## City of Ryde Civic Centre, Devlin Street, Ryde Locked Bag 2069, North Ryde NSW 1670 DX 8403, Ryde Facsimile 9952 8070 Telephone 9952 8222



## **Development Consent**

Applicant:

Remo West Ryde P/L

10 Regatta road

**FIVE DOCK NSW 2046** 

Consent No:

559/2007

**Consent Date:** 

11 December 2007

Valid until:

**11 December 2012** 

The City of Ryde, as the consent authority under the provisions of the Environmental Planning and Assessment Act, 1979 hereby consents to the development as follows:

Property:

Small lot on northern edge of 7 Chatham Road, West Ryde - Lot 1,

DP 1072082;

9-19 Chatham Road, West Ryde - Lots 149-154, DP 11208; 7A & 7B Chatham Road, West Ryde - Lots A & B, DP 398801; 5 & 5A Anthony Road, West Ryde - Lots 1 & 2, DP 590509;

3 Anthony Road, West Ryde - Lot B, DP 414394; 10 Anthony Road, West Ryde - Lot 2, DP 1072079;

Part of Anthony Road, West Ryde, and Part of Chatham Road, West Ryde

**Development:** 

Erection of a seven storey building of mixed retail, commercial and residential use with five basement levels and the provision of a village square on the area adjoining the building, landscaping and associated road works, and erection of a four storey building to house community services and some retail floor space above two

basement car parking levels.

subject to the conditions 1 to 192 specified in this consent.

You are advised that failure to observe any condition of approval set out in the consent is an offence and legal proceedings may be instituted by Council.

This Consent does not guarantee compliance with the Disability Discrimination Act and you should, therefore, investigate your liability under the Act.

You are advised of your right of appeal to the Land and Environment Court under Section 97 of the Environmental Planning & Assessment Act and your right to request a review of the determination to Council under Section 82A of the Environmental Planning & Assessment Act within 12 months after you have received the Consent.

Sue Weatherley

**Group Manager Environment & Planning** 

The fees quoted at the time of issue of this Consent may be subject to variation. Council's annual fees and charges are published in the Management Plan. To confirm fees please contact Customer Service on 9952-8222.

## **GENERAL**

## **Approved Plans**

1. Development is to be carried out in accordance with the following plans and support information as submitted to Council, except where amended by these conditions of consent:

Document	Author	Date
Architectural		
DA 01B – Master Plan Roof	Jack Taylor Architects Pty Ltd	22.10.07
DA 02B – Master Plan Ground Floor	Jack Taylor Architects Pty Ltd	22.10.07
DA 201B - Basement 1A	Jack Taylor Architects Pty Ltd	22.10.07
DA 202B – Basement 1B	Jack Taylor Architects Pty Ltd	22.10.07
DA 203B – Basement 2	Jack Taylor Architects Pty Ltd	22.10.07
DA 204B – Basement 3	Jack Taylor Architects Pty Ltd	22.10.07
DA 205B – Basement 4	Jack Taylor Architects Pty Ltd	22.10.07
DA 210B – Ground floor	Jack Taylor Architects Pty Ltd	22.10.07
DA 211B – Level 1	Jack Taylor Architects Pty Ltd	22.10.07
DA 212B – Level 2	Jack Taylor Architects Pty Ltd	22.10.07
DA 213B – Level 3	Jack Taylor Architects Pty Ltd	22.10.07
DA 214B – Level 4	Jack Taylor Architects Pty Ltd	22.10.07
DA 215B – Level 5	Jack Taylor Architects Pty Ltd	22.10.07
DA 216B – Level 6	Jack Taylor Architects Pty Ltd	22.10.07
DA 301B – Elevations	Jack Taylor Architects Pty Ltd	22.10.07
DA 302B – Elevations	Jack Taylor Architects Pty Ltd	22.10.07
DA 303B – Section	Jack Taylor Architects Pty Ltd	22.10.07
DA 304B – Section	Jack Taylor Architects Pty Ltd	22.10.07
DA 305B – Section	Jack Taylor Architects Pty Ltd	22.10.07
DA 401B – Typical units	Jack Taylor Architects Pty Ltd	22.10.07
DA 402B – Typical units	Jack Taylor Architects Pty Ltd	22.10.07
DA B – Perspectives	Jack Taylor Architects Pty Ltd	22.10.07
DA B – Perspectives	Jack Taylor Architects Pty Ltd	22.10.07
DA B – Perspectives	Jack Taylor Architects Pty Ltd	22.10.07
DA 101B – West Ryde Urban Village	Jack Taylor Architects Pty Ltd	22.10.07
DA 102B - West Ryde Urban Village	Jack Taylor Architects Pty Ltd	22.10.07
DA 103B – West Ryde Urban Village	Jack Taylor Architects Pty Ltd	22.10.07
DA 104B – Level 1	Jack Taylor Architects Pty Ltd	22.10.07
DA 105B – Level 2	Jack Taylor Architects Pty Ltd	22.10.07
DA 106B – Level 3	Jack Taylor Architects Pty Ltd	22.10.07
DA 107B - Roof plan	Jack Taylor Architects Pty Ltd	22.10.07
DA 110B – Sections	Jack Taylor Architects Pty Ltd	22.10.07
DA 111B – Sections	Jack Taylor Architects Pty Ltd	22.10.07
DA 112B – Elevations	Jack Taylor Architects Pty Ltd	22.10.07
DA 113B – Elevations	Jack Taylor Architects Pty Ltd	22.10.07
DA 114B – Community centre	Jack Taylor Architects Pty Ltd	22.10.07

Document	Author	Date
Civil Services		
VC00 – Cover sheet, drawing index and locality plan	Buckton Lysenko Consulting Engineers	25.07.07
VC01 – General notes and Legend	Buckton Lysenko Consulting Engineers	25.07.07
VC02 – Soil and Water Management Plan, Notes and Details	Buckton Lysenko Consulting Engineers	31.07.07
VC03 – Stormwater – Basement 4 Floor Plan	Buckton Lysenko Consulting Engineers	31.07.07
VC04 – Stormwater – Basement 3 Floor Plan	Buckton Lysenko Consulting Engineers	31.07.07
VC05 – Stormwater – Basement 2 Floor Plan	Buckton Lysenko Consulting Engineers	31.07.07
VC06 – Stormwater – Basement 1B Floor Plan	Buckton Lysenko Consulting Engineers	31.07.07
VC07 – Stormwater – Basement 1A Floor Plan	Buckton Lysenko Consulting Engineers	31.07.07
VC08 – Stormwater – Ground Floor Plan	Buckton Lysenko Consulting Engineers	22.10.07
VC09 – Stormwater – Level 1 Floor Plan	Buckton Lysenko Consulting Engineers	22.10.07
VC10 – Stormwater – Level 2 Floor Plan	Buckton Lysenko Consulting Engineers	22.10.07
VC11 – Stormwater – Level 3 Floor Plan	Buckton Lysenko Consulting Engineers	22.10.07
VC12 – Stormwater – Level 4 Floor Plan	Buckton Lysenko Consulting Engineers	22.10.07
VC13 – Stormwater – Level 5 Floor Plan	Buckton Lysenko Consulting Engineers	22.10.07
VC14 – Stormwater – Level 6 Floor Plan	Buckton Lysenko Consulting Engineers	22.10.07
VC15 – Stormwater – Roof Plan	Buckton Lysenko Consulting Engineers	25.07.07
Landscaping	•	
LS1 - Landscape Concept Plan	Jack Taylor Architects Pty Ltd	25.07.07
LS2 - Podium Landscape Concept	Jack Taylor Architects Pty Ltd	25.07.07
LS3 – Concept Details	Jack Taylor Architects Pty Ltd	25.07.07
Civil Services - Community Building	J	
CC00 – Community – Cover Sheet, Drawing Index, and Locality Plan	Buckton Lysenko Consulting Engineers	25.7.07
CC01 – Community – General Notes and Legend	Buckton Lysenko Consulting Engineers	25.7.07
CC02 – Community – Soil and Water Management Plan, Notes and Details	Buckton Lysenko Consulting Engineers	31.7.07

Document	Author	Date
CC03 – Community – Stormwater – Basement 1 and Basement 2	Buckton Lysenko Consulting Engineers	31.7.07
CC04 – Community – Stormwater – Ground Floor & Level 1	Buckton Lysenko Consulting Engineers	31.7.07
CC05 – Community – Stormwater – Level 2 & Level 3	Buckton Lysenko Consulting Engineers	31.7.07
CC06 – Community – Stormwater – Roof Plan	Buckton Lysenko Consulting Engineers	31.7.07
Road Design		
RD01 – Cover Sheet, Drawing Index, and Locality Plan	Buckton Lysenko Consulting Engineers	.25.7.07
RD02 – General Notes, and Legend	Buckton Lysenko Consulting Engineers	25.7.07
RD03 – Sediment and Erosion Control Plan	Buckton Lysenko Consulting Engineers	25.7.07
RD04 – Proposed Intersections, Stormwater Drainage	Buckton Lysenko Consulting Engineers	22.7.07
RD05 – MC01 – Anthony Road and Longitudinal Section	Buckton Lysenko Consulting Engineers	Undated
RD06 – MC02 – Reserve Street and Longitudinal Section	Buckton Lysenko Consulting Engineers	25.7.07
RD07 – MC03 – New Betts Street and Longitudinal Section	Buckton Lysenko Consulting Engineers	25.7.07
RD08 – MC01 – Anthony Road Cross Sections, Sheet 1 of 2	Buckton Lysenko Consulting Engineers	25.7.07
RD09 – MC01 – Anthony Road Cross Sections, Sheet 2 of 2	Buckton Lysenko Consulting Engineers	25.7.07
RD010 – MC02 – Reserve Street Cross Sections	Buckton Lysenko Consulting Engineers	25.7.07
RD011 – MC03 – New Betts Street Cross Sections	Buckton Lysenko Consulting Engineers	25.7.07
RD012 – Kerb Returns	Buckton Lysenko Consulting Engineers	25.7.07
RD013 – Stormwater Longsections	Buckton Lysenko Consulting Engineers	22.7.07

## Conditions to ensure compliance with the approval

2. The term of this Consent is limited to a period of five (5) years from the date of approval. The consent will lapse if the development does not commence within this time.

#### Utilities

3. Utility installations must not be located above ground. The installation of utilities will occur to the satisfaction of the relevant authority (eg. Energy Australia) prior to the occupation of the development. All works are to be at the applicant's/ developer's expense.

## Signage

4. The applicant is advised that any erection of signs on advertising structures not indicated on the development consent plans requires the submission of a separate development application to Council.

#### Materials, Colours and Finishes Schedule

- The development materials, colours and finishes must be in accordance with the Issue A, Schedule of External Finishes for Remo Properties dated 27 July 2007, except for the public domain, whereby the paving materials and colour, any street furniture, seating including all private restaurant seating, bins and bollards, lighting details and any public art within the public domain shall be installed to the satisfaction of Council. The details of such elements within the public domain shall be submitted with the application for a Construction Certificate, and the applicant shall liaise with Council prior to the installation of these elements.
  - a) The applicant shall, at no cost to Council, construct full width granite footpath paving, new 'SA' kerb and gutter and driveway laybacks across the full frontage of the property. The Village Square shall be constructed granite paving. The levels of the footpath paving and kerbing shall conform with levels issued by Council's Public Works Division.
  - b) Granite footpath crossings shall be constructed at all locations where vehicles cross the footpath, to protect it from damage resulting from the vehicle traffic. The location, design and construction shall conform to the requirements of Council. Finished levels shall conform with property alignment levels issued by Council's Public Works Division. Kerbs shall not be returned to the alignment line. Bridge and pipe crossings will not be permitted.
  - c) All hard landscaping, paving, soft landscaping including species selection, street furniture and the like for the public domain, including the Village Square shall be carried out in accordance with approved landscape plans and full details including samples, schedules and plans shall be submitted to and approved by the Council prior to the construction of the development. Where soft landscaping is proposed including species selection, the applicant must ensure that the species health is guaranteed for a minimum of 2 years to ensure the character and appearance of the streetscape is maintained and established. Any species that die within two years of planting must be replaced by the applicant with a species of a similar size and maturity.
  - d) A Public Arts Strategy shall be developed and implemented to the satisfaction of the Council. The strategy shall be developed in conjunction with the City of Ryde and will include a management and action plan, identify the exact locations of proposed public art installations and detailed design of any proposed public art installations. The applicant shall be responsible for the costs of preparing the strategy and action plans and the implementation of these plans prior to the issue of a final Occupation Certificate.

#### Hours of work

6. All demolition and all construction and associated work is to be restricted to between the hours of 7.00am and 7.00pm Monday to Friday (other than public holidays) and between 8.00am and 4.00pm on Saturday. No work is to be carried out on Sunday or public holidays. No change is to be made to these hours without the prior written approval of Council.

## Payment of Council fees and charges

7. The applicant must pay all applicable fees and charges as set out in Council's Management Plan, except where payment has been waived by Council as set out in the Voluntary Planning Agreement.

## **Energy Efficiency**

- 8. The development must be in accordance with the City of Ryde's Energy Smart and Water Wise DCP and the following:
  - Each new dwelling must achieve a minimum 3.5 Star NatHERS energy rating of internal thermal comfort.
  - Where a hot water system is of domestic/ residential scale it must achieve a minimum 3.5 Star Greenhouse Score. The energy rating of the hot water system should be visible on the product at the place of purchase.
  - Ceiling/ roof and walls must be fitted with insulations. Ceiling/ roof insulation must be rated R3.0 or equivalent, and wall insulation must have an R1.5 or equivalent rating. Insulation of cavity brick walls is not required.
  - Where electric clothes dryers are to be installed as a part of a development, each dryer must have a minimum Greenhouse Score of 3.5.
  - The total anticipated energy consumption for the base building is no greater than 450 Mega Joules/ annum/ metre square (MJ/am²) for commercial uses and 900MJ/am² for retail uses.
  - The use of electrical appliances such as dishwashers, refrigerators, freezers and washing machines with a minimum Energy Star Rating of 3.5 Stars is encouraged.
  - The installation of energy efficient lighting, motion detectors and dimmers is encouraged.
  - AAA or AAAA rated fittings and fixtures will be used to ensure high levels of water efficiency. Where fittings cannot be AAA or AAAA, self-regulating flow restrictors will be provided on the supplies to limit the discharges to levels equivalent to AAA ratings.
  - A BASIX Certificate must be provided to the satisfaction of Council prior to the issue of a Construction Certificate.

#### **Parking General**

9. The layout of the proposed carparking areas associated with the subject development (including driveways, queuing areas, grades, turn paths, sign distance requirements, aisle widths, and parking bay dimensions) should be in accordance with AS2890.1 – 2004 and AS2890.2 – 2002 for heavy vehicle usage.

#### Heritage

10. The boundary fence of Darvall Park must be re-instated to its original condition, to the satisfaction of Council.

## PRIOR TO CONSTRUCTION CERTIFICATES

#### **Tree Planting Scheme**

 A tree planting scheme for the village square must be submitted to Council for approval prior to the issue of the Construction Certificate.

**Note:** The trees around the village square should be evergreen and densely foliating to ensure their effectiveness for wind mitigation throughout the year.

#### **Construction Schedule**

12. A Construction Schedule must be submitted and approved by Council prior to the issue of the Construction Certificate.

## Civil Engineering, Utility Services and Water Management

- 13. Prior to release of the relevant Construction Certificate, design drawings and certification is to be provided to Council by a suitably qualified Engineer showing all details of the proposed excavation shoring and confirming that all shoring has been designed for a maximum lateral movement at the shoring face of no more than 25mm.
- 14. The applicant is to submit and have approved by the certifying authority, engineer's details for all concrete work and structural steelwork prior to the issue of the relevant Construction Certificate.
- 15. Detailed design drawings of all works to be undertaken in the public road reserve are required to be submitted and approved by Council or the relevant certifying authority prior to the issuing of the relevant Construction Certificate.
  - a) Structural Drawing/s prepared by an appropriately qualified practising Structural Engineer; corresponding with and attached to a Structural Certificate (see (c));
  - b) A Structural Certificate for Design, confirming compliance with:
    - i) The relevant clauses of the Building Code of Australia (BCA);
    - ii) The relevant conditions of Development Consent:
    - iii) The Architectural Plans incorporated with the Construction Certificate; and
    - iv) The relevant Australian Standards listed in the BCA (Specification A1.3).

The structural drawings and design certificate must cover the following elements:

- Footings:
- Reinforced concrete slabs, beams and columns;
- Stairs:
- Retaining walls;
- Stabilisation structures (ie. works required to stabilise both the excavation and surrounding structures);
- All structural steel work;
- Tunnels;
- Bridges; and
- Any other critical structural elements.

- c) Prior to the issue of a Construction Certificate for that component of the approved development involving the carpark, the Council must be provided with and approve a report by an engineer with suitable qualifications in geotechnical and structural evaluation of tunnels which report confirms that the approved development will not adversely impact upon the structure of the West Ryde Stormwater Tunnel ("Tunnel"). This report must include the following details:
  - Survey and sectional drawings of the Tunnel and the zone of influence surrounding the Tunnel ("Zone");
  - Geotechnical details of the Tunnel and the Zone:
  - A construction plan showing the details of construction within the Zone together with a monitoring plan for the construction process; and
  - A contingency plan to address any adverse impacts upon the Tunnel structure during the construction process.
- d) In carrying out the development, all aspects of the report approved by Council in accordance with Condition No. 15 c), including any of the details provided in accordance with Condition No. 15 c) i) iv), must be complied with.
- e) Where the construction of the development will involve works within the Zone, the Council shall, prior to the commencement of such work, be provided with security in accordance with section 80A of the *Environmental Planning and Assessment Act 1979* for the sum of \$2million to cover the cost of making good any damage caused to the Tunnel as a consequence of the works.
- 16. Road pavements are to be designed by a Professional Civil Engineer in accordance with Council's requirements and based upon soil tests performed by a registered N.A.T.A. Soils Laboratory. The pavement design and design traffic loading are to be submitted to and approved by Ryde City Council prior to issue of the relevant Construction Certificate.
- 17. The developer shall roto-mill and asphalt resheet (AC14) the full width of roadway to a minimum depth of 40mm for the following roads:
  - Chatham Road from 10 metres north of New Betts Street to 10 meters south of Dickson Ave;
  - Anthony Road from 10 metres north of New Betts Street to 10 meters east of Reserve Street:
  - Reserve Street from Anthony Road to 10 metres north of the development sites northern boundary.

18. The maximum grade of all internal driveways and vehicular ramps shall be 1 in 4 and in accordance with the relevant section of AS 2890.1. The maximum change of grade permitted is 1 in 8 (12.5%) for summit grade changes and 1 in 6.7 (15%) for sag grade changes. Any transition grades shall have a minimum length of 2.0m. The driveway design is to incorporate Council's issued footpath and gutter crossing levels where they are required as a condition of consent. The information required includes a driveway plan, longitudinal section from the centreline of the public road to the garage floor, and any necessary cross-sections clearly demonstrating that the driveway complies with the above details and that vehicles may safely manoeuvre within the site without scraping. All information required is to be submitted to, and approved by Council prior to issue of the relevant Construction Certificate.

## **Sydney Water**

- 19. A Section 73 Compliance Certificate under the Sydney Water Act 1994 must be obtained from Sydney Water Corporation. Application must be made through an authorised Water Servicing Coordinator. Please refer to the Building, Development and Plumbing section of the website at <a href="www.sydneywater.com.au">www.sydneywater.com.au</a>, then refer to "Water Servicing Coordinator" under "Developing Your Land" or telephone 13 20 92 for assistance. Following application a "Notice of Requirements" will advise of water and sewer infrastructure to be built and charges to be paid. Please make early contact with the Coordinator, as it may take some time to build water/sewer pipes and this may impact on other services and building, driveway or landscape design. A copy of Sydney Water's Notice of Requirements must be submitted to the Principal Certifying Authority prior to the Construction Certificate being issued. The Section 73 Certificate must be submitted to the Principal Certifying Authority prior to occupation of the development.
- 20. **Mechanical ventilation details** Details of all proposed mechanical ventilation systems, and alterations to any existing systems, must be submitted to Council or an accredited private certifier for approval with the application for the Construction Certificate. Such details must include:
  - (a) Certified plans of the proposed work, with any alterations coloured to distinguish between new and existing work;
  - (b) A site survey plan showing the location of all proposed air intakes and exhaust outlets on the site, and any existing cooling towers, air intakes, exhaust outlets and natural ventilation openings in the vicinity;
  - (c) A completed Mechanical Services Design Certificate (Form M1), together with a copy of the certifier's curriculum vitae; and
  - (d) Documentary evidence in support of any departures from the deemed-to-satisfy provisions of the Building *Code of Australia*.

## Traffic Management Plan

- 21. a) A Traffic and Parking Management Plan shall be prepared and submitted to the RTA and Council for approval prior to the issue of the relevant construction certificate. This Plan should address such issues as management of localised traffic congestion associated with the development, recommend strategies for dealing with traffic and parking management during Peak Trading Periods (eg. Christmas/ Easter).
  - b) To minimise traffic impacts, the developer will construct two traffic calming devices in Dixon Avenue between Chatham Road and Bellevue Avenue. The type and design of the devices will be developed in conjunction with the affected residents and to the satisfaction of the City of Ryde.

#### **Dilapidation Survey**

22. A dilapidation survey is to be undertaken for all properties adjoining and facing the site. The dilapidation survey shall be carried out prior to any work commencing on the site. A copy of the survey (and if applicable any evidence of the refusal of property owners to grant access for the purposes of conducting the survey) shall be submitted to Council. The applicant shall, at their own cost, rectify any damage caused to other properties during construction of the proposal. In this regard, the applicant is to submit to Council, prior to the Construction Certificate being issued, a copy of an insurance policy that covers the cost of any rectification works. The insurance cover shall be a minimum of \$20 million.

## Conditions to ensure appropriate construction site management practices

- 23. A site works plan must be prepared and submitted with the relevant Construction Certificate for all demolition, earthworks or building works indicating methods of sediment and pollution control in accordance with Council's DCP 2006, Part 8.1 Construction Activities.
- 24. A site works plan indicating compliance with Council's DCP 2006, Part 8.1, 'Construction Activities', is to be submitted to the satisfaction of Council or the PCA with the relevant Construction Certificate in relation to:
  - a) Sedimentation and pollution controls;
  - b) Security fencing:
  - c) Builder's identification signage and demolition in progress signage; and
  - d) Provision of site toilets.

## 1100 'Dial Before You Dig'

25. Underground pipes and cables may exist in the area. In your own interest and for safety, telephone 1100 before excavating or erecting structures. Information on the location of underground pipes and cables can also be obtained by fax on 1300-652-077 or through the following website <a href="www.dialbeforeyoudig.com.au">www.dialbeforeyoudig.com.au</a>. If alterations are required to the configuration, size, form or design of the development, upon contacting the Dial Before You Dig service, an amendment to the Development Consent (or a new Development Application) may be necessary. Council's Assessment Officer should be consulted prior to the lodgment of an application for a Construction Certificate if this is the case.

#### PRIOR TO COMMENCEMENT OF CONSTRUCTION

#### Conditions to improve the development by minimising its environmental impact

- 26. Prior to commencing any construction works, the following provisions of the Environmental Planning and Assessment Amendment Act, 1979 are to be complied with:
  - a) A Construction Certificate is to be obtained in accordance with Section 81A (2)(a) of the Act for the relevant works.
  - b) A Principal Certifying Authority is to be appointed and Council is to be notified of the appointment in accordance with Section 81A (2)(b) of the Act and Form 7 of Schedule 1 to the Regulations.
  - c) Council is to be notified at least two (2) days prior to the intention to commence building works, in accordance with Section 81A (2)(c) of the Act and Form 7 of Schedule 1 to the Regulations.
- 27. The applicant may apply to the Council or an accredited certifier for the issuing of separate Construction Certificates and Occupation Certificates for the different elements of the development to Council or an accredited certifier to monitor compliance with the approval, and to issue any relevant documentary evidence or certificate/s Council Officers can provide these services and further information can be obtained from Council by telephoning 9952-8222 (Customer Service).

## **Damage Deposit**

28. A damage deposit for potential damage to Council's infrastructure is to be paid to Council prior to the commencement of any construction works on the site, in accordance with Council fees and charges, and evidence of such a deposit shall be submitted to the Principal Certifying Authority prior to any work commencing.

#### **Road Works**

29. Prior to construction the applicant shall apply for a road-opening permit where a new pipeline is proposed to be constructed within or across the footpath. Additional road opening permits and fees may be necessary where connections to public utility services (eg. telephone, electricity, sewer, water or gas) are required within the road reserve. No drainage work shall be carried out on the footpath without this permit being obtained and a copy kept on the site.

## **Retaining Walls**

- 30. Details of all retaining walls associated with the erection or demolition of a building or other approved methods of preventing movement of the soil must be provided to the Certifying Authority for approval prior to commencement of construction. Adequate provision must be made for drainage. All proposed retaining walls must be designed and certified by a qualified Structural Engineer.
- 31. Signage outlining the applicant's required erosion and sediment control commitments must be displayed at five prominent positions on the construction site, visible to both the street and site workers. The signs shall be erected prior to commencement of works and shall be displayed throughout the full duration of construction.
- 32. Erosion and sediment control measures are to be implemented prior to commencement of any works on the site. The controls are to be maintained in effective working order during the full construction period.

**Note:** The applicant may be liable to prosecution under the Environmental Planning and Assessment Act 1979 for breach of an approved condition, or under the Protection of the Environment Operations Act 1997, if its employees, agents or sub contractors allow sediment, including soil, excavated material, building materials or other material to be pumped, drained or allowed to flow to the street, stormwater pipes or waterways. The applicant shall ensure that its employees, agents or sub contractors understand and maintain erosion and sediment control measures.

## **Construction Traffic Management Plan**

- 33. A Construction Traffic Management Plan (*CTMP*) prepared by a suitably qualified traffic consultant is required to be submitted for approval by Council prior to the commencement of any site works. The plan must discuss the following:
  - Quantity of material to be transported;
  - o Proposed truck movements per day;
  - o Proposed hours of operation; and
  - o Proposed traffic routes.

## Consultation with Energy Australia

- 34. Consultation with Energy Australia is essential prior to commencement of work. Failure to notify Energy Australia may involve unnecessary expense.
- 35. Where clearances to any existing overhead power lines are affected, the builder shall make arrangements with Energy Australia for any necessary modification to the electrical network in question. These works shall be at the applicant's expense.
- 36. A registered surveyor's check survey certificate or compliance certificate shall be forwarded to the Certifying Authority detailing compliance with Council's approval at the following stages of construction:
  - After excavation work for the footings, but prior to pouring of concrete showing the area of the land, building and boundary setbacks;
  - Prior to construction of each floor level showing the area of land, building and boundary setbacks and verifying that the building is being constructed at the appropriate levels;
  - Prior to fixing roof cladding;
  - o On completion of the building works; and
  - On completion of all drainage works.

#### **DURING DEMOLITION**

37. In relation to demolition, all work is to be carried out in accordance with the requirements of AS 2601-2001 (*The Demolition of Structures*).

Where the site adjoins a public thoroughfare with a footpath alongside the common boundary, the footpath must be provided with overhead protection in accordance with the requirements of Australian Standard AS 2601-1991 *The Demolition of Structures*, unless:

- The vertical height of the structure being demolished is less than 4 metres above the footpath; or
- The horizontal distance between the boundary and the structure being demolished is more than half the height of the structure.

- 38. Before work commences the location of any underground services (eg. gas, water, electricity, telecommunications cables) must be identified and appropriate measures taken to protect those services. Any required protection works and or reinstating of disturbed underground services shall be at the applicant's expense.
- 39. All loading and unloading in relation to the construction works is to take place wholly within the property.
- 40. The delivery/ pick-up of any large equipment/ materials/ containers transported by an 'Over Size' vehicle to/ from the site is not to occur between 11.00pm and 5.00am in order to protect the amenity of local residents.
- 41. Appropriate measures must be taken to control the generation of dust during demolition work:

Any existing accumulations of dust (eg. in ceiling voids and wall cavities) must be removed using an industrial vacuum cleaner fitted with a high efficiency particulate air (HEPA) filter.

Any materials that are likely to generate dust during demolition or removal must be wetted down and any dust created must be suppressed by means of a fine water spray. Water used for dust suppression must not be allowed to enter the street or stormwater system.

All stockpiles of materials that are likely to generate dust must be kept damp or covered.

Demolition work must not be carried out during high winds, which may cause dust to spread beyond the boundaries of the site unless dust control measures approved by Council are in place.

- 42. All potentially contaminated soil excavated during demolition work must be stockpiled in a secure area and be assessed and classified in accordance with the Environmental Guidelines: Assessment, Classification & Management of Liquid & Non-Liquid Wastes (EPA, 1999) before being transported from the site.
- 43. Demolition wastes must not be placed on public roads, footpaths or reserves, or be allowed to enter any street gutter, stormwater drain or waterway.
- 44. The burning of demolition waste is prohibited under the *Protection of the Environment (Control of Burning) Regulation 2000.*
- 45. All wastes must be transported in an environmentally safe manner to a facility or place that can lawfully be used as a waste facility for those wastes. Copies of the disposal dockets must be kept by the applicant for at least 3 years and be submitted to Council on request.
- 46. All vehicles transporting demolition materials from the site must have their loads covered.
- 47. All practicable measures must be taken to ensure that vehicles leaving the site do not deposit mud or debris on the road.
- 48. Any mud or debris deposited on the road must be cleaned up immediately in a manner that does not pollute waters (ie. by sweeping or vacuuming).

49. A truck shaker grid with a minimum length of 6 metres must be provided at the construction exit point. Fences are to be erected to ensure vehicles cannot bypass them. Sediment tracked onto the public roadway by vehicles leaving the subject site is to be swept up immediately.

## Conditions to ensure appropriate construction site management practices

- 50. Excavations and backfilling
  - All excavations and backfill associated with the erection or demolition of a building must be executed safely and in accordance with appropriate professional standards.
  - b) All excavations associated with the erection or demolition of a building must be properly guarded and protected to prevent them from being dangerous to life or property.
- 51. Retaining walls and drainage

If the soil conditions require it:

- a) Retaining walls associated with the erection or demolition of a building or other approved methods of preventing movement of the soil must be provided.
- b) Adequate provision must be made for drainage.
- 52. Support for neighbouring buildings

If the soil conditions require it:

- a) If an excavation associated with the erection or demolition of a building extends below the level of the base of the footings of a building on an adjoining allotment of land, the person causing the excavation to be made:
  - i) Must preserve and protect the building from damage, and
  - ii) If necessary, must underpin and support the building in an approved manner, and
  - iii) Must, at least 7 days before excavating below the level of the base of the footings of a building on an adjoining allotment of land, give notice of intention to do so to the owner of the adjoining allotment of land and furnish particulars of the excavation to the owner of the building being erected or demolished.
- b) The owner of the adjoining allotment of land is not liable for any part of the cost of work carried out for the purposes of this clause, whether carried out on the allotment of land being excavated or on an adjoining allotment of land.
- c) In this clause, "allotment of land" includes a public road and any other public place.

#### 53. Protection of Public Places:

- a) If the work involved in the erection or demolition of a building is likely to cause pedestrian or vehicular traffic in a public place to be obstructed or rendered inconvenient, or building involves the enclosure of a public place, a hoarding or fence must be erected between the work site and the public place.
- b) If necessary, an awning is to be erected, sufficient to prevent any substance from, or in connection with, the work falling into the public place.
- c) All public spaces adjoining the work site are to be lit between sunset and sunrise.

- d) Any such hoarding, fence or awning is to be removed when the work has been completed.
- 54. Telephone Installations
  - Conduits with draw in wires should be laid in concrete floors to the points where telephone services are required. Consult the local Telecommunications Sales Office for advice.
- 55. Any new information discovered during remediation, demolition, excavation or construction works which has the potential to alter previous conclusions about site contamination and remediation, shall be notified to Council in accordance with SEPP55.
- 56. Works shall not encroach onto or over adjoining properties, including retaining walls, fill material or other similar works unless in accordance with agreement reached with adjoining owners. Soil shall not be lost from adjoining sites due to construction techniques employed on the subject site.
- 57. Security fencing shall be provided around the perimeter of the building/demolition site and precautionary measures taken to prevent unauthorized entries of the site at all times during demolition and construction.
- 58. Signage is to be provided on the site as follows:
  - During the demolition process notices lettered in accordance with AS1319 displaying the words "DANGER DEMOLITION IN PROGRESS" or a similar message shall be fixed to the security fencing at appropriate places to warn the public. In addition, during the entire construction phase signage shall be fixed on site identifying the PCA and principal contractor (the coordinator of the building work), and providing phone numbers.
- 59. Adequate precautions must be taken to control the emission of dust from the site during demolition and construction work. These precautions could include minimizing soil disturbance, use of water sprays, erecting screens and not carrying out dusty work during windy conditions.
- 60. All work involving asbestos products and materials, including asbestos-cement sheeting (i.e. fibro) must be carried out in accordance with the guidelines for asbestos work published by WorkCover New South Wales.
- 61. All asbestos wastes including used asbestos-cement sheeting (i.e. fibro), must be disposed of at a landfill facility licensed by the New South Wales Environmental Protection Authority to receive that waste. Copies of the disposal dockets must be kept by the applicant for at least 3 years and be submitted to Council on request.
- 62. Adequate arrangements must be made for the storage and disposal of demolition and building waste generated on the premises. In this regard the demolishers and builders are encouraged to maximize the re-use and recycling of materials (eg. concrete, bricks, roof tiles, timber, doors, windows, fittings) by separating these materials from other wastes.

#### **DURING CONSTRUCTION**

#### **BCA and Construction Certificates**

- 63. Compliance with the Building Code of Australia:
  - All building work (other than work relating to the temporary building) must be carried out in accordance with the requirements of the Building Code of Australia (as in force on the date of the application for the relevant construction certificate or complying development certificate was made).
  - b) This clause does not apply to the extent to which an exemption is in force under clause 187 or 188, in the Environmental Planning and Assessment Regulations 2000, subject to any terms of any condition or requirement referred to in Clause 187(6) or 188(4).

## Pedestrian Traffic – During Construction

64. Appropriate pedestrian fencing details must be submitted to the satisfaction of Council.

#### **Certificates Demonstrating Compliance**

65. Certificates demonstrating compliance with the approved design are to be submitted to Council during construction in accordance with Section 8.2 of the City of Ryde DCP 2006.

#### Street Trees - General

- 66. For all street trees outside the development site, pruning or removal of street trees is not permitted. Prior written consent from Council is required for any additional pruning or removal of street trees.
- 67. Where a street tree outside the development site sustains damage during the construction process, Council must be notified within five (5) working days. Such notification can be made by contacting the Customer Service Centre on 9952 8222 between 8:30am and 4:30pm Monday to Friday.

#### **Conditions for inspections**

68. Class 5, 6, 7, 8, 9 or 10 Buildings & Structures:

The occasions on which building work must be inspected are:

- At the commencement of the building work;
- After excavation for, and prior to the placement of, any footings;
- o Prior to pouring any in-situ reinforced concrete building element;
- Prior to covering of the framework for any floor, wall, roof or other building element:
- o Prior to covering any stormwater drainage connections; and
- o After the building work has been completed and prior to any occupation certificate being issued in relation to the building.

Documentary evidence of compliance with Council's approval and relevant standards of construction is to be obtained prior to proceeding to the subsequent stages of construction and copies of the documentary evidence are to be maintained by the Principal Certifying Authority and be made available to Council officers upon request.

Prior to occupation of the building, an occupation certificate must be obtained. Prior to the issue of the occupation certificate, **the mandatory inspections must be carried** out.

## All Classes – Inspections and Survey Check

- 69. In addition to the above stated inspections, the Principal Certifying Authority is required to ensure that adequate provisions are made for the following measures at each stage of construction, to ensure compliance with the approval and City of Ryde's DCP 2006, Part 8.1 'Construction Activities':
  - Sediment control measures.
  - Tree Preservation and protection measures.
  - o Security fencing.
  - o Materials or waste containers upon the footway or road.
  - PCA and principal contractor (the coordinator of the building work) signage and site toilets.
- 70. Council recommends that a Registered Surveyors check survey certificate be submitted to the Principal Certifying Authority (and Council, if Council is not the PCA) detailing compliance with Council's approval at the following stages:
  - After excavation work for the footings, but prior to pouring of concrete, showing the area of the land, proposed building and boundary setbacks.
  - At damp course level showing the area of the land, proposed building and the boundary setbacks.
  - o Prior to construction of the first completed floor/ floor slab showing the area of the land, proposed building and the boundary setbacks.
  - Prior to construction of the first completed floor/ floor slab showing the area of the land, proposed building and the boundary setbacks and verifying that the proposed building is being constructed to the approved levels.
  - Prior to construction of each floor level showing the area of the land, proposed building and the boundary setbacks and verifying that the proposed building is being constructed to the approved levels.
  - o On completion of the proposed building showing the area of the land, completed building and the boundary setbacks.

## Conditions to improve the development by minimising its environmental impact

- 71. Concrete wastes must be collected, stored and treated in accordance with the Concrete Wastes guide published by the Environment Protection Authority.
- 72. Only unpolluted water is to be discharged to Council's stormwater drainage system.
- 73. The L<sub>10</sub> noise level measured for a period of not less than 15 minutes while demolition and construction work is in progress must not exceed the background noise level by more than 20 dB(A) at the nearest affected residential premises.
- 74. No spoil, stockpiles, building or demolition material is to be placed on any public road, footpath, park or Council owned land.
- 75. Site toilets shall be provided in accordance with the WorkCover Code of Practice entitled "Amenities for Construction Work".
- 76. At all times work is being undertaken within a public road adequate precautions shall be taken to warn, instruct and guide road users safely around the work site. Traffic

control devices shall satisfy the minimum standards outlined in AS1742.3-1996 "Traffic Control Devices for Work on Roads".

## Civil Engineering, Utility Services and Water Management

- 77. All engineering design and construction shall be carried out in accordance with the approved plans.
- 78. All mains, services, poles, etc., which require alteration as part of the proposed development shall be carried out to the satisfaction of Council and the relevant service authorities at the applicant's expense.
- 79. Public areas must be maintained in a safe condition at all times. Restoration of disturbed road and footway areas will be carried out to the satisfaction of Council at the applicant's expense.
- 80. All stormwater management systems on the site must be designed and constructed in accordance with Section 8.2 of DCP2006.
- 81. Erosion and sediment control measures are to be implemented for the full duration of the construction works in accordance with Sections 8.1 and 8.2 of DCP2006,
- 82. Water generated onsite during the excavation works may be discharged to Councils drainage system during dry weather conditions only (*ie. after 24 hours of no preceding rainfall*). All water proposed to be discharged into Councils surrounding drainage systems must be free of pollutants. All water must be delivered to Councils drainage system at an existing pit (*ie. not at the kerb*). As a minimum, any water proposed to be discharged must be tested to achieve a Total Suspended Solids (*TSS*) concentration of less than 50mg/L. NATA registered test compliance certificates must be submitted to Council for approval prior to any proposed discharge into Councils surrounding drainage systems. Initial and ongoing monthly testing of any proposed dewatering discharge is also required to be carried out for pH, temperature, turbidity, conductivity, salinity, total nitrogen, total phosphorous, faecal coliforms, metals and hydrocarbons. NATA registered test certificates outlining the results for the above parameters must be submitted to Council on a monthly basis for the duration of the construction works.
- 83. Essential services must be provided within the development to the requirements of the Building Code of Australia, the Environmental Planning and Assessment Act 1979 (as amended) and Regulations.
- 84. The applicant must undertake all practical measures to minimise disruption to the supply of existing utility services (*ie. gas, power, sewer, water and telecommunications*) to adjoining properties as a result of the development, for example by scheduling disruptions outside of business hours where feasible, Affected residents, property and business owners and occupiers must be notified of any likely disruptions to services and where possible an alternative supply source of equivalent capacity shall be provided. Council must also be notified of all proposed disruptions to the supply of existing utility services.

#### **Essential Services**

85. Essential services must be provided within the development to the requirements of the Building Code of Australia, the Environmental Planning and Assessment Act 1979 (as amended) and Regulations.

## No Obstruction of the Public Way

86. The footpath and adjacent roadway is to be kept free of obstruction by building materials and/ or plant. All concrete trucks, pumps and associated plant are to be kept wholly within construction.

## **All Building Classes**

- 87. Doors and fixed panels which are located such that they maybe perceived as a doorway in a path of unimpeded travel may be provided with a Grade "A" Safety Glazing in accordance with AS 2008, Safety Glazing Materials for use in buildings (Human Impact Consideration) where it is perceived a danger exists. All other glazing shall be installed in accordance with Table 1A Appendix "A" of AS 1288 Glass Installation Code.
- 88. Panels and doors in paths of travel shall be provided with a midrail, motifs or other approved permanent means of making the panels clearly distinguishable. Safety glass installations that are not carrying permanent safety glass markings in accordance with AS 2208, Safety Glazing Materials for Use in Buildings, shall be either legibly labelled, or a certificate furnished to Council or an accredited certifier and in each case the following information shall be given:
  - o Distributor's or installer's name.
  - o Details of the original panel from which the piece was cut.

#### CLASS 5, 6, 7, 8, 9 or 10 BUILDINGS & STRUCTURES:

- 89. Treads, risers and balustrades must comply with the Building Code of Australia Part 3.9.1 and Part 3.9.2. Ballustrading is to be a minimum 1.0 metres high and any openings are not to exceed 125mm.
- 90. All steel framing is to comply with Part 3.4.2 Steel Framing of the Building Code of Australia.
- 91. Roofwater is to be disposed of to the approved/existing stormwater drainage system.
- 92. The building shall be constructed to comply with Part F5 of the Building Code of Australia (Noise Transmission and Insulation).
- 93. Continuous balustrades shall be provided along the side/s of any stairway or ramp, any corridor, hallway, balcony, access bridge or the like, any path of access to a building if:
  - It is not bounded by a wall; and
  - The change in level is more than one (1) metre, or five (5) risers in the case of a stairway, from the floor or ground surface beneath except where specific exemptions are provided in the BCA.
- 94. Balustrades shall prevent as far as practicable:
  - Children climbing over or through it;
  - o Persons accidentally falling from the floor; and
  - Objects which might strike a person at a lower level falling from the floor surface
  - ⇒ Balustrade heights and designs are to comply with the BCA Clause D2.16, AS 1170 Part 1. Height above nosings of stair treads, landing, corridors and the like shall generally be not less than 865mm, except in the case of particular locations

and specific classes of buildings. The applicant shall check building regulations and ensure compliance.

- 95. Suitable handrails shall be provided where necessary to assist and provide stability to persons using the ramp or stairways, located and designed in accordance with the BCA Clause D2.17.
- 96. Bollards/ approved barriers shall be provided adjacent to egress doors and paths of travel that are likely to be obstructed by vehicles, plant or equipment associated with the use of the premises. BCA Clause D1.10.
- 97. Sanitary facilities for people with disabilities shall be provided in accordance with Clause F2.4 Table F2.4 of the BCA and to the standards set out in AS 1428.1.
- 98. Access for disabled people shall be provided in the building or portion of the building in accordance with Part D.3 of the BCA and to the standards set out in AS 1428.1.
- 99. Materials used in the building including floor coverings, shall comply with the requirements of Part C1 of the BCA, with regard to restrictions concerning early fire hazard properties of materials, spread of smoke and flame.
- 100. An emergency lighting system shall be installed in the building to:
  - a) Fire isolated stairways;
  - b) Fire isolated ramps;
  - c) Fire isolated passageways;
  - d) Passageways, corridors, hallways or the like that is part of the path of travel to an exit:
  - e) Required non-fire isolated stairs;
  - f) All storeys, rooms and spaces having prescribed floor areas; and
  - a) Required fire control centre. BCA Clause E4.2.

Illuminated exit signs shall be installed in the building above or adjacent to:

- a) Door providing direct egress from a storey to a required exit;
- b) Door from an enclosed stairway, passageway or ramp at every level of discharge to a road or open space;
- c) Horizontal exit; and
- d) Door serving as, or forming part of a required exit in a storey required to be provided with emergency lighting.

Design and installation of exit signs shall comply with AS 2293.1 and the following:

- a) Exit signs shall be clearly visible to persons approaching the exit and shall be circuit sensing to the general lighting circuit.
- b) Exit signs shall be green with white lettering and installed to operate continuously in the event of a power failure. BCA Clause E4.5 and E4.8.

Additional exit signs shall be installed in appropriate positions in corridors, hallways, lobbies, foyers and the like indicating the direction to a required exit. BCA Clause E4.6 (NSW).

- 101. Design and installation of emergency lighting system and illuminated exit signs shall comply with AS 2293.1 and clauses E4.2 and E4.5 of the Building Code of Australia.
- 102. A warning sign stating "DO NOT USE LIFTS IF THERE IS A FIRE" conforming with the details and dimensions of Figure E3.3 of the BCA shall be displayed in a conspicuous position near every call button for all lifts throughout the building. Such warning sign shall consist of:

- a) Incised, inlaid or embossed letters on a metal, wood, plastic or similar plate securely and permanently attached to the wall; or
- b) Letter incised or inlaid directly into the surface of the material forming the wall. BCA Clause E3.3, Figure E3.3.
- 103. A notice shall be displayed in a conspicuous position adjacent to each doorway providing access to:
  - a) Fire isolated stairway.
  - b) Fire isolated passageway.
  - c) Fire isolated ramp.

as or forming part of a required exit in or to the effect as follows:

#### OFFENCES RELATING TO FIRE EXITS

By virtue of the regulations under the Environmental Planning and Assessment Act 1979, it is an offence:

- a) To place anything in this exit that may impede the free passage of persons, or
- b) To interfere with, or cause obstruction or impediment to, the operation of the doors providing access to this exit, or
- c) To remove, damage or otherwise interfere with this notice.

**NOTE:** The words "OFFENCE RELATING TO FIRE EXITS" should be in letters of a height of 8mm or more. The remaining words in the notice should be in letters and figures of a height of 2.5mm or more.

By virtue of Clause 183 of the Environmental Planning and Assessment Regulation 2000, it is an offence:

- a) To place anything in this exit which may impede the free passage of persons;
- b) To interface with our cause, obstruction or impediment to the normal operation of the doors providing access to this exit; or
- c) To remove, damage or otherwise interfere with this notice.
- 104. Portable fire extinguishers shall be installed in the building or portions of the building, compatible to the hazard/s posed by equipment or functions associated with the use of the building.
  - Installation and maintenance of fire extinguishers shall comply with Australian Standard 2444 BCA Clause E1.6.
- 105. Hose reels shall be installed in the building located not more than 4m from a required exit on each floor of the building and adjacent to any hydrant required within the building. Hose reels shall not be installed in fire isolated exits or where the fire hose will need to pass through a doorway fitted with fire or smoke doors. The nozzle end of a fully extended hose reel when laid to avoid partitions and other barriers shall reach every part of the floor served by the hose reel on that floor. BCA Clause #1.4, Australian Standard 2441.
- 106. Hydrants shall be designed and installed in the building/s and or on site in accordance with the BCA Clause E1.3 and Australian Standard 2419.1 and so located that:
  - a) INTERNAL HYDRANTS:

Internal hydrants shall be located in positions that are accessible to fire fighting personnel as follows:

- i) Within each required fire-isolated exit;
- ii) Within the tenanted space and within 4m of a require non-fire isolated exit;
- iii) At a position whereby any point on a floor of a building is within reach of a 10m hose stream issuing from a nozzle at the end of a 30m length of hose connected to the hydrant outlet.

**NOTE:** After erection, the location of storage racking and stored goods may restrict the passage of hose through areas of the building.

#### b) EXTERNAL HYDRANTS:

External hydrants shall be located so that:

- i) They are accessible to fire brigade personnel;
- ii) They are not less than 10m from a wall of a building, although Council may permit the hydrants to be mounted closer to the wall where site conditions so dictate; and
- iii) They are not obstructed by parking or loading and unloading of vehicles.

Where necessary, external hydrants shall be protected from mechanical damage.

In any case, hydrants shall not be mounted on external walls which have a fire resistance rating less than FRL 90/90/90. Where a hydrant is permitted to be mounted on an external wall, the hydrant shall be located so that the FRL 90/90/90 wall extends not less than 2m on each side of the hydrant and whichever is the lesser, 3m from ground level or the height of the wall.

Hydrants that are installed by water supply authorities on street mains may be considered as external hydrants, provided that such hydrants comply with the requirements for flow and pressure given in AS 2419.

- 107. An electrical, electronic, plumbing, mechanical ventilation, air conditioning or other service that penetrates a building element (other than an external wall or roof) that is required to have a Fire Resistance Level or a resistance to the incipient spread of fire, shall be installed so that the fire resistance performance of the building element is not impaired. BCA Clause C3.14 and C3.15.
- 108. The means of egress is to comply with the provisions of Part D of the Building Code of Australia.

#### Imported fill

- 109. All imported fill must be validated by an experienced environmental consultant to ensure that the material is virgin excavated natural material (eg. clay, gravel, sand, soil and rock) that is not mixed with any other waste and:
  - a) Has been excavated from areas that are not contaminated, as a result of industrial, commercial, mining or agricultural activities, with manufactured chemicals and that does not contain sulphidic ores or soils; or
  - b) Consists of excavated natural materials that meet such criteria as may be approved by the NSW Environment Protection Authority.

Each load of imported fill must be accompanied by a delivery docket from the supplier including the description and source of the fill. A responsible person must be on site to receive each load of imported fill and must examine the delivery docket and load to ensure that only virgin excavated natural material that has been validated for use on the site is accepted. The delivery dockets must be forwarded to the Principal Certifying Authority within seven (7) days of receipt of the fill and must be produced to any authorised officer who demands to see them.

#### PRIOR TO OCCUPATION CERTIFICATE

## Conditions to improve the development by minimising its environmental impact

- 110. Prior to the issue of the Occupation Certificate, the Principal Certifying Authority is to ensure that the BASIX commitments have been implemented in accordance with the approved BASIX Certificate. NOTE: Certificates from suitably qualified persons are to be submitted to the Principal Certifying Authority (if Council is the PCA) verifying that all BASIX commitments listed have been fulfilled in accordance with the BASIX Certificate.
- 111. All construction in the public road reserve must be undertaken by a contractor approved by Council.
- 112. An **Occupation Certificate** must be obtained from the Principal Certifying Authority (PCA) and a copy furnished to Council in accordance with Clause 151 of the Environmental Planning and Assessment Regulation 2000 prior to commencement of occupation or use of the whole or any part of a new building, an altered portion of, or an extension to an existing building.
- 113. The developer shall submit to Council a letter from Telstra and Optus confirming that satisfactory arrangements have been made to allow all existing and future telephone service around the entire perimeter, of the construction site to be placed underground. This information must be submitted to the Principal Certifying Authority prior release of the Final Occupation Certificate.
- 114. The developer shall submit to Council documentary evidence that Energy Australia has been consulted and that their requirements have been satisfactorily met prior to the release of the Final Occupation Certificate. Where an electricity substation is required by Energy Australia, a final film survey plan shall be endorsed with an area having the required dimensions as agreed with Energy Australia over the location of the proposed substation. The substation must be located within the boundary of the development site to which the DA relates, or within the building, subject to compliance with the BCA.
- 115. A maintenance period is to apply to all civil works, including road works, the village square, street trees and footpaths that are to be dedicated to Council or which will require ongoing maintenance by Council. The maintenance period will apply for twelve (12) months after the issue of the relevant Occupation Certificate. In that period the applicant will be liable for any part of the works which fail to perform in the manner required by the relevant certifications, or would reasonably be expected under the design conditions.
- 116. Work as executed (WAE) drawings and an accompanying survey certificate prepared by a registered surveyor must be submitted to the Principal Certifying Authority prior to release of the Final Occupation Certificate, showing the following:

- a) Details of the main 100yr ARI drainage system traversing the site (ie. pipes and overflow channel);
- b) Details of all onsite detention systems;
- c) Details of all rainwater collection and reuse systems; and
- d) Details of all works carried out within the public road reserve.
- e) The survey certificate must confirm that all works have been constructed at both the level and alignment/ location of the approved design.
- 117. Engineering Compliance Certificates from a Chartered Professional Engineer must be submitted to the Principal Certifying Authority in accordance with Section 8.1/2.2 of DCP 2006 prior to release of the relevant Occupation Certificate.
- 118. Compliance Certificates from a Chartered Professional Engineer must be submitted to the Principal Certifying Authority prior to release of the relevant Occupation Certificate confirming that all stormwater management works have been constructed in accordance with the Building Code of Australia and the relevant Australian Standards.
- 119. Prior to issue of an Final Occupation Certificate photographic evidence of the condition of the road reserve area adjoining the site after the completion of all construction, must be submitted showing that no damage has been done and if damage has been done that it has been fully remediated. The photographs shall be accompanied by a statement that no damage has been done (or where damage has been remediated that Council has approved that work). In this regard Council's written agreement that all restorations have been completed satisfactorily must be obtained.
- 120. Inspection footage of all stormwater drainage systems larger than 150mm diameter constructed as part of the development is to be submitted to Council prior to release of the Final Occupation Certificate.
- 121. Prior to release of the Final Occupation Certificate all required drainage easements shall be created in favour of Ryde City Council for the main stormwater drainage system (ie. the 100yr ARI pipes and emergency overland flow channel) traversing the site. Evidence that the required easements have been registered with the Land Titles Office must be submitted to Council for approval.
- 122. Prior to issue of the relevant Occupation Certificate, documentary evidence shall be provided to the Principal Certifying Authority that compliance with the requirements of the NSW WorkCover Authority have been met.

#### Essential fire services

- 123. A **Fire Safety Certificate**, (EP and A Regulation 2000) must be furnished to the Principal Certifying Authority (PCA) for all of the items listed in the Fire Safety Schedule forming part of this approval prior to any consent for occupancy/ partial occupancy being granted.
- 124. A Fire Safety Certificate/s from a suitably qualified person/s is to be submitted to Council or the PCA (and Council, if Council is not the PCA or an accredited certifier) for all the essential services installed in the building in accordance with Clauses 170 and 171 of the Environmental Planning and Assessment Regulation 2000.

- 125. On completion of the building work and **prior to a** relevant **Occupation Certificate being issued**, the owner of the building must provide to the Consent Authority a Fire
  Safety Certificate from a competent person with respect to each essential service
  nominated in the schedule.
- 126. An annual Fire Safety Statement (EP&A regulation 2000) must be given to Council and NSW Fire Brigade commencing within 6 months after the date on which Council receives the initial Fire Safety Certificate.

#### Standard NSW Police Conditions - Crime Prevention

- 127. A plan for internal directional signage is to be prepared and implemented prior to the occupation of the development. This signage is to be clear and concise such that persons attending the complex can not unknowingly enter non-public areas, should inform visitors to the site about the location of the carpark entries and exits, the entrance to each building, visitors parking and the like. The plan is to provide an indicative location for all directional signage that will be erected within the site. The Plan is to be submitted to Council prior to occupation of the development for consultation with NSW Police.
- 128. The details of any future on-site site security service and monitoring are to be submitted to Council prior to the occupation of the development for consultation with the NSW Police.
- 129. For publicly accessible areas which are not otherwise permanently lit, sensor security lighting should be provided. Details of any such lighting are to be submitted to Council prior to occupation of the development for consultation with NSW Police.
- 130. Fire/ service doors that open onto public spaces are to have shields fitted over the lock area to prevent them from being forced open.
- 131. Any surveillance equipment installed is to utilise digital or video technology to record images from the cameras. Cameras are to be installed in and around the business to maximise surveillance opportunities. Any surveillance system should be manufactured and installed by a qualified/reputable installer and regularly function tested. If surveillance equipment is installed, it should meet the requirements of the Privacy legislation.
- 132. All ground level surfaces are to be treated with anti-graffiti coating to minimise the potential of defacement. In addition, any graffiti evident on the exterior facades and visible from a public place is to be removed immediately.

## Waste Management Plan

133. The Waste Management Plan prepared by Remo Properties dated July 2007 must be complied with.

#### Certification of mechanical ventilation

134. Prior to issue of a relevant Occupation Certificate under Environmental Planning and Assessment Act 1979 and following the completion, installation, and testing of all the mechanical ventilation systems covered by the approval, a **Mechanical Ventilation Certificate of Completion and Performance** in the form of **Attachment M2** must be submitted to the Principal Certifying Authority (PCA), with a set of the certified drawings.

- a) Prior to issue of a relevant Occupation Certificate and/ or use of the premises, a Structural Inspection Certificate in the form of Attachment S1C must be submitted to the satisfaction of the Principal Certifying Authority with a set of the final certified drawings after:
  - The site has been periodically inspected and the Certifier is satisfied that the Structural Works is deemed to comply with the final Design Drawings;
     and
  - ii) The drawings listed on the Inspection Certificate have been checked with those listed on the final Design Certificate/s.

## b) Notes:

- i) An appropriately qualified practicing structural engineer certifying by completing **Attachment S1** must have:
  - Appropriate tertiary qualifications in Civil or Structural Engineering; AND
  - Corporate membership of the Institution of Engineers Australia or equivalent; AND
  - Evidence of relevant experience in the form of a CV/Resume;
  - Appropriate current professional indemnity insurance.
- ii) Certification of Inspection/s is also required prior to issue of the Occupation Certificate, and/ or prior to use. See Schedule 1E Conditions.
- iii) Council **reserves** the right to randomly audit any structural documentation.

#### CLASS 5, 6, 7, 8, 9 or 10 BUILDINGS & STRUCTURES:

- 135. The applicant is to submit to the Principal Certifying Authority (and Council if Council is not the PCA) upon completion of the building and before the issue of an **Occupation Certificate**, a certificate from an accredited person certifying compliance with the requirements of Part C1 of the BCA.
- 136. The space below a flight of stairs of a required fire isolated stairway (including an external stairway) shall not be enclosed to form a cupboard or enclosed space unless the enclosing walls and ceilings have a Fire Resistance Level of not less than 60/60/60 and any access doorway to the enclosed space is fitted with a self closing -/60/30 fire door. A certificate detailing and certifying the fire resistance levels provided shall be submitted to the Principal Certifying Authority (and Council if Council is not the PCA) prior to the issue of an **Occupation Certificate** for the building. BCA Clause D2.8.
- 137. Any electrical, electronic, plumbing, mechanical ventilation, air conditioning or other service that penetrates a building element (other than an external wall or roof) that is required to have a Fire Resistance Level or a resistance to the incipient spread of fire, shall be installed so that the fire resistance performance of the building element is not impaired. BCA Clause C3.14 and C3.15.
  - On completion of the building and prior to the issue of an **Occupation Certificate**, details and certification of the system/s provided in maintaining the fire resistance, performance of the building elements shall be submitted to the Principal Certifying Authority (and Council if Council is not the PCA).

- 138. The applicant is required to install an emergency warning and intercommunication system in accordance with Part E4.9 of the Building Code of Australia and submit documentary evidence to the Principal Certifying Authority (and Council if Council is not the PCA) that the system is operational prior to an **Occupation Certificate** being issued.
- 139. The applicant is to provide and submit documentary evidence to the Principal Certifying Authority (and Council if Council is not the PCA) that an inspection from the NSW Fire Brigade has been carried out prior to the issue of an **Occupation Certificate**.

#### **OPERATIONAL**

## Conditions to improve the development by minimising its environmental impact

140. The lighting of the premises shall be directed so as not to cause nuisance to the owners or occupiers of adjacent/adjoining premises or to motorists on adjoining or nearby roads. All existing and proposed lights shall comply with the Australian Standard AS 4282-1997: Control of the Obtrusive Effects of Outdoor Lighting.

#### **Hours of Operation Precinct 1**

141. The hours of operation of the retail/ commercial elements of Precinct 1 are 7:00am to 12:00pm Monday to Saturday and 7:00am to 10:00pm on Sunday.

## **Hours of Operation Precinct 2**

- 142. The elements of Precinct 2 are restricted to the following hours of operation:
  - a. The childcare centre is restricted to operation between 7.00am and 6:00pm Monday to Friday.
  - b. The retail and commercial elements of Precinct 2, not including the childcare centre, are restricted to between 7.00am and 10.00pm, Monday to Friday.
  - c. The ground floor of the Precinct 2 development, excluding the childcare centre, is approved for usage during the hours given above in (a), in addition to 7.00am Friday to 1.00am the following day, any extension to which will require the prior written consent of Council.

## Hours of Operation – Rubbish Removal

143. Once the development is completed the hours of operation for rubbish collection are restricted to 7:00am to 8:00pm, 7 days a week.

#### **Vehicle Access facilities**

144. Vehicle access facilities are to be provided in accordance with the standards contained in the RTA document 'Guide to Traffic Generating Developments'.

#### **Deliveries/Loading Hours of Operation**

145. The hours of operation of the loading docks are 7:00am to 8:00pm, 7 days a week. Furthermore, deliveries by semi trailers must occur within the abovementioned hours and must not take place between the hours of 9:30am and 3:30pm or 6:30pm and 8:00pm.

#### **Childcare Centre**

146. The number of children in the childcare centre is limited to a maximum of 50...

## **Loading Dock**

147. The following restrictions and works apply to the loading dock:

- Noise generated by the loading dock must comply with the EPA Industrial Noise Policy requirements, or create an offensive noise as defined in the Protection of the Environment Operations Act 1997.
- o Truck engines must be turned of during loading and unloading.
- o Vehicles must enter and exit the loading dock in a forward direction.
- Signage requesting that staff and visitors minimise noise within the area at all times must be installed in the loading dock and maintained thereafter.
- o All loading and unloading in relation to the use of the premises shall take place wholly within the property.
- Loading areas are to be used for the loading and unloading of goods and materials, waste collection and general servicing access only and for no other purpose.
- B-Double trucks are not permitted to access the loading dock.
- The gates on the loading dock are to be configured to allow access to the waste storage areas shown on Plan No. 210-DAB, 60717, Ground Floor, dated 22 October 2007.

## **Lighting – Operation**

148. All lights, notwithstanding security lighting, within the retail and commercial elements shall be turned off outside of normal operating hours (with the exception of solar powered lighting).

#### Roller Door - Maintenance

149. All roller shutter doors erected within the development site over the life of the development shall be maintained within the manufacturer's acoustic specifications to ensure their continued quiet operation.

## **SPECIAL CONDITIONS**

#### Traffic - Construction of New Intersections

- 150. The new intersections and modifications to the streets surrounding the development must be constructed as follows:
  - The Chatham Road / New Betts Street intersection must be a roundabout with two northbound lanes.
  - The Chatham Road / new retail car park access intersection must be a roundabout with two northbound lanes.
  - The Chatham Road / Dickson Avenue must be a Roundabout with two northbound lanes.
  - The New Betts Street / residential car park access intersection must only allow cars to access the site via a left turn only.
  - A design must be developed for the pedestrian crossing point across the northern section of Anthony Road and New Betts Street. (eg. pram ramps and refuge island).
  - Clear cycle warning signs, cycle routes signage for cyclist links and pavement markings must be provided to warn vehicles of the cycle route in accordance with the RTA's NSW Bicycle Guidelines, Austroads Part 14 and AS1742.9.
  - In designing the junctions of New Betts Street with Chatham Road and Anthony Road, the layout should take into account the location of nearby residential driveways.

## **Design Modifications to Surrounding Streets**

- 151. The developer is required to provide the following modifications to effectively manage the traffic network surrounding the development:
  - The length of the right turn bay from Victoria Road into Chatham Road must be extended to provide 130m of storage;

**Note:** This will result in the loss of the bus bay along the southern side of Victoria Road.

- Provide changes to the lane designations within the Chatham Road approach to Victoria Road so 1 lane is left only and the other a through road; and
- To improve safety and to minimise delays for the egress of vehicles, the right turn movement out of the driveway onto new Betts Street should be banned. These movements can be accommodated at the proposed roundabout at Chatham Road/ New Betts Street.

## **RTA Requirements**

- 152. The proposed right turn bay extension at Victoria Road/ Chatham Road (including associated civil/ signal works to facilitate the extension) shall be designed to meet the RTA's requirements, and endorsed by a suitably qualified and chartered Engineer (ie. registered with the Institute of Engineers, Australia). The design requirements shall be in accordance with the RTA's Road Design Guide and other Australian Codes of Practice. The certified copies of the civil/ traffic signal design plans shall be submitted to the RTA for consideration and approval prior to the release of Construction Certificate by Council and commencement of road works.
- 153. The RTA fees for administration, plan checking, civil/signal works inspections and project management shall be paid by the developer prior to the commencement of works.
  - Note: The developer may be required to enter into a Works Authorisation Deed (WAD) for the abovementioned works. Please note that that the Works Authorisation Deed (WAD) will need to be executed prior to the RTA's assessment of the detailed civil/ signal design plans.
- 154. The developer shall be responsible for all public utility adjustment/ relocation works, necessitated by the above work and as required by the various public utility authorities and/or their agents.
- 155. All works/ regulatory signposting associated with the proposed development shall be at no cost to the RTA.

#### **Drainage and Stormwater**

#### 156. Prescribed conditions

- a) Design and Construction Standards All engineering design and construction shall be carried out in accordance with the requirements of Ryde City Council, in particular with reference to DCP 2006 and RCC "Environmental Standards Development Criteria Section 4 Public Civil Works" (Draft).
- b) Stormwater Management All stormwater Management systems on the site and within the immediate surroundings must be designed and constructed in accordance with the Buckton Lysenko DA Drawings and the letter titled "Proposed Development of the West Ryde Precinct", 21 November 2007.

- c) Floor Levels above the flood levels All habitable and non habitable floor levels of the proposed development are to be sited a minimum of 300mm above the critical 100yr ARI flood level. The minimum ground floor level for the community centre component of the development is to be RL 19.25AHD.
- d) Basement Entry Levels above Flood Levels All basement driveway entry crests for the proposed development are to be sited a minimum of 300mm above the critical 100yr ARI flood level. Any openings that lead to the basement areas are to also comply with the above requirement.
- e) Additional Basement Entry Crest Requirement for Community Centre In addition to compliance with Condition 156(d), the basement entry point to prevent inundation of the basement areas with floodwaters for all events up to and including the PMF. The Self Closing Waterdam (SCW) is to be fully operational in the event of a power blackout and must be regularly maintained and tested to ensure its readiness in the event of a flood.
- f) Floor Warning System There is to be no connection between the existing Woolworths basement car park and the proposed basement carparking facilities that would allow the passage of floodwaters.
- g) Raising Anthony Road sag The proposed raising of the Anthony Road sag point must be restricted to a maximum of 250mm.
- h) Chatham Road drainage The existing piped drainage system in Chatham Road along the development frontage is to be upgraded to a minimum of 20yr ARI capacity.
- Reserve Road Drainage The existing piped drainage system in Reserve Road is to be upgraded to a minimum of 100yr ARI capacity.
- j) Sustainability The development must incorporate the water related sustainability measures as described in the Bunkton Lysenko letter titled "Proposed Development of the West Ryde Precinct", 21 November 2007. In addition, the development must achieve a minimum "4 Green Star Certified Rating" in accordance with the "Green Star Shopping Centre Design Pilot", Green Building Council of Australia for the proposed commercial component of the development.
- k) Public Roadworks All public road works must be approved by Council based on the provisions of Section 138 of the Roads Act 1993.
- Stormwater pipes all stormwater pipes within the public road reserve shall be reinforced concrete.
- m) Emergency overland flow path An unobstructed emergency overland flow path is to be maintained between the Anthony Road sag and Market Street with a maximum finished surface of RL 19mAHD and a capacity to convey 100yr ARI flows with a depth of less than 250mm in the event that the Anthony Road sag inlets are fully blocked.

# Matters to be incorporated into the development and maintained over the life of the development

- n) Sustainability Audit A sustainability audit shall be carried out by the proposed shopping centre and community centre management teams on an ongoing 5 year frequency to assess the performance of sustainability measures and the availability of new technologies that will enable more sustainable practices to be implemented in the future. The results of each sustainability audit shall be submitted to Council for information.
- Rainwater tanks Rainwater tanks are to be installed as part of the development and the collected water re-used in accordance with the Buckton Lysenko report titled "Proposed Development of the West Ryde Precinct", 21 November 2007 and the following.

A first flush device shall be fitted to the system to divert the first 5mm of runoff from the total roof area so as to drain away from the storage tank (e.g. 0.5 litre per square metre);

Adequate provisions shall be made to prevent mosquitoes breeding in the reservoirs. This should include suitable screening to prevent eggs being laid within the tank;

All tanks shall be structurally sound;

Overflow from the tank shall be piped to an approved stormwater system;

Dual submersible pumps are to be installed and maintained so as to prevent cross connection with the potable water supply;

A "topping up" decide (from potable water supply) shall be provided to ensure continuous supply once the tank is emptied;

A "backflow prevention device" shall be installed;

All rainwater services shall be clearly labelled "Non Potable Water" with appropriate hazard identification; and

Pipe work used for rainwater services shall be coloured purple in accordance with AS 1319.

#### 157. Matters to be satisfied prior to the issue of a construction certificate

- a) Detailed Design Drawings Detailed design drawings of all road/drainage works to be undertaken in the public road reserve are required to be submitted and approved by Council prior to the issuing of the Construction Certificate.
- b) Integrated Water Management Report An Integrated Water Management Report (IWMR) is to be submitted to Council for approval prior to issue of the Construction Certificate incorporating the following:
  - Incorporation of proposed stormwater quantity, quality, flooding, conveyance, WSUD and sustainability/reuse components of the development into a single report;

- A description, including detailed drawings, of all stormwater management components of the proposal updated to include all requirements of the conditions of development consent;
- Updating of all drainage models as a result of the detailed design process;
- Complete a detailed daily water balance modelling over an historic period of 5 years (ie containing wet, average and dry rainfall years) so as to confirm the achievement of the 30% reduction in potable water demand. Both "traditional" and "water saving: scenarios are to be modelled; and
- A quantative assessment of the water quality benefit provided by the proposed stormwater treatment measures.
- c) Flood emergency response plan Detailed Flood Emergency Response Plans (FERP) are to be developed for both the proposed mixed use development and community centre. Both plans shall consider floods up to and including the Probable Maximum Flood (PMF). Implementation and maintenance of the FERPs are to become the responsibility of the body corporate/shopping centre management and the community centre management. All residents, owners and tenants of the shipping centre and community centre must be made aware of the relevant FERP. Details of each FERP are to be submitted to Council to Council for approval prior to issue of the Construction Certificate.
- d) Sustainability Water efficient fixtures and water recycling systems must be implemented as part of the development to achieve a total reduction in potable water demand of no less than 30% compared with the traditional water use of similar commercial/retail applications (ie compared with pre year 2000 applications). Details are to be noted on the plans submitted with the Construction Certificate. In addition, a detailed assessment by a suitably qualified engineer/scientist demonstrating compliance with the above 30% target including water balance calculations, is to be submitted prior to issue of a Construction Certificate.

#### Protection of the West Ryde Stormwater Tunnel (WRST)

- e) Prior to the issue of the Construction Certificate, confirmation from a registered surveyor of the exact location of the WRST within the proximity of the proposed development site is required to be submitted to Council. A report prepared by an engineer with suitable qualifications
- f) Prior to the issue of the Construction Certificate a report prepared by an engineer with suitable qualifications in geotechnical and structural evaluation of tunnels must be submitted to Council for approval which confirms that the proposed development will not adversely impact on the structure of the WRST.
- g) The report referred to in condition 157(f) must include the following details:
  - Survey and sectional drawings of the WRST and the zone of influence ('zone') surrounding the tunnel;
  - Geotechnical details of the WRST and the Zone:
  - A design report for the development as it relates to the Tunnel containing all calculations and test data;

- Design report for the development as it related to the WRST containing all calculations and test data;
- A construction plan showing the details of construction within the Zone, together with a monitoring plan for the construction period; and
- A contingency plan to address any adverse impacts upon the WRST structure during the construction process.
- h) Prior to the issue of an occupation certificate for that component of the approved development involving the car park, certification that there has been compliance as required by this condition must be submitted to and approved by Council from an engineer with suitable qualifications in the geotechnical and structural evaluation of tunnels.
- i) Where the construction of the development will involve works the Zone, the Council shall, prior to the commencement of such work, be provided with the security in accordance with Section 80A of the Environmental Planning and Assessment Act 1979 for the sum of \$2 million to cover the cost of making good any damage cause to the WRST as a consequence of the works.
- j) Existing 1500mm dia. Line Downstream of the Anthony Road sag The proposed method of excavation and any associated protection/support measures within the vicinity of the existing 1500mm dia. line located downstream of the Anthony Road sag is to be submitted to Council for approval prior to the issue of the Construction Certificate.

# Matters to be satisfied prior to commencement of works and maintained during the works

- 158. All construction in the public road reserve must be undertaken by a Council authorised contractor.
  - a) Erosion and sediment control measures are to be implemented for the full duration of the construction works in accordance with Sections 8.1 and 8.2 of the Ryde DCP 2006 and the Buckton Lysenko Erosion and Sediment control drawings.
  - b) Water generated onsite during the excavation works may be discharged to Council's drainage system during dry weather conditions only (ie. after 24 hours of no preceding rainfall). All water proposed to be discharged into Council's surrounding drainage systems must be free of excessive pollutants. As a minimum, any water proposed to be discharged must be tested to achieve a Total Suspended Solids (TSS) concentration of less than 50mg/L. NATA registered test compliance certificates must be submitted to Council for approval prior to any proposed discharge into Council's surrounding drainage systems. Initial and ongoing monthly testing of any proposed de-watering discharge is also required to be carried out for pH, temperature, turbidity, conductivity, salinity, total nitrogen, total phosphorous, faecal coliforms, metals and hydrocarbons. NATA registered test certificates outlining the results for the above parameters must be submitted to Council on a monthly basis for the duration of the construction works. All water must be delivered to Council's drainage system at an existing pit (ie. not at the kerb).

## Matters to be satisfied prior to issue of the Occupation Certificate

- c) A maintenance period is to apply to all civil engineering works to be dedicated to Council that will require ongoing maintenance by Council. The maintenance period will apply for twelve (12) months after the issue of the Occupation Certificate. In that period the applicant will be liable for any part of the works which fail to perform in the manner required by the relevant certifications, or would reasonably be expected under the design conditions.
- d) The Survey Certificate must confirm that all works have been constructed at both the level and alignment/ location of the approved design.
- e) Engineering Compliance Certificates from a Chartered Professional Engineer must be submitted to the certifying authority in accordance with Section 8.1, Part 2.2 of the DCP prior to release of the Occupation Certificate. These Compliance Certificates must confirm that all stormwater management works have been constructed in accordance with the relevant conditions of this consent.
- f) CCTV footage of all stormwater drainage systems larger than 150mm diameter constructed as part of the development is to be submitted to Council prior to the release of the Occupation Certificate showing that no damage has been done, and if damage has been done, that it has been fully remediated. The photographs shall be accompanied by a statement that no damage has been done (or where damage has been done, that it has been remediated and that Council has approved that work). In this regard Council's written agreement that all restorations have been completed satisfactorily must be obtained.
- g) Prior to release of the Occupation Certificate all required drainage easements shall be created in favour of Ryde City Council. Evidence that the required easements have been registered with the Land Titles Office must be submitted to Council for approval.

#### **Relocation of Pedestrian Crossing**

159. The proposed pedestrian crossing shown on the approved plans located at the southern end of New Betts Street must be relocated to the northern end of New Betts Street, this will require the northernmost car parking space on New Betts to be deleted. Subsequently the development will have a total of 686 car parking spaces. Prior to the final occupation of the development full details which include a breakdown of the allocation of parking to each land use shall be submitted to, and approved by, Council.

#### Traffic Engineering

160. All designated disabled parking spaces shown on the approved plans shall be provided and maintained, and are to be identified by the international access symbol. All disabled access carparking spaces are to be designed as wide bay spaces in accordance with the Ryde DCP 2006.

## **Lighting Systems**

- 161. a) Full details of all the proposed street lighting systems including their location, type and luminance level must be submitted to the Council for approval prior to the occupation of the site.
  - b) The applicant shall, at no cost to Council, install "smartpole" lighting within the public domain surrounding the development site and the village square. Full details including design, levels of luminance and location of lighting within the public domain, on the approved buildings and the surrounds of the site are to be submitted to and approved by Council prior to installation and be in accordance with Australian Standard AS/NZS 1158.3.1:2005: Road Lighting Pedestrian area (Category P) lighting Performance. The light levels shall meet Category V5 for all Streets and Category P2 for all footpath areas.

#### Parking Scheme

162. Any paid parking schemes adopted for the development site must be appropriately managed to minimise on-street parking in the local area to the satisfaction of the Council and RTA. A car parking management plan is to be submitted to Council. This plan should address parking fee structures, in particular a period of free parking and the hours of operation. The hours of operation should take into account not only the operating hours of the subject development but also the hours of operation of other nearby businesses in West Ryde. (This plan might, but not necessarily, provide a higher level of access to the Council's 172 parking spaces).

## Wind Mitigation

163. 1.2m high impermeable balustrades around the corner balconies of the main building must be installed to ensure residential amenity is not negatively affected by intense wind.

#### **Roller Shutters**

164. The shop front may only incorporate see-through grilles or translucent barriers to ensure maximum light is transmitted to footpath areas. Metal or roller shutter doors are not permitted. Development consent is required for any security grilles or translucent barriers.

#### Window and Door Locks

165. Window and door locks must be made of metal.

#### Signage

- 166. All advertising signs are to be displayed in the English language, but may include a translation into another language using letters or characters that are no larger than the English language letters or characters. Any translated message must be accurate and complete.
- 167. Any community information signage to be erected at a future date shall be subject of the approval of the Council and must be agreed in writing by the Council in accordance with the provisions of Part 4.4, Section B, Part 3.6 (3) of the Ryde DCP 2006.

#### Landscaping

168. All hard landscaping, paving, soft landscaping including species selection, street furniture and the like for the applicant's land shall be carried out in accordance with approved landscape plans. Where soft landscaping is proposed including species selection, the applicant must ensure that the species health is guaranteed for a minimum of 2 years to ensure the character and appearance of the streetscape is maintained and established. Any species that die within two years of planting must be replaced by the applicant with a species of a similar size and maturity. All street furniture is to be installed following the installation methods of Council (or Group Manager) and is to comply with AS 1428.2 – ie. street furniture is not to be situated so that it causes a hazard to people with disabilities. Items such as seats, tables, drinking fountains and planter boxes will be positioned at least 500mm from any accessible path of travel. All seating should have armrests at a height of 210 to 300mm above the seat, and have a seat height of 450mm, unless a high proportion of elderly people are likely to use the seating, in which case at least some of the seats are to have a seat height of 520mm, which enables people to stand up from the seat more easily (AS 1428.2).

#### Disabled Access

- 169. Disabled access is to be provided to and within the development. Prior to occupation of the development, a suitably qualified access consultant is to certify that the development complies with Australian Standard 1428.1 and the Building Code of Australia.
- 170. Accessible toilets are provided, but will need to be amended to comply with Australian Standard 1428, in addition, an accessible toilet is to be provided on the ground floor of the retail/ commercial aspect of Precinct 1, and accessible toilets needs to be provided on levels 2 and 3 of the Precinct 2 building, and an accessible toilet provided at ground level that is compliant with AS 1428.2. Washbasins, which allow a wheelchair user to sit front-on to the basin with room under it for clearance over the person's knees are to be provided. Provision should also be made for an area which allows for the easy placement of such things as hair brushes (AS 1428.2). Taps are to be either level type, capstan type or sensor plate controlled, or the like. Hot water will be provided through a mixer valve (AS 1428.1).

## **Access and Mobility**

- 171. The development must comply with City of Ryde's Pedestrian Circulation Strategy and the Accessibility review prepared by Remo Projects. In particular the development must comply with the following:
  - The width of paths must comply with Australian Standard 1428.2.
  - To comply with AS 1428.1 the 1:20 gradient walkways leading from Anthony Road and Chatham Road to the two automatic entry doors are to have 1200mm landings at 15m intervals, and the village square steps will require handrails in accordance with AS 1428.1, and tactile ground indicators in accordance with AS 1428.4.
  - Tactile indicators must be provided in accordance with AS 1428.4.
  - o Information in lifts must be provided in tactical, aural and visual formats. Visual information must be able to be read by a person with visual impairment.

- Lifts must be able to be operated independently by people with disabilities. There
  must be sufficient room for a wheelchair user to turn around in the lift car and
  control buttons are to be within reach of a wheelchair user. Hand rails are to be
  provided.
- Stairs may have a rise of 150 to 165 mm and a tread of 275 to 300mm. However, where possible, the rise should be 95 to 105 mm with a tread of 575 to 600mm which suits people using assistive devices such as walking frames.
- Stairways are to have dual handrails on both sides of the stairway. The top rail is to be 865 to 900mm from the top of a step and the lower rail is to be 665 to 700mm from the top of the step. Railings are to be a minimum of 30mm and a maximum of 50mm in diameter (AS 1428.2).
- o The maintenance illumination levels should be 150 lux for paths of travel, corridors and stairs to ensure all lighting levels comply with AS 1680.
- o Gateways and checkouts suitable for people with disabilities are to be identified by the international symbol for access. Turnstiles are not appropriate for people with disabilities. An opening of at least 850mm is required, and any coin device or ticket machine is to be located at a height of between 800 and 900mm to enable wheelchair users to use it. Any barrier must be at least 1200mm past the ticket or coin feed point to allow a wheelchair user access. (AS 1428.2)
- Basement accessible car bays are to have a vertical clearance of 2.5m, compliant with AS 2890.1
- Where boom gates are used, a ticket machine is to be within reach of a driver seated within a car, and an intercom system provided that can be operated from the driver's seat for drivers who cannot operate the ticket machine. (AS 1428.2 and AS 2890.1)
- On-street parking bays for people with disabilities are to be a minimum of 3.2m wide and 5.5m long if the bay is at the end of a the parking area, and 6.7m long in other circumstances.
- o Kerb ramps are to be provided at each end of the parking bay.
- The number of parking bays for people with disabilities is to comply with Table 1 of Clause 16 (AS 2890.5).
- Emergency exits need to be accessible to people with disabilities. Where egress is required from upper levels, the use of fire rated lifts or other means may be required. There is no Australian Standard dealing with this issue, however, the Human Rights and Equal Opportunity Commission's Advisory Notes on Access to Premises provide advice (HREOC Advisory Notes on Access to Premises, Section 5.21).
- o Full details including sectional drawings and detailed plans of all lifts, ramps and hand rails within the proposed development shall be submitted to and approved by Council prior to the occupation of the development and shall be installed in accordance with the submitted plans.
- All paths must have a clearance overhead of at least 2000mm to ensure that people with a visual impairment are provided with suitable access free from obstacles.
- All floor surfaces within the development must be slip resistant so as not to be a hazard to people with disabilities. Where carpet is used it must provide a firm surface and be attached so that there is no changes in level greater than 3mm between the carpet and any other surface. The ground surface of parking bays is to be smooth, but non-slip and have a slope in any direction not exceeding 1:40.

- All public entrances and employee entrances are to be accessible to people with disabilities. Thresholds are to be avoided but where they are essential, they must be no higher than 56mm and be ramped using a threshold ramp with a gradient of no more than 1:8.
- Clear door openings of at least 960mm to enable equitable access shall be provided throughout the development for people who use wheelchairs and people using other mobility aids. Sufficient circulation space at doors to allow people with disabilities to open and close the doors independently is also to be provided.
- The lighting of pedestrian pathways within the development shall be designed, installed and maintained to Australian Standard AS1158.3.1 1999: Road Lighting Pedestrian Area (Category P) Performance and Installation Design Requirements. Areas besides thoroughfares should be evenly lit to avoid concealment or entrapment opportunities. The same is applicable to public clotheslines, communal courtyards and letterbox areas.
- o Emergency warning systems need to include both visual and audible alarms so that as many people as possible can be alerted to any emergency. Signs that warn of danger are to be placed sufficiently ahead of the hazard to allow avoidance (AS 1428.2).

#### Cycle Parking

172. An additional five (5) bicycle racks are to be provided at street level within the village square.

## **Security Lighting**

- 173. Where security lighting is provided within the development, it should not illuminate observers or vantage points. Light should be projected outwards towards pathways and gates, not towards windows and doors.
- 174. All car park lighting is to be designed, installed and maintained to Australian Standard AS1680.2.1 1993: Interior Lighting Circulation Spaces and Other General Areas. To this effect, ceilings, columns and other vertical structures (including columns and pipes) should be painted white

## **Acoustic Report**

- 175. The development must be in accordance with the recommendations of the West Ryde Village Acoustic Assessment prepared by Environmental Resources Management Australia Pty Ltd dated July 2007.
- 176. All external noise levels generated mechanically shall not exceed the levels given in Australian Standard 1055.

#### Street Trees

- 177. The following requirements apply to all street trees:
  - Street trees at the time of planting shall have a minimum container size of 50 litres, and a minimum height of 3.5 metres, subject to species availability.
  - Tree sites in the footpath shall be 1.2m by 1.2m, filled with approved gravel located 200mm from the back of the kerb line.
  - All trees shall be protected by a tree grate of a type that meets Council's specifications.
  - o Street trees are to be provided at the cost of the developer.

#### **Rain Water Tanks**

- 178. Where Rainwater tanks are to be installed as part of the development and the collected water re-used in accordance with the following:
  - A first flush device shall be fitted to the system to divert the first 5mm of runoff from the total roof area so as to drain away from the storage tank (eg. 0.5 litres per square metre).
  - Adequate provisions shall be made to prevent mosquitoes breeding in the reservoir. This should include suitable screening to prevent eggs being laid within the tank.
  - o All tanks shall be structurally sound.
  - o Overflow from the tank shall be piped directly to an approved stormwater system.
  - Dual submersible pumps are to be installed within the rainwater tanks to allow for delivery of collected water to reuse sources.
  - All rainwater tanks should be installed and maintained so as to prevent cross connection with the potable water supply.
  - A "topping up" device (from the potable water supply) shall be provided to ensure continuous supply once the tank is emptied;
  - o A "backflow prevention device" shall be installed.
  - All rainwater services shall be clearly labelled "Non Potable Water" with appropriate hazard identification, and
  - Pipework used for rainwater services shall be coloured purple in accordance with AS1345. All valves and apertures shall be clearly and permanently labelled with safety signs to comply with AS 1319.

#### Road, Pavement and Associated Works

- 179. All redundant vehicular crossings shall be removed and replaced with kerb and gutter and footpath at full cost to the applicant.
- 180. All bulk earthworks, road and pavement construction, footpath construction and drainage construction to be undertaken in the road reserve shall be carried out in accordance with the requirements of Council's DCP 2006 and AUSSPEC. Where any conflict between the two above documents exists, Councils DCP 2006 shall take precedence.

#### **Telecommunications**

181. All existing above ground power (*high and low voltage*) and telecommunication services along the street frontages of the proposed development site must be placed below ground to the satisfaction of the relevant service authorities requirements and at the applicant's expense.

#### Sewer Connections

182. Any discharge to the sewer from the subject premises shall be in accordance with the requirements of Sydney Water.

## **Shopping Trolleys**

183. A mechanism, to the satisfaction of the Council, must be installed and maintained at all times, to prevent shopping trolleys being taken from the site.

## **Service Access**

184. Service access is to be provided for the tenancy marked Fresh Fruit Retail on Plan No. 202-DAB, 60717, Basement 1B, stamped 22 October 2007. The precise layout of the retail tenancies is to be provided and approved by the certifying authority prior to release of the Construction Certificate.

## **Voluntary Planning Agreement**

- 185. Prior to the issue of any Construction Certificate for works to which this consent relates, the applicant shall enter in to a Voluntary Planning Agreement (VPA) with Council in the terms of the offer made by the applicant in connection with the subject Development Application, and all works shall be carried out in accordance with the applicable VPA.
- 186. Prior to the issue of any Construction Certificate the applicant/developer must register the VPA on the relevant folios of the Torrens Title Register held by the NSW Office of Land and Property Information pertaining to the land.
- 187. The construction of the mixed use component of the proposed development shall not commence until the construction of the community facilities building is completed to the satisfaction of Council.
- 188. Design for the mixed use building to be amended to the satisfaction of the Council prior to the issue of the first construction certificate that floodgates to the basement entrance of the mixed use building are designed so that vehicles can not park on them and that a 300mm freeboard is provided.
- 189. Prior to the issue of the first construction certificate for the mixed use building plans shall be prepared to the satisfaction of the Council that provide for:
  - Redesign of the apartment layout in order to reduce the number of apartments facing only the central courtyard, and to increase the level of sunlight available for units to a level that would satisfy SEPP 65 design parameters;
  - Redesign of apartments to minimise opportunities for cross-viewing between balconies and windows that are located closer than 12 metres from one another:
  - Redesign of maisonette units (apartments with two levels) to promote natural cross ventilation by setting the mezzanine level back from the window line in order to create voids that stimulate ventilation by convection.
- 190. Prior to the issue of the first construction certificate for the community building plans shall be prepared to the satisfaction of the Council that provide for:
  - Exposure of above ground childcare classrooms and activity areas to the square including redesign of the proposed video screen to allow extensive windows between those activity rooms and the square, consolidation of retail spaces, including deletion of the planter box at the corner of Reserve Street and Anthony Road and relocation of the toilets of the community hall away from the Anthony Road Frontage
- 191. Prior to the issue of a construction certificate, Council is to be submitted with one of the following documents:

- (a) Amended Plan(s) providing for access and egress to/from the retail and commercial car parking areas within the development at the New Betts Street; or
- (b) Documentation from a suitably qualified traffic engineer that, via the use of traffic simulation modelling, satisfies Council that the requirement for amended plans as described in condition 191(a) is unnecessary as the current configuration of the Chatham Road entry/exit point is sufficient to support the non-residential traffic generated by the development and prevent excessive vehicle queuing.
- 192. The layout of the basement one (1) of the community building car parking to be used by parents setting down children for the childcare centre should be altered to provide four to five spaces adjacent to the lifts with a footpath leading from behind these spaces to the lifts. This will require changes to the current layout

## **ADVICE**

- 1. You are advised to consult with your utility service providers (eg. *Energy Australia, Telstra*) in order to fully understand their requirements before the commencement of any work.
- 2. Failure to comply with the relevant provisions of the Environmental Planning and Assessment Act, 1979 (as amended) and/ or the conditions of this Development Consent may result in the serving of penalty notices (on-the-spot fines) under the summary offences provisions of the above legislation or legal action through the Land and Environment Court, again pursuant to the above legislation.
- 3. The water from any rainwater tanks shall not be used for drinking purposes. Sydney Water shall be advised of all rainwater tank and/ or water recycling systems proposed to be used in the development.
- 4. The issue of on-street parking within Chatham Road should be reviewed through Council Local Traffic Committee with the view to removing any on-street parking during the traffic peaks in order to improve traffic flow.
- 5. To facilitate the improved parking utilisation in the area, it is recommended that consideration be given to the linking of the parking areas between this development and the Woolworths development, subject to flooding considerations.
- 6. With the Council ownership of the property to the north west of the Dickson Avenue and Chatham Road intersection there is the potential to solve the existing alignment level issues at the roundabout.
- 7. The right turn bay from Victoria Road into Chatham Road should be extended beyond the length given in Condition No. 151 if a beneficial solution can be agreed to between Council, STA and RTA.

#### **End of consent**