



Planning Assessment Report

Development Application DA 119-5-2004

1 SUMMARY

This report is an assessment of the proposed development which is the subject of Development Application number DA 119-5-2004. The proposal is generally known as the **Chatswood Transport Precinct Project (CTPP)** proposal.

The applicant, Transport Infrastructure Development Corporation (TIDC) was formed as a new, State-owned corporation on 1 January 2004 to deliver and act as proponent of the Parramatta Rail Link (PRL) infrastructure project. The CTPP proposal is development associated with the Chatswood Transport Interchange (CTI), a modification to the PRL at Chatswood.

For the purposes of this assessment, the applicant may be considered to be a public authority and hence, under clause 226(1)(a) of the Environmental Planning and Assessment Regulation (the Regulation), a prescribed person in accordance with section 116B of the *Environmental Planning and Assessment Act 1979* (the Act). Consequently, the application may be considered to be Crown development.

The application seeks staged consent for building envelope and use under section 80(A) of the Act for the area located in **Figure 1**. The full description of the Stage 1 application is provided in section 3 of this report.

Residential development is prohibited under the Sydney Regional Environmental Plan (SREP) No. 5 - Chatswood Town Centre. Under section 89 of the Act, the Minister may direct that specified development on specified land may be the subject of a development application if having regard to matters that in the Minister's opinion are of significance for State or regional environmental planning, the Minister considers it expedient in the public interest to do so. The Minister directed the proposal to be the subject of a development application on 20 January 2004. Under section 89(2)(b) of the *Environmental Planning and Assessment Act 1979*, the Minister for Infrastructure and Planning is consent authority.

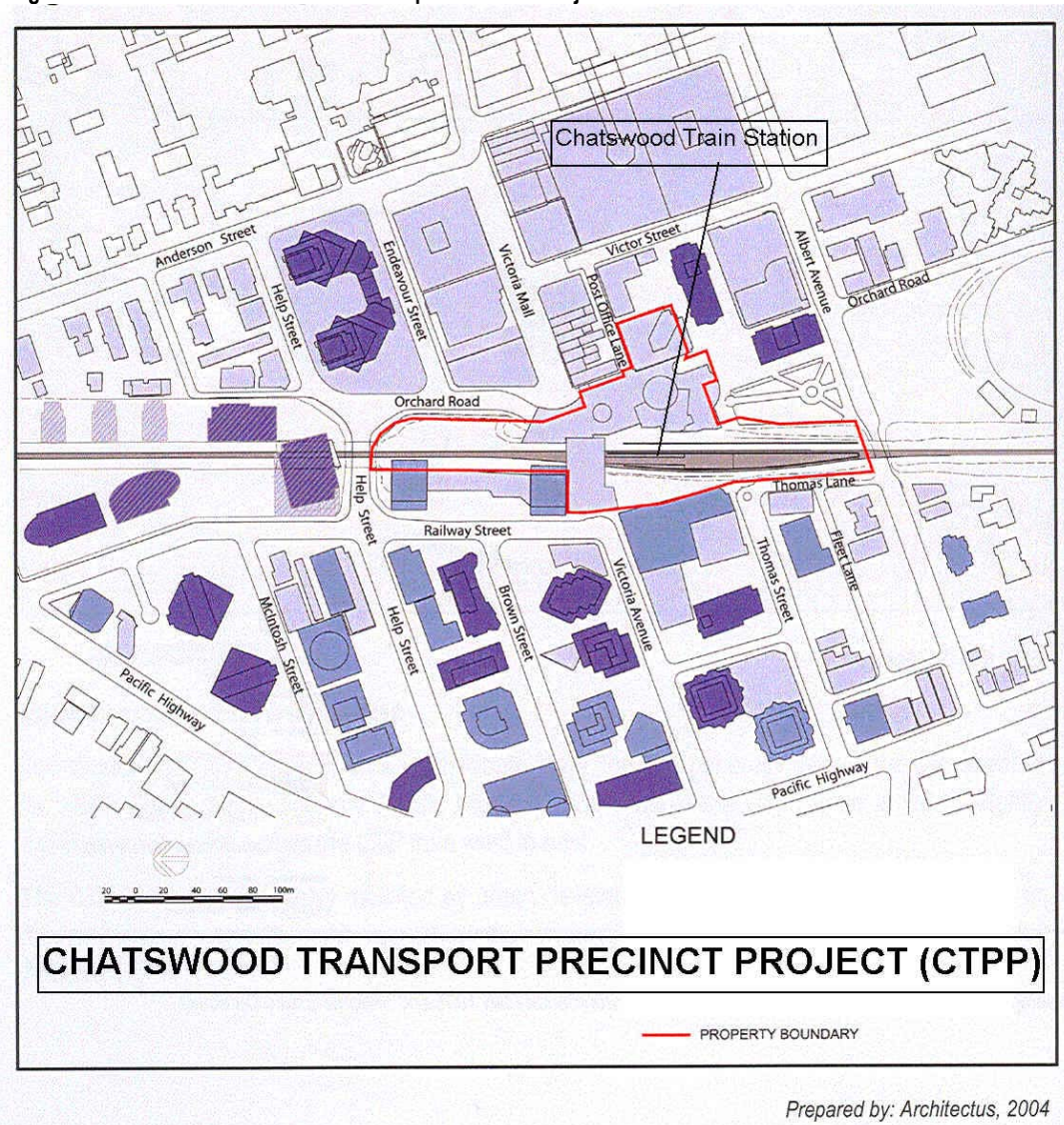
The following sections of this report identify matters taken into account in assessing this application. In considering these matters, it is recommended that the development application be **granted consent** subject to conditions.

2 BACKGROUND

2.1 Site Context

The site is located under, over and to the east of the Chatswood train station as shown on the accompanying plans on land generally bounded by Albert Avenue, Thomas Lane, Railway Street, Help Street and Orchard Road, Chatswood in the Willoughby local government area provided in **Attachment 1**. A general plan showing the location of the development in Chatswood is provided in **Figure 1**.

Figure 1. Location of the Chatswood Transport Precinct Project in Chatswood



The development application (DA) was lodged with the Department on 20 May 2004 in accordance with the Act. Site visits with various attendees were conducted on 10 February 2004, 22 June 2004 and 3 August 2004.

The CTPP is proposed to provide the most effective solution for the upgrade of the CTI. In providing the upgrade, the State Government has decided to pursue a Public Private Partnership (PPP) delivery process. A PPP allows for the upgrade of the CTI and associated public spaces to be partly funded through the availability of air space above the CTI for retail/residential development and the development of retail areas over the former bus interchange site to the east. Together the CTPP and CTI form the Chatswood Transport Precinct (CTP), a government initiative.

The CTI refers to activities that require approval under Part 5 of the EP&A Act and include:

- demolition of the existing operational and disused station platforms including removal of remaining platform buildings (to the extent that this is not already covered by the approved activity);

- construction of new elevated twin island platforms;
- relocation and upgrade of the station concourse area under the railway tracks;
- relocation and upgrade of the bus interchange;
- provision of additional traffic facilities including taxi spaces and layover, and 'kiss and ride' facilities;
- road network modifications;
- raising of Albert Avenue Bridge in accordance with the Conditions of the approved activity; and
- raised track works south of Albert Avenue bridge in accordance with the Conditions of the approved activity.

Details of the CTI are provided in the Review of Environmental Factors (REF) *Modifications to the Parramatta Rail Link – Proposed Chatswood Transport Interchange* prepared on behalf of the Proponent, TIDC. The Director-General's Report provided under Section 115C of the EP&A Act and entitled Chatswood Transport Interchange: *Proposed modifications to the Parramatta Rail Link – Chatswood Transport Interchange* provides for the draft approval of the CTI.

3 THE PROPOSED DEVELOPMENT

The proposed Stage 1 application seeks consent for the building envelope and use of the levels of:

- two levels below natural ground level for car parking associated with residential flat development for a maximum of 500 car parking spaces. These levels would be at approximately RL 88m and 91m;
- approximately 7,245 square metres of gross floor area retail space mainly on the concourse level under the train station and east in the vicinity of the bus interchange;
- a podium over the train station at approximately RL 106 metres AHD for a mix of public and private landscaped space;
- three separate residential buildings generally occupying the air space above the rail corridor from the podium level to maximum RLs of 146.55m, 163.65m and 210.40m AHD including lift over-runs and plant room for approximately 12, 18 and 32 floors respectively and containing a maximum of 49,000 square metres of residential gross floor area; and
- vehicular access to residential car parking.

No construction would be undertaken through this development application.

Plans identifying the areal layout are tagged **Attachment 1**.

4 STATUTORY FRAMEWORK

4.1 *Statement of permissibility*

The proposal is located in part on land zoned 5(b) - Special Uses "B" (Railways) Zone under SREP No. 5 - Chatswood Town Centre. Residential development is prohibited in this zone.

On 20 January 2004, the Minister directed that this residential development may be the subject of a development application.

For the purposes of section 76A(7)(d) of the Act, prohibited development is State significant development while the section 89 direction is in force.

4.2 *Instrument of consent and other relevant planning instruments*

Although the requirements of the various planning instruments over the site do not apply to the proposed residential use, for the purposes of this assessment, the Department considers the following environmental planning instruments (EPs) are relevant to this proposal:

Table 1. Environmental Planning Instruments considered in relation to the CTPP

Instrument / Policy	
SEPP- Building Sustainability Index 2004	Attachment 2
SEPP No. 65 – Design Quality of Residential Flat Development	Attachment 2
SEPP No. 11 – Traffic Generating Developments	Section 5.3
Sydney Regional Environmental Plan No. 5 – Chatswood Town Centre	Attachment 3
Willoughby City Council Local Environmental Plan 1995	Attachment 4
Willoughby City Council Development Control Plans (DCPs) DCP No. 2 – Transport Requirements for Development DCP No. 14 – Access and Mobility DCP No. 23 – Willoughby Local Housing Program DCP No. 30 – Sustainable Development Willoughby Council's "Local Policy for On-site Stormwater Detention" and "Code for Installation, construction and operation of garbage handling systems for residential flat buildings; residential buildings; commercial buildings and buildings under construction" are considered relevant are also referred to in this Attachment.	Attachment 5

An assessment against the relevant provisions of the SREP relating to retail use is provided in **Attachment 3**.

4.3 *Legislative context*

Pursuant to s.76A(7)(d) of the Act and clause 5(1)(a) of the Regulations, the proposal is classified as State significant advertised development. The associated retail development is also State significant development under s. 76A(8)(a).

As the application was submitted by the Crown, the proposal is not integrated development in accordance with s.90(2) of the Act.

5 CONSULTATION

5.1 *Public consultation*

The application was notified, in accordance with the Regulations including:

Table 2. Public consultation summary

Notifications – landowners/occupiers	Letters were sent to 387 landowners/occupiers and 15 interest groups
Newspaper advertisements	The development application was advertised at the same time as the CTI infrastructure proposal on 28 May 2004 in both the Sydney Morning Herald and the North Shore Times and in the North Shore Times on 2 June 2004.
Site notices	Three site notices were placed on the site in three locations from 31 May 2004
Exhibition dates	The CTPP was exhibited from 31 May 2004 to 29 June 2004 inclusive.
Exhibition venues	▪ Resources Centre, DIPNR, 20 Lee Street, Sydney ▪ Transport Infrastructure Development Corporation (TIDC) Chatswood Display Centre, Chatswood Train Station ▪ Transport Infrastructure Development Corporation, 10 Valentine Avenue, Parramatta ▪ Willoughby City Council Chambers - Help and Service Centre, 31 Victor Street, Chatswood ▪ Willoughby Library (Chatswood), 407 Victoria Ave, Chatswood ▪ Total Environment Centre, 362 Kent Street, Sydney

The CTPP and CTI were jointly exhibited at the same locations for a period of 30 days.

Forty-seven submissions including two late submissions were received regarding the CTPP. As well, a number of the 25 representations to the CTI also included issues relating to the CTPP.

The Department has considered all submissions including late submissions and all relevant representations in this Assessment Report.

A summary of submissions is provided at **Attachment 6**. Key issues raised are considered in Section 6.2 of this report.

Submissions were received from various sources as described in Table 3.

Table 3: Submissions received.

	Submissions under Part 4
Individual	32
Council	1
Government	2
Community Groups	8
Business Groups	4
Total	47

5.2 Referrals

5.2.1 Council

The application was referred to Willoughby City Council on 26 May 2004 in accordance with cl 88(1)(b) of the Regulation. Council responded on 29 June 2004. Issues raised by Council are discussed in detail in Section 6.2 of this report. Council's full submission is at **Attachment 7**.

5.2.2 Design Review Panel

During the assessment, TIDC referred the development proposal, together with the modification design of the Chatswood Transport Interchange to the PRL Design Review Panel. The Panel responded with comments on the general areas of design for resolution including:

- edge condition and connections with surrounding areas;
- the design of the bus interchange;
- through site links;
- design of the podium;
- solar/wind effects; and
- SEPP 65 considerations.

The Panel's recommendations have been considered and incorporated, where appropriate in the recommended conditions of consent. A copy of the response is provided at **Attachment 8**.

5.2.3 Other Agencies

Roads and Traffic Authority

In accordance with the provisions of State Environmental Planning Policy (SEPP) No. 11 – Traffic Generating Developments, this proposal was referred to the Roads and Traffic Authority (RTA) on 26 May 2004. The policy's aim is to ensure that the RTA is made aware of and is given an opportunity to make a submission regarding development to which the SEPP applies. A response dated 27 August 2004 is provided at **Attachment 9**.

In summary, the RTA generally supports the proposal and considers its proximity to public transport would reduce its traffic impact on the local road system. The RTA also supported:

- a s.94 contribution for road and transport;
- the reduced residential parking rate;
- a condition for traffic noise;
- Council/DIPNR consider, with advice of the Local Traffic Committee the need for changed parking restrictions in the surrounding area;
- imposing similar traffic management requirements as exist for the Parramatta Rail Link.

The matters raised have been considered during assessment and are discussed under the relevant headings of Section 6.2.

Department of Environment and Conservation

The Department invited comment from the Department of Environment and Conservation (DEC) on 26 May 2004. In response, DEC identified measures to limit residential car parking spaces, possibly through a trading scheme; and secure bicycle storage as issues for further consideration by the applicant.

In providing a response, the applicant has agreed to the provision of bicycle spaces and measures to ensure car parking spaces are for the use of the occupant, tenant or resident of the apartments. These issues have been addressed through the recommended conditions of consent.

During the assessment process, DEC provided advice regarding regenerated noise. The advice is provided in **Attachment 10**.

NSW Heritage Office

The application was referred to the NSW Heritage Office on 26 May 2004. The Office provided separate comments on the CTPP and CTI. Potential effects from the CTPP on the Hotel Chatswood and the Garden of Remembrance (part of the Chatswood Urban Conservation Area) were identified.

The Heritage Office supported the removal of the existing bus interchange and its eastern stair as this would open up the area in front of the Hotel Chatswood. Requests were made that:

- the Stage 2 developer consult with the Heritage Office during detailed design and construction to manage the impact of the proposal;
- consultation continue with Willoughby Council and the Heritage Office to ensure the Garden is not overwhelmed by building elements and that a simple accessible link between the podium and the Garden is provided while minimising the impact on the Boer War memorial;
- the design, scale and finishes of the base of the podium supports, underside of the northern tower and proposed landscaping should be carefully considered in relation to the hotel to ameliorate impacts in consultation with Willoughby Council and the Heritage Office;
- the overall impact of the increased shadow will decrease the Garden amenity and may affect the health of existing and future plantings. Microclimate and wind condition changes are also likely to occur; and
- Archaeological investigation of archaeologically sensitive areas of the site is to occur following the demolition of the existing buildings but prior to bulk excavation or other subsurface disturbance. If opportunities arise to reduce the footprint of excavation, these should be considered.

The requests relevant to the CTPP have been considered under the relevant parts of Section 6.2 below. All the issues raised have been considered and where relevant, included as conditions of consent.

NSW Police

During discussions prior to DA lodgement, a preliminary crime risk assessment of the CTPP and CTI was undertaken by the NSW Police. In relation to the development:

- crime risk is likely to be lessened if cabs are located near the two bus interchanges;
- location of further licenced premises in the precinct would not be supported;
- wayfinding and access control are priorities; and
- recommendations regarding access to residential car parking.

In responding to these issues:

- the CTI approval requires relocation of taxi ranks to safe locations;
- provision for further licenced premises is not included in this CTPP Stage 1 and would require a separate DA; and
- access would be the subject of a Safer by Design assessment.

A Condition of Consent is imposed requiring the Stage 2 DA to include a Safer by Design assessment.

5.3 Internal consultations

The Department's Sydney Region East (SRE) planning team has been consulted regarding the application both prior to and on submission of the DA. SRE indicated that:

- there is a concern that Chatswood's role as a regional centre market is constrained by the lack of availability of office sites.
- there was an instrument limiting the FSR for residential development in the Chatswood CBD in late 2000.
- the design of the towers should be flexible to provide a response to market requirements at the time these would be available for sale.

The applicant identified that with the likely lead time to the commencement of construction, inclusion of business uses would be considered in relation to future DAs over the site. In relation to SREP No. 5, the FSR for various residential zones was considered during assessment. The SEE proposes an FSR of no more than 3.5:1 using SREP No. 5 clause 11(2)(f1)(i) for the Stage 1 application. In resolving the design of the apartment buildings, the applicant would be providing further information identifying the FSR once issues are addressed.

6 CONSIDERATION

6.1 The Environmental Planning & Assessment Act

6.1.1 Section 79C

The application and the likely impacts of the proposed development have been considered in accordance with Section 79C of the Act.

The requirements under Section 79C(a)(i) to (iii) of the Act are addressed through attachments as identified below:

This assessment incorporates the provisions of the Regulations (under Section 79C(a)(iv)), as appropriate, including consultation, notification and assessment. The relevant requirements are set out under the appropriate headings in this document.

Significant issues are discussed below in Section 6.2, and, where relevant, a detailed assessment is provided. The subject site is considered suitable for the proposed development. Submissions have been considered and issues raised in submissions are discussed in Section 6.2. On balance, the proposed development is considered to be in the public interest.

6.2 Main Issues

6.2.1 Noise and Vibration

The source of regenerated railway noise would be vibrations caused at the train wheel/rail interface. These vibrations would be propagated within the ground or building structure and would then radiate through a building as noise from vibrating surfaces, such as floors, ceilings and walls.

The SEE's Noise and Vibration Impact Assessment (NVIA) estimates that regenerated noise levels would be approximately L_{Amax} 55 dBA without mitigation at the lowest residential level of the CTPP flat buildings. Incorporation of acoustic materials within the CTI would reduce noise levels at nearby existing residential development. The SEE identified that an L_{Amax} 40dB(A) level is attainable for CTPP residential units through one of several combinations of CTI track and structural mitigation measures.

6.2.2.1 Submissions

A total of five submissions for the CTPP and representations for the CTI, including three submissions: one from Council, and two private submissions raised concerns regarding regenerated noise at the CTPP residential towers. The Department was also concerned about the proposed regenerated noise criteria adopted by TIDC.

6.2.2.2 Consideration

In considering this issue, the Department undertook a dual assessment of regenerated noise for both the CTPP and the CTI proposals. This included a review of the existing conditions of approval that apply to the Parramatta Rail Link (PRL), a request for advice from the DEC and a review of relevant criteria applied elsewhere.

In summary, this review identified:

- the PRL Director-General's Report (February, 2002) states International and Australian best practice appear to indicate acceptable criteria for regenerated noise of between 30 and 35 dB(A). This is consistent with DEC advice (Attachment 10, DEC (24 September 2004 and 1 November 2004));
- in the Representations Report for the PRL (February 2002), the proponent made a case for a criterion of 35 dB(A) rather than 30 dB(A);

- the Department notes that regenerated noise criteria for the PRL relates to the “excavated tunnel” and therefore is not directly applicable to the CTI. However the intent with regard to a reasonable amenity criterion would remain relevant;
- the approval for the New Southern Railway (Director’s Report, February 1995) includes a regenerated noise criterion of 35 dB(A) for the then future residential development in the Waterloo, Zetland and Mascot areas, including medium/high density residential developments at Green Square. This criterion is applied to development over the rail tunnel; and
- additional information provided by the proponent for the CTI identified various guidelines ranging from 35 dB(A) to approximately 42 dB(A) (L_{Amax} fast meter response) (Attachment 10, Richard Heggie (15 September 2004 and 20 October 2004)).

The Department notes that the applicant indicated that considerable mitigation would be undertaken to achieve a criterion of L_{Amax} 40 dB(A) due to the structural proximity of the residential buildings and the mobility of the elevated railway. The Department is concerned about the potential impacts of regenerated noise on new residents purchasing a property being built above a railway line. The Department considers that in the absence of any written notification that the CTPP apartments might be affected by regenerated rail noise, a purchaser might reasonably expect any apartment not to be affected by regenerated rail noise, regardless of where it is built. Therefore the Department considers it appropriate that future purchasers of any CTPP residential apartments are notified of potential noise impacts. DEC supports this approach.

6.2.2.3 Resolution

In terms of feasibility of noise reductions, the Department considers that insufficient information is available to determine the extent to which the proposed CTPP design and CTI infrastructure measures would assist amenity. The Department also considers that, at this stage of the design of both the CTPP and CTI, there may be further opportunities to achieve reductions below 40 dB(A) without considerable cost.

In relation to the criterion to be applied, the Department applies a dual approach that requires further noise reductions through:

- firstly, applying an achievable noise criterion (L_{Amax} 40 dB(A)) through CTI conditions of approval (CTI modification to PRL, Condition of Approval 76A) with the additional requirement that further design work prior to construction, submitted as a Noise Report for the Director-General’s approval, demonstrates how the proponent has endeavoured to reduce the regenerated noise level below 40 dB(A). The Report must provide details of mitigation/treatment measures and regenerated noise levels; and
- secondly, requiring the applicant for the CTPP to provide in the Stage 2 DA a report that demonstrates how the design of the residential buildings has incorporated measures to mitigate the impacts of the regenerated noise from train movements and provide the regenerated noise levels at the various levels in the residential buildings; and

- as it is not clear where noise affection including between 35 dB(A) and 40 dB(A) would occur, the applicant is required to ensure that an easement is created over the residential development stating that any development for the purpose of residential use at the subject land may be affected by noise due to rail operations within the CTI corridor.

Through the recommended conditions, the Stage 2 DA for residential development must be accompanied by the necessary documentary evidence that such an easement has been created stating that the residential development may be affected by (regenerated) noise due to rail operations.

6.2.2 Traffic and Transport

Congestion frequently occurs on the Pacific Highway during the weekday morning and evening peaks and has flow on effects on alternative routes such as Penshurst and Archer Street and connecting links such as Boundary Street, Help Street, Albert Ave and Mowbray Rd (Figure 2).

Figure 2. Existing street layout in the vicinity of the Chatswood Transport Precinct Project (Source: Sydney and Blue Mountains street directory)



A specialist traffic and transport infrastructure assessment report prepared by Maunsell (SEE, Volume 2) investigated construction and operational impacts of both the CTI and CTPP projects. This assessment included a micro-simulation traffic model (VISSIM). To assist the Department in assessment, consultants Stepfair-Samsa were engaged. A full copy of the report titled '*Chatswood Transport Precinct: Transport Impact Assessment Review*' is provided in **Attachment 11**.

During this review, the applicant provided a report by Maunsell entitled '*Chatswood Transport Interchange Concept Master Plan – Chatswood Transport Modelling Note*' regarding assumptions and the methodology used in the traffic modelling. This report is reproduced in **Attachment 11**.

Two key traffic and transport issues have been recognised during assessment. These relate to construction traffic and operational organisation.

6.2.3.1 Submissions

Twenty-one submissions, including one from Willoughby City Council raised issues related to construction and operational traffic and transport issues. The Department also raised a number of issues. The issues included:

- ♦ assumptions used in modelling impacts;
- ♦ resolution of traffic and access conflicts in the Thomas Street / Thomas Lane area;
- ♦ regional traffic impacts of the proposal and the need for additional road augmentation;
- ♦ parking stock requirements; and
- ♦ connectivity, in particular pedestrian access.

6.2.3.2 Consideration of construction related impacts

Three construction sites for CTI/CTPP works are proposed at:

- Thomas Street/Thomas Lane;
- Orchard Rd (near the existing bus interchange); and
- Orchard Rd south (north of the Garden of Remembrance).

Construction access to these sites to and from the Pacific Highway is proposed via the arterial routes of Albert Ave and Help Street and other connections along Victoria Ave, Railway Street, Katherine Street and Thomas Street. The Department raised concerns that these nominated access routes may create potential conflict with pedestrians and other vehicles since an anticipated combined (CTI and CTPP) peak of construction is estimated to generate 100-180 vehicles per day, mainly from the transportation of spoil.

The Department raised concerns about the validity of assumptions in the modelling in the SEE and whether these accurately reflect worst case simultaneous construction impacts. Traffic impacts modelled in the SEE were based on estimated 2007 background traffic flows and other assumptions included limiting access points, construction traffic routes and limiting the number of heavy vehicles leaving the construction site to 20 per hour at all times of the day.

6.2.3.3 Resolution of construction related impacts

The Department's review of the additional information from Maunsell indicates that the modelling approach taken appears to be sufficiently conservative to account for realistic spoil volumes and the cumulative traffic impacts of the projects.

Where CTPP construction continues beyond the completion of CTI works, TIDC has indicated that the same construction traffic constraints would apply. Also, TIDC has stated that it would work with Willoughby Council to ensure appropriate traffic controls were implemented to minimise traffic congestion during construction.

The Department considers that the sensitive traffic environment in Chatswood necessitates a conservative management regime during all stages of construction of both projects. The Department remains concerned about the use of local streets in Chatswood during peak commuter and school hours. Therefore, restrictions on the use of local streets have been included in the requirements through the recommended Conditions of Consent.

The Department also requires a traffic monitoring report for the intersections in the vicinity of the development in the Stage 2 DA together with practical measures to reduce impacts on nearby streets, provision for site specific Traffic Management Reports (TMRs), measures to ensure that no more than 20 trucks (40 movements) per hour cumulatively use the streets and safety auditing will be carried out. Measures to ensure that traffic impacts are minimised are provided through recommended Conditions of Consent.

It is not clear how pedestrian access would be managed for CTPP construction. The details of this would need to be provided as part of a Stage 2 DA application.

6.2.3.4 Consideration of operation related impacts

Modelling of Operational Impacts – The Department raised concerns that the modelling for the operational phase may have under-predicted traffic generation from the CTPP. The Department suggested that benchmarking traffic generation rates with other similar developments should be undertaken.

The applicant stated that the rates used for traffic generation from the CTPP development during peak periods, based on the RTA document '*Guide to Traffic Generating Developments*', would generate a total of 116 trips in the peak hour. TIDC stated that, even if rates were doubled, the estimated impacts would likely be negligible due to the high background traffic flows and existing congestion. As described above, TIDC agreed to work with Willoughby Council to address any issues in the business peak or weekend periods.

Parking and Access – On-site parking supply for the CTPP will include parking for 484 cars for residential, residential visitor and may include associated uses such as child care, visitor child care and carer spaces. It does not include provision of retail tenant or retail patron spaces. The proposed service delivery would be either on

street (one loading space proposed for Victoria Avenue West) or via the area currently used by the bus interchange (under the Sydney Water Building).

In the CTPP car parking space beneath the train line, a further sixteen spaces will be set aside for Rail Corp staff. The area under the Sydney Water building (near the existing bus interchange) would continue to be used as a loading zone for surrounding retail businesses and also for those associated with the CTPP. No additional retail parking is proposed as part of the CTPP development as the Maunsell report suggests that the additional retail facilities would primarily cater for rail and bus commuters and generate little demand for parking.

Willoughby Council requested that retail tenant parking not be provided in the space vacated by the bus interchange but rather it be a service area made available for servicing premises fronting the Mall between the CTI and Victor Street to enable separate development of two frontages to those properties and to activate Post Office Lane as a "shopping street". The Department considers parking in the Sydney Water building to be primarily for loading and unloading for the CTPP retail areas with some capacity for disabled car parking and bicycle storages for retail employers/es.

Thomas Street/Thomas Lane - Two access points to the car park are proposed off Thomas Lane: one near the intersection with Thomas Street and a secondary one opposite the intersection with Fleet Lane. These access points may also be used by delivery vehicles for the CTPP.

In the SEE, this area was proposed for:

- the main new taxi rank on Thomas Lane;
- two entrances to the parking for the CTPP residential developments;
- the regional cycleway would utilise Thomas Lane;
- regarding on Thomas Street to link with a lowered Thomas Lane;
- a roundabout at the corner of Thomas Street and Thomas Lane; and
- a new signalised intersection with Albert Ave at the southern end of Thomas Lane.

Concerns were raised about conflicts between pedestrians and cars in any crossings of Thomas Lane and Thomas Street. A submission from the Guide Dogs NSW/ACT identified the issue of the safety of sight impaired pedestrians endeavouring to cross from the CTPP Thomas Street/Thomas Lane area to the Guide Dog offices on the opposite corner of this intersection in the vicinity of the roundabout, the taxi rank and cycleway.

The Department requested that the intersection between Thomas Lane and Albert Ave be modelled. Council also raised concerns about the viability of the cycleway through the area. In response, TIDC stated that it was likely to make the area a 'shared zone' meaning that traffic would be slowed to minimise conflicts with pedestrians. During the detailed design period TIDC also agreed to review the design of the area to minimise pedestrian/car and taxi/access way conflicts. Cycleway and taxi issues have been discussed as part of the CTI Director-General's Report for the CTI.

TIDC stated that modelling of the intersection of Thomas Lane and Albert Ave was not necessary as the RTA had indicated its satisfaction with the proposed signalised intersection.

Regional Investigations and Additional Roadworks - Willoughby Council in its submission raised concerns that the appropriate regional traffic and transport assessment had not been undertaken for the proposal. Willoughby Council also recommended several physical improvements to intersections and roads that it suggested would be affected by the proposed developments.

TIDC responded by stating that such modifications were not necessary as a result of additional traffic from the CTP developments and were beyond the scope of the proposal. TIDC stated that it had considered a 'left-in' and 'left-out' treatment of Thomas Street and the Pacific Highway but believed that the ability to turn right into Thomas Street from the Pacific Highway had merit particularly for emergency access. TIDC stated that it was prepared to co-ordinate discussions with the RTA and Council about potential intersection improvements at Pacific Highway with Albert Ave, Thomas Street and Brown Street. It suggested that such co-ordination could be undertaken through the Station Area Transport Management Committee through existing PRL conditions of approval.

6.2.3.5 Resolution of Operational Traffic Issues

Modelling of Operational Impacts - The Department considers that it is likely that the combined effects of the CTPP and CTI will lead to additional traffic in and around the Chatswood area. To ensure that the impacts of the CTI and CTPP developments are similar to those predicted, the Department recommends the inclusion of recommended Condition No. B16 specifying a number of intersections to be monitored during operations. The monitoring is also required to be undertaken on Saturday mornings and other times outside of the peak periods. Further assessment of this matter would occur as part of the Stage 2 DA.

Parking and Access –This assignment of spaces is provided through Condition of Consent B7 Parking and Bicycle Storage for the CTPP and includes bicycle storage for both residents and retail employees.

In assessing the number of spaces proposed for residential (including related residential) use, the Department review the allocation against Willoughby Council's DCP No. 2 (Transport Requirements for Development) and the recent consent for residential development at Pacific Place. Without knowing the unit mix for the CTPP, the comparison was based on a ratio of gross floor area as an approximate estimate. The allocation of spaces for the CTPP is less than the allocation in both the DCP and the consent for Pacific Place using this estimate. While there is some flexibility with respect to allocation of parking provisions for CTPP owners/residents, recommended Condition of Consent B7 identifies the use of spaces without permitting transfer/sale of parking spaces from occupants, tenants or lessees of a residential unit.

TIDC has stated that the retail developments would be primarily, if not totally, commuter convenience focussed and would be unlikely to generate any additional

traffic or demand for parking. The Department considers that patron retail car parking is not required for this development.

To ensure service spaces sufficient for retail and residential requirements including service access and waste storage, these are required to be provided consistent with Council's plans and guidelines as indicated in recommended Conditions No. B7 and B2 respectively.

As the applicant has indicated its willingness to address the need for a kiss and ride facility from Orchard Road South, space for this is also rationalised in this approach. Consequently, recommended Condition of Consent No. B7 requires provision of adequate loading spaces in the vicinity and associated with retail development and this would be addressed in subsequent DAs.

Thomas Street/Thomas Lane Area

The Department remains concerned that TIDC has not identified a design for the new Thomas Street/Thomas Lane area that addresses the concerns raised in the submissions. To guide the design process for this area the Department recommends the inclusion of Condition No. B2 to address the relevant aspects raised.

TIDC has committed to investigating the redesign of the area under the Sydney Water building to provide improved transport facilities including a kiss and ride facility. The provision of such a facility could obviate the need for the proposed kiss and ride facility on Albert Avenue, about which the RTA and Council have raised concerns in regard to traffic flows during peak periods.

Regional Investigations and Additional Roadworks - It is clear that the Pacific Highway and associated intersections through Chatswood are the key areas of traffic congestion and affect the reliability of the road network. In recommending any physical changes to the road network in Chatswood, however, a nexus must be identified between the impacts of the proposal and the need for upgrades. To provide information regarding traffic movements at Chatswood, the Department requires that recent monitoring results be provided at the time of lodgement of any Stage 2 DA. Monitoring would validate TIDC's traffic modelling predictions and/or identify areas where additional traffic management measures would be required.

Conclusion

There are a number of existing traffic and transport issues at Chatswood that are difficult to resolve. Traffic generated by the CTPP development during the week is anticipated to be relatively small. There are likely to be disruptions and impacts during the construction period due to the scale of development and further assessment of these impacts and their mitigation are required in Stage 2DAs.

Additional monitoring of impacts is required at several key intersections. Monitoring would validate TIDC's traffic modelling predictions and/or identify areas where additional traffic management measures would be required.

6.3 Urban Design

The Chatswood Transport Interchange Concept Master Plan by the NSW Government Architect and Daryl Jackson Robin Dyke was developed for the Parramatta Rail Link and was released publicly in February 2003. This plan identifies the design principles intended to form the basis of the projects' design.

The Concept Master Plan's guiding principles include:

- a new bus interchange that would be adjacent to the open street system;
- an improved railway station;
- landscaped connections with existing parks;
- improved east west connections;
- retail uses;
- avoidance of overshadowing of the Garden of Remembrance;
- form of new buildings; and
- a new centre for Chatswood that is a flowing connecting centre.

TIDC identified that the projects would affect the visual amenity of the surrounding area and would most likely affect public domain, open space and nearby landscaped areas. In recognition of this, TIDC provided a visual impact assessment, preliminary wind notes and reflectivity recommendations as part of the REF and SEE. Plans of overshadowing in the Garden of Remembrance were included for the CTPP and an analysis of these elements was provided for the associated residential/retail development.

Urban Design Advice was provided by the Department's Urban Assessments Branch for the CTI and CTPP. A copy of this advice is provided in **Attachment 12**. In summary, the Advice considers project design in relation to the Concept Master Plan of February 2003 and highlights aspects of the proposals where detailed design treatments could be used effectively to enhance project outcomes. Specific areas include:

- the amount of public open space on the podium level;
- meeting the objective of extending the "green fingers" into the Chatswood centre;
- the provision of two east-west pedestrian connections when four were originally identified in the Concept Master Plan;
- opportunities to provide additional access between levels and improve access points;
- the need to provide retail activity including on the podium to reinforce vitality and safety;
- overshadowing;
- the form of the new buildings and the need for exemplary design; and
- a broad consideration that the proposal suffers from:
 - ♦ a lack of urban form clarity;
 - ♦ not being a substantial improvement on existing facilities;
 - ♦ failing to provide a real "centre" for Chatswood; and
 - ♦ optimising opportunities.

In response to the urban design advice, the main points applicant indicated are:

- thirty-seven percent of the landscaped space on the podium would be public space;
- the potential for east-west connections at Endeavour Street and Brown Street and Post Office Lane are subject to ownership constraints and existing uses;
- adequate access would be provided between levels;
- general intentions with respect to retailing include:
 - ♦ safety and efficiency;
 - ♦ retail layout influenced by a blank wall on the eastern side,
 - ♦ integration of the height difference on the eastern side of the CTPP;
- shadows would occur over the Garden from about 12.30pm onwards but there would be sunlight from mid to late morning to about 12-12.30pm throughout the year;
- for the residential buildings, there would be an opportunity to change the shape within the building envelope and provide modulation subject to sun access constraints, site shape and orientation in the Stage 2 DAs; and
- the CTI would meet the highest standards of design and operational requirements. It was acknowledged that further detailed design development was required in order to enhance the design quality and functionality of the concept design of the CTPP.

During the course of assessment, the Parramatta Rail Link Design Review Panel (DRP) was involved in discussions with TIDC and the Department concerning issues raised and provided a number of recommendations which were considered for incorporation in the relevant Conditions.

6.3.1 Submissions

Urban design issues were identified as a major concern in submissions and representations including twenty-eight submissions that identified such issues, ten of which objected to various proposed design elements particularly the potential impacts associated with the location and mass of the three towers. Other issues raised relate to:

- access across the site including east-west connections and the effects of multiple grade changes; and
- effect of overshadowing on green spaces such as the Garden of Remembrance.

A submission from Willoughby Council identified access issues, design issues including the relationship of the proposal with adjacent development, impacts on heritage items and environmental sustainability.

6.3.2 Consideration and Resolution of Key Issues

Public landscaped space

Consideration: TIDC's SEE identifies that the podium provides an opportunity for the construction of a public area by a public authority (SEE, ps-14). Limiting public

space to approximately 37% of the podium as originally proposed has the potential to limit movements on the podium and its long term enjoyment by the public. The Department considers that no clear justification for the proportion of public/private space was provided.

Resolution: In further response the applicant has agreed to maximise public access on the podium with the majority of the podium allocated to “public space” outside the footprint of the towers. This undertaking is reflected in recommended Condition No. B4.

Green space connections

Consideration: The Concept Master Plan envisaged the connection of the green spaces of Chatswood Park and the Garden of Remembrance with areas to the north of the Garden, the proposed CTPP podium area and the area within the bus interchange loop. The CTP proposals provide for terracing along the northern edge of the Garden, a proportion of public green space on the podium and green space within the bus interchange loop. These areas are located on different elevations with respect to the Garden of Remembrance and nearby Chatswood Park and are not readily connected either visually or physically to existing ground level green spaces with the current design.

Resolution: Responses from TIDC have indicated a willingness to consider the connection issue in the detailed design of both projects. The Department considers the original connections of green space should be carefully developed to optimise this element of the design, particularly where opportunities exist for extending public green space to reflect the intentions of the Concept. The Department therefore recommends that for subsequent relevant stages of the CTPP, the applicant address these issues through:

- careful design of green space edges;
- treatments in the vicinity of the Garden of Remembrance to protect the amenity of the Garden;
- provision, of the majority of the podium area outside the tower footprints as public space with sufficient structural support to provide for mixed soft landscaping including large trees where possible; and
- cover for parts of the podium structure by screening and framing views especially at key pedestrian view points.

Willoughby Council’s DCP No. 30 – Sustainable Development provides general guidelines for landscaping. Future DAs for the CTPP that include landscaping would need to conform with this DCP. Landscaping should also include replacement of removed landscaping elements that have amenity value. The black bean trees that would be lost from the eastern side of the station fall into this category.

Improved pedestrian connections

Consideration: Under a development consent applied to Pacific Place at 7 Railway Street Chatswood for Lots 51 and 55 in DP 883103, (Willoughby Council Development Consent No. 19991812) a public pedestrian bridge over Help Street will connect the upper level public precinct (over the Railway Enclosure Structure). To encourage pedestrian use of this link, sufficient and appropriate structural

arrangements need to be made at the northern end of the development to accommodate this link consistent with the requirements under Council's consent.

The Chatswood Central (ICA) buildings (Blue Towers) lie directly adjacent to the CTI and CTPP. The construction of infrastructure and development projects will jointly produce a vertical offset between the new podium and the existing raised base level of the Chatswood Central towers with potential changes to the access to these towers.

The SEE identifies that access to the station from the surrounding public streets including Albert Avenue and Post Office Lane is particularly important. In discussions, the Department and Willoughby Council raised the use of Post Office Lane as part of a loop for kiss and ride access through the Sydney Water Building to Orchard Road south of the Gardens. TIDC has indicated it is considering a kiss and ride option in the existing bus interchange building. With respect to access from Post Office Lane, pedestrian access would be provided from this to the CTI/CTPP.

Access to Help Street and Albert Avenue would be available from the concourse level. Opportunities to provide additional access both across and between levels and to improve access points were identified during the Department's assessment with a view that commuters and residents may be provided with efficient access opportunities including suitable emergency access.

Resolution: Conditions of Consent are imposed requiring a design resolution to provide a high level of connectivity to external adjacent sites and to the various levels within the CTPP.

Any changes need to be undertaken with due regard to maintaining existing access and exploring direct access to the podium level.

Versatile uses

Consideration: The applicant is proposing to provide child care/pre-school facilities for the residents of the CTPP through a separate DA. This facility could be provided on the podium. Options for outdoor cafes, child care facilities together with gardens for passive recreation are considered to provide a versatile level for multiple uses.

A number of new developments in the vicinity of the proposal have been developed for residential or a mix of residential and commercial uses. These include Pacific Place due north which includes two mixed commercial /residential buildings. At present, the proposed development would not include space for commercial and employment opportunities. In the interests of public investment, a mix of uses to spread financial commitments is considered preferable.

Resolution: These requirements for use of the podium have been provided in recommended conditions in the CTPP relating to the *Design of the Podium* (B4).

The need to consider opportunities for provision of commercial/residential buildings has been conveyed to the applicant and would be the subject of a separate DA, if considered appropriate.

Overshadowing and access to sunlight

Consideration: Potential impacts from overshadowing have been identified at the Garden of Remembrance and at other sites including:

- the diagonal walk on the podium from Victoria Street west to the retail areas where overshadowing is likely from about 10am in mid-winter;
- increases in overshadowing in winter at Chatswood Park;
- overshadowing of the Orchard Tavern from the podium and towers;
- overshadowing in the morning from autumn to spring on the streets and buildings on the western side of the projects; and
- at Victoria Mall by the northern building in the afternoon from about 1pm in mid March, with this progressively extending winter and receding to mid September.

A detailed assessment is made of the impact on the Garden of Remembrance in Section 6.4 of this report.

Resolution: The Department considers that both the height and bulk of the buildings is likely to contribute to loss of sunlight on public places. Consequently, the Department requires, as part of the recommended Condition of Consent No. B3, for Stage 2 the applicant will need to demonstrate how building designs provide views and minimise overshadowing at adjoining public spaces and areas including Victoria Avenue West. Notwithstanding this, further design improvements/refinements to address issues when Stage 2 DAs are submitted are required by the consent conditions.

Location and form of new buildings

Visual impact of buildings

Consideration: The location of the northern building is physically constrained by the limited opportunities for vertical access due to the operational requirements of the bus interchange and rail lines. However, as situated, the northern building is likely to have an impact on the street corridor views, on shadowing of areas to east and west, and on view equity of nearby residential development.

The Visual Impact Assessment by Architectus, in the SEE, includes a revised footprint for the northern building with a maximum length not greater than 55metres (reducing the extent of northern extent of the tower). with any sections longer than 35metres to be broken into smaller sections with strong emphasis on vertical and façade articulation to lessen the visual impact.

Resolution: A Condition of Consent is imposed requiring the incorporation, into the final design, of a number of design principles including the building recommendations of the SEE report in relation to the building envelope.

Northern Building/Chatswood Plaza Buildings

Consideration: The proposed northern tower lies relatively close to the southern Chatswood Central tower with associated issues of overlooking/privacy and safety of horizontal separation. A greater separation is required to avoid the visual impact of the combined bulk of the two Chatswood Central towers with the proposed northern

tower. A report by Architectus provided with the SEE identifies recommendations as “the buildings should be simple and elegant to reduce the visual impact” (Architectus, p77).

Resolution: The Department considers these requirements should be provided as commitments. Consequently, simple, elegant forms with clearly defined visual separation to provide views and achieve maximum privacy from nearby residential development is a requirement under the CTPP recommended conditions as *General Design Principles* (B2) and *Design of the Podium* (B4).

Edge of development/infrastructure

Consideration: The edge of the podium and support structures for the railway tracks will be a major element in the streetscape views from the eastern and western sides of the station, including from the Garden of Remembrance. If the structural elements of the development are treated as an integral part of the design and have an elegant form, the visual impact would be moderated.

Resolution: TIDC is aware of the Department’s views and undertakes, through recommended Condition No. B2 to address this issue.

Scale and form

Consideration: The edges of the CTI and CTPP both with respect to their combined effect and their interaction with surrounding development do not currently support the scale and proximity of surrounding forms. The effect of these edges needs to be addressed (e.g. Architectus, p78) and treatments are required to reduce the impact at the scale of the human form. Also, pedestrian views along street corridors are often terminated by the lower levels of the development including along the important view corridors along Victoria Avenue and Victoria Mall. The visual impact would be moderated if the low level views from these streets were terminated by well designed focal elements at pedestrian level to address the visual impact of pedestrian views along street corridors, eg Victoria Ave west, Victoria Mall, Thomas Street/Thomas Street east.

Resolution: Provision of these at appropriate levels need to be included and is required through recommended conditions including the recommended Condition of Consent No. B2 – *General Design Principles*.

Integration of CTI and CTPP

Consideration: An important consideration in the assessment has been the relationship of the design of the CTPP with the CTI as the lower structural levels built under the proposed CTI modification must to be able to accommodate the final design of the CTPP. The design therefore needs to demonstrate sufficient flexibility to resolve development design issues. This was always a major consideration during the assessment of the both projects.

Resolution: The recommended conditions for the CTPP are reflected in the draft Conditions of Approval for the CTI, to maximise opportunities for the integration of design.

The detailed architectural, urban design and landscaping element recommendations from the Design Review Report and the Western Precinct Design Report required for the modified CTI proposal would be addressed through recommended Condition No. B1. This and other measures should ensure that the improvements to the detailed design for the CTPP respond to community concerns.

6.4 Non-Indigenous Heritage

6.4.1 Background

The key heritage items potentially affected by the CTPP are:

- ♦ Garden of Remembrance and Chatswood Urban Conservation Area – The Garden of Remembrance is not listed as an individual item on any heritage registers. It is included within the boundary of the Chatswood Urban Conservation Area (South Chatswood Precinct), which is listed on the Register of the National Trust of Australia (NSW). The Garden also has a strong historical connection for the local community, including the Returned Services Association. Some of the roses in the Garden are sourced from original stock from the Somme and
- ♦ Hotel Chatswood (also referred to as the Orchard Tavern) – listed as a heritage item in Sydney Regional Environmental Plan (SREP) No. 5 (Chatswood City Centre) 1983.

Garden of Remembrance

The establishment of three residential buildings is likely to reduce the overall sun access to the Garden, particularly in mid-winter, resulting in increased overshadowing in the late afternoon. The CTPP could also cause wind downwash from the buildings and the podium onto the Garden of Remembrance. West wind flow on upstream building corners would generate turbulent wake flow and both unimpeded and turbulent wake flow would strike the western facades of residential towers leading to downwash at lower levels. As southeast to south winds and northeast winds are also prevalent, similar down wash effects would be experienced, particularly affecting the Gardens during summer.

The proximity and scale of the CTPP development may create visual and amenity impacts for users of the Gardens. The closest tower would be within 35 metres from the monument in the Gardens and be approximately 48 metres above the monument. The northern tower would be approximately 125 metres directly from the monument and extend approximately 113 metres above the monument or 117 metres above the Gardens. There would also be the potential for overlooking from nearby residential development and privacy issues that could impact on the amenity and overall role of the Garden.

Hotel Chatswood

The CTPP towers would dominate the view to the west and result in potential overshadowing on the Hotel.

Provision of additional information: At the request of the Department, the applicant provided an existing horticultural assessment of the Garden of Remembrance (prepared by the Royal Botanic Gardens Sydney (RBG) Plant Disease Diagnostic Unit, dated 13 November 2002) provided in **Attachment 13** and a new horticultural assessment of the Garden of Remembrance (prepared by MW Barrett, dated 9 October 2004) provided in **Attachment 13**.

The RBG assessment notes that in November 2002 the rose bushes in the Garden of Remembrance were in good condition and well cared for. The rose garden appeared to be receiving adequate light for the healthy growth of the plants, but any less light would not be conducive to their good condition.

The RBG assessment also notes that additional buildings may contribute to a 'wind tunnel' or air turbulence effect that already appears to be present within the Garden. An increase in air velocity and/or turbulence over the roses would result in loss of blooms, and in severe instances, lead to premature drying out of the soil and therefore reduced plant health.

A second horticultural report (prepared for TIDC by M.W. Barrett) indicates that the roses in the Garden are currently in a state of decline due to several factors, but primarily as a result of overshadowing from existing buildings. The report concludes that if roses were to be maintained in the Garden with the proposed CTPP development, a rejuvenation of the roses and re-planning of the Garden layout would be required to ensure the roses are located in areas that do receive the minimum sunlight to maintain a healthy growing environment.

6.4.2 Key Issues

Impacts on the heritage values of the Gardens and Hotel are a major community concern. Nine submissions raised concerns regarding the impact of the CTPP proposal on the Garden of Remembrance, including representations from Willoughby City Council, RSL, Australian Ex-Service Men and Women and Willoughby District Historical Society. These concerns included physical impacts and indirect impacts as a result of potential overshadowing and wind impacts of the proposed interchange and residential buildings. An overall concern raised by submissions and the Department related to the long term viability of the Garden with construction of the CTPP development.

6.4.3 Consideration and Resolution of Issues

Garden of Remembrance

1. Pedestrian connectivity

Consideration: There are opportunities to improve connectivity, however this could result in the Garden becoming a more active area and therefore jeopardising other functions of the Garden.

Resolution: The Department considers that detailed urban design of the CTPP landscape interface, in consultation with relevant stakeholders, would resolve such conflicts. To support this, the recommended conditions require that landscaping protect the amenity of the Garden (through Condition B2).

2. Scale of development and privacy

Consideration: The proximity and scale of the CTPP may create visual and amenity impacts on users of the Gardens. Additionally, the use of space above the podium for residential development is likely to lead to a loss of privacy in the Gardens.

Resolution: There are a number of urban design principles that should moderate these visual and amenity impacts. These are discussed in Section 6.4 - Urban Design.

3. Overshadowing and wind impacts

a. During Construction

Consideration: The Department, in considering the likely impacts on the Garden, concluded that there would be the potential for impact during construction from dust, wind and changes to the microclimate and potential for longer term impacts associated with construction of the CTPP.

Resolution: Consequently, through the recommended Conditions of Consent, the applicant will be required to address short term impacts at the Garden and provide an alternative site should amenity be unacceptable for remembrance ceremonies. If it were necessary to remove roses from the Garden, then rose stock would need to be protected for future replanting.

b. During Construction and Operation

Consideration: TIDC has stated that the orientation and design of the proposed CTPP buildings may change following detailed design work. However, it may not be possible to provide sufficient mitigation to avoid the adverse effects of overshadowing and changed wind regimes as a result of the CTPP.

The Department questioned the conclusions of the second horticultural report, particularly the assessment that overshadowing from the CTPP would represent a minor overall increase. Both the RBG and the second horticultural report note that roses generally require at least 6 hours of direct sun light per day to maintain health and growth, and less than this would result in yellowing and loss of leaves, increase of fungal and bacterial diseases, and a deterioration of growth rate.

There appears to have been no overall change in overshadowing or wind impacts on the Gardens since the Egis development was built on the eastern side in the 1980s. The Department notes that there appears to be no areas in the Garden that would meet the criterion for direct sunlight with the overshadowing identified from the CTPP. The second horticultural report (9 October 2004) states that:

“The location of the two buildings adjacent to the Garden, particularly the southern one, will have a significant impact on light access to the roses. It is expected that the reduction of light available to the roses will result in less vigorous plants which will be more susceptible to disease. This will lead to fewer, smaller flowers and a shorter flowering period. There is no means of mitigating the overshadowing.”

Resolution: The Department has not been able to form a firm view on the extent of the impacts of the design of the buildings on the Garden given that the information submitted provides conflicting information. Consequently, the Department requires a Garden of Remembrance Protection Plan (GRPP) to ensure the long term viability of the Garden including its roses. As part of the drafting of the GRPP, the applicant is required to define viability. The GRPP is to be drafted in consultation with Willoughby City Council, the Trustees of the Garden, and the local branches of the Returned and Services League of Australia and the Australian Legion of Ex-Servicemen and Women. Both the NSW Heritage Office and the Council need to be consulted during work on the detailed design of the Garden to provide an outcome acceptable to the community.

To minimise wind impacts where possible, a wind tunnel analysis is required for the Stage 2 of the proposal. The applicant is required to respond to wind effects in the detailed design of the development. As well, the amenity of the Garden would be reduced if down wash from the proposed buildings generated turbulence in the Garden. As a guide, the maximum wind speed in the western part of the Garden, away from the effect of the Egis building has been identified as not more than 13 metres/ s and where possible, wind speed should be significantly below this to ensure the long term viability of the Garden.

4. Future implications for the Garden of Remembrance

Consideration: Minimising impacts on the Garden of Remembrance is a high priority. Both the former Minister for Transport, Hon. Carl Scully MP, and Mayor of Willoughby, Cllr Pat Reilly, have stated that protection of Garden is a critical element of the concept master planning process (media release, 26 February 2003).

Based on the information available, including the SEE, consultation with Willoughby City Council, the horticultural assessment by the Royal Botanic Gardens (13 November 2002) and the second horticultural report (9 October 2004), the Department considers that negative impacts on the Garden of Remembrance are likely to occur as a result of the CTPP. However, it is difficult to determine the magnitude of impacts related to overshadowing, wind, proximity of buildings, pedestrian connectivity and altered use of the Garden.

The Department can only reasonably conclude that there is considerable risk that the Garden will experience significant impacts resulting in the existing amenity failing to be maintained. The existing amenity relates to the tranquillity of the Garden's open space, commemorative purposes, the visual symbolism of the specific landscaping arrangements, and the historical significance of the roses, stocks of which have been sourced from the First World War Somme area.

The Department has assessed potentially significant impacts on the Garden of Remembrance in assessing the CTPP development application. Due to the risk associated with potential impacts on the Gardens of Remembrance and their significant local importance, the Department considers that, should the CTPP be shown to have significant cumulative impacts on the Gardens, TIDC should be involved in developing and implementing alternative options for the Gardens. Any change related to the Gardens must be considered in consultation with the Heritage Office, the Trustees of the Garden, the Willoughby sub-branch of the RSL and other relevant stakeholders.

In addition, the Department is concerned that it may not be possible to maintain the present amenity and viability of the Garden in the long term. If this were likely to occur, then mitigation measures must adequately resolve the adverse effects at the present site or provide an alternative site.

Resolution: For subsequent development applications the Department is likely to consider that contingency is required either as alternative plantings/layout acceptable to the Council, the Garden's Trustees and returned services organisations or in the form of assistance with an alternative site with the existing site considered for a park protected from future development.

In either case, the applicant for a relevant future DA would need to consider transfer and/or replacement of the roses during the dormant months with layout to ensure viability of the Garden, acceptable to Council, the Trustees and the returned services organisations, designed by a suitably qualified landscape architect and the planting undertaken by a horticultural specialist either at the re-landscaped Garden or an alternative Garden site, depending on community needs as identified in the recommended conditions relation to the Garden of Remembrance Protection Plan.

Hotel Chatswood

Consideration: The Hotel Chatswood, at 455 Victoria Avenue, across Orchard Road from the CTI, would be affected by overshadowing and affected visually, by the construction of the tallest of the three residential buildings in its vicinity. The Hotel may be overshadowed from about 1.30pm onwards at the March and September equinoxes and possibly from 2pm onwards in mid winter.

Resolution: The recommended conditions require the applicant to demonstrate that principles are incorporated into the Stage 2 DA that minimise overshadowing of adjoining public spaces/areas including the Chatswood Hotel and the adjoining Victoria Mall.

Conclusion

Impacts on the adjacent Garden of Remembrance, Hotel Chatswood and Urban Conservation Area, would be associated with the three proposed residential buildings. These elements have important local heritage significance and are likely to be adversely affected by changes in light and wind, visual intrusion and changes to amenity of the area.

While it is acknowledged that the CTPP and related infrastructure projects would benefit the community, the need to reduce associated impacts is recognised and the recommended conditions serve to reduce impacts on these sites.

6.5 Contributions

Willoughby Council has identified land for affordable housing as the Willoughby Local Housing Precinct within the local government area through Willoughby Local Environmental Plan 1995. Details for this housing are provided in Development Control Plan No. 23 – The Willoughby Local Housing Program. No housing made under an affordable housing scheme is located in Chatswood, the closest in the LGA being at North Willoughby.

Sydney Regional Environmental Plan (SREP) No. 5 – Chatswood Town Centre applies to the development site with the three residential flat towers located in land zoned 5(b). Residential flat development is prohibited in this zone and as such is a form of development not envisaged under the existing planning instruments. The statutory framework is considered in Section 4 of this report.

In relation to section 94 contributions, under Willoughby City Council's contributions plans, these apply to:

- drainage;
- childcare;
- car parking;
- road and traffic/transport management; and
- open space, recreation and community facilities.

During the assessment, the applicant identified that the proposed child care facility would be a private facility for the residents of the CTPP and would not be open to the public.

On 14 July 2004 the Department of Housing wrote to the Director-General regarding provision of affordable housing in the LGA, in particular, the inclusion of affordable housing stock in the CTPP citing the proximity of the development to employment and transport.

6.5.1 Key Issues

Three submissions including one from Willoughby Council and one from the RTA raised the issue of s. 94 contributions. The RTA's submission related to the appropriateness of s. 94 contributions for road and transport infrastructure. Willoughby Council also identified the applicability of affordable housing to the site through its submission.

6.5.2 Consideration and Resolution of Key Issues

The applicant has indicated that, as large scale infrastructure works would be provided in Chatswood, these should be considered in any analysis of the

applicability of contributions. The applicant has also requested that a decision be made regarding the appropriateness of these contributions prior to any Stage 2 DA being lodged.

The Department considers that, as there is no general exemption for affordable housing and s.94 contributions, the Minister is required, under the Act, to consider the principles of these planning matters with respect to the proposed CTPP development.

Notwithstanding this, should the applicant request the Minister to consider the provision of public infrastructure in lieu of these contributions, detailed quantitative information in relation to the provision of transport infrastructure at Chatswood is required and would need to be provided prior to lodgement of any other DA over the CTPP area.

Resolution: This matter would then be addressed through the appropriate Stage 2 DA/s.

7 CONCLUSION

The Minister for Infrastructure and Planning is the consent authority.

The application has been considered with regard to the matters raised in section 79C of the Act.

The application has been notified in accordance with the Regulations. All submissions received in the period prescribed by the Regulations have been considered.

On balance, it is considered that the proposed development is acceptable and should be approved.

8 CONSULTATION WITH APPLICANT – RECOMMENDED CONDITIONS

The applicant was asked to comment on the recommended conditions of consent on 1 October 2004. The applicant responded on 21 October 2004 and to Garden of Remembrance Conditions on 29 October 2004 and further discussions were undertaken. The applicant agreed to the recommended conditions on 1 December 2004.

9 RECOMMENDATION

It is recommended that the Minister for Infrastructure and Planning pursuant to section 80 (1), 80A and 89(2)(b) of the *Environmental Planning & Assessment Act*, 1979 (as amended), and clause 6(2) of Sydney Regional Environmental Plan No. 5 – Chatswood Town Centre:

- (A) grant **consent** to the application subject to conditions (Tagged “**A**”), and
- (B) authorise the Department to carry out post-determination notification.

Prepared by:

Endorsed by

Robert Black
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