Operation

The proposed centre is expected to operate from Monday to Friday, between the hours of 7.00 am to 7.00 pm.

## 3.2 Essential Services

The project is assessed as a Class 9(b) building, under the Building Code of Australia (BCA), 2013. The child-care centre is regarded as "*an assembly building...*" or a building of a public nature.

The existing building has been constructed as a Type C Construction system. As such the completed development will provide the required classification of construction.

A schedule of the Essential Services to be incorporated into the construction of the child-care centre may be summarised as follows :-

Fire and Smoke Alarm	AS1670.1 and 3	BCA	SpecE2.2
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A schedule of the relevant Building Code of Australia requirements may be summarised as follows :-

Termite Protection	AS3660.1	BCA	Part B1.3
Type of Construction		BCA	Part C1.1
Compartmentation and separation		BCA	Part C2.2
Type C Construction		BCA	Spec C1.1
Widths of stairs		BCA	Part D2.9
Treads and risers		BCA	Part D2.13
Access to buildings	AS 1428.1	BCA	Part D3.2
Waterproofing of wet areas		BCA	Part F1.7
Natural lighting		BCA	Part F4.1
Natural ventilation		BCA	Part F4.6
Sound insulation of floors		BCA	Part F5.3
Sound insulation of walls		BCA	Part F5.4
STC Ratings		BCA	Spec F5.2

A schedule of the relevant Australian Standards that will apply to the child-care centre may be summarised as follows :-

Playground and playground equipment	AS/NZS4486.1, 1997
	AS/NZS4422, 1996
Design, Construction and Fit-out of Food Premises	AS4674, 2004
Access and Mobility	AS 1428.1
Car Parking	AS2890.1, 2004
Commonwealth Disability Discrimination Act	1992
Emergency Lighting and Exit Signs	AS2293

## 4.0 EDUCATION AND CARE SERVICES NATIONAL REGULATIONS

The design of the internal layouts for the proposed child-care centre development has been influenced by the performance criteria and design controls contained in the original New South Wales Government's **Children's Services Regulation 2004** (Reg-2004), which has now been superseded by the new **Australian Children's Education and Care Quality Authority (ACECQA) and National Quality Framework (NQF)**.

These regulations comprise of the **Education and Care Services National Regulations** (Regulations) under the **Education and Care Services National Law** (Law). The Law and Regulations now supersede the Reg-2004.

The Law and Regulations establishes the minimum operating requirements for education and care services, relating to matters such as staffing, physical environment and educational programs. The framework includes centre-based service provisions under **Chapter 4 – Operational Requirements** and specific New South Wales requirements under **Part 7.3**.

The design of the proposed additions is a direct response to the intended compliance with the performance criteria and design controls contained therein.

The management of the proposed centre has a detailed and thorough understanding of what is required to achieve appropriate levels of maintenance, safety and operational efficiency in a child-care centre.

With their experience, the current design has been formulated. Consultations with management, staff and members of the Department of Community Services (DoCS) have provided the basis of the design and arrangement of the internal areas.

A detailed schedule of inclusions and fittings will ensure that all dangerous items are locked in secure areas, power points and electrical items are stored out of reach of children, the relationships between rooms are functional and efficient and sufficient storage is provided for activities and materials for play.

The construction will obviously ensure that no projecting objects or surfaces are created and attention to detail will ensure a high standard of child-care centre is maintained.

The play room areas have been designed to provide appropriate space and a high level of safety for children to actively participate in play activities and incorporate the following :-

- (a) The design integrates flexibility to allow for a variety of organised activities in a number of spaces by using re-locatable shelving, partitions and furniture to create distinct spaces capable of achieving a variety of functions. The play areas each comply with the minimum requirements of 3.25 square metres per child;
- (b) Suitable flooring and soft areas are provided to accommodate children's needs and behaviour;
- (c) These play areas are a vinyl floor and provide a flexible flooring material to cater for a range of activities, while maintaining good maintenance and hygiene standards;
- (d) Areas designated for eating and drinking are within the play areas and will be created by chairs and tables, used for play and learning to also provide an area for eating and drinking;
- (e) Access within each play area will be unobstructed and detached from exit areas and doorways. The large play area provided will be multi-functional and create flexibility within the one space;
- (f) The centre integrates clear safety glass panelling to all sliding glass doors and fixed glass panels, allowing supervision of children in all areas. The main wall dividing the play areas from the access hallways will provide clear safety glass throughout to allow a visual connection between spaces;
- (g) The external walls will provide exit doors to provide a connection between areas. The doors will be clearly indicated to illustrate the egress requirement and fixed glazing will be clearly marked with etched motifs to illustrate fixed glazing;
- (h) Observation windows are positioned in toilet areas for the supervision of children by carers;
- (i) The design of the centre and construction details will ensure there is no threshold or sliding door track projecting above the floor level;

- (j) The thresholds will be designed with a maximum step of 25 millimetres to ensure there is no tripping point between indoor areas and outdoor areas;
- (k) A direct access to toilet areas for children is provided from each play room with an observation window to ensure safety and security at all times;
- (l) The design of the centre places the kitchen with access to the indoor and outdoor play rooms and avoids any excessive pathways or hallways to connect services through the play rooms.

The child-care centre will provide for children aged between six-weeks and five (5) years of age.

The child-care centre provides the following facilities :-

- bottle preparation and sterilisation area is integrated into the kitchen to provide an immediate area for the preparation of bottles for children;
- the bottle preparation area is separated from the nappy changing area, which is located in a separate room, with hand-basin, baby-bath tub and cupboard space for soiled and clean nappies;
- a refrigerator is provided for infant formulas, milk and food below the sink;
- an overhead cupboard is provided, inaccessible to children and used for the storage of detergents and other cleaning substances.

The proposed child-care centre has four (4) toilet areas that are dedicated for the children and provides the following :-

- twelve (12) toilets for the use of 100 children at the rate of one per 8 children;
- twelve (12) taps in a trough-style arrangement at a level of 600 mm above the floor level for children at the rate of one per 8 children;
- a separate nappy changing room and cot room;
- separate overhead cupboard storage area for cleaning substances in the kitchen;
- toilets and washroom area are directly accessible and visible from the access hallway areas connecting the play areas via a glass door and side windows;
- the floor surface is a washable tiled surface with non-slip surface and drained to a floor waste outlet;
- a shower recess with shower rose and taps, suitable for children with a disability within the toilet designated for disabled persons and constructed in accordance with AS1428.3;
- liquid soap dispensers are proposed for each basin at a height appropriate to each vanity basin;
- paper towels are used for hand drying with a waste bin adjacent to the entry doors.

The proposed hot-water system will be regulated to ensure the temperature of the water is maintained to less than 43.5 degrees. Hot water is provided to the shower recess, kitchen, staff room and disabled toilet areas only.

The proposed nappy change area has permanent change-tables, fixed to the wall, within easy access to the cot room and indoor play areas for children, aged 0 to 2 years of age, with a separate shower recess.

The permanent table is a conventional system used frequently and with great success to reduce waste of space. The table is not accessible to children and does not adversely impact upon the available space in the toilet area. Soiled nappies are stored in sealed containers below each table, with clean nappies stored in the cupboard area adjacent.

The nappy change area remains within direct visual contact with the cot room and children's play room adjacent.



The nappy change room provides the following facilities :-

- a child-proof overhead cupboard, inaccessible to children with child-proof locks, for the storage of disinfectants and other potentially harmful substances;
- a hand-washing basin with elbow/wrist operated taps for adults;
- a baby-bath tub or sink at table-height between the two changing tables for bathing children;
- a waste disposal bin for the storage of soiled nappies pending laundering or disposal below the change table;
- facilities for the storage of clean nappies in a secure cupboard area.

The proposed child-care centre already provides for the following laundry arrangements and safe sanitary facilities :-

- (a) a laundry accommodates one laundry tub, washing machine and dryer with secured storage cupboards above to accommodate the detergents;
- (b) the laundry arrangement is considered to be compact, accessible and efficient use of space for the proposed range of children, aged zero to five years;
- (c) the cupboards within the laundry are fitted with child-proof locks;
- (d) the floor finish is an impervious tiled floor, with non-slip finish and graded to the floor waste outlet;
- (e) flammable liquids will not be stored within the laundry;
- (f) a laundry tub is provided for soiled clothes;
- (g) a sanitary basket is used for the storage of soiled clothes and linen before laundering or disposal;
- (h) the laundry tub is provided with hot and cold water;
- (i) one washing machine is provided;
- (j) a cleaner's sink is provided.

An additional kitchen area has been provided in the new centre and will incorporate the following characteristics :-

- compliance with the **Food Act 2003** and regulations therein;
- compliance with **AS4674-2004 – Design, Construction and Fit-out of Food Premises**.

The kitchen integrates the following inclusions :-

- floors, walls and ceilings are impervious and smooth, free of cracks and crevices to be capable of thorough cleaning;
- intersections between walls and floors will be coved throughout;
- machinery will be on wheels or mounted on plinths 150 mm high;
- shelving and fittings will be constructed of stainless steel materials;
- a kitchen door will be provided to prevent entry by children;
- the kitchen provides for a stove and oven, with a stainless steel sink bowl with hot and cold water and a refrigerator;
- a hand basin is provided for personal hygiene and is supplied with a liquid soap dispenser and hand towels;
- the kitchen has overhead cupboards, which are lockable, to store detergents and cleaning substances;
- toilets do not open onto any kitchen area;
- all openings to the kitchen are fitted with tight-fitting doors and roller shutters to inhibit the initial spread of flame or smoke

The child-care centre is provided with outdoor play areas and facilities to ensure the development of recreation and activity skills. The open space areas are exposed to the indoor areas for additional supervision.

However, the requirement is that all children are supervised by no less than two carers at the one time within each play area. The amount of outdoor play area required must be no less than seven (7) square metres per child.

The play areas are provided with covered roofs or pergola structures, allowing flexibility in being completely opened for maximum solar access or completely closed for wet weather protection. Additional shading to other play area is provided by shade cloth, stretched across the play areas.

The centre will incorporate a variety of play surfaces, such as sand, "astro- turfing", hard paving and soft-fall areas to provide a variation in colour and texture. The centre accommodates the following inclusions :-

- an open flat area for running, active play and mobile play equipment;
- a soft-fall area for games;
- a quiet reading area and "book corner";
- secure fencing 1.8 metres in height;
- a large sand pit, of 12 square metres in area, with shade structure above. The sand pit will be covered at night to prevent access by animals and protected from debris;
- a paved area for wheeled toys.

## 5.0 CONCLUSION

In conclusion, we hereby confirm that the design and documentation of the proposed child care centre for up to one-hundred (100) children, aged between 0 and 5 years of age, has been completed and is in accordance with the requirements of the **Education and Care Services National Regulations** (Regulations) under the **Education and Care Services National Law** (Law), including the **Children (Education and Care Services) Supplementary Provisions Regulation 2012**.

The framework of the Regulations is very extensive and comprehensive. The Regulations include the centre-based service provisions, under **Chapter 4 – Operation Requirements** and specifically for New South Wales requirements are specified under **Part 7.3**.

The Department of Community Services (DOCS) now requires the designer, preferably a registered architect, to certify that the child care centre is in accordance with the appropriate regulations. The writer is a qualified architect, registered in New South Wales and Queensland as such and has designed and constructed over fifty (50) child-care centres in the last ten (10) years.

The final design is therefore certified by the writer as being in accordance with the recommendations of the Department of Community Services and presented to the consent authority with a recommendation for approval.

Yours faithfully,

**architex**



**Robert Del Pizzo**

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