

David Gibson  
Team Leader  
Social Infrastructure Assessment  
Department of Planning and Environment  
320 Pitt Street, GPO Box 39  
SYDNEY NSW 2001

**Attention: Eleanor Parry**

18 July 2018

Dear Mr Gibson,

**Council submission re: Macquarie University Central Courtyard Precinct Redevelopment  
192 Balaclava Road, Macquarie Park (SSD 8755)**

I refer to your notification letter dated 18 June 2018 advising Council of a Development Application (DA) lodged by Macquarie University for the redevelopment of the Central Courtyard Precinct within the University campus.

Council has reviewed the DA documents attached to the notification letter and makes the following comments recommended conditions of consent for the consideration of the DPE prior to making a determination of the DA:

**Strategic Planning**

The subject land has the benefit of a concept plan approval (Major Project No. 06\_0016) granted by the DPE on 13 August 2009 under Part 3A of the *Environmental Planning and Assessment Act 1979*. The concept plan approval is for the development of the Macquarie University Campus including commercial uses, academic uses, student accommodation, car parking, landscaping and associated infrastructure.

The submitted documents indicate that the proposal is within the maximum height and FSR controls and is consistent with the concept plan approval, and therefore, there is no strategic planning objection raised to the proposal

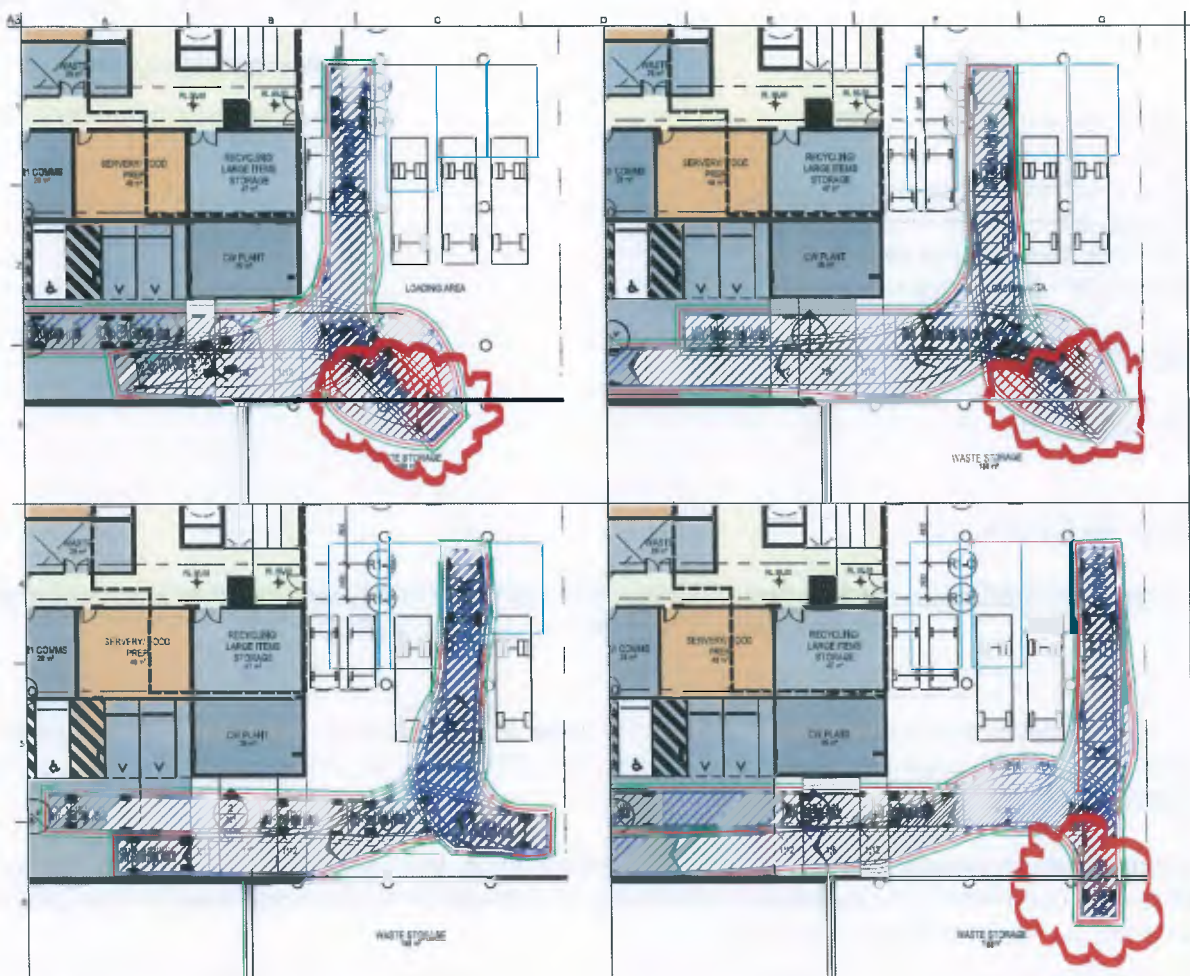
**Traffic Issues**

Council's Traffic department has reviewed the Transport Assessment prepared by Arup dated 22 November 2017 and provides comments and recommendations below.

**Loading and Unloading Bays**

**Concern:**

1. The traffic report specifies that the loading dock is proposed to have capacity for two SRVs and two MRVs. However, plans indicate that there will be two SRV spaces and three MRV spaces.
2. Swept path diagrams for 10.24m EPA Garbage Truck, MRV and SRV attached to the traffic report show encroachment as illustrated below:



**Recommendation:**

1. The architectural plans should be amended to clearly show the actual location of the loading and unloading bays and the swept path diagram must be revised so that there is no encroachment.

**Shuttle Bus Access**

**Concern:**

Plans do not show exact location of the bus stop and the turnaround path of the shuttle bus.

**Recommendation:**

2. The plans should be amended to show swept path of the shuttle bus turning around in front of the development to drop-off and pick-up passengers.

**Median on Gymnasium Road**

**Concern:**

The applicant proposes to carry-out "removal of the existing median on Gymnasium Road and replacement with line marking" during construction.

**Recommendation:**

3. The median island should be reinstated at the end of the construction period.

### **Removal of Bollards**

#### Concern:

The applicant proposes to carry-out "removal of bollards and provision of barriers where body of construction vehicle overhangs" during construction.

#### Recommendation:

4. Bollards should be reinstalled and barriers should be removed at the end of the construction period.

### **Construction Vehicle Access**

#### Concern:

Turning paths of construction vehicles were provided only for Culloden Road / Gymnasium Road intersection.

#### Recommendation:

5. Plans should be amended to show the swept path provision for all local road / local road intersections that are part of the proposed truck routes. This must be included in the CTMP.

### **Construction Traffic Management Plan (CTMP)**

#### Concern:

Traffic report contains a draft CTMP. Council will undertake a formal assessment once CTMP has been submitted to Council for approval.

#### Recommendation:

The applicant must submit a Construction Traffic Management Plan. A CTMP shall be prepared by an RMS accredited person and submitted to and approved by City of Ryde Council prior to issue of any Construction Certificate.

### **Clarifications Required**

### **Construction Vehicle Access**

The traffic report proposes to "Permit construction vehicles only to turn right from Culloden Road to Gymnasium Road" during construction. This must be justified or clarified considering Gymnasium Road provides access to several car parks. It is Council request that this matter is clarified prior to issue of any development consent.

## **RECOMMENDED CONDITIONS OF CONSENT**

1. **Building Code of Australia.** All building works approved by this consent must be carried out in accordance with the requirements of the Building Code of Australia.
2. **Energy Efficiency.** The fittings, fixtures and materials installed in association with the development (including but not limited to hot water systems, ceiling/roof insulation, shower heads, toilet cisterns and the like) shall comply with the requirements of Council's DCP.
3. **Archaeology.** As required by the National Parks and Wildlife Service Act 1974 and the Heritage Act 1977, in the event that Aboriginal cultural heritage or historical cultural fabric or deposits are encountered/discovered where they are not expected, works must cease immediately and Council and the Heritage Division of the Office of Environment and Heritage (OEH) must be notified of the discovery.

Customer Service Centre  
1 Pope Street, Ryde NSW 2112  
(Within Top Ryde City shopping centre)

North Ryde Office  
Level 1, Building O, Binary Centre,  
3 Richardson Place, North Ryde NSW 2113

Phone (02) 9952 8222  
Email [cityofryde@ryde.nsw.gov.au](mailto:cityofryde@ryde.nsw.gov.au)  
Post Locked Bag 2069, North Ryde NSW 1670  
[www.ryde.nsw.gov.au](http://www.ryde.nsw.gov.au)  
TTY (02) 9952 8470 Fax (02) 9952 8070  
Translating and Interpreting Service 131 450

In the event that archaeological resources are encountered, further archaeological work may be required before works can re-commence, including the statutory requirement under the Heritage Act 1977 to obtain the necessary approvals/permits from the Heritage Division of the OEH.

Note: The National Parks and Wildlife Service Act 1974 and the Heritage Act 1977 impose substantial penalty infringements and / or imprisonment for the unauthorised destruction of archaeological resources, regardless of whether or not such archaeological resources are known to exist on the site.

4. **Compliance with Acoustic Report.** The development is to comply with the recommendations contained in the Acoustic Report prepared by Arup dated 6 November 2017 and all other relevant BCA acoustic requirements.
5. **Compliance with the VPA.** The Planning Agreement entered into between Council the City of Ryde and Macquarie University dated 7 February 2013 in accordance with Section 7.4 of the Environmental Planning and Assessment Act 1979 applies to development the subject of this consent.
6. **Compliance with Accessibility Statement.** The development is to comply with the recommendations contained in the Access Review prepared by Moris Goding Accessibility Consulting dated 20 November 2017 and all other relevant BCA requirements.
7. **Offset Planting.** To offset the loss of trees from the site, replacement planting shall be carried out as per recommendation of Arborist report prepared by Australian Tree Consultants dated 27 November 2017.
8. **Tree removal.** All tree removal works are to be carried out in accordance with the recommendation of Arborist report prepared by Australian Tree Consultants dated 27 November 2017.
9. **Tree to be retained.** Trees that are to be retained should be protected during construction works.
10. **Tree Protection.** All tree protection works including installation of any fencing is to be undertaken prior to any demolition or site clearing works on site.
11. **Tree Protection Fencing.** All protective fencing and signage around TPZs must be located in accordance with AS4970: Protection of trees on development sites. In this regard, any fencing required to be constructed around the TPZ is to be in accordance with AS4687 Temporary fencing and hoardings.
12. **Project Arborist.** A Project Arborist with minimum AQF level 5 qualifications is to be engaged to ensure adequate tree protection measures are put in place for all trees to be retained on the subject site. All trees are to be monitored to ensure adequate health throughout the construction period is maintained. Additionally, all work within the Tree Protection Zones is to be supervised by the Project Arborist throughout construction. Details of the Project Arborist are to be submitted to Council prior to the commencement of construction.
13. **Stormwater Trench/Pit Locations.** The alignment of stormwater infrastructure is to be located as far away from existing trees to be retained as practical. Should the excavation for the stormwater pits and trenches conflict with any major structural roots (greater than >25 mm

diameter) of existing trees, their location and alignment is to be modified in consultation with the Project Arborist to avoid impact. Under no circumstances should roots be severed or cut without prior approval from the Project Arborist.

14. **Underground Utilities.** Any utility services to be located underground within the TPZ are to be undertaken utilising excavation techniques that prevent or minimise damage to structural roots (roots greater than >25 mm diameter). To prevent soil compaction and root damage these works should be conducted with non-motorised hand tools or directional drilling.
15. **Fill Requirements.** All fill to be placed within the Tree Protection Zones of neighbouring trees is to be gap graded structural soils which allows for gaseous exchange and future root growth. The Project Arborist is to confirm suitability of the proposed material prior to installation.
16. **Excavation within TPZ.** Any excavation or grading/re-grading within the identified TPZs of trees to be retained shall be carried out by hand using manual hand tools. Roots greater than 25mm are not to be damaged or severed without the prior written approval of the Project Arborist.
17. **Soil Moisture within TPZ.** Soil moisture levels within all TPZs are to be regularly monitored by the Project Arborist. If temporary irrigation or watering is required within the TPZ, then any above-ground irrigation system is to be installed and maintained by a suitably qualified individual.
18. **Final Assessment of Trees.** At completion of all construction works the Project Arborist is to carry out an assessment of all trees that were required to be retained. This assessment is to be documented in writing, a copy of which is to be submitted to Council for the development. The documentation is also to specify any required on-going remedial care that is required to be undertaken to ensure the continuous health and retention of the specified trees.
19. **Design and Construction Standards.** All engineering plans and work inside the property shall be carried out in accordance with the requirements of the relevant Australian Standard. All Public Domain works or modification to Council infrastructure which may be located inside the property boundary, must be undertaken in accordance with Council's 2014 DCP Part 8.5 (Public Domain Works), except otherwise as amended by conditions of this consent.
20. **Service Alterations.** All mains, services, poles, etc., which require alteration shall be altered at the applicant's expense.
21. **Restoration.** Public areas must be maintained in a safe condition at all times. Restoration of disturbed road and footway areas for the purpose of connection to public utilities will be carried out by Council following submission of a permit application and payment of appropriate fees. Repairs of damage to any public stormwater drainage facility will be carried out by Council following receipt of payment. Restoration of any disused gutter crossings will be carried out by Council following receipt of the relevant payment.
22. **Road Activity Permits.** To carry out work in, on or over a public road, the Consent of Council is required as per the Roads Act 1993. Prior to commencement of any work, permits for the following activities, as required and as specified in the form "*Road Activity Permits Checklist*" (available from Council's website) are to be obtained and copies submitted to Council with the *Notice of Intention to Commence Work*.



- a) **Road Use Permit** - The applicant shall obtain a Road Use Permit where any area of the public road or footpath is to be occupied as construction workspace, other than activities covered by a Road Opening Permit or if a Work Zone Permit is not obtained. The permit does not grant exemption from parking regulations.
- b) **Work Zone Permit** - The applicant shall obtain a Work Zone Permit where it is proposed to reserve an area of road pavement for the parking of vehicles associated with a construction site. Separate application is required with a Traffic Management Plan for standing of construction vehicles in a trafficable lane. A Roads and Maritime Services Work Zone Permit shall be obtained for State Roads.
- c) **Road Opening Permit** - The applicant shall apply for a road-opening permit and pay the required fee where a new pipeline is to be constructed within or across the road pavement or footpath. Additional road opening permits and fees are required where there are connections to public utility services (e.g. telephone, telecommunications, electricity, sewer, water or gas) within the road reserve. No opening of the road or footpath surface shall be carried out without this permit being obtained and a copy kept on the site.
- d) **Elevated Tower, Crane or Concrete Pump Permit** - The applicant shall obtain an Elevated Tower, Crane or Concrete Pump Permit where any of these items of plant are placed on Council's roads or footpaths. This permit is in addition to either a Road Use Permit or a Work Zone Permit.
- e) **Crane Airspace Permit** - The applicant shall obtain a Crane Over Airspace Permit where a crane on private land is operating in the air space of a Council road or footpath. Approval from the Roads and Maritime Services for works on or near State Roads is required prior to lodgement of an application with Council. A separate application for a Work Zone Permit is required for any construction vehicles or plant on the adjoining road or footpath associated with use of the crane.
- f) **Hoarding Permit** - The applicant shall obtain a Hoarding Permit and pay the required fee where erection of protective hoarding along the street frontage of the property is required. The fee payable is for a minimum period of 6 months and should the period is extended an adjustment of the fee will be made on completion of the works. The site must be fenced to a minimum height of 1.8 metres prior to the commencement of construction and throughout demolition and/or excavation and must comply with WorkCover (New South Wales) requirements.
- g) **Skip Bin on Nature Strip** - The applicant shall obtain approval and pay the required fee to place a Skip Bin on the nature strip where it is not practical to locate the bin on private property. No permit will be issued to place skips within the carriageway of any public road.

23. **A Tree Protection Schedule.** As indicated below, which provides a logical sequence of hold points for the various development stages including pre construction, construction and post construction and a checklist of various hold points that are to be signed and dated by the Project Arborist. This is to be completed progressively and included as part of the final certification. A copy of the final certification is to be made available to the City of Ryde Council.

**Customer Service Centre**  
1 Pope Street, Ryde NSW 2112  
(Within Top Ryde City shopping centre)

**North Ryde Office**  
Level 1, Building 0, Binary Centre,  
3 Richardson Place, North Ryde NSW 2113

**Phone** (02) 9952 8222  
**Email** [cityofryde@ryde.nsw.gov.au](mailto:cityofryde@ryde.nsw.gov.au)  
**Post** Locked Bag 2069, North Ryde NSW 1670  
**www** [www.ryde.nsw.gov.au](http://www.ryde.nsw.gov.au)  
**TTY** (02) 9952 8470 **Fax** (02) 9952 8070  
**Translating and Interpreting Service** 131 450

1.	Indicate clearly (with spray paint on trunks) trees approved for removal only	Project Arborist	Prior to demolition and site establishment
2.	Establishment of tree protection fencing	Project Arborist	Prior to demolition and site establishment
3.	Supervise all excavation works proposed within the TPZ	Project Arborist	As required prior to the works proceeding adjacent to the tree
4.	Inspection of trees by Project Arborist	Project Arborist	Bi-monthly during construction period
5.	Final inspection of trees by project Arborist	Project Arborist	At completion of the development.

24. **Signage – not approved unless shown on plans.** This consent does not authorise the erection of any signs or advertising structures not indicated on the approved plans. Separate approval must be obtained from Council for any additional signs, unless such signage is “exempt development”.
25. **Hours of work.** Building activities (including demolition) may only be carried out between 7.00am and 7.00pm Monday to Friday (other than public holidays) and between 8.00am and 4.00pm on Saturday. No building activities are to be carried out at any time on a Sunday or a public holiday.
26. **Hoardings.**
- (a) A hoarding or fence must be erected between the work site and any adjoining public place.
  - (b) Any hoarding, fence or awning erected pursuant this consent is to be removed when the work has been completed.
27. **Illumination of public place.** Any public place affected by works must be kept lit between sunset and sunrise if it is likely to be hazardous to persons in the public place.
28. **Public space.** The public way must not be obstructed by any materials, vehicles, refuse, skips or the like, under any circumstances, without prior approval from Council.
29. **Public Utilities.** Compliance with the requirements (including financial costs) of any relevant utility provider (e.g. Energy Australia, Sydney Water, Telstra, RMS, Council etc) in relation to any connections, works, repairs, relocation, replacements and/or adjustments to public infrastructure or services affected by the development.
30. **Compliance with Australian Standards.** The development is required to be carried out in accordance with all relevant Australian Standards.
31. **Security deposit.** The Council must be provided with security for the purposes of section 4.17A(6) of the *Environmental Planning and Assessment Act 1979* in a sum determined by reference to Council’s Management Plan (category: other buildings with delivery of bricks or concrete or machine excavation)

32. **Fees.** The following fees must be paid to Council in accordance with Council's Management Plan:

- (a) Infrastructure Restoration and Administration Fee
- (b) Enforcement Levy

33. **Long Service Levy.** Documentary evidence of payment of the Long Service Levy under Section 34 of the Building and Construction Industry Long Service Payments Act 1986 is to be submitted to Council prior to the certification of Crown Building works.

34. **Sydney Water Tap in™.** The approved plans must be submitted to the Sydney Water Tap in™ on-line service to determine whether the development will affect any Sydney Water sewer or water main, stormwater drains and/or easement, and if further requirements need to be met.

The Sydney Water Sydney Water Tap in™ service provides 24/7 access to a range of services, including:

- building plan approvals
- connection and disconnection approvals
- diagrams
- trade waste approvals
- pressure information
- water meter installations
- pressure boosting and pump approvals
- changes to an existing service or asset, eg relocating or moving an asset.

Sydney Water's Tap in™ online service is available at:

<https://www.sydneywater.com.au/SW/plumbing-building-developing/building/sydney-water-tap-in/index.htm>

35. **Site Sign**

- (a) A sign must be erected in a prominent position on site, prior to the commencement of construction:
  - i. showing the name, address and telephone number of the Principal Certifying Authority for the work,
  - ii. showing the name of the principal contractor (if any) or the person responsible for the works and a telephone number on which that person may be contacted outside working hours, and
  - iii. stating that unauthorised entry to the work site is prohibited.
- (b) Any such sign must be maintained while the building work, subdivision work or demolition work is being carried out, but must be removed when the work has been completed.

36. **Noise from construction work.** All feasible and reasonable measures must be implemented to minimise the emission of noise from construction work.

37. **Sediment/dust control.** No sediment, dust, soil or similar material shall leave the site during construction work.

38. **Construction materials.** All materials associated with construction must be retained within the site.

Customer Service Centre  
1 Pope Street, Ryde NSW 2112  
(Within Top Ryde City shopping centre)

North Ryde Office  
Level 1, Building 0, Binary Centre,  
3 Richardson Place, North Ryde NSW 2113

Phone (02) 9952 8222  
Email [cityofryde@ryde.nsw.gov.au](mailto:cityofryde@ryde.nsw.gov.au)  
Post Locked Bag 2069, North Ryde NSW 1670  
[www.ryde.nsw.gov.au](http://www.ryde.nsw.gov.au)  
TTY (02) 9952 8470 Fax (02) 9952 8070  
Translating and Interpreting Service 131 450



**39. Site Facilities** The following facilities must be provided on the site:

- (a) toilet facilities in accordance with WorkCover NSW requirements, at a ratio of one toilet per every 20 employees, and
- (b) a garbage receptacle for food scraps and papers, with a tight fitting lid.

**40. Site maintenance**

The applicant must ensure that:

- (a) approved sediment and erosion control measures are installed and maintained during the construction period;
- (b) building materials and equipment are stored wholly within the work site unless an approval to store them elsewhere is held;
- (c) the site is clear of waste and debris at the completion of the works.

**41. Sydney Water – Section 73.** 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 Co-ordinator. Please refer to the Building Developing and Plumbing section of the web site [www.sydneywater.com.au](http://www.sydneywater.com.au) then refer to “Water Servicing Coordinator” under “Developing Your Land” or telephone 13 20 92 for assistance.

- (a) 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 Co-ordinator, since building of water/sewer infrastructure can be time consuming and may impact on other services and building, driveway or landscape design.
- (b) Details demonstrating compliance are to be submitted to Council.

**42. Vehicle Access & Parking.** All internal driveways, vehicle turning areas, garages and vehicle parking space/ loading bay dimensions must be designed and constructed to comply with the relevant section of AS 2890 (Off-street Parking standards).

**43. Stormwater Management.** Stormwater runoff from the development shall be collected and piped by gravity flow in accordance with the provisions contained in the DCP Part 8.2 (Stormwater and Floodplain Management) Technical Manual.

The detailed plans, documentation and certification of the drainage system must be prepared by a chartered civil engineer and comply with the following;

- The certification must state that the submitted design (including any associated components such as WSUD measures, pump/ sump, absorption, onsite dispersal, charged system) are in accordance with the requirements of AS 3500.3 (2003) and any further detail or variations to the design are in accordance with the requirements of Council's DCP 2014 Part 8.2 (Stormwater and Floodplain Management) and associated annexures.
- The submitted design is consistent with the approved architectural and landscape plan and any revisions to these plans required by conditions of this consent.

**44. Stormwater Management - Construction.** The stormwater drainage system on the site must be constructed in accordance with the Stormwater Management Strategy prepared by ARUP dated 16 November 2017.

**Customer Service Centre**  
1 Pope Street, Ryde NSW 2112  
(Within Top Ryde City shopping centre)

**North Ryde Office**  
Level 1, Building 0, Binary Centre,  
3 Richardson Place, North Ryde NSW 2113

**Phone** (02) 9952 8222  
**Email** [cityofryde@ryde.nsw.gov.au](mailto:cityofryde@ryde.nsw.gov.au)  
**Post** Locked Bag 2069, North Ryde NSW 1670  
**www.ryde.nsw.gov.au**  
**TTY** (02) 9952 8470 **Fax** (02) 9952 8070  
**Translating and Interpreting Service** 131 450

- 45. Erosion and Sediment Control Plan - Implementation.** The applicant shall install erosion and sediment control measures at the commencement of works on the site. Erosion control management procedures in accordance with the manual "Managing Urban Stormwater: Soils and Construction" by the NSW Department – Office of Environment and Heritage, must be practiced at all times throughout the construction.
- 46. Traffic Management.** Traffic management procedures and systems must be in place and practised during the construction period to ensure safety and minimise the effect on adjoining pedestrian and vehicular traffic systems. These procedures and systems must be in accordance with AS 1742.3 1985 and City of Ryde, Development Control Plan 2006: - Part 8.1; Construction Activities.
- 47. Construction Traffic Management Plan.** A Construction Traffic Management Plan (CTMP) and report shall be prepared by an RMS accredited person and submitted to and approved by the consent authority prior to commencement of building works:

The CTMP must:-

- i. Make provision for all construction materials to be stored on site, at all times.
- ii. Specify construction truck routes and truck rates. Nominated truck routes are to be distributed over the surrounding road network where possible.
- iii. Provide for the movement of trucks to and from the site, and deliveries to the site. Temporary truck standing/ queuing locations in a public roadway/ domain in the vicinity of the site are not permitted unless approved by Council's Public Works.
- iv. Include a Traffic Control Plan prepared by an RMS accredited traffic controller for any activities involving the management of vehicle and pedestrian traffic. Specify that a minimum Fourteen (14) days notification must be provided to adjoining property owners prior to the implementation of any temporary traffic control measure
- v. Include a site plan showing the location of any site sheds, location of requested Work Zones, anticipated use of cranes and concrete pumps, structures proposed on the footpath areas (hoardings, scaffolding or shoring) and any tree protection zones around Council street trees.
- vi. Take into consideration the combined construction activities of other development in the surrounding area. To this end, the consultant preparing the CTMP must engage and consult with developers undertaking major development works within a 250m radius of the subject site to ensure that appropriate measures are in place to prevent the combined impact of construction activities, such as (but not limited to) concrete pours, crane lifts and dump truck routes. These communications must be documented and submitted to Council prior to work commencing on site.
- vii. The CTMP shall be prepared in accordance with relevant sections of Australian Standard 1742 – "Manual of Uniform Traffic Control Devices", RMS's Manual – "Traffic Control at Work Sites" and Councils DCP 2014 Part 8.1 (Construction Activities).

**Note:** This condition is to ensure public safety and minimise any impacts to the adjoining pedestrian and vehicular traffic systems. The CTMP is intended to minimise impact of construction activities on the surrounding community, in terms of vehicle traffic (including traffic flow and parking) and pedestrian amenity adjacent the site.

- 48. Implementation of Construction Traffic Management Plan.** All works and construction activities are to be undertaken in accordance with the approved Construction Traffic Management Plan (CTMP). All controls in the CTMP must be maintained at all times and all traffic management control must be undertaken by personnel having appropriate RMS

**Customer Service Centre**  
1 Pope Street, Ryde NSW 2112  
(Within Top Ryde City shopping centre)

**North Ryde Office**  
Level 1, Building O, Binary Centre,  
3 Richardson Place, North Ryde NSW 2113

**Phone** (02) 9952 8222  
**Email** [cityofryde@ryde.nsw.gov.au](mailto:cityofryde@ryde.nsw.gov.au)  
**Post** Locked Bag 2069, North Ryde NSW 1670  
**www** [www.ryde.nsw.gov.au](http://www.ryde.nsw.gov.au)  
**TTY** (02) 9952 8470 **Fax** (02) 9952 8070  
**Translating and Interpreting Service** 131 450

accreditation. Should the implementation or effectiveness of the CTMP be impacted by surrounding major development not encompassed in the approved CTMP, the CTMP measures and controls are to be revised accordingly. A copy of the approved CTMP is to be kept onsite at all times and made available for inspection on request.

49. **Stormwater Management - Work-as-Executed Plan.** A Work-as-Executed plan (WAE) of the as constructed Stormwater Management System must be prepared and certified (signed and dated) by a Registered Surveyor and is to clearly show the constructed stormwater drainage system (including any onsite detention, pump/ sump, charged/ siphonic and onsite disposal/ absorption system) and finished surface levels which convey stormwater runoff.
50. **Stormwater Management – Positive Covenant(s).** A Positive Covenant must be created on the property title(s) pursuant to the relevant section of the Conveyancing Act (1919), providing for the ongoing maintenance of the onsite detention system and onsite disposal/ absorption components incorporated in the approved Stormwater Management system. This is to ensure that the drainage system will be maintained and operate as approved throughout the life of the development, by the owner of the site(s). The terms of the instrument are to be in accordance with the Council's standard terms for such systems, as specified in City of Ryde DCP 2014 - Part 8.4 (Title Encumbrances) - Section 7. The covenants must be accompanied by a survey plan demarcating the location of the absorption/ disposal and detention components to be registered on the title. The covenants are to be registered.
51. **Drainage System Maintenance Plan.** To ensure the approved onsite detention system, dispersal trench and WSUD measures function as designed for the ongoing life of the development, a drainage system maintenance plan (DSMP) must be prepared for implementation for the ongoing life of the development.

The DSMP must contain the following;

- (a) All matters listed in Section 1.4.9 of the DCP Part 8.2 (Stormwater and Floodplain Management – Technical Manual).
- (b) A master schedule and plan identifying the location of all stormwater components crucial to the efficient operation of the trunk drainage system on the development lot. This is to include (but not be limited to) pump/sump systems, WSUD components, dispersal trenches and all onsite detention systems. The master plan is also to contain the maintenance schedule for each component.
- (c) The DSMP is also to include safe work method statements relating to access and maintenance of each component in the maintenance schedule.
- (d) Signage is to be placed in vicinity of each component, identifying the component to as it is referred in the DSMP (eg. OSD – 1), the reference to the maintenance work method statement and maintenance routine schedule.
- (e) Designate areas inside the property in which the maintenance operation is to be undertaken for each component. Maintenance from the road reserve or public domain is not accepted. Areas are to be demarcated if required.
- (f) Locate a storage area for maintenance components / tools to be stored on site. The location is to be recorded in the DSMP.

The DSMP is to be prepared by a suitably qualified and practising drainage engineer in co-operation with a workplace safety officer (or similar qualified personal) and all signage / line markings are to be implemented.

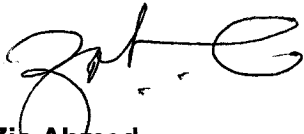
- 52. Engineering Compliance Certificates.** To ensure that all engineering facets of the development have been designed and constructed to the appropriate standards, Compliance Certificates must be obtained for the following items. All certification must be issued by a qualified and practising civil engineer having experience in the area respective of the certification unless stated otherwise.
- a) Confirming that all components of the parking areas contained inside the site comply with the relevant components of AS 2890 and Council's DCP 2014 Part 9.3 (Parking Controls).
  - b) Confirming that the Stormwater Management system (including any constructed ancillary components such as onsite detention) servicing the development complies with Council's DCP 2014 Part 8.2 (Stormwater and Floodplain Management) and associated annexures, and has been constructed to function in accordance with all conditions of this consent relating to the discharge of stormwater from the site.
  - c) Confirming that after completion of all construction work and landscaping, all areas adjacent the site, the site drainage system (including any on-site detention system), and the trunk drainage system immediately downstream of the subject site (next pit), have been cleaned of all sand, silt, old formwork, and other debris.
  - d) Confirming that the footings adjacent to drainage easements are founded below the zone of influence of this infrastructure, in accordance with Council's DCP 2014 Part 8.2 (Stormwater and Floodplain Management) and associated annexures.
  - e) Confirming that erosion and sediment control measures were implemented during the course of construction and were in accordance with the manual *"Managing Urban Stormwater: Soils and Construction"* by the NSW Department – Office of Environment and Heritage and Council's DCP 2014 Part 8.1 (Construction Activities).
  - f) Certification from a suitably qualified structural or geotechnical engineer confirming that any temporary soil/ rock anchors installed into public roadway, have been de-stressed and are no longer providing any structural support.
- 53. On-Site Stormwater Detention System - Marker Plate.** To ensure any constructed On-site detention will not be modified, a marker plate is to be fixed to each on-site detention system constructed on the site. The plate construction, wordings and installation shall be in accordance with Council's DCP 2014 Part 8.2 (Stormwater and Floodplain Management) and associated annexures. The plate may be purchased from Council's Customer Service Centre.
- 54. Disposal of liquid wastes.** All liquid wastes generated on the premises must be treated and discharged to the sewerage system in accordance with the requirements of Sydney Water Corporation or be transported to a liquid waste facility for recycling or disposal. Any liquid wastes discharged to the sewerage system must not have an adverse impact on the University's Sports Fields Recycled Water Scheme.
- 55. Trade waste permit.** The applicant must contact Sydney Water Corporation to determine whether a Trade Waste Permit is required before discharging any trade wastewater to the sewerage system.
- 56. Plumbing and drainage work.** All plumbing and drainage work must be carried out in accordance with the requirements of Sydney Water Corporation and the NSW Department of Fair Trading.
- 57. Sewerage Connection.** The premises must be connected directly to the sewerage system by gravity flow.

58. **Mechanical ventilation.** All proposed mechanical ventilation systems, and alterations to any existing systems must comply with the Building Code of Australia and be certified by a professional mechanical services engineer.
59. **Fresh air intake vents** - All fresh air intake vents must be located in a position that is free from contamination and at least 6 metres from any exhaust air discharge vent or cooling tower discharge.
60. **Exhaust air discharge vents** - All exhaust air discharge vents must be designed and located so that no nuisance or danger to health will be created.
61. **Air pollution.** The use of the premises, including any plant or equipment installed on the premises, must not cause the emission of smoke, soot, dust, solid particles, gases, fumes, vapours, mists, odours or other air impurities that are a nuisance or danger to health.
62. **Standards of air impurities not to be exceeded** - Any discharge to atmosphere from the premises must comply with the requirements of the Protection of the Environment Operations (Clean Air) Regulation 2010.
63. **Offensive noise.** The use of the premises must not cause the emission of 'offensive noise' as defined in the Protection of the Environment Operations Act 1997.
64. **Noise and vibration from plant or equipment.** Unless otherwise provided in this Consent, the operation of any plant or equipment installed on the premises must not cause:
- (a) The emission of noise that exceeds the background noise level by more than 5dBA when measured at, or computed for, the most affected point, on or within the boundary of the most affected receiver. Modifying factor corrections must be applied for tonal, impulsive, low frequency or intermittent noise in accordance with the New South Wales Industrial Noise Policy (EPA, 2000).
  - (b) An internal noise level in any adjoining occupancy that exceeds the recommended design sound levels specified in Australian/New Zealand Standard AS/NZS 2107:2000 Acoustics – Recommended design sound levels and reverberation times for building interiors.
  - (c) The transmission of vibration to any place of different occupancy.
65. **Clean water only to stormwater system.** Only clean unpolluted water is permitted to enter Council's stormwater drainage system.
66. **Clean-up materials.** An adequate supply of suitable clean up materials must be kept on the premises for cleaning up accidental spills and all cleaning wastes and spills must be collected and disposed of in an environmentally acceptable manner.
67. **Duty to notify.** Pollution incidents causing or threatening harm to the environment must be reported to Council as soon as practicable on Tel. 9952 8222.

Thank you very much for advising Council of the proposed SSD and providing the opportunity for making a submission.

Should you wish to discuss any aspect of this matter, please contact me by e-mail [zahmed@ryde.nsw.gov.au](mailto:zahmed@ryde.nsw.gov.au) or on phone 9952 8234.

Yours sincerely,



**Zia Ahmed**  
**Client Manager, Building and Development Advisory Service**

**Customer Service Centre**  
1 Pope Street, Ryde NSW 2112  
(Within Top Ryde City shopping centre)

**North Ryde Office**  
Level 1, Building O, Binary Centre,  
3 Richardson Place, North Ryde NSW 2113

Phone (02) 9952 8222  
Email [cityofryde@ryde.nsw.gov.au](mailto:cityofryde@ryde.nsw.gov.au)  
Post Locked Bag 2069, North Ryde NSW 1670  
[www.ryde.nsw.gov.au](http://www.ryde.nsw.gov.au)  
TTY (02) 9952 8470 Fax (02) 9952 8070  
Translating and Interpreting Service 131 450