#### NWRL ENVIRONMENT IMPACT ASSESSMENT NO.2

#### SUBMISSION ON CRITICAL ISSUES IDENTIFIED

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#### INTRODUCTION

This submission is based on my own investigations and assessment of documents submitted with Environmental Impact Assessment No.2 (EIS 2). The assessment is based on review of technical data and investigation reports that are submitted part of the EIS2. This assessment is general review of the feasibility of transport planning /operation and other issues in relation to proposed Cherrybrook Station.

This is an unbiased report that incorporates the information available from varied sources (including the work done by Robert Road Action group and other community members who are residents of the area surrounding the Robert Road.

I also fully support the details provided in EIS1 submission by Robert Road Action Group (see Appendix A attached with this submission)

I am qualified Civil Engineer and a resident of the community that is impacted by the proposal. For any future design and planning by NWRL; I would be interested in getting involved in reviews and assessment of the technical reports and/or proposals etc.

#### 1. TRAFFIC MANAGEMENT

USE OF ROBERT ROAD AS ACCESS TO PROPOSED CHERRYBROOK STATION

#### 1.1 RECOMMENDATION

ROBERT ROAD AS ENTRY ROAD TO CHERRYBROOK STATION IS NOT ACCEPTABLE AND WIDELY SUPPORTED BY COMMUNITY GROUP OF ROBERT ROAD AND ITS NEIGHBOURHOOD. THE REASONING IS PROVIDED IN THIS SUBMISSION.

#### 1.2 REFERENCES

 ${\bf ENVIRONMENTAL} \ {\bf ASSESSMENT} \ {\bf NO.2} \ ({\bf EIS} \ 2), \ {\bf Documents} \ {\bf Referred}.$ 

- Chapter 6A Project Description- Operation
- Chapter 9 Traffic and Transport (Refer Section 9.4.1)
- No.2 Technical Paper: Construction Traffic and Transport Management (Refer Page 28-29)
- No.7 Technical Paper: Surface Water and Hydrology

#### 1.3 SUBMISSION (KEY ISSUES IDENTIFIED)

#### A. ISSUE WITH CARRIAGEWAY WIDTH OF ROBERT ROAD AND FRANKLIN ROAD

**REFER:** Environmental Assessment No. 2 Technical Paper: Construction Traffic and Transport Management (Page 28-29)

#### **Extract from report**

Franklin Road, Robert Road and Glenhope Road are all local roads with priority junctions at Castle Hill Road. Adjacent to the site Franklin Road and Robert Road are narrow two lane pavements. Robert Road is a narrow road of approximately 8.5 metres which provides only a single traffic lane if vehicles are parked on both sides of the road. Franklin Road provides kerb and gutter on the western side of the road with a narrow two lane pavement (approximately 7.5 metres wide) and narrow unsealed shoulder on the eastern side of the street. Glenhope Road provides two traffic lanes and parking lanes adjacent to the kerb although no edge marking is provided.

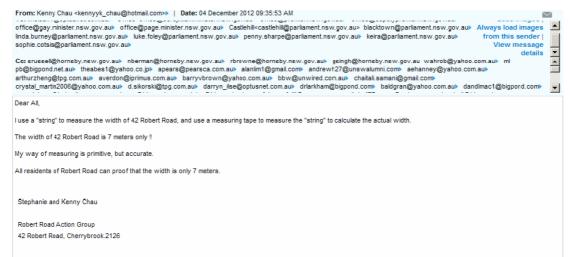
#### Issues Identified

Robert Road is a narrow road with a carriageway width of 7.0 m (average) (kerb to kerb measurements) and not 8.5 metres as quoted in the report. As there is no survey and design drawings available from Council to validate the claim, Google Earth was used for ground truthing of the lane widths. It is a digitally acceptable method of ground truthing (although it is still approximate) but can be used for relative comparison of roads in absence of surveys or design drawings. It is widely used for concept design or preliminary design purposes only. The snapshots have been presented in Figure 2 along with rough calculations.

The carriageway width has been corroborated by residents living along the road (Refer below email from resident at 42 Robert Road, who has done the actual road measurement). There is no justification on how 8.5 m (although quoted approximate) was sourced from. This also contradicts the carriageway width of Robert Road quoted as 7.5 m in Chapter 9, Section 9.4.1.

It makes a significant difference the measured carriageway width has on classification and traffic modelling of road. A 9.0 m carriageway width is classified as "Local Road or Street" with two travel lanes and two parking lanes. Some of the adjoining roads that fit into the category are John Road and Franklin Road (although this has been quoted as 2 lane road in Technical Report 2). It appears there is lot of inconsistency in what is quoted and used for analysis in Technical Report2 as compared to actual figures. In my opinion this is technical flaw or error unless it is justified by the consultant. Note my assessment is based on what I see in the report.

This reduced width of the road is corroborated by current traffic conditions. A detailed report on this was submitted as part of EIS No.1 by Robert Road Working Group (See Appendix A). Any one who drives on this road would corroborate that this road does not have capacity (although I have no source of design intent or history of this road to critically question road width but this must be investigated).



NOTE: ROBERT ROAD HAS BEEN CLASSIFIED AS LOCAL ROAD BY HORNSBY SHIRE COUNCIL (TWO WAY, TWO LANED ROADS) REFER 9.5.2. THIS IS NOT CORRECT, SEE PHOTOS BELOW, IT IS NOT A TWO WAY, TWO LANED "LOCAL ROAD BY DEFIINITION AS QUOTED IN EIS No.2".

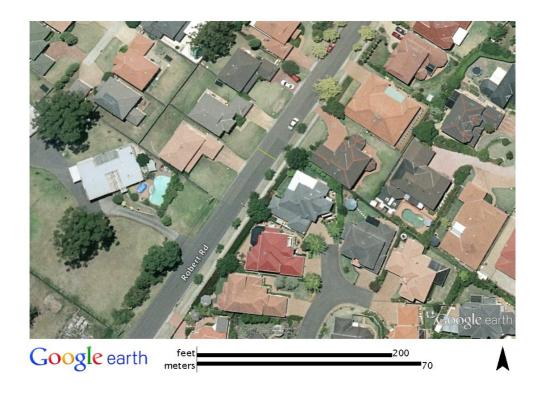
An example of Current Traffic Movement along Robert Rd (sourced from Appendix A) is shown below:

Figure 1 Current Traffic Movement along Robert Rd



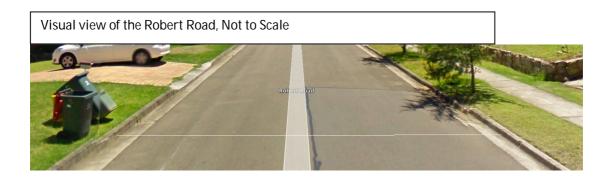


Figure 2 Google Maps



Calculations using the scale

 $0.8 \text{cm} / 8 \text{cm}^* 70 = 7.0 \text{ m}$ 



ROAD WIDTH IDENTIFIED FROM GOOGLE MAP IS 7.0 M. THIS WIDTH IS OPEN FOR VERIFICATION AND GROUND TRUTHING USING SURVEY OR ACTUAL MEASUREMENTS.

THIS WIDTH HAS BEEN CORROBORATED BY RESIDENTS LIVING ALONG THE ROAD AND CURRENT TRAFFIC CONDITIONS (SEE PHOTOS IN APPENDIX A)

#### FRANKLIN ROAD

#### Extract from EIS No.2 Technical Report No.2 prepared by AECOM

Franklin Road provides kerb and gutter on the western side of the road with a narrow two lane pavement (approximately 7.5 metres wide) and narrow unsealed shoulder on the eastern side of the street.

RESPONSE: This cannot be construed as average width of entire Franklin Road which is approximately 9.0 m, the narrow unsealed shoulder section on eastern side is altered section of the road (between Kayla way and Castle Hills Road junction) and can be easily widened as there is no formal kerb and gutter on the eastern side. As per NWRL-10038-R-TS-00006-v4.0-Operational T&T Report, Widening of Franklin Road between Castle Hill Road and the Kayla Way intersection is proposed to provide for a right turn lane into the access road to the station and through lanes in each direction with a proposed increased width of 11m (Refer Chapter 9)

#### Issues Identified

I do not know the history of Franklin road as I am new resident in the neighbourhood, but based on my understanding this road is a "Local Road" by definition (with carriageway width of 9m) with a connection to New Line Road that was closed by Horsnby Shire Council, see Google Map below with a Cul-de-Sac created as Eagle Circuit.



The carriageway width quoted as 7.5m in the extract is a small section of the road connection to Castle Hill Road between Kayla Way intersection (this appears to be 10% of the total length of the road and is not the average for the entire road section which is approximately 9.0m and therefore is incorrect.

The average width of the Franklin Road excluding this section of the road (that has been altered) varies from 9-10m (although the average is more of 9 m for major chunks of the kerb to kerb sections).

A google map snapshots have been provided as reference only but this can be corroborated by anyone who drives along this road especially at sections along the intersection of Doulton Drive upto the Franklin Road intersections with Kayla Way. A section of the road near Inala School has extra lanes for school drop.

There are also Hills Buses that daily ply in the morning and afternoon hours on section of the road between the roundabout at John Road and Neale road.

Figure 3 Google Maps



Calculations using the above scale

0.44cm/4.9cm\*100= 9.0 m

Visual view of the Franklin Road, Not to Scale



#### **VISUAL COMPARISONS**

A visual comparison of the roads show perception of how Franklin road compares to Robert Road (Google 3D images). Measured distance of Robert road at this road location is 7.0 m and for Franklin road (located between John Road intersection and the Kayle Way) is 9.0 m. Franklin road upstream of the John Road intersection towards intersection of Doulton Drive is even wider greater than 9.0m at several places. This can be corroborated by ground truthing via surveys and even driving along the road.

#### **ROBERT ROAD**



#### **FRANKLIN ROAD**



#### **CONCLUSIONS DRAWN**

The 8.5m road carriageway width for Robert Road and 7.5 m for Franklin Road as quoted in Technical Report No.2 is totally incorrect based on my investigations. It appears these estimates may have been used for traffic analysis for construction operation, LINSIG. Based on the above deductions this analysis is flawed and therefore needs to be re-visited.

Also, this brings into question why Franklin road has not been used for entry in and egress out or into Franklin road (as one-way egress) with entry from Castle Hills road. Not much details are provided in Chapter 9 to understand the logic behind traffic operations.

#### B. ISSUES WITH TRANSPORT OPTIONS PROPOSED FOR CHERYBROOK STATION

#### Extract from EIS, Chapter 9, Section 9.5.2

- One-way bus circulation along Franklin Road and Robert Road in order to avoid the need
  for buses to pass one another. This option would create an inefficient bus service by forcing
  eastbound buses to traverse the section of John Road between Robert Road and Franklin
  Road twice, whilst westbound buses would not service this section.
- Numerous options to route buses via County Drive and Castle Hill Road in order to avoid
  one or both of Robert Road and Franklin Road. However, these options would weaken bus
  services in the key station catchment to the north, increase congestion, result in delays
  along County Drive and Castle Hill Road, and result in reduced pedestrian safety for bus
  passengers around Cherrybrook Station.
- Reconfiguration of parking and traffic lanes on Robert Road and Franklin Road to facilitate bus and car access to the station via John Road and Neale Avenue.

Some other justification of planning by NWRL (as provided by a resident)

As mentioned, the major arguments/assumptions for using Robert road as the main feeder road to the station seem to be that County Drive and Castle Hill roads cannot be used as the main feeder route to the station because:

- a) There is a need to maintain bus stops along John Road, and
- b) The intersection of County Drive and Castle Hill road is already saturated with traffic so buses cannot use County Drive.
- c) Robert Road is well below is traffic capacity and can handle far more traffic.

A copy of this route planning has been extracted from EIS2 to provide a visual of the proposed operation



#### ISSUES IDENTIFIED

#### **B1.1 TRAFFIC AND ROUTE PLANNING**

# B1.1.2 Critical Appraisal of Roads Identified for access to proposed Cherrybrook Station.

#### History of the Roads

This is the history of the roads as provided by resident who has lived more than 18 years on Robert Road.

- Initially the 2 key feeder roads designed to handle traffic flow between New Line Road and Castle Hill Rd were Franklin Rd and David Rd. Robert Road was a narrow roadway with no curb and guttering (when we moved here) and was designed to service down to John Road and the residents in that pocket.
- David Road was closed off as it was considered too dangerous to keep open onto Castle Hill Road, plus it was generally recognized that when County Drive was opened as a dual carriageway, that it would take this traffic to a safer exit point on Castle Hill Rd.
- Robert Road was made no right turn onto and off Castle Hill Road as it was too dangerous due to rat running.
- County Drive was opened onto Castle Hill Rd as a dual carriageway to handle traffic movements between New Line Road and Castle Hill Road.
- The Franklin Road entry and exit at New Line Road was closed forcing traffic down County Drive.

#### **Critical Overview of the Roads and Route Comparisons**

A critical overview of the roads that are proposed to feed into proposed Cherrybrook Station that includes County Drive, John Road, Robert Road and Franklin Road are provided based on my findings. Note, this are preliminary findings based on limited information, lack of time and lack of any drawings and survey data on the roads.

Table 1 provides a Classification of roads by AUSTROAD, National Association of Roads and Traffic Authorities of Australia) and how each of the named roads would fit into the category.

Table 2 provides the current status of the roads and AADT. Note AADT is a guide only and actuals are based on traffic counts and other analysis.

NOTE: A Traffic Management Study is being undertaken by INCO Pty Ltd titled "TRAFFIC Study of Proposed Development of NWRL Cherrybrook Station and Impact on Robert Road, 30<sup>th</sup> November 2012 (Refer to link <a href="https://www.saverobertroad.com">www.saverobertroad.com</a> under traffic studies). This study is independently being undertaken on behalf of Robert Road Actions Group.

<u>Table 1 Classification of Roads (By AUSTROAD, National Association of Roads and Traffic Authorities of Australia)</u>

Road Type	Carriageway Widths (kerb to kerb clear width in metres)	Number of lanes	AADT	Nominated Roads for access to Cherrybrook station that would fit category	Actual Road width*
Sub-Arterial	12.5 m separated by 4 m median	4 travel lanes and no parking		County Drive	16.5m but effective carriage width is 14m
Collector	11	2 travel lanes and 2 parking lanes	2000 to 4000		
Local street	9	2 travel lanes and 2 parking lanes	500 to 2000	John Road, Franklin Road	
Cul-de-sac Serving a maximum of 30 dwellings/dwelling units	7.5	2 travel lanes parking permitted	Upto 500	Robert Road	7.0 m does not comply with minimum width of 7.5 m,

\*NOTE: Based on Google map measurements

<u>Table 2 Current status of Roads (as proposed for Cherrybrook Station Access, Castle Hills Road, Franklin road has not been included in this analysis).</u>

Road	Design	Road classification	Current Status	Effective Design Width	AADT* Based on Actual Design Capacity
County Drive	Four Lane Road	Sub-Arterial	2 parking lanes allowed	Reduced to 2 lanes- 7.5m in some sections of the road. Right turn lanes and bus lanes sections are excluded.	Based on traffic counts, but > 10,000 for 4 lane road
John Road	Two Lane Road	Local Street	2 parking lanes allowed except at bus zones	9 m, 2 travel lanes and 2 parking	500 to 2000
Robert Road	2 travel lanes parking permitted	Cul-de-sac  Although the road does not comply with this classification as it is not Cul-de-Sac and also does not comply with minimum Carriageway width of 7.5m. Therefor classification is unknown??	2 parking lanes and 2 travel lanes (which effectively are 1 lane due to reduced Carriageway width of 7 m, see photos in Appendix A)	7 m	Upto 500, it could be lower

\*NOTE: 1. AADT is acronym for Annual Average Daily Traffic, Note AADT is just a guideline; actual traffic carrying capacity is based on actual monitored traffic counts. Independent Traffic management Study is being conducted by INOLA Traffic Management Consultants on behalf of Robert Road Group . A report will be prepared shortly that will compare the actual traffic capacity of the listed roads that will be used for comparison.

#### **Some Hard Facts**

- Robert Road has a road width nearly 7 m. As per the AUSTROAD (National Association of Road and Traffic Authorities in Australia) it does not comply with the minimum road carriageway width (measured from Kerb to Kerb) of 7.5 m. The road in its current form cannot carry traffic (AADT < 500). The design standards applied by Council are not known and cannot be verified but the reduced width ie 7.0 m is insufficient for conveyance of traffic. This is particularly observed when the cars are parked on both sides of the road. Lot of pictures have been shown and submitted by other residents (as part of both current EIS 2 and previous EIS 1, Refer Appendix A for a report). This road in current form is a traffic Hazard.</p>
- NWRL proposal to use this road does not hold any merit due to the following reasons
  - (a) Robert Road is a major traffic Hazard, (maybe under designed road, I cannot comment unless we know the design intent) that at present cannot cater for normal residential traffic. Even if parking is not allowed as proposed, two buses (heading two ways) cannot fit into the road. Has any traffic and engineering design considerations or studies done prior to this road considered in its current form. I cannot see any technical reports in EIS2.
  - (b) John Road has similar issues, although it is bit wider road (9 m). The buses travelling from County Drive are severely constrained by the road width. As it is obvious buses need a much wider turning radius. It is a traffic hazard as well especially when cars are turning from John Road into County Drive. Some photos of recent accidents have been posted by other residents in their submissions.
  - (c) County Drive is a much wider road (4 lane) with carriageway width 12.5 m. The road has been designed as a link road (Classified as Sub-Arterial) but recently Council has closed one lane for resident parking. Lot of protest was done by other residents who wrote several emails to Mayor and councilors (with a website dedicated to the cause) but it was overturned by Council due to undisclosed reasons. What has happened as outcome of road closure:
    - Peak Traffic on County Drive that extends atleast 500m from the roundabout in the morning heading towards New Line Road. It takes me 20 minutess to just cross this 500m of traffic jam every day
    - High Traffic Hazard, have see some nasty accidents
  - (d) Access from Dalkeith Road and other estates surrounding Robert Road. This is a major issue that has been overlooked by NWRL. Lot of residents including myself use Robert Road while accessing other local roads including John road. The proposal to carry buses and extra cars on this road for future Cherrybrook Station without road widening is a blunder. Even in the current state, it is a traffic hazard (see photos), what will you expect in the future if NWRL goes with its plan is not too difficult to visualize, it will be utter chaos.
  - (e) The other excuse that NWRL is putting forward is that lot of people take bus from John Road and thereby this have to pass through Robert Road. I don't believe there is any iota of reasoning behind this. I am regular bus traveller who walks to John Road taking 642/642X to City, in 6 years time I will be the last person to take a bus to the City. Reasons A, it will take me more time to reach work (90 minutes by bus compared to 45 minutes by Train based on forecast time in NWRL submission) and B, it will be more convenient. If someone needs to take a bus for personal reasons, these bus routes could be transferred to County Drive, as there are already bus stops on the road that have access to John Road, Dalkeith Road. It takes me same time to walk to County Drive compared to John Road and even less for people living closer to John Road.

(f) I travel on all these three roads whilst travelling to drop my son to school and the above dot points based on actual facts.

## B1.1.3 The intersection of County Drive and Castle Hill road is not saturated with traffic

Few residents have already put forward their submission to negate NWRL findings. A traffic management study is also in place to validate NWRL claim and number of photos and videos have also been taken and provided in the submissions.

It appears NWRL claim is not based on actual findings and are not justifiable.

A REPORT PROVIDED TO NWRL BY ANOTHER RESIDENT (Extract is added here)

We have been previously advised by NWRL personnel that the intersection of County Drive and Castle hill Road has a classification of "F". This represents the base indication of the worst case in peak traffic. The document provided by NWRL provides the code for the Intersection Performance which is LoS=Level of service & DoS=Degree of Saturation at Intersection.

Table 13 on page 33 refers to the Cherrybrook Site – Intersection Performance and indicates that the referenced intersection has a LOS of "D" & a DOS of .090 in the am

Whilst in the pm the LoS is E & the DoS is E.

The LOS Criteria for intersections is provided on Table 4 page 12 and shows the various LOS from A to F with F being the worst case scenario.

Therefore as can be seen the intersection is categorised as being near operating capacity not as advised as category F which is Over Capacity, unstable operation.

In addition the waiting time at the lights has a bearing on the category nominated for any particular intersection. However the point which has been overlooked at this intersection is that the count appears to be taken with the 2 right hand turn lanes and possibly the centre lane in mind. They have not taken the left hand lane into consideration in their formulation of the NWRL document. For anyone who can avail themselves of the time they would quickly observe that the left hand lane is indicating green twice during a single green mode of the right hand lanes.

In short this means that the left hand lane is in the category of A, B and perhaps C which puts the left hand turn lane in the category of A = Good Operation, B = Good with acceptable delays and spare capacity, and C = Satisfactory.

This is a lot better than the original verbal advice provided to us where the designation of the intersection was nominated as F = Over Capacity, Unstable operation for the intersection as a whole.

# Traffic Conditions on "County Drive / Castle Hill Road Intersection

# Taken on Wednesday 21 November 2012 from 7.00am to 8.00am.

The photos were taken every 5 minutes from 7 to 8 am. This was irrespective of whether there were lines of traffic or not.





THERE IS NO TRAFFIC TURNING LEFT INTO CASTLE HILLS ROAD FROM COUNTY DRIVE, NO JUSTIFICATION FOR SATURATION OF TRAFFIC AT THE INTERSECTION

B1.1.4 Reconfiguration of parking and traffic lanes on Robert Road and Franklin
 Road to facilitate bus and car access to the station via John Road and Neale
 Avenue.

Elimination of parking on the road may affect residents. It appears NWRL is eliminating the residents entitlement to residential parking on a road that would have been designed for that purpose. Also, if parking is restricted it still cannot cater to the traffic volume expected due to narrow carriageway width of the road. It is a big planning issue that has not been picked by NWRL in EIS2.

#### C. ISSUES WITH USE OF ROBERT ROAD FOR CONSTRUCTION OPERATION

#### References

• No.2 Technical Paper: Construction Traffic and Transport Management (Refer Page 28-29)

#### Issues

- As discussed in this Submission, Section 1- Traffic Management, the carriageway width
  of Robert Road is inadequate to handle any traffic movements for construction purposes.
  The current status as pointed via photos, this road is traffic hazard and introduction of
  extra construction vehicles will cause additional traffic chaos and will be a significant
  hazard to residents.
- The report also does not specify what type of construction vehicles will travel on the road

Some of the dust and noise issues in current NWRL are highlighted below:

#### **NOISE AND DUST DURING CONSTRUCTION**

#### **NOISE**

- There are major concerns over noise and dust during construction as Robert Road has been proposed to carry light construction vehicles.
- EIS2 refers to use of Computer modeling to simulate noise levels. Where are the model results and analysis?
- We have moved into this neighbourhood as this was a quiet, leafy and peaceful community. Most of the estates surrounding Robert Road will be severely affected by the level of noise during construction. The noise issues have not been properly addressed as what will be the audible levels and what time of the day (via computer modeling). There are lot of elderly people and school going children that will be adversely affected by the construction noise. What are the impacts on children activities that regularly use Robert Park.

#### **DUST**

- This issue has not been covered in detail, what will the ppm (parts per million) level of
  particulates during construction, what are the levels of NOx and other vehicular
  generated pollutants that will be of concern to elderly and small children. There are
  cases of asthma related illness that can be triggered by dust levels. More details are
  needed on the gaseous pollutants generated by construction vehicles and during
  construction itself.
- It also appears some areas will be stockpiled within construction boundaries. What are the measures to prevent the dust contamination during stockpiling.

#### CONSTRUCTION/VIBRATION IMPACTS ON PROPERTIES FROM TUNNELLING

Insufficient details are provided on the impact on properties in the vicinity of the proposed Station and also during the tunneling operations. I have not been able to see details on how NWRL will manage this issue and how it will handle vibration in particular during construction and also after the NWRL is fully in operation.

#### 2. ALTERNATIVE ACCESS TO PROPOSED CHERRYBROOK STATION

- Remove Parking Lanes on County Drive. Traffic studies are currently being undertaken by INCO Pty Ltd for Robert Road Action Group (A report will be available after the submission date) but in my professional opinion the four lane road will cater to the forecasted traffic volume as proposed for Cherrybrook station. The reasoning, it is sub-arterial road and has been designed to carry large volume of traffic.
- Why not use Franklin Road as it has much wider carriageway (9 m) and provide more natural flow of traffic via John Road. The other option is to re-connect Franklin road with New Line Road. See Map attached



 Provide closure of Robert Road near proposed intersection with New Access Road to the Station. This option will avoid the rat race to the station. As some residents have suggested it needs to be converted to a cul-de-sac.

#### 3. TECHNICAL REPORT 7- SURFACE WATER AND HYRDOLOGY

Due to lack of time, I have not been able to go into details, but I will request NWRL to allow me time to provide my comments later on this report.

In particular, I have following issues:

- 1. The report is not clear on the adoption of two planning levels (ie PMF and 1 in 100 year for station and other access areas). The report highlights that all access areas leading to the platforms will be above the PMF, it is not shown what areas are at what planning level.
- 2. Where is the evacuation strategy and evacuation plan?
- 3. What will be size of detention and other stormwater drainage details. I was expecting this report to cover atleast some preliminary or concept design for comments by the community.
- 4. Where are the hydrological and hydraulic modeling results.

#### **APPENDIX A**

# COPY OF THE SUBMISSION MADE BY ROBERT ROAD GROUP AS PART OF FIS 1

#### **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** 

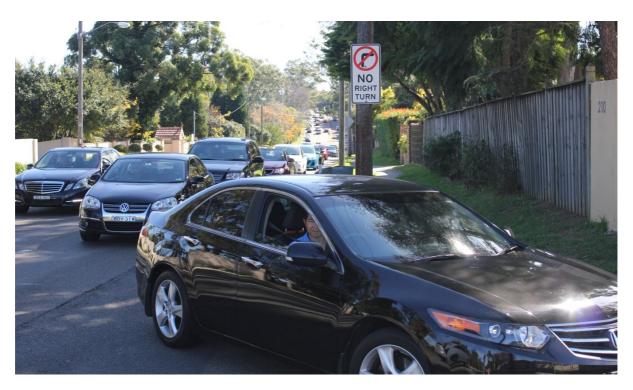




**Entering and Exiting Robert Road from Castle Hill Road** 



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



## 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</u> <u>Precinct- See 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 5<sup>th</sup> 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 5<sup>th</sup> 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.