

**ATTACHMENT 2**  
**INTERNAL COUNCIL REFERRAL COMMENTS**

**NATURAL AREAS ASSESSMENT**

Ku-ring-gai Council's vegetation mapping identifies part of the site as containing Blue Gum High Forest (BGHF), which is listed as a Critically Endangered Ecological Community (CEEC) in schedule 2 of the *Biodiversity Conservation Act 2016* and is considered the main ecological constraint. The Ecological Report, prepared by GIS Environmental Consultants accompanying the Planning Proposal similarly identifies the extent, location and significance of BGHF onsite.

A total of 31 trees were assessed within the Arborist report submitted with the Planning Proposal. The indicative construction footprint provides for the retention of 26 of these trees and removal of 5 from the subject site, including 1 *Eucalyptus saligna* (T30) (Blue Gum).

Of the 26 trees highlighted for retention in the submitted proposal, the submitted plans and arborist report indicate works will be completed within the Tree Protection Zones (TPZ) of 22, including 18 where the encroachment is major as defined by AS-4970.

Additionally, the Arborist report recommends the trimming of branches from remnant BGHF trees to allow access for machinery to construct the underground carpark and retaining walls.

**Contamination**

Based on the conducted assessment, Compaction and Soil Testing Services Pty. Ltd. (CSTS) has concluded that the site known as 45-47 Tennyson Avenue & 105 Eastern Road, Turramurra NSW is of a suitable condition, from a contamination perspective, for the proposed land use, and does not pose an unacceptable risk to human health or the surrounding environment in accordance with the National Environment Protection (Assessment of Site Contamination) Measure 1999 (Amended 2013).

During any development, if indicators of potential contamination are encountered a full assessment of potential risk and all required remedial actions will be required.

**Recommendations**

- The site is considered capable of supporting B1 Neighbourhood Centre zoning, however the proposed building footprint needs to be designed to further reduce impacts on the remnant BGHF. This could potentially be achieved through a reduction of areas which are not considered as ecologically significant (i.e. the orchard in the current proposal) and the provision of greater buffers for the remnant BGHF trees. Additional buffers could be achieved through site specific DCP controls requiring a greater set back from the mapped BGHF located in the south eastern corner of the site.
- The impacts associated with the removal of 5 trees including 2 native species (T30 a young *Eucalyptus saligna* and T1 a large *Melaleuca quinquenervia*) through the current proposal is

able to be offset onsite with appropriate plantings, which would need to be clearly identified in a vegetation management and replenishment plan.

- Whilst the current design appears to have retained a significant proportion of the trees onsite and in particular the high value BGHF trees, major encroachments within the Tree Protection Zone of 18 of the 26 retained trees raises many issues regarding the future viability of BGHF remnants onsite. Whilst the arborist report recommends extensive root mapping, slight redesigns to the footprint of the proposed building which seeks to reduce encroachments would provide a better outcome and would be required to meet LEP and DCP requirements.
- The arborist report indicates that 9 trees will require pruning to allow for construction and/or machinery access through the construction phase. The report states that the estimated required pruning is unlikely to impact upon the ULE of the trees however a detailed survey and tree plan would be required to ensure all retained trees remain viable, with suitable monitoring, vegetation management and replenishment. Again, a better outcome could be achieved by providing a greater buffer to retained trees or through alternative construction methods.
- The BGHF in the south east of the site is identified as Landscape Remnant. The objectives outlined within section 18.4 of the KDCP should be considered and the building designed to comply with the objectives, with a VMP to detail how the objectives will be met. The objectives for landscape remnants are;
  1. To maintain smaller Key Vegetation Communities remnants as 'stepping stones', providing habitat, seedbank and pollination resources (facilitating gene flow) and supporting flora and fauna resilience.
  2. To maintain and restore smaller remnants of Key Vegetation Communities across a range of topographies.
  3. To protect trees within Key Vegetation Communities that provide food, shelter or nesting resources for native fauna, or that are of exceptional aesthetic value.

## **TRANSPORT ASSESSMENT**

### **Matters of strategic transport merit – North District Plan**

- Productivity / Integration of land use and transport:

The traffic and transport assessment accompanying the planning proposal found that for people working the travel zone, 75% travelled to it by car, 8% as a passenger, 4% by train, 3% walked and 2% travelled by both bus and bicycle. While Council does not yet have access to 2016 Journey to Work data at travel zone level, this is broadly consistent with the 2011 Journey to Work data that Council has for the adjacent travel zone (Turramurra local centre).

The traffic and transport assessment also found that the largest proportion of workers in the travel zone (approximately 50%) originate from the Ku-ring-gai LGA. Again, while Council does not yet have access to 2016 Journey to Work data at travel zone level, this is broadly consistent with the origin of workers in the 2011 Journey to Work data that Council has for the adjacent travel zone (Turramurra local centre). In the 2011 data, the Hornsby area (at 14%) was the next highest statistical area that employees originated from.

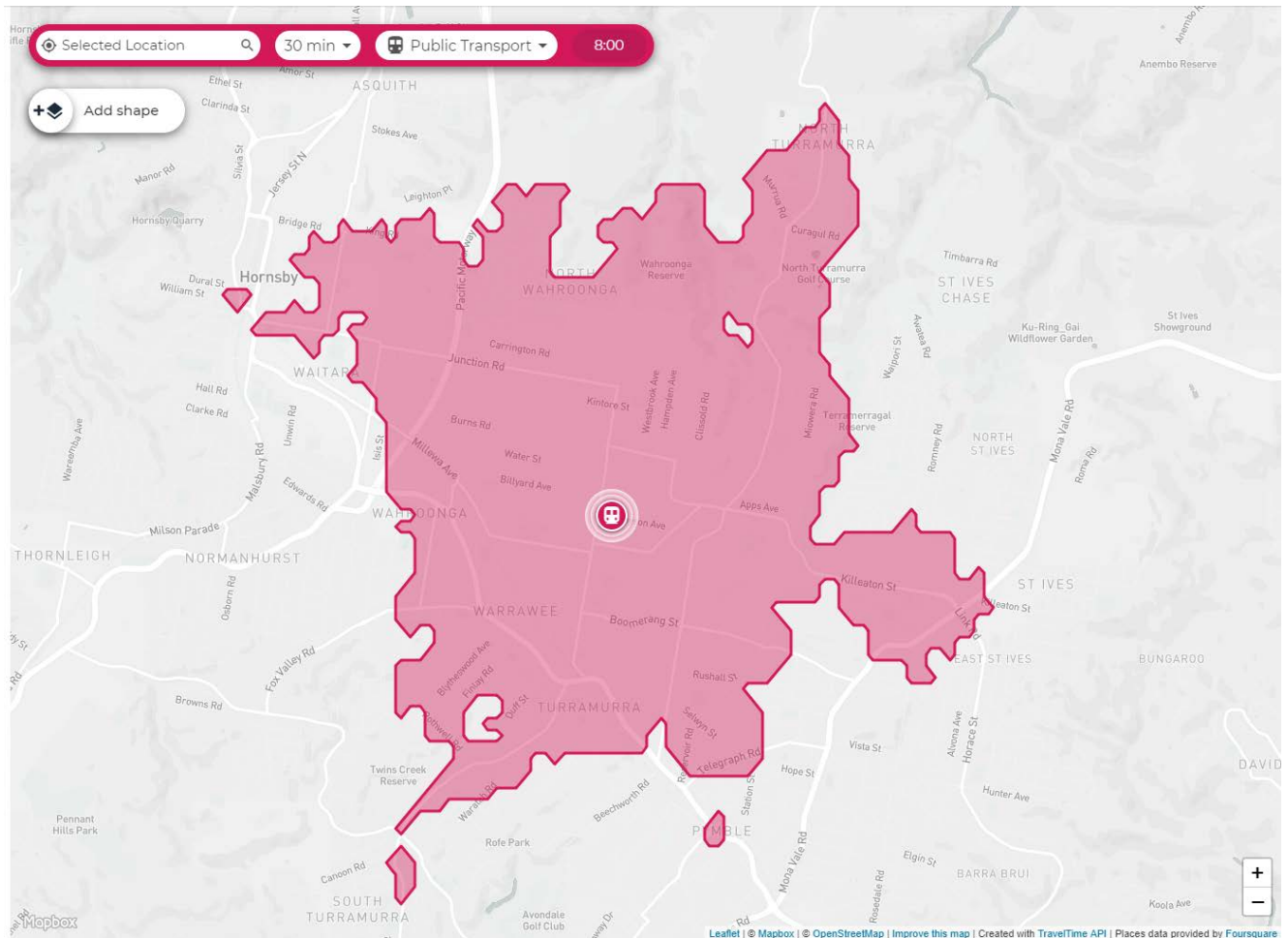
From the information in the traffic and transport assessment, around 20 employees would be working in the store at any one time. Based on the travel mode characteristics of the travel zone, it is likely that 15 employees would drive to work, 2 would be dropped off, 1 would arrive by train, 1 would walk and 1 would arrive by bus.

Therefore while it is likely that around half of the employees would originate from the Kuring-gai LGA, this site is still likely to be a highly car-dependent site for journeys to work by employees.

- Level of access to public transport, and its capacity to accommodate additional passengers;

Given the numbers of employees expected to use public transport is low (based on the mode share characteristics of the travel zone), it is unlikely that this additional demand for public transport would place significant additional burden to existing services. Similarly, the relatively small 30 minute public transport catchment (see below) suggests that public transport would not be the main mode of travel for customers arriving to the site, and therefore the existing public transport services would likely have the capacity to accommodate any additional demand.

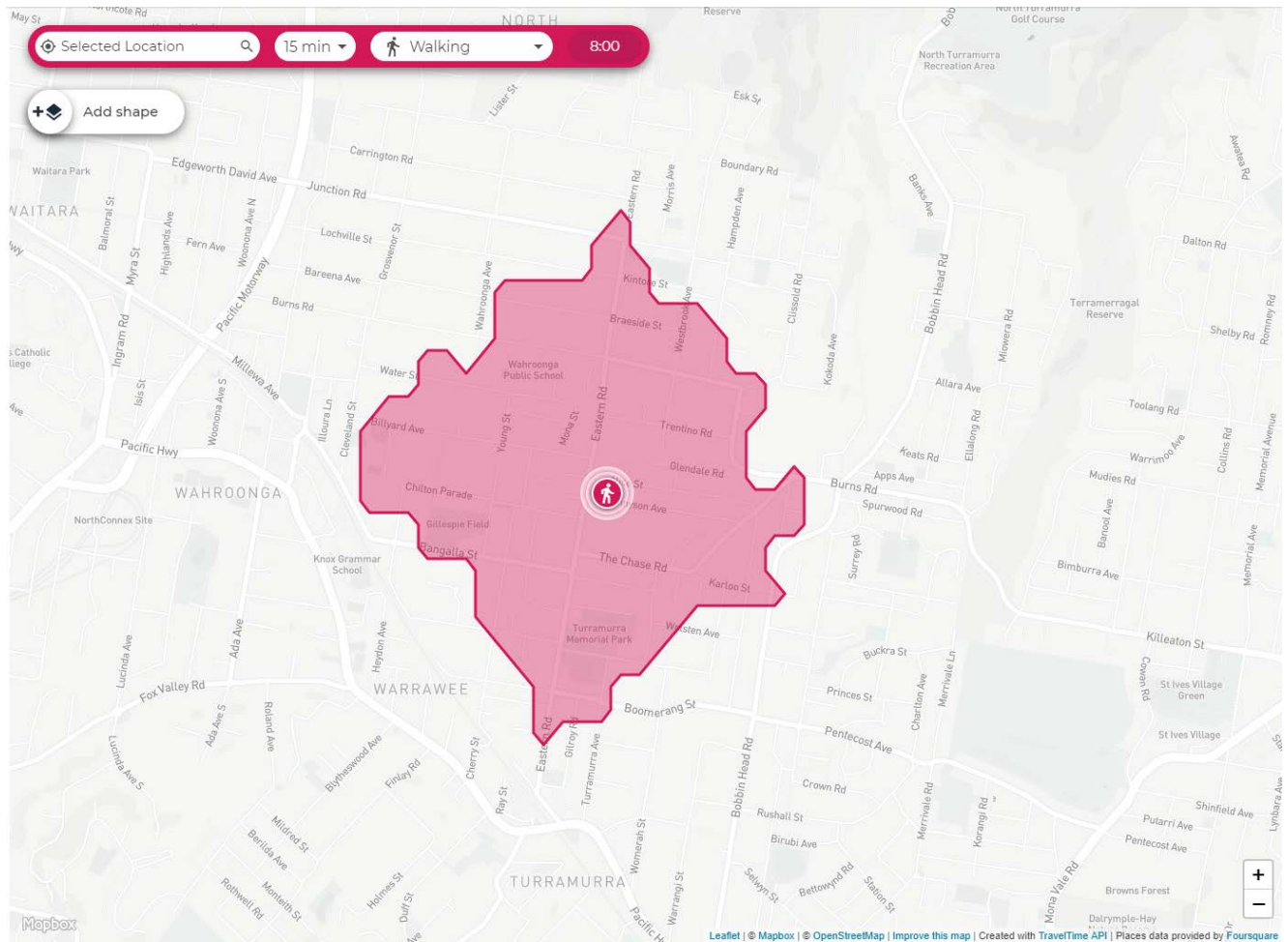
- Degree of access to employment / strategic centres (noting Greater Sydney Commission goal of 30 minute city by public transport);



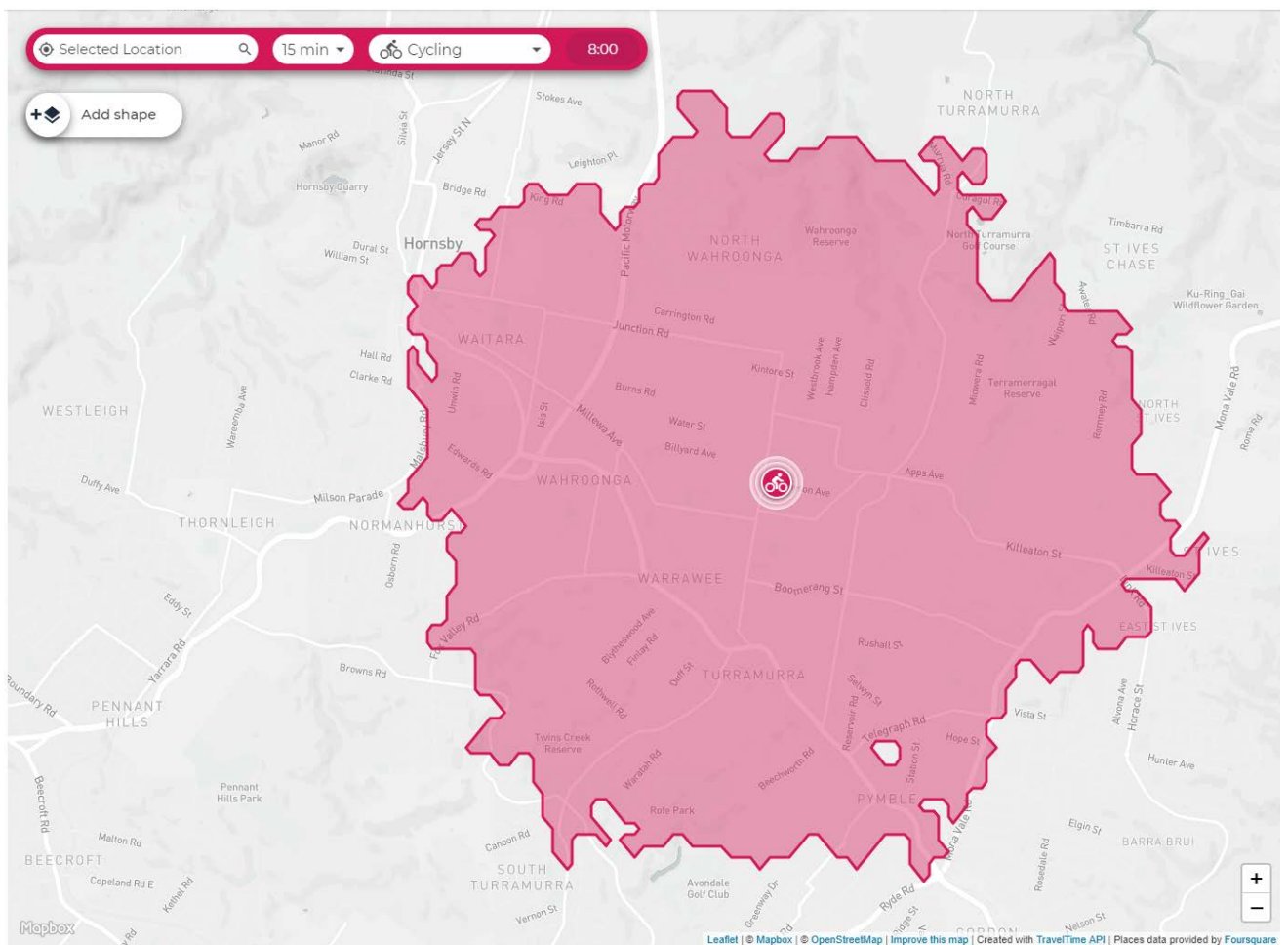
The diagram above (from <https://app.traveltimeplatform.com/>) indicates the extent of the 30 minute catchment by public transport around the site. As can be seen, the catchment draws in Turrumurra, Warrawee and Wahroonga (generally north of Pacific Highway), parts of St Ives and Pymble as well as the eastern edge of Waitara and Hornsby, but is relatively small and unlikely to provide access to a large workforce. Given the small public transport catchment and unrestricted nature of on-street parking in the vicinity of the site, it is likely to be highly car dependent for journeys to work.

- Liveability

- Level of access to active transport networks (walking and cycling links);



The diagram above (from <https://app.traveltimeplatform.com/>) indicates the extent of the 15 minute walking catchment around the site. The catchment is reasonably evenly distributed along the north-south and east-west axis (roughly being Eastern Road, and Chilton Parade/Tennyson Avenue respectively) and is characterised by approximately 950 low density dwellings, or a population of approximately 2,950. As the proposal to rezone the site would increase pedestrian demand across Eastern Road (to/from the western part of the walking catchment), consideration will need to be given (likely at DA stage) to improving crossing opportunities and additional pedestrian facilities on Eastern Road as well as across Tennyson Avenue and The Chase Road (where they meet Eastern Road), to facilitate and promote pedestrian access.



The diagram above (from <https://app.traveltimeplatform.com/>) indicates the extent of the 15 minute cycling catchment around the site. As expected, the 15 minute cycling catchment is larger than the 15 minute pedestrian catchment, and generally covers Turrumurra, Wahoonga, Warrawee, St Ives (east of Mona Vale Road), parts of Pymble, Waitara and eastern parts of Hornsby. However, the bicycle infrastructure in the catchment is largely undeveloped, with the only facilities of note being the shared user path along Link Road/Killeaton Street and Burns Road (providing connections to St Ives), and the on-road shoulders on Bobbin Head Road (providing connections to Turrumurra/North Turrumurra). Apart from these facilities, the majority of cycling is expected to be confined to either on-road/mixed use cycling or cycling on footpaths (where permissible).

While the absence of formalised cycling facilities anywhere near the site is unlikely to encourage cycling as an alternative means of transport in the short to medium term, this should not obviate the need to provide bicycle support facilities (bike racks, change rooms/lockers and showers) as part of any future development application.

### Transport infrastructure capacity

- Capacity of public transport (rail, bus) and its ability to accommodate additional passengers resulting from the proposal

#### Platform capacity

Council has no data or information on the current levels of platform occupancy at Turrumurra railway station, although in light of the mode share characteristics of the travel zone and the number of employees expected to use public transport (rail), it is unlikely that the additional demand generated by the proposal would create platform capacity issues. The number of shoppers/visitors to the site arriving by rail is also expected to be low, based on the mode share characteristics of the travel zone.

#### Bus stop capacity

There is a bus stop directly outside the site and opposite the site. These bus stops provide convenient access to route 575 and 576T services. Route 575 connects Macquarie University to Hornsby (via West Pymble, Pymble, Turramurra, Wahroonga East and Waitara). Route 576T connects Wahroonga with Turramurra (via the North Wahroonga Loop). Both services provide connectivity to Turramurra railway station.

The bus stop outside the site has a brick shelter enclosed on 3 sides, as well as a standard Transport for NSW totem with timetable information. Bus stop infrastructure on the opposite side of the site comprises a bench seat and a standard Transport for NSW totem with timetable information.

From Opal data collected during a week in May 2018, the bus stops have the following usage characteristics:

<b>Stop ID</b>	<b>Location</b>	<b>Tap on (weekly numbers)</b>	<b>Tap off (weekly numbers)</b>
207463	Eastern side of Eastern Road, adjacent to site  (Turramurra station direction)	152	0-50
2074154	Western side of Eastern Road, opposite site  (Wahroonga direction)	0-50	169

The numbers recorded above indicate the bus stops are popular for travel to/from the Turramurra direction, possibly for access to the railway station.

The majority (approximately 85%) of the bus stops in Ku-ring-gai recorded weekly tap on/tap off numbers in the 0-50 range. While the weekly numbers recorded at these 2 stops suggest they are relatively well utilised (compared to other bus stops in Ku-ring-gai), it is unlikely there would be insufficient capacity at the stops to accommodate additional demand from the proposal. To encourage bus access to the site, consideration should be given in any future development application to upgrading the bus shelter to a more modern type typically installed at other stops in Ku-ring-gai.

- Traffic generation, and assess impacts on nearby intersections

The estimated traffic generation of the proposal is derived from the RTA Guide to Traffic Generating Developments for supermarkets and specialty shops. The net increase in traffic generation (allowing for the existing use) is estimated at additional 150 vehicle trips per hour (two-way) during the weekday afternoon peak hour and 130 vehicle trips per hour (two-way) during the Saturday peak hour.

In terms of impacts to nearby intersections, this would result in a Level of Service A/B (good operation/acceptable delays and spare capacity) for both the intersection of Eastern Road and Tennyson Avenue and the intersection of Eastern Road and Alice Street.

In terms of amenity on surrounding roads, the increases in traffic movements on Tennyson Road would not result in the maximum suggested environmental traffic flows for a local road to be exceeded (as outlined in the RTA Guide to Traffic Generating Developments). This indicates that the existing road infrastructure has capacity to cater for the proposal. However, Tennyson Road has a relatively narrow road pavement varying from approximately 7.5m to 10m, and the question of the desirability of carrying additional traffic in Tennyson Avenue, and

whether traffic management measures would need to be considered, may be a matter for a future development application.

It should be noted that any traffic management measures that reduce traffic movements in Tennyson Avenue are likely to result in corresponding increases in traffic movements along The Chase Road. The Chase Road is a collector road and is already operating at around the maximum environmental traffic flows suggested for a collector road (as outlined in the RTA Guide to Traffic Generating Developments).

While not a consideration at this stage of assessment, the potential for 82 car spaces would be lower than required by the DCP but higher (per sqm) than the parking provided for the existing shops. The slightly-lower-than-DCP provision could be supported though, if a management system was implemented to encourage turnover of the on-site spaces (e.g. electronic parking management system or enforcement by Council's rangers). There are also 3-4 time-restricted parallel parking directly opposite (on the western side of Eastern Road) which contribute to short stay parking supply for public use.

For its car parking needs, the existing shops at 96-101A Eastern Road rely on the car park at its rear (37 spaces), the angle parking on the Eastern Road street frontage (12 spaces), 2 parallel parking spaces on the Tennyson Avenue frontage and parallel parking directly opposite on the western side of Eastern Road (4 spaces). These 55 spaces are signposted with varying time restrictions, to encourage turnover. Due to the timing of the application, it was not possible to assess the occupancy and turnover of these spaces, but if a future development application does not comply with the parking requirements of the DCP and is therefore relying on surrounding car parking, then the applicant would be required to assess the occupancy and turnover of these spaces.

## **Conclusions**

### **Matters of strategic transport merit – North District Plan**

#### Productivity / Integration of land use and transport

While it is likely that around half of the employees from the proposal would originate from the Ku-ring-gai LGA, the proposal is still likely to result in a highly car-dependent site for journeys to work by employees

- Level of access to public transport, and its capacity to accommodate additional passengers

It is unlikely that the proposal will create significant additional demand for public transport that would place significant additional burden to existing services.

- Degree of access to employment / strategic centres (noting Greater Sydney Commission goal of 30 minute city by public transport);

Given the small 30 minute public transport catchment and unrestricted nature of on-street parking in the vicinity of the site, the proposal is likely to result in highly car dependent travel for journeys to work.

#### Liveability

- Level of access to active transport networks (walking and cycling links);

The proposal would increase pedestrian demand across Eastern Road (to/from the western part of the walking catchment), therefore consideration will need to be given to improving crossing opportunities and additional pedestrian facilities, to facilitate and promote pedestrian access.



## Transport infrastructure capacity

- Capacity of public transport (rail, bus) and its ability to accommodate additional passengers resulting from the proposal

It is unlikely that the additional demand generated by the proposal would create platform capacity issues at Turramurra railway station. Similarly, it is unlikely that the proposal would result in insufficient capacity at the nearby bus stops to accommodate additional demand. To encourage bus access to the site, consideration should be given in any future development application to upgrading the bus shelter adjacent to the site.

- Traffic generation, and assess impacts on nearby intersections

The proposal would result in a Level of Service A/B (good operation/acceptable delays and spare capacity) for both the intersection of Eastern Road and Tennyson Avenue and the intersection of Eastern Road and Alice Street. The increases in traffic movements on Tennyson Road would be within the maximum suggested environmental traffic flows for a local road.

## Comment

Specific issues, including car parking, would be dealt with at Development Assessment stage in the future.

## URBAN DESIGN ASSESSMENT

The response focusses on the architectural visualisation submitted as part of the planning proposal (Aerial Perspective, Nursery Café Perspective and Attachment 5 Urban Design Statement). If well designed, it is considered that new development (with a maximum height limit of 9.5 metres and a proposed FSR of 0.3:1) could be compatible with the neighbourhood scale and village feel/character of the area.

Subject to the outcomes of the traffic study, updated retail strategy and community consultation, the Planning Proposal is supported in principle from an urban design point of view.

A site specific Development Control Plan (DCP) should be prepared to provide the community with greater clarity and certainty about the nature and scale of future development, as well as the conservation and management of significant vegetation on parts of the site.

## Character

- The proposal provides a significantly vegetated interface to the north, south and east through generous green setbacks/retention of deep soil, reflecting the verdant nature of the surrounding area. These generous setbacks will go some way to improve and protect state significant native vegetation on site;
- The proposed built form maintains an appropriate scale, whilst taking architectural cues from the surrounding vernacular, such as the gabled roof and verandah of the proposed main building, 'The Homestead'; and
- The proposal accords with the intent of *KMC Community Strategic Plan 2038, Theme 3 – Places, Spaces and Infrastructure, Objective P1.1* i.e. Ku-ring-gai's unique visual character and identity is maintained. It is considered that the new development is consistent with the existing maximum FSR and building height controls which will inherently maintain the village feel/scale and landscape character of the immediate context.

## **Amenity**

- The proposal increases public amenity, by way of providing publicly accessible open space on site - referenced in the scheme as 'The Orchard' on the northern frontage and 'The Native Garden' on the southern frontage);
- Increased tree planting and significant vegetation are proposed across the site, including improvements to the native habitat through the inclusion of planting species from the Blue Gum High Forest Ecological Community in the proposed Native Garden (fenced re-vegetation area);
- Location of 'The Orchard' on the site's northern frontage respects the interface with the existing residential to the north, while the location of the proposed 'barn' on the southern corner of the site, responds to the existing neighbourhood retail centre typology immediately to the south of the site. Overall, the proposed layout of the development gives due consideration to the existing streetscapes and adjoining land uses and responds accordingly;

## **Safety/Surveillance**

- The configuration of the proposal allows for clearly defined pedestrian movement in and around the site (as demonstrated in the proposed access and movement circulation diagram included in the Urban Design Statement), thus ensuring an activated site which contributes to 'eyes on the street'.

## **Scale**

- The proposal references the local residential typology (i.e. detached dwellings of single & two storey construction) by working within the existing development standards and not exceeding the permissible height limit of 9.5 metres, with a proposed FSR of 0.3:1. The proposed built form seeks to maintain and promote the neighbourhood scale and village feel/character of the area;
- The proposed buildings have been orientated and heights minimised, to maximise solar access to the site, including solar access to the outdoor areas proposed, namely The Orchard, Native Garden and rooftop vegetable garden, whilst maintaining adequate solar access to adjoining and surrounding properties; and
- The proposed 'Barn' component of the scheme relates well in scale to the existing Eastern Road shops immediately south of the site. It maintains a certain degree of consistency in terms of street frontage, by not providing a setback.

## **Active Frontage**

- The site has historically been used for non-residential uses, including a petrol station/mechanics shop, retail nursery and associated café. This forms a continuation of the existing Eastern Road retail strip to the south of the site, which includes the Eastern Road IGA. The proposal is a continuation of these neighbourhood centre uses and subsequent activation of these two street frontages. It is proposed that the 'Forecourt' parking area be an adaptable space for week-end markets and events, which will encourage activation of this primary street frontage.

## **Comment**

The proposal is supported in terms of urban design. A site specific draft DCP is recommended in this report to provide detail on Council's requirements for the site, and to better inform the

community of potential outcomes. Whilst the concept of an adaptable forecourt parking area has merit, this would need to be determined at a later stage.

## **DEVELOPMENT ASSESSMENT**

Specific controls for the site in a DCP in relation to setbacks and also to ensure the protection of significant trees are necessary. It may also be a useful tool to retain or replicate significant elements such as the Orchard.

Should the rezoning proceed it is recommended that a pre DA meeting between Council and the applicant be held in the future to exchange information and determine issues.

It is noted that the surrounding area is predominately residential. There is little in the way of increased density in the area. As to the adjoining commercial area, recent development has been incidental to the established uses.

### **Comment**

This report recommends the preparation of a site specific DCP for the site. It is also recommended that the DCP be exhibited as part of the overall planning proposal to enable full community understanding and consultation.

## **INFRASTRUCTURE ASSESSMENT**

Future Development Application/s (DA) would be subject to the imposition of a section 94 contribution. Significant vegetation on the site needs to be retained. There is also the possibility of augmentation of the public domain improvement works in the area via a VPA.

### **Comment**

The applicable s.94 contributions will be levied at the DA approval stage/s of future development. Identified significant vegetation will be protected via the Biodiversity mapping information (LEP) and via more detailed development controls (DCP) at the DA stage/s. A Vegetation Management Plan (VMP) would be required as part of any future DA. A Council endorsed VMP would form part of any future DA approval.