NORTH WEST RAIL LINK EIS 2
HORNSBY SHIRE COUNCIL SUBMISSION

The following specific concerns are raised about the impact of the proposal.

1- STRATEGIC TOWN PLANNING		
1.1	**Strategic Context**	***Epping Services Facility*** The Epping Town Centre Study has been prepared to explore potential for the Town Centre to accommodate increased residential and employment growth. Of note, the Study recommends: • A compact high density Town Centre Core with increased development around the railway station and building heights between 4 and 20 storeys to permit a wide range of retail, residential and community uses and opportunities for between 1,125 and 1,835 high density dwellings; and • Opportunity for approximately 1,300 new dwellings outside the Town Centre Core in the form of townhouses and residential units within 5 new residential intensification precincts. The Study recommends land use zones and development controls to facilitate the erection of multi-storey mixed use buildings up to 20 storeys in height in the Town Centre Core. It is anticipated that multi-storey underground car parking will be required to support the multi-storey buildings in the Town Centre Core. The proposed tunnel alignment runs below the Town Centre Core. Further, the *Epping Service Facility* is proposed to be constructed on property No. 240 Beecroft Road, a key site within the Town Centre Core which is also within close proximity of other key sites within the Town Centre Core. The Minister for Planning and Infrastructure has now declared Epping Town Centre an Urban

		Activation precinct to progress the recommendations of the Epping Town Centre Study. The EIS identifies that ventilation shafts will be provided within underground stations to allow for effective natural ventilation and supplementary mechanical ventilation and that a number of service buildings would be required within each station precinct. These facilities would supply fresh air to stations and tunnels and discharge air from the tunnels and station environment. The project would be an electrified passenger only rail line and therefore tunnel emissions would not affect air quality. The ventilation systems would be designed to meet the criteria for normal, congested and emergency operating scenarios. The systems would also provide ventilation in the event of fire to ensure suitable conditions in the tunnel for safe egress of passengers and safe access for the emergency service personnel. In the event of fire, smoke-laden air would be discharged to the atmosphere. **The following issues are raised:** Whilst the EIS indicates that emissions would not affect air quality, it is unclear whether discharge during normal operation and during the event of fire will result in restrictions on adjoining land uses or if the setback requirements will be wholly accommodated within the development site.
1.2	**Visual Impact**	The following construction and operational activities detailed in the EIS will impact upon the current visual qualities of the three construction sites: • Construction and operation of the station concourse and platform; • Construction and operation of the permanent service facility buildings; and • Construction and operation of parking areas. **The following issues are raised:**

		The three construction sites are located within areas of high visibility that contribute positively to the visual qualities of the site and the adjoining locality. The location of the *Epping Services Facility* forms the northern extent of the Epping Town Centre and contains a low rise commercial building situated within landscaped grounds. The location of the *Cheltenham Services Facility* contains a stand of significant vegetation which provides a landscaped visual screen between the M2 and the Cheltenham Heritage Conservation Area. *Cherrybrook Station* is located on the corner of Castle Hill Road and Franklin Road and contains significant remnant vegetation contributing to the adjoining streetscape and landscape setting of adjacent heritage items. The construction timelines provided in the EIS indicate that the 3m (6m at Cherrybrook) boundary walls around the perimeter of the sites and the 15m high acoustic sheds within the sites are likely to be retained for 2 years after tunnelling has been completed. Although these structures are temporary, the structures will have a significant impact on the visual qualities of the sites and surrounding localities during the construction period, including impacts on views and vistas from the public domain (M2 corridor and rail corridor) for the following reasons: • The anticipated period of construction of the major infrastructure project is a considerable length of time; • The scale and siting of the temporary structures is incongruous with both existing and anticipated future development within the site and within the locality; • The structures will provide increased opportunities for graffiti; and • The visual impact of the temporary structures will be exacerbated by the removal of existing vegetation screening within the construction sites and within adjoining land to facilitate access. The EIS indicates that appropriate measures should be incorporated to mitigate the visual impact of the temporary structures, including:

		• Incorporating architectural treatment and detailing of finishes within key elements of temporary structures that reflect the context within which the construction sites are located. For example, the Epping Service Facility could include public art depicting key activities and functions within the Town Centre Core and the Cheltenham Service Facility could include public art depicting key activities and functions within the adjoining recreation area; and • The provision of temporary landscaping/planter boxes, where appropriate, to soften views of the construction sites from adjoining sensitive areas. Additionally, appropriate measures should be incorporated to mitigate the visual impact of the permanent structures including: • Incorporating architectural treatment and detailing of finishes within key elements of the structures that reflect the context within which the operational sites are located. For example, the Epping Service Facility could replicate the pattern of fenestration and built form that might otherwise have occurred within the commercial site within the Town Centre Core. This will provide for continuity of built form when the adjacent lands are developed in accordance with the town centre functions of the locality. • Incorporating materials, details and finishes in the design of the Cheltenham Service Facility that respond to the heritage conservation area values and landscape elements of the site. • Providing opportunities within the Cherrybrook Station site for the planting of tree species that will provide a positive landscape contribution commensurate with those species removed from the site.
1.3	**Construction Noise and Vibration**	The EIS identifies potential construction and operation noise and vibration from the following sources: • Airborne noise from construction and operational traffic and construction works; and • Airborne noise and vibration from operational activity.

		The following issues are raised: The noise and vibration assessment within the EIS includes the identification of mitigation and management measures to minimise operational and construction noise and vibration impacts. It is requested that the mitigation measures and protocols proposed are strictly imposed and enforced. Reporting of compliance measurements should be made available to the public on a regular basis. The EIS notes that with respect to future development that the control of noise and vibration issues resulting from rail traffic should be the joint responsibility of the rail operator and of surrounding land users. Further, future land use planning measures must also take into account the rail link and include relevant mitigation measures in relevant design/ planning requirements. To enable Council to have regard to the potential impact of the rail network on adjacent land uses, current information must be provided to Council to enable the approved tunnel location to be determined in respect of property cadastre. In this respect, the latest shape file data of the tunnel is requested.
1.4	**Heritage**	The EIS confirms that the three sites will impact on listed heritage items, primarily with respect to the removal of existing vegetation approved under EIS 1. Some replanting will occur as part of the final works. **The following issues are raised:** **Cheltenham Services Facility** No additional vegetation, other than that assessed in EIS 1 would be removed for the proposed construction works. Materials, details and finishes should be incorporated into the design of the

		Cheltenham Service Facility that respond to the heritage conservation area values of the site to ensure that the operation of the Facility would have a minor visual impact on the conservation area. **Epping Services Facility** Epping Services Facility is described in the EIS as disturbed with a high level of ground surface impact arising from the processes of urban development and provision of transport infrastructure. It is unclear whether replacement tree planting will occur within the site. **Cherrybrook Station** The Cherrybrook Station site currently provides a landscape setting for heritage items within the vicinity. Whilst Council acknowledges that the land use of the site will change significantly as a result of the proposal, the site still provides opportunities for replacement planting to provide landscape setting for items within the vicinity. It is unclear whether replacement tree planting will occur within the site, what species will be provided and whether the planting will provide a commensurate landscape setting.
1.5	**Local Business Impact**	The EIS assesses the potential impact of construction and operational activity on existing land uses and known future land uses, including business premises, educational establishments and community facilities. Potential negative sources and implications detailed in the EIS - Stage 2 includes potential impacts during construction and potential impacts during operation. The potential impacts on local businesses during construction works for the stations, rail

		infrastructure and systems would vary depending on the location and type of business. The EIS identifies the impacts that would affect the operation of local businesses during the construction works including: • Reduced accessibility; • Poorer visibility; • Reduced quality in operating amenity; and • Economic stimulus from construction worker activity. The EIS identifies the impacts that would affect the operation of local businesses as a result of the operation of the NWRL including: • Businesses such as Accommodation, Cafes and Restaurants in the surrounding station precinct may potentially experience increased competition as new businesses are established to meet the growth in demand. • Increased patronage and demand from existing and passing trade may result in upward pressure on rental cost to businesses due to increased demand for shop spaces (e.g. local food eateries, take away outlets, cafes or convenience stores). • The project's implementation at Epping would provide enhanced accessibility for skilled professionals residing in the north western suburbs. This is expected to support existing and new business activity as an increasing number of patrons use the existing Epping Station (i.e. Property and Business Services and Finance and Insurance Businesses in Epping). • Reduced accessibility, including loss of parking from construction vehicles; • Poorer visibility, either through reduced passing traffic or through obstruction of views by construction sites and materials; • Reduced operational quality (noise, air vibration disturbance); and • As detailed in the vibration and acoustic section, a number of businesses in the vicinity and adjoining Epping Services Facility and Cherrybrook Station may experience a significant

		reduction in amenity. **The following issues are raised:** Cumulative impacts from Stage 1 and Stage 2 construction works on local businesses such as changes to accessibility, reduced visibility and reduced operating amenity may be prolonged for a greater period of time as a result of Stage 1 and Stage 2 construction activities and traffic generated (refer to Chapter 9). The cumulative impact would last between 4 and 5 years depending on the site. Council requests that measures to mitigate the cumulative impact of works on the local business continue to be monitored. Information regarding contact details for construction complaints should be made available to Council and the public. The singular source for the recording and documenting of responses should be made public and should be monitored by the authority with government overview of the monitoring of the cumulative impacts of the NWRL and Third Track projects.
1.6	**Waste Water Management**	The EIS identifies the potential risk of contaminated water leaving the site and requires that the proponent shall identify risks to groundwater quality and/ or risks to surface water quality from contaminated groundwater during construction and operation. The EIS includes measures to avoid, manage, mitigate and monitor impacts of turbid, saline or contaminated water collected within the tunnel or excavations from dewatering or seepage, including: • Disturbance of contaminated land or groundwater. • Contaminants leaking to the ground surface. • Accidents or spills involving construction equipment. **The following issues are raised:** Council requests that the protocols for the assessment of contaminated water and the disposal of

		wastewater are strictly regulated, imposed, and enforced on all operators and sub-contractors to ensure that waste water is disposed of to authorised sites. It is unclear whether it is intended that wastewater be disposed of through Council's stormwater system and/or into local watercourses. Strategic Planning suggests that Bushland and Biodiversity Team may wish to address this matter further. This may potentially require consultation with Council and/or directions for stormwater to be disposed of to Council's stormwater system and/or into local watercourses.
1.7	**Air Quality**	The EIS identifies that ventilation shafts will be provided within underground stations to allow for effective natural ventilation and supplementary mechanical ventilation. The EIS also identifies that a number of service buildings would be required within each station precinct. The ventilation system operates to ensure fresh air is circulated through the tunnel and prevents the build-up of heat. Fresh air is drawn through the entrance of the tunnel and discharged through ventilation shafts ensuring that air discharged from the tunnel is well diluted and dispersed into the outdoor air. Air vent shafts would typically be incorporated into the station or precinct design and there would also be ventilation fans at each station in the tunnel section. These facilities would supply fresh air to stations and tunnels and discharge air from the tunnels and station environment. The project would be an electrified passenger only rail line and therefore tunnel emissions would not affect air quality. The ventilation systems would be designed to meet the criteria for normal, congested and emergency operating scenarios. The systems would also provide ventilation in the event of fire to ensure suitable conditions in the tunnel for safe egress of passengers and safe access for the emergency service personnel. In the event of fire, smoke-laden air would be discharged to the atmosphere. **The following issues are raised:**

		Whilst the EIS indicates that emissions would not affect air quality, it is unclear whether the discharge during normal operation and during the event of fire would impose restrictions on adjoining land uses and if setback requirements will be accommodated wholly within the development site.
1.8	**Visual Impact and Urban Design**	The three sites within Hornsby LGA will impact on the visual setting of the sites and adjoining lands during both the construction and operation phases of the project. The EIS proposes a number of mitigation measures, including: • The colour and materials of service facility buildings would be selected to blend into adjacent bushland setting; • Landform would be used to conceal buildings, station and service facilities where reasonable and feasible; • Street tree planting would be used to visually soften roads and car parking areas; • Where noise walls are proposed, potential visual impacts would be reduced through high quality urban design treatments developed in consultation with adjacent property owners; • The colour and materials of acoustic sheds at selected sites would be selected to blend into adjacent bushland or rural setting; and • Designing hoarding as a feature would be considered at appropriate locations. This may include artworks or project information. These would be installed as early as feasible and reasonable in the construction process. **Cherrybrook** Tree removal associated with EIS 1 works will remove the majority of vegetation within the site opening up views of and across the site. In addition to the station building the site will contain two - three storey stepped park and ride facility located to the east of the station entry plaza and provide

		approximately 340 car parking spaces. An at grade park and ride facility for approximately another 60 cars will be located north of the proposed access road, and adjacent and beneath the existing power lines. **Epping Service Facility** The EIS indicates that properties, located near or directly adjacent to the site, would experience views into and across the future development site. Preparation of this area of the site for future development would open up views to Beecroft Road and the rail corridor beyond. These elements would be visible with minimal screening and filtering due to their proximity to the site boundary and absence of roadside and site vegetation, which is proposed to be removed as part of EIS 1 works. Overall, the EIS notes that there is likely to be a minor adverse visual impact during both operation and Stage 2 construction. This will be due to the considerable reduction to the amenity of views from a location of neighbourhood visual sensitivity. During operation, the impacts would be negligible due to there already being a noticeable reduction to the amenity of these views. **Cheltenham Service Facility** Preparation of this area of the site for future development would open up views across the M2 and along Castle Howard Road to Beecroft Road and the rail corridor beyond. The EIS indicates that following construction of the facility replanting of the access corridor along the M2 will be undertaken. **The following issues are raised:** Although landscaping of the sites is proposed as part of the EIS, consideration should be given to planting species that will provide landscaping contribution similar in height and crown to that landscaping currently on site.

1.9	**Transit oriented development**	Key land use integration elements of the NWRL Project design include: • Locating stations within existing centres or locations with the potential for creating new transit oriented neighbourhoods. • Ensuring that station access infrastructure is set within a robust street pattern that is adaptable to future urban development needs. • Optimising station precinct and car park layouts to provide opportunities for active uses near stations. This helps to improve precinct safety and surveillance and allows day-to-day needs to be met locally, reducing the need for additional vehicle trips. • Ensuring that the design and location of transport infrastructure and service facilities maintains the potential for future development of residual lands. • A mix of uses-employment, retail and community services located within a five minute (400 m) walkable catchment, to reduce the need for trips to meet daily needs. The EIS indicates that station precincts would comprise commercial and / or retail activities, open space and public domain improvements. Within the immediate station precinct, there would be the potential for development to occur after construction has finished. Station precincts have been designed to allow future development by other parties. These future developments are not directly related to the project and separate planning approvals under relevant local / State legislation would be required. **The following issues are raised:** The clustering of land uses around public transport nodes are supported, including the clustering of retailing, mixed use and residential functions within the station precinct to encourage sustainable transport modes and reduce the need for private vehicle use. However, with respect to Cherrybrook Station, Council's

		current and draft planning instruments do not facilitate development within the precinct. With respect to the walkable catchment, Council notes that the NWRL operation is predicted to stimulate development within the area surrounding this station, particularly medium density housing. The EIS notes that this would increase the dwelling stock and choice and would increase the population density within the area over the longer term. However, with respect to Cherrybrook Station, Council's current and draft planning instruments do not facilitate development within the walkable catchment. Although Council is currently participating in structure planning activities with the Department of Planning and Infrastructure, land owners within the walkable catchment are requesting that Council progress the rezoning of land within these areas ahead of the release of any Structure planning investigations. Council does not support the rezoning of these lands ahead of the Department's release of the Structure Planning activities for Cherrybrook. It is requested that the State Government provide advice to Council and the public with respect to when the draft structure plan will be made public so that Council can appropriately program the potential rezoning and delivery of development within these precincts into its strategic planning and infrastructure provision programs.
1.10	**Cumulative impacts**	The EIS identifies cumulative impacts that may result from the construction of the NWRL and other activities. With respect to Hornsby LGA, the EIS identifies cumulative impacts associated with the Northern Sydney Freight Corridor – Epping to Thornleigh Third Track Area between Epping Station and M2 Motorway Construction. The Northern Sydney Freight Corridor Epping to Thornleigh Third Track project is likely to commence between 2012 and 2015. Therefore, there would be a construction timeline overlap between projects. The predicted cumulative impacts during construction include:

		• Noise and vibration impacts to receptors along Beecroft Road as a result of construction activities and related traffic; • Cumulative disruption to traffic along Beecroft Road as a result of construction related traffic. Increased construction traffic volumes on the M2; • Increased parking restrictions along Beecroft Road in close proximity to the construction sites; • Increased number of European heritage items and known Aboriginal items impacted; • Indirect heritage impacts to the stone causeway over Devlins Creek; • Impacts to bushland on the road reserve on Beecroft Road between Carlingford Road and Kandy Avenue. The NWRL construction works would impact the middle and western portion of the bushland. Northern Sydney Freight Corridor works would take place immediately to the east with potential to impact the remaining eastern portion of bushland in this area; • Visual impacts along Beecroft Road as a result of construction hoarding and acoustics sheds at Epping Service Facility, along with construction of a viaduct over the sectioning hut to the north of Epping Station and over Devlins Creek (immediately south of M2 Motorway); • Water quality impacts on Devlins Creek; and • Increased amount of spoil and waste generated. **The following issues are raised:** Concern is raised regarding the extent of potential cumulative impacts associated with the two major projects. Council requests that opportunities for reducing potential cumulative impacts from the two projects be investigated and implemented.
2 - TRAFFIC AND TRANSPORT		
2.1	**Single deck trains**	**Changing double deck trains to single deck trains on the Epping to Chatswood Rail Line (ECRL)** Under the planned NWRL, the existing Epping to Chatswood Rail Line (ECRL) will be modified for single deck trains exclusively. As a consequence, this line will no longer be compatible with the

		current double deck network. Passengers from Cheltenham, Beecroft, Pennant Hills, Normanhurst and Thornleigh will have to catch three trains to access stations between Chatswood and Milsons Point instead of the one direct route that is now provided. This will increase their travel times and may consequently force more cars back onto the roads in these areas. A commitment should be provided to ensure that the Metro system is extended throughout the North Shore to Sydney CBD as soon as possible.
2.2		**Integration of pedestrian and cycling facilities** Traffic volumes, pedestrian activity and other multi-modal activities will increase around the proposed Cherrybrook station precinct once it is operational. The vehicular activity around the station precinct will create conflict with pedestrians and cyclists. Currently no dedicated cyclist facilities or continuous pedestrian network is available in the vicinity of the proposed Cherrybrook station. A small number of cyclists currently use Castle Hill Road. Improvements will need to be made in the following areas ▪ Cycling paths, both to AND through the station precincts ▪ Integration of cycling paths to broader RMS and council cycle networks ▪ Detail of cycle parking and other end of trip facilities ▪ Landscaping treatment to deter the pedestrian set down or pick up directly from Castle Hill Road, which will be a road safety issue. The proponent should provide these works as part of the project.
2.3	**Traffic impacts**	**Impact of Construction and operational traffic on local roads** Construction traffic accessing Epping and Cheltenham Oval Service facilities will use local roads like Ray Road, Kirkham Street and perhaps Kandy Avenue. Proposed hours of work is 7am – 6pm Mon-

		Fri, 8am –1pm Saturdays. This will have a significant impact on weekday peak hour traffic conditions particularly at the Carlingford Road/Ray Road/Rawson Street and Beecroft Road/Kirkham Street intersections. Construction traffic may result in loss of on-street parking a, damage to road pavement and increase in general levels of dust and traffic noise. The use of Ray Road by heavy vehicles cannot be supported. Due to limited visibility from the heavy vehicle cab to the footpath there are significant road safety implications regarding heavy vehicles turning across pedestrian crossings at intersections. Red arrow pedestrian protection will be required at the intersection of Ray Road and Carlingford Road. The same conflict will exist between heavy vehicles and pedestrians at the intersection of Ray Road and Beecroft Road, particularly as the path is used by school age pedestrians and seniors from near by retirement villages. This intersection should be signalised with red arrow pedestrian protection to cater for heavy vehicle movements.
2.4	**Parking impacts**	**Car parking supply and management of commuter parking** The proposed Cherrybrook station would reduce the parking demand at Beecroft, Cheltenham, Pennant Hills and Thornleigh railway stations and would save travel time for Hills residents who are currently using these stations. 400 commuter parking spaces and 14 kiss and ride spaces will be provided at Cherrybrook Station. The EIS has not provided any justification for providing the proposed quantum of parking. Since no commuter parking will be provided at the Castle Hill Station, there is a high likelihood that the actual NWRL commuter catchment area for Cherrybrook Station will extend outside the local area. As with almost every station on the Sydney rail network, some of those accessing the station by park and ride will park on-street, at distances ranging up to around one kilometre. Parking management over this

		area is beyond Council's resources. Council will require additional financial assistance to manage increased parking demand in adjoining residential streets and around the station precinct.
2.5		**Vehicle access to station precinct** Traffic volumes on local roads will increase with the proposed Cherrybrook station. Vehicle access between the station precinct and Robert Road and Franklin Road should be isolated as much as possible. Council would prefer to see bus and private vehicle access via County Drive and Castle Hill Road in which case road connectivity between the new station precinct road and Robert Road/Franklin Road may be restricted. If bus access via Robert Road and Franklin Road is necessary, "buses excepted" turn restrictions can be provided with cameras to deter private vehicle access. The proposed left turn slip lane into Franklin Road is not supported. Vehicles using the turn slip lane will restrict visibility of drivers attempting to egress Franklin Road and this effect will be exacerbated by the bend.
2.6		**Signalisation of Robert Road and arrangement of the new Cherrybrook access road** If full vehicle access is permitted between the new station precinct road and local roads, the proposed traffic signals at Castle Hill Road/Robert Road intersection will create a 'rat run' for through traffic. In order to reinforce the proposed intersection arrangement at the new access road, the right turn out of Robert Road into the new road may have to be restricted during peak periods. This will encourage private vehicle access via County Drive which is a higher order road than Robert Road.

2.7		**Proposed bus routes and impact on Robert Road and Franklin Road** Currently three bus routes use John Road between County Drive and Castle Hill Road – including the route from Castle Hill to Pennant Hills Station and the route from Dural to Sydney CBD via the M2. The EIS proposes that these routes will be rerouted to the station via Robert and Franklin Roads. Buses would operate two-way in both Robert and Franklin Roads as far as John Road and Neale Avenue respectively. Parking would need to be banned from both sides of both Robert and Franklin Roads to allow for safe bus operation. A review of bus timetables indicates that the number of bus movements per peak hour will approximately double from 15 currently to 28, and this may rise further with later timetable adjustments. Council objects to buses being diverted via Robert Road and Franklin Road because – Any issues with delays at the intersection of County Drive and Castle Hill Road is a matter for RMS to address. Such delays should not be an opportunity to divert additional traffic onto local residential roads. Residential amenity along Robert Road and Franklin Road will be significantly reduced with the loss of on street parking required due to the narrow road widths. As well as the noise and vibration impacts of buses using these narrow roads, the loss of parking will lead to increased vehicle speeds generally. Buses on Franklin Road will be in conflict with parent and pedestrian traffic accessing Tangara School and Inala Special School. Even if additional footpaving, traffic management and pedestrian crossings were provided, the congestion during school peaks will affect bus services. The impact of running more buses in Robert and Franklin Roads will significantly reduce the life of the

		road pavement on these roads and Council will require assistance with maintenance funding. Council considers that the existing route along John Road/Franklin Road/Neale Ave/Edward Bennett Drive should be retained for local bus patrons and County Drive used for other services. If buses are to use Robert Road and Franklin Road then parking needs to be retained on street, which may require road widening and/or alternating parking on either side of the street to create a chicane effect.
2.8	**General**	Rawson Street is in Parramatta City LGA (Page 21)
3 - ENVIRONMENT PROTECTION		
3.1	**Soils and Ground Water**	1. It is noted that it is proposed to discharge groundwater to a treatment facility at Lady Game Drive, Lindfield during the operational phase of NWRL works. It is not clear how groundwater is to be dealt with during the NWRL construction phase. Section 8.5.3 states that "*Discharge from the plant at this location (Lady Game Drive, Lindfield) occurs near the confluence of the Lane Cove River and Blue Gum Creek. The plant at this location on the Lane Cove River is considered preferable to other potential discharge locations such as Cattai Creek*". This suggests that Blum Gum Creek is the only creek to be used as a discharge point during the operation of the NWRL, however Table 8.7 detailing mitigation measures during the construction of the NWRL states under SG27 "*Where water salinity is found to be too high for discharge to **creeks**, brackish water reverse osmosis would be undertaken*". It is requested that further details be provided in relation to whether any discharge will occur to local creeks within Hornsby Shire. If discharge to Hornsby Shire local creeks is proposed, discharge points and methods of

		treatment should be notified to Council.
3.2	**Noise and Vibration**	1. Reference is made to the implementation of Construction Noise and Vibration Impact Statements (CNVIS) for each major stage of works/activity. It is recommended that noise complaint management is incorporated into the noise response procedures – the Operational Noise and Vibration Management Plans (ONVMP). Furthermore, it is recommended Council be consulted in relation to the formation of both the CNVIS's and ONVMP's. 2. Concerns are raised in regards to the predicted ground-borne vibration exceedances within the Hornsby Shire Local Government Area, particularly the Veterinary Hospital located at 138 Castle Hill Road, West Pennant Hills. Specific mitigation measures should be incorporated into the ONVMP for this area. 3. Concerns are again raised in relation to predicted noise exceedances of more than 20 dB of the Noise Monitoring Levels (NMLs) at the Cherrybrook site. Exceedances of this level are predicted for the construction of the car park at residential areas adjacent to the site. Further to this, minor exceedances are predicted at residential areas during the station platform supporting structure and station building construction. Similarly, minor exceedances are predicted at residential areas during the installation of rail systems equipment. It is noted that Table 10.47 states that options would be investigated as part of the detailed design to reduce noise impacts from the operational car parks at Cherrybrook. It is recommended that prior to the implementation of feasible and reasonable noise and vibration mitigation measures; Council is consulted with recommendations incorporated into the detailed design.

	4 - PARKS AND RECREATION	
4.1	**Temporary Measures**	• retain access to the oval proper for maintenance vehicles and ambulance • provide basic temporary amenities including a canteen, toilets and a small area for changing and some storage for club equipment • The existing small old building to the north west of the ground could be retained instead of demolished and it might provide some of the temporary amenities • storage containers may fit on the eastern extremity of the oval proper, outside the fence • soccer could remain operational throughout the construction period through the provision of the abovementioned amenities • cricket could remain operational as above and if the existing cricket nets are permanently relocated in the south-western corner of the oval proper, outside the existing fence • netball will require two courts in another location for temporary operation for the duration of construction • Cheltenham Sports Club or Cheltenham Girls High School have existing courts that could be used for netball training if floodlights are provided • A footpath on Castle Howard Road will be required to allow access during construction due to the loss of off-street parking at the ground.
4.2	**End State**	• An amenities building with canteen, change rooms, toilets, showers, a clubroom and storage space for club and council equipment is required • A rectangular paved area with capacity for four netball courts is to be provided • The netball court area should be configured so that some courts could be used for car parking instead of courts. • A children's playground with a direct line of sight to the oval proper and the replacement netball courts is desirable

5 – BUSHLAND AND NATURAL RESOURCES		
5.1	**Revisions since EIS 1**	• The Epping site is being developed within an existing commercial development and should not result in the loss of any vegetation. • The Cheltenham site has been modified to exclude the use of the existing walking trail off Castle Howard. The access road off Kirkham is proposed to be temporary, to be revegetated upon completion of construction. Permanent access is to be provided off Castle Howard via the existing entrance and car park adjacent to the netball courts and changing rooms. This will require the removal of additional trees within the traffic island on Castle Howard Road. • The Cherrybrook station is within the original footprint and setback from remnant Blue Gum High Forest to the north. • Biodiversity Offset Package is to be produced within 12 months of start of construction. ThisI package may include site specific VMP's.
5.2	**Cherrybrook Station**	• There is a footpath to the northern part of the site that proceeds towards the remnant Blue Gum High Forest on privately owned land. It would be a good opportunity to incorporate this footpath into the adjoining BGHF as part of a public reserve. • Development of the offset package should investigate the acquisition of Blue Gum High Forest in the near vicinity. The offset package should also look at providing funds for the long term restoration of BGHF reserves within Hornsby Shire LGA where the impacts on BGHF occur. Council needs to be consulted during the development of the offset package.
5.3	**Cheltenham**	• Temporary access off Kirkham Road with bushland to be revegetated at completion of works. It is assumed that the revegetation works will form part of the VMP for the site. As the manager of bushland in the area, and with the presence of Bushcare volunteers in the reserve, Council should be consulted during the development of the revegetation proposal and VMP to meet the requirements of Council's *Vegetation Management and Restoration Guidelines – Level 3*

		Plan for 5 Years. • It appears the majority of land affected by the temporary access off Kirkham passes through land owned by the RTA with minor intrusions into the bushland reserve. The activity is not consistent with the current Plan of Management. The land upon which the netball courts occupy and also the bushland reserve are Community land and may not be able to have a lease/licence/easement placed upon them as stated in Section 46 of the Local Government Act 1993. NWRL proponents need to advise Council as to how they will legally acquire rights to undertake the works on Community land. • Permanent access to the site is to be provided off Castle Howard using the existing access into the car park and netball courts. This will require the removal of an additional 5 trees from the traffic island. These trees need to be offset as part of the Offsets package and may be offset within the landscaped area surrounding the proposed new netball courts. • The access along Castle Howard Road will be used to access the site during emergencies. The western section of the road is relatively narrow with significant trees in the road reserve. Is it likely that this section of the road needs to be widened, and as such trees removed, due to the requirements of emergency vehicle access? Any additional long-term impacts upon the remnant trees in the road reserve will require inclusion in the offset package. • The Beecroft-Cheltenham link trail contains interpretive and directional signs. During the construction period these signs will need to be amended or replaced with suitable signs advising users of the changed track route away from the service facility. Options may include removal of existing signs and replacement of amended signs or placing a temporary sticker over the current signs. The Beecroft-Cheltenham link trail brochures will also be required to be amended.
5.4	**General**	Mitigation measures (page 15-15) - E12 should also include appropriate Phytophthora and Myrtle Rust procedures.