

Your Reference:
Our Reference:
Contact:
Telephone

DA39/12
SYD12/00447
Dianne Rees
8849 2237



Transport
Roads & Maritime
Services

The General Manager
Lane Cove Council
PO Box 20
LANE COVE NSW 1595

Attention: May Li

**PROPOSED DEMOLITION OF THREE BUILDINGS AND CONSTRUCTION OF FIVE
RESIDENTIAL FLAT BUILDINGS CONTAINING 249 UNITS
AT 316-322 BURNS BAY ROAD, LANE COVE**

Dear Sir/Madam

I refer to your letter of 12 April 2012 (Council Ref: DA39/12) and subsequent letter of 18 September 2012, concerning the abovementioned development application which was referred to Roads and Maritime Services (RMS) for comment in accordance with Clause 104 of *State Environmental Planning Policy (Infrastructure) 2007* and Section 138 of the *Roads Act 1993* for concurrence.

This response from RMS is based on an assessment of the amended plans received from Council on 18 September 2012, Council's letter dated 18 September 2012 and all documentation previously submitted. This response supersedes all previous responses by RMS.

The response is divided into two parts; the first part provides RMS's requirements for the development which is dependent on the construction of the link road where alternate access is provided to the site in accordance with *State Environmental Planning Policy (Infrastructure) 2007*. The second part gives RMS's requirements should the link road not be constructed. If the link road is not constructed then the site would be landlocked and RMS would be required to provide access to the development from Burns Bay Road.

Council has advised in its letter of 18 September 2012 that in order to construct alternate access to the development by constructing the link road, it has given landowner's consent for assessment purposes and is holding ongoing discussions with the proponent.

PART 1: WITH THE LINK ROAD CONSTRUCTED

RMS stated in the Sydney Regional Advisory Committee's letter dated 12 September 2012 that it supports in principle, the proposed link road to the local road network and the existing traffic control signals at the intersection of Burns Bay Road, to the north of the site. This provision of the link road is consistent with Council's 'Lane Cove Development Control Plan Locality 1 – Burns Bay Road (Adopted on 22 February 2010, Amendment 2 – 9 December 2011) and the 'Draft Masterplan for 314 + 318-332 Burns Bay Road' (prepared by Harry Sidaway and Associates Pty Ltd, dated July 2004).

RMS advises that current practice is to limit the number of vehicular conflict points along the arterial road network to maintain network efficiency and road safety. This current practice is reflected in Section 6.2.1 of RMS's current publication of the 'Guide to Traffic Generating Developments', which states "access across the boundary with a major road is to be avoided wherever possible".

Burns Bay Road is a major arterial road, which carries a high volume of traffic, where transport efficiency of through traffic is of great importance.

Also, State Environmental Planning Policy (Infrastructure) 2007, reads as follows:

"The consent authority must not grant consent to development on land that has frontage to a classified road unless it is satisfied that:

(a) where practicable, vehicular access to the land is provided by a road other than the classified road".

RMS has considered the traffic impacts of directing all traffic generated by the development to the signalised intersection and the network efficiency of the arterial and local road network, and grants concurrence under Section 138 of the *Roads Act, 1993* to a left-out only access from the development to Burns Bay Road. The provision of the left-out only access will reduce the impact of left turning vehicles on the operation of the existing signalised intersection to the north and will reduce queuing at that intersection.

Council should consider the vehicular movements and vehicle turning paths at the left-out only access and may wish to restrict vehicles to light vehicles only. Council should consult with Carisbrook House and the proponent to determine the access requirements for buses and heavy vehicles, respectively, which may visit the site.

RMS notes that the amended plans forwarded by Council on 18 September have not been amended to relocate the pedestrian crossing at Burns Bay Road, however RMS will not require a pedestrian crossing at this location as part of the provision of the left-out only access. Also, RMS has not received additional information regarding the accessibility of the site for pedestrians, in particular, access to Blocks 1 and 2.

**Exercise of Concurrence Function under the *Roads Act, 1993*
- with the construction of the link road**

RMS grants concurrence to a left out-only access on Burns Bay Road under Section 138 of the *Roads Act 1993*, subject to Council's approval and the following requirements being included in the determination of the development application:

1. All works/regulatory signposting associated with the proposed development are to be at no cost to RMS.

Reason: To comply with RMS requirements.

2. Detailed design plans and hydraulic calculations of any changes to the stormwater drainage system are to be submitted to RMS for approval, prior to the commencement of any works.

Details should be forwarded to:
Sydney Asset Management
Roads and Maritime Services
PO Box 973
Parramatta CBD 2124.

A plan checking fee will be payable and a performance bond may be required before RMS's approval is issued. With regard to the Civil Works requirement please contact RMS's Project Engineer, External Works Ph: 8849 2114 or Fax: 8849 2766.

Reason: To ensure RMS's assets function effectively.

3. The developer is to submit detailed design drawings and geotechnical reports relating to the excavation of the site and support structures to RMS for assessment. The developer is to meet the full cost of the assessment by RMS.

This report would need to address the following key issues:

- a. The impact of excavation/rock anchors on the stability of Burns Bay Road and detailing how the carriageway would be monitored for settlement.
- b. The impact of the excavation on the structural stability of Burns Bay Road.

The report and any enquiries should be forwarded to:
Project Engineer, External Works
Sydney Asset Management
Roads and Maritime Services
PO Box 973 Parramatta CBD 2124.

Telephone 8848 2114
Fax 8849 2766

If it is necessary to excavate below the level of the base of the footings of the adjoining roadways, the person acting on the consent shall ensure that the owner/s of the roadway is/are given at least seven (7) days notice of the intention to excavate below the base of the footings. The notice is to include complete details of the work.

Reason: To maintain RMS's assets and the classified road network efficiency.

4. A Road Occupancy Licence should be obtained from RMS for any works that may impact on traffic flows on Burns Bay Road during construction activities.

Reason: To comply with RMS requirements.

5. The proposed access shall be designed to meet RMS's requirements, and be endorsed by a suitably qualified practitioner. The design requirements shall be in accordance with AUSTROADS and other Australian Codes of Practice. The certified copies of the civil design plans shall be submitted to RMS for consideration and approval prior to the release of the Construction Certificate by Council and commencement of road works.

The developer may be required to enter into a Works Authorisation Deed (WAD) for the abovementioned works. Please note that the Works Authorisation Deed (WAD) will need to be executed prior to RMS's assessment of the detailed civil design plans.

RMS fees for administration, plan checking, civil works inspections and project management shall be paid by the developer prior to the commencement of works.

Reason: To maintain the classified road network capacity and efficiency.

6. All redundant driveways shall be removed and replaced with kerb and gutter to match existing.

Reason: To ensure pedestrian safety.

7. Any proposed temporary/partial road closures will require the applicant to apply for a Road Occupancy Licence (Form C & D) by contacting the Transport Management Centre's Planned Incidents Unit on (02) 8396 1513 during office hours (8am-4pm) or 131 700 after hours.

The applicant will be required to submit the Road Occupancy Licence forms/traffic management plan at least 10 working days prior to the start of works. Plans should be forwarded to the Supervisor Planned Incidents Unit, Transport Operations, Transport Management Centre or on facsimile (02) 8396 1530.

In due course the applicant will need to obtain a Road Opening Licence. Details can be obtained from RMS's Sydney Project Services on 8849 2496.

Reason: To maintain the classified road network efficiency and capacity.

8. All vehicles are to enter and leave the site in a forward direction.

Reason: To allow safe vehicular entry and exit

9. All demolition and construction vehicles are to be contained wholly within the site and vehicles must enter the site before stopping. A construction zone will not be permitted on Burns Bay Road.

Reason: To maintain peak traffic flows and classified road capacity.

10. The required sight lines to other vehicles and pedestrians in or around the car park or entrances should not be compromised by landscaping, signage, fencing or display materials. Minimum sight lines for pedestrian safety are outlined in AS2890.1 (Figure 3.3).

Reason: To maintain pedestrian and vehicle safety.

11. The proposed development should be designed such that road traffic noise from Burns Bay Road is mitigated by durable materials, in accordance with the NSW Environment Protection Authority (EPA) criteria for new land use developments (The Environmental Criteria for Road Traffic Noise, May 1999). The RMS's Environmental Noise Management Manual provides practical advice in selecting noise mitigation treatments.

Reason: To comply with EPA requirements.

12. A Construction Traffic Management Plan detailing construction vehicle routes, number of trucks, hours of operation, access arrangements and traffic control should be submitted to Council and RMS for approval prior to the issue of the Construction Certificate. The TMP must detail the traffic impact of the construction works on the local area and the means proposed to manage construction works to minimise such impacts. In particular, the report must consider the impact on any on-street parking during construction, the movement of trucks to and from the site, the location of any site sheds, and the use of any cranes and concrete pumps. The applicant is to note that the use of cranes and pumps on the public reserve requires a "Permit to Stand Plant" from Council. All materials and plant are to be stored on-site unless prior permission is received from Council to use the footpath.

Reason: To comply with RMS requirements.

13. If not already in place, full time "No Stopping" restrictions are to be implemented along the full Burns Bay Road frontage of the development site, excepting the relocated bus zone. This restriction should be implemented prior to the commencement of any demolition works relating to the proposed development. Prior to the installation of the parking restrictions the applicant is to contact RMS's Traffic Management Services on phone: (02) 8849 2021 for a works instruction.

Reason: To comply with RMS requirements.

14. No demolition, remediation or other work is to occur on site until such time as RMS has been provided with, and approved, a Demolition Traffic Management Plan detailing vehicle routes, number of trucks, hours of operation, access arrangements and traffic control arrangements associated with the demolition and/or remediation of the site.

Reason: To comply with RMS requirements.

15. No Construction Certificate is to be issued by a Certifying Authority until such time as evidence is received by the Certifier confirming that the Traffic Management Plan referred to in Condition 14 above has been approved by RMS.

Reason: To comply with RMS requirements.

16. Detailed designs regarding the left out only access and the proposed link road are to be provided to Council's Traffic Section and RMS for review and approval prior to the issue of the Construction Certificate.

Reason: To comply with RMS requirements.

RMS provides the following advisory comments to Council for consideration in its determination of the project application:

1. The layout of the proposed car parking areas associated with the subject development (including, driveways, grades, turn paths, sight distance requirements, aisle widths, aisle lengths, and parking bay dimensions) should be in accordance with AS 2890.1- 2004 and AS 2890.2 – 2002 for heavy vehicle usage.
2. The swept path of the longest vehicle (including garbage trucks) entering and exiting the subject site, as well as manoeuvrability through the site, shall be in accordance with AUSTROADS. In this regard, a plan shall be submitted to Council for approval, which shows that the proposed development complies with this requirement.
3. Council should ensure that all pedestrian pathways within the site meet the requirements of the *Disability Discrimination Act 1992*.
4. Council should ensure that disabled parking spaces are appropriately located within the basement car park and are in accordance with AS2890.1. The shared areas for disabled parking will need to comply with AS2890.6. The shared areas will require a bollard or the like to prevent vehicles parking in these spaces.
5. Signage will be required on Burns Bay Road to the north of the site to inform motorists that access to, and parking for Carisbrooke House, is provided via the signalised intersection.
6. The final location of the bus stop and bus zone will require detailed consultation with RMS and Sydney Buses as there is high speed traffic on Burns Bay Road at the frontage of the site.
7. No stopping zones will be required for all internal roads, excepting where approved loading zones and visitor parking are provided. A detailed drawing showing all signposting should be forwarded to Council for consideration.
8. The marked pedestrian crossings within the site will require signposting and pavement markings consistent with RMS standards and RMS Technical Directions. The t-junction within the site requires a traffic control arrangement to formalise traffic movements at the intersection. The type of traffic control to be used requires analysis and justification.

PART 2: WITHOUT THE CONSTRUCTION OF THE LINK ROAD

RMS notes that the amended plans forwarded by Council on 18 September have not been amended to relocate the pedestrian crossing at Burns Bay Road. Amended plans showing the relocated pedestrian crossing are to be submitted to RMS and Council for review and approval. Also, RMS has not received additional information regarding the accessibility of the site for pedestrians, in particular, access to Blocks 1 and 2.

RMS advises that the left turn movement from Burns Bay Road will require the construction of a left turn deceleration lane (with a minimum width of 3 metres) including the relocation of public utilities, construction of a footpath and dedication of land to accommodate the above.

The left turn lanes, deceleration lane and raised concrete triangular island are to be designed to accommodate the largest vehicle entering and leaving the site, including buses, removalist vehicles and service vehicles. The turning paths of these vehicles is not to encroach on the kerbs or triangular island.

Exercise of Concurrence Function under the *Roads Act, 1993* - Without the construction of the link road

RMS grants concurrence to a left in/left out access on Burns Bay Road under Section 138 of the *Roads Act 1993*, subject to Council's approval and the following requirements being included in the determination of the development application:

1. All works/regulatory signposting associated with the proposed development are to be at no cost to RMS.

Reason: To comply with RMS requirements.

2. Detailed design plans and hydraulic calculations of any changes to the stormwater drainage system are to be submitted to RMS for approval, prior to the commencement of any works.

Details should be forwarded to:
Sydney Asset Management
Roads and Maritime Services
PO Box 973
Parramatta CBD 2124.

A plan checking fee will be payable and a performance bond may be required before RMS's approval is issued. With regard to the Civil Works requirement please contact RMS's Project Engineer, External Works Ph: 8849 2114 or Fax: 8849 2766.

Reason: To ensure RMS's assets function effectively.

3. The developer is to submit detailed design drawings and geotechnical reports relating to the excavation of the site and support structures to RMS for assessment. The developer is to meet the full cost of the assessment by RMS.

This report would need to address the following key issues:

- c. The impact of excavation/rock anchors on the stability of Burns Bay Road and detailing how the carriageway would be monitored for settlement.
- d. The impact of the excavation on the structural stability of Burns Bay Road.

The report and any enquiries should be forwarded to:

Project Engineer, External Works
Sydney Asset Management
Roads and Maritime Services
PO Box 973 Parramatta CBD 2124.

Telephone 8848 2114
Fax 8849 2766

If it is necessary to excavate below the level of the base of the footings of the adjoining roadways, the person acting on the consent shall ensure that the owner/s of the roadway is/are given at least seven (7) days notice of the intention to excavate below the base of the footings. The notice is to include complete details of the work.

Reason: To maintain RMS's assets and the classified road network efficiency.

- 4. A Road Occupancy Licence should be obtained from RMS for any works that may impact on traffic flows on Burns Bay Road during construction activities.

Reason: To comply with RMS requirements.

- 5. The proposed deceleration lane along Burns Bay Road shall be designed to meet RMS's requirements, and be endorsed by a suitably qualified practitioner. The design requirements shall be in accordance with AUSTROADS and other Australian Codes of Practice. The certified copies of the civil design plans shall be submitted to RMS for consideration and approval prior to the release of the Construction Certificate by Council and commencement of road works.

The proposed concrete island separating the left in/left out vehicle movements on Burns Bay Road is to be extended in the direction of the pedestrian crossing. The turning movements for coaches must not encroach on the concrete island and place pedestrians at risk.

The developer may be required to enter into a Works Authorisation Deed (WAD) for the abovementioned works. Please note that the Works Authorisation Deed (WAD) will need to be executed prior to RMS's assessment of the detailed civil design plans.

RMS fees for administration, plan checking, civil works inspections and project management shall be paid by the developer prior to the commencement of works.

Reason: To maintain the classified road network capacity and efficiency.

6. Any realignment boundary to facilitate a footway resulting from the proposed deceleration lane must be dedicated as road at no cost to RMS.

Reason: To comply with RMS requirements.

7. All redundant driveways shall be removed and replaced with kerb and gutter to match existing.

Reason: To ensure pedestrian safety.

8. Any proposed temporary/partial road closures will require the applicant to apply for a Road Occupancy Licence (Form C & D) by contacting the Transport Management Centre's Planned Incidents Unit on (02) 8396 1513 during office hours (8am-4pm) or 131 700 after hours.

The applicant will be required to submit the Road Occupancy Licence forms/traffic management plan at least 10 working days prior to the start of works. Plans should be forwarded to the Supervisor Planned Incidents Unit, Transport Operations, Transport Management Centre or on facsimile (02) 8396 1530.

In due course the applicant will need to obtain a Road Opening Licence. Details can be obtained from RMS's Sydney Project Services on 8849 2496.

Reason: To maintain the classified road network efficiency and capacity.

9. All vehicles are to enter and leave the site in a forward direction.

Reason: To allow safe vehicular entry and exit

10. All demolition and construction vehicles are to be contained wholly within the site and vehicles must enter the site before stopping. A construction zone will not be permitted on Burns Bay Road.

Reason: To maintain peak traffic flows and classified road capacity.

11. The required sight lines to other vehicles and pedestrians in or around the car park or entrances should not be compromised by landscaping, signage, fencing or display materials. Minimum sight lines for pedestrian safety are outlined in AS2890.1 (Figure 3.3).

Reason: To maintain pedestrian and vehicle safety.

12. The proposed development should be designed such that road traffic noise from Burns Bay Road is mitigated by durable materials, in accordance with NSW Environment Protection Authority (EPA) criteria for new land use developments (The Environmental Criteria for Road Traffic Noise, May 1999). The RMS's Environmental Noise Management Manual provides practical advice in selecting noise mitigation treatments.

Reason: To comply with EPA requirements.

13. A Construction Traffic Management Plan detailing construction vehicle routes, number of trucks, hours of operation, access arrangements and traffic control should be submitted to Council and RMS for approval prior to the issue of the Construction Certificate. The TMP must detail the traffic impact of the construction works on the local area and the means proposed to manage construction works to minimise such impacts. In particular, the report must consider the impact on any on-street parking during construction, the movement of trucks to and from the site, the location of any site sheds and the use of any cranes and concrete pumps. The applicant is to note that the use of cranes and pumps on the public reserve requires a "Permit to Stand Plant" from Council. All materials and plant are to be stored on-site unless prior permission is received from Council to use the footpath.

Reason: To comply with RMS requirements.

14. If not already in place, full time "No Stopping" restrictions are to be implemented along the full Burns Bay Road frontage of the development site, excepting the relocated bus zone. This restriction should be implemented prior to the commencement of any demolition works relating to the proposed development. Prior to the installation of the parking restrictions the applicant is to contact RMS's Traffic Management Services on phone: (02) 8849 2021 for a works instruction.

Reason: To comply with RMS requirements.

15. No demolition, remediation or other work is to occur on site until such time as RMS has been provided with, and approved, a Demolition Traffic Management Plan detailing vehicle routes, number of trucks, hours of operation, access arrangements and traffic control arrangements associated with the demolition and/or remediation of the site.

Reason: To comply with RMS requirements.

16. No Construction Certificate is to be issued by a Certifying Authority until such time as evidence is received by the Certifier confirming that the Traffic Management Plan referred to in Condition 15 above has been approved by RMS.

Reason: To comply with RMS requirements.

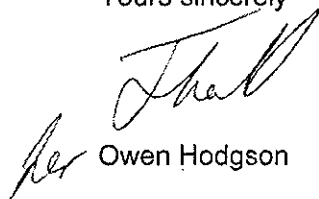
RMS provides the following advisory comments to Council for consideration in its determination of the project application:

1. The layout of the proposed car parking areas associated with the subject development (including, driveways, grades, turn paths, sight distance requirements, aisle widths, aisle lengths, and parking bay dimensions) should be in accordance with AS 2890.1- 2004 and AS 2890.2 – 2002 for heavy vehicle usage.
2. The swept path of the longest vehicle (including garbage trucks) entering and exiting the subject site, as well as manoeuvrability through the site, shall be in accordance with AUSTRROADS. In this regard, a plan shall be submitted to Council for approval, which shows that the proposed development complies with this requirement.

3. The layout of the proposed car parking areas associated with the subject development (including, driveways, grades, turn paths, sight distance requirements, aisle widths, aisle lengths, and parking bay dimensions) should be in accordance with AS 2890.1- 2004 and AS 2890.2 – 2002 for heavy vehicle usage.
4. The swept path of the longest vehicle (including garbage trucks) entering and exiting the subject site, as well as manoeuvrability through the site, shall be in accordance with AUSTROADS. In this regard, a plan shall be submitted to Council for approval, which shows that the proposed development complies with this requirement.
5. Council should ensure that all pedestrian pathways within the site meet the requirements of the *Disability Discrimination Act 1992*.
6. Council should ensure that disabled parking spaces are appropriately located within the basement car park and are in accordance with AS2890.1. The shared areas for disabled parking will need to comply with AS2890.6. The shared areas will require a bollard or the like to prevent vehicles parking in these spaces.
7. Signage will be required on Burns Bay Road to the north of the site to inform motorists that access to, and parking for Carisbrooke House, is provided via the access to the development.
8. The final location of the bus stop and bus zone will require detailed consultation with RMS and Sydney Buses as there is high speed traffic on Burns Bay Road at the frontage of the site.
9. No stopping zones will be required for all internal roads, excepting where approved loading zones and visitor parking are provided. A detailed drawing showing all signposting should be forwarded to Council for consideration.
10. The marked pedestrian crossings within the site will require signposting and pavement markings consistent with RMS standards and RMS Technical Directions.
11. The t-junction within the site requires a traffic control arrangement to formalise traffic movements at the intersection. The type of traffic control to be used requires analysis and justification.

Any inquiries can be directed to Dianne Rees by telephone on 8849 2237.

Yours sincerely



Owen Hodgson

Senior Land Use Planner
Transport Planning, Sydney Region

21 September 2012

Your Reference: DA39/12
Our Reference: SYD12/00447
Contact: Dianne Rees
Telephone: 8849 2237

**SYDNEY
REGIONAL
DEVELOPMENT
ADVISORY
COMMITTEE**

SRDAC

The General Manager
Lane Cove Council
PO Box 20
LANE COVE NSW 1595

Attention: May Li

**PROPOSED DEMOLITION OF THREE BUILDINGS AND CONSTRUCTION OF FIVE
RESIDENTIAL FLAT BUILDINGS CONTAINING 249 UNITS
AT 316-322 BURNS BAY ROAD, LANE COVE**

Dear Sir/Madam

I refer to your letter 12 April 2012 (Council Ref: DA39/12), concerning the abovementioned development application which was referred to Roads and Maritime Services (RMS) for comment in accordance with Clause 104 of *State Environmental Planning Policy (Infrastructure) 2007* and Section 138 of the *Roads Act 1993* for concurrence. I wish to advise that the Sydney Regional Development Advisory Committee (SRDAC) considered the traffic impact of this application at its meeting on 9 May 2012 and provides the following comments:

1. Prior to the determination of the development application, RMS requires the submission to Council of a Demolition Traffic Management Plan (TMP) for further submission to, and approval by RMS. The TMP is to provide details of heavy vehicle routes, number of trucks, hours of operation, access arrangements and traffic control arrangements.
2. The southern turning area for heavy vehicles and coaches is located beside the entrance to Carisbrook House and near the proposed neighbourhood shop, an area of potentially high pedestrian activity. All of the proposed pedestrian paths lead to the paved area set aside for parking and turning manoeuvres which will result in conflicting movements between buses, heavy and smaller vehicles, and pedestrians.

Council should ensure that the applicant addresses this issue by providing alternative pedestrian routes around the perimeter of the parking and manoeuvring area.

Council should also ensure that there is adequate room for heavy vehicles and coaches to turn around safely in the area provided.

Roads and Maritime Services of New South Wales

LEVEL 11, 27-31 ARGYLE STREET PARRAMATTA NSW 2150
PO BOX 973 PARRAMATTA CBD NSW 2150 DX 28555
www.rmservices.nsw.gov.au | 13 22 13

3. The proposed pedestrian path along the frontage of the site will require land dedication in the vicinity of the deceleration lane, the access point with raised island and the proposed pedestrian crossing. Council should ensure that the level of the pedestrian pathway along Burns Bay Road is not below the level of the road and deceleration lane. (See condition No. 5 below)

Council should ensure that the provision of pedestrian crossings meets the warrants in accordance with relevant Austroads and Australian Standards and RMS Supplements to Australian Standards.

4. Council is to ensure that all pedestrian pathways within the site meet the requirements of the *Disability Discrimination Act 1992*. The plans indicate a level difference of approximately 4.6m over a distance of 24 metres between the raised island at the access point on Burns Bay Road, and the proposed service road. The level difference will result in a steep climb for both pedestrians and vehicles from the service road at the lower level to Burns Bay Road and bus stops. The applicant has provided ramps within the development which provide grades of 1:14 between Block 2 and 4, however these grades have not been replicated on the footpaths leading to Burns Bay Road.
5. The plans for the basement carpark show parking spaces which are located too close to the circulation ramps causing potential conflict areas between circulating vehicles and those entering and leaving car parking spaces.
6. The basement carparks in Blocks 1, 4 and 5 show disabled parking spaces located in the middle of the ramp circulation paths. The disabled spaces in blocks 4 and 5 are located on the other side of the aisle to the lifts which would result in disabled pedestrians crossing the path of vehicles to access these parking spaces. The disabled parking spaces are to be relocated to an area outside the main circulation path of the ramps and to the same side of the aisles and beside the lifts.
7. The motorcycle spaces mentioned in the SEE and traffic report should be clearly shown on the plans either by legend or labelling.
8. There are inconsistencies between the SEE and the traffic report regarding the number of bicycle parking spaces. The discrepancy should be rectified and the location and number of spaces should be shown on the plans.
9. There is no analysis of the impacts on traffic on Burns Bay Road and surrounding streets when the single access/egress off Burns Bay Road is employed. The Committee raised concerns regarding the impacts of motorists exiting the site that want to head northbound. This issue must be addressed by the applicant prior to finalisation of any traffic related conditions being imposed. It is considered that Council's proposed internal north-south access road (across 314 Burns Bay Road site) and its connection with Burns Bay Road requires examination and should be incorporated into proposed access movements for this development.
10. Detail designs regarding this access road across 314 Burns Bay Road are to be provided for the review and consideration of Council's Traffic section and RMS.
11. Likewise northbound motorists on Burns Bay Road wanting to enter the site would be required to use the G-turn. It has not been demonstrated that the G-turn could accommodate the additional capacity, particularly in the peak periods. The issue must be addressed by the applicant with intersection modelling analysis.

12. The applicant will also need to provide greater consideration to loading activities for the site and will need to comply with AS2890.2, in this respect. All loading activity must be confined to the site. The applicant has not shown that large vehicles would safely enter and exit the site in a forward direction. Truck turning movements should be shown on the plans.
13. The shared areas for the disabled parking will need to comply with AS2890.6. The shared areas will require a bollard or the like to prevent vehicles parking in these spaces.
14. If security shutters are to be used for the car parks, then Intercom systems will be required for each one to allow visitors to utilise the allocated parking spaces. Also, the visitor parking will require signposting, both for the car spaces and at the car park entries at each of the street frontages notifying visitors that the on-site parking is available.
15. Signage will also be required at the proposal's access that the parking for Carisbrooke House is provided on the site.

The proposed new bus stop on Burns Bay Road is to be relocated further south of the site egress. The final location will require detailed consultation with RMS and Sydney Buses as there is high speed traffic at Burns Bay Road at the front of 316-332 Burns Bay Road.

16. No stopping zones will be required on Burns Bay Road, for the length of the site (outside any approved bus zone).
17. No stopping zones will be required for all internal roads, excepting where approved loading zone and visitor parking are provided. A detailed drawing showing all signposting should be forwarded for Council's consideration.
18. The marked pedestrian crossings within the site will require signposting and pavement markings consistent with RMS standards and RMS Technical Directions.
19. The t-junction within the site requires a traffic control arrangement to formalise traffic movements at the intersection. The type of traffic control to be used requires analysis and justification.
20. The movement/impact of vehicles associated with the construction of this proposed development has not been considered as part of the Colston Budd Hunt & Kafes traffic study. Council will require a Construction Management Plan for RMS's and Council's consideration prior to the issue of a Construction Certificate for the consideration of RMS and Land Cove Council Traffic Committee. It must detail the traffic impact of the construction works on the local area and the means proposed to manage construction works to minimise such impacts. In particular, the Report must consider the impact on the on-street parking during construction, the movement of trucks to and from the site, the location of any site sheds and the use of any cranes and concrete pumps. The applicant is to note that the use of cranes and pumps on the public reserve requires a "Permit to Stand Plant" from Council. All materials and plant are to be stored on-site unless prior permission is received from Council to use the footpath.

Roads and Maritime Services Requirements and Comments.

Exercise of Concurrence Function under the *Roads Act, 1993*

RMS grants concurrence to the proposed vehicular crossing and deceleration lane on Burns Bay Road under Section 138 of the *Roads Act 1993*, subject to Council's approval and the following requirements being included in the development consent:

1. All works/regulatory signposting associated with the proposed development are to be at no cost to RMS.

Reason: To comply with RMS requirements.

2. Detailed design plans and hydraulic calculations of any changes to the stormwater drainage system are to be submitted to RMS for approval, prior to the commencement of any works.

Details should be forwarded to:

Sydney Asset Management
Roads and Maritime Services
PO Box 973
Parramatta CBD 2124.

A plan checking fee will be payable and a performance bond may be required before RMS's approval is issued. With regard to the Civil Works requirement please contact RMS's Project Engineer, External Works Ph: 8849 2114 or Fax: 8849 2766.

Reason: To ensure RMS's assets function effectively.

3. A Road Occupancy Licence should be obtained from RMS for any works that may impact on traffic flows on Burns Bay Road during construction activities.

Reason: To comply with RMS requirements.

4. The proposed deceleration lane along Burns Bay Road shall be designed to meet RMS's requirements, and be endorsed by a suitably qualified practitioner. The design requirements shall be in accordance with AUSTROADS and other Australian Codes of Practice. The certified copies of the civil design plans shall be submitted to RMS for consideration and approval prior to the release of the Construction Certificate by Council and commencement of road works.

The proposed concrete island separating the left in/left out vehicle movements on Burns Bay Road is to be extended in the direction of the pedestrian crossing. The turning movements for coaches must not encroach on the concrete island and place pedestrians at risk.

The developer may be required to enter into a Works Authorisation Deed (WAD) for the abovementioned works. Please note that the Works Authorisation Deed (WAD) will need to be executed prior to RMS's assessment of the detailed civil design plans.

RMS fees for administration, plan checking, civil works inspections and project management shall be paid by the developer prior to the commencement of works.

Reason: To maintain the classified road network capacity and efficiency.

5. Any realignment boundary to facilitate a footway resulting from the proposed deceleration lane must be dedicated as road at no cost to RMS.

Reason: To comply with RMS requirements.

6. In accordance with AS 2890.1- 2004 (Parking Facilities, Part 1: Off-street car parking), the driveway shall be a minimum of 6.0 metres in width for a minimum distance of 6 metres from the property boundary.

Reason: To allow for two-way simultaneous entry and exit vehicular movements.

7. The redundant driveway shall be removed and replaced with kerb and gutter to match existing.

Reason: To ensure pedestrian safety.

8. Any proposed temporary/partial road closures will require the applicant to apply for a Road Occupancy Licence (Form C & D) by contacting the Transport Management Centre's Planned Incidents Unit on (02) 8396 1513 during office hours (8am-4pm) or 131 700 after hours.

The applicant will be required to submit the Road Occupancy Licence forms/traffic management plan at least 10 working days prior to the start of works. Plans should be forwarded to the Supervisor Planned Incidents Unit, Transport Operations, Transport Management Centre or on facsimile (02) 8396 1530.

In due course the applicant will need to obtain a Road Opening Licence. Details can be obtained from RMS's Sydney Project Services on 8849 2496.

Reason: To maintain the classified road network efficiency and capacity.

9. All vehicles are to enter and leave the site in a forward direction.

Reason: To allow safe vehicular entry and exit

10. All demolition and construction vehicles are to be contained wholly within the site and vehicles must enter the site before stopping. A construction zone will not be permitted on Burns Bay Road.

Reason: To maintain peak traffic flows and classified road capacity.

11. The required sight lines to pedestrians or other vehicles in or around the car park or entrances should not be compromised by landscaping, signage, fencing or display materials. Minimum sight lines for pedestrian safety are outlined in AS2890.1 (Figure 3.3).

Reason: To maintain pedestrian and vehicle safety.

12. The proposed development should be designed such that road traffic noise from Burns Bay Road is mitigated by durable materials, in accordance with EPA criteria for new land use developments (The Environmental Criteria for Road Traffic Noise, May 1999). The RMS's Environmental Noise Management Manual provides practical advice in selecting noise mitigation treatments.

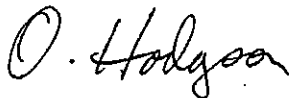
Reason: To comply with EPA requirements.

RMS provides the following advisory comments to Council for consideration in its determination of the project application:

13. A Construction Traffic Management Plan detailing construction vehicle routes, number of trucks, hours of operation, access arrangements and traffic control should be submitted to Council prior to the issue of a construction certificate.
14. If not already in place, full time "No Stopping" restrictions are to be implemented along the full Burns Bay Road frontage of the development site, excepting the relocated bus zone. This restriction should be implemented prior to the commencement of any demolition works relating to the proposed development. Prior to the installation of the parking restrictions the applicant is to contact RMS's Traffic Management Services on phone: (02) 8849 2021 for a works instruction.
15. The layout of the proposed car parking areas associated with the subject development (including, driveways, grades, turn paths, sight distance requirements, aisle widths, aisle lengths, and parking bay dimensions) should be in accordance with AS 2890.1- 2004 and AS 2890.2 – 2002 for heavy vehicle usage.
16. The swept path of the longest vehicle (including garbage trucks) entering and exiting the subject site, as well as manoeuvrability through the site, shall be in accordance with AUSTROADS. In this regard, a plan shall be submitted to Council for approval, which shows that the proposed development complies with this requirement.
17. Consideration should also be given to providing bicycle parking facilities either within the development, or close to it, as well as end trip facilities such as showers, changing rooms, etc. to encourage travelling to and from the development by bicyclists.

Any inquiries can be directed to Dianne Rees by telephone on 8849 2237.

Yours sincerely



Owen Hodgson

Senior Land Use Planner
Transport Planning, Sydney Region

15 May 2012