



# NWRL EIS 1 SUBMISSION

BY THE GPT GROUP



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# 1.0 INTRODUCTION

## 1.1 This Submission

This submission is made on behalf of The GPT Group ("GPT"), including in its capacity as the owners and managers of Rouse Hill Town Centre (as may be expanded in accordance with rights granted by the NSW State Government as owner of adjacent lands)("RHTC").

In principle GPT does not oppose the North West Rail Link ("NWRL") project. However, to the extent that the NWRL may have an adverse impact upon GPT or the RHTC as detailed in this submission, this document should be read as an objection to the NWRL project.

The design development and delivery of the NWRL is critical to GPT. GPT will maintain its objection to the NWRL project, specifically the staged State Significant Infrastructure (SSI) Concept Modification and Stage 1 Civil Works applications, until all recommendations contained within this submission, as summarised in section 1.2 below, have been adopted and implemented by Transport for NSW ("TfNSW") to the satisfaction of GPT.

This submission seeks to clarify the various concerns held by GPT in relation to the planning process and the likely impacts of the NWRL on the operation of the RHTC (including the impacts on the RHTC community and customers) during construction and beyond.

It is vital to GPT that resolution of the concerns identified in this submission is achieved with TfNSW and that the recommendations set out below are adopted by TfNSW. If this does not occur, the potential consequences of the NWRL for RHTC and GPT could be catastrophic, including, but not limited to substantial loss of revenue, significant costs and losses and unacceptable reputational damage.

This submission has been prepared by GPT and BBC Consulting Planners with input from relevant experts from various disciplines. Technical reports from Aecom, Renzo Tonin and Cadence Australia have been appended to provide additional information to assist TfNSW in their evaluation of this submission.

## 1.2 Summary of Key Recommendations

In response to the EIS 1, GPT makes the following recommendations. Note the numbering relates to the order the recommendations are made in the body of this submission;

- 1 The SSI Concept Plan modification application should not be determined until such time as EIS 2 has been exhibited and assessed.
- 2 Same as Recommendation 1. (utilising similar
- 3 A separate, detailed and holistic assessment, covering detailed design and impact mitigation in and around the RHTC, should be undertaken by TfNSW and resubmitted to the Minister for assessment and to GPT for review.
- 4 Continued engagement by TfNSW with GPT with the purpose of agreeing the detailed design of the viaduct, station building and station precinct for RHTC, prior to the release of the EIS 2 designs, for RHTC.
- 5 Modifications to the approved Level 2 Precinct Plan DA for the Town Centre Core Precinct Plan that may be required as a result of the SSI Concept Plan modification should be obtained at the cost to TfNSW. Modifications to existing approvals must not adversely affect existing Project Approvals.

- 6 Same as Recommendation 1.
- 7 TfNSW to develop a site specific detailed construction programme in consultation with GPT that identifies;
  - a. Total construction timeframe for Stage 1 and Stage 2 works.
  - b. The various construction activities and their proposed timeframes.
  - c. Staging implications that accommodate as best as possible the operational needs of RHTC and future development of the Northern Precinct and Sleeve Sites.
- 8 Establish appropriate working hours and noise criteria having regard to the existing and approved uses of the RHTC.
- 9 Develop a Construction Management Plan in consultation with GPT which seeks to maintain the existing standard of amenity for occupants of and visitors to the Town Centre, including during extended work hours and peak trading periods.
- 10 Develop a Construction Management Plan in consultation with GPT that addresses and incorporates all items identified in Cadence Australia's report.
- 11 Develop a site specific Noise & Vibration Management Plan in consultation with GPT that addresses the issues raised in Renzo Tonin's report to ensure the level of amenity that currently exists at RHTC is preserved.
- 12 A transparent and robust methodology for the assessment of traffic impacts needs to be developed by TfNSW, and must have regard to;
  - a. The cumulative traffic impact of other major developments including the Rouse Hill Northern Precinct.
  - b. The cumulative traffic impact of other major infrastructure projects including the Schofields Road upgrade.
  - c. The quantitative impact assessment of vehicles on all affected local roads, with potential impact on the safety and amenity of local residents.
  - d. The likely significant impact on the level of service at Windsor Road and Schofields Road, given that this intersection is the 'gateway' to the RHTC. Cumulative assessment of this intersection in conjunction with the network impacts of the Windsor Road / White Hart Drive intersection is required.
  - e. The cumulative impacts of the NWRL as a whole as a result of the wider access routes of vehicles attending Construction Sites 13 to 17.
- 13 Develop a site specific Traffic Management Plan in consultation with GPT that details;
  - a. Changes to Tempus Street and to the potential adjustment of the Windsor / Schofields Rd intersection.
  - b. Information about the management of access to Construction Site 14 from White Hart Dr as there is potential for substantial queuing impacts. There is also the potential to impact on existing intersections on White Hart Drive, which have not been identified.
  - c. Appropriate communication procedures to consult with GPT and advise of any temporary or permanent road diversions or amendments.
  - d. Addresses the issues raised in Aecom's report.
- 14 Develop a site specific Carpark Management Plan in consultation with GPT to address the following and ensure that the current amenity that is provided to the visitors and employees of RHTC is preserved;
  - a. Sufficient construction parking is provided and that queuing is planned for.
  - b. Consideration should be given to remote parking and transportation of workers to key worksites.

- c. Confirmation that car parking will be allocated within worksite 13.
  - d. Consideration of the financial implications of introducing and maintaining a more stringent car parking system at RHTC.
- 15 Develop a site specific Carpark Management Plan in consultation with GPT to address the following and ensure that the current amenity that is provided to the visitors and employees of RHTC is preserved;
- a. The 560 parking spaces which are lost as a result of Construction Sites 14 & 15 are replaced by NWRL during the construction period.
  - b. Any breaches of existing GPT development consents and legal obligations, which may arise due to the loss of car parking, will be addressed by TfNSW at their cost.
  - c. Any approval issues (for example, change of use and development of undeveloped sites for use as car parking) will be attended to by TfNSW at their cost. Modifications to existing approvals must not adversely affect existing Project Approvals or anticipated future applications.
- 16 Ongoing engagement with GPT for the purposes of agreeing the bus interchange relocation, kiss and ride and taxi relocation, pedestrian access arrangements; pedestrian amenity, impacts of bus re-rerouting, and impact on key intersections particularly when combined with the construction access / egress driveways.
- 17 Develop a Pedestrian and Cyclist Management Plan in consultation with GPT that stipulates how pedestrian movements and pedestrian safety is to be managed, to ensure safe movements around the construction worksites and modified transport facilities. These measures should have regard to the highly pedestrian-focussed nature of the RHTC. The management plan will also need to consider relocation of bicycle racks and lockers displaced as a result of the works.
- 18 Confirm that contamination assessments will be conducted and any significant issues raised with relevant stakeholders.
- 19 Develop a Contamination Management Plan for GPT's approval which will ensure that the construction activities will not introduce a migration pathway for contaminants onto the RHTC either by mobilisation of contaminants through the soil or geology profile, tracking along existing or new utilities, or by wind-blown dust.
- 20 Establish with GPT the clear delineation of boundaries, controls and responsibilities at an early stage to be able to determine independent liability for minor or serious pollution events.
- 21 Develop a site specific Surface Water and Hydrology Management Plan in consultation with GPT that addresses the following;
- a. Separation of water treatment trains for the NWRL construction phase and the RHTC construction and operation stages.
  - b. The precise location and operation of sediment basins should be defined and any impacts arising should be subject to further consultation
- 22 A consolidated Statement of Commitments should be released and further developed.
- 23 TfNSW to undertake a more robust assessment of business impacts, costs and mitigation options, having regard to unique trading environment of RHTC.
- 24 Agree with GPT a mechanism by which compensation could be sought should there be adverse impacts to the RHTC business and businesses within the RHTC as a consequence of the NWRL.
- 25 Further information is required in regards to the business impacts at EIS 1 stage, and specific mitigation measures should be developed in addition to the ongoing liaison with stakeholders.



- 26 An assessment, consultation or approval process needs to be identified as being applicable to any additional construction sites and/or alteration of exact locations as currently proposed in the Statement of Commitments in the EIS 1.
- 27 Rectification of the following omissions;
- a. When establishing land uses which may be impacted, a number of community uses in the RHTC are not identified, including the Library, Community Uses, Town Square and Market Square.
  - b. Mapping does not reflect the zoned, master planned use of all land within RHRC.
  - c. On figures 14.9 and 14.10 of EIS 1 the Northern Precinct, Central Residential Precinct, and Southern Residential apartment site are all coloured as "Rural" land uses, despite the text of the EIS 1 identifying business and residential zonings.
  - d. In the case of work site 15 impact assessment, there is no direct recognition of the presence of a proportion of the worksite being adjacent to the masterplan approved Northern Precinct.
- 28 TfNSW to undertake a site specific assessment of the visual impacts of Construction Sites 13, 14 & 15 on the RHTC, and Northern Precinct.
- 29 Develop a Visual Impact Management Plan in consultation with GPT that addresses the following;
- a. Appropriate replacement signs will be erected by TfNSW in consultation with GPT.
  - b. Additional directional and wayfinding signage will be implemented around RHTC and on construction hoarding, to ensure that the reduced visibility and accessibility is addressed.
  - c. Sight lines to major tenant signage will not be impeded.
  - d. GPT's artwork, messaging and branding will be included on hoardings and signage.
  - e. A rigorous hoarding maintenance scheme will be implemented to ensure the presentation quality of RHTC is preserved.
- 30 The visual impact on the Northern Precinct should be considered in future assessments and management frameworks, and feature hoarding and appropriate signage should be planned to coincide with the development of that Precinct.
- 31 Develop a site specific Air Quality Management Plan in consultation with GPT that addresses the following:
- a. Location of spoil stockpiles on the construction sites to ensure stockpiles are located away from the boundary with the shopping centre.
  - b. Stockpile management procedures, including management of any contaminated spoil for prevention of release of dust.
  - c. Recognising air quality as a key issue at RHTC.
  - d. Agreement on the method by which the air quality baseline will be set and the appropriate exposure thresholds that will be used for assessing the impact to air quality at Rouse Hill Town Centre.
  - e. Any assessment of air quality impacts should include consideration of property damage i.e. dust deposition on land, vegetation, buildings or vehicles, as well as human health impacts.
  - f. Confirmation of the extent and frequency of monitoring of weather conditions



and air quality. Air quality monitoring should be conducted at the boundary with RHTC to ensure that dust or gaseous emissions potentially affecting the site are quantified. Weather conditions should be continuously assessed and measures put in place to restrict certain construction activities during high winds or when the prevailing wind direction is toward sensitive receptors.

- g. Details on how air quality impacts to pedestrians accessing RHTC will be assessed and managed.
  - h. Management of demolition activities to prevent the release of hazardous materials (e.g. asbestos).
  - i. Procedures for consultation / communication with RHTC Management and residents during construction specifically with reference to dust release events, receipt and investigation of complaints and information on construction schedules and activities.
- 32 TfNSW to provide guarantees to GPT that services to RHTC will not be disrupted.
- 33 A site specific assessment of the capability or capacity of existing utilities to support the additional needs of the development is required.
- 34 GPT is seeking engagement with Government and key stakeholders to:
- a. Have input into the design of the station precinct, station box and viaduct structures to ensure design compatibility between the existing design principles of RHTC and the key elements of the station precinct.
  - b. Develop a clear and integrated design, operational and governance structure.
  - c. Include the station precinct and associated public realm into the existing Publicly Accessible Areas Management Plan (PAAMP) and Town Centre and Community Management Scheme.
- 35 TfNSW to provide detailed plans of the proposed designs for the station box, station precinct and viaduct.
- 36 Continued consultation regarding the detailed design and operation of the interchange and station precinct should occur with GPT, prior to the release of the EIS 2 designs.
- 37 Same as Recommendation 1
- 38 TfSNW to provide a more detailed method for assessing potential impacts and potential methods of mitigation is required in relation to impacts of ground borne noise on Cinema operation during the Stage 2 construction phase.
- 39 Noise impacts during operation need to be assessed in detail as part of the SSI Concept Plan modification.
- 40 Processes need to be established for concurrent construction of projects in the vicinity, including any projects that are not yet approved but could be reasonably foreseen, such as the Northern Precinct, RHTC sleeve sites, and residential development within the RHRC residential precincts.
- 41 A robust assessment of the cumulative traffic and visual impacts during the Stage 1 works needs to be undertaken with appropriate mitigation strategies to be incorporated into relevant management plans in consultation with GPT.
- 42 EIS 2 should ensure that the cumulative impact of any construction work that may occur simultaneously with that addressed in EIS 1 is covered.

### **1.3 Background to Exhibition**

In May 2008, approval was granted for a Part 3A Concept Plan for the North West Metro which included an underground railway line and station at Rouse Hill. Since this time, the Concept has substantially changed as follows;

- a viaduct (or 'Skytrain') is now proposed in the vicinity of the RHTC in lieu of tunnelling;
- a much larger Rouse Hill station building to accommodate a platform on top of the viaduct;
- a revised route beyond Rouse Hill Station, and
- the 'Metro' concept has been returned to a heavy rail concept

In March 2012, two applications relating to the NWRL were lodged and exhibited concurrently by the Proponent, TfNSW, from 4 April to 21 May 2012. The applications are:

- Application no. MP06\_0157 MOD 1 - Staged State Significant Infrastructure Modification (referred to herein as the "SSI Concept Plan modification"); and
- Application no. SSI-5100 - State Significant Infrastructure Application for Major Civil Construction Works (referred to herein as "the Stage 1 Civil Works application").

The two applications are supported by a single Environmental Impact Statement (EIS) which describes and assesses the impacts of each application (referred to herein as "EIS 1"). The EIS is accompanied by six Technical Papers.

GPT understands that the Proponent intends to lodge a second application for the Stage 2 construction works with an accompanying EIS (referred to as "EIS 2"), relating to the station design, railway operating systems and project operations (ie the operational phase). EIS 2 will provide a detailed description of construction works associated with:

- Skytrain design and architectural aspects
- Rail infrastructure such as railway tracks, signalling systems, ventilation systems, overhead power supply and substations
- Transport interchanges, park and ride parking facilities, kiss and ride, bus stops, taxi ranks and cycle storage
- Access roads and landscaping

### **1.4 The Rouse Hill Regional Centre and Rouse Hill Town Centre**

#### **1.4.1 Rouse Hill Now**

GPT is proud to be a long-term Project Partner, with Lend Lease, Landcom and the NSW Office of Strategic Lands, tasked with the delivery of the Rouse Hill Regional Centre (RHRC), which has been designated the Major Centre for the North West sector of Sydney.

The Rouse Hill Regional Centre Facts:

- 120ha mixed use community is being delivered by Lend Lease and GPT in partnership with Landcom, NSW Office of Strategic Lands
- Approximately 35 kms north-west of Sydney CBD
- Will include up to 1,800 homes and include a population of over 4,500 people

- Key infrastructure delivered up front: Rouse Hill Town Centre, schools, community facilities, open space, transport and road infrastructure
- Extensive emphasis placed on the quality of urban form, with unified streetscapes, advanced street tree planting and homes designed to address public spaces
- A walkable community - each home is located within a three minute walk of an open space
- An integrated transit square designed and approved in the TCCPP

To-date, GPT has delivered the following:

- \$470 million Greenfield development
- 63,600 square metres of retail space
- Approx 2,800 square metres of office space
- Approx 3,000 square metres of community space
- A range of public spaces including Town Square, Market Square, Food Terrace, Backyard and the Secret Garden

The Rouse Hill Town Centre has an annual sales turnover of \$365 million, accommodates 200 retailers, provides employment for over 3,000 people, created 104 residential dwellings and has been embraced by Rouse Hill residents as the living heart of their community with 10 million visitors per year. GPT and its partners have put the customer and their needs at the central focus of this development.

Today, nine years after the NSW Government first awarded the tenders to GPT and its Project Partners, RHTC is a vibrant, mixed-use town centre that provides a focal point for the local community and surrounding suburbs. The mix of signature architecture, attractive retail choices and active spaces has created an authentic and contemporary Australian town and activity centre.

The public realm of the town centre is critical to its sense of 'civic' place. Streets and pedestrian ways are public and active. Public spaces, including Market Square, Town Square, Food Terrace, Backyard and Secret Garden have all been embraced by the community as they are places where they can meet, engage and delight in the town centre environment. GPT's intention is for the future transit square to be integrated into the RHTC similarly as envisaged in the Town Centre Core Precinct Plan.

### 1.4.2 Rouse Hill Future

The RHRC is subject to a staged consent process under the former Section 80(4) of the Environmental Planning and Assessment Act 1979. The approved 2004 Masterplan is a "Level 1 DA", each Precinct Plan (including the 2005 Town Centre Core Precinct Plan) is a "Level 2 DA" and consents for building works and subdivision are issued as "Level 3 DAs".

The Level 1 and Level 2 DA consents provided for the development of Sleeve Buildings throughout the Town Centre to wrap large format uses and service areas in order to mitigate the visual presence of such uses to streets. The Sleeve Buildings were designated to be a mix of fine-grain retail, commercial, community and residential uses and several are in close proximity to the rail corridor. Due to the significant impact the construction of the NWRL will have on these sites the development of these sites is likely to be postponed until after the NWRL is complete.

The GPT Group in conjunction with the Project Partners is currently in the process of preparing a Precinct Plan for the Northern Precinct. The Northern Precinct is between Commercial Road and the existing Town Centre and therefore shares an interface with the NWRL. The development of the Northern Precinct for a wide range of retail, office and residential uses is facilitated by the Rouse Hill Regional Centre Masterplan 2003 and the approvals framework following the Masterplan. To date GPT, as developer, has submitted a draft Northern Precinct Plan to Landcom / Office of Strategic Lands for consideration.

### **1.4.3 Rouse Hill and North West Rail**

The North West Rail Link and the delivery of the public realm linking the proposed Rouse Hill station to the existing RHTC and Northern Precinct presents a unique opportunity to create world's best practice in the integration of heavy rail within an Australian town centre.

An enhanced pedestrian walking environment that is well designed, cohesive, welcoming and rich in amenity will provide a seamless customer experience as passengers transition from the station turnstiles, across the public realm and in and around the town centre precinct. GPT shares TfNSW's aspirations for the North West Rail Link stations to integrate with and strengthen the character of the local area. With previous experiences on other transport integration projects such as Melbourne Central, GPT understands the importance of collaboration with North West Rail and Government to efficiently and seamlessly deliver, operate and manage the public realm, linking Rouse Hill station to the wider community amenity.

A clear Construction Management Interface Agreement between GPT and TfNSW and a governance structure such as possible inclusion in the existing Publicly Accessible Area Management Plan and Town Centre and Community Management Schemes could enable effective delivery and successful ongoing management that will ensure customer experiences and their expectations of the precinct are not only met but exceeded.

## **1.5 GPT's Commitment**

Having delivered the \$470 million award-winning Rouse Hill Town Centre, in partnership with Lend Lease, Landcom, NSW Office of Strategic Lands and in consultation with Transport for NSW, GPT is committed to working with the North West Rail Link and key stakeholders to seamlessly integrate the new Rouse Hill rail station into the existing transport network, as well as the surrounding urban context of Rouse Hill Town Centre.

Having worked alongside NSW Government in delivering and meeting the challenges of Rouse Hill Town Centre, GPT well understands the importance of providing industry leadership and building strong community relationships to achieve superior outcomes.

GPT's key goal is to help deliver the best outcomes at a construction management, design, operational and governance level to facilitate a high level of amenity, new street patterns and public spaces that promote the sustainable and highly liveable built form outcomes at RHTC and the broader New Rouse Hill development, a GPT joint venture project with Lend Lease. GPT's intention is to bring together the best thinking and best practice locally, nationally and globally to 'get it right – now'.

## 2.0 PROCESS ISSUES

### 2.1 SSI Concept Plan modification Assessment

#### Submission

The staged EIS process will result in an incomplete assessment of the SSI Concept Plan modification application.

The modification to the approved concept (change from underground to viaduct) will introduce significant new impacts during construction and operation. The bulk of these impacts have not yet been addressed.

The impacts of the SSI Concept Plan modification cannot be properly understood by stakeholders, or indeed the consent authority, in the absence of detailed studies relating to both Stage 2 works and the operational phase.

#### Scope of Issue

Although the 2008 Concept Plan approval was ostensibly for a Metro line, EIS 1 takes the position that the 2008 approval was for a new electrified passenger rail line between Epping and Rouse Hill, and that the approved scheme needed to be reviewed in order to accommodate a Metro line. The review was not completed as the heavy rail link plan was re-born in 2010. Hence, the broad concept of a rail line, EIS 1 argues, is essentially similar to the 2008 Concept Approval.

Nevertheless, there are clearly substantial changes proposed, not least of which is the change to the vertical alignment. The originally proposed cut and cover or bored tunnel is to be replaced with a 4.2 km Skytrain viaduct. The twin track viaduct structure would follow the eastern side of Windsor Road with Rouse Hill Station located on a straight section of elevated track between Rouse Hill Town Centre and Windsor Road, above the existing North-West T-way interchange. From here the alignment would curve westwards to pass over Windsor Road to run generally north west, parallel and to the north of Schofields Road.

The move from underground to viaduct will introduce significant new impacts in relation to amenity (noise, air quality, access and traffic), visual impact, land use impacts, substantially increased construction impacts on a range of measures, and noise impacts during operation.

The Director Generals Requirements (DGRs) state that the Proponent is required to consider any changed or additional impacts including as a result of the proposed construction and operation of stations, rail infrastructure and systems stage, at a conceptual level. The DGRs also require that targeted consultation occur with the community in relation to the proposed changes.

In response to this requirement, Section 6 of EIS 1 contains a summary of impacts of the modification, expressed in quite general terms. EIS 1 claims that the detailed impacts of the modification are either addressed throughout EIS 1, or will be addressed in EIS 2.

The Proponent states that the purpose of lodging two staged EISs is to enable works to commence on Stage 1 civil works (particularly tunnelling) as soon as possible, while allowing more time to be devoted to consultation about detailed design of the structures including the viaducts, station buildings and station precincts.

This approach is as follows:

EIS 1 purports to be a combined assessment prepared for both the SSI Concept Plan modification and the Stage 1 civil works. However, EIS 1 only assesses the impact of Stage 1 civil works ie the first stage of construction and does not assess the impact of Stage 2 works

or of the operational phase (both being components of the SSI modification).

The failure to assess the impacts of Stage 2 works or the completed structure in EIS 1 represents a major flaw in the process. The impacts of the SSI Concept Plan modification cannot be properly understood by GPT, Government authorities, Councils, the community or indeed the consent authority, in the absence of detailed studies relating to Stage 2 works and relating to the operational phase.

The Minister's determination of the SSI Concept Plan modification application should be based on a full assessment of all the impacts of the modification, including public input into EIS 2 (Stage 2 works, the completed structure and to the operational phase).

### **Recommendation**

1. The SSI Concept Plan modification application should not be determined until such time as EIS 2 has been exhibited and assessed.

## **2.2 Insufficient Information on Stage 1 Design**

### **Submission**

In the absence of any design details of the viaduct and station precinct it is not possible to meaningfully comprehend and assess the full implications of the SSI Concept Plan modification application.

### **Scope of Issue**

Further to the issues discussed in Section 2.1, the Stage 1 Civil Works application purports to be seeking consent to the viaduct, while EIS 2 will deal with the "appearance" of the viaduct. Although approval to the construction of the viaduct is apparently sought as part of the Stage 1 Civil Works application, there are no plans included in EIS 1 which show the detail of the viaduct to be constructed in terms of precise height, width, route across land, road crossings, and most importantly, location or size of supports.

Furthermore, all assessment in relation to the station precinct and transit centre design has been deferred to EIS 2, although the options for design will be significantly limited by the decisions made in the Stage 1 design.

### **Recommendation**

2. The SSI Concept Plan modification application should not be determined until such time as EIS 2 has been exhibited and assessed.
3. A separate, detailed and holistic assessment, covering detailed design and impact mitigation in and around the RHTC, should be undertaken by TfNSW and resubmitted to the Minister for assessment and to GPT for review.

## **2.3 Masterplanning Implications**

### **Submission**

The Concept modification contemplates an elevated railway structure and station building which is a significant amendment to the masterplan-approved layout of the RHTC and the pending designs for the Northern Precinct.

### **Scope of Issue**

The Level 1 Masterplan DA, Level 2 Town Centre Core Precinct Plan (TCCPP) DA, and Level 3 DAs for Stage 1 of the Town Centre, each envisaged an underground railway line and predominantly underground station precinct at Rouse Hill.

The RHTC has been designed to reflect this outcome, and as such the SSI Concept Plan modification introduces many challenges in integrating the Skytrain and elevated station into the existing RHTC while retaining the pedestrian primacy of the precinct and a functional transport interchange.

### **Recommendation**

4. Continue engagement with GPT with the purpose of agreeing the detailed design of the viaduct, station building and station precinct, prior to the release of the EIS 2 designs.
5. Modifications to the approved Level 2 Precinct Plan DA for the Town Centre core that may be required as a result of the SSI Concept Plan modification should be obtained at acost to TfNSW. Modifications to existing approvals must not adversely affect existing Project Approvals.
6. The SSI Concept Plan modification application should not be determined until such time as EIS 2 has been exhibited and assessed.



## 3.0 STAGE 1 CONSTRUCTION PHASE ISSUES

### 3.1 Construction Timeframe

#### Submission

The construction period for the enabling works, Stage 1 and Stage 2 works are not clearly detailed in the EIS 1 for the specific sites nor is sufficient detail provided in regards to the specific construction activities that will be undertaken. The assessment of impacts should be based on the total construction period, including enabling works and should include a cumulative impact assessment over the period.

#### Scope of Issue

Indicative construction timeframes are included in Section 7.9 of EIS 1, but no overall construction programme is available.

Three construction zones affect the RHTC: Construction Sites 13, 14 and 15.;

- Construction Site 13: Old Windsor Road to White Hart Drive: 2 years for civil works, plus up to 2-3 years additional for EIS 2 works.
- Construction Site 14: Rouse Hill Station. 18 months, plus up to 2-3 years additional for EIS 2 works.
- Construction Site 15: Windsor Road Viaduct. 2 years, plus up to 2-3 years additional for EIS 2 works.

It is noted that the stated construction periods provided throughout EIS 1 could be misconstrued as the impact assessment is largely associated only with EIS 1 or Stage 1 works. For example, comments on page 16.39 of EIS 1 states that visual impacts from construction will last for the 2 year construction phase but does not recognise that construction work sites will also need to be retained or established for the Stage 2 works (rail infrastructure and station construction).

While in the process of providing advice to GPT, every consultant has misunderstood this aspect during their review of the documents, and every consultant has erroneously thought that the Stage 1 timeframe represents the total time period of construction impacts.

#### Recommendation

7. TfNSW to develop a site specific detailed construction programme in consultation with GPT that clearly identifies;
  - a. Total construction timeframe for Stage 1 and Stage 2 works.
  - b. The various construction activities and their proposed timeframes.
  - c. Staging implications that accommodates as best as possible the operational needs of RHTC and future development of the Northern Precinct and sleeve sites.

### 3.2 Work Hours

#### Submission

EIS 1 does not appropriately consider the extended trading hours of the shopping centre, its peak trading periods and the approved uses of the RHTC, Northern Precinct and Sleeve Sites.

#### Scope of Issue

Standard construction hours for site establishment and ongoing work are 7am-6pm Monday to Friday; 8am-1pm Saturday; no work Sunday or public holidays. However, numerous

exceptions apply and work may exceed these hours: for safety or operational reasons; deliveries as required by Roads or Police, and works on roads as required by NSW Roads "Non-disruptive" preparatory work, repairs and maintenance can occur Saturday afternoon or Sundays, and works that comply with EPA noise management levels could occur at any time. Material supply and spoil removal will occur up to 24 hours a day, and extended hours may be agreed with affected parties at any time. Further, once acoustic sheds and barriers are constructed, construction works may occur as often as 24 hours a day.

As a major town centre, the RHTC trades outside normal trading hours and into the evening, with restaurants, cinemas and community uses operating until midnight. EIS 1 when assessing the relevant noise criteria to apply to work in evening periods, incorrectly assesses RHTC as "Commercial premises - 'N/A'". However the operation of retail premises during the evening period should be considered for any proposed evening work.

Appropriate recognition should also be given to the existing residential apartments in the town centre; the future development on the Northern Precinct and within the 'sleeve' development sites along Tempus Street which have Precinct Plan DA approval.

Extended construction working hours could compromise the amenity of RHTC and as such discourage visitation by customers. In turn, this may have a detrimental impact on the continued commercial success of RHTC.

### **Recommendation**

8. Establish appropriate working hours and noise criteria having regard to the existing and approved uses of the RHTC.
9. Develop a Construction Management plan in consultation with GPT which seeks to maintain the existing standard of amenity for occupants of and visitors to the town centre, including during extended work hours and peak trading periods.

## **3.3 Environmental / Construction Management**

### **Submission**

The Construction Environmental Management Framework (CEMF) document does not provide the necessary site specific assurances relating to pedestrian flow and safety, traffic congestion, parking, amenity of the employees, visitors and residents, and the everyday running of the RHTC, taking into account stakeholders' issues.

### **Scope of Issue**

Project and Construction Management consultants, Cadence Australia, have advised on this issue and a copy of their report is provided at Appendix 1. Issues and concerns are summarised in Section 5.1 of the Cadence Australia report.

### **Recommendation**

10. Develop a Construction Management Plan in consultation with GPT that addresses and incorporates all items identified in Cadence's report.

### **3.4 Construction Noise and Vibration**

#### **Submission**

The noise & vibration assessment in EIS 1 does not satisfy GPT that the construction noise and vibration impacts are fully understood nor will they be properly managed given the unique trading environment of RHTC.

#### **Scope of Issue**

There is a lack of assessment of impact on retailers trading into the evening as well as residential premises within the RHTC.

There is inconsistency and a lack of detail in regards to assumptions associated with noise prediction levels.

Incorrect assessment of RHTC as a “commercial” premises and inadequate proposed mitigation strategies.

Inconsistency in regards to assumptions associated with safe working distances and vibration modelling.

The assessment criteria for noise borne vibration has been set too high which is unacceptable to GPT.

Clarification of assumptions of assessment findings particularly in regards to Cinema.

Renzo Tonin has prepared, on behalf of GPT, advice relating to noise and vibration. Refer Appendix 2 of this submission.

#### **Recommendation**

11. Develop a site specific Noise & Vibration Management Plan in consultation with GPT that addresses the issues raised in Renzo Tonin’s report to ensure the level of amenity that currently exists at RHTC is preserved.

### **3.5 Construction Traffic Impacts**

#### **Submission**

EIS 1 does not provide a transparent and robust methodology for the assessment of traffic impacts. It lacks significant detail in relation to amendments to major intersections and roads, impacts to RHTC internal road network, and proposed access routes for construction vehicles into and around the various construction sites.

#### **Scope of Issue**

The impacts of construction traffic is significant as it has the potential to substantially impact the high level of accessibility, safety and convenience that currently exists at RHTC by;

- Diminishing the level of service at the major intersections and accessibility to the RHTC carparks and internal road network.
- Compromising the internal road network and roads surrounding RHTC as a result of “flow on” effects of the additional traffic generated by NWRL, changes to intersections or traffic diversions, access to construction sites or new carparking arrangements.

This concern is further magnified when considering that the timing of construction and delivery of the Rouse Hill Northern Precinct is likely to coincide with the construction

phase of the NRWL and other developments in the Rouse Hill Regional Centre. AECOM has prepared, on behalf of GPT, a detailed paper relating to construction traffic and transport. Refer Appendix 3 of this submission.

### **Recommendation**

12. A transparent and robust methodology for the assessment of traffic impacts needs to be developed by TfNSW which must have regards to;
  - a. The cumulative traffic impact of other major developments including the Rouse Hill Northern Precinct
  - b. The cumulative traffic impact of other major infrastructure projects including the Schofields Road upgrade
  - c. The quantitative impact assessment of vehicles on all affected local roads, with potential impact on the safety and amenity of local residents
  - d. The likely significant impact on the level of service at Windsor Road and Schofields Road, given that this intersection is the 'gateway' to the RHTC. Cumulative assessment of this intersection in conjunction with the network impacts of the Windsor Road / White Hart Drive intersection is required
  - e. The cumulative impacts of the NWRL as a whole as a result of the wider access routes of vehicles attending construction sites 13 to 17.
13. Develop a site specific Traffic Management Plan in consultation with GPT that details;
  - a. Changes to Tempus Street and to the potential adjustment of the Windsor / Schofields Rd intersection.
  - b. Information about the management of access to Construction Site 14 on White Hart Drive. If the carpark entry is gated there is the potential for substantial queuing which could have impacts on existing intersections on White Hart Drive, which have not been identified.
  - c. Appropriate communication procedures to consult with RHTC and advise GPT of any temporary or permanent road diversions or amendments
  - d. Issues raised in Aecom's report.

## **3.6 Construction Car Parking**

### **Submission**

GPT requires sufficient car parking for construction workers to be provided in order to avoid the inappropriate use of the RHTC car park and street parking by vehicles associated with NWRL construction.

### **Scope of Issue**

Parking is not indicated in the site layout for the proposed works at Old Windsor Road to White Hart Drive (Construction Site 13). Considering its location (just south of RHTC), this is likely to place pressure on existing parking provisions. Furthermore, if parking availability on either the Rouse Hill Station or Windsor Road Viaduct sites is insufficient, increased parking demand is likely to be borne by RHTC. Lack of available carparking will discourage visitation by customers. This in turn may have a detrimental impact on the continued commercial success of RHTC.

Appropriate carpark measures will need to be in place to ensure queuing for traffic entering the worksites during peak periods does not occur. This could potentially affect the accessibility to the centre and compromise pedestrian safety if queuing occurs over intersections.

There is likely to be a significant number of construction worker vehicles wanting to park on the Rouse Hill station site. There is little detail within EIS 1 as to how the project might co-ordinate construction workers car travel to minimise the impact on RHTC (for instance parking remotely and traveling to the site on a bus/minibus.)

Underground parking in RHTC is currently provided free for the first 3 hours for the use of visitors to the centre. Consideration of more stringent parking controls, such as a number plate recognition system, may be required to ensure that the car park is not used inappropriately by construction employees (e.g. to discourage entering / exiting the car park every 3 hours). There would be costs associated with such a system upgrade and these costs should be met by TfNSW.

## **Recommendation**

14. Develop a site specific Carpark Management Plan in consultation with GPT to address the following and ensure that the current amenity that is provided to the visitors and employees of RHTC is preserved;
  - a. Sufficient construction parking is provided and that queuing is accommodated.
  - b. Consideration should be given to remote parking and transportation of workers to key construction sites.
  - c. Confirmation that car parking will be allocated within Construction Site 13
  - d. Consideration of the financial implications of introducing and maintaining a more stringent car parking system at RHTC.

## **3.7 Loss of RHTC Car Parking**

### **Submission**

The EIS 1 contemplates the eradication of approximately 400 formal and 160 informal car parking spaces as a result of the construction worksites. This will have significant implications for the staff and visitors of RHTC (including financial and safety implications) and will generate a breach of the existing development consents and legal obligations for RHTC.

### **Scope of Issue**

During construction, all parking adjacent to Windsor Road is likely to be displaced. This includes:

- approximately 130 barrier restricted spaces at the corner of Windsor Rd and White Hart Drive, which largely cater for staff
- approximately 40 on street spaces between Windsor Road and the town centre, which cater for a range of casual users
- approximately 240 parking spaces located north of Rouse Hill Drive adjacent to Windsor Road, which cater for staff, special events and peak periods; and
- approximately 160 informal spaces on grass available for peak periods and special events, located to the immediate north of the 240 spaces and south of Commercial Road.

No details have been given as to how and where lost car parking would be replaced.

The loss of 400 formal parking spaces would have a significant detrimental impact on the operation of the town centre. The inevitable increase in demand on the basement car park may increase operational costs and reduce the level of amenity which visitors have become accustomed to at RHTC. This loss of amenity could potentially deter visitation. In turn, this may have a detrimental impact on the continued commercial success of RHTC. Therefore it is essential that the car parking is provided elsewhere by TfNSW.

In relation to breaches of existing consents, the existing Level 3 consent for the RHTC, referred to as "DA 3", requires a minimum number of car parking spaces to be provided. The total number of spaces includes all of the spaces to be lost during construction, including those spaces which are presently informal.

While the DA3 consent recognised that 400 spaces would be lost when the rail line commenced operation, it remains silent as to any loss of spaces during construction. As such, any loss of spaces would represent a breach of the development consent.

It should be noted that at the time the consent was granted, the intention was for an underground railway line and station. Therefore, it was never envisaged that 560 spaces would be lost for the designated period of time.

GPT also has legal obligations to some of its retailers to provide a minimum number of carparking spaces which may be breached should the parking spaces not be replaced.

### **Recommendation**

15. Develop a site specific Carpark Management Plan in consultation with GPT that addresses the following and ensures that the level of amenity and safety currently enjoyed by visitors and employees is preserved;
  - a. The 560 parking spaces are replaced by TfNSW during the construction period.
  - b. Any breaches of existing GPT development consents and legal obligations, which may arise due to the loss of car parking, will be addressed by the Proponent at their cost.
  - c. Any approval issues (for example, change of use and development of undeveloped sites for use as car parking) will be attended to by the Proponent at their account. Modifications to existing approvals must not adversely affect existing Project Approvals or anticipated future applications.

## **3.8 Public Transport Impacts**

### **Submission**

The EIS 1 fails to provide sufficient detail in regards to the relocation of the bus interchange, its associated facilities, and the temporary operation of the interchange to ensure that the public transport amenity that currently exists at RHTC is preserved.

### **Scope of Issue**

EIS 1 states that the existing bus interchange (bus stops, layover areas) would be relocated for the duration of the construction of the Rouse Hill station and makes reference to proposed changes in bus operations and access routes for buses for the duration of station construction.

However, no details are provided for the relocation of kiss and ride and taxi facilities currently located at the Rouse Hill bus interchange. Further details are also required for bus route diversion, bus access and bus interchange arrangements (including kiss and ride and taxis) during construction of the NWRL as this will directly affect the customer arrival experience at the RHTC, and the safety of bus interchange users.

In particular, further detail is required of the relocated interchange arrangement, bus route diversion due to the proposed closure of the interchange and T-Way, particularly at the intersections of existing T-Way / White Hart Drive and Tempus Street / White Hart Drive.

EIS 1's intention is to retain two-way traffic movement on Tempus Street, however details are still to be released as to how this will be achieved. The access to Main Street from Tempus Street needs to be clarified as there are likely to be a considerable number of buses and bus stops along Tempus Street which will probably make access less attractive/effective.

EIS 1 states that the management of buses at the interchange is to be reviewed during detailed construction planning to minimise impacts on existing services. As the bus interchange is a vital component of the North West public transport infrastructure any reduction in services would impact visitor numbers to RHTC.

Should the above issues not be suitably addressed, RHTC will be adversely impacted as a result of;

- diminished arrival experience to RHTC for visitors
- pedestrian accessibility to public transport modes being compromised
- pedestrian and cyclist safety not being maintained
- flow- on impacts to the RHTC internal road network

### **Recommendation**

16. Undertake ongoing engagement with GPT to agree the bus interchange relocation, kiss and ride and taxi relocation, pedestrian access arrangements; pedestrian amenity, impacts of bus re-rerouting, and impact on key intersections particularly when combined with the construction access / egress driveways.

## **3.9 Pedestrian and Cyclist Impacts**

### **Submission**

As a town centre station, the area surrounding the Rouse Hill worksite generates a higher level of pedestrian activity relative to other worksites, and Rouse Hill prides itself on being pedestrian friendly. Maintaining pedestrian and cyclist connectivity, safety and facilities during construction is vital.

### **Scope of Issue**

Informal east-west pedestrian routes through the existing T-way interchange would be lost during the construction period, with pedestrians diverted via either Rouse Hill Drive or White Hart Drive (up to 200m).

The EIS 1 does not recognise that the relocation of bus stops to the eastern side of Tempus Street will impact on pedestrian movements along the existing footpath. The footpath is less than 4m wide and would be constrained by bus stop shelters, which would be required due to a lack of existing bus shelters along Tempus Street.

The EIS 1 does not address the way in which pedestrian and cyclist safety will be managed during the construction of the NWRL. This is an issue that needs to be addressed to protect the pedestrian-focussed nature of the RHTC.

Bicycle racks and bicycle lockers are currently provided in the bus interchange – although bike racks are provided throughout the town centre, this is the only location where lockers are provided. The EIS 1 does not indicate whether or not these facilities will be re-located during construction.



## **Recommendation**

17. Develop a Pedestrian and Cyclist Management plan in consultation with GPT that stipulates how pedestrian movements and pedestrian safety is to be managed, to ensure safe movements around the construction worksites and modified transport facilities. These measures should have regard to the highly pedestrian-focussed nature of the RHTC. The management plan will also need to consider relocation of bicycle racks and lockers displaced as a result of the works.

## **3.10 Contamination**

### **Submission**

There has been an inadequate assessment of contamination risk as EIS 1 has dismissed this issue due to RHRC being “a relatively new development” despite the NWRL involving works on certain land which has never been substantially developed.

### **Scope of Issue**

EIS 1 does not confirm if contamination assessments have been undertaken at Construction Sites 13, 14 and 15. EIS 1 states that there is considered to be little or no contamination risk in the vicinity of the RHTC. It would appear that no testing has or will occur in relation to any civil works within the RHRC site. This represents an unacceptable risk to GPT and other stakeholders.

### **Recommendation**

18. Confirm that contamination assessments will be conducted and any significant issues raised with relevant stakeholders.
19. Develop a Contamination Management Plan for GPT’s approval which will ensure that the construction activities will not introduce a migration pathway for contaminants onto RHTC either by mobilisation of contaminants through the soil or geology profile, tracking along existing or new utilities, or by wind-blown dust.

## **3.11 Surface Water and Hydrology**

### **Submission**

Potential impacts on the surrounding environment include altered flood behaviour, drainage patterns, and impact on water quality arising from works and sediment basin overflow. There must be the ability to clearly identify the responsible party in the event of any incident, and further design and management details are required.

### **Scope of Issue**

While the majority of impacts are expected to be on the Construction Sites, some potential impacts to the broader surrounding environment have been identified including:

The potential for works within the floodplain to alter existing flood behaviour and adversely impact the surrounding environment through altered drainage patterns.

The potential for works to result in exposed soil which could result in erosion and adversely impact downstream water quality.

The disturbance and exposure of soils at designated construction sites has the potential to result in increased erosion and sediment transport with potential impacts on the receiving environment, particularly around and downstream of Tributary 3 (adjacent to RHTC). If RHTC is undertaking construction concurrently, there is a risk that the source of any downstream adverse water quality impacts could be uncertain.

Water quality mitigation and management is proposed to adhere to the relevant Guidelines, and if properly implemented, the proposed mitigation measures are expected to provide a suitable level of risk mitigation. The two key risk elements identifiable for RHTC are the placement of as yet undefined construction sites for laydown/construction support and the ability to clearly define between downstream impacts on water quality if any adverse impact was identified.

There is no consolidated draft Statement of Commitments, these are provided subsequent to the identification of DGRs and Supplementary DGRs at the beginning of each section. The Statements of Commitment provided present no forward commitment to additional investigations, controls or mitigations.

The Framework Construction Environment Management Plan identifies generic considerations for preparation of CEMPs and soil erosion control plans (SECP) or soil and water management plans but does not identify specific controls to be implemented and affected for site specific conditions at the construction areas most likely to affect RHTC.

The precise location of sediment basins has not been defined. The location will have implications for access needs for construction and maintenance (to retain functionality and capacity) as well as for potential off-site discharge via an assumed spillway into a natural drainage line. The location may also influence the availability of land for RHTC activities and implications for current RHTC land use and access.

The EIS 1 notes the potential for significant rainfall events to result in sedimentation basins filling to capacity and overflowing, with higher quantities of sediment being discharged downstream. Although the EIS 1 indicates that an appropriate level of dilution is likely given the large volume of runoff associated with such events, there remains potential for downstream impacts and for these impacts to be attributed to RHTC work sites.

### **Recommendation**

20. Establish with GPT the clear delineation of boundaries, controls and responsibilities at an early stage to be able to determine independent liability for minor or serious pollution events.
21. Develop a site specific Surface Water and Hydrology Management Plan in consultation with GPT that addresses the following;
  - a. Separation of water treatment trains for the NWRL construction phase and the RHTC construction and operation stages.
  - b. The precise location and operation of sediment basins should be defined and any impacts arising should be subject to further consultation
22. A consolidated Statement of Commitments should be released and further developed.

## **3.12 Local Business impacts**

### **Submission**

During the lengthy construction period, the impact on RHTC, the businesses within the existing RHTC, future stages of the RHTC and the planned Rouse Hill Northern Precinct may be dire in regards to loss of income, increased operational costs and potential reputational damage.

### **Scope of Issue**

RHTC is a Major Centre, being the nominated Regional Centre for the North West Sector. However, EIS 1 does not recognise Rouse Hill as one of the major centres which will be affected by the NWRL, nor is the RHTC or Northern Precinct depicted on the relevant map

(mapping error).

Further, EIS 1 does not identify the important community facilities within RHTC, including the Library, internal community uses, and outdoor community spaces.

Within the immediate proximity of the NWRL to the Town Centre, a series of major construction worksites will divide Rouse Hill from Windsor Road for a number of years, creating a visual and physical barrier.

The impact on many businesses is likely to be negative, for a number of years. No attempt has been made to quantify the impacts.

Furthermore, EIS 1 only considers business impacts on immediately adjoining tenants. The works will impact the entire RHTC, with traffic, noise, dust and worksite hoarding significantly reducing the attractiveness of RHTC as a destination.

A number of potential business costs which have generally not been identified in the EIS 1, include:

- Additional costs associated with increased cleaning, security, car park operation, resourcing, maintenance to roads, maintenance to landscaping, maintenance to air conditioning equipment, increased insurances, and increase resourcing to manage stakeholder engagement and complaints.
- Reduced visitation leading to claims for rent abatements/rent reductions due to visual amenity impacts, lack of passing trade, traffic redirection, and problems accessing the centre.
- Increased vehicular traffic through the centre (i.e along Main Street) as a consequence of changes to the existing traffic patterns to the detriment of the open spaces and ambience of the centre;
- Diminished car park capacity resulting in reduced visitation
- Noise and dust reducing restaurants ability to trade in their licensed areas
- General construction traffic intimidating customers

There is no recognition of or assessment of impacts on future occupants of the Northern Precinct of RHRC. It is important to ensure that future businesses can be protected by the mitigation measures (eg business consultation groups and business impact register).

### **Recommendation**

23. Undertake a more robust assessment of business impacts, costs and mitigation options, having regard to unique trading environment of RHTC and:
  - a. The role of RHTC as the Major Centre for the North West Sector;
  - b. The planned expansion of the RHTC into the Northern Frame; and
  - c. The substantial impacts likely as a result of the immediate proximity of the RHTC to the construction worksites;
24. Agree with GPT a mechanism by which compensation could be sought should there be adverse impacts to the RHTC business and businesses within the RHTC as a consequence of the NWRL.

### 3.13 Land Use Issues

#### Submission

Assessment of land use impacts has generally been deferred to EIS 2 which is unreasonable given that its construction is proposed as part of EIS 1. Once EIS 1 is approved, work can and will commence on the construction of the viaduct and the decision becomes a fait accompli which is unacceptable to GPT.

#### Scope of Issue

The issue of land use impacts encompasses a range of concerns as follows;

The EIS 1 does not specify the extent of the construction site impacts on existing RHTC land use and infrastructure other than relocation of the bus station and layover area.

While indicative details have been provided in respect of construction sites, facilities and layouts, EIS 1 includes provision for the selection of additional construction sites and/or alteration of the exact locations currently proposed. The criteria provided for selection of these new areas make selection of existing cleared open space the primary focus areas for any such additional sites. No subsequent review, assessment, consultation or approval process is identified as being applicable to any such additional sites, and while the CEMF does envisage some additional assessments for a range of works, construction site establishment is not expressly identified. This should be included as a Statement of Commitment in the EIS 1.

No specific mitigation measures are identified, except for continued liaison and consultation with statutory organisations, Councils, the community, and key stakeholders.

There is potential for conflict of land use interests between RHTC's short – medium term development plans, RHTC's existing operational environment and NWRL's dynamic construction site environment. These should be clearly resolved at an early stage of the process, prior to commencement of construction.

#### Recommendation

25. Further information is required at EIS 1 stage, and specific mitigation measures should be developed in addition to the ongoing liaison with stakeholders.
26. An assessment, consultation or an approval process needs to be identified as being applicable to any additional construction sites and/or alteration of exact locations as currently proposed in the Statement of Commitments in the EIS 1.
27. Rectification of the following omissions:
  - a. When establishing land uses which may be impacted, a number of community uses in the RHTC are not identified, including the Library, Community Uses, Town Square and Market Square.
  - b. Mapping does not reflect the zoned, master planned use of all land within RHRC. On figures 14.9 and 14.10 of EIS 1 the Northern Precinct, Central Residential Precinct, and Southern Residential apartment site are all coloured as "Rural" land uses, despite the text of the EIS 1 identifying business and residential zonings.
  - c. In the case of the Construction Site 15 impact assessment, there is no direct recognition of the presence of a proportion of the worksite being adjacent to the masterplan approved Northern Precinct.

### 3.14 Loss of Signage and Reduced Visibility

#### Submission

A robust assessment of the extent of the visual impacts to RHTC and adjacent sites has not been undertaken and subsequently are understated in the EIS 1.

#### Scope of Issue

RHTC will have construction sites in front of its main frontage and at all four corners of its main entry intersections, creating visual barriers to the Centre signage, major tenant signage, retailers and carpark entries.

The placement of facilities and equipment within the construction sites may also impede sightlines to traffic lights, and directional signage risking the safety of pedestrian, cyclists and visitors to RHTC.

The existing major entry signage to the RHTC is located within the NRW construction worksites and will need to be relocated to an equally prominent location.

In addition to this, the worksites will comprise a major visual barrier between Windsor Road and the town centre, thereby further reducing visibility and impacting wayfinding.

No consideration has been given to the impact during construction on visual amenity of future uses within the Northern Precinct.

The magnitude of hoardings around and opposite RHTC has the potential to create the perception of closure for the shopping centre and surrounding facilities which could result in reduced visitation and in turn impact on the commercial success of RHTC.

#### Recommendation

28. Undertake a site specific assessment of the visual impacts of Construction Sites 13, 14 & 15 on the RHTC, and Northern Precinct.
29. Develop a Visual Impact Management Plan in consultation with GPT that addresses the following;
  - a. Appropriate replacement signs to be erected by the Proponent, in consultation with GPT.
  - b. Additional directional and wayfinding signage will be implemented around RHTC and on construction hoarding, to ensure that the reduced visibility and accessibility is addressed.
  - c. Sight lines to major tenant signage will not be impeded.
  - d. GPT's artwork, messaging and branding will be included on hoardings and signage.
  - e. A rigorous hoarding maintenance scheme will be implemented to ensure the presentation quality of RHTC is preserved.
30. The visual impact on the Northern Precinct should be considered in future assessments and management frameworks, and feature hoarding and appropriate signage should be planned to coincide with the development of that Precinct

### 3.15 Air Quality

#### Submission

EIS 1 indicates that air quality is a non-core issue however, given the unique open air trading environment and the immediate proximity of a transport interchange, outdoor dining and public squares, reduced air quality will have a significant impact on RHTC.

## Scope of Issue

It is noted that the DGRs include a supplementary requirement for the EIS 1 to assess the air quality impacts on sensitive receptors, however this is a very general requirement which does not specify how the air quality impacts should be assessed or identify or qualify sensitive receptors. Given the unique trading environment of RHTC, (the open air retail and dining areas and the residential component) it is considered a highly sensitive receptor and the impact on air quality is a key issue that must be adequately assessed and managed.

EIS 1 does not clarify if the development of, and impact to, the Northern Precinct is included within the boundary of the RHTC when considering the impact of civil works.

Confirmation of the impacts of demolition of existing buildings and structures have not been incorporated, with an appropriate assessment of any hazardous materials.

Assessment of air quality impacts only considers human health impacts.

It is finally noted that the EIS 1 does not refer to spoil stockpiles at Construction Sites 14 and 15.

## Recommendation

31. Develop a site specific Air Quality Management Plan in consultation with GPT that addresses the following:
  - a. Location of spoil stockpiles on the construction sites to ensure stockpiles are located away from the boundary with the shopping centre.
  - b. Stockpile management procedures, including management of any contaminated spoil for prevention of release of dust.
  - c. Recognising air quality as a key issue at RHTC
  - d. Agreement on the method by which the air quality baseline will be set and the appropriate exposure thresholds that will be used for assessing the impact to air quality at RHTC.
  - e. Any assessment of air quality impacts should include consideration of property damage i.e. dust deposition on land, vegetation, buildings or vehicles, as well as human health impacts.
  - f. Confirmation of the extent and frequency of monitoring of weather conditions and air quality. Air quality monitoring should be conducted at the boundary with RHTC to ensure that dust or gaseous emissions potentially affecting the site are quantified. Weather conditions should be continuously assessed and measures put in place to restrict certain construction activities during high winds or when the prevailing wind direction is toward sensitive receptors.
  - g. Details on how air quality impacts to pedestrians accessing RHTC will be assessed and managed.
  - h. Management of demolition activities to prevent the release of hazardous materials (e.g. asbestos).
  - i. Procedures for consultation / communication with RHTC Management and residents during construction specifically with reference to dust release events, receipt and investigation of complaints and information on construction schedules and activities.

## 3.16 Utilities

### Submission

EIS 1 contains insufficient consideration of the capability or capacity of existing services or mitigation strategies to ensure services to RHTC are not disrupted.

## Scope of Issue

The services identified within EIS 1 as being required for construction include power, water, sewer and communications. Intermittent disruption to services could be expected during construction which could have catastrophic impacts to the operation of RHTC and its retailers.

The proposed power supply source is the Mungerie Park substation. The EIS 1 is silent on the potential impact of this power supply requirement on neighbouring users.

Construction works at the RHTC will require water for dust suppression and site amenity buildings. While recycled water would be maximised for dust suppression, the likely volume and proposed sources have not been identified. Similarly, the sewer provisions for site amenities have not been identified (e.g. use of portaloos in comparison to connection to the existing sewerage system).

EIS 2 will deal with the permanent station fit-out works, installation of permanent services and station precinct works.

In summary, there is no sites specific assessment that provides quantification around the forecast requirements, loads or demands on existing utilities or that provides an assessment of the implications of loads, demands or disruptions to these services (intentional or unintentional) to surrounding land users. There is no assessment of the capability or capacity of existing utilities to support the additional needs of the development.

## Recommendation

32. Provide guarantees to GPT that services to RHTC will not be disrupted.
33. A site specific assessment of the capability or capacity of existing utilities to support the additional needs of the development is required.



## 4.0 POST STAGE 1 CONSTRUCTION ISSUES

### 4.1 Consultation and Governance

#### Submission

GPT wishes to collaborate with TfNSW to efficiently and seamlessly deliver, operate and manage the public realm, linking Rouse Hill station to the wider community amenity.

#### Scope of Issue

Today's customer-centric RHTC caters to the complex requirements of a broad cross section of society, whilst at the same time effectively integrating a car-based community with enhanced provision for pedestrians and cycle traffic. GPT is committed to maintaining and enhancing this functionality and connectivity.

GPT shares TfNSW's aspirations for the North West Rail Link stations to integrate with and strengthen the character of the local area.

A clear governance structure such as possible inclusion in the existing Publicly Accessible Areas Management Plan (PAAMP) and Town Centre and Community Management Schemes could enable effective and successful ongoing management that will ensure customer's experience and their expectations of the precinct are not only met but aspire to be exceeded.

Timing however is of the essence. To ensure GPT, its Project Partners, Government and other stakeholders continue to 'get it right' for Rouse Hill, bringing this best practice thinking to the integration process must start now.

GPT's strong view is that its participation in the planning and design process will deliver a seamless, high quality environment at Rouse Hill rail station and put the customer's needs at the centre of this important transport interchange. It will also continue to build upon GPT's long track record of delivering excellence in design at Rouse Hill Town Centre.

#### Recommendation

34. As a result of the high quality customer experience presented at RHTC, residents and customers have high expectations for surrounding infrastructure. To enable the Rouse Hill station precinct to not only meet, but also aspire to exceed these expectations, GPT is seeking engagement with Government and key stakeholders to:
  - a. Have input into the design of the station precinct, station box and viaduct structures to ensure design compatibility between the existing design principles of RHTC and the key elements of the station precinct;
  - b. Develop a clear and integrated design, operational and governance structure; and
  - c. Include the station precinct and associated public realm into the existing Publicly Accessible Areas Management Plan (PAAMP) and Town Centre and Community Management Scheme.

### 4.2 Urban Design Impacts

#### Submission

Despite design development being advanced, with a SSI Concept Plan modification being put forward for a Skytrain and above-ground station, a visual impact assessment of the completed structure has not occurred, nor has consideration been given to the urban design impacts of the proposal.

## Scope of Issue

The Statements of Commitment attached to the approved SSI Concept Plan says that a visual impact assessment of the project would be undertaken as part of design development. Despite design development apparently being fairly advanced (ie the Skytrain structure has been put forward for approval), a visual impact assessment of the completed structure has apparently not occurred, as the issue is proposed to be dealt with in EIS 2.

No consideration has been given to the visual impact of the completed viaduct structure or the Rouse Hill Station building. This should be assessed now as it forms a critical element of the SSI Concept Plan modification.

Noise walls, earth mounding, retaining walls, viaduct and underpass detailed design are all proposed to be addressed at EIS 2 stage. These elements have the potential to create significant visual impacts.

EIS 1 states that station design will occur as part of EIS 2 including access, car parking and urban design of the station precinct. This work needs to occur prior to approval of the SSI Concept Plan modification.

In Section 16.6.12 of EIS 1, it is mentioned in passing that the station building will be up to 20 metres in height. The bulk and scale of the station building will be further accentuated by the viaduct of 13 metres (or more) in width, adjoining the building at either end. Further, it could be envisaged that noise barriers may be required in the vicinity of the station building to deal with the noise of braking, accelerating and idling trains, thereby further increasing the visual impact.

The built form implications are of substantial concern. EIS 1 does not recognise that the approved TCCPP DA envisaged a Transit Centre building of just 10 metre in height, above an underground railway platform. In addition, the Precinct Plan DA allows for a 16 metre high building on Market Square, directly across Tempus Drive from the future station building.

## Recommendation

35. The following is a list of information with regard to the NWRL at Rouse Hill that GPT requires to be addressed in detail prior to exhibition of EIS 2 and resolved prior to approval of the SSI Concept Plan modification. This information would aid in the coordination of the construction and development of both the NWRL and the Northern Precinct.
  - a. The alignment at Rouse Hill. A detailed concept design of the NWRL alignment including location of the viaduct structures, proposed road crossing and intersections and amendments.
  - b. The Rouse Hill station box location. A detailed concept design of the Rouse Hill station box and location along the NWRL alignment.
  - c. The Rouse Hill station platform configuration. A detailed concept design of the Rouse Hill station including number and location of platforms as well as platform details (inward or outward platforms).
  - d. Urban design impacts. Implications for the Precinct Plan DA approval for buildings in the Town Centre including on Market Square (16 metres) and on the station site (10 metres).
  - e. Details of how noise and other pollutants arising from the elevated rail line will be managed and mitigated, including efficacy and visual impact of any required noise barriers, noise walls and other physical measures.
  - f. Pedestrian access arrangements at the Rouse Hill station. Details on the con-

nection between platforms, concourses, bus interchange and associated facilities (kiss and ride, taxis), street level and integration with the Rouse Hill Town Centre is required.

- g. Bus interchange arrangements at the Rouse Hill station. Details on bus interchange location and configuration, facilities (number of bus stops, layovers, kiss and ride, taxi, bike racks etc), future bus routes and frequencies and access arrangements.
- h. Details of the future pedestrian and cyclist connections and facilities between Rouse Hill station, the bus interchange, the Rouse Hill Town Centre and the proposed Area 20 precinct as part of the NWRL design.
- i. Details on the future train operations, train numbers, train frequencies, type of service (freight, passenger), future patronage forecasts and mode of arrival at the Rouse Hill station.
- j. Details on the access/easement requirements for maintenance and maintenance / ownership of area underneath the elevated track along the alignment at Rouse Hill.

### **4.3 Transport Interchange**

#### **Submission**

There is currently no feasible solution for the transport interchange precinct which is unacceptable to GPT. It is likely that certain feasible solutions for the transport interchange precinct will be eliminated as a result of the Stage 1 approval which may lock in column location and configuration, type of station (island/platform), and size of the station building footprint.

#### **Recommendation**

- 36. Continued consultation regarding the detailed design and operation of the interchange and station precinct should occur with GPT, prior to the release of the EIS 2 designs.
- 37. The SSI Concept Plan modification application should not be determined until such time as EIS 2 has been exhibited and assessed.

### **4.4 Noise and Vibration during Stage 2 works and operation**

#### **Submission**

Excessive noise will arise due to the change in vertical alignment from underground to above ground.

#### **Scope of Issues**

Excessive noise arising from Stage 2 construction will impact on Cinema operation. There is no indication of how this impact could be mitigated.

Once operational, excessive noise will be an ongoing reality for uses in the vicinity of the rail line, which would not have been the case had the line remained underground.

#### **Recommendation**

- 38. Provide a more detailed method for assessing potential impacts and potential methods of mitigation in relation to impacts of ground borne noise on Cinema operation during the Stage 2 construction phase.
- 39. Noise impacts during operation need to be assessed in detail as part of the SSI Concept Plan modification.

## **5.0 CUMULATIVE IMPACT ISSUES**

## **Submission**

The Cumulative Impact Assessment is very brief and fails to address the compounding impacts of the NRWL during construction and whilst in operation.

## **Scope of Issues**

### **‘External’ cumulative impacts**

Section 20 outlines, in very general terms, the expected ‘external’ cumulative impacts of the construction of the NRWL with other construction projects likely to occur in the vicinity, including the Northern Precinct works.

No consideration is provided as to the likely scale of the cumulative impacts (noise, vibration, traffic, visual and water quality) nor are any particular mitigation measures proposed to deal with cumulative impacts.

The assessment fails to take into account the possible construction of buildings within the RHTC – i.e. sleeve sites.

### **‘Internal’ cumulative impacts – noise impacts of Stage 2 works and operation**

Section 20 also considers, generally, the expected ‘internal’ cumulative impacts arising from the full construction process for the NRWL. However, the sole impact considered is noise and vibration because, according to EIS 1, this is the only issue in EIS 2 which has been substantially completed at the time of writing EIS 1.

### **‘Internal’ cumulative impacts – other impacts “associated with Stage 2 railway operations”**

EIS 1 lists additional potential impacts associated with Stage 2 works and/or operation include:

- Visual: Permanent impact of lighting and overhead wiring;
- Traffic: Commuter traffic to and from stations
- Local business opportunities: resulting from passenger demand
- Hydrology: Potential impacts on watercourses resulting from stage 2 construction works.

The ‘internal’ impact assessment merely serves to expose the flaws associated with separating the works into two staged EIS’s. A single EIS which includes all works and a comprehensive assessment of the SSI Concept Plan modification would eliminate the need for such a limited, insufficient cumulative impact assessment.

## **Recommendation**

40. Processes need to be established for concurrent construction of projects in the vicinity, including any projects that are not yet approved but could be reasonably foreseen, such as the Northern Precinct, RHTC sleeve sites, and residential development within the RHRC residential precincts.
41. A robust assessment of the cumulative traffic and visual impacts during the Stage 1 works needs to be undertaken with appropriate mitigation strategies to be incorporated into relevant management plans in consultation with GPT.
42. EIS 2 should ensure that the cumulative impact of any construction work that may occur simultaneously with that addressed in EIS 1 is covered.





## APPENDIX 1: CADENCE AUSTRALIA CONSTRUCTION MANAGEMENT REVIEW

# **REVIEW OF NORTHWEST RAIL LINK (NWRL)**

## **EIS 1**

### **FOR THE**



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## **New Rouse Hill Station Construction Methodology and Potential Impact to Rouse Hill Town Centre (RHTC)**

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**Prepared by:**  
**Cadence Australia Pty Ltd**  
**9 May 2012**



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## 1.0 Brief

The GPT Group have requested Cadence Australia to review the current Environmental Impact Statement – Stage 1 (EIS 1), together with various other documents issued by GPT, and identify risks and deficiencies of these documents with respect to the potential impact to the Rouse Hill Town Centre (RHTC) that may be caused by the Northwest Rail Link Project (NWRL), specifically the portion associated with the Rouse Hill Station works.

## 2.0 Familiarisation

### 2.1 Background Documents

The following documents were reviewed in this study:

#### **Electronic documents:**

- North West Rail Link - Stage 1
- Major Civil Construction Works
- State Significant Infrastructure Application Report  
Date: 14 December 2011  
Author: Transport for NSW  
Revision: Stage I SSI report FINAL  
2011 12 14.docx  
Status: Final
- EIS for stage 1 dated 26th of March 2012
- Hyder memorandum dated 1May 2012

#### **Hard copies:**

- NWRL Environmental Impact Statement 1- Overview dated April- May 2012
- NWRL Construction Environmental Management Framework, dated March 2012
- Rouse Hill Town Centre – Impact of North West Rail Link produced by GTA Consultants (Draft dated 26th of April 2012)
- AECOM report , not dated
- Renzo Tonin & Associates report, dated 27 April 2012
- BBC Consulting Planners report Version – 1, dated 23 April 2012

NWRL Identification of Key issues for Rouse Hill Regional Centre, prepared for GPT by BBC Consulting Planners

EIS for Stage 1 dated 26th of March 2012 also confirms that on the second half of 2012, EIS Stage 2 will be issued covering specific details for each site. This is verified from the following extract from EIS Stage 1:

A second and separate EIS is currently being prepared for Stage 2: Stations, Rail Infrastructure and Systems and will be exhibited in the second half of 2012.

This Cadence Australia report should be read in conjunction with all the Consultants' Reports, noted above, as Cadence Australia has not analysed, in this report, those elements in the EIS that have been addressed by the Consulting team's reports.

## 2.2 Rouse Hill Station and Windsor Road Viaduct Construction Site (Specific notes extracted from EIS)

The Rouse Hill worksite is located adjacent to Rouse Hill Town Centre and Windsor Road. White Hart Drive and Rouse Hill Drive are located to the south and north of the site respectively and intersecting with Windsor Road. The station is proposed to be constructed above the existing bus interchange, on the western side of the Rouse Hill Town Centre. This work would require relocation of the bus interchange for the duration of the works. **It is noted that this relocation has not been determined.**

All movement signalised intersections, provide access from Windsor Road at White Hart Drive and Rouse Hill Drive / Schofields Road. The White Hart Drive intersection incorporates north-south T-way movement. Bus access at the northern end of the bus interchange, is in the form of a channelised intersection on Rouse Hill Drive, some distance from the traffic signals. A south bound bus only left-in entry is also provided directly from Windsor Road, immediately south of Rouse Hill Drive.

The EIS suggests that changes to the road network during the construction phase, would be minimal, with all general vehicle movements being retained. There would be some minor realignment of one of the Windsor Road carriageways north of the Schofield Road intersection, to facilitate the construction of bridge piers in the median of Windsor Road. The through traffic lane configuration would be retained.

The EIS also suggests that discussions are currently being undertaken with the operators of the Rouse Hill Town Centre, with the view to retaining two way traffic movements on Tempus Street. This would be further detailed in subsequent TMPs as the construction program is further developed. **Cadence Australia has seen no evidence, in this regard.**

### Bus Interchange

As the Rouse Hill worksite would occupy the existing bus interchange, it requires all bus stops and layover areas to be relocated for the duration of the works. It is anticipated that the bus stops would be relocated to the adjoining service road, Tempus Street, with new bus stops established on the eastern side of the road.

There would be some changes to the approach and departure routes for buses accessing the Rouse Hill bus interchange, in order to enter the bus interchange from Rouse Hill Drive and to exit the interchange via White Hart Drive.

### Pedestrians and Cyclists

As a town centre station, the area surrounding the Rouse Hill worksite generates a higher level of pedestrian activity relative to other worksites. Maintaining pedestrian and cycle connections during construction is therefore important.

**Informal east-west pedestrian routes through the existing T-way interchange would be lost during the construction period.** Pedestrians would be redirected via either Rouse Hill Drive or White Hart Drive, which at most, would result in a diversion of approximately 200m. The key pedestrian desired lines from the T-way interchange, are east through the Town Centre to the car parks and residential areas, with only a minor pedestrian movement west towards Windsor Road. The impact of the construction activity on these pedestrian routes is therefore considered minor.

The key cycle route in the precinct, is the shared use path on the western side of Old Windsor Road, which would be unaffected by the construction.

### **Parking, Taxis and Kiss-and-Ride**

The worksite is likely to displace all of the existing parking adjacent to Windsor Road, i.e. between Windsor Road and the Town Centre and north of Rouse Hill Drive. There are approximately 170 spaces around Tempus Street and these are, either time restricted (along the western side of Tempus Street), or restricted access (in the car park at the southern end of the street). There are approximately 240 spaces located to the north of Rouse Hill Drive, adjacent to Windsor Road which would need to be relocated during construction. It is understood that this area is mainly used for staff and overflow parking.

Some of the affected parking could be relocated to other vacant parts of the Rouse Hill Town Centre, possibly as part of the next stage of the development of the Town Centre. There is significant below ground car parking available under the Town Centre.

Some vehicular drop offs may be restricted on Tempus Street, adjacent to the worksite. Alternative arrangements are generally available in other parts of the Town Centre.

*The following illustration depicts the overall site layout.*



### 3.0 Overview

On review of the documents, in relation to the NWRL, there are a number of key areas that are considered to have implications for RHTC:

- Pedestrian Access diversions from the west of the RHTC
- Buses and public transport access from the transit centre which is to be relocated
- Potential impact to existing operations stemming from the above points and the level of construction activity adjacent to the Main Street entry
- Increased costs in operations of the existing Centre
- Increased costs of construction for the northern precinct, if required to be undertaken simultaneously with the NWRL work
- Potential impact on development sites surrounding the RHTC

Whilst the above are immediate negative impacts, there is a long term benefit to the RHTC stemming from the construction of the new station adjacent to the centre. Every opportunity should be taken through the EIS consultation process, to capitalise on improving the links to the RHTC from this elevated station.

The Environmental Assessment is such, that a significant portion of the assessment of site specific impacts have been dealt with in a whole of project generic fashion, and seems to have deferred actual assessment to an EIS – Stage 2.

Due to the generic nature of the EIS, with no specific consolidated chapter for the RHTC zone, it is difficult to provide meaningful comment and therefore Cadence recommends **GPT should seek a specific and consolidated EIS for their precinct and reserve their rights to respond and comment at that point.**

The document suggests that NWRL have had detailed discussions with GPT but Cadence has not vetted any documents in this regard.

It is critical that detailed programmes and construction methodologies, including the establishment of viaduct launching systems, erection of viaduct structures, their location etc. are provided in great detail to GPT and are carefully analysed in the interest of GPT and RHTC.

The same applies for the underground works, special anchoring and vibration issues.

### 4.0 Programme

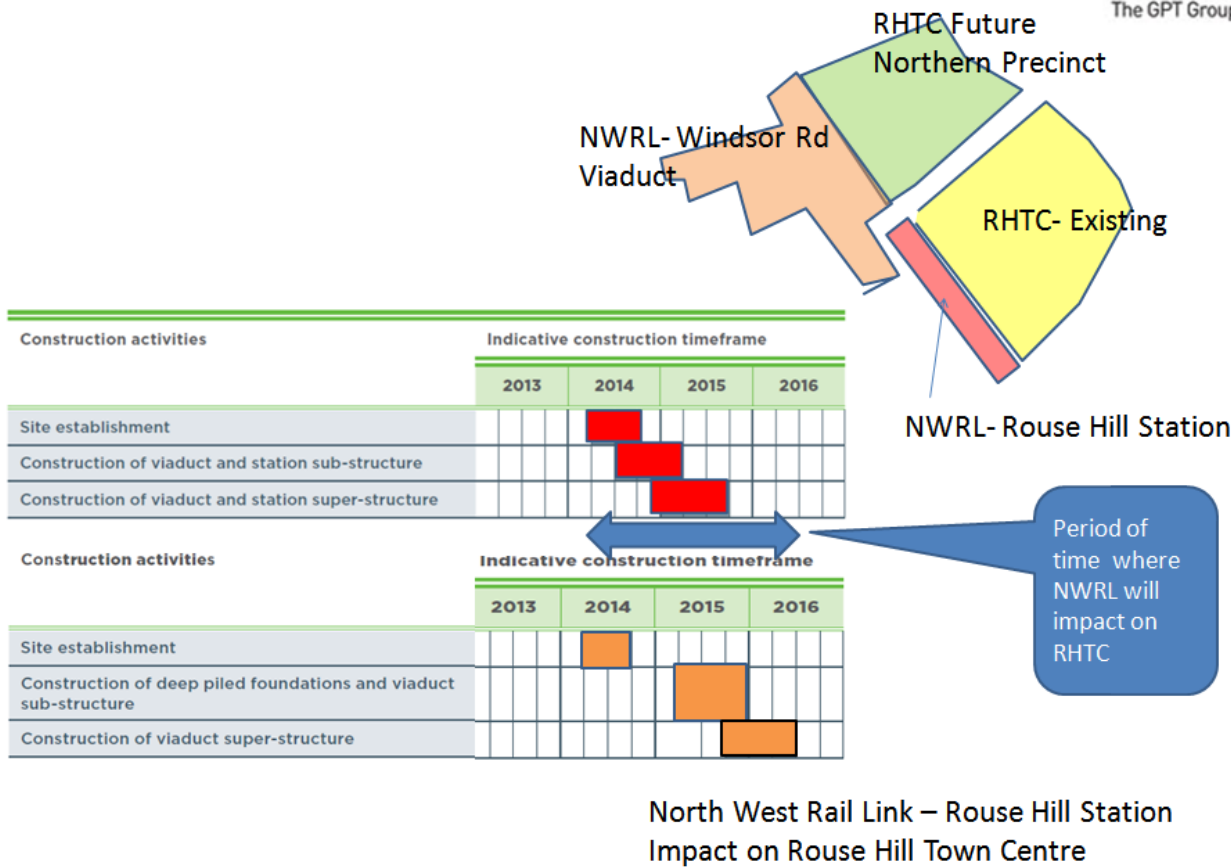
The programme for the NWRL works affecting RHTC are currently scheduled to extend from March 2014 to July 2016 (28 months)

It is possible that this scope could take up to 36 months in reality and the time frames could also shift for many reasons including approval processes etc.

The following illustration provides the detailed programme for the NWRL work adjacent to the RHTC.

CADENCE  
AUSTRALIA

GPT  
The GPT Group



## 5.0 Construction Environmental Management Framework (CEMF)

This document is commonly known in the industry as the Construction Management Plan. The author has gone to great lengths in specifying the Codes, regulations and standards the construction contractors will have to comply with, however like the EIS 1 this document has stopped short in providing the stakeholders the assurances necessary that their tenants, residents and general public require, in addressing the pedestrian flow and safety, traffic congestion, parking, amenity of the residents, every day running of the RHTC and its employees, as well as a role in ensuring the document takes into account the stakeholders' issues.



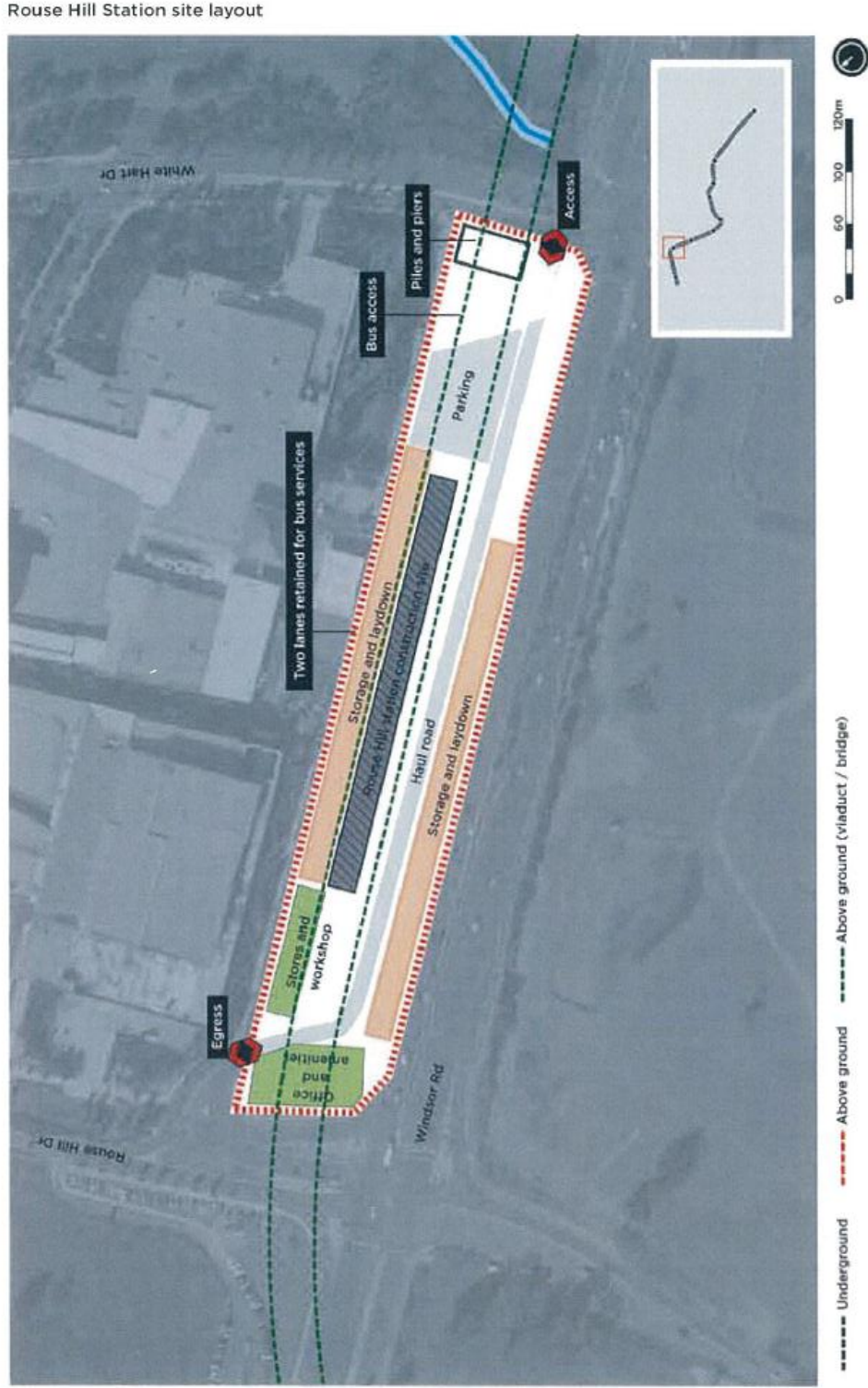
*The following diagram is the viaduct route approaching the RHTC site*

Old Windsor Road to White Hart Drive site layout

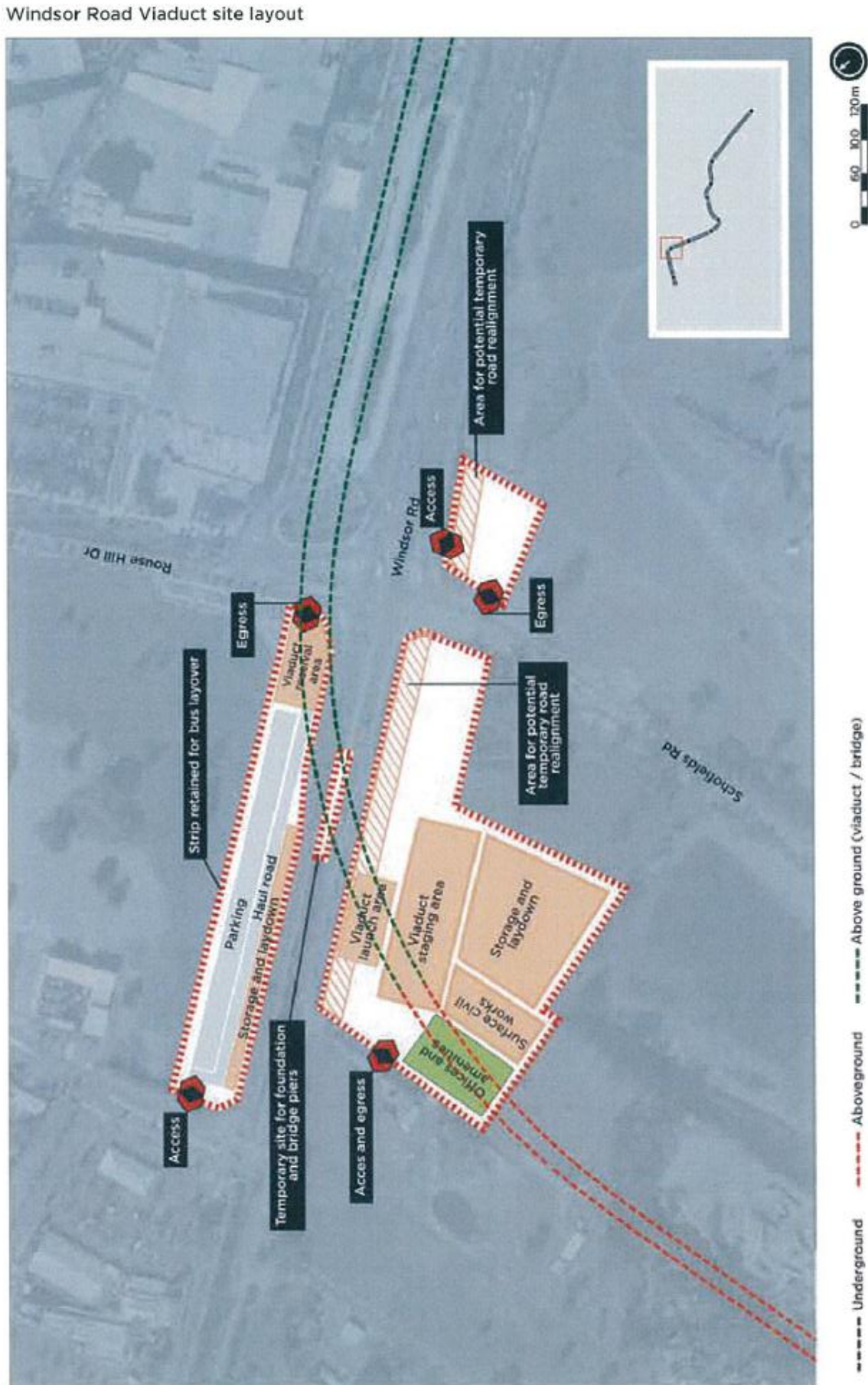




The following diagram highlights the area the NWRL is occupying on the RHTC site



*The following diagram is the Windsor Rd viaduct to Cudgegong Rd station*



## 5.1 Issues to be Addressed & Questions to be asked regarding the CEMP

- Will RHTC management have a role in reviewing the Principal Contractor's CEMP
- Additional Environmental assessments will be required e.g. High Voltage
- Condition / Dilapidation Surveys; RHTC to insist that the Principal Contractor has prepared a Condition / Dilapidation Survey by an agreed independent consultant
- Hold Points; RHTC to have an input into the creation / approval of the Register of Hold Points e.g. water discharge
- RHTC to receive copies of Environmental monitoring and audits
- RHTC to be provided a copy of all Environmental Non Conformances within a reasonable time
- The CEMP should be a live document and as such RHTC should have a say in the review and improvement of the CEMP
- Stakeholder & Community Involvement; as a major stakeholder RHTC should have regular meetings with representatives of the TF NSW and the Principal Contractor, so as RHTC can be aware of all upcoming matters, prior to their retailers, tenants as well as their residents, this will allow RHTC input into the public relations of their business
- All complaints from the retailers should be channelled through RHTC or Centre Management through to NWRL & the Principal Contractor
- All urban design of temporary works and signage by the Principal Contractor / NWRL to be approved by RHTC and at all times, signage around the construction site, hoardings and surrounding environs to be of RHTC approvals, in order that the site is not disadvantaged, during the 36 month construction phase.
- Impact on business and property by the works performed by the NWRL is not to disadvantage the RHTC and its tenants, and the Principal Contractor is to take all precautions to mitigate any impact on the businesses
- Impact on sensitive businesses; where certain businesses carry out medical, dental or a business of another sensitive nature, NWRL must ensure that the works do not interfere with these businesses and must take all precautionary means of consultation with RHTC / Centre Management as well as the business in question
- Business Disturbances; all businesses have the right to operate with a minimum of disturbances. The Principal Contractor / NWRL must ensure that all steps are taken that this is the case
- A Business Management Plan (BMP) ought to be prepared and take into account the previous three (3) dot points
- Working Hours; The CEMP states that the working hours are > Monday to Friday 7.00 am to 6.00 pm and Saturdays, 8.00 am to 1.00 pm and no work on Sundays or Public Holidays, however, when you read further the author, of the CEMP, states that non-disruptive preparatory works, repairs and maintenance may be carried out on Saturday afternoons and Sundays between the hours of 8.00 am and 5.00 pm
- The extent of these types of works will require further information, as where it is said that repairs and maintenance are non-disruptive, the use of air tools and the like can be a disturbance
- The site layout is to be sensitive to both noise and light, and must be approved by RHTC and its consultants prior to installation by the Principal Contractor
- The site layout showing all elements such as hoardings ( A or B class ) sheds e.g. ablutions, lunch and change sheds, site offices and entry and exit gates, temporary electrical, and hydraulic services, craneage, must all be detailed and issued to RHTC for review and approval



- Reinstatement and Make Good; all make good of the existing RHTC site is the responsibility of NWRL, all works required to reinstate the condition of the RHTC to its pre dilapidation survey requirements are the responsibility of NWRL
- Spoil removal traffic requires a Traffic Management Plan to be in accordance with RHTC policy requirements and to address elements such as; pedestrian access, car park traffic, public and tenant movement, loading dock deliveries to all tenants and bus way traffic
- Ground water management is a crucial element to the centre and a detailed GMP is required by NWRL
- A site specific Traffic Management Plan (TMP) addressing issues such as pedestrian ,cyclists, buses and motorists, entry end exits of heavy vehicles and the effect on RHTC pedestrians and vehicle traffic. A traffic minimisation plan should also be in the forefront of any TMP
- Noise and Vibration; this element of the works has been addressed by the Acoustic report
- Indigenous and non-indigenous heritage issues should be managed in accordance with the NWRL Heritage Management Plan
- Management policy for handling fuels / petrochemicals; for the running of equipment and machines that addresses the control, dispensing, storage, spillage, fire prevention and fire and life safety. This policy will require sanctioning by the appropriate authorities and should be prepared by the Principal Contractor
- Rubbish removal, cleaning and maintaining a site free of rubbish must be the responsibility of the Principal Contractor
- Vermin control on the work site must be controlled by the Principal Contractor in a manner that does not have a detrimental effect on the ecology of the surroundings and RHTC
- Surface water must be controlled and restricted to the work site, therefore adequate drainage to be provided, connection to the RHTC drainage system must be with the approval of RHTC
- The Principal Contractor must mitigate against surface water flooding from the site
- The Principal Contractor must maintain adequate air quality at all times and that any high polluting earth moving equipment and generators are to be controlled and time of operations agreed by RHTC
- Dust control and air filtration units to be used where necessary
- Connection of onsite ablutions to sewer and potable water usage; if there is a requirement to obtain access of these facilities from the RHTC, all appropriate approvals and consultation between the Principal Contractor and RHTC and the engagement of any consultants to design the appropriate systems will be at the Principal Contractor's account.
- How is NWRL going to address the issue of pedestrian movement from the western side of Old Windsor Road as a result of the dislodgement by the construction works? Is the construction of a temporary pedestrian footbridge a feasible option, when you consider the peak hour traffic movements and the number of bus commuters, additional workforce etc., May very well be worthwhile considering a pedestrian footbridge
- The Principal Contractor to issue for approval by RHTC a detailed 1:100 scale site plan showing location of all the elements that will be contained within the compound prior to commencement.
- Programme; The lack of detail and coordination of the works from station to station warrants the NWRL to put together a sequential programme showing the progressive completion of all the works at the varying completion dates in order that the stakeholders can assess the real impact on their developments.
- Northern Precinct; RHTC require a collaborative and consultative approach by NWRL & the Principal Contractor in the event that the RHTC commence construction works on the Northern Precinct during the NWRL time table. RHTC will be looking to access and operate their site without being
  - a) delayed by the NWRL works .
  - b) limited in the scope of the works
  - c) incur any additional cost in design and construction of the works

## 6.0 Findings & Recommendations

The key findings from this preliminary review of the EIS, in connection to impact from the construction of the NWRL (Specifically Rouse Hill Station) to the RHTC are as follows:

### 6.1 Impacts

- Work adjacent to the RHTC will occur from 2014 to at least 2016, taking from 29 to 36 months to complete
- Pedestrian access diversions from the west of the RHTC
- Buses and public transport access from the transit centre which is to be relocated
- Potential impact to existing operations stemming from the above and the level of construction activity adjacent to the main street entry
- Increased costs in operations of existing Centre
- Increased costs of Construction for northern precinct, if required to be done simultaneously with the NWRL work.
- Impact on land proposed for future development around the perimeter of the RHTC precinct

### 6.2 Opportunities

Whilst the above are immediate negative impacts, there is a long term benefit to the RHTC stemming from the construction of the new station adjacent to the centre. Every opportunity should be taken through the EIS consultation process to capitalise on improving the links to the RHTC from this elevated station.

### 6.3 Going Forward

The following are recommended actions to GPT:

- It is critical for GPT to have a detailed understanding of the current operations of the RHTC, to have as background, in preparation for discussions with NWRL. A dilapidation report on current operations is essential, as the basis for discussions with NWRL. This would set the benchmark and issues that need to be carefully addressed to GPT's satisfaction in going forward
- GPT should then seek from NWRL, detailed programmes and construction methodologies including the establishment of Viaduct launching systems, their location etc. These should be provided in sufficient and specific detail to GPT, so they can be carefully analysed in the interest of GPT and RHTC. It is anticipated that at least 50% of this information should be available in EIS Stage 2 post July 2012 as noted in current EIS Stage1
- GPT should seek clarification and agreement from NWRL to the issues raised in item 5.1

## **ATTACHMENT A**

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Site Photographs taken 07/05/2012



View of the Northern Precinct looking north from Rouse Hill Drive



View looking north west towards the car park used by the bus commuters that will be taken over by the NWRL



View looking north west across to where the viaduct will be exiting the site as it goes towards the Schofields Rd intersection



The intersection of Schofields Rd and Windsor Rd, where the viaduct takes a sweep to the west as it heads to Cudgegong Rd Station. The works across this intersection will create significant delays to RHTC shoppers





The Principal Contractor's Site Offices will be located in this area



View down Tempus St which will remain in operation during construction, however an exit gate will be located very close to this photo



This area will be inside the construction site compound.



This bus way will be inside the construction compound





This area will be inside the compound



This area earmarked for future development may be difficult to access during construction



This area will not be effected by the construction compound



This area will not be effected by the construction compound



The area covered by these four photos will generally remain intact , albeit congested



The area covered by these four photos will generally remain intact , albeit congested



The area covered by these four photos will generally remain intact , albeit congested



The area covered by these four photos will generally remain intact , albeit congested





Future development site ( south side )



Future development site ( south side )



The Viaduct will pass through this area



The viaduct will pass through this area



The viaduct will pass through this area



The viaduct will pass through this area



The viaduct will pass through this area



Future development site





Future development site



View looking west to future Rouse Hill Railway Station



This section will not be effected by the construction compound



Intersection of White Hart Drive & Windsor Rd.  
The viaduct will be approaching the site from the left hand side of this photo



## APPENDIX 2: RENZO TONIN ACOUSTIC & VIBRATION REVIEW

Doc Ref: TF759-01F01 (rev 2) Summary of Key Issues

Date: 7 May 2012

To: The GPT Group

Attn: Charlotte Brabant

Email: [Charlotte.Brabant@gpt.com.au](mailto:Charlotte.Brabant@gpt.com.au)

From: Glenn Wheatley

**RE: ROUSE HILL TOWN CENTRE – NWRL EIS1 - REVIEW OF NOISE & VIBRATION ASSESSMENT**

Renzo Tonin & Associates has carried out a review of the NWRL EIS1 with in respect to potential noise impact onto the Rouse Hill Town Centre (RHTC) and proposed expansion of the Rouse Hill Town Centre to the north. The following documents, obtained from the NSW Department of Planning website were reviewed:

- 01\_EIS\_Table of Contents and Chapters 1 to 5\_Background
- 02\_EIS\_Chapter 6\_Modification
- 03\_EIS\_Chapter 7\_Project Description
- 04\_EIS\_Chapter 7\_Project Description
- 06\_EIS\_Chapter 10\_Key Issues
- 07\_EIS\_Chapters 11 to 14\_Key Issues
- 08\_EIS\_Chapters 15 to 22\_Key Issues and Conclusion
- 09\_EIS\_Appendices A to C
- 10\_EIS Technical Paper 1\_Construction Traffic and Transport
- 11\_EIS Technical Paper 2\_Construction Noise and Vibration

It is noted that the documents above relate to the '*Environmental Impact Statement Stage 1 Major Civil Construction Works Volume 1A*'. It is noted that technical reports associated with the 'Modification' application did not present any additional information not otherwise addressed in the documents above.

With regard to the proposed future expansion of the RHTC to the north, based on *Precinct Plan Option 6*, it is expected that impact upon the future retail/commercial tenancies would be no worse than that assessed for the existing RHTC as it was estimated from the documentation available that the Windsor Road Viaduct would be no closer than 20m from building C4. On this basis, comments made in regard to impact upon the RHTC or any deficiencies relating to that assessment are considered applicable to the future site.





The following table presents an outline of the key issues, our comments and areas of the assessment that we consider are deficient.

Key component / issue	Comments	Further detail needed (areas of deficiency)	Further issues identified
<b>1 - Airborne Construction Noise Assessment</b>			
1.1 - Assessment Criteria	Noise criteria have been appropriately based upon the NSW 'Interim Construction Noise Guideline' (ICNG) [Section 6.2, p.27].		
	Noise criteria for commercial premises are noted as 'N/A' during evening period.	Retail premises within Rouse Hill Town Centre operate into the evening period and therefore should be considered for any proposed evening work.	
1.2 - Assessment Locations	<p>The nearest most potentially affected receiver locations for the most part have been identified. This includes both commercial and residential receivers.</p> <p>However with regard to the RHTC only the existing commercial uses have been identified.</p>	<p>Assessment to the approved Level 2 DA of RHTC, to be situated between Tempus St and the existing RHTC, has not been considered in the assessment.</p> <p>Residential premises within the RHTC have also not been considered in the assessment.</p> <p>Assessment of construction noise to residential apartments within the Rouse Hill Town Centre is required as they are located closer than other identified residential receivers.</p>	Assessment to closer residential and commercial premises may impact upon the reasonableness of potential evening construction works.
1.3 - Assessment Scenarios and Proposed Construction Plant Equipment	<p>Noise predictions are reported to have been carried out based upon the expected 'worst-case' activities during each of the construction phases.</p> <p>For Rouse Hill Station the assessment only considers Mobilisation/Earthworks, and Viaduct/Station Platform Construction. [Section 7.11.3, p. 87]</p>	<p>Assessment of "major road works" [Section 7.11.1, para.2, p 86] associated with the temporary relocation and reinstatement of the Bus T-Way has not been carried out. This deficiency could alter the duration and proximity of works to the RHTC</p> <p>Stage 2 works, including station building and station precinct construction have also been deferred to EIS2.</p> <p>Consideration of these other construction phases will either extend the duration of the construction works or compound noise impact as additional equipment will be operating in the vicinity.</p>	Noise level data of all typical road construction equipment are not included within the report or Construction Noise and Vibration Impact Strategy in Appendix E.
	<p>Noise levels of equipment are set out in Table 7.1 [p.35]</p> <p>Only brief outline of equipment and activities associated with each construction phase are described in Sections 5.1.1 to 5.1.4 [pp.19-21].</p>	<p>The number of each plant item to be expected at each site during each phase of works, or that assumed in the noise assessment, needs to be provided to ensure an appropriate noise assessment has been carried out.</p> <p>It is noted that Table 7.32 of the Main Report [Chapter 7, p.7-50] sets out Indicative Plant and Equipment but no reference is made to this in the noise assessment.</p>	

Key component / issue	Comments	Further detail needed (areas of deficiency)	Further issues identified
1.4 - Noise Predictions	<p>Noise predictions are presented within the report and have been assessed against the relevant noise criteria.</p> <p>Noise predictions for preliminary earthworks are noisier at Non-Station locations than at Station sites. Comparison between <i>Rouse Hill Station Location A</i> and <i>Rouse Hill to Cudgegong Road Station Location A</i> reveal lower noise levels for Station works for a closer receiver distance.</p> <p>Predicted noise levels to Location A for the Rouse Hill Station site reveal substantially lower noise levels for piling activities than for earth works, 59dB(A) compared to 79dB(A) [Section F.8, p.F20].</p> <p>Noise predictions at other locations do not highlight such a reduction.</p>	<p>Detail of the assumed equipment and number of each plant item is required to clarify why predicted noise levels differ.</p> <p>Clarification required as to the assumptions for piling activities and assessment onto the Rouse Hill Town Centre.</p>	
1.5 - Noise Mitigation Measures	<p>Specific mitigation measures are not presented for all cases where criteria are predicted to be exceeded. A list of standard noise mitigation and management measures are presented in the report which are reasonable considered the high level assessment.</p> <p>However Table 7.55 within Section 7.17 [p.114] states that 3m high hoardings are to be provided for Rouse Hill. No specific measures are stated for Rouse Hill Station to Cudgegong Station.</p> <p>By reference to the noise monitoring location identified for the RHTC, predicted noise levels would exceed the background level by 28dB(A) during the daytime for Earthworks and Establishment works.</p>	<p>The EIS should clarify whether the specific 3m hoardings are to be provided around Rouse Hill Station. It is considered reasonable given the 10dB(A) predicted exceedance.</p> <p>If not, justification as to why noise barriers have not been considered should be discussed. Consideration of feasible and reasonable noise mitigation should be considered for the RHTC.</p> <p>Whilst excursion above the background noise level is not strictly applied to the assessment of commercial premises, consideration should be given to the amenity of external occupancies of restaurants and the like through the main street of the RHTC.</p>	

Key component / issue	Comments	Further detail needed (areas of deficiency)	Further issues identified
1.6 - Additional Mitigation Measures Matrix (AMMM)	<p>Within the proposed Construction Noise and Vibration Strategy [Appendix E] the report identifies a mechanism to determine when and what additional mitigation measures should be applied, beyond the Standard Measures. This approach, the Additional Mitigation Measures Matrix (AMMM), is generally well considered and provides some certainty about when mitigation options should be offered to affected receivers.</p> <p>However it is not clear whether the AMMM will be used to assess commercial receivers such as the RHTC.</p> <p>The AMMM refers only to the level at which construction noise exceeds the background noise level [Appendix E, CMVS, Tables 5.2 to 5.4, p.19] which is not the standard approach for assessing commercial receivers.</p>	The AMMM should ensure a mechanism for assessment of commercial premises. Reference to background noise levels may be appropriate, in particular for external areas of restaurants and cafes where an external amenity is expected.	
<b>2 - Vibration Assessment</b>			
2.1 - Assessment Criteria	Vibration Criteria have been appropriately set in accordance with the Department of Environment and Climate Changes 'Assessing Vibration – A Technical Guideline"		
2.2 - Assessment Locations	The nearest most potentially affected receiver locations have been identified appropriately as the commercial tenancies of the RHTC.		

Key component / issue	Comments	Further detail needed (areas of deficiency)	Further issues identified
2.3 - Safe Working Distances	<p>There is a discrepancy between the 'Safe Working Distances' quoted for vibration generating equipment between Table 3.3 [p.13] and Table 7.2 [p.40].</p> <p>Table 7.2 indicates a conservative assessment, whilst Table 3.3 indicates assessment directly against the BS7385.2-1993. However contrary to these statements, Table 7.2 permits working at distances closer than that specified in Table 3.3.</p>	Confirm the actual safe working distances to be considered for the assessment of Cosmetic Damage	
2.4 - Vibration Monitoring During Construction Works	<p>Whilst construction work at the Rouse Hill Station is identified to be as close as 20m, Section 7.11.4 states that "<i>vibration impacts are not anticipated to be appreciable at the nearest residential and commercial receivers.</i>"</p> <p>However this contradicts Section 7.13.5 [p.101] which stipulates that vibration monitoring will be required where structures are located closer than 50m to earthworks.</p>	Confirmation of whether vibration will impact upon the Rouse Hill Town Centre is required, and whether or not vibration monitoring is to be recommended within the CNVS.	
<b>3 - Ground Borne Noise Assessment</b>			
3.1 - Assessment Criteria	<p>Ground borne noise criteria had been appropriately set for residential premises in accordance with the NSW '<i>Interim Construction Noise Guideline</i>' (ICNG) [Section 6.3, p.30].</p> <p>As stated in the report, ground borne noise criteria for commercial premises is not set out in NSW '<i>Interim Construction Noise Guideline</i>' (ICNG) [Section 6.3, p.31] as the criteria is to protect sleep.</p> <p>The assessment report nominates an internal Noise Management Level (NML) of <math>L_{Aeq(15minute)}</math> 60dB(A) in order to assist in identifying potential impacts.</p>	<p>The internal ground borne noise NML of <math>L_{Aeq(15minute)}</math> 60dB(A) is considered too high, being only 10dB(A) below the external NML.</p> <p>Whilst a more stringent criteria and assessment is required for the Reading Cinema Complex (see Point 3.2), Assuming a conservatively low outside to inside noise reduction of 20dB(A) for a building with windows and doors closed, the NML should be no greater than 50dB(A).</p> <p>The screening test and potentially affected receivers should be revised on this basis.</p>	

Key component / issue	Comments	Further detail needed (areas of deficiency)	Further issues identified
3.2 - Assessment Findings	<p>S 7.11.4 [p.89] concludes that ground-borne noise levels within the Reading Cinema are not anticipated to be audible. The Construction Noise and Vibration Strategy [Appendix E, p.34] requires the use of ground-borne noise level versus distance prediction curves to determine the level of ground-borne noise at each building location. Furthermore, for highly sensitive building occupancies, for which theatres are considered, the assessment may need to incorporate the acoustic properties of the building space and the structural response of the building.</p> <p>Section 7.13.5 [p.101] justifies that lack of impact from ground-borne noise to be the fact that “<i>airborne noise levels will be more prominent than the ground-borne noise levels</i>”. No assumptions are made to support these conclusions.</p>	<p>The assessment of ground borne noise into the Reading Cinema [Section 7.11.4, p.89] has not presented any information detailing the procedure used to draw conclusions.</p> <p>With regard to the Reading Cinema, airborne noise levels are likely to be lower than for other commercial or residential receivers due to the higher acoustic performance of the building envelope. As this is not a typical or general occurrence for a receiver location, it is unclear whether this aspect has been considered for the assessment.</p>	
<b>4 - Construction Traffic</b>			
4.1 - Assessment Criteria	Noise generation from Construction Traffic has been appropriately set in accordance with the NSW 'Road Noise Policy'.		
4.2 - Noise generated by construction traffic	<p>The Construction Noise Assessment and Traffic Report both identify limited traffic movements to and from the Rouse Hill Station site.</p> <p>Noise impacts have been appropriately assessed and given the traffic volumes on surrounding roads, construction traffic is not expected to generate impacts during the proposed daytime operations.</p>		

Key component / issue	Comments	Further detail needed (areas of deficiency)	Further issues identified
4.3 - Parking on the Construction site	The Rouse Hill Station site is allocated with onsite parking, assumed to be for workers. Whilst the activity of light vehicles has not been included in the noise assessment it is not considered of consequence when compared with the general construction activities. Use of the area for car parking would not be dissimilar to existing parking arrangements and usage by the Rouse Hill Town Centre patrons.		
<b>5 - Indicative Impacts of Stage 2 Construction Works [Section 20.3.2]</b>			
5.1 - Rouse Hill Station [p. 20-17]	It is stated that the predicted noise levels from construction of the station, car park and installation of rail systems equipment indicate compliance with the NMLs at the nearest residential and commercial receivers. No detail is provided.	Details to be provided in EIS2.	
	With regard to the Reading cinema the highest ground-borne noise levels may be audible, being associated with vibratory roller paving activities. Recommendations to measure levels when the works commence are made.	It would be recommended that the CNVS for EIS2 identify a more detailed method for assessing potential impacts and potential methods of mitigation.	
5.2 - Rouse Hill Station to Cudgegong Road [p. 20-19]	Identifies commercial sites east of Windsor Road and north of White Hart Drive may moderately exceed NMLs during ballast and rail placement, and compliance during overhead wiring installation.	The report also states that the standard track design is slab with resilient fasteners [p.20-20] and therefore ballast would not be present. EIS2 to confirm track design.	
<b>6 - Indicative Impacts of Stage 2 Operational Railway and Stations [Section 20.3.3 and Section 20.3.4]</b>			
Insufficient detail of the assessment is provided to allow any comment			

Key component / issue	Comments	Further detail needed (areas of deficiency)	Further issues identified
<b>7 - Information expected to be obtained through EIS 2</b>			
7.1 - The primary matters of assessment to be included within EIS 2 will be operational noise and vibration assessment of the rail line and station and their impact upon the Rouse Hill Town Centre and surrounding residential development.			
7.2 - EIS 2 is also to contain assessment of the construction of the station building and station precinct. EIS2 should ensure that the cumulative impact of any construction work that may occur simultaneously with that addressed in EIS1 is covered. There is some concern that the deferral of these construction phases will delay identification of potential cumulative impacts.			



## APPENDIX 3: AECOM TRAFFIC & TRANSPORT REVIEW

18 May 2012

Director, Infrastructure Projects  
Major Projects Assessment,  
Department of Planning and Infrastructure,  
GPO Box 39, SYDNEY, NSW 2001.

Dear Director

**North West Rail Link - Environmental Impact Statement 1 - Construction Traffic and Transport Submissions (on behalf of GPT)**

**Introduction**

AECOM has prepared this submission in response to the North West Rail Link Environmental Impact Statement 1 (NWRL EIS 1) on behalf of the GPT Group, the owners of Rouse Hill Regional Centre. This submission focuses on the **construction traffic and transport** component of NWRL EIS 1 and in particular the construction sites in the vicinity of the Rouse Hill Regional Centre (sites 13, 14 and 15).

Our review has covered the following reports within the NWRL EIS1 document:

- Overview Summary
- Chapter 9 of Environmental Impact Statement Stage 1 - Major Civil Construction Works: Construction Traffic
- Technical Paper 1 Construction Traffic and Transport Management.

The Rouse Hill Regional Centre is a mixed use neighbourhood incorporating retail, commercial, residential, open space, community uses, entertainment uses and learning spaces. In 2005 a Transport Management and Accessibility Plan (TMAP) was prepared by AECOM and approved by relevant agencies to support a Level 1 Master Plan Development Application of the overall Rouse Hill Regional Centre and a Level 2 Town Centre Core Precinct Plan.

Planning is currently underway to expand the Rouse Hill Town Centre Core into the currently undeveloped Northern Precinct in accordance with the overall master plan. A Level 2 Precinct Plan Development Application for the Rouse Hill Northern Precinct (RHNP) is currently being prepared.

The timing of construction and delivery of the RHNP is likely to coincide with the construction phase of the NWRL. Coordination of construction activities needs to be considered carefully to account for the cumulative impacts to the road network and maintain safe and efficient operations of the existing Town Centre and bus interchange.

At the time of approval of the Level 1 Master Plan Development Application the North West Rail link was assumed to terminate at Rouse Hill with stabling to occur north of the regional centre. The station at Rouse Hill was proposed to be located underground directly below the bus interchange with elevators and lifts connecting to ground level. The existing Town Centre has therefore been planned and delivered based on the assumption of an underground station.

The current proposal of a Skytrain and an elevated station at Rouse Hill will require a careful review of the station precinct and interchange requirements to ensure safe and efficient movements between the station, the interchange and the Rouse Hill Regional Centre.

GPT appreciates the current dialogues with the North West Rail Link design team and welcomes the opportunity to provide feedback to NWRL EIS 1. GPT wishes to continue the on-going discussions and consultations with the relevant agencies to facilitate the coordination of the planning and construction of the NWRL and the Rouse Hill Regional Centre, including the preparation of future staged Traffic Management Plans and NWRL EIS 2.

## Comments on key construction traffic and transport issues

### 1) Construction traffic and transport assessment methodology

It is considered that NWRL EIS 1 does not provide a transparent and robust methodology for the assessment of traffic impacts that would be expected to be included as part of an Environmental Impact Statement in order to gain approval for major civil construction works. In comparison to the traffic modelling and assessment approach requested by the Roads and Maritime Services (RMS) and Transport for NSW (TfNSW) for the RHNP, GPT would like to see the following items to be considered / included in the assessment.

- Existing traffic count data used in the assessment and sources of data;
- A future year assessment (at least up to 2016 when the majority of the construction activities are expected to be completed) or justification as to why no future year assessment has been undertaken;
- Trip generation or distribution of construction activities;
- Existing and proposed intersection layouts of key intersections along all haulage routes;
- Cumulative impacts of construction activities of all NWRL construction sites to key intersections along all haulage routes;
- Cumulative impacts of other known or planned government sponsored construction activities generated by other major projects such as Schofields Road upgrade; and
- Network assessment of coordinated intersections to understand the network impacts of affected intersections.

The components described above form the basis of any robust traffic and transport assessment and are generally required as good industry practice for projects of regional significance. **Further details for all the items listed above** need to be considered to understand the assumptions that form part of the assessment and the true impacts and mitigation measures required to the surrounding road network.

### 2) General details of construction activities

NWRL EIS 1 provides generic details only of construction activities at each site individually. No detailed information is provided on construction activities to be undertaken, estimation of construction plant required and associated movements and impacts throughout the construction period to justify the determination of the nominated truck numbers in the EIS. Estimation on the workforce required, associated movements and parking allocation are also not provided to justify the determination of the number of general vehicles that will be generated at each site. These **construction activity details** are required to be provided (as part of the further staged Traffic Management Plans) in order to understand the full extent of the construction activities surrounding the Rouse Hill Regional Centre.

NWRL EIS 1 states that access to construction sites would be via major arterial roads and provides a high level description of the proposed route to each construction site. The document however does not provide details of the access route in the wider area of the construction sites, nor does it provide details on how many construction vehicles are expected at each key intersection along the access routes to be generated by each site in a cumulative fashion. For example up to 862 HV movements per day and 842 LV movements per day can be generated by the construction sites 13 to 17, which a significant proportion of these vehicles can have impacts to the intersection of Windsor Road / Schofields Road during construction. GPT requires further information with regard to the **wider access routes and associated construction vehicle numbers at each key intersection** in the vicinity of Rouse Hill Regional Centre to fully understand the **cumulative impacts** of all construction sites of NWRL works.

Draft construction staging and draft program for each construction site is not provided in the document. Estimation or when the construction activities would occur (including the months/years of construction activity for each site) are not provided and are required in order to understand the length and intensity of construction. Daily construction hours are provided for each site however these have been based on whether the construction activity is above or below ground and does not take into consideration site specific constraints such as operating hours of the Town Centre. Further information on expected **construction staging, timing and daily hours** is required (as part of the further staged Traffic Management Plans).

NWRL EIS 1 does not take into consideration the cumulative impacts of the construction of other major developments including the Rouse Hill Northern Precinct. NWRL EIS 1 acknowledges that RHNP would generate cumulative traffic impacts however the report states that the possible major developments proposed to coincide with the NWRL construction are at the early stages of planning and that little information is currently available on timing or scope of construction activities. The coordination of construction of the NWRL at Rouse Hill and RHNP are vital as both construction sites would be in proximity to each other and have the potential to occur at the same time leading to increased impact on the local road network and key intersections.

GPT have been in consultation with the NSW government agencies including the NWRL team with regards to the construction and development of the RHNP through the development of the traffic and transport assessment over the last 15 months. Further **coordination of the methodology of the assessment of the construction of the NWRL and other major developments (including RHNP)** is required.

As well as not taking into account the cumulative impacts of major surrounding developments, NWRL EIS 1 does not consider the external cumulative impacts of committed / planned infrastructure projects for example the Schofields Road upgrade. Cumulative impacts for Schofields Road upgrade will have significant impacts to the intersection of Rouse Hill Drive / Windsor Road for a significant period of time and no assessment has been undertaken to confirm this with mitigation measures. Therefore further **assessment to consider the cumulative impacts of committed / planned infrastructure projects** of this is required.

### 3) Construction impacts to roads and intersections

NWRL EIS 1 provides information on the number of likely construction vehicles per day using the arterial roads and some local roads (along the access routes only). However the quantitative impact of these vehicles on these roads is not provided. Other local roads that might be impacted such as Caddies Boulevard and Sanctuary Drive at Rouse Hill have also not been identified or assessed in NWRL EIS 1 and could be impacted adversely in terms of capacity and efficiency as well as safety and amenity of local residents. Further details on the tender **construction traffic management plans in residential areas** as well as demonstration of vehicle turning paths are required.

NWRL EIS 1 also states that there would be changes to Tempus Street. GPT are discussing these arrangements with the NWRL design team. The outcomes of this discussion will need to inform the further staged Traffic Management Plans regarding **changes to Tempus Street**.

Dialogue is also required with regard to **the potential adjustment of the Windsor Road / Schofields Road intersection**. Both Tempus Street and the Windsor Road / Schofields Road intersection directly affect the Rouse Hill Regional Centre in terms of access into the centre and vehicle movements around the centre.

The ability to provide safe and efficient vehicular movements in and out of proposed construction accesses has not demonstrated in EIS 1 and would be required to dispel any concerns of vehicle conflict along Tempus Street at the Rouse Hill site. In addition to this there is no mention of the impact to the quality of the pedestrian environment or mitigation measures required during construction works. During construction pedestrians will need to be protected from noise, dust and dirt created by the construction works. More detail on how this will be achieved is required.

Information about the management of the access to the construction site at Rouse Hill (site 14) on White Hart Drive is not provided. If the construction site access located on White Hart Drive is gated this has the potential to create queuing which will cause delays to vehicles on White Hart Drive (vehicles accessing the shopping centre and residential areas) as well as potentially queuing back to Windsor Road and adversely affecting the efficiency of the Windsor Road / White Hart Drive intersection. Further information is required (as part of the further staged Traffic Management Plans) with regard to the **management of construction site access**.

Consideration has also not been given to the proximity of the proposed construction access and existing intersection locations along White Hart Drive which might have safety implications for users of Rouse Hill Regional Centre. Further coordination of the construction access at Rouse Hill in consultation with GPT is required.

The intersection of Windsor Road / Schofields Road is of great importance to GPT as it is the gateway to the Rouse Hill Town Centre. It is documented in the EIS this intersection is performing at LoS D and close to capacity ( $DoS > 0.95$ ) in the existing situation with and without NWRL construction traffic. If a future year was to be assessed, with cumulative NWRL construction traffic as well as cumulative major development and infrastructure projects construction traffic, it is potential that further delays will be experienced at the intersection and subsequent mitigation measures would need to be implemented. It is suggested that certain enabling works at the

intersection should be considered from the outset of construction to accommodate all construction traffic and ensure pedestrian safety during the construction period. Further **cumulative assessment of this intersection in conjunction with the network impacts of Windsor Road / White Hart Drive** is required.

4) Changes to public transport and bus interchange operations during construction

NWRL EIS 1 states that the existing bus interchange (bus stops, layover areas) would be relocated for the duration of the construction of the Rouse Hill station and makes reference to proposed changes in bus operations and access routes for buses for the duration of station construction. However, no details are provided for the relocation of kiss and ride and taxi facilities currently located at the Rouse Hill bus interchange.

Further details are also required for bus route diversion, bus access and bus interchange arrangements (including kiss and ride and taxis) during construction of the NWRL as this will directly affect how customer arrival experience at the Rouse Hill Regional Centre and the safety of bus interchange users. In particular, further detail is required of the relocated interchange arrangement, bus route diversion due to the proposed closure of the interchange and T-Way, particularly at the intersections of existing T-Way / White Hart Drive and Tempus Street / White Hart Drive.

Consideration should also be given to the feasibility of rerouting buses and relocating the bus interchange. Consultation and coordination with GPT is therefore required to ensure safety and efficiency of bus passengers and that customers are not compromised during the construction of the NWRL.

5) Safety and risks to pedestrians and cyclists during construction

NWRL EIS 1 states that at the Rouse Hill construction site, pedestrians from Windsor Road would be redirected via either Rouse Hill Drive or White Hart Drive during construction and that there would be a minor impact. It also states that the key cycle route in the area would be unaffected by the construction and that cycle facilities currently at the bus interchange will be relocated. There is no mention how pedestrian and cyclist safety will be managed during the construction of the NWRL. This is an issue that needs to be addressed (as part of the further staged Traffic Management Plans) due to the nature of the Rouse Hill being a pedestrian friendly regional centre.

6) Impacts to parking during construction

NWRL EIS 1 states that the Rouse Hill worksite is likely to displace all of the existing parking adjacent to Windsor Road, i.e. between Windsor Road and the Rouse Hill Town Centre and north of Rouse Hill Drive. The report identifies that the 240 spaces (north of Rouse Hill Drive) would need to be relocated during construction potentially to other vacant parts of the Rouse Hill Town Centre. However, it should be noted that the existing Town Centre car park is reaching capacity during the peak shopping hours and any allocation of existing parking spaces to non-customers will affect the commercial operation of the Town Centre and is not acceptable to GPT. Land that is currently vacant to the north of Rouse Hill Drive may also not be available due to the construction of RHNP. Close liaison with GPT and Centre Management is required to identify suitable locations for parking displaced during the construction of the NWRL.

There is also no mention of where the existing staff and visitor parking on Tempus Street would be relocated once lost due to construction. Therefore further information on this is required.

**Information expected to be obtained through NWRL EIS 2**

It is understood that a separate EIS (EIS 2) is currently being prepared for Stage 2: Stations, Rail Infrastructure and Systems. In this document it is understood that the station design, railway operating systems and project operations as well as a detailed description of construction works will be provided.

The following is a list of information with regard to the NWRL at Rouse Hill that GPT expects in NWRL EIS 2. This information would aid in the coordination of the construction and development of both the NWRL and the RHNP.

- The NWRL alignment at Rouse Hill. A detailed concept design of the NWRL alignment including location of the viaduct structures, proposed road crossing and intersections and amendments are required.
- The NWRL Rouse Hill station box location. A detailed concept design of the Rouse Hill station box and location along the NWRL alignment is required.
- The NWRL Rouse Hill station platform configuration. A detailed concept design of the Rouse Hill station including number and location of platforms as well as platform details (inward or outward platforms) is required.

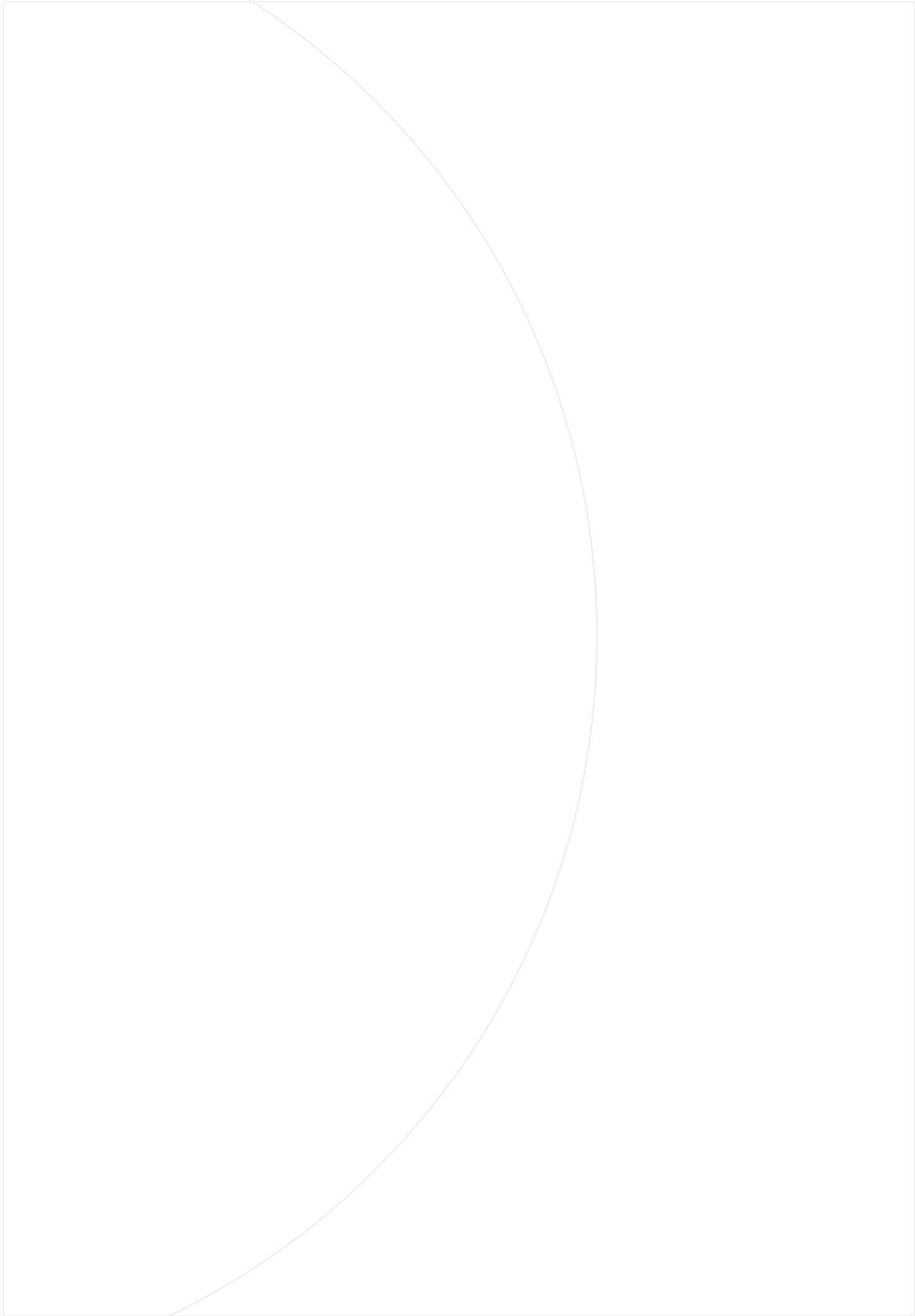
- Pedestrian access arrangements at the Rouse Hill station. Details on the connection between platforms, concourses, bus interchange and associated facilities (kiss and ride, taxis), street level and integration with the Rouse Hill Town Centre is required.
- Bus interchange arrangements at the Rouse Hill station. Details on bus interchange location and configuration, facilities (number of bus stops, layovers, kiss and ride, taxi, bike racks etc), future bus routes and frequencies and access arrangements is required.
- Details of the future pedestrian and cyclist connections and facilities between Rouse Hill station, the bus interchange, the Rouse Hill Town Centre and the proposed Area 20 precinct as part of the NWRL design is required.
- Details on the future train operations, train numbers, train frequencies, type of service (freight, passenger), future patronage forecasts and mode of arrival at the Rouse Hill station is required.
- Details on the access/easement requirements for maintenance and maintenance / ownership of area underneath the elevated track along the alignment at Rouse Hill is required.
- Details on the future consultation process with stakeholders with regards to the NWRL is required.
- Details of how noise and other pollutants arising from the elevated rail line will be managed and mitigated.

GPT will continue discussions with the NSWRL team and TfNSW to obtain the above information prior to the release of EIS 2 such that innovative solutions can be embedded into the design process as early as possible to ensure an optimal design solution can be achieved for NWRL and Rouse Hill Station.

Yours faithfully

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