Executive Summary

Communication received by North West Rail Link ("NWRL") to Residents

The Robert Road Group ("Our Group") was advised by NWRL approximately 3 months ago, of the plans of NWRL to change the footprint of the construction zone ("Footprint") for the Cherrybrook Railway Station. That is, Our Group was advised that the Footprint would now incorporate land directly opposite the homes situated between 1 and 7 Robert Road ("Additional Construction Zone"). The Additional Construction Zone is illustrated in Appendix A.

Further, Our Group was advised during a meeting with NWRL on Thursday 19th April 2012 at the Public Exhibition Centre at Castle Hill, that post construction, the Additional Construction Zone would now be utilised to increase the footprint of the Cherrybrook Station Precinct. In particular, there was a suggestion made by one of the representatives of NWRL, that they could take advantage of the Additional Construction Zone by using Robert Road as a "Feeder Road" for buses and general traffic to access the train station.

Our Position on Communication Received by NWRL

The initial communication received from NWRL in relation to the Additional Construction Zone has been extremely distressing for Our Group and it is clear that this will result in a deterioration of the quality of life of Our Group for years to come. If this news wasn't distressing enough, the suggestion made by one of the representatives of NWRL on the night of 19th April 2012, to now take advantage of the Additional Construction Zone by using Robert Rd as a Feeder Road into the station, demonstrated that there was a complete lack of regard as to the collateral damage that would result for Our Group and all residents of Robert Road. To be clear, the implementation of any such proposal to use Robert Rd in any capacity other than its current form would be nothing less than catastrophic.

Our Submission

Whilst this submission is formally in response to Environmental Impact Statement 1 (and will cover our concerns in relation to EIS1) our support, as you can appreciate, will be contingent upon getting comfort from NWRL that EIS2:

- 1. will not incorporate the utilisation of Robert Rd as access into the station; and
- 2. will incorporate a structure that utilises the Additional Construction Zone so as to shield the Robert Road residents from visual, acoustic and congestion impacts resulting from the Cherrybrook Railway Station.

With this in mind, this submission will detail the following:

- 1. Why utilising Robert Road in any capacity will be detrimental and hazardous;
- 2. Our Proposal to efficiently utilise the area within and surrounding the Cherrybrook Station Precinct, including supporting the concept of the "Station in the Forest";
- 3. The Diminution in Property Values as a result of Robert Road being used in any capacity other than its current form; and
- 4. Our Concerns in relation to EIS1

Section 1: Utilising Robert Road in any Capacity will be Detrimental and Hazardous

As a general comment, regular users and residents of Robert Road truly appreciate the implications described below in this section. So, whilst we have attempted to describe the issues both in writing and via illustrations, we hope you can appreciate that the submission cannot do sufficient justice to the true implications of the issues raised. That is, the reader would only be able to truly appreciate the implications through experiencing the issues themselves.

Current Traffic Movement along Robert Rd

In its current form, Robert Road is currently designed to accommodate low level traffic for local residents. In fact it is so narrow at points, that when there is a car parked on one side of the road, only one car can pass through at a time. When there is a car parked on either side of the road at any point on Robert Road, one car must pull over to the side of the road to allow the oncoming car to pass.

It is vital to note that street parking is imperative throughout Robert Road given the sheer quantity of houses that are either battleaxe blocks or community estates, both having limited off street parking. That is, in the absence of sufficient off street parking, residents and their guests are required to park in the street.

With this in mind, residents and users of Robert Road already appreciate the caution required when navigating through the road in its current state, including the need to regularly give way to oncoming traffic. In our view, any further traffic along this road will increase the likelihood of head on collisions. Further, the introduction of buses along any part of this Road will not only be impractical and more than likely not possible to achieve, it will almost certainly result in head on collisions. The pictures below provide an indication of the traffic congestion/movement already existing on Robert Road.



An example of Current Traffic Movement along Robert Rd

Current Traffic Movement along Robert Rd







Entering and Exiting Robert Road from Castle Hill Road

In 1999, access for Robert Road from Castle Hill Road was altered to allow only left in and left out movements. The intersection was characterised as having a high incident of accidents which resulted in this traffic arrangement being implemented in order to reduce the potential for accidents at this location (See Appendix B – Hornsby Council – Executive Managers Report No. WK101/98. Works Division

As it currently stands, turning left off Castle Hill Road into Robert Road continues to be hazardous as it is a blind corner. With the presence of houses built directly beside Castle Hill Road on the east bound approach to Robert Road, the turn into Robert Road is a sharp turn off Castle Hill Road which has the potential to cause tail end collisions, especially given that current traffic flows freely downhill on this part of Castle Hill Road. Furthermore, with these houses built directly beside Castle Hill Road on the east bound approach to Robert Road, drivers are not able to see oncoming traffic moving up Robert Road towards Castle Hill Road until they are in the process of turning into the street. Any more traffic will only increase the risk of accidents on this already hazardous intersection.

This becomes even more treacherous when cars are parked on the street at the top of Robert Road on either side. That is, vehicles travelling up Robert Road towards Castle Hill Road need to move to the centre of the road to get through, thereby placing themselves directly in the path of oncoming traffic turning left off Castle Hill Road onto Robert Road. The pictures below demonstrate the existing traffic situation at the intersection of Robert Road and Castle Hill Road.

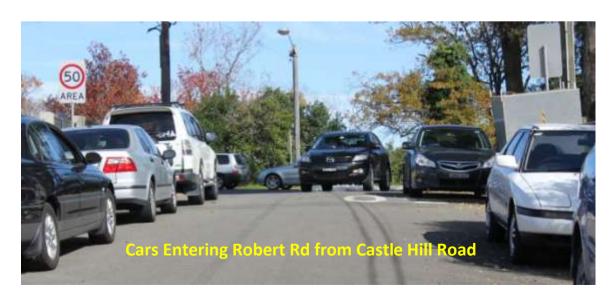


Entering and Exiting Robert Road from Castle Hill Road

Entering Robert Road from Castle Hill Road



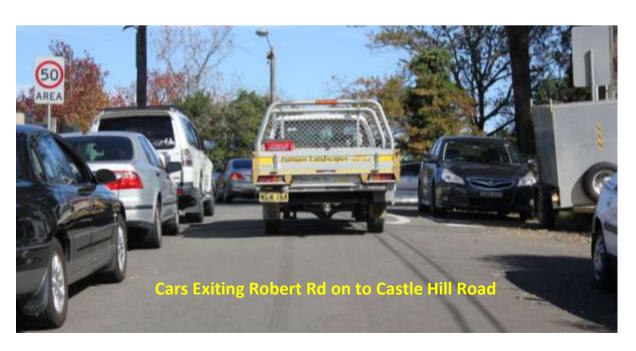




Exiting Robert Road onto Castle Hill Road







Entering and Exiting Robert Road from Castle Hill Road



Cars entering Robert Rd from Castle Hill Road meet head on with oncoming traffic trying to exit Robert Rd.



Cars are forced to stop on Castle Hill Road as cars exiting onto Robert Road become banked up when faced with oncoming traffic trying to exit Robert Road.

Entering and Exiting Robert Road from John Road

As traffic enters Robert Road from John Road, drivers travel up the crest of a steep hill which forms the beginning of Robert Road. This hill restricts the visibility for drivers to see oncoming cars travelling in the opposite direction down Robert Road towards John Road. Further, cars travelling down John Road turning left into Robert Road have absolutely no visibility until such time as they have turned into Robert Road, which gives them little time to adjust for oncoming cars coming over the crest of the hill.

Equally, the visibility of drivers travelling down Robert Road towards John Road, to see cars travelling up the hill on Robert Road (coming off John Road), is also poor. The risk of a head on collision increases even more when vehicles are parked on either side of the road along this hill as drivers need to move to the centre of the road in order to get through.

To introduce any further traffic to this intersection will increase the likelihood of head on collisions. Further as mentioned in the section above headed "Current Traffic Movement along Robert Rd", the introduction of buses in this section will not only be impractical and more than likely not possible to achieve, it will almost certainly result in head on collisions.

The pictures below demonstrate the existing traffic situation at the intersection of Robert Road and John Road.



Entering and Exiting Robert Road from John Road



Turning off John Rd either from the left or right into Robert Rd, vehicles meet with oncoming traffic coming over the crest of the hill, wishing to exit Robert Rd



Entering and Exiting Robert Road from John Road





Entering and Exiting Robert Road from John Road







Section 2: Post Construction – Our Proposal to efficiently utilise the area within and surrounding the Cherrybrook Station Precinct, including supporting the concept of the "Station in the Forest"

Overview of the Cherrybrook Station Precinct Catchment

Housing and residents occupying the section bordered by John Road, Franklin Road, Castle Hill Road and County Drive – See Appendix C- Area A

Given their vicinity to the station, the housing/residents occupying the section bordered by John Road, Franklin Road, Castle Hill Road and County Drive would presumably not require public transport to the train station.

Housing and residents occupying the section bordered by John Road, Franklin Road, New Line Road and County Drive - See Appendix C- Area B

Access from New Line Road into the pocket of housing bordered by John Road, Franklin Road, New Line Road and County Drive is currently not available. As a result, this constitutes a small pocket of housing. We suspect that rather than public transport, this small pocket will generally require a kiss and drop zone which we propose to be situated at Franklin Road as illustrated in Appendix D.

Notwithstanding this, in the event that this small pocket does require public transport, residents would presumably catch the bus on John Road or Franklin Road heading to the station via Franklin Road.

Housing and residents occupying the section anywhere east of Franklin Road - See Appendix C-Area C

All residents occupying the section east of Franklin Road have no option but to pass through Franklin Road or Castle Hill Road in order to access the Cherrybrook Station Precinct, whether travelling by public transport or otherwise. Therefore, naturally, access to the station would be via one of these roads. Where access is gained from Castle Hill Road, we propose that transport would enter the station in accordance with the proposal under the section headed "Proposals Regarding Access from Catchment to Cherrybrook Station Precinct" within this Section 2.

Non-local residents - Housing and residents occupying the section anywhere north of New Line Road and west of County Drive See Appendix C- Area D

Non-local residents occupying areas north of New Line Road and areas west of County Drive have no option but to pass through County Drive in order to access the Cherrybrook Station Precinct, whether travelling by public transport or otherwise. Therefore, with the exception of buses travelling along John Road to Franklin Road, there is no requirement to put any further strain on the small local roads east of County Drive. In fact, increasing traffic flow and consequently putting any further strain on Robert Road would be detrimental as described in Section 1 of this submission.

Rather, we propose a low impact/low cost option. That is, all transport would continue to flow through County Drive and left onto Castle Hill Road to then access the station in accordance with the proposal under the section headed "Proposals Regarding Access from Catchment to Cherrybrook

Station Precinct" within this Section 2. In this way, County Drive would continue to be utilised for the purpose it was intended as more fully described by Castle Hill MP, Michael Richardson in the document attached as Appendix E. As local residents, we can confirm that during the morning peak hour traffic, the traffic heading south on County Drive towards Castle Hill Road is minimal and free flowing. The result is that County Drive, in this direction, is currently under-utilised and is able to take significantly more traffic than it currently does.

<u>Proposals Regarding Access from Catchment to Cherrybrook Station Precinct—See</u> <u>Appendix D</u>

With the purchase of the Additional Construction Zone as identified in Appendix A, the Department of Transport has an option of utilising the space efficiently to achieve the safest possible access for vehicles entering and exiting the Cherrybrook Station Precinct, without placing further strain on local streets. We would like to propose the following in relation to access from the Catchment to Cherrybrook Station Precinct.

Entering the Cherrybrook Station Precinct: From the West along Castle Hill Rd

Castle Hill Road is currently a 4 lane road with 2 lanes headed in either direction. We would like to propose that an ingress lane be built alongside Castle Hill Road within the Additional Construction Zone, to allow traffic heading east in the direction of Thompsons Corner to easily exit Castle Hill Road and flow freely into the Cherrybrook Station Precinct, without the need for traffic signals. This ingress lane would commence just after Robert Road. Given that during the morning peak hour traffic it is normal for traffic heading east on Castle Hill Road to be free flowing up until Edward Bennett Drive, an ingress lane would allow traffic to continue flowing freely along Castle Hill Road and into the Cherrybrook Station Precinct, without causing an added hold up that any traffic signals would otherwise create.

Entering the Station Precinct: From the East along Castle Hill Rd

Traffic heading west to access the station from the east along Castle Hill Road is also free flowing during morning peak hour times and therefore does not have any hold up. Therefore, an additional "Right Hand Turn Only" lane on Castle Hill Road at the Glenhope Road traffic signals (as shown in Environmental Impact Statement 1) could easily manage the traffic needing to enter the Cherrybrook Station Precinct.

Alternatively, by taking advantage of the natural contour of the land around the Cherrybrook Station Precinct, we believe it may also be possible to create an egress lane off Castle Hill Road heading west which descends under Castle Hill Road and into the Cherrybrook Station Precinct, again avoiding the need for further traffic signals.

Entering the Station Precinct from Franklin Road-Buses Only

NWRL advised in the Community Information meeting on Saturday 5th May 2012, that they were trying to encourage as many commuters as possible to access the station via public transport. This can be achieved by constructing a right hand turn off Franklin Road into the station precinct for BUSES ONLY. By restricting entry to the station off Franklin Rd to buses only, this will prevent excessive traffic building up, thereby keeping Franklin Rd safer for both school students at Tangara School and also those residents at Inala with special needs. For local Cherrybrook residents who wish

to drop off passengers and not park, a kiss and drop zone could be constructed on Franklin Rd. With the use of a roundabout, these residents could then return up Franklin Rd to their homes.

Exiting the Station Precinct:

As all traffic (with the exception of a few buses) will enter the station via entrance points to the middle or west of the station (please refer to Appendix D), traffic can easily and smoothly flow out of the station at the east end turning right onto Franklin Rd. Traffic lights at this point can allow traffic to turn either left or right onto Castle Hill Rd.

Buses that have entered the station from Franklin Rd (which presumably will be a minimal amount) can re-enter Castle Hill Road, turning either left or right via a BUSES ONLY lane. Again this would utilise the traffic signals proposed at Glenhope Road in Environmental Impact Statement 1.

It is important to note that all of the above proposals utilise the traffic signals proposed by NWRL in Environmental Impact Statement 1. To achieve this,

- 1. no further access is required from Robert Rd; and
- 2. incoming traffic on Franklin Road and John Road is kept to a minimum by catering for local traffic (via the kiss and drop zone) and buses only.

Robert Road – Not Required as an Access Point for the Station Precinct.

As highlighted above, there is absolutely no need to use Robert Road as an access point for the Cherrybrook Station Precinct.

Currently, there is a left hand turn only lane onto Castle Hill Rd from Robert Rd. Robert Rd is a narrow, local street that already struggles to cope safely with the volume of local traffic passing through it at various times during the morning, afternoon and evening. With the addition of the Cherrybrook Station Precinct just east of Robert Rd, unless Robert Rd is permanently closed, there is absolutely no chance of avoiding a significant increase in traffic and therefore accidents in Robert Rd.

Furthermore, as highlighted above in Section 1 of this submission, Robert Road has also been previously identified as a high accident area where it intersects with Castle Hill Rd. Therefore, for

- 1. the safety of local residents;
- 2. the avoidance of a build up of traffic in an unsuitable local street; and
- 3. the purpose of avoiding the accidents that will undoubtedly occur as a result, we propose that Robert Rd be converted into a cul-de-sac.

Street Parking on Robert Road

As described in this submission, street parking on both sides of Robert Rd is paramount. However, where cars are parked on both sides, the road becomes a single lane road as shown in the pictures above in Section 1 – "Current Traffic Movement along Robert Rd". This obviously increases the likelihood of head on collisions as described more fully in Section 1 of this submission.

In our view, it is therefore imperative that this street does not become a parking facility for commuters using Cherrybrook Railway Station. To ensure this does not occur, we propose that there be restricted parking of up to 3 hours on Robert Rd, with the exception of residents. We further propose that the parking within the Station Precinct is free to encourage commuters to utilise the designated parking area.

Utilisation of Additional Construction Zone

As mentioned in the cover letter of this submission, there were fresh comments made by NWRL in an open forum on 5th May 2012, that the Cherrybrook Railway Station would now be an "open cut" design rather than underground. The release of this new information coupled with the drawing released by NWRL in EIS 1, as illustrated in Appendix A of this submission, now suggests that:

- 1. the Cherrybrook Railway Station may be shifted further west towards Robert Road so that a portion of the station will exist on, what we have referred to in this submission, as the Additional Construction Zone (as marked in Appendix A); and
- 2. The station would be located above ground.

We have been persistent in attempting to extract answers from NWRL and their representatives as to clarification of the genuine plans of NWRL in relation to the above 2 issues but unfortunately our attempts have failed. If the suggestions made as above are consistent with NWRL's genuine plans, we strongly object to these plans. However, in the absence of concrete information, we make the comments below in relation to the utilisation of the Additional Construction Zone on the basis that NWRL's plans are consistent with that of the plans released to the public in 2007, being the most recent plans we are aware of.

Therefore, in relation to the utilisation of the Additional Construction Zone post construction, we propose a structure which utilises the Additional Construction Zone so as to shield the Robert Road residents from visual, acoustic and congestion impacts resulting from the Cherrybrook Railway Station.

The structure proposed in Appendix D:

- 1. serves to achieve the above;
- 2. incorporates easy access into the station;
- 3. incorporates the provision for additional parking; and
- 4. supports the branding of the Cherrybrook Railway Station as the "Station in the Forest".

Note that the depth of the trees of at least 30 metres off Robert Road (from the existing property lines) should serve as a visual barrier to the Cherrybrook Railway Station. Whilst the depth of trees will form an acoustic barrier to a smaller extent, we now have further concerns about the acoustic impact (e.g. Station PA Systems, Arriving and Departing Trains etc) following the latest suggestions of NWRL in the Community Information meeting on Saturday 5th May 2012, to make the Cherrybrook Station an "open cut" design. We therefore believe that in any event, it is imperative to have a high acoustic wall situated on the inside boundary of these trees. The depth of the trees along with an acoustic wall should also deter anyone wishing to illegally access the station via Robert Road.

Section 3: The Diminution in Property Values as a result of Robert Road being used in any capacity other than its current form

Approximately 3 months ago, NWRL resolved to change the footprint of the construction zone for the Cherrybrook Railway Station. That is, NWRL created a construction zone opposite the residents of 1-7 Robert Road ("Additional Construction Zone") which we understand will be in place for a period of somewhere between 6-8 years. Further, following this period of construction, a representative of NWRL suggested that they could take advantage of the Additional Construction Zone and use it as an entry point into the Cherrybrook Station Precinct by using Robert Road as a "Feeder Road". The initial communication received from NWRL in relation to the Additional Construction Zone has already been extremely distressing and will result in a deterioration of the quality of life of the residents of Our Group. To further add insult to injury, the additional suggestion to use Robert Road as a "Feeder Road" simply demonstrated a complete lack of regard as to the collateral damage that would result for Our Group and all the residents of Robert Road following such a suggestion, let alone the implementation of such a proposal. To be clear, the implementation of any such a proposal to use Robert Rd in any capacity other than its current form would be nothing less than catastrophic.

The owners of the properties in Our Group have:

- 1. Bought in Robert Road on the basis that the road would continue to be a low traffic street with close proximity to the upcoming Franklin Road Railway Station. Consequently, they have paid market value based on these factors; and
- 2. Have made decisions not to sell their property in Robert Road on the basis that the road would be a low traffic street with close proximity to the upcoming Franklin Road Railway Station.

The use of Robert Road in any capacity other than its current form will most certainly lead to a diminution in the value of our properties. Therefore, if after giving consideration to this submission and in particular, our views in relation to:

- 1. the utilisation of Robert Road in any capacity other than its current form; and
- 2. the various alternatives for traffic flow from the catchment into the Cherrybrook Station Precinct and the supporting of the concept of the "Station in the Forest",

NWRL resolves to use Robert Road as a "Feeder Road", this would, as you can appreciate, be met with strong objection and Our Group would have no alternative but to take further action against NWRL, as is necessary to stop this resolution from proceeding and/or recover from NWRL an amount equivalent to the value of diminution.

Section 4: Concerns in Relation to EIS 1

As mentioned in this submission, the news received from NWRL to change the construction zone has come as a shock and has caused distress to the Robert Road residents and will result in a deterioration of the quality of life for each of us for years to come.

Having said this, we are still keen to support NWRL in achieving their objectives in relation to the construction of the North West Rail Link. However, as you will appreciate, our support for works to be carried out at the Additional Construction Zone can only be contingent upon getting comfort from NWRL, that EIS2:

- 1. will not incorporate the utilisation of Robert Rd as access into the station; and
- 2. will incorporate a structure that utilises the Additional Construction Zone so as to shield the Robert Road residents from visual, acoustic and congestion impacts resulting from the development of the Cherrybrook Railway Station.

Assuming that we can obtain comfort in relation to the above, our support comes with a number of concerns for which we have not been able to obtain clarity from NWRL to date. Some of these concerns are described below.

Acoustic Impact after Hours during Construction

To date, we have not been able to obtain clarity/confirmation from NWRL that works carried out at the Additional Construction Zone will be restricted to the proposed "Above Ground Construction Hours". In fact, it has been suggested by NWRL that the Additional Construction Zone may need to be accessed outside of the proposed "Above Ground Construction Hours".

We are strongly opposed to any work being carried out within the Additional Construction Zone outside of the proposed "Above Ground Construction Hours" and seek confirmation that this will not occur.

Traffic and Staff Parking

Following our meetings with NWRL, in terms of traffic and staff parking, we have been unable to obtain clarity/confirmation that Robert Road will be unaffected during the period of construction.

However, through accessing the "Technical Paper: EIS 1 Construction Traffic and Transport Management" dated March 2012 ("Technical Paper"), we now learn that NWRL seem to have some certainty as to their plans in relation to both of these issues.

In particular, Sections 4.3.2 and 4.3.7 of the Technical Paper specifically refer to Robert Road as being an access road for light vehicles as well as the provisioning for on street parking for staff.

We have described in detail in this submission and in particular within Section 1, the hazards already experienced on Robert Road in its current form as well as the detrimental impact expected as a result of utilising Robert Road for any additional purpose.

For these reasons, a decision by NWRL to use Robert Road in the capacity proposed in the Technical Paper is strongly opposed.

Preservation of Local Flora and Fauna

Robert Road currently has a high density of native bush and endangered trees which attract and provide a habitat for a number of native animals and birds. Without specific consideration and planning for flora and fauna conservation, the development of the Additional Construction Zone may lead to the demise of this local wildlife via loss of habitat.

As part of the proposal below under the section headed "Boundaries of Additional Construction Zone – Visual and Acoustic Impacts", we have given consideration to the preservation of this habitat.

Boundaries of Additional Construction Zone – Visual and Acoustic Impacts

There has been some confusion as to the boundary that will surround the Additional Construction Zone. We are particularly concerned as to the visual and acoustic impacts during construction, including construction flood lights.

We have attached in Appendix A, the Additional Construction Zone as we understand it to be. For the purposes of construction, we would like to propose that the boundaries for Robert Road and Oliver Way be set in such a way that preserves the existing large trees including several Blue Gums that are highly endangered and which currently exist on the site. Some of these trees have been photographed and are shown in Appendix F. We further propose that a full boundary be created by planting native trees to a depth of at least 15 metres back off Robert Road (from the existing property line) with a high acoustic wall situated on the inside of the boundary of the trees.

As mentioned in Section 2 above, we propose that post construction, trees be planted to a depth of at least 30 metres off Robert Road (from the existing property lines), so as to shield the Robert Road residents from visual, acoustic and congestion impacts of the Cherrybrook Railway Station.

It is noted that there is a Blue Gum Shale Forest on the Northern boundary of the proposed Cherrybrook Station Precinct. This area is highlighted in Appendix G. In a report by Hornsby Shire Council titled "Generic Plan of Management for Community Land and Crown Reserves Planning District 8" which can be found at (http://www.hornsby.nsw.gov.au/media/documents/about-council/corporate-documents-and-reports/poms/District-8-Plan-of-Management.pdf), reference is made to the preservation of "Native Vegetation" and "Fauna and Habitat". Relevant extracts of this report are attached in Appendix H.

In particular, the report focuses on the need to conserve remnants of any Blue Gum Forest and specifically highlights the importance of conserving these remnants to the fullest extent possible including linking them to other remnants. Further, they specifically report that remnants of such forests should be conserved and enhanced.

With this result in mind, the opportunity exists to preserve the significant corridor of blue gums and other native trees that currently exist along the border of 4 Robert Road and Cherryhaven Way. Adding to the existing trees in this area during and pre-construction to a depth of approximately 15 metres off Robert Road (from the existing property lines), would allow an easy progression post construction of the plantation of an additional 15 metres in depth of trees, thereby constituting 30 metres in depth off Robert Rd in total, as more fully described in Section 2 of this submission.

Foundations of Property

We have recently received advice that given the vicinity of works that will be carried out by NWRL from the properties situated between 1 and 7 Robert Road, the foundation of those properties may be affected.

Therefore, in accordance with pg 14 of the public document named "Environmental Impact Statement 1 – An overview" under the heading "Ground-borne vibration", we would like to propose that NWRL fund the following:

- 1. The cost of an independent expert to assess and report on the foundation of the property prior to construction
- 2. The cost of an independent expert to assess and report on the foundation of the property during construction if the owner reasonably believes that the foundations of the property have been affected as a result of the works carried out
- 3. The cost of an independent expert to assess and report on the foundation of the property post construction
- 4. The cost of repairing the property to its original state had the property not been affected by the works carried out

APPENDIX A



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The Shire of Hornsby

Executive Manager's Report No. WK101/98 Works Division Date of Meeting: 11/11/1998

Item No: Subject:

1 PROPOSED INTERSECTION UPGRADE - CASTLE HILL ROAD / COUNTY DRIVE / HIGHS ROAD, CASTLE HILL

BACKGROUND

A Review of Environmental Factors (REF) for the proposed upgrade of the intersection of County Drive with Castle Hill Road and with Highs Road has been prepared by the Roads and Traffic Authority. This review contains three original options (Options A, B, and C) which were put on exhibition in September, 1997.

Following a review of the submissions relating to the three possible intersection treatments, the RTA announced that Option B had been selected as the preferred upgrade option favoured by about 70% of the respondents. As a result of further representations and submissions by residents of the West Pennant Hills Valley and the Baulkham Hills Shire Council, the RTA has developed an additional option (Option D).

The four (4) options (A, B, C and D) are currently on exhibition at Cherrybrook Shopping Centre at Cherrybrook, Coonara Shopping Village at West Pennant Hills and Castle Hill Motor Registry at Castle Hill up to 13 November, 1998. The period for comments expires on 27 November, 1998.

PURPOSE/OBJECTIVE

The purpose of this report is to explain the benefits and disadvantages of each option and recommend a preferred option for Council to submit to the RTA.

DISCUSSION

1. Description of Options

Generally all four options provide improved safe access for residents within the Hornsby and Baulkham Hills LGAs, however, Options A and C have access restrictions to and from Highs Road.

The four options on exhibition all include the construction of a signalised intersection. All proposed options would include the permanent closure of David Road at Castle Hill Road.

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Access for Robert Road at the intersection with Castle Hill Road would only be permitted for left in and left out movements. Currently, access to Castle Hill Road from the suburbs to the north is largely limited to David and Robert Roads which are both characterised to have a high incidence of accidents. The proposed road closure of David Road and restricted movement at Robert Road would reduce the potential for accidents at these locations.

The advantages and disadvantages of each option are discussed below.

i. Option A

This proposal provides good access to and from County Drive with the exception that vehicles cannot enter County Drive from Highs Road. The deletion of this movement eliminates a signal phase from the proposed traffic signals thus allowing greater traffic flow along Castle Hill Road.

The disadvantages of this option is that residents within the West Pennant Hills Valley are required to drive a circuitous route if they wish to access the Cherrybrook Shopping Centre and child care facilities in Cherrybrook.

Option A results in the displacement of 132 northbound vehicles off Highs Road. The majority of this traffic would be diverted to Coonara Road through to Edward Bennett Drive and John Road. The balance would be diverted to Pennant Hills Road and Castle Hill Road.

ii. Option B

This proposal provides excellent access conditions for all legs of the proposed intersection. Highs Road is provided with three (3) lanes, ie. ingress lane for left and right turns from Castle Hill Road and cross movements from County Drive. Two (2) lanes are provided for egress from Highs Road, ie. left and right turns onto Castle Hill Road and cross movements into County Drive.

In view of the provision for cross traffic movements from Highs Road, and the traffic signal time required for this movement, some additional delays to traffic on Castle Hill Road will result. A traffic study undertaken by Masson and Wilson on behalf of the RTA established that traffic volumes on Castle Hill Road west of Highs Road would increase up to 333 vehicle per hour during the morning peak period. East of Highs Road, traffic volume on castle Hill Road would decrease by around 43 vehicles per hour.

In a report by the traffic consultant, it is indicated that the main traffic that currently uses Highs Road is drawn from the local areas north of Castle Hill Road and also from Dural/Kenthurst along the Old Northern Road/Castle Hill Road route. It is reported that the predominant through movement along Highs Road is between the above areas and Parramatta using the Highs Road-Taylor Street-Aiken Road-Oakes Road and Jenkins Road route.

As a result of the proposed traffic arrangement for Option B, traffic volume in Highs Road

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south of Castle Hill Road would increase by about 302 vehicles per hour during the morning peak hour. However, there would only be a minor net increase in the Pennant Hills Valley since Coonara Road would experience a traffic reduction of up to 230 vehicles per hour.

iii. Option C.

This proposal is designed to prevent access into and out of County Drive from Highs Road. Whilst this option maintains ingress and egress to County Drive from Castle Hill Road the capacity of County Drive will be reduced due to the reduction of the south bound carriageway from three (3) lanes to two (2).

As a result of imposing traffic movement bans for northbound traffic, traffic redistribution for Option C is as described under Option A. The southbound traffic flow would be reduced by 313 vehicles in Highs Road during morning peak hour. This is a reduction of 139 vehicles on current flows. Half of the 313 vehicles would be diverted to Coonara Road while the other half would continue along Castle Hill Road.

In the previous report to Council regarding the three options which were exhibited in 1997, the Manager for the Traffic and Road Safety Branch raised concern at the number of traffic islands for this proposal. It was considered that the islands and their associated line marking would be confusing in such a small area and do not physically prevent vehicles from carrying out illegal turns or manoeuvres, particularly to access Highs Road from County Drive. Such manoeuvres would be extremely hazardous and detract from the safety objectives of the upgrading works. Concerns were also expressed that the pedestrian crossing across the left turn lane on County Drive is unsignalised.

It was also indicated that in the event that the RTA adopt this option it is considered that County Drive should maintain the three (3) lanes south bound with two left turn lanes onto Castle Hill Road. It will also be necessary to provide improvements to the right turn facility on Castle Hill Road at Coonara Avenue to cater for the vehicles wanting to gain access to and from the West Pennant Hills Valley and Cherrybrook.

iv. Option D

Option D is a slight variation of Option B. Under Option D, there would be no through traffic from County Drive to Highs Road.

As a result of the proposed arrangement, southbound traffic on Highs Road would be reduced by 317 vehicles during the morning peak hour. Half of this traffic would be diverted to Edward Bennet Drive/Coonara Road while the balance would continue along Castle Hill Road. Under this option, there would be a minor reduction in traffic volume on Aiken Road compared to the present situation.

2. Preferred Option

Option B is the preferred option. Option B is also the RTA's preferred treatment to improve

http://www2.hornsby.nsw.gov.au/ebp/hscebp98.nsf/21097a8176941d6e4a2564600016ad. 27/04/2012

APPENDIX B (page 4 of 5)

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safety and traffic efficiency. This is the same option which was supported by Council during the exhibition period in 1997. Option B offers the most balanced solution. This option permits all movements to and from Castle Hill Road, County Drive and Highs Road. There will be minimal impact on the West Pennant Hills Valley.

The traffic study prepared by the Consultant for the RTA also showed that Option B offers the most balanced solution, providing good accessibility (lower delays) with the lesser overall network cost changes. As a result of all movements being permitted at the subject intersection, this option would relieve pressure on the intersection of Castle Hill Road/Edward Bennett Drive. With a set of signals at the subject location, side street traffic would enjoy safer conditions and much reduced delay when entering or exiting Castle Hill Road.

The impacts of Option B and the extension of County Drive to Castle Hill Road will be localised, with little or no changes to traffic volumes outside the Cherrybrook and West Pennant Hills Valley areas. At the same time, a significant decrease in traffic would be experienced on roads such as Edward Bennet Drive, Neale Avenue, Woodgrove Avenue and John Road.

BUDGET

This project is to be designed and constructed by the Roads and Traffic Authority at no cost to Council.

POLICY

There are no policy implications reflected in the recommendations of this report.

CONSULTATION

The four (4) options for the upgrading of Castle Hill Road, County Drive and Highs Road are on public exhibition up to 13 November, 1998.

RESPONSIBLE OFFICER

The responsible officer for this project is Bernard Choongo, Traffic/Transport Planner in the Traffic and Road Safety Branch, telephone 9847 6680.

RECOMMENDATION

THAT

Council endorse Option B as the preferred option for the upgrading of the Castle Hill Road, County Drive and Highs Road intersection.

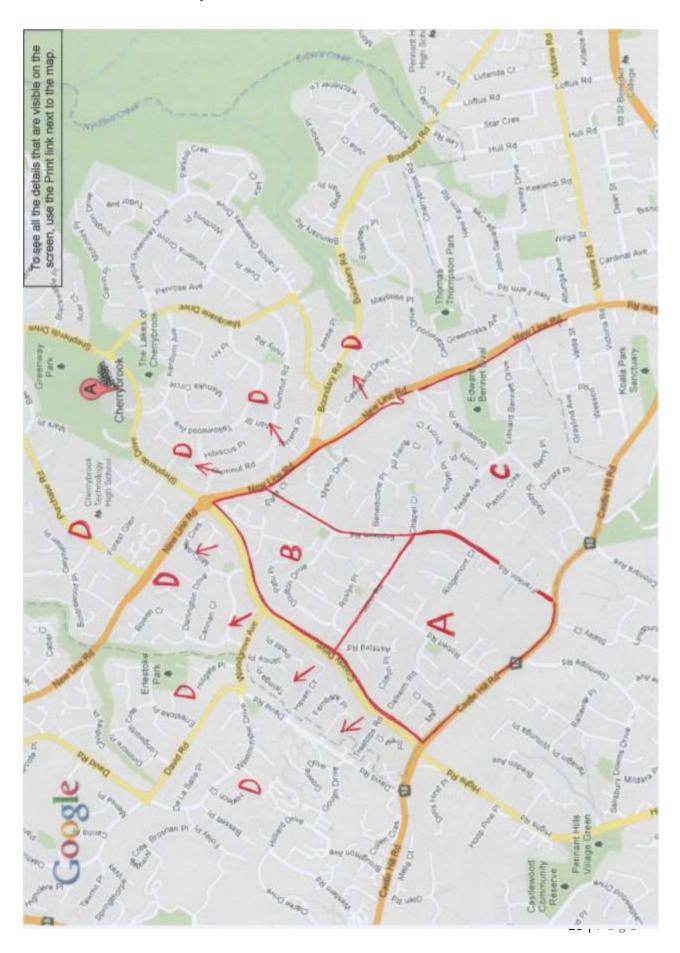
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APPENDIX B (page 5 of 5)

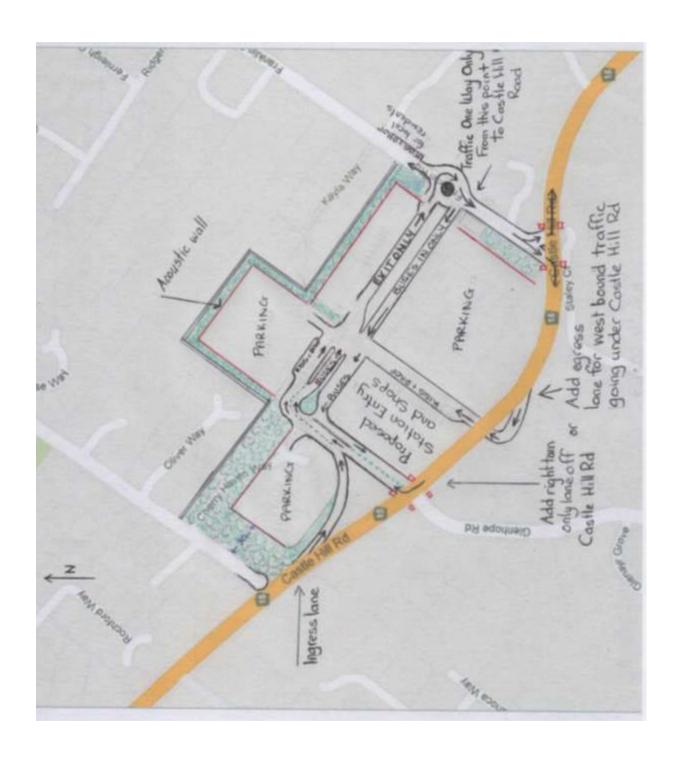
Page 5 of 5 ROB RAJCA Acting Executive Manager Works Division Attachments: WK101 LF Attachments - Option A (1 Page) Option B (1 Page) Option C (1 Page) Option D (1 Page) http://www2.hornsby.nsw.gov.au/ebp/hscebp98.nsf/21097a8176941d6e4a2564600016ad... 27/04/2012

Overview of the Cherrybrook Station Precinct Catchment

APPENDIX C



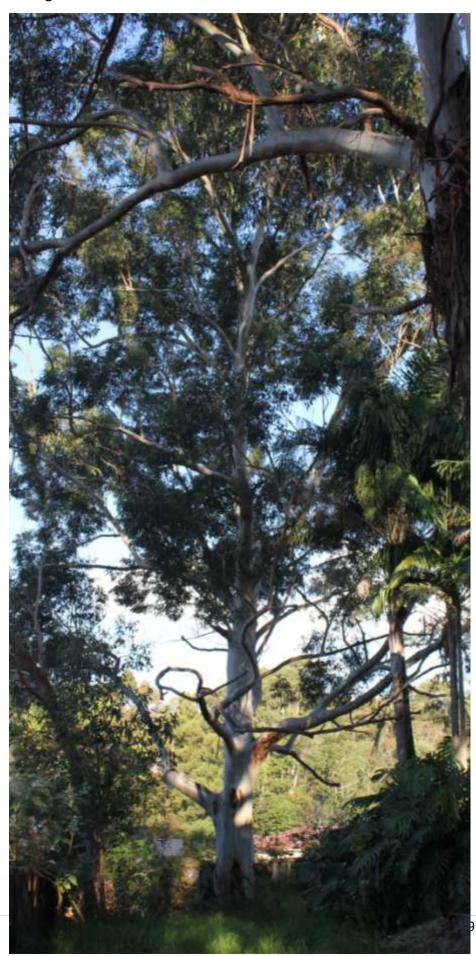
Proposals Regarding Access from Catchment to Cherrybrook Station Precinct $\boldsymbol{APPENDIX}\;\boldsymbol{D}$



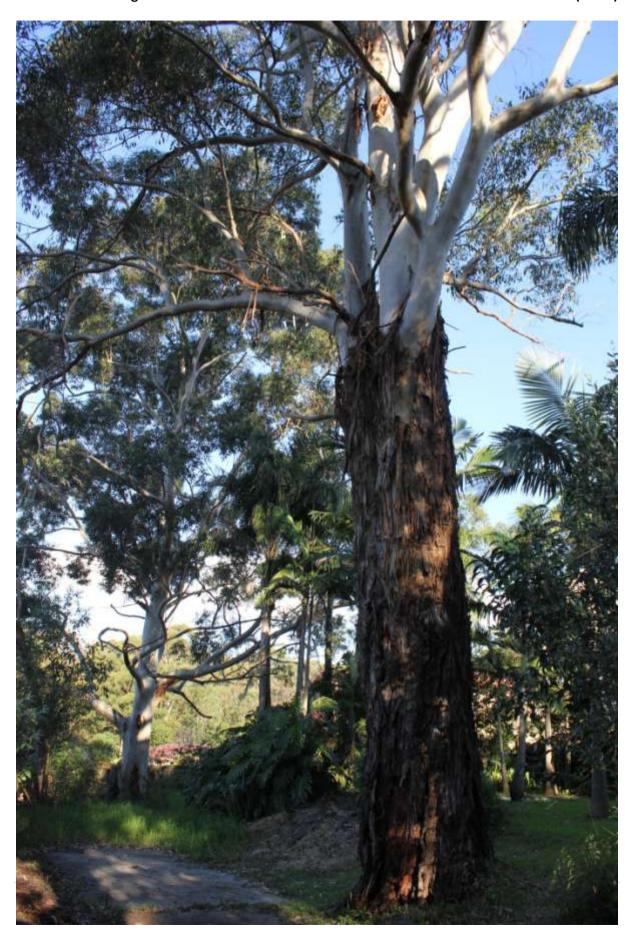
APPENDIX E

County Drive's problems could soon be over - Local News - News - General - Hills News Page 1 of 5 County Drive's problems could soon be over 08 Jun, 2010 04:00 AM THE sags surrounding County Drive could soon be over On May 27, Hornsby Council's traffic committee held a meeting to recommend changes to traffic management on the Cherrybrook road to improve If approved, the changes will on be trial and if successful, implemented by the council. Earlier this year the council changed County Drive from two lanes to one, sparking anger and frustration from residents concerned about traffic safety and flow Castle Hill MP Michael Richardson said the latest changes would deal with many of the concerns russed by local residents. There's no doubt County Drive has a poor accident round and some improvements were needed although the police advised that speeding or undertaking were not the issues some County Drive residents claimed," Mr Richardson said. Changes included extended stip lanes at Treetops Road, Woodgrove Avenue and John Road, left-turn-only signage for the inside lane at Treetops Road, double right-turn out of John Road into County Drive with an extended slip lane for exiting traffic, an extra lane southbound between Treetops and Castle Hill roads to improve traffic flow, a pedestrian reloge in the median strip near Durlington Drive, and the removal of the water barriers. "I have never received so many letters and emails on a single roads issue as I have on this one. It was clearly semething the community felt very strongly about," Mr Richardson said. "As a major link road between two state roads New Line Road and Castle Hill Road County Drive is an essential part of the Cherrybrook road The committee felt that converting it to a two-lane road createn rat-runs down other streets, such as David Road, Franklin Road and Edward Bennett Drive, semething the opening of County Drive was supposed to relieve." 'Equally, the committee did not support the peak-hour clearways proposed by some residents. "We paid particular attention to the intersection of Treetops Road and County Drive, which has the worst socidest record of the whole road." County Drive Action Group spokesperson Lee Smith, who supports two lanes back on County Drive, said the changes were "a good start". "This is a better version than the last version but in my mind, I am still not sure," Mr Lee and. "I think it's now a matter of we will just wait and see. The only thing we do know is that this is another "Until we lobbied against this, none of this would have been done. "I would like to still see the two outside lanes clear during peak hour." What do you think? Share on Facebook Tweet on Twitter

http://www.hillsnews.com.au/news/local/news/general/county-drives-problems-could-soo... 27/04/2012



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Tree corridor on the border of 4 Robert Rd and Cherryhaven Way

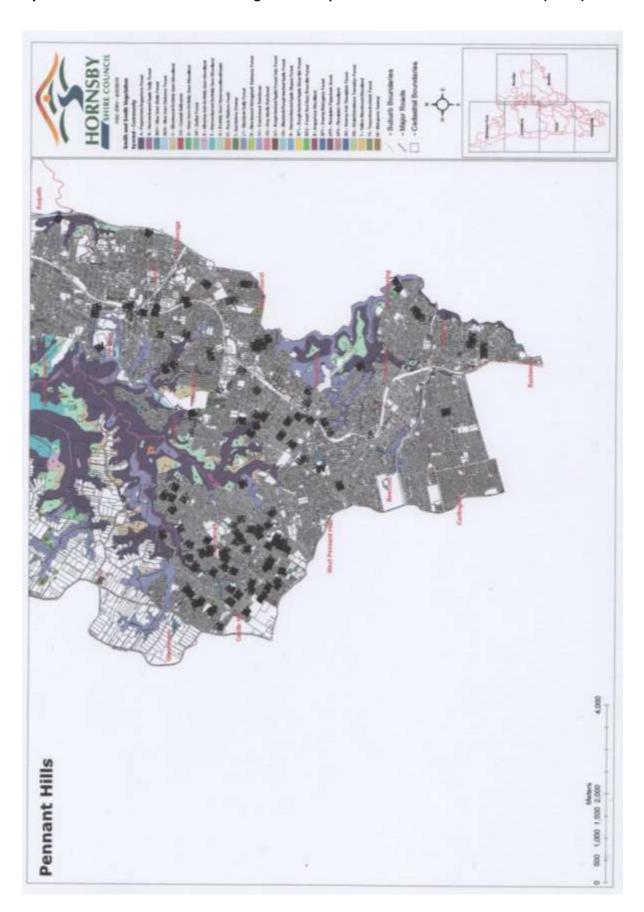
APPENDIX F (3 of 3)







APPENDIX G (1 of 2)



APPENDIX G (2 of 2)

Hornsby Shire Council – Smith and Smith Vegetation Map: Magnified to show the proposed Cherrybrook Station Precinct



APPENDIX H (1 of 3)

Extract from Generic Plan of Management for Community Land and Crown Reserves Planning District 8

District 8 - Community Land and Crown Reserves Generic Plan of Management

4.0 DESCRIPTION OF THE LAND

Planning District 8 includes the suburbs of Cherrybrook, Castle Hill and Dural. Hassell (1997) described the distribution and the quality of the open space within Planning District 8:

"The eastern area of the district is occupied by the Berowra Valley Regional Park. To the south western part of the district there are a series of larger lots with more of a rural residential character where there is an absence of open space resources. The remainder of the district is mostly residential development, interspersed with a range of small parks and natural areas.

"As has been the case with prior planning districts, small parks are generally low in quality. There are six areas of high quality open space in Planning District 8, including Greenway Park, Hastings Park, Edward Bennet Oval and The Lakes of Cherrybrook, a park and natural area."

4.1 CATCHMENT CONTEXT

The whole of Pianning District 8 lies within the south-western upper reaches of the Berowra Creek catchment. Most of the eastern border of the district is formed by Berowra Creek, while much of the northern border conforms closely to Georges / Pyes Creek. Pyes Creek forms a large sub-catchment of its own comprising almost half the area of the district. The majority of the surroundings of these three major tributaries are comprised of bushland of varying condition. In the north-east Berowra Valley Regional Park contributes the largest area of bushland in the district, with many of the district's bushland reserves forming continuous links with this.

4.2 TOPOGRAPHY, GEOLOGY AND SOILS

Geology is roughly divided between the Shire's predominant geological formation, Hawkesbury Sandstone, in the north-east of the district, and overlying Wianamatta Shales in the south-west. Typically, Hawkesbury Sandstone gives rise to shallow, coarse soils of low-moderate fertility, while Wianamatta Shales give rise to slightly higher fertility clay soils.

4.3 NATIVE VEGETATION

The Hornsby Shire has a particularly high diversity of native plant species when compared to other local government areas, with in the order of 1000 species (Fallding et al, 1994) and a total of 26 threatened plant species occurring (draft Hornsby Shire Biodiversity Conservation Strategy, 2004).

Apart from the area of Berowra Valley Regional Park and some adjoining medium sized council reserves the majority of native vegetation in the district has been cleared. Historically, the flatter and relatively fertile ridge top Wianamatta Shales supported Tail Open Forest of Blackbutts, Blue Gum and Turpentine white numerous sandstone communities existed, many of which are still well represented within the shire. District 8 does contain some very significant native vegetation within public reserves.

Plant species, populations and communities of conservation significance within the study District 8

- Two nationally significant plant species (vulnerable under the Federal Environmental Protection and Biodiversity Conservation Act.1999);
 - Tetratheca glandulosa
 - Melaleuca deanei
- One NSW threatened plant species (vulnerable under the NSW Threatened Species Conservation Act, 1995);
 - Epacris purpurascens var. purpurascens.
- Two NSW Endangered Ecological Communities (listed by the N.S.W. Scientific Committee under the Threatened Species Conservation Act, 1995), occur on Wianamatta Shale:
 - Blue Gum High Forest (Community J).
 - Sydney Turpentine-Ironbark Forest (Vegetation Communities K and M)

The NSW Scientific Committee's determinations on these communities indicated that there is 1% of the original area of Blue Gum High Forest remaining and 0.5% of Sydney Turpentine Ironbark Forest remaining.

- One ecological community of Regional Conservation Significance, significant in Sydney Region due to very restricted distribution, occurs in District 8
 - Warm Temperate (Coachwood) Rainforest (Community O)
- One ecological community of Local Conservation Significance, the largest areas of which are present outside major reserves, occurs in District 3:

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APPENDIX H (2 of 3)

Extract from Generic Plan of Management for Community Land and Crown Reserves Planning District 8

District 8 - Community Land and Crown Reserves Generic Plan of Management .

 Eucalyptus pilularis – Angophora costata – Syncarpia glomulifera Tall Open Forest (Vegetation Community L).

4.4 FAUNA AND HABITAT

The Hornsby Shire provides habitat for a diverse range of faura species, with a total of 388 native terrestrial vertebrate animal species occurring, or likely to occur in the Shire. This includes 29 frogs, 51 reptiles, 55 mammals and 253 birds. In addition, 18 introduced fauna species have been recorded (Fallding et al., 1994). Bushland areas within the Shire are currently significantly fragmented, especially by roads and urban development. Up to 42 endangered or threatened fauna species may occur within the Hornsby Shire, these comprising 10% of total native terrestrial vertebrate species. These endangered or threatened species are reliant on the remaining bushland within and surrounding the Shire for their continued existence (Fallding et al., 1994, draft Hornsby Shire Biodiversity Conservation Strategy, 2004).

Fauna species and populations of conservation significance within the study District 8

- Three species of NSW threatened fauna (vulnerable under the NSW Threatened Species Conservation Act, 1995) occur in Planning District 8
 - Glossy Black-Cockatoo (Calyptorhynchus lathami)
 - Powerful Owl (Ninox strenua)
 - Red Crowned Toadlet (Pseudophryne australis)

4.5 ABORIGINAL CULTURAL HERITAGE

The Aboriginal language group of the area was the Guringal people and within the district known Aboriginal heritage items such as shelters, archeological deposits and charcoal drawings exist. Despite this remaining heritage the district lies within a heavily developed area where many sites may have been destroyed without being recorded, although there is still potential for sites to be found in some of the larger bushland areas adjoining and within Berowra Valley Regional Park.

There are 2 bushland areas in District 8 with known Aboriginal relics:

- Lambe Place Bushland
- Pyes Creek Bushland

4.6 EUROPEAN CULTURAL HERITAGE

Items of local or regional heritage significance

There are 4 parks and reserves with items of local heritage significance listed in the Hornsby LEP in Planning District 8:

- "The Lakes of Cherrybrook Reserve"
- Greenway Park
- Westminster Park
- Upper Pyes Creek Bushland

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APPENDIX H (3 of 3)

Extract from Generic Plan of Management for Community Land and Crown Reserves Planning District 8

District 8 - Community Land and Crown Reserves Generic Plan of Manager Blue Gum High Forest: Publicly owned remnants must be conserved as fully as possible and linked to other remnants. Wherever feasible, remnants should be conserved and enhanced:-· Cease mowing parks where there is opportunity to rehabilitate this endangered community; Undertake professional bush regeneration works in sites affected by weed invasion; Curtail excessive recreational use in areas that could be rehabilitated; · Prevent further substantial losses of this community; · Map this community on private land and apply protective zoning, and . Undertake a project to link remnants using appropriate species to be planted along road reserves, other open space and in gardens. Sydney Turpentine-Ironbark Forest Wherever feasible, remnants should be conserved and enhanced through long-term protection involving expansion and linking of remnants:- Cease mowing in parks where there is opportunity to rehabilitate this endangered community; · Undertake professional bush regeneration works in sites affected by weed invasion; Curtail excessive recreational use in areas that could be rehabilitated; · Prevent further substantial losses of this community; · Map this community on private land and apply protective zoning; and . Undertake a project to link remnants using appropriate species to be planted along road reserves, other open space and in gardens. Page 26