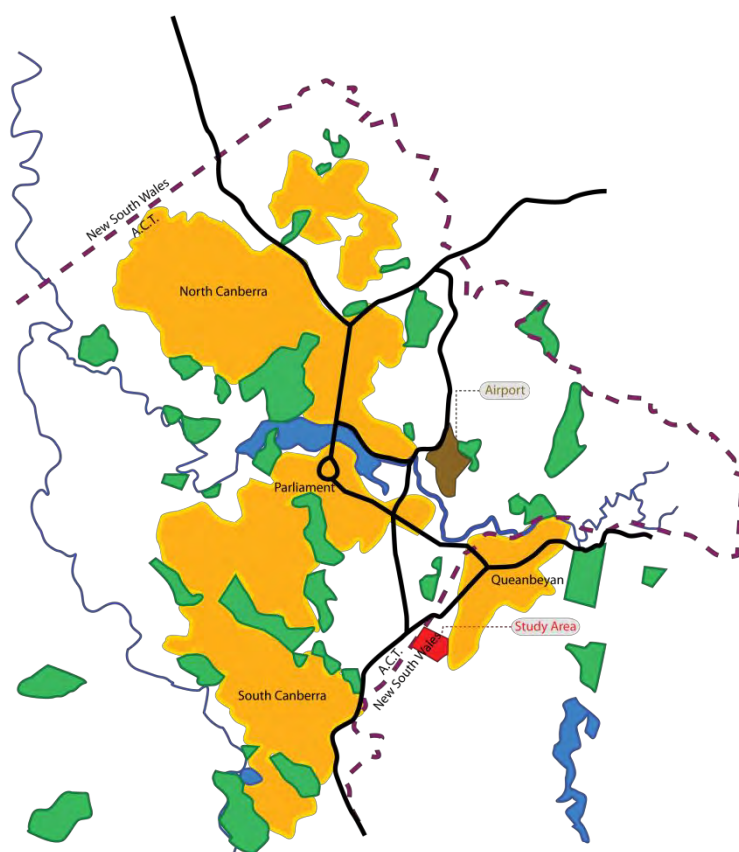
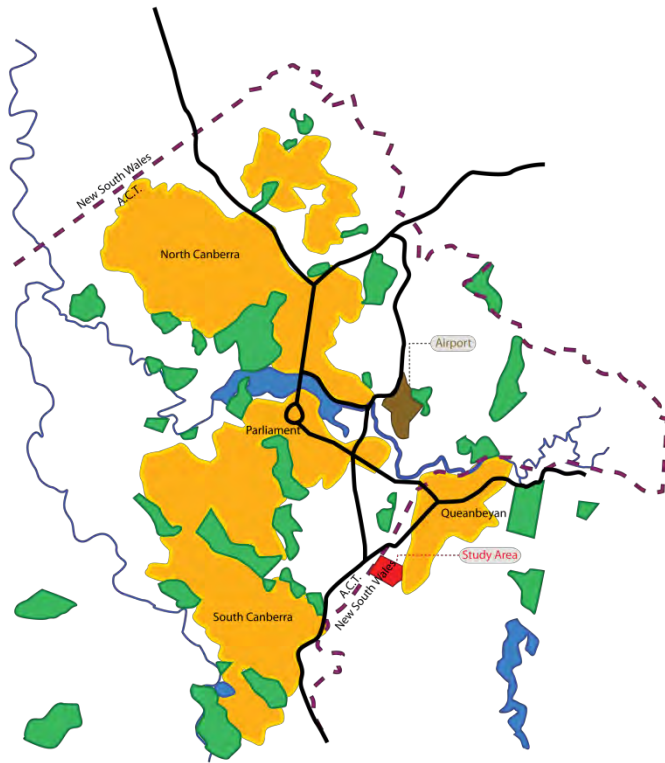


north traalee
supplementary report
to the



north traalee
local environmental study

north traalee
supplementary report
to the



north traalee
local environmental study

prepared for
Queanbeyan City Council

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executive summary

This Supplementary Report to the North Tralee Local Environmental Study provides the necessary background information for Queanbeyan City Council (QCC) to evaluate and make a decision on the North Tralee Site (the Site) in relation to determining the width of the buffer/ open space land and the extent of the employment lands in relation to the eastern boundary of the Site. In addition, this Supplementary North Tralee LES makes recommendations in relation to the heritage item H3 – Stone Façade Building, located on the Site.

The North Tralee LES (December 2011), found that the land at North Tralee is generally suitable for employment, conservation, community and open space land uses, outside of flood prone land (i.e. 1 in 100 yr flood affected areas), subject to a number of recommendations. These recommendations included identifying the extent of buffer areas on the eastern boundary of the Site, to ensure the amenity of the existing Jerrabomberra suburb would not adversely impacted by the development.

The North Tralee LES (December 2011) recommended a substantial buffer to the eastern boundary of the Site, based on environmental noise studies. The buffer was identified to protect the amenity of the existing urban areas of Jerrabomberra. A reduced buffer area was investigated during the preparation of the 2011 LES, however this option could not be supported at the time, on acoustic impact grounds on the existing dwellings in Jerrabomberra.

In 2014 the land owners requested Council to defer the buffer area to permit further investigations if alternative solutions could be considered which would allow for the reduction of the buffer. In response to the land owner's request to defer the buffer zone land, Council resolved at its 26 March 2014 Ordinary Council meeting, to engage consultants to review additional acoustic studies commissioned by the applicant, to determine the final width of the buffer.

In addition, Council is seeking recommendations in relation to the Stone Façade Building, identified for conservation and retention by Council's Heritage Advisory Committee at its meeting of 2 November 2010. The Stone Facade Building is located within the flood prone land on the Site.

As a result of the studies undertaken for this Supplementary Report, updated recommendations include:

- It is considered appropriate to extend the employment lands to the east on the basis that mitigation measures are implemented including:
 - Construction of a 3.0m high acoustic mound, landscaped on the eastern site boundary (wholly within the Site to ensure its care, control and management falls to the Site owners and is not a burden on QCC).
 - Building location and building layout should be considered in the planning process. In particular, 'L' shaped buildings and windows and

- openings of buildings orientated away from the eastern boundary.
- A clause should be incorporated into the draft LEP which requires the consideration of noise impacts and other impacts from proposed development within the North Tralee B7 –Business Park zone on existing residential properties to the east of North Tralee, in Jerrabomberra. This would be similar to Clause 7.4 of the Queanbeyan LEP (South Tralee) 2012.
- In relation to the Heritage item H3 – Stone Façade Building, it is recommended that Heritage item H3 – Stone Façade Building should be included as an item of local heritage significance in any future draft LEP for North Tralee.

It is not considered that the identification of Heritage item H3 – Stone Façade Building presents an impediment to the rezoning of the Site, particularly as it is located within the Flood Prone Land. It is envisaged that the building could be restored in the future and be included as a feature of the Site.

This report does not repeat the detail of previous studies where they remain relevant rather, a review of additional information lodged by the applicant and reviewed by Council's consultants in relation to the buffer zone on the eastern boundary of the Site.

This Supplementary Report to the North Tralee Local Environmental Study must be read in conjunction with the December 2011 North Tralee Local Environmental Study.

1. introduction

There has been considerable analysis of land use planning issues in the Queanbeyan Local Government Area over a number of years, particularly the detailed analysis of the South Jerrabomberra area, which includes North Tralee (the Site), The Poplars and South Tralee. In December 2008, the NSW Department of Planning (DoP) approved the *Queanbeyan Residential and Economic Strategy 2031* revised Strategy map. A revised Strategy map was prepared and forwarded to the DoP for consideration. This was reviewed and was approved, subject to conditions, on 10 December 2008 (see **Figure 1**). Queanbeyan City Council (QCC) resolved and proceeded to prepare draft Local Environmental Plans (LEPs) for Stage 1 of South Jerrabomberra which included sites at 'The Poplars', North Tralee and South Tralee (see **Figure 2**).

Various Local Environmental Studies for the South Jerrabomberra sites have been undertaken over the past 10 years to inform the rezoning process including:

- Tralee Local Environment Study (March 2005) prepared by URS, which covered both the North Tralee and South Tralee sites.
- South Tralee Supplementary Local Environmental Study (August 2009) prepared by Eco Logical Australia.
- South Tralee Supplementary Local Environmental Study (August 2010) prepared by Eco Logical Australia and Willana Associates.
- Poplars Local Environmental Study (May 2011) prepared by Willana Associates.
- North Tralee Local Environmental Study (December 2011) prepared by Willana Associates.
- Planning Proposal to Rezone Land at North Tralee (April 2014) prepared by QCC.

Consequently, the Queanbeyan Local Environmental Plan (South Tralee) 2012 was gazetted on 9 November 2012, rezoning land for up to 2000 new homes; a town centre; land zoned for private recreation and also land identified for environmental consideration.

The Queanbeyan Local Environmental Plan (Poplars) 2013 was gazetted on 23 August 2013 rezoning the Poplars site for approximately:

- 7 hectares for retail and commercial activities.
- 30 hectares for a business park.
- 53 hectares for private recreation.
- 110 hectares for environmental consideration.

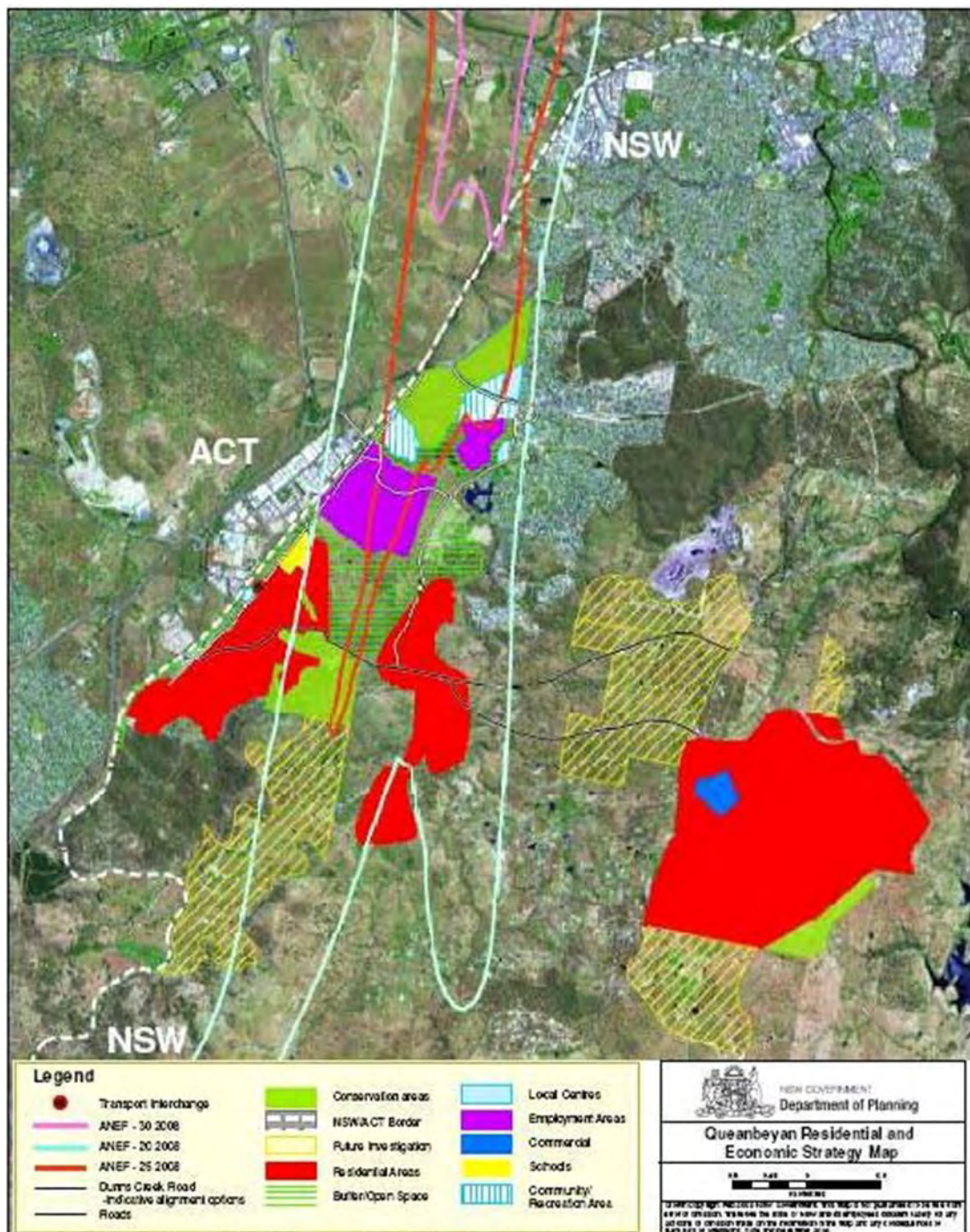


Figure 1 | Queanbeyan Residential and Economic Strategy Map (Approved December 2008)

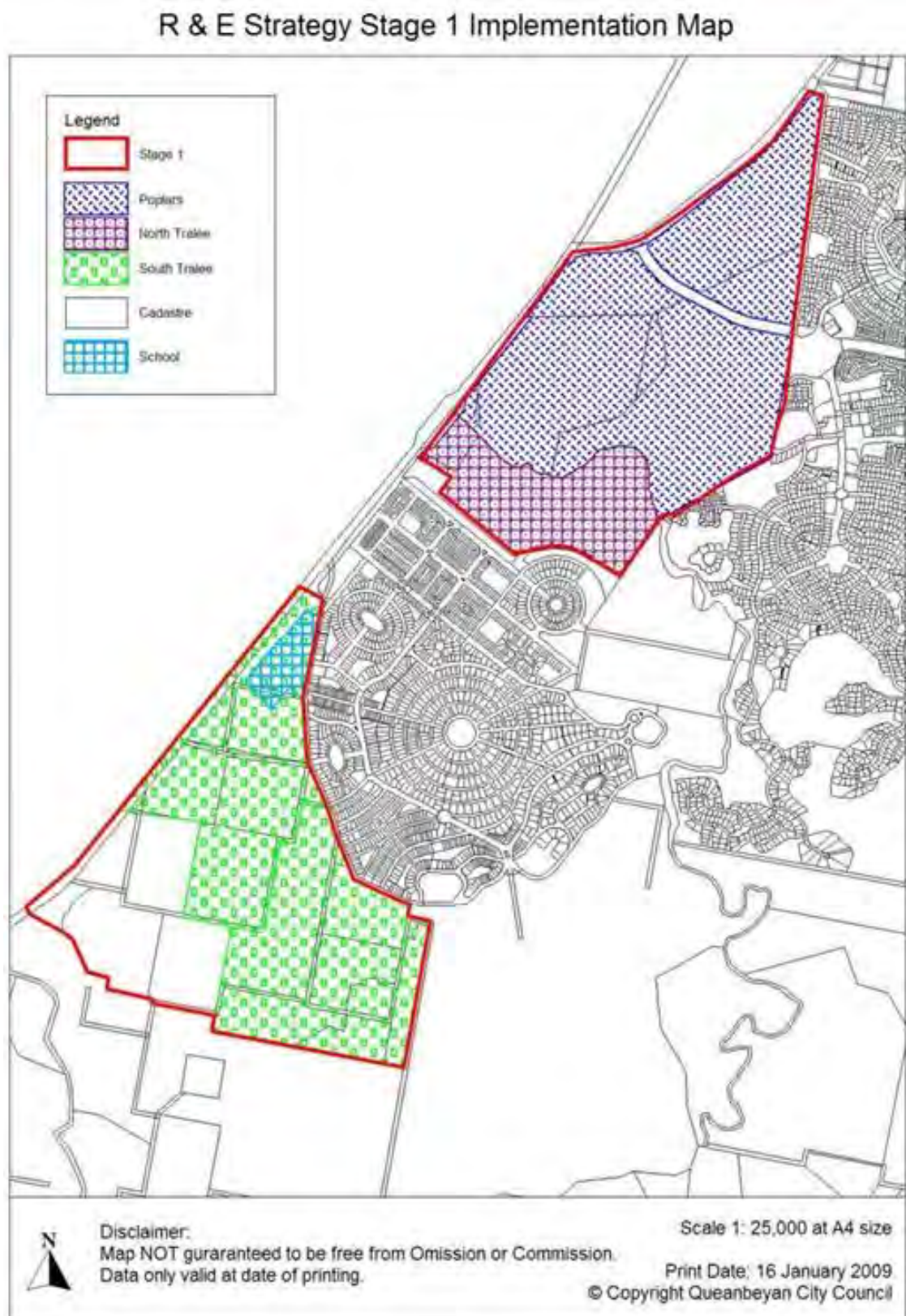


Figure 2 | Stage One, South Jerrabomberra

The North Tralee LES (December 2011), found that the land at North Tralee is generally suitable for employment, conservation, community and open space land uses, outside of flood prone land (i.e. 1 in 100 yr flood affected areas), subject to a number of recommendations. These recommendations included identifying the extent of buffer areas to ensure the amenity of the existing Jerrabomberra suburb would not be adversely impacted by the development.

The rezoning of North Tralee has not progressed due to the flood affected land at the Site. The land owners requested that QCC progress the rezoning of the North Tralee for employment lands based on:

- The flood prone land be deferred.
- The buffer zone to the east of the Site, adjoining the existing suburb of Jerrabomberra, as identified in the LES (December 2011) also be deferred.

At its Ordinary Council Meeting of 26 March 2014, Councillors, in relation to the North Tralee Site, resolved:

1. *That Council progress the Draft Local Environmental Plan (North Tralee) as Generally shown on Figure 1 and undertake all necessary actions, including preparing a Planning Proposal and associated actions if required, for the rezoning of the land for employment lands and other associated uses.*
2. *The Council agrees to the flood prone land located within the 1 in 100 ARI flood area be deferred.*
3. *That in regard to the buffer area in Figure 1 work commissioned by the applicant be reviewed by Council's consultants to determine the final width of the buffer.*
4. *That Council does not support deferral of the land identified in Figure 1 as buffer zone/open space from the Draft Queanbeyan Local Environmental Plan (North Tralee).*

The North Tralee LES (December 2011) recommended a substantial buffer to the eastern boundary of the Site (refer to **Figure 3** below), based on environmental noise studies. The extent of this buffer was established on the basis of recommendations of independent noise consultants, Renzo Tonin. The buffer was identified to protect the amenity of the existing urban areas of Jerrabomberra. A reduced buffer area (see **Figure 4**) was investigated during the preparation of the 2011 Local Environmental Study however, this option could not be supported at the time on acoustic impact grounds on existing dwellings in Jerrabomberra.

An adequate noise buffer is required to protect the amenity of residential areas in close proximity to the Site. The noise report prepared as part of the North Tralee LES (2011) states that *it is difficult to support a scenario where the employment land uses are located further to the east of the Site (e.g. where the buffer is reduced)*. However, the land owners requested Council to defer the buffer area to permit further investigations if alternative solutions could be considered which would allow for the reduction of the buffer.



Figure 3 | Extract of 'Figure 1' as referred to in Council's resolution for North Tralee at its meeting of 26 March 2014. The image is the recommended land uses if flood prone land issues are not resolved in the short term (Figure 36 of the North Tralee Local Environmental Study by Willana Associates (Dec 2011))

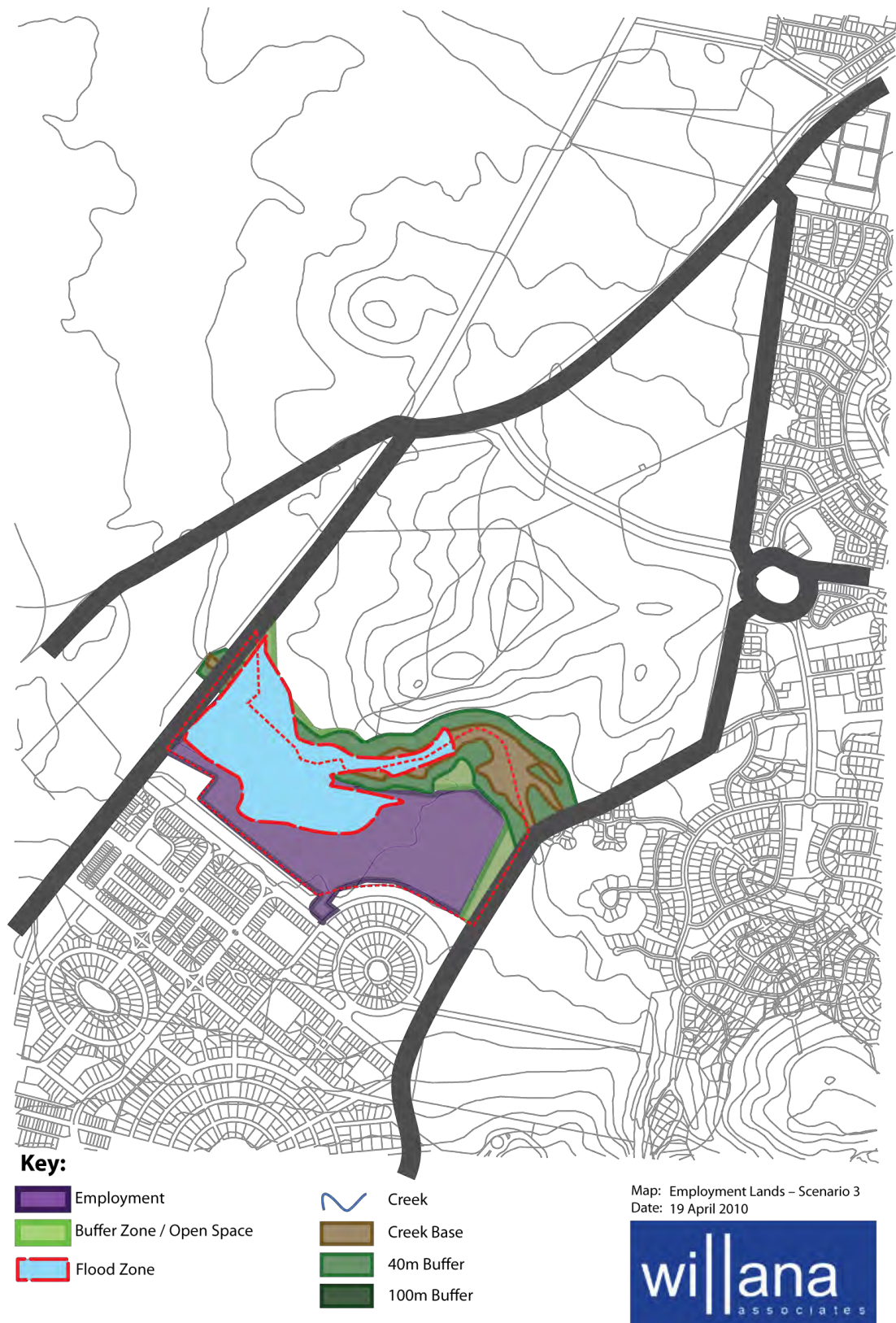


Figure 4 | The image is 28.9ha of land for employment uses located outside of the flood prone land (Figure 22 of the North Tralee Local Environmental Study by Willana Associates (Dec 2011))

Following Council's resolution at its 26 March 2014 Ordinary Council meeting, QCC submitted a Planning Proposal request to the NSW Department of Planning and Environment to rezone North Tralee for employment and other uses. Gateway Determination was issued by the Department of Planning and Environment on 23 May 2015.

In response to the land owner's request to defer the buffer zone land, Council resolved to engage Council's consultants to review work commissioned by the applicant to determine the final width of the buffer.

In addition, Council is seeking recommendations in relation to the Stone Façade Building, identified for conservation and retention by Council's Heritage Advisory Committee at its meeting of 2 November 2010. The Stone Facade Building is located within the flood prone land on the Site.

This report does not repeat the detail in previous studies where they remain relevant, rather a review of additional information lodged by the applicant and reviewed by Council's consultants in relation to the buffer zone on the eastern boundary of the Site.

This Supplementary Report to the North Tralee Local Environmental Study must be read in conjunction with the December 2011 North Tralee Local Environmental Study.

1.1. New Information

The following documents have been reviewed and inform the recommendations and outcomes of this Supplementary Report to the North Tralee Local Environmental Study:

Proponent commissioned documents:

- The Proponent's Concept Plan dated 14/04/15 (refer to Appendix A)
- Wilkinson Murray – North Tralee Development – Industrial Noise Assessment (Appendix B)
- Wilkinson Murray Acoustic Assessment – Proposed Bridge Works, South Jerrabomberra (May 2014) (refer to Appendix C)

Council commissioned documents:

- Renzo Tonin & Associates – North Tralee, Queanbeyan – Remodelling and Assessment for Proposed Buffer Zone (July 2014) (Appendix D)

1.2. Purpose of the Supplementary Report to the North Tralee Local Environmental Study

The purpose of this Supplementary Report to the North Tralee Local Environmental Study is to:

- Update the outcomes of the North Tralee LES (December 2011) given the additional acoustic reporting that has been undertaken in relation to the Site since 2011.

- Review the buffer zone to the east of the Site, as recommended in the North Tralee LES (December 2011) and determine if the extent of the buffer zone can be reduced, whilst maintaining the amenity of residential areas in close proximity to the Site.
- Make recommendations in relation to the Heritage item (H3) Stone Façade Building located at the Site.
- Inform the preparation of the draft Local Environmental Plan for the Site.

The objectives of the Supplementary Report to the North Tralee Local Environmental Study include:

- Recommend appropriate zonings and local provisions based upon the Standard Instrument LEP that will contribute to sustainable development and produce complementary mapping layers.
- Identify and recommend location and nature of employment lands to accommodate the target growth in jobs associated in population growth in Queanbeyan in accordance with the *Queanbeyan Residential and Economic Strategy 2031*.
- Confirm how and where key environmental values can be conserved.
- Recommend measures to manage potential land use conflicts.

2. study area

The Queanbeyan Local Government Area (LGA) is located in southern New South Wales approximately 180km south west from Sydney. It is adjoined by the Australian Capital Territory (ACT) to the north, west and south west. To the north east, east and south is the Palerang Local Government Area. Canberra is the nearest metropolitan area, being between 2 and 5 kilometres from the nearest developed area of Queanbeyan. Goulburn, another regional centre, is approximately 80km to the north east. The LGA lies within 2 main valleys which are dissected by the Queanbeyan River and Jerrabomberra Creek.

North Tralee covers 55.64ha and is the site of the old Fraser Park Speedway. The Site is situated south west of Queanbeyan, adjacent to the ACT/NSW border, south of the proposed 'Poplars' release area and west of the existing Jerrabomberra residential development (**Figure 5**).



Figure 5 | North Tralee LES study area

2.1. Land ownership and zoning

The site is located at 360A Lanyon Road, North Tralee and is legally described as:

- Lot 1 DP 313299
- Lot 6 DP 239080
- Lot 1 DP 213249
- Lot 1 DP 323002
- Lot 1 DP 333443

The Site is principally owned by the Village Building Company Pty Ltd (VBC) and two members of the Morrison family.

The Site is currently zoned 1(a) (Rural A Zone) under Queanbeyan Local Environmental Plan 1998.

2.2. Surrounding development

There have been and are proposed, a number of significant urban releases on the western side of the Queanbeyan Urban Area. These include Jerrabomberra, North Tralee, South Tralee and 'The Poplars'.

Jerrabomberra

To the east of the North Tralee study area is the suburb of Jerrabomberra. Jerrabomberra consists of three areas; North Terrace, The Heights (north of Edwin Land Parkway) and The Park. The first serviced blocks in stage one of the residential release at Jerrabomberra were released in 1988.

Features of the suburb include Jerrabomberra Mountain Reserve, Lake Jerrabomberra, Mount Jerrabomberra, various reserves, a community centre and a primary school and the Jerrabomberra Public School, which has been opened since 2002. Jerrabomberra also supports a shopping centre which is located north east of the Jerrabomberra roundabout at the intersection of Edwin Land Parkway and Limestone Drive.

‘The Poplars’

‘The Poplars’ study area is located at the south western edge of the Queanbeyan LGA, north of the North Tralee site. ‘The Poplars’ site was rezoned in accordance with Queanbeyan Local Environmental Plan (Poplars) 2013 (refer to **Figure 6**).

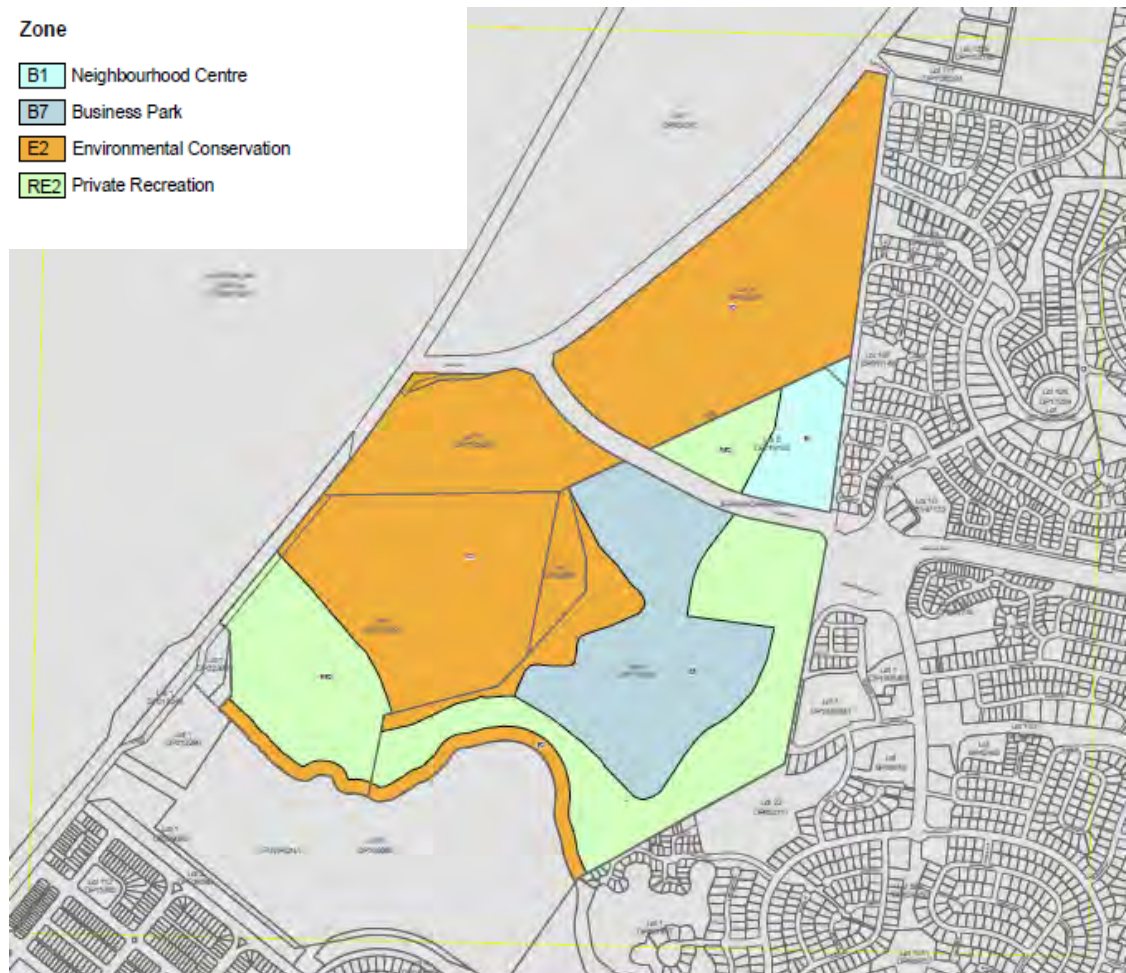


Figure 6 | Queanbeyan LEP (Poplars) 2013 – Land Zoning Map

South Tralee

The southern release area in the LGA is South Tralee. The Queanbeyan Local Environmental Plan (South Tralee) 2012 was gazetted on 9 November 2012, rezoning land for up to 2000 new homes, a town centre, land zoned for private recreation and also land identified for environmental consideration (refer to **Figure 7**).

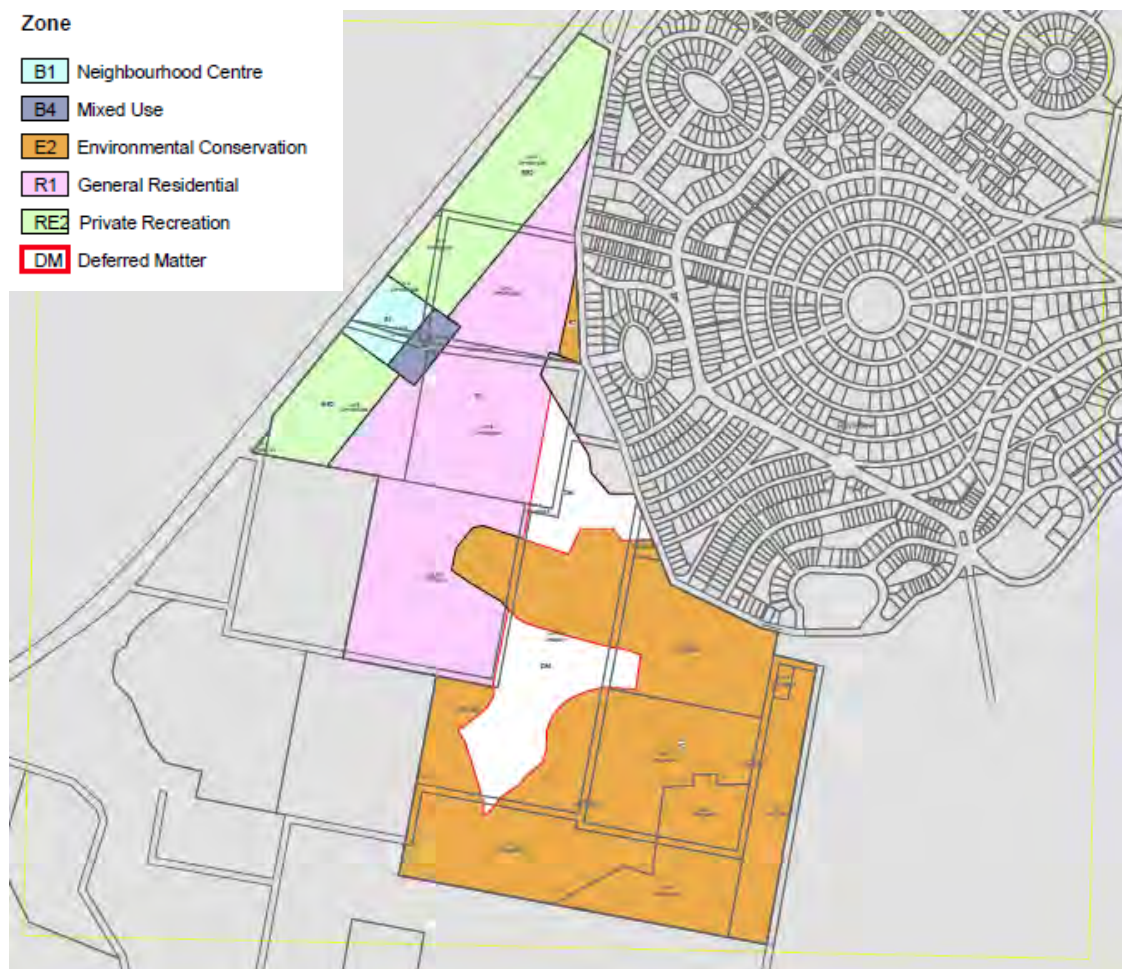


Figure 7 | Queanbeyan LEP (South Tralee) 2012 – Land Zoning Map

3. strategic planning framework

The strategic planning framework for the Site, as outlined in Chapter 3 of the North Tralee LES (December 2011), remains relevant. A summary of new or updated strategic planning documents is provided below.

3.1. Regional Growth Plans

In June 2014, the NSW Government released new draft regional boundaries for NSW. Once the boundaries are finalised for each region, they will provide the basis for a new generation of strategic plans called Regional Growth Plans. Queanbeyan LGA falls within the South East and Tablelands regional area.

The NSW Government is developing a new Regional Growth Plan for the way the South East and Tablelands will grow over the next 20 years. The new Regional Growth Plan will guide future planning and investment decisions covering housing, economic development and jobs, open space and the transport to connect our homes, jobs, education and recreation facilities.

Until a Regional Growth Plan is prepared, the *Sydney-Canberra Corridor Regional Strategy 2006* continues to apply to the region.

3.2. Additional Strategic Documents

Further strategic documents considered (but not limited to) during the preparation of the Supplementary Report to the North Tralee Local Environmental Study include:

- Queanbeyan City Council Community Strategic Plan 2013 – 23
- Canberra Airport 2014 Master Plan (January 2015)

4. statutory framework

The statutory framework for the Site, as outlined in Chapter 4 of the North Tralee LES (December 2011), remains relevant. This section reviews any new or amended statutory documents and discusses any implications for the North Tralee study area.

4.1. Local Environmental Plans

The Queanbeyan Local Environmental Plan 2012 (QLEP 2012) is the principle environmental planning instrument influencing development in the LGA and was gazetted (in accordance with the Standard Instrument (Local Environmental Plans) Order 2006) in November 2012. It applies to a variety of zones across the LGA and identifies a range of land uses which can take place in each of the zones. It also includes a number of performance based objectives and development standards influencing the form and intensity of development. North Tralee, South Tralee and 'The Poplars' sites were deferred matters under the QLEP 2012.

The Queanbeyan Local Environmental Plan (South Tralee) 2012 was gazetted on 9 November 2012, rezoning land for up to 2000 new homes; a town centre; land zoned for private recreation and also land identified for environmental consideration (see **Figure 6**).

The Queanbeyan Local Environmental Plan (Poplars) 2013 was gazetted on 23 August 2013 rezoning (see **Figure 7**) 'The Poplars' site for approximately:

- 7 hectares for retail and commercial activities.
- 30 hectares for a business park.
- 53 hectares for private recreation
- 110 hectares for environmental consideration.

4.2. Development Control Plans

There are 3 DCPs that apply in the Queanbeyan (LGA) as outlined below:

- The overarching Queanbeyan DCP was adopted by Council on 12 December 2012 and is applicable to the entire Queanbeyan LGA excluding land release areas which have their own DCP.
- The Googong DCP was adopted by Council on 12 November 2014 and applies to land in the new township of Googong.
- The South Jerrabomberra DCP commenced on 6 March 2015. The South Jerrabomberra area consists of 'The Poplars', North and South Tralee, Environa, Forrest Morrison and part of Tralee Station. The South Jerrabomberra DCP applies to rezoned land at 'The Poplars' and South Tralee and will apply to the remainder of the South Jerrabomberra area as each rezoning proceeds.

5. environmental impact

5.1. Reduction to the buffer

This section reviews the environmental impact of reducing the buffer zone on the eastern boundary of North Tralee.

Under the *Queanbeyan Residential & Economic Strategy 2031* (2008), 28.9ha of employment lands was envisaged at North Tralee (**Figure 8**). This was considered to be the general employment land potential for the Site, as identified at the strategic planning level prior to this LES being undertaken. Under the *Queanbeyan Residential & Economic Strategy 2031* (2008), the impacts of the 28.9ha of employment lands had been investigated and recommendations made should the flood issue be resolved and rezoning of the land proceeds. This is identified as Scenario 1 outcome for the Site.

On the basis that the issues surrounding the flood prone land remain unresolved, the North Tralee LES (December 2011) investigated the possibility of maintaining the 28.9ha of employment lands, outside the flood prone land, by extending the employment lands east towards the existing Jerrabomberra residential area (Scenario 2 - **Figure 9**). As a result of the acoustic report, prepared in relation to locating the employment lands to the east in accordance with Scenario 2, it was concluded in the North Tralee LES (December 2011) that the potential noise impacts on existing residential properties, to the east of the North Tralee site, meant that it would be difficult to support the scenario where the employment land uses are located further towards the east of the Site.

As a result, the North Tralee LES (December 2011) recommended a reduced employment outcome of approximately 15 – 16ha of employment lands, located outside of the flood prone land and maintaining the buffer/ open space zone in accordance with the endorsed *Queanbeyan Residential & Economic Strategy 2031* (2008) – see **Figure 10** (Scenario 3).

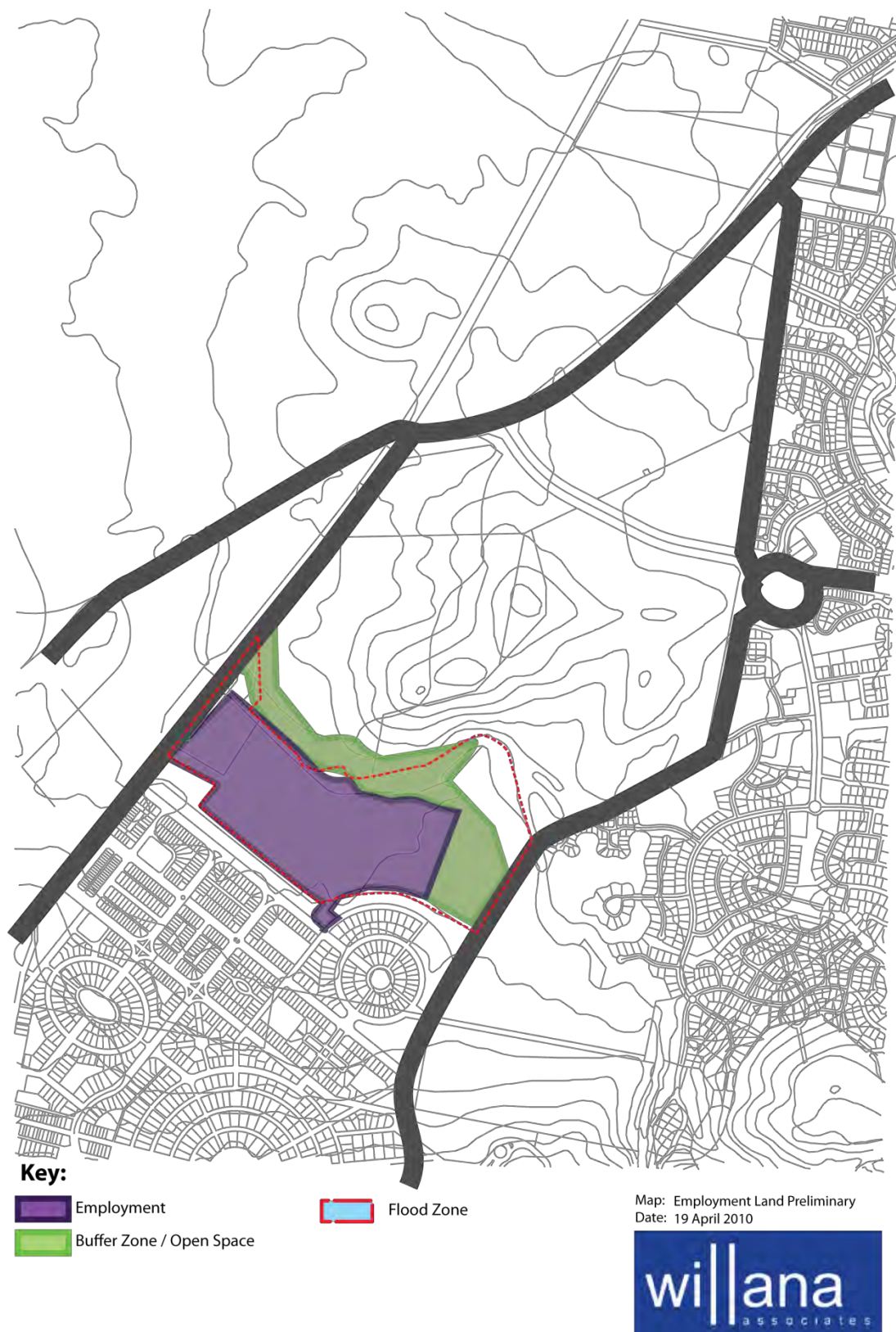


Figure 8 | Scenario 1: North Tralee employment lands (approx. 28.9ha) as outlined in the endorsed *Queanbeyan Residential & Economic Strategy 2031*



Figure 9 | Scenario 2: 28.9ha of Employment Lands located outside flood prone area (i.e. reduced buffer to the eastern boundary of the Site).



Figure 10 | Scenario 3: North Tralee LES (December 2011) Recommended land uses including 15 – 16ha Employment Lands

The primary environmental issues associated with the proposed reduction in the buffer/ open space zone and increase in employment lands to approximately 28.9ha, the subject of this Supplementary Report to the North Tralee Local Environmental Study, includes:

- Visual Impact
- Acoustic impact
- Economic impact
- Traffic and transport
- Stormwater

28.9ha was considered to be the general employment land potential for the Site, as identified in the endorsed *Queanbeyan Residential & Economic Strategy 2031* (2008). Consequently, the impacts of 28.9ha of employment lands has been thoroughly investigated at both the time of the preparation of the *Queanbeyan Residential & Economic Strategy 2031* (2008) and also as part of investigations for the North Tralee LES (December 2011) (this was on the basis that the issues associated with flood prone land could, eventually be resolved).

As a consequence, the recommendations of the North Tralee LES (December 2011) in relation to hydrology, bushfire risk management, industrial and employment lands, utilities and infrastructure phasing and traffic and transport remain relevant to the proposed outcome to reduce the width of the buffer/ open space land on the eastern boundary of the Site. In particular, in terms of traffic and transport, the reduction in employment lands to approximately 15ha under the North Tralee LES (December 2011) for the Site, was identified as a potential issue for the viability of the bridge crossing of Jerrabomberra Creek.

The North Tralee LES (December 2011) Traffic and Transport Recommendations included that a new crossing of Jerrabomberra Creek will be required to avoid disruption of the adjoining residential areas while connecting North Tralee with further proposed employment lands at 'The Poplars' to the north and Environa to the south.

The suggested location of the crossing is shown in **Figure 11**. It was recommended that the costs for the Bridge should be apportioned across all sites in the wider South Jerrabomberra area (South Tralee, Environa, 'The Poplars').

However, it was flagged in the North Tralee LES (December 2011) that should the area of land developable for employment lands be reduced to approximately 15 hectares, i.e. employment lands outside the Flood Prone area (i.e. refer to Figure 10 - Scenario 3 above), this may impact on the viability of the suggested bridge crossing of Jerrabomberra Creek. This was because the crossing is not required for 'The Poplars' and it was identified that it may be difficult to substantiate more than a nominal contribution by developers of that parcel. The North Tralee LES (December 2011) included that: *significantly reducing the area of development in North Tralee will reduce the contribution capacity, potentially placing pressure onto Council to subsidise the development.*

As a consequence, the proposal to pursue approximately 28.9ha of employment lands, as originally envisaged for the Site under the *Queanbeyan Residential & Economic Strategy 2031* (2008), will assist with the viability of the bridge crossing.



Figure 11 | Potential Jerrabomberra Creek Crossing

The primary environmental impacts that require further investigation for the current proposed Concept Plan (April 2015 – see **Figure 12** and **Figure 13**), prepared by the Proponent, are visual impact and acoustic impact. An assessment of the proposal, to increase the employment lands towards the eastern boundary of the Site, is provided below. It is important, as a result of the proposed increase to employment land uses, appropriate buffer zones with the existing Jerrabomberra suburb need to be determined to ensure the amenity of the suburb is not adversely impacted by the development.

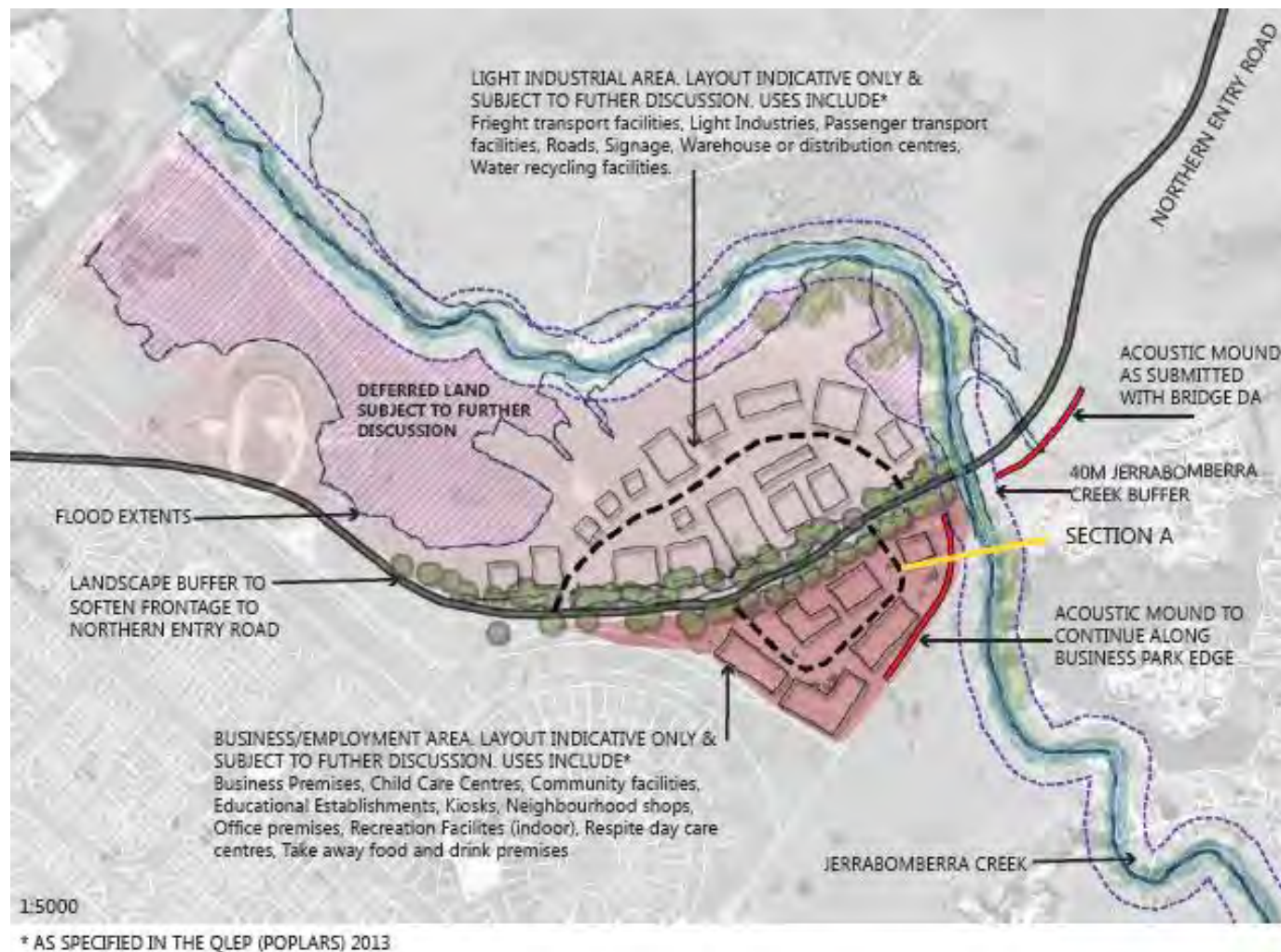


Figure 12 | Extract of the proposed North Tralee Concept Plan (April 2015) submitted by The Village Building Company

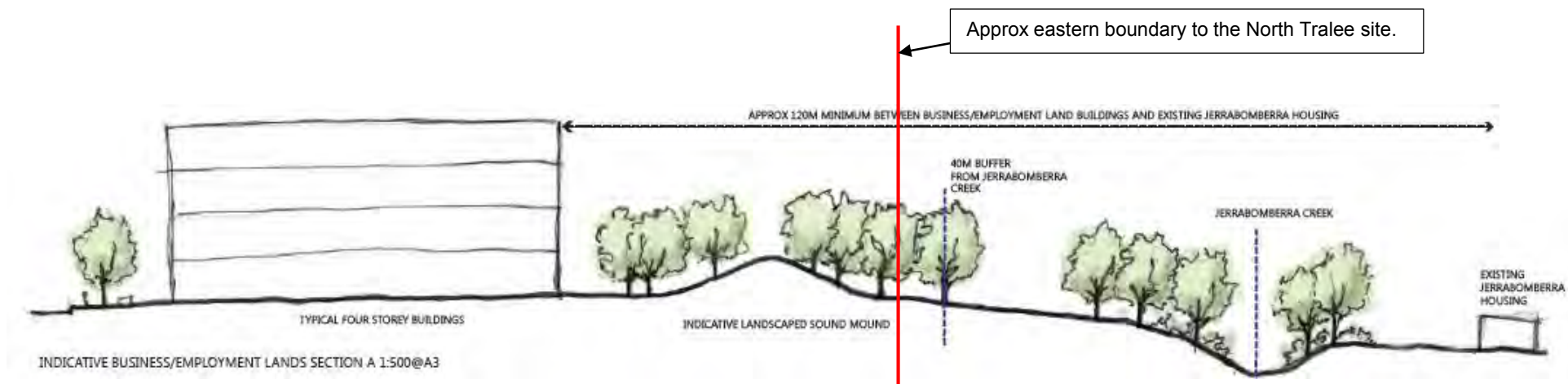


Figure 13 | Extract of the proposed North Tralee Concept Plan (April 2015) submitted by The Village Building Company – indicative section. The approximate location of the North Tralee property boundary has been added in red.

5.1.1. Landscape and Visual Character

Landscape character

A view impact analysis, from properties on Bayside Court, Jerrabomberra (on the pedestrian path west of Lake Jerrabomberra), and from Coachwood Avenue near Jerrabomberra Public School was undertaken to inform this Supplementary LES. Views from these areas, towards the site, are provided in the photographs below.



Photograph 1 | View from 36 Bayside Court looking west



Photograph 2 | View from opposite No. 25 Bayside Court looking north west



Photograph 3 | View from Coachwood Avenue looking south west. The site is in the low lying area behind the mound



Photograph 4 | View from Lake Jerrabomberra pedestrian path looking west



Photograph 5 | View from Lake Jerrabomberra pedestrian path looking west



Photograph 6 | Pedestrian recreational path adjacent to Lake Jerrabomberra looking north west

The reduction in the buffer/ open space land will be most evident when viewed from the properties at the western end of Bayside Court, closest to the eastern boundary of the Site.

The landscape and visual character assessment of the North Tralee Site, undertaken for the North Tralee LES (December 2011), remains relevant to this Supplementary LES. The landscape design of the development needs to give consideration to visual impact attenuation between the employment lands at North

Tralee and existing dwelling houses in Jerrabomberra to the east of the Site. The following discussion extracted from Chapter 5.2 of the North Tralee LES (December 2011) will inform the visual assessment of reducing the buffer zone as proposed in the Proponent's Concept Plan at **Figure 12**.

Visual Assessment – Discussion

Despite the low lying topography of the land, future development of the Site should be sensitive to the impacts that the built environment will have on the numerous views of the Site from surrounding vantage points.

- *Consideration must be given to the exposure of employment lands to existing residential areas of Jerrabomberra. Landscaping, minimum lot sizes and controls relating to building bulk and scale will help to address visual impact.*
- *Maximum building heights of 12m, consistent with Council's Industrial DCP and the height requirements within the ACT, is considered appropriate for the Site.*
- *Careful consideration must be given to signage, landscaping, setbacks and building frontage.*
- *Treatment of setbacks, building bulk/ scale and landscaping also needs to be considered.*
- *Careful consideration of the interface of the employment land use with existing residential development to the east of North Tralee must be taken into account in any LEP and DCP document arising from the LES.*

The indicative business/ employment lands Section A (at **Figure 13** above) indicates a 120m minimum distance between the business/ employment land buildings and existing Jerrabomberra Housing. The minimum height of the proposed acoustic mound (as recommended by Council's acoustic consultant's, Renzo Tonin) is 3.0m.

Currently, there is little in the way of landscaping along the edges of Jerrabomberra Creek, west of the existing housing at Jerrabomberra in the vicinity of the Site. The visual impact of the reduction in the buffer zone will be acceptable on the basis of appropriate landscaping of the acoustic mound, which must be located within the eastern property boundary of the North Tralee Site, and therefore under the care, control and management of the Site owner's. Any landscaping at the Site, including the acoustic mound, must also be consistent with the recommendations for bushfire risk included in the North Tralee LES (December 2011) remain relevant. Including:

Generally, it is recommended that each land use zone needs to be responsible for providing protection to adjoining lands. Therefore, Asset Protection Zones must be included within each land use zone boundary. The recommended setbacks outlined below, need to be considered in future DCP or master planning documents for the Site.

Buffer/Open space

- *The purpose of this designation is in part to protect (via its vegetation) the land bordering Jerrabomberra Creek. Whatever active vegetation management is*

proposed, it is considered unlikely to involve the planned application of fire. The area may therefore develop the ability to support more vigorous fire behaviour than the present grass cover, but its retention will require the ability to keep fire out. Thus a degree of perimeter protection to minimise the likelihood of encroachment will be important.

- *The only management constraints recommended include a degree of protection for road users in the form of a 10m wide mown strip beside roads which these land uses adjoin.*

Flood Prone Land

If the Flood Prone Land is not developed, or not developed in the short term until flood issues have been resolved, the following recommendations are made:

- *If the designated Flood Prone Land were to be managed as some form of Open Space, it would be possible to provide within that Open Space, an adequate buffer area to the remaining employment area to its south. This should be in the form of a 10m wide mown grass strip.*
- *Mowing should not interfere with land identified as Riparian Corridor.*
- *The capacity of the general open grassland, to protect the streamside, would not be compromised by the level of mowing proposed (keep between 50 & 100mm throughout Spring and Summer) beyond about 10-20m from the bank edges. In the case of a designated 40m wide Riparian zone, the first undisturbed 30m would incorporate all of the steeper part of the southern bank, and the remaining outer 10m being mown periodically would not jeopardise soil stability, overland flow filtration capacity, or movement of such animals as may use open grassland as a corridor.*
- *The proposed road through the block should be protected by mown verges, that is, both roadsides within the road easement should be kept slashed where it passes through open (undeveloped) land.*
- *On the western side of the North Tralee site, the proposed road near the ACT border and railway easement will provide an adequate bush (grass) fire protection setback. On its eastern side, the proposed new Employment Area should have a 10m setback, all of which could be provided on adjoining (Open Space) land.*

Employment Areas

- *Buildings in these areas will be required to be built to a standard which makes them highly resistant to attack by bushfires. They should be beyond the reach of flames in whatever vegetation exists, or will be allowed to develop, on adjoining land. In addition, there must be room for firefighters to access and operate in safety between the structures and the nearby fuels. This normally involves provision of a perimeter road or track. A total setback from unmanaged vegetation of 15m is recommended.*
- *Where an Employment Area adjoins Buffer/Open space with a primary environmental protection purpose, or steep land, a setback within the Employment Area will be necessary. Otherwise, suitable management within*

the Buffer/Open space can provide adequate setbacks between structures and retained vegetation.

- *Given that this development will be staged over many years, protection of the southern side of the Employment Area of NorthTralee block, and the adjoining land from escapes from the area, should include a 5m wide fuel-free access track with 5m of mowing on both sides.*

It has been concluded by Roger Fenwick Bushfire Consultant, that development is possible at the Site from a bushfire planning perspective. A number of strategies are suggested to ensure that the risk from bushfire can be minimised and that the approvals process can be streamlined. These strategies include:

- *Ensure adequate setback from bushfire prone vegetation.*
- *Integrate non combustible infrastructure within Asset Protection Zones (APZs) such as roads, easements and parking areas.*
- *Ensure adequate access and egress from the Site.*
- *Consider the adequacy of water supply and delivery of other services (gas and electricity).*
- *Provide temporary APZs during any staged development.*
- *Consider the requirements of ongoing APZ maintenance.*

Further bushfire advice and input into the planning process can be provided through the rezoning process and when a development footprint is determined. Further, a formalised bushfire assessment will be required to facilitate the development approval process.

5.1.2. Visual Assessment Conclusion

Investigations have shown that there are no impediments to extending the employment zone to the east of the site, as a result of the visual impact assessment, on the basis that mitigation measures are implemented including:

- A maximum 12m building height limit, from natural ground level is imposed on all buildings in the North Tralee employment lands.
- Landscaping of the eastern boundary of the Site is an important consideration in protecting the visual amenity of properties in Jerrabomberra to the east of the Site.
- Careful consideration must be given to signage, landscaping, setbacks and building frontage.
- Treatment of setbacks, building bulk/ scale and landscaping also needs to be considered.
- Careful consideration of the interface of the employment land use with existing residential development to the east of North Tralee must be taken into account in any LEP and DCP document arising from the LES.

5.1.3. Acoustic Impact

Renzo Tonin & Associates was engaged to conduct an environmental noise assessment of the proposed land uses for the North Tralee land release area in order to inform the North Tralee LES (December 2011). Renzo Tonin's report quantified the noise impact from industrial noise from the nearby Hume Industrial Estate located in the ACT and also aircraft noise and assesses the potential impact upon North Tralee land release area. In addition, future industrial site operation noise associated with North Tralee land release area, impacting on existing residential premises located nearby, was also assessed.

As a result of their previous acoustic study (which included modelling based on the 3 scenarios at **Figure 8**, **Figure 9** and **Figure 10**), Renzo Tonin recommended that noise control measures should be considered to reduce noise impacts to the affected residential areas only. Renzo Tonin recommend the following in-principle noise control solutions to reduce industrial noise impacts to residential areas in Jerrabomberra:

- *Noise screens / walls should be considered in the design phase of any industrial premise to be located within the North Tralee site. The noise screens / wall can form part of boundary fences and should be designed to and located such that the screen / wall provides sufficient noise attenuation to reduce noise impacts to neighbouring residential areas.*
- *Consideration should be given to building layout design at the design stage of an industrial development to ensure that noisy activities are located away from residential areas. For example, loading docks and driveways should be located towards the western side of the Site and the building located to the eastern side so that the building provides noise shielding of noisy activities to the affected residential areas.*

Importantly, it was considered at the time that the potential noise impacts on existing residential properties, to the east of the North Tralee Site, meant that it was difficult to support the scenario where the employment land uses are located further towards the east of the Site (i.e **Figure 4**), in order to maintain the amount of employment land uses on the Site, if the issues relating to flood prone land cannot be satisfactorily resolved.

Following Council's resolution at its meeting of 26 March 2014, that in regard to the buffer area, work commissioned by the applicant be reviewed by Council's consultants to determine the final width of the buffer, Renzo Tonin were commissioned by QCC in July 2014 to undertake noise modelling based on reducing the buffer zone as per **Figure 4**.

A copy of the North Tralee, Queanbeyan – Remodelling and Assessment for Proposed Buffer Zone, prepared by Renzo Tonin, dated 22 July 2014, is provided at **Appendix D**.

Renzo Tonin & Associates July 2014 report includes that, *for the purpose of the noise assessment, it has been assumed that heavy industries will be located on the*

western side of the employment area, while light industries will be located in the centre of the site and community centres and educational facilities will be located on the eastern side of the employment area. For the day time scenario it is assumed that all the industries and facilities would be operating concurrently and for the evening and night time scenarios, it is assumed that only heavy industries would be operating.

It is noted that Renzo Tonin undertook acoustic testing based on predicted worst case scenarios, including heavy industrial uses being permissible on the Site. It is not recommended that heavy industry is permitted on the Site. The recommended zone for the Site is B7 Business Park. It is recommended that the same uses are permitted with consent at North Tralee as per the *Queanbeyan Local Environmental Plan (Poplars) 2014* for land zoned B7 Business Park, as extracted below:

Zone B7 Business Park

1 Objectives of zone

- *To provide a range of office and light industrial uses.*
- *To encourage employment opportunities.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area.*
- *To provide for a well-designed business park development that appropriately responds to site constraints and adjoining residential development.*

2 Permitted without consent

Nil

3 Permitted with consent

Business premises; Child care centres; Community facilities; Educational establishments; Freight transport facilities; Kiosks; Light industries; Neighbourhood shops; Office premises; Passenger transport facilities; Recreation facilities (indoor); Respite day care centres; Roads; Signage; Take away food and drink premises; Warehouse or distribution centres; Water recycling facilities

4 Prohibited

Any development not specified in item 2 or 3

As a consequence, it is expected that the acoustic impact should be less than that modelled by Renzo Tonin.

Through the use of the SoundPLAN computer program and based on the various meteorological conditions (1. calm & isothermal conditions, i.e. acoustically neutral, 2. slight to gentle breeze. 3. moderate temperature inversion), Renzo Tonin prepared industrial noise contour plots. As outlined in the North Tralee LES (December 2011), the amenity criteria are determined in accordance with Chapter 2 of the NSW Industrial Noise Policy (INP).

The INP recommends base acceptable noise levels for various receivers, including residential, commercial, industrial receivers and sensitive receivers such as schools, hospitals, churches and parks. These base noise criteria are then lowered by up to

10dB depending on the extent of existing industrial noise impact upon the receiver. Higher levels of existing industrial noise therefore result in stricter Amenity Criteria applied to any new industrial development. In this way, the cumulative impacts of existing and known future industrial noise sources are minimised.

To limit continuing increases in noise levels, the maximum ambient noise level within an area from industrial noise sources should not normally exceed the acceptable noise levels specified in Table 2.1 of the INP, the applicable parts of which are reproduced below. Given that proposed uses for the North Tralee site may consist of childcare centres, commercial premises and industrial premises, the applicable amenity criteria for these proposed uses are presented in **Table 1** below. For noise from the proposed Site, impacting on the residential properties in Jerrabomberra, the amenity criteria for residential land uses were categorised as 'Suburban'.

From the noise contour plots undertaken in July 2014 by Renzo Tonin, based on the proposal to extend the employment lands east, industrial noise from the North Tralee site will not exceed DECCW's Industrial Noise Policy (INP) intrusive and amenity noise criteria during the daytime for the residential areas in Jerrabomberra.

The noise contour plots for industrial noise from the North Tralee site impacting neighbours for the proposal to extend the employment areas to the east, during the night time are shown in **Figure 14**, **Figure 15** and **Figure 16** for the three meteorological conditions. These noise contour plots indicate that industrial noise from the North Tralee site will exceed DECCW's Industrial Noise Policy (INP) intrusive and amenity noise criteria (35dB(A) and 40dB(A) respectively) for the residential areas in Jerrabomberra during night time (defined under the INP as the hours between 10:00pm – 7:00am).

Table 1 | Amenity Criteria for Various Land Uses

Type of Receiver	Indicative Noise Amenity Area	Time of Day	Recommended L_{Aeq}	Noise Level, dB(A)
			Acceptable	Recommended Maximum
Residence	Suburban	Day	55	60
		Evening	45	50
		Night	40	45
School classrooms – internal	All	Noisiest 1-hour period when in use	35 ¹	40 ¹
Commercial Premises	All	When in use	65	70
Industrial Premises	All	When in use	70	75

Notes: 1. Criteria based on internal noise levels

Source: Renzo Tonin (October 2011) North Tralee Environmental Noise Impact Assessment for LES.

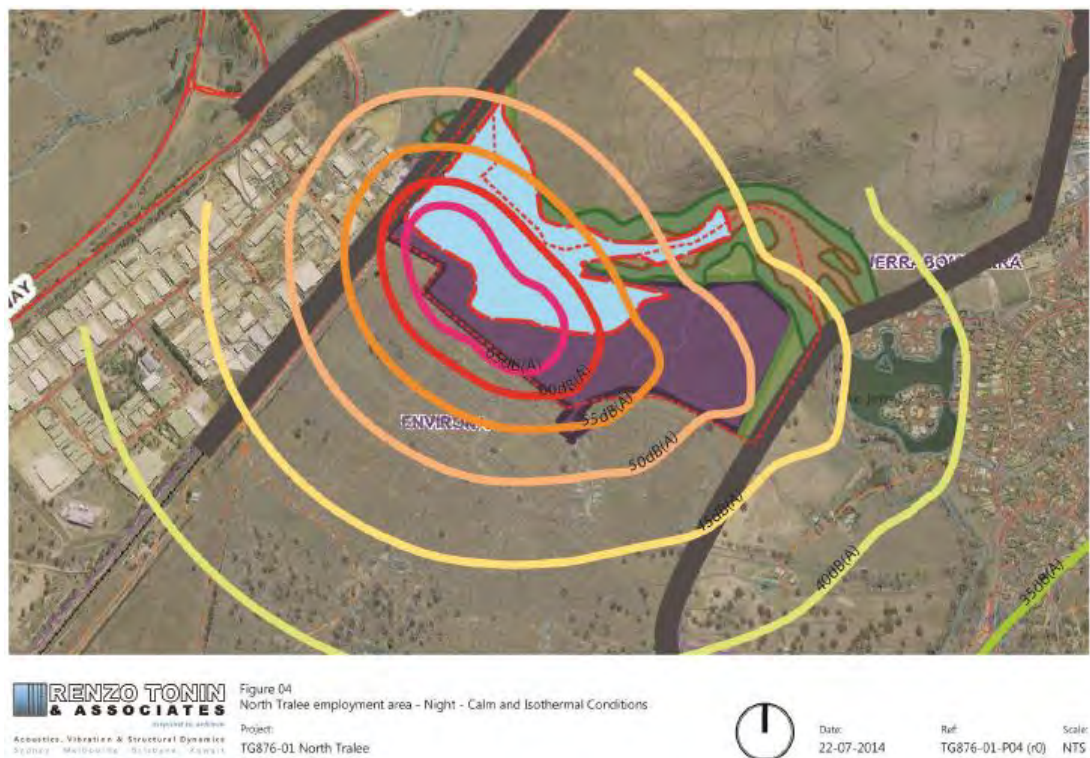


Figure 14 | North Tralee Employment sources – Night – Calm & Isothermal Conditions

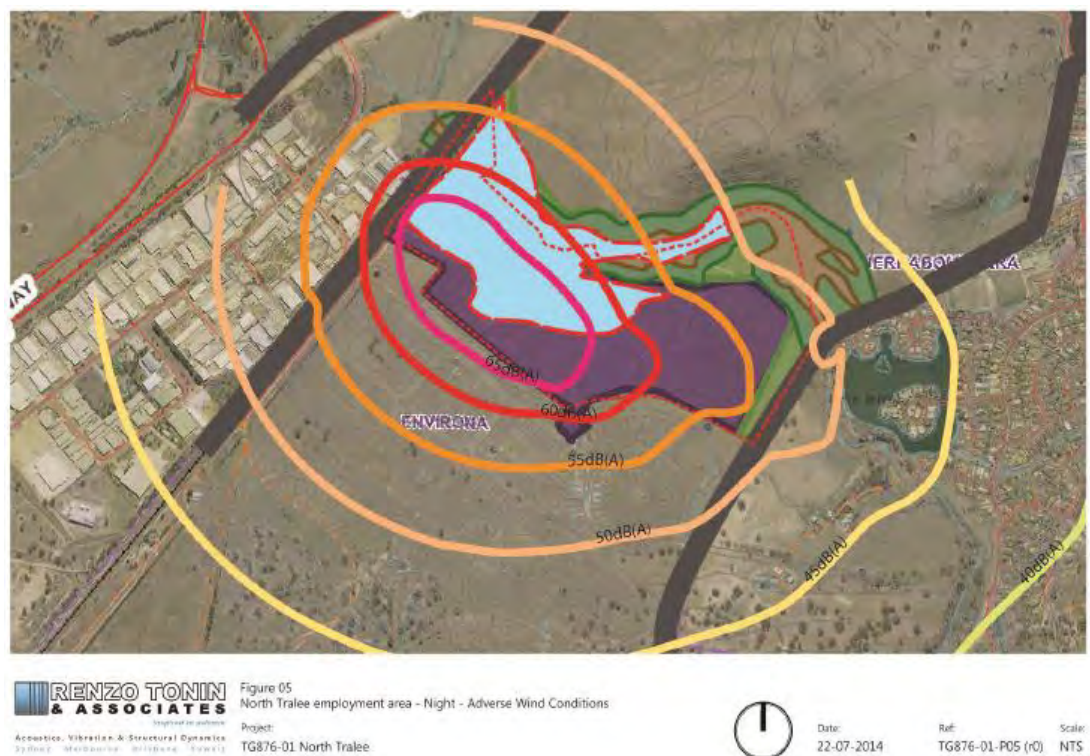


Figure 15 | North Tralee Employment area – Night - Adverse Wind conditions



Figure 16 | North Tralee Employment area – Night – Temperature Inversion

As a result of the noise modelling, Renzo Tonin recommended that (Appendix D):

The following recommendations provide in-principle noise control solutions to reduce noise impacts to residential areas in Jerrabomberra. This information is presented for the purpose of the decision making and cost planning process only. The assistance of an acoustic consultant must be sought at the detailed design phase of the project to provide more accurate design advice when there is more detailed information about building type, lot arrangement and traffic flow information available.

The advice provided here is in respect of acoustics only. Supplementary professional advice may need to be sought in respect of fire ratings, structural design, buildability, fitness for purpose and the like.

- *Noise screens/ walls should be considered in the design phase of any industrial premises to be located within the North Tralee site. The noise screens/ wall can form part of boundary fences and should be designed to and located so that the screen/ wall provides sufficient noise attenuation to reduce noise impacts to neighbouring residential areas.*
- *Consideration should be given to building layout design at the design stage of an industrial development to ensure that noisy activities are located away from residential areas. For example, loading docks and driveways should be located towards the western side of the site and the building located to the eastern side so that the building provides noise shielding of noisy activities to the affected residential areas.*

- *No premises are to be built outside of the employment area shown in the concept plan. The placement of community centres, educational facilities, light industrial and heavy industrial facilities should be limited to the areas designated in Figure 7 (extract at **Figure 17** below).*

Following Renzo Tonin's Remodeling and Assessment of the revised buffer, the Proponent prepared the April 2015 Concept Plan (**Figure 12** and **Figure 13** above), for additional assessment by Renzo Tonin. The Concept Plan relies on the provision of an acoustic mound, on the eastern boundary of the Site, in concert with additional acoustic mitigation measures, in order to extend employment land uses further east. As a result, the proposal will achieve approximately 29.8ha of employment land uses at the Site, consistent with the 2008 Strategy.

The proposed noise mitigation measures include:

- The construction of a landscaped sound mound to the west of the 40m Jerrabomberra Creek buffer, on the Site's eastern boundary.
- Land use types, for example, locating business/ employment land uses closer to existing residential areas and light industrial land uses further away from existing residential areas.

Renzo Tonin undertook further modelling based on the Proponent's 2015 Concept Plan. Renzo Tonin investigated the further mitigation required to achieve the project noise criteria (as indicated in **Figure 18**). The proposed mitigation is a combination of:

- Extending the acoustic mound in the Business/Employment Area to start from the edge of the Northern Entry Road and extending to the southern site corner.
- Install a 3m high acoustic mound along the eastern boundary of the Light Industrial Area.
- Maintain a buffer zone to the eastern end of the Light Industrial Area, or the placement of an L-shaped industrial building with an approximate footprint equal to the buffer zone at the eastern end of the Light Industrial Area. It is considered that buildings can provide a more effective buffer than mounding and landscaping.

Renzo Tonin have recommended that the minimum height of the acoustic mound should be 3.0m.

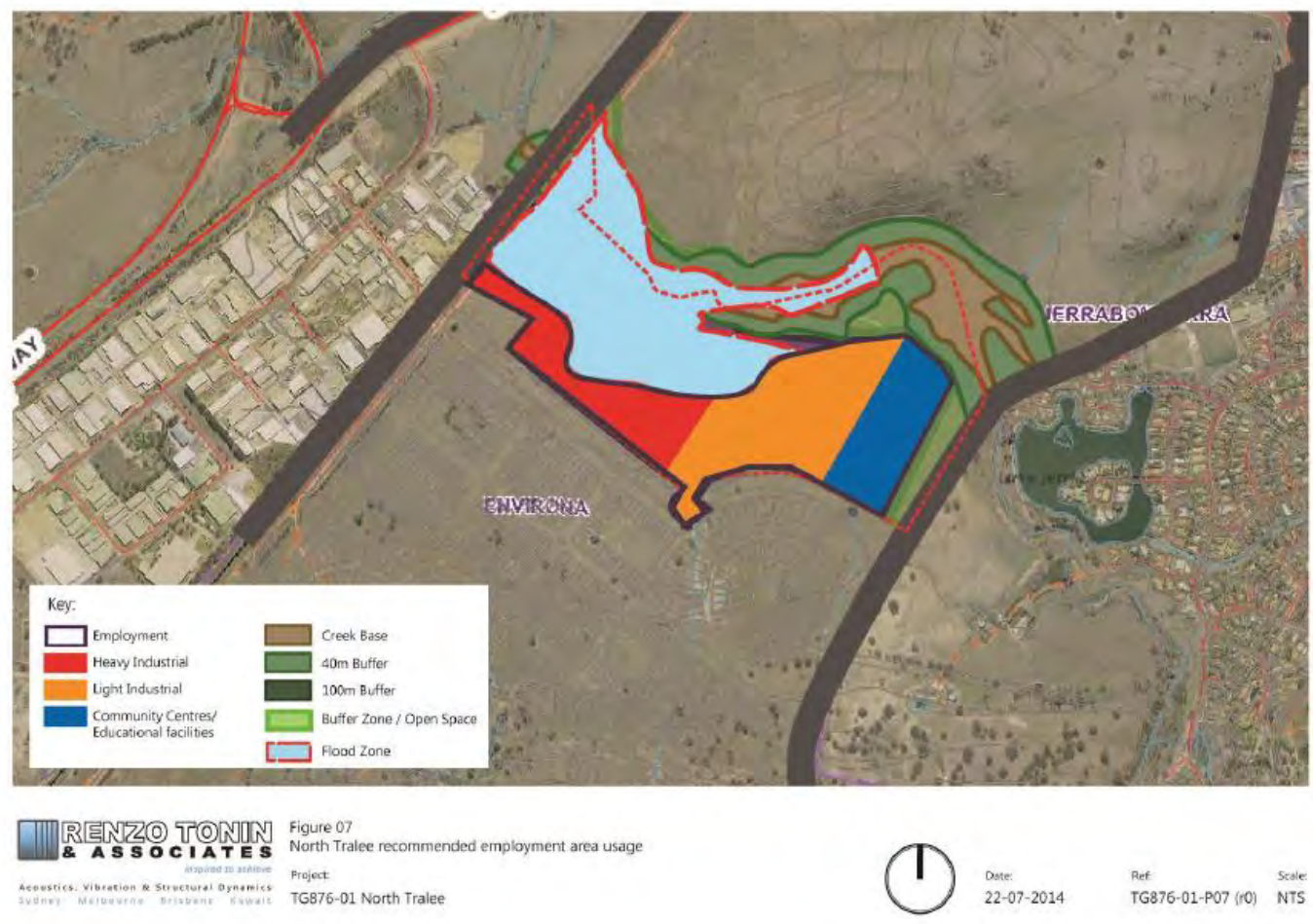


Figure 17 | Extract of Figure 7 from Renzo Tonin – North Tralee Remodelling and Assessment (July 2014)

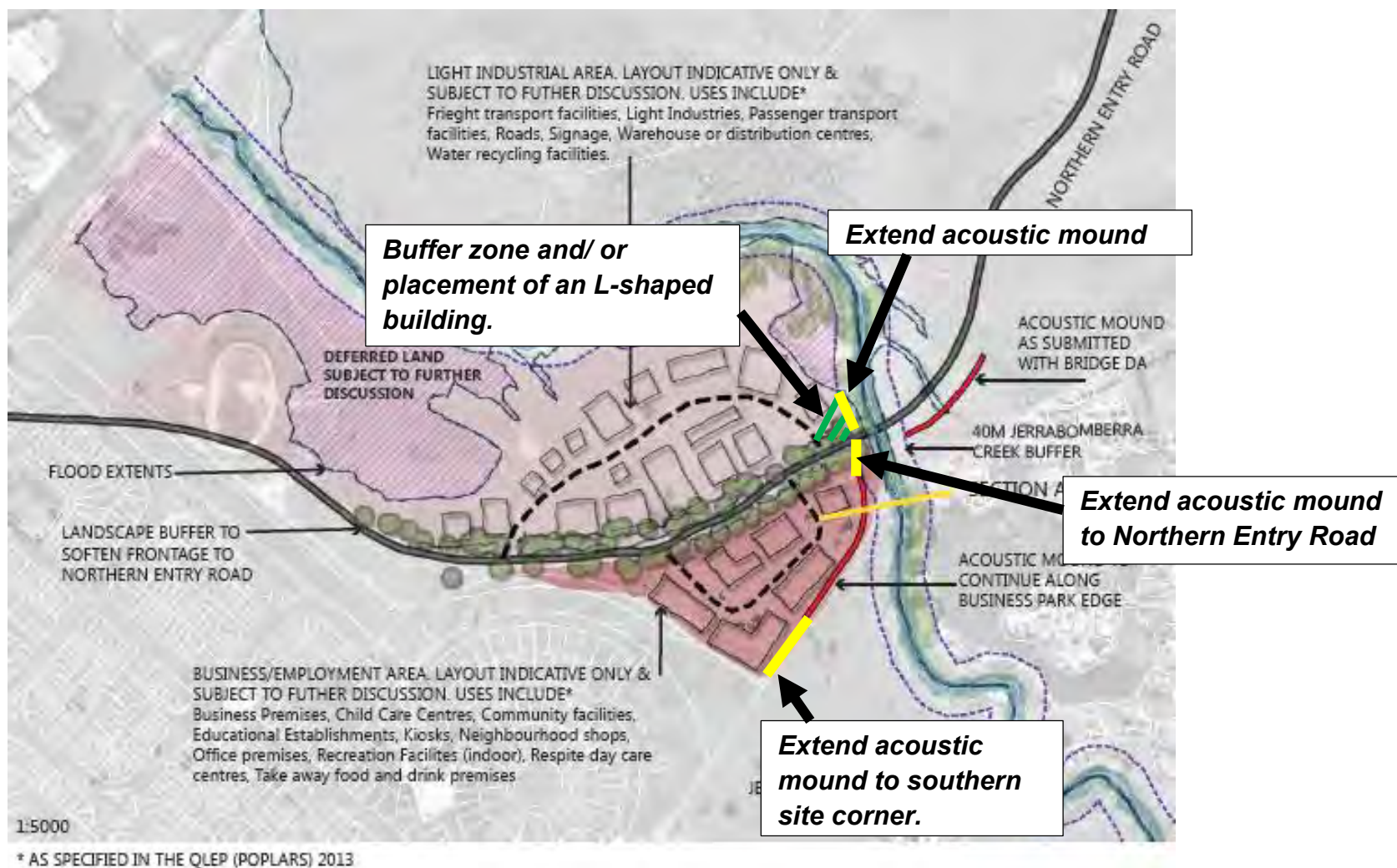


Figure 18 | Renzo Tonin recommendations to Proponent's Concept Plan

Based on the above outcomes (**Figure 18**), Renzo Tonin undertook further acoustic modelling. The results indicate that there remains a noise contour exceedance during the night time period, during adverse weather conditions only (i.e. worse case scenario). The criteria at night time is 35dB(A). There are exceedances in the Jerrabomberra residential area, around the Bayside Court cul de sac (See **Figure 19** below).

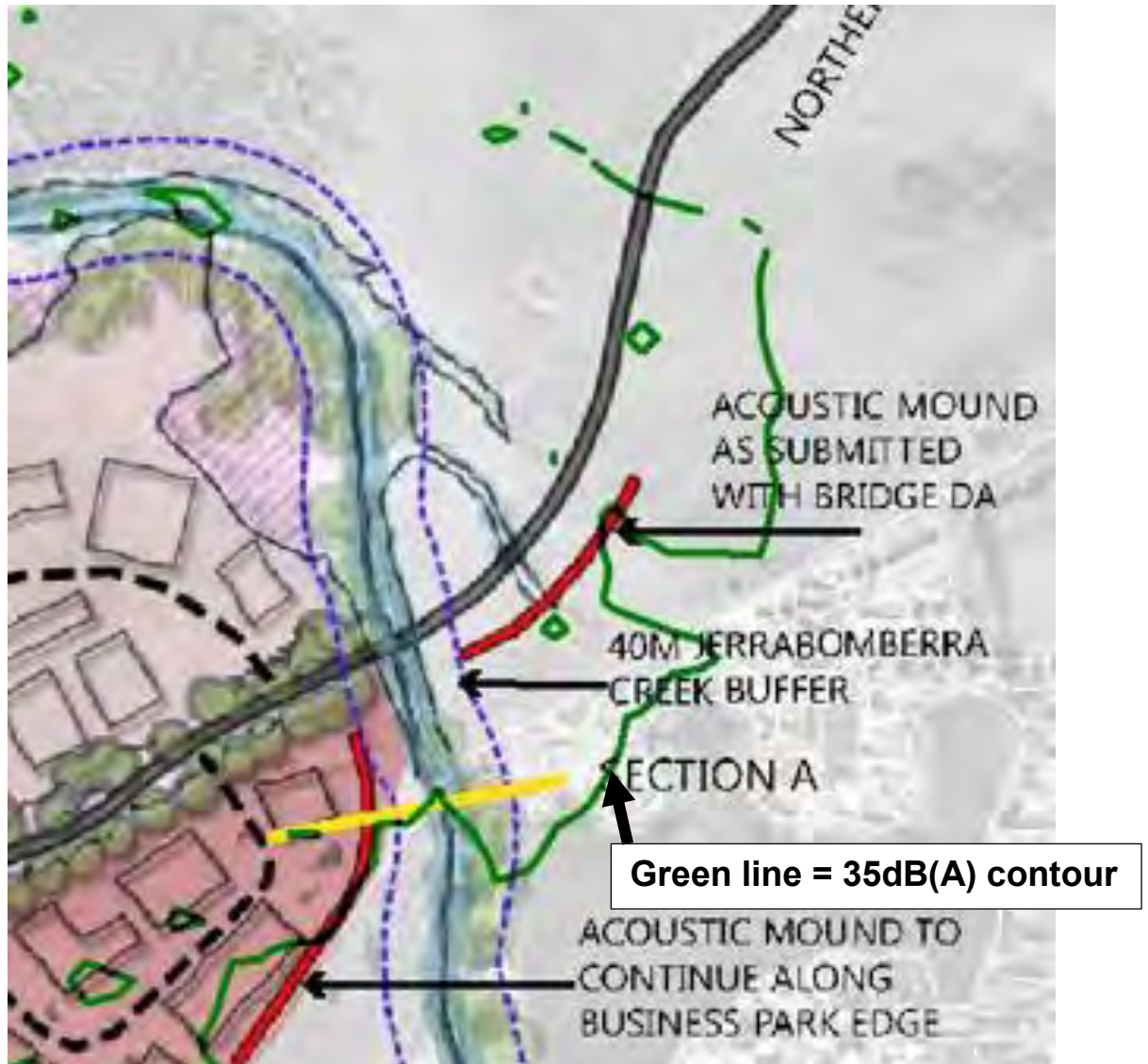


Figure 19 | Mark –Up of the Proponent’s Concept Plan by Renzo Tonin indicated the 35dB(A) contour line –adverse weather conditions – night time

It is considered that the outcomes of the noise modelling is not unacceptable and does not pose an impediment to the extension of the employment area to the east of the Site. The noise contour exceedance is only measured to occur when there are adverse weather conditions. Typically, an exceedance is not expected to occur.

The amenity of the residential properties, shown to be impacted by the 35dBA contour line, during the night time in adverse weather conditions, will be protected through the incorporation of additional mitigation measures indicated at Figure 18. In addition, the requirements of the *South Jerrabomberra DCP – Part 11 – Business*

Park and Employment Lands Controls and Principles, which is expected to apply to the Site on the basis that the Site is rezoned. Section 11.16 of the *South Jerrabomberra DCP* includes:

11.16 Noise, Vibration and other Emissions

Objectives:

- 1) *Ensure any emissions from uses are managed to avoid impacts on uses of the site, adjoining development and any local residential area.*

Control:

- a) *Buildings shall generally be designed to prevent noise from plant machinery and operations associated with the development exceeding 5dBA above the background noise level at any time, measured at the boundaries of the site.*
- b) *All machinery shall be installed to ensure that no vibration is transmitted beyond the development site.*
- c) *Industrial activity must comply with the relevant pollution control legislation administered by the Environment Protection Authority and Council, such as the Protection of the Environment Operations Act 1997.*

As a consequence, detailed acoustic advice must be submitted at DA stage, indicating compliance, during all weather conditions and during the day time and night time, with the DCP requirements.

The detailed design of the buildings associated with the employment land uses will be important. Acoustical site planning often provides a successful technique for noise impact reduction. Buildings can be designed to provide an effective acoustic buffer to reduce acoustic amenity impacts on sensitive noise receptors on adjoining land. Site planning and internal layout can ensure that buildings themselves form a noise barrier. In this regard, 'L' shaped buildings on the eastern boundary edges of the Site, with windows and openings of all buildings on the eastern boundary facing within the Site, will form an effective noise shield. This is in addition to conditions restricting operating hours, if deemed necessary at the detailed DA stage for the use of the buildings and the restrictions to the uses.

It is noted that the Proponent is proposing Business/ Employment land uses on the southern side of the Northern Road (i.e. the area closest to Jerrabomberra residential area), and light industrial area to the north of the Northern Road. The Concept Plan suggests that the types of land uses on the northern side of the Northern Entry Road will be different to the southern side of the Northern Entry Road.

The Concept Plan includes for the southern area of the Northern Entry Road:

Business/Employment Area. Uses include - Business Premises, Child Care Centres, Community facilities, Educational Establishments, Kiosks, Neighbourhood shops, Office premises, Recreation Facilities (indoor), Respite day care centres, Take away food and drink premises.

And for the area north of the Northern Entry Road:

Light Industrial Area. Uses Include - Freight transport facilities, Light Industries, Passenger transport facilities, Roads, Signage, Warehouse or distribution centres, water recycling facilities.

These uses are consistent with the B7 – Business Park land uses in accordance with the QLEP (Poplars) 2013. The whole area is to be rezoned B7 – Business Park. The indicative uses suggest that light industrial uses listed for the northern side of the Northern Entry Road would not be permissible south of the Northern Road (in the business/ employment area). The zoning will be such that all the uses under B7 – Business Park will be permissible across the northern and southern sides of the Northern Entry Road.

- *This will mean that it will be imperative, at the DA phase, that detailed acoustic advice must be submitted with any application, indicating compliance, during all weather conditions, and during the daytime and night time, with the DCP requirements.*

5.1.4. LEP Residential/ Employment Lands buffer controls

On 31 March 2006, the NSW Government gazetted the *Standard Instrument Order*. It requires any new LEP to be in the format, including structure and content, specified by the *Standard Instrument Order*. The intention of the Order is to standardise LEPs to improve their understanding by stakeholder's involved communities across a range of local government areas.

The standard instrument identifies mandatory, non-mandatory and local provisions for inclusion in new principal LEPs. It is a mandatory the B7- Business Park zones include light industries as permitted with consent. As outlined in Section 5.1.3 above, while the Proponent's Concept Plan (**Figure 12**) indicates Light Industrial uses on the northern side of the Northern Entry Road, and Business/ Employment Land Uses on the southern side of the Northern Entry Road, under the B7 – Business Park zone, light industries must be permitted on both northern and southern sides of the Northern Entry Road.

In order provide further protection to the existing residential areas to the east of the Site, it is recommended that local provision clauses are included within a draft LEP for North Tralee. Local provisions refer to any LEP content (e.g. clauses, objectives, additional permitted or prohibited land uses) that is not part of the standard instrument. Local provisions may be prepared by councils to address matters that are relevant to their local area and which are not covered by provisions in the standard instrument.

A number of Council's, including QCC have included local provision clauses in their LEP's in order to protect noise sensitive land uses (such as residential land uses), from amenity impacts of adjoining employment/ industrial land uses. **Table 2** provides examples of these local provision clauses. It is recommended that appropriate local provision clauses such as those in **Table 2** below are included in a

draft LEP for the Site for the development of any land within Zone B7 – Business Park that is within 400m of land within a residential zone.

Table 2| Examples of LEP Local Provision Clauses

LEP	Control
Blacktown LEP 2015	7.8 – Development of certain land in Zone IN 1 (1) This clause applies to any land within Zone IN1 General Industrial that is within 250 metres of land in a residential zone. (2) Development consent must not be granted to development on land to which this clause applies unless the consent authority has considered the following: (a) whether any proposed buildings are compatible with the height, scale, siting and character of existing residential buildings in the vicinity, (b) whether goods, plant, equipment and other material resulting from the development are to be stored within a building or will be suitably screened from view from residential buildings and associated land, (c) whether the elevation of any building facing, or significantly exposed to view from, land on which a dwelling house is situated has been designed to present an attractive appearance, (d) whether noise generation from fixed sources or motor vehicles associated with the development will be effectively insulated or otherwise minimised, (e) whether the development will otherwise cause a nuisance to residents, by way of hours of operation, traffic movement, parking, headlight glare, security lighting or the like, (f) whether the development will provide adequate off-street parking, relative to the demand for parking likely to be generated, (g) whether the site of the proposed development will be suitably landscaped, particularly between any building and the street alignment

LEP	Control
Holroyd LEP 2013	6.9 - Buffer area between industrial and residential zones (1) The objectives of this clause are as follows: (a) to maintain an adequate separation between general industrial land uses and residential land uses, (b) to prevent any likely adverse impacts of outputs of industrial land uses (including noise, vibrations, odours, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit or oil) on adjacent residential dwellings, (c) to ensure that neighbouring residents can enjoy a reasonable level of amenity without preventing the operation of general industrial land uses, (d) to provide visual separation of the primary buildings and structures on industrial land from neighbouring residential dwellings. (2) This clause applies to land identified as “Industrial-residential buffer area” on the <u>Site Specific Provisions Map</u>. (3) Despite any other provision of this Plan, development must not be carried out on land to which this clause applies other than: (a) if the land is in Zone R2 Low Density Residential—development permitted on land in that zone in the Land Use Table (excluding residential accommodation), or (b) if the land is in Zone IN1 General Industrial—development permitted on land in that zone in the Land Use Table, but only if the consent authority is satisfied that the development is consistent with the objectives of this clause

LEP	Control
Queanbeyan LEP (South Tralee) 2013	7.4 – Land adjoining Hume Industrial Area and Goulburn/Bombala Railway Line (1) The objectives of this clause are to: (a) minimise the impact of any noise, vibration or other emissions on the land to which this clause applies; and (b) require certain land uses on the land to which this clause applies to include, or to be the subject of, appropriate noise mitigation measures. (2) This clause applies to the land identified as “Visual and Acoustic Buffer Land” on the <u>Local Clauses Map</u>. (3) Despite any other provision of this Plan, the consent authority must not grant consent to any development on the land to which this clause applies, unless the consent authority has assessed the following matters: (a) the impact of noise from any nearby land uses, having regard to any noise attenuation measures proposed, (b) the visual impact that any nearby land uses would have on the proposed development, (c) the impact that noise and other emissions from any nearby industrial land uses and associated activities would have on the proposed development. Note. Clause 87 (Impact of rail noise or vibration on no-rail development) of the <u>State Environmental Planning Policy (Infrastructure) 2007</u> also applies to this land.

In addition, to assist councils in the preparation of their principal LEP's, the NSW DoP has drafted 'model local clauses' which are local provisions that have been settled by the Parliamentary Counsel's Office and address common topics raised by councils in their Standard Instrument LEP preparation. These are described as 'settled clauses' by the DoP and should reduce the time required to prepare an exhibition Standard Instrument LEP. In April 2010, the DoP exhibited a second round of draft Model local provisions for Standard Instrument LEPs. The Director-General of the Department informed councils that the second round of model clauses had been finalised in December 2010. The second round of settled clauses include clause 7.6 *Development in areas subject to aircraft noise* which requires compliance with AS2021-2000 for development with ANEF 20 and above areas.

This Model local provision is included in the *Queanbeyan Local Environmental Plan 2012*, *Queanbeyan Local Environmental Plan (South Tralee) 2012* and *Queanbeyan Local Environmental Plan (Poplars) 2013*. QCC has advised that a similar provision will be included in the draft LEP for the Site.

5.1.5. DCP Residential/ Employment Lands buffer controls

A local provision clause in the LEP, protecting the existing residential Jerrabomberra residential area from employment and industrial land uses at North Tralee, is consistent with the South Jerrabomberra DCP – Part 11 – Business Park and Employment Lands Controls and Principles (South Jerrabomberra DCP).

It is recommended that Council amend the South Jerrabomberra DCP – Part 3 – The Master Plan to include the North Tralee Buffer/ Open Space area and include additional controls relating to the North Tralee interface with Jerrabomberra Residential lands.

The following clauses should be incorporated into the DCP/ Master Plan:

- An acoustic report shall accompany a development application for B7 – Business Park land uses within 400m of residential development within Jerrabomberra. The acoustic report shall evaluate potential impacts on existing homes in Jerrabomberra. Noise impact shall be assessed in accordance with both NSW legislation and guidelines.
- The acoustic report shall provide appropriate recommendations for noise mitigation treatments to achieve acceptable external and indoor sound levels within existing dwelling houses in Jerrabomberra.
- On completion of the works, an acoustic report shall be provided certifying that the recommended treatment has been completed and noise measurements shall be undertaken to confirm compliance with the noise level criteria stipulated in the report.
- Design considerations should be incorporated into any DCP for the Site in relation to the use of buildings on the eastern edge of the Site including that the block should run along the edge of the site parallel to the acoustic mound, around the sides of the property to protect the sides.

5.1.6. Acoustic Assessment Conclusion

Investigations have shown that there are no impediments to extending the employment zone to the east of the site, as a result of the acoustic assessment, on the basis that mitigation measures as shown in **Figure 18** are implemented, and an appropriate worded local provision clause as identified in **Table 2**.

In addition to these mitigation measures, the detailed assessment of proposed uses at the Site must be in accordance with DECCW 's 'Industrial Noise Policy', 'Environmental Noise Control Manual', 'Environmental Criteria for Road Traffic Noise'; and Australian Standard AS2021- 2000 for aircraft noise impacts, at DA stage.

5.1.7. Reduction to Open Space

The proposal to extend the employment lands to the east will result in the reduction of open space/ buffer land in North Tralee.

The original 2006 Strategy included residential land abutting the eastern boundary of the Site (i.e. was based on less open space land than the final endorsed 2008 Strategy). The Strategy was then amended (2008) as a result of acoustic impacts associated with Canberra Airport, identifying North Tralee for employment land uses. At this time the buffer/ open space land was identified to provide acoustic protection to the existing Jerrabomberra suburb. QCC Officers have advised that the buffer/ open space land was identified for acoustic purposes only and the land was not part of an overall Open Space Strategy for the LGA.

Under the North Tralee LES (December 2011), it was considered that the proposed location of the open space, recreation and community facilities as outlined in the Queanbeyan Residential and Economic Strategy 2031 (December 2008) was reasonable given:

- *The location of the Site within the 20 and above ANEF. The riparian corridor/ buffer/ open space areas such as those proposed, are not generally affected by being located under a flight path.*
- *The type of land uses permissible on the North Tralee site is limited given the NSW Planning Minister announcement that residential land uses would not be permissible within the study area; the amount of industrial/ business park land has been capped for South Jerrabomberra (this is supported by Hill PDA's economic study) and a portion of the study area is protected for conservation purposes (i.e. riparian corridor). Consequently, one of the few land uses that could be supported on the Site is large open space land uses.*
- *The proposed open space/ buffer land uses are easily accessible for existing residents of Jerrabomberra and ACT residents.*
- *The proposed open space land provides a buffer between the proposed employment land uses and existing residential land uses of Jerrabomberra, forming both a visual buffer and acoustic buffer.*

The proposal includes extending the employment land uses east and as a result, removing the buffer/ open space land. The reasons listed in the North Tralee LES (December 2011) (extracted above) as to why the location of the proposed buffer/ open space land was reasonable remain relevant. A buffer area will remain on the eastern boundary of the Site, but is proposed to be reduced in width and will incorporate a landscaped acoustic mound 3.0m in height. This will form both an acceptable visual and acoustic buffer to the existing residential land uses of Jerrabomberra.

5.1.8. Reduction to Open Space Conclusion

Investigations have shown that as a result of the proposal to extend the employment zone to the east of the site, which will result in a reduction in open space in the Quenabeyan LGA, there is no impediment to the proposed rezoning.

5.2. Protection of the Stone Building

In addition to an assessment of the extension of the employment land uses towards the eastern site boundary, Council is seeking recommendations in relation to the Stone Façade Building, identified for conservation and retention by Council's Heritage Advisory Committee (Site H3: Stone Facade Building) at its meeting of 2 November 2010. The Stone Facade Building (Site H3) is located within the flood prone land on the site.

The information regarding European Heritage in regards to the Stone Building remains relevant to this Supplementary LES, i.e.

Navin Officer Heritage Consultants undertook a European Heritage Assessment of North Tralee as part of their 2003 Cultural Heritage Assessment Report. Five (5) European sites were recorded in the study area as listed below:

- Site H1: Fraser Park Raceway Complex
- Site H2: Open Air Motor-sport Track
- Site H3: Stone Façade Building
- Site H4: Tree Plantings
- Site H5: Shed Ruins

The location of these sites and features is shown at **Figure 20**.

In June 2010 the Village Building Company submitted a development application (along with a Heritage Impact Statement) seeking approval to demolish a number of recorded sites across North and South Tralee, including Site H3 - Derelict Stone Facade Building.

Council's Heritage Advisory Committee (HAC) advised at the Council meeting of 2 November 2010, in relation to the proposal to demolish Site H3 that:

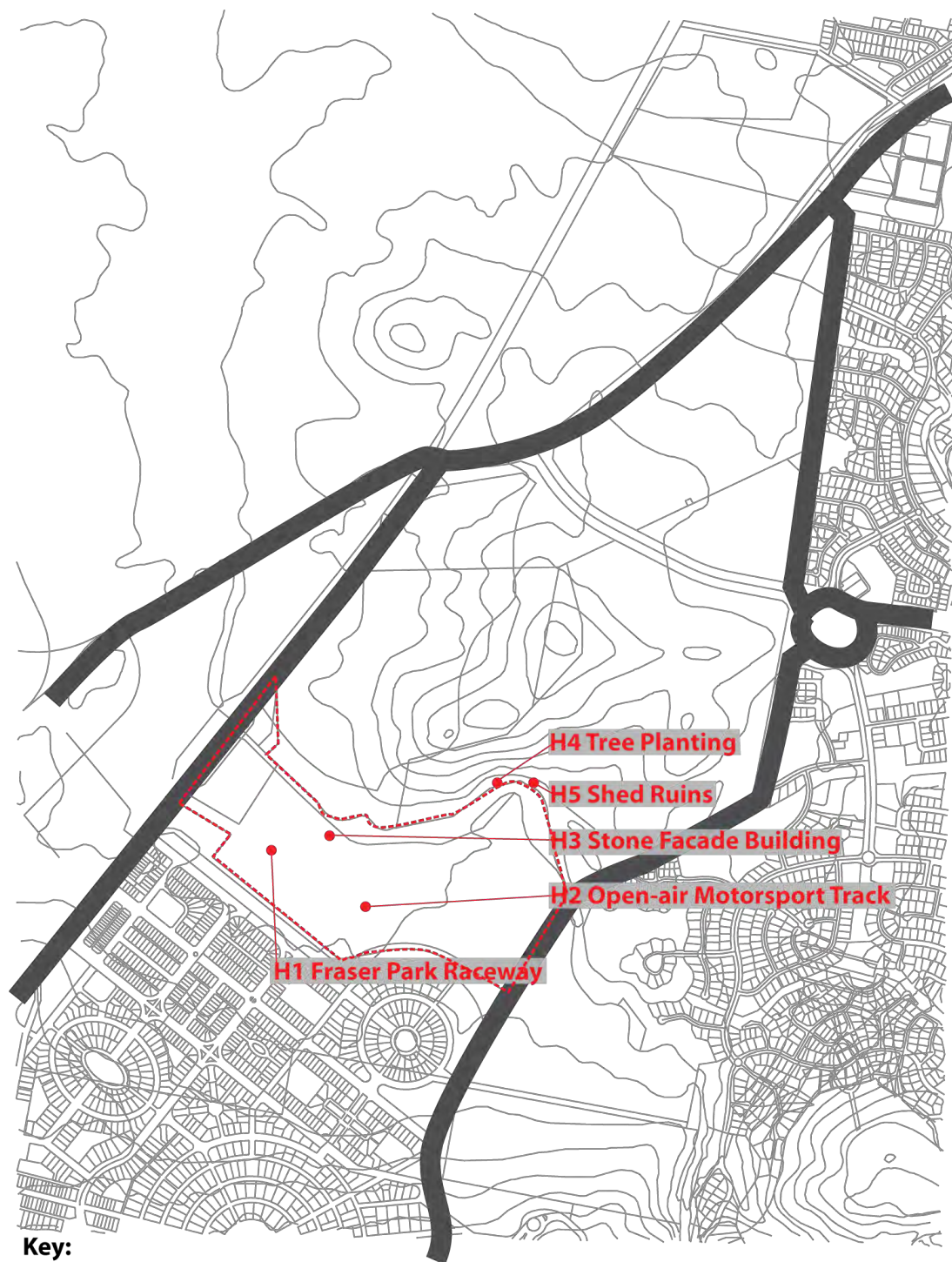
The Committee strongly recommends the structure be retained in its present location and that the building is not demolished or relocated for the following reasons:

- *The building is unique to the area and should be retained.*
- *The building is part of the larger Environa site and is the only stone lined building constructed by Halloran and the only partially intact Halloran building in the area.*
- *The building is an integral part of the Environa complex and moving the building from the site would undermine the heritage value of the building*
- *The building is the only surviving link to the Environa site as a recreation centre in the 1920's.*

- *Site H3 is important in the course and pattern of NSW's and the local area's cultural history.*
- *It is an item that has strong or special association with the life or works of a person, of importance in the cultural history of the local area.*
- *It is important in demonstrating the principal characteristics of a class of NSW's and the local areas cultural places.*

The Stone Façade Building is located within flood prone land that is identified as deferred land on the North Tralee Site, in accordance with Council's resolution at its meeting of 26 March 2014. The Stone Façade Building is currently listed as a local heritage item under the current planning instrument for the Site, being the *Queanbeyan Local Environmental Plan 1998*. As the Stone Façade Building is located within the deferred land, it will remain as a protected heritage item under *Queanbeyan Local Environmental Plan 1998*. In accordance with the Planning Officer's report to QCC's Planning and Development Review Committee of November 2010, it is recommended that item H3 – Stone Façade Building should be included as an item of local heritage significance in any future draft LEP for the deferred North Tralee land.

It is not considered that the identification of item H3 – Stone Façade Building presents an impediment to the rezoning of the Site, particularly as it is located within the Flood Prone Land. It is envisaged that the building could be restored in the future and be included as a feature of the Site.



Key:

● Possible Heritage Item

Map: Proposed Heritage Plan
Date: 19 April 2010



Figure 20 | North Tralee Location of European heritage sites

6. land use conclusions

The major implications arising from the key assessment areas of the LES, as identified in the North Tralee 2011 LES generally remain relevant to this Supplementary LES report.

On the basis that the following additional **recommended** design controls are included in any future draft LEP and DCP for the Site, there are manageable considerations to rezoning the Site, generally in accordance with the endorsed *Queanbeyan Residential and Economic Strategy 2031* and the Proponent's Concept Plan dated 14/04/15 (**Figure 12** and **Figure 13**), from a noise, air quality and economic impact viewpoint:

- To protect the amenity of existing residents to the east of the Site in Jerrabomberra, a 3.0m high landscaped acoustic mound must be designed along the eastern boundary of the Site in accordance with **Figure 18**.
- Dense planting of vegetation (including trees and shrubs) should be incorporated over the acoustic mound.
- Building location and building layout should be considered in the planning process. In particular, 'L' shaped buildings in accordance with **Figure 18** and windows and openings of buildings orientated away from the eastern boundary.
- A clause should be incorporated into the draft LEP which requires the consideration of noise impacts and other impacts from proposed development within the North Tralee B7 –Business Park zone on existing residential properties to the east of North Tralee, in Jerrabomberra. This would be similar to Clause 7.4 of the Queanbeyan LEP (South Tralee) 2012.

6.1. Natural Environment

- The Site is generally flat and low-lying however, views into the Site from residential properties to the south east of the Site must be taken into consideration.
- A maximum height of 12m, consistent with the Queanbeyan LEP (Poplars) 2013 maximum height for B7 zoned land, and the ACT industrial height requirements is considered appropriate, with careful consideration of landscaping to help screen any future development.
- The treatment of the interface between the existing residential properties to the east and south east is an important consideration, particularly if the employment zone is to be located closer towards the existing residential properties.
- The riparian corridor associated with Jerrabomberra Creek will require protection from future development and best practice management principles should be adopted for the management, preservation and enhancement of the corridor.

- The areas of the Site which are subject to flooding should be deferred from the zoning maps.
- Controlling runoff volumes and rates so as not to adversely affect downstream waterways, habitats and landforms.
- Maintaining the integrity of the water-cycle and existing (environmental) flows to downstream watercourses and Lake Burley Griffith.
- Providing adequate protection to people and property from overland stormwater flow.
- Land provision (about 2% of the developed area needs to be set aside to accommodate constructed wetlands and stormwater quality improvement devices (SQIDs).
- Provision for SQIDs and onsite detention within the private space should be addressed through appropriate DCP regulations.
- Managing stormwater runoff pollution/quality and implementing WSUD principles.
- High quality presentation of any land uses to existing Jerrabomberra residential land to the east and south east is required. Consideration of setbacks and buffer zones, landscaping, building heights, building layouts building uses, bulk and signage.
- Land use zones must include APZ buffers within the zone boundary. Each land use is responsible for providing protection to adjoining lands.
- A conservation management plan should be prepared for the land zoned for riparian corridor. The plan should include quantifiable objectives and performance criteria and be integrated with other management issues including bushfire and recreational open space.
- It is recommended that development of all areas be subject to detailed geotechnical engineering assessment at development application stage. The assessment should analyse existing site soils to accommodate the conditions of development and ensure integrity of the Site and installation.

6.2. Built Environment

- While rezoning may occur, it should be conditional upon further Aboriginal archaeological investigations being undertaken at development assessment stage to identify whether or not objects are, in fact, present within PADs. Such investigations may result in a requirement to ensure that sites and objects are conserved.
- Identified PADs or areas of high/ moderate sensitivity not possible to conserve may require under the National Parks and Wildlife Act 1974, section 90 consent and / or Section 87 permit for test/ salvage excavation.
- Best practice principles for the recording and interpretation of the history and significance of the Fraser Park Speedway should be included into any DCP for the Site.
- Heritage Item Number H3 – Stone Façade Building should be included as an item of local heritage significance in any future draft LEP for the deferred North Tralee land.

- Additional studies may be required at development application stage to assess land contamination and in order to enable the preparation of a remedial action plan.
- There is potential for some contamination of the Site, it is considered appropriate however that the degree to which it may be contaminated could be ascertained at development application stage should rezoning occur. SEPP 55 requires careful consideration regarding contamination of the land.
- Providing adequate protection to people and property from overland stormwater flow.
- Managing stormwater runoff pollution/quality to protect Jerrabomberra Creek.
- Services might require amplification of various sections of infrastructure such as sewer upgrades.
- Investigations into the practicality and sustainability to harvest rainwater on site and supply rain water for non-potable and irrigation purposes as part of the development process is recommended.
- Waste water collection from allotments would be through new gravity networks generally laid within the allotments. Service corridors in public space will only be required for the rising mains. With road reserves a corridor width of 1.5 metres should be provided along the route of any rising main.
- Service corridors for the fixed network infrastructure are generally provided within the verges of road reserves. Shared trenching with electricity, gas and telecommunications is usually acceptable.
- The main site road network will need to be designed to accommodate large commercial vehicles to service industrial/ employment lands.
- Detailed assessment of existing local roads will be required to confirm improvement works to as a result of traffic generated by the North Tralee development site.
- Early negotiations with bus service providers are essential to ensure new services direct to North Tralee.
- Detailed planning work needs to be undertaken with public transport providers to maximise uptake of public transport between local origin and destination pairs.
- The internal transport network needs to provide good, safe and direct footpaths and separated cycle ways to encourage internal trips and link to key attractors outside North Tralee.
- Walking and bicycle tracks should connect with existing surrounding networks.
- Direct links to existing streets that adjoin the boundaries of North Tralee as interface points for direct vehicle connection between the employment areas and the residential areas should be avoided.

6.3. Noise

Development at North Tralee should be based on:

- The currently endorsed ANEF contours for Canberra Airport.
- Guidance provided by S.117(2) Ministerial Direction 3.5.
- The DoP's draft model LEP clause for development in areas subject to aircraft noise.
- Clauses 102 of the Infrastructure SEPP (2007).
 - NSW Government's Environmental Criteria for Road Traffic Noise (EPA 1999).
 - NSW Department of Planning (Dec 2008) Development near Rail Corridors and Busy Roads – Interim Guidelines.
- Detailed acoustic advice must be submitted at DA stage. Need to consider extent and form of buffer to south east.
- Construction of a 3.0m high landscaped sound mound on the eastern site boundary, adjacent to the 40m buffer zone to Jerrabomberra Creek.
- Need to consider building layout at the design stage to ensure noisy activities are located away from residential areas and to protect noise sensitive uses within employment zones.
- Need to consider acoustic treatment for noise sensitive uses permissible in business park zone such as childcare centres.

6.4. Economic & Demographics Analysis

- A mix of employment options should be considered on the Site to encourage diversification of trade and industry.
- Exposure of the employment precinct to improve legibility is a planning principle that has merit, although signage, access points and visual appearance of development are important considerations.
- Likely employment zone includes B7 – Business Park.
- Acoustic treatment for noise sensitive uses permissible in business park zones such as childcare centre need to be considered.
- Need to consider zoning of riparian corridor and flood prone land.

7. conclusions & recommendations

Rezoning of North Tralee for employment, conservation and community and open space uses, as endorsed by the DoP as part of the *Queanbeyan Residential and Economic Strategy 2031* (2007 and 2008), and the North Tralee LES (December 2011) are broadly recognised as an appropriate form of development for the Site. The land uses are defined in the various plans associated with the study area.

The range of new information that has been developed since the completion of the North Tralee LES (December 2011), has been analysed and incorporated as appropriate into the recommendations for rezoning of the Site. As a result of the additional investigations into the extent of the open space/ buffer zone, giving consideration to the amenity impact of existing residential areas to the east of the Site and the desire not to adversely hamper the development of the Site, it is considered appropriate to extend the employment lands to the east on the basis that mitigation measures are implemented including:

- Construction of a 3.0m high landscaped acoustic mound, on the eastern Site boundary (wholly within the site to ensure its care, control and management falls to the site owners and is not a burden on QCC).
- To protect the amenity of existing residents to the east of the Site in Jerrabomberra, the 3.0m high landscaped acoustic mound along the eastern boundary of the Site must be designed in accordance with **Figure 18**.
- Building location and building layout should be considered in the planning process. In particular, 'L' shaped buildings in accordance with **Figure 18** and windows and openings of buildings orientated away from the eastern boundary.
- A clause should be incorporated into the draft LEP which requires the consideration of noise impacts and other impacts from proposed development within the North Tralee B7 –Business Park zone on existing residential properties to the east of North Tralee, in Jerrabomberra. This would be similar to Clause 7.4 of the Queanbeyan LEP (South Tralee) 2012.

In relation to the Heritage item H3 – Stone Façade Building, it is recommended that Heritage item H3 – Stone Façade Building should be included as an item of local heritage significance in any future draft LEP for the deferred North Tralee land.

It is not considered that the identification of Heritage item H3 – Stone Façade Building presents an impediment to the rezoning of the Site, particularly as it is located within the Flood Prone Land. It is envisaged that the building could be restored in the future and be included as a feature of the Site.