

Appendix D

Additional Aboriginal heritage assessment



South West Rail Link



**Addendum:
Technical Paper 6
Preliminary Assessment of Aboriginal
archaeological & cultural heritage values**

Prepared by
Heritage Concepts Pty Ltd

for
Parsons Brinckerhoff (Australia) Limited

20th March 2007

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1.0 Introduction

This document provides an addendum to the *Preliminary Assessment of Aboriginal Archaeological & Cultural Heritage Values* report as prepared by Heritage Concepts Pty Ltd for PB as part of the South West Rail Link (SWRL) Environmental Assessment in November 2006. This addendum has been prepared for the SWRL submissions report. It documents ongoing consultation and work conducted subsequent to the submission of the report for public display and builds on the findings of that report.

The SWRL project is located within the South West Growth Centre. The approach to Aboriginal heritage and archaeological assessment has been in accordance with NSW Growth Centres Commission's (GCC), Precinct Assessment Method for Aboriginal Cultural Heritage in the Sydney Growth Centres. This methodology is supported by the Department of Environment and Conservation (DEC).

The *Preliminary Assessment of Aboriginal Archaeological & Cultural Heritage Values* report prepared for the SWRL EA complies with Step 1 of the Growth Centres Commissions Precinct Assessments Method for Aboriginal Cultural Heritage. For the purpose of this document, the above mentioned report will be referred to as the 'Preliminary Report' and this document as the 'Addendum'.

It is important to note that this addendum does not include a full summary of the Preliminary Report and it should be read in conjunction with the Preliminary Report, which is included as Technical Paper 6 in Volume 3 of the SWRL Concept Plan and Environmental Assessment.

As part of Step 1 of the GCC Protocols for Aboriginal Stakeholder involvement, the methodology required that a workshop be held with members of the registered Aboriginal stakeholder communities, and the proponent, to discuss the 'Step 1' Preliminary Report on its completion. Section 2 of this addendum provides details of this workshop which was held subsequent to the completion of the EA.

Section 3 of this report provides details of an additional preliminary site inspection carried out with representatives of the Northern Illawarra Aboriginal Collective (NIAC).

Section 4 of this report addresses the proposed Stage A works at Glenfield North Junction and Glenfield South Junction. While Section 5 briefly summarises the feedback received from the Aboriginal stakeholder groups to the Step 1 Preliminary Report.

2.0 Aboriginal Stakeholder Focus Meeting

2.1 Introduction

In line with the NSW GCC's, Precinct Assessment Method for Aboriginal Cultural Heritage in the Sydney Growth Centres, a stakeholder workshop or focus meeting was arranged. All registered Aboriginal stakeholders were contacted and invited to attend (refer to Appendix A).

The following Aboriginal stakeholders were in attendance at the meeting, conducted on 13th December 2006:

Glenda Chalker	Cubbitch Barta Native Title Claimants Aboriginal Corporation (CBNTCAC)
Gordon Morton	Darug Aboriginal Cultural Heritage Assessments (DACHA)
Greg Simms	Darug Custodian Aboriginal Corporation (DCAC)
Leanne Watson	Darug Custodian Aboriginal Corporation (DCAC)
Des Dyer	Darug Tribal Aboriginal Corporation (DTAC)
Gordon Workman	Darug Tribal Aboriginal Corporation (DTAC)
Chris Illert	Northern Illawarra Aboriginal Collective (NIAC)
Barbara Keely Simms	Northern Illawarra Aboriginal Collective (NIAC)
Allan Carriage	Northern Illawarra Aboriginal Collective (NIAC)
Yvonne Simms	Northern Illawarra Aboriginal Collective (NIAC).

The Tharawal Local Aboriginal Land Council was also invited, but no representative attended the meeting.

In addition to the above members of the stakeholder communities, the meeting was also attended by the following people:

Gavin Martin	Department of Environment and Conservation (DEC)
Fiona Hamilton	Department of Environment and Conservation (DEC)
Lori Sciusco	Heritage Concepts
Dan Jones	Heritage Concepts
Kathleen Bunting	PB
David Gainsford	Transport & Infrastructure Development Corporation (TIDC)
Sally Nunnerley	Transport & Infrastructure Development Corporation (TIDC).

A presentation was given to the Aboriginal stakeholders which summarised the project to date and provided a forum for stakeholders to give their views.

The presentation covered the following:

- Identification of the study area and the proposed SWRL corridor;
- Summary of the NSW GCC's, Protocol for Aboriginal Stakeholder involvement in the assessment of Aboriginal Cultural Heritage in the Sydney Growth Centres, and the four step approach identified for the Precinct Assessment Method for Aboriginal Cultural Heritage in the Sydney Growth Centres, namely:
 - i. Step 1: Gather & Analyse Existing Information;
 - ii. Step 2: Identify Aboriginal Cultural Heritage Places & Values;
 - iii. Step 3: Develop Land Use & Management Options; and

iv. Step 4: Input into Precinct Planning.

- Outlined the approvals process for the SWRL under Part 3A of the *Environmental Planning and Assessment Act 1979 (EP&A Act)* noting that TIDC is at this stage seeking concept approval only for the SWRL project;
- Discussed the 'concept approval' stage for the SWRL and identified that it aligns with Step 1 of the Precinct Assessment Method;
- Noted that the Precinct Assessment Method and Protocols for Aboriginal Stakeholder Involvement do not over-ride the existing DEC Interim Community Consultation Guidelines (2005) and that the *National Parks & Wildlife Act (1974)* continues to afford protection to Aboriginal sites and places;
- The SWRL project comprises 2 distinct construction stages – A and B:
 - Stage A; includes early works at Glenfield North Junction and Glenfield South Junction (but not including works at Glenfield Station); and the establishment and use of low impact construction worksites outside of the rail corridor at Glenfield Waste Facility and on land known as the James Meehan Estate;
 - Stage B; works comprise everything else proposed as part of the project, as explained the Preliminary Report (Heritage Concepts 2006). Stage B is less well defined and further environmental assessment, including heritage impact assessment is proposed;
- Step 1 of the protocols, gathering and analysing existing information, was summarised in detail;
- The Aboriginal stakeholders for the project were identified as consisting of the following groups
 - Cubbitch Barta Native Title Claimants Aboriginal Corporation (CBNTCAC)
 - Darug Aboriginal Cultural Heritage Assessments (DACHA)
 - Darug Custodian Aboriginal Corporation (DCAC)
 - Darug Tribal Aboriginal Corporation (DTAC)
 - Northern Illawarra Aboriginal Collective (NIAC)
 - Tharawal Local Aboriginal Land Council (TLALC)
- The initial project 'start up' workshop held on the 17th August 2006 to which all identified stakeholders were invited was summarised, including the decision to undertake a site visit;
- SWRL Step 1: Preliminary Values Mapping was explained and identified, including areas of actual or potential significance;
- Previous Aboriginal heritage assessments in and around the SWRL corridor and their results were summarised;
- Management recommendations identified through the Step 1 process and included in the *Preliminary Assessment of Aboriginal Archaeological and Cultural Heritage Values* were noted, including the fact that:
 - i. A referral would be submitted if required for the Commonwealth listed former Ingleburn Military Camp;
 - ii. Any area identified as having archaeological potential would require further investigation;
 - iii. The location of skeletal material would trigger the normal DEC procedure for actual or potential ancestral remains.

- Key tasks of Step 2 of the Protocols were identified and include investigating, assessing and ranking of significance values; stakeholder participation in archaeological survey, historic research and other investigations; the preparation of Stakeholder reports on the social/cultural values of the precinct; stakeholder participation on workshops/meetings to discuss and agree on significance values across the precinct with the consultant; and review of the report for finalisation and progression onto Step 3.
- It was clearly explained that an archaeological survey has not been conducted as part of the Preliminary Report. Completion of a detailed archaeological survey is part of the works associated with Step 2 of the NSW GCC's, Protocol for Aboriginal Stakeholder involvement in the assessment of Aboriginal Cultural Heritage in the Sydney Growth Centres;

2.2 Workshop Outcomes

Following the presentation, a general discussion regarding the project, the assessment methodology and the way forward was held.

The general discussion following the presentation largely centred on the future heritage assessment work associated with the project and the level of Aboriginal stakeholder involvement. The main issues raised concerned the number of sites currently identified within the study area (three) and potential cultural offsets for the destruction of Aboriginal heritage and values across the study area.

The discussion also addressed the access constraints that the existing rail corridor (the site of the Stage A works) posed for a site inspection. . Specifically, OH & S laws require that those visiting the rail corridor would have to have the appropriate Track Safety Awareness training and accreditation. This would mean that general access to this area would be restricted to the existing footbridge and land adjacent to the corridor.

At this point it was also discussed that, whilst the rail corridor presented potential OH & S constraints, the area within the existing corridor had been heavily disturbed through construction, subsequent maintenance and developments to the existing rail line, and that, due to the heavy levels of disturbance in this area, the potential for any extant archaeological and/or cultural material was likely to be low. Furthermore, it was noted that no significant sites or places have been previously recorded in the immediate vicinity of the construction area.

An agreement was reached during the workshop that the consultant would contact each registered stakeholder group to discuss whether they felt that the area of the proposed Stage A works would merit a further site visit. The merits of another site visit were discussed as some stakeholders had not attended the initial preliminary site visit.

All the registered Aboriginal stakeholders present stated that they would be interested in continued involvement in subsequent steps in the development of the SWRL project as per the GCC Precinct Assessment Methods and Protocols.

3.0 Additional Preliminary Site Visit

3.1 Introduction

Following the workshop, members of NIAC and its constituent groups were invited to attend a second preliminary site visit. The purpose of this site visit was to afford NIAC the opportunity to view the landscape and landforms across which the SWRL corridor would cross, and to identify any areas that may have cultural significance.

It was made clear that these preliminary site visits were not part of a full archaeological survey of the SWRL corridor. Full archaeological survey work will be conducted at subsequent steps in the development process and in line with the Precinct Assessment Method for Aboriginal Cultural Heritage in the Sydney Growth Centres.

3.2 Attendees

The site walkover, on Tuesday 30 January 2007, was attended by the following members of Heritage Concepts and NIAC:

Aboriginal Stakeholders:

- Jacob Kitchener of Korewal La Perouse Botany Bay Aboriginal Corp*;
- Yvonne Simms of Korewal La Perouse Botany Bay Aboriginal Corporation*;
- Allan Carriage of Wadi Wadi Coomaditchie Aboriginal Group*;

Others

- Jakub Czastka of Heritage Concepts Pty Ltd;
- Dan Jones of Heritage Concepts Pty Ltd; and
- *Daniela Reverbri as Technical Officer for NIAC.

*Constituent Members of NIAC.

The site visit itinerary was consistent with previous site inspections made with the other Aboriginal stakeholders. As had occurred at the time of the previous preliminary site visit, there were a number of properties that could not be accessed as land owners had not granted access permission.

3.3 Outcomes

The stakeholders left with a clear understanding of the proposed SWRL route and the landforms it would cross, in addition to the potential impact.

The site inspection revisited two previously recorded sites that had been identified during the initial preliminary site visit (refer to section 6.3 of the Preliminary Report). These sites were recorded and site cards have been lodged in accordance with DEC requirements.

The main issues raised by the stakeholder representatives in attendance were as follows:

- Particular attention should be paid to creeklines and associated floodplains and/or terraces during future studies;
- The possibility of burials along the proposed route was noted and the fact that these should to be dealt with in a sensitive manner was identified;
- All stakeholders would like to be part of any future studies; and
- Any sensitive sites or areas identified would potentially need to be visited by Elders from the respective communities and this would need to be facilitated appropriately.

The issues raised and outlined above are consistent with the findings of the Preliminary Report (refer to Section 8.2 of the Preliminary Report). Also, consistent with the Preliminary Report and the Precinct Assessment Methodology, further consultation and field investigations will need to be conducted. Should the need arise, appropriate arrangements may need to be made

to facilitate access for Elders from the relevant registered stakeholder communities should they require access to specific locations along the SWRL corridor in the future. All the issues will be constantly assessed for their relevance as the project progresses.

4.0 Assessment of Stage A Issues

The Stage A works include early works at Glenfield North Junction and Glenfield South Junction (but not including works at Glenfield Station), and the establishment and use of construction worksites at Glenfield and on land known as the James Meehan Estate. The Stage A works would be complicated and lengthy to construct as they are largely located within an existing rail corridor. For this reason, TIDC has conducted more advanced design work on this stage of the project and wishes to carry out this work early in the project timeline.

This stage of the project is well defined and is considered likely to have a low risk of significant environmental impacts.

Following the Aboriginal stakeholder focus meeting (see Section 2), Heritage Concepts made contact with all registered Aboriginal stakeholder groups to discuss whether they felt there was a need to conduct further site visits to the area of impact of the Stage A works.

In telephone conversations on the 19th January 2007, representatives of DACHA, DTAC and NIAC requested that they be sent some written details of the proposed Glenfield Stage A works for discussion within their communities. CBNTCAC and DCAC stated that they felt there was no real need to visit the area of impact, nor any real benefit to be gained from such a visit. TLALC were contacted and a message was left detailing the issue but no return contact was received.

After review, a letter was sent to each registered stakeholder group on 22nd February 2007, outlining all details of the proposed Glenfield Stage A works (see Appendix A). The letter included photocopies of plans for the construction footprint of the proposed Stage A works. This letter was then followed up with a telephone call to ensure the details had been received. In telephone conversations CBNTCAC, DACHA, DCAC, DTAC and NIAC saw no benefit in conducting an additional site visit over the area of impact for the proposed Glenfield Stage A and agreed to forward written statements to identify this fact.

TLALC were asked for comment but have not responded at this time.

The responses received to date are provided in Appendix C.

5.0 Feedback in Response to the Preliminary Assessment

Appendix C of this Addendum includes Aboriginal stakeholder consultation feedback in response to the preliminary assessment.

In general, the Aboriginal stakeholders that responded were satisfied with the level of detail and recommendations presented in the preliminary assessment. Responses have been received from five of the six identified Aboriginal stakeholder groups to date.

The overwhelming response was the recognition that the preliminary assessment was only the first step in the four step approach of the Precinct Assessment Method for Aboriginal Cultural Heritage in the Sydney Growth Centres. All stakeholders that provided a response have expressed an interest in being involved in the subsequent steps.

Where concerns were raised that related to the preliminary assessment and the GCC Protocols, these concerned a possible scarred tree and burial site. Issues of ground surface visibility and greater access to the proposed study area were also raised. These issues can be and will be assessed further and addressed in the subsequent steps of the GCC Protocols.

6.0 Conclusions

Following a process of consultation with all registered Aboriginal stakeholder groups, through which process each group received a copy of the *Preliminary Assessment of Aboriginal Archaeological and Cultural Heritage Values*, a copy of the full Environmental Assessment on CD Rom, and participated in a preliminary site visit, the recommendations as made in the initial report are supported by the community.

These recommendations can briefly be summarised as such:

- When more firm design plans are agreed upon, particular attention should be paid to areas where the proposed SWRL corridor crosses creeklines, their associated floodplains and/or terraces;
- Any possible burials in the above mentioned landforms should be dealt with sensitively within normal Department of Environment and Conservation procedures
- Further heritage assessment would be required as construction design plans are consolidated;
- Any area identified as having archaeological potential would require further investigation; and
- All registered Aboriginal stakeholder groups have expressed an interest in being involved in any subsequent cultural heritage assessment across the route.

The responses received from the Aboriginal stakeholder groups to date in relation to the proposed works of Glenfield Stage A indicate that they are satisfied for work to progress in areas of heavy disturbance within the existing rail corridor. These areas were previously assessed as having low archaeological potential due to the level of past disturbance associated with the rail corridor (refer to 6.1).

In addition, the following action is recommended:

- An Aboriginal cultural heritage management plan should be developed as part of the Construction Environmental Management Plan as it relates to the proposed Stage A works. This Plan should be prepared in consultation with the identified Aboriginal stakeholder groups and should include a protocol for 'chance finds' of both Aboriginal and historical artefacts/relics.

Full details of management recommendations and mitigation strategies are included in the *Preliminary Assessment of Aboriginal Archaeological and Cultural Heritage Values* (Technical Paper 6 in Volume 2 of the SWRL Concept Plan and Environmental Assessment).

Appendices

Appendix A: An Example of a letter of Invitation for the Aboriginal Stakeholder Focus Meeting.

6th December 2006

Attn: xxxxxxxxxxx
Organization: xxxxxxxxxxx
Address: xxxxxxxxxxx

Dear xxxxxxxxxxx

RE: SWRL: Step 1 Review Workshop.

This letter is to confirm your attendance at the South West Rail Link (SWRL) Project Aboriginal Cultural Heritage Assessment Step 1: Review Workshop on Wednesday 13 December 2006. The workshop is being conducted by Heritage Concepts on behalf of Transport Infrastructure Development Corporation, the NSW Government agency responsible for the SWRL project.

The SWRL Environmental Assessment (EA) is currently on public exhibition until February 2007 and includes a Preliminary Assessment of Aboriginal Archaeological and Cultural Heritage Values. This assessment was undertaken in accordance with the Growth Centres Commission's (GCC) *Precinct Assessment Method for Aboriginal Cultural Heritage in the Sydney Growth Centres* (Precinct Assessment Method), and *Protocol for Aboriginal Stakeholder Involvement in the Assessment of Aboriginal Heritage in the Sydney Growth Centres* (Protocol); and as directed by the GCC and Department of Environment and Conservation (DEC) was completed up to Step 1.

The purpose of the workshop is to ensure that the Preliminary assessment undertaken has been discussed with registered Aboriginal stakeholders and strategies for future investigations and moving forward can be developed. The enclosed information package includes details of the workshop to be conducted at the Parsons Brinckerhoff offices, an agenda (including list of workshop invitees), travel details, venue location, a mock invoice and a map.

It is requested that attendance at the workshop be limited to no more than 2 people from each registered Aboriginal stakeholder group. This is due to the limited space and is consistent with the Protocol and Part C, DEC Interim Community Consultation Requirements.

TIDC will pay travel costs and reasonable expenses associated with attendance of stakeholders attending the meeting but, in line with Part B: 2, DEC Interim Community Consultation Requirements, won't remunerate for peoples time at the meetings. Travel expenses and other reasonable costs will need to be invoiced to TIDC (for the attention of David Gainsford).

If you have any further queries or questions regarding the workshop or issues relating to SWRL, please don't hesitate to call or contact our offices.

Regards,

Dan Jones
Archaeologist
Heritage Concepts Pty Ltd

Appendix B: An example of the letter to the registered Aboriginal stakeholder groups outlining the proposed Glenfield Stage A works.

22nd February 2007

Dear, xxxxxxxxxxxx

RE: South West Rail Link Glenfield Junction Stage A works.

As discussed in my telephone conversation with xxxxxxxx (19th January 2007), please find enclosed some details of the proposed Glenfield Junction Stage A works, which comprises part of the South West Rail Link (SWRL) project.

Subsequent to our previous site visit with you, TIDC made the decision to split the SWRL project into two stages. The Stage A works include early works at Glenfield North Junction and Glenfield South Junction (but not including works at Glenfield Station); and establishment and use of construction worksites at Glenfield and on land known as the James Meehan Estate. The Stage A works would be complicated and lengthy to construct as they are largely located within an existing rail corridor. For this reason, TIDC has done more design work on this Stage of the project (see attached) and wishes to construct this work early in the project construction.

This stage of the project is well defined and is considered likely to have a low risk of significant environmental impacts. TIDC proposes to construct the Stage A works without carrying out further heritage impact assessment. For this reason, we are contacting you now to seek your comment on the Stage A works.

The Stage B works comprise everything else proposed as part of the project, as explained in our previous consultations with you. Stage B is less well defined and further environmental assessment, including heritage impact assessment is proposed.

As discussed in our previous telephone conversation and at the workshop of 13th December 2006, access to the live rail corridor (the site of the Stage A works) for a site visit is problematic for safety reasons. Specifically, those visiting the rail corridor would have to have the appropriate Track Safety Awareness training and accreditation. Any general access would be restricted to the footbridge and land adjacent to the corridor.

However, as discussed in the workshop, the proposed Glenfield Stage A construction would take place mainly within the existing rail corridor (see enclosed plans) and would have minimal impact outside of that corridor.

The area within the existing corridor has been heavily disturbed through construction, subsequent maintenance and developments to the rail line. Due to the heavy levels of disturbance to the area of impact, the potential for any extant archaeological and/or cultural material is likely to be low. Furthermore, no significant sites or places have been previously recorded in the immediate vicinity of the construction area.

Bearing in mind the level of disturbance to the area, the narrow construction 'footprint' for this stage of the works, the difficulties and dangers of surveying a live rail line, the fact that the environmental impact would be managed in the Statement of Commitments and Construction Environmental Management Plan, and tentative discussions with your group, TIDC do not intend to conduct further site inspections prior to the commencement of the Glenfield Stage A works.

Addendum to *South West Rail Link - Preliminary Assessment of Aboriginal Archaeological & Cultural Heritage Values November 2006*

Please contact us if you have any questions or issues regarding this matter. Furthermore, please let us know your thoughts on this matter in writing by 16th March 2007.

Thanks in advance for your help in this matter.

Regards,

Dan Jones
Archaeologist
Heritage Concepts Pty Ltd

Appendix C: Aboriginal Stakeholder Consultation Feedback
Correspondence received in response to the Preliminary Report

Cubbitch Barta Native Title Claimants
Aboriginal Corporation
55 Nightingale Road,
PHEASANTS NEST, N.S.W. 2574
7th December, 2006

Mr. Dan Jones,
Heritage Concepts Pty Ltd.
Level 1 55 Lower Fort Street,
SYDNEY, N.S.W. 2040.

Dear Dan,

RE: SOUTH WEST RAIL LINK

I would like to take this opportunity of commenting on the draft report for the above proposed project.

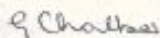
In regards to the possible scarred tree recorded as SWST1, this is not an Aboriginal scarred tree, which I have only seen in this report, not in the field, it is not consistent with the real scarred trees. There are many previously recorded sites on or near the proposed rail line, and there were others that were recorded on the very brief inspection by Heritage Concepts with members of the community in September, 2006.

In regards to the mention of a burial by others, there is not enough information I believe to say that any burial is within the study area, at this point in time.

Until there is proper access to the properties along the route, no proper assessment of the study area, can be undertaken. On the inspection day, there were but a few little insights into only a small number of properties.

I cannot give a proper significance assessment until the whole of the proposed route is accessible. Having participated in previous assessments in the area, I have a good general knowledge of the area.

Yours faithfully,



Glenda Chalker
Hon. Chairperson.

Darug Aboriginal Cultural Heritage Assessments

28 Calala Street, Mt Druitt 2770
ABN 51734106483

Gordon Morton
Ph: 9625 0005
Fax: 45 677421

Celestine Everingham
Ph/Fax: 4567 7421
Mob: 0432 528 896

Attention

8.12.06

Dan Jones
Heritage Concepts Pty Ltd.
re South West Rail Link Environmental Assessment -
Technical Paper 6.

DACHA support your recommendations in the draft report, keeping in mind that the SWRL design has only been developed to a concept level. Prior to any works commencing, investigations should be considered for any area identified as having archaeological potential. Because of poor ground surface visibility across the entire study area, the presence of newly recorded sites may indicate that more Aboriginal cultural remains exist. DACHA has appreciated the meetings and workshops you have conducted, as they have been informative and given us a clearer picture of the project.

Yours sincerely,
Celestine Everingham

Cultural Heritage - Building respect for the past and Conservation for the future

RECEIVED
22 JAN 2007

DARUG CUSTODIAN ABORIGINAL CORPORATION BY:.....

PO BOX 81 WINDSOR 2756
PH: 45775181 FAX: 45775098 MOB: 0415770163
ABN: 81935722930

SUBJECT: Draft Report South West Rail Link Environmental Assessment.


To Whom It May Concern:

The Darug Custodian Aboriginal Corporation have read over the draft report prepared by Heritage Concepts and would like to take the opportunity to say that this report has been very well written.

We are especially pleased with the way that the Aboriginal history has been explained in this report and also very pleased with the explanation of the groups and the connections, it is great to see Darug in a report as many consultants do not put the groups into reports.

Well done and Thankyou.

Leanne Watson


Chairperson

DARUG TRIBAL ABORIGINAL CORPORATION

(Incorporating Darug Link Associating Inc.)

P.O BOX 441

BLACKTOWN NSW 2148

ABN: 77 184 151 969

Dan Jones
Archaeologist
Heritage Concepts
P O Box 1075
Leichhardt
NSW 2040

Re: SWRL Project.

The Darug Tribal Aboriginal Corporation has read the report and we agree in part to the precinct assessment method and protocols we feel there is still a need to workout other strategies before development starts.

The Darug Tribal Aboriginal Corporation would like to take part in any assessment and management plain.

Respectfully yours,

Des Dyer
Secretary Darug Tribal Aboriginal Corporation

South West Rail Link – NIAC Aboriginal cultural heritage feedback

N.I.A.C. ABN 80475697297

Northern Illawarra Aboriginal Collective Inc.
representing Wulungulu, Gundungara, Wadi-Wadi and Korewal traditional owner groups

2/3 Birch Crescent, East Corrimal, NSW 2518. ph/fax (02) 42833009

South West Rail Link
- Aboriginal cultural heritage feedback -



by Yvonne Simms, Jacob Kitchener & Allan Carriage

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1

FIELDWORK

On Tuesday 15 January 2007 a field investigation of the proposed *South West Rail Link* was undertaken by Aboriginal traditional-owner representatives Yvonne Simms, Jacob Kitchener, and Allan Carriage, assisted by Daniela Reverberi of NIAC, along with Dan Jones and Chaz of *Heritage Concept Pty Ltd*. A total of five inspection stops were made, along the proposed route, with approximately 30–40 minutes spent at each location.

Stop 1 was near the proposed Edmonson Park Railway Station off Campbelltown Road (33° 57' 47.7" S, 150° 50' 46.5" E + 4m). Access was through a locked gate accompanied by a TIDC executive. This spot, in the proximity of Holsworthy Military Camp, was a training area which may still have unexploded devices, yet to be disabled and removed. For safety we stayed on the road.



Figure 1: Facing SSE near proposed Edmonson Railway Station

Figure 1 shows the area, which is grass land with patches of open woodland and forest. The proposed rail link is to cut across this area.

Stop 2 was at the proposed Edmonson Park Railway Station (33° 58' 10.4" S, 150° 51' 27.5" E + 4m). We stopped briefly at this spot, shown in Figure 2.



Figure 2: Proposed site of Edmonson Park Railway Station, facing roughly south.

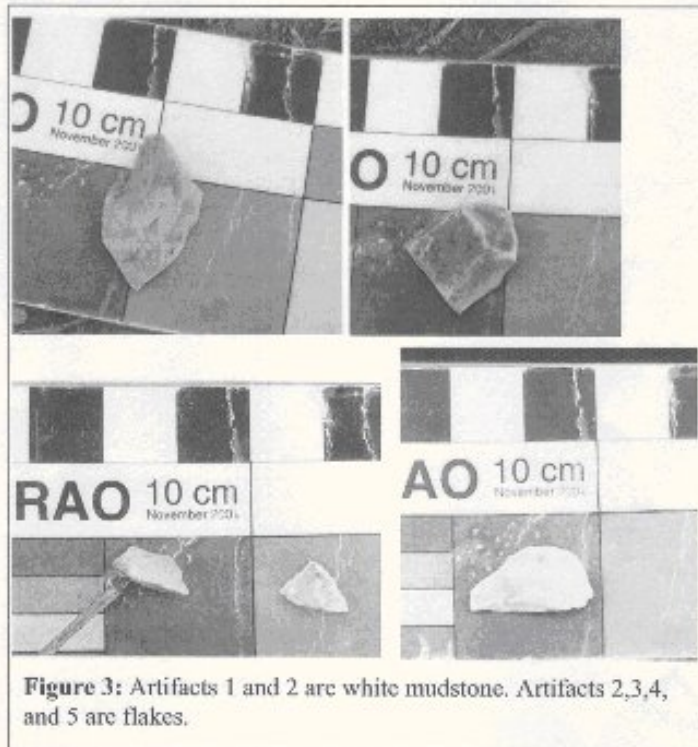
Stop 3 was at the Holsworthy Military Camp housing area. The proposed rail link will pass through this area, which is also designated for future public use as a housing development.

Stop 4 was near proposed Leppington Railway Station, at a private property designated for compulsory acquisition. Out of respect for the owners Josephine and her husband, who very kindly allowed us access, we did not take pictures. This Italian couple raised five children at this home and had dreamed of also building homes for their children on this property so that the family and grandchildren could stay together. This family and others in the area will have to vacate their homes to make way for the proposed rail link and housing development. For one elderly resident,

living opposite this homestead, this may will be his second compulsory acquisition and forced relocation.

A **previously unknown scarred tree** was found, at the site near the proposed Leppington Railway Station, that should now be listed on the AHIMS database. The elders did not inspect the site intensely, but feel that this spot has special significance needing further investigation if the proposed railway link proceeds.

Stop 5 was at the Macquarie Links Estate (33° 58' 30.1" S, 150° 52' 23.0" E ± 4 m). We inspected the highest point on the site. Even though only making a quick inspection, we found 5 flake artifacts within a 15 metre radius (shown in Figure 3, below) – a **previously unknown site** that should now be listed on the AHIMS database.



RELEVANT ABORIGINAL HISTORY & CONNECTION

Queen Emma, born at Liverpool in 1840, was described in the early 1900's as *"the last Dharug Princess"*. And the Georges River, past Campbelltown and Liverpool, is believed to have roughly been the route taken by Queen Emma in 1890 when she walked *"the littlest Gundungaras"* - the last children still living a traditional lifestyle in accordance with Midthung Law and Custom - off the Wara-N'hayara Plateau to the safety of La Perouse.

Ellen Anderson's version of the stories told during this *"Great Walk"*, recorded by C.W. Peck at the Peakhurst Salt Pan Aboriginal settlement in the 1920's, relate in many instances to plants and animals unique to this region – plants whose cultural and medicinal value was being explained to the Gundungara children by Queen Emma as they walked along, albeit pursued by Dhuligayal "Banksia-Men" that hurried dawdling toddlers along on their onerous journey.

Along the way they may have rested for a while with the Everitt family who had 40 acres within the thirteen homestead "Cobrakall" settlement that was founded in 1884, between Georges River and Punchbowl Creek, only to be compulsorily acquired for the Holsworthy Military Reserve in 1913, the ruins of which were rediscovered in 1983 by the Sydney Prehistory Group. It is recorded that the Everitt children *"used to ride, three to a horse, to school in Campbelltown, via the Woolwash and up the old cattle track just to the south-west of the present road. When George Everitt died, the family stayed on for several years before leaving the district"*.

In December 1900 Mary Everitt published an account of Gundungara Aboriginal language in the *Journal and Proceedings of the Royal Society of NSW*. This fine account of Gundungara language, was obtained *"from Bessy Simms alone"*, one of the children from the 1890 Great Walk, who gave a series of language lessons to Mary Everitt at La Perouse.

Albert "Harry" Etchells, who was born in Appin on 14th April 1862, was the third settler at "Cobrakall", east of the river, on the Old Coach Road which went on for about five miles before turning into a bridle track through Darkes Forest and on to Bulli. Harry and his elder brother Frank made rum that they sold to thirsty Bulli miners. Some time prior to WW1 a young C.W. Peck (Ellen Anderson's biographer), who was born and raised at Bulli, set out with "Harry" from *"a real old fashioned farm ... at Macquarie Fields"* on a cross-country shandradan buggy journey *"all the way to Colong [in the Upper Wollondilly River Valley], and perhaps the Kowmung and Millnigang ... and Bullnigang"* – evidently attempting to retrace the epic 1901 expedition of Mary Everitt and her young niece who, together, successfully descended 2000 foot cliffs into an icy Burrogorang Valley, traversing 15 foot snow-drifts during the coldest winter in recorded history, riding on top of a frozen Wollondilly River, on two massive powerful draft horses, in order to meet Gundungara people at their Nulla Nulla camp and record their traditional songs. By comparison, Peck and Etchells were clowns, their buggy fell apart and they got into all sorts of difficulties, saved only by fine weather and other people.

The proposed rail corridor thus commences near the Georges River - of *"the Great Walk"* oral traditions involving Liverpool's *"last D'harug Princess"* - not far from the forgotten "Cobrakall" township in the Holsworthy Military Reserve, which may

have played an important role in post-contact Aboriginal history. In any event Ellen Anderson's (1925) story of "the first *Gymea* or *Gigantic Lilly*", the subject of a civic mural in the old entrance to Campbelltown hospital thirty years ago, is perhaps the only documented provable traditional story of country, specifically "from the *Glenfield-Minto area*", clearly telling of the traditional tribal boundary between Botany Bay Turrulwal and Wara-N'hayaran Plateau Gundungara peoples. Thus the Gundungara and Thurrawal Local Aboriginal Land Councils need to swap their names.

A number of flora and fauna species mentioned in the Ellen Anderson stories, hence clearly of traditional cultural significance to Aboriginal people, are unique-to or characteristic-of *Upper Georges River Sandstone Woodland* (which itself is unique on the planet) or *Cumberland Plain Woodland* and *Shale Sandstone Transition Forest* - both of which are **Endangered Ecological Communities** protected by the *NSW Threatened Species Conservation Act 1995* (TSC Act) and by the *Commonwealth Environment Protection & Biodiversity Conservation Act 1999* (EPBC Act).

Some of these culturally significant species and ecological communities, protected under both state and federal laws, are likely to occur along the proposed rail corridor and associated Edmonson Park subdivision – for example along Cabramatta Creek. Our elders are concerned that they have not been provided with relevant flora and fauna studies as part of this Aboriginal cultural heritage assessment. To date they have only been involved in brief and clearly inadequate archaeological studies.

CONCLUSION

The relative ease with which NIAC elders during a "quick" survey found a previously unknown scarred tree and an archaeological site, respectively at different locations, both immediately worthy of AHIMS database listing, demonstrates that:

- 1) the whole railway corridor is probably of similar archaeological significance,
- 2) the archaeological studies done to date have been grossly inadequate, and
- 3) there is an urgent need for further more detailed inspection by NIAC's highly skilled Aboriginal elders, along the whole length of corridor, to gather realistic baseline data.

It is not the Aboriginal community's fault that the NSW state government wants to extinguish native title "in bulk", in a brief timescale, entirely without compensation to the Aboriginal traditional owners, throughout south western Sydney – bypassing all the usual environmental and heritage checks and balances in the EPA Act. The Aboriginal communities represented by NIAC ask the state government to properly do, and properly fund, all the assessments which happen to be required by this new "accelerated south western growth centres" system.

Underprivileged and disadvantaged Aboriginal communities should not be expected to subsidize the imposed short timescales, and bulk extinguishments without compensation, caused by the state government's own lack of forward planning. Make some serious resources available for proper cultural heritage assessments so that our elders can meaningfully contribute and participate. The budget available to us so far is grossly inadequate.

Responses to Glenfield Stage A.

Darug Aboriginal Cultural Heritage Assessments

28 Calala Street, Mt Druitt 2770
ABN 51734106483

Gordon Morton
Ph: 9625 0005
Fax: 45 677421

Celestine Everingham
Ph/Fax: 4567 7421
Mob: 0432 528 896

Attention

4.3.07

Dan Jones
Heritage Concepts

re South West Rail Link - Glenfield Junction,
Stage A works

As Stage A works are within the existing
rail corridor and has been heavily disturbed
through construction & maintenance DACHA
do not wish to be involved at this
stage, however, as Stage B is less
well defined - we wish to be involved
in all stages of the planning and
Heritage Assessments.

Yours Sincerely,
C. Everingham,
Senior Site Officer

Cultural Heritage- Building respect for the past and Conservation for the future.

DARUG CUSTODIAN ABORIGINAL
CORPORATION

PO BOX 81 WINDSOR 2751
PH: 45775181 FAX: 45775098 MOB: 0115770163
ABN: 81935722930

5th March 2007.

Attention: Dan Jones.

SUBJECT: South West Rail Link Glenfield Junction Stage A Works.

Dear Dan,

The Darug Custodian Aboriginal Corporation have looked over the details of the proposed Glenfield Junction stage A works as part of the South West Rail Link (SWRL).

Due to the works being carried out in a already disturbed area, mainly within the existing rail corridor, our organisation have no concerns regarding the proposed works in this section.

Leanne Watson


Chairperson

5th March
2007

To Dan Jones
from NIAC

- re SWRL Glenfield Junction
Stage A works —

Dear Dan,
re your letter of 22nd Feb,
the Elders agree that for OHS reasons
they don't want to work on a live
railway corridor (albeit less than a km long).
But they do want to look at the rest.

Best regards

Chris Illert *C. R. Illert*



March 27th 2007

Chris Illert
Northern Illawarra Aboriginal Collective,
2/3 Birch Crescent
East Corrimal
NSW 2518

Dear Chris:

cc: Lou Ewins & Gavin Martin (Department of Environment & Conservation), Barbara Keely Simms & Yvonne Simms

RE: South West Rail Link (SWRL): Step 1 Preliminary Site Visit.

I am writing to thank you for the report *South West Rail Link - Aboriginal cultural heritage feedback*, by Yvonne Simms, Jacob Kitchener & Allan Carriage, which we received by e-mail on 15th February 2007.

I would like to bring your attention to a couple of points for the sake of clarity.

The 'TIDC Executive' you mention was in fact David Schofield, Development Manager with Landcom, who are the owners of a parcel of land that is impacted by approximately 3 kilometres of the SWRL corridor.

I would also like to take this opportunity to respond to a number of points raised within the above mentioned report.

In paragraph 8 of the section entitled "*Relevant Aboriginal History and Connection*", your report mentions that your Elders have not seen 'relevant flora and fauna studies as part of this Aboriginal cultural heritage assessment'.

Whilst our report does briefly discuss this issue, it is outside the scope of this study to comprehensively deal with the flora and fauna encountered along the proposed SWRL corridor, as our client has engaged separate consultants whose area of expertise is in the field of biodiversity.

I draw your attention to Chapter 14 of the SWRL Concept Plan and Environmental Assessment (Volume 1) and Technical Paper 3 in Volume 2, which deal with the biodiversity issues likely to be encountered along the proposed SWRL corridor. Copies of this Environmental Assessment were on display at the meeting NIAC representatives attended on 13th December 2006, and a CD Rom copy was forwarded to your address on 20th December 2006. For a comprehensive discussion of the flora and fauna issues I refer you to these documents.

Also in paragraph 8, and in your conclusion, you mention that your Elders have been involved in 'inadequate archaeological studies'. I would like to reiterate the point that we have made consistently throughout the consultation process for the proposed SWRL project — that the scope of the assessment to date is not intended to include a comprehensive archaeological survey at this early stage. The proposed SWRL project is, as you know, at concept approval stage and as such, matters of Aboriginal cultural heritage are being assessed in accordance with Step 1 of the NSW Growth Centres Commission's Precinct Assessment Method for Aboriginal Cultural Heritage in the Sydney Growth Centres (Precinct Assessment Method) as endorsed by DEC and in line with the Director General's requirements. The main aim of step 1 of this process, as outlined in Section 1.5 of the '*Preliminary Assessment of Aboriginal Archaeological and Cultural Heritage Values*' report sent to NIAC on 31st October 2006, is to 'Gather and Analyse Existing Information'.

The Precinct Assessment Method does not require a site visit at this early stage. However, our client agreed to conduct a preliminary site visit to give the registered Aboriginal stakeholder communities the opportunity to identify any areas that may be of cultural sensitivity and to better visualise the landscape.

These preliminary site visits were in no way intended to constitute a comprehensive archaeological survey of the proposed SWRL corridor. Further archaeological survey work is required in subsequent steps within the framework of the Precinct Assessment Method and the proponent will continue to follow those steps in line with the requirements of the Department of Environment and Conservation and the NSW Growth Centres Commission.

Furthermore, I refer you to Sections 5 and 8 of our report which identify that there are gaps in the present archaeological knowledge along the proposed SWRL corridor and that comprehensive archaeological survey should be conducted as the development process for this project progresses.

If you have any further queries or questions regarding the workshop or issues relating to the SWRL project, please don't hesitate to call or contact our offices.

Regards,

Dan Jones
Archaeologist
Heritage Concepts Pty Ltd

Appendix E

Additional traffic, transport, parking
and access assessment

South West Rail Link Submissions Report - Additional Traffic and Transport Assessment

May 2007

Transport Infrastructure Development
Corporation



Parsons Brinckerhoff Australia Pty Limited ABN 80 078 004 798

*Ernst & Young Centre,
Level 27, 680 George Street
Sydney NSW 2000
GPO Box 5394
Sydney NSW 2001
Australia
Telephone +61 2 9272 5100
Facsimile +61 2 9272 5101
Email sydney@pb.com.au*

NCSI Certified Quality System ISO 9001


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Author: Joel Carson, Sam Black.....

Reviewer: Sam Black.....

Approved by: Kathleen Bunting.....

Signed: .....

Date: 3 May 2007

Distribution: TIDC.....

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1. Introduction

Parsons Brinckerhoff Australia (PB) completed the *South West Rail Link Concept Plan and Environmental Assessment* in November 2006 on behalf of the Transport Infrastructure Development Corporation (TIDC). A component of this work was PB's *Technical Paper 1 – Traffic, transport, parking and access* (in Volume 2), which provided a traffic, transport, parking and access assessment of the proposed South West Rail Link (SWRL) Concept Plan.

At the request of TIDC, PB has undertaken an additional traffic and transport assessment to be incorporated into the Submissions Report for the SWRL project. This additional assessment reviews aspects of the SWRL Concept Plan that have been changed or revised since the previous assessment. Specifically, this additional assessment focuses on the traffic and transport impacts resulting from changes and revisions to the following aspects proposed in the SWRL Concept Plan:

- an additional off-street commuter car park planned for the western side of Glenfield Station
- revisions to the existing on-street car parking area on the western side of Glenfield Station
- changes to the construction staging of the Glenfield North Junction works and new information on construction traffic flows

2. Commuter car parking at Glenfield Station west side

2.1 Proposed new commuter car park

TIDC proposes to construct a new commuter car park on the western side of Glenfield Station adjacent to the existing RailCorp commuter parking area on the station access road to provide additional parking in the short term. The proposed car park was not included in the SWRL Concept Plan and Environmental Assessment, but was identified as a possible future car park. The proposed commuter car park is located on RailCorp land and could provide up to 280 off-street car spaces. These additional spaces would be provided in the short term, with medium to long-term commuter car parking being resolved as part of subsequent project development and assessment. Additional car parking is proposed at Glenfield Station to offset losses when the SWRL Stage B is built and to accommodate anticipated increases in parking demand. The additional parking at Glenfield forms a component of the NSW State Government's *Urban Transport Statement* (November 2006), which has identified a need for development and parking improvements at Glenfield to accommodate high transport demand existing at the Station.

2.2 Proposed revisions to existing commuter car park

The existing commuter car parking area located on the station access road on the western side of Glenfield Station currently provides 219 on-street car spaces. This car parking area is planned to be upgraded. The upgrade would result in up to 15 additional on-street car spaces. This parking area is located on RailCorp land.

2.3 Summary of increased parking supply

The provision of commuter car parking at the western side of Glenfield Station would grow from the existing provision of 219 on-street spaces to 514 car spaces, with the proposed additional off-street car park and revisions to the existing parking regime. Figure 2-1 presents the location of the proposals.

The new parking arrangement is intended to (as a minimum) replace the existing 120 car parking spaces lost on the other side (eastern side) of Glenfield Station as a result of the SWRL works, and provide an additional 175 spaces to accommodate anticipated demand in the short term. The additional commuter car parking area would be constructed as part of the SWRL Stage A early works prior to the commencement of construction of the SWRL Stage B works (which include the Glenfield Station upgrade and permanent loss of the 120 spaces).

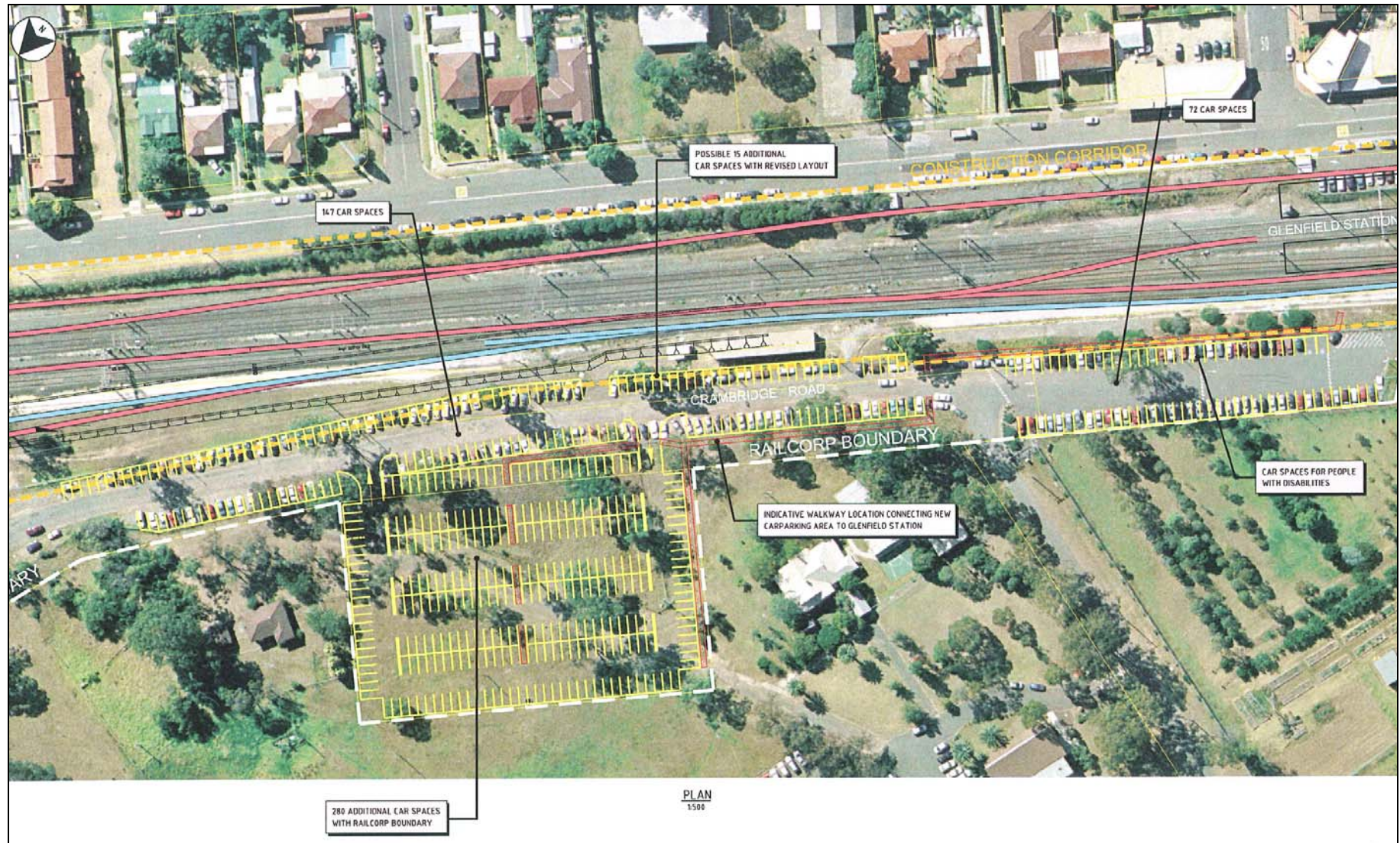


Figure 2-1: Planned commuter car park arrangement on west side of Glenfield Station (Source: Connell Wagner/TIDC, 1 March 2007)

2.4 Impacts of increased parking provision

PB has undertaken an assessment of the likely impacts on the surrounding local road network as a result of the increased parking provision described above.

2.4.1 Access and circulation

The existing commuter car park area on the western side of Glenfield Station is accessed from the Glenfield Road intersection roundabout. This is the only access point to and from the western car park. The locality plan in Figure 2-2 presents the location of the western side car parking area in relation to the surrounding road network.

The proposed new off-street car park contains one entry point and one exit point for vehicles. This is a suitable design as it would facilitate efficient traffic circulation by separating the movement of entering and exiting vehicles and minimising conflicts. No traffic signals or other traffic control devices would be required for the new car park.

The existing car parking area and station access road is likely to experience an increase in traffic levels due to the introduction of the additional car parking spaces. Because of this, there may be the need to include a turning circle at the southern end of the station access road in the revised designs for the existing car parking area so as to maintain an efficient traffic flow to and from the station and minimise traffic disruption. A turning circle would facilitate the circulation of vehicles looking for parking spaces along the station access road.

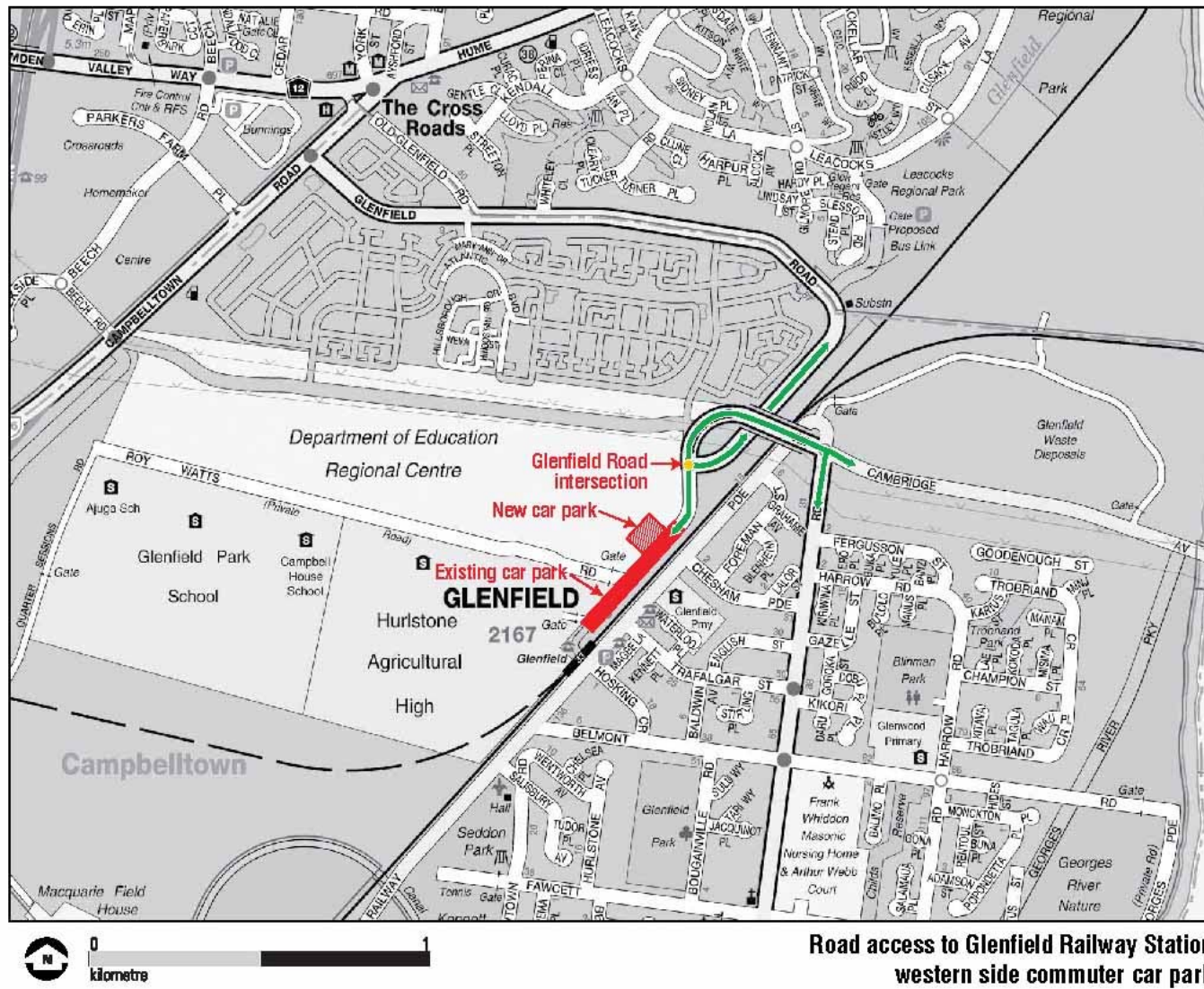


Figure 2-2: Locality plan presenting road access to Glenfield Station west side car park

2.4.2 Traffic generation

Previous investigations have indicated there is a high demand for car parking at the Station. The existing commuter car parking area on the western side is fully utilised and cars park in alternative spaces such as the road shoulder. The analysis indicated that the large majority of cars parked at Glenfield Station are registered in the surrounding local districts (with approximately 65% originating from the western side of the rail line), indicating that most of these users are commuters who make park-and-ride trips.

For the purposes of this analysis, it is assumed that the current car parking arrangement on the western side of Glenfield Station (219 spaces) is fully utilised and that the additional provision of car parking (295 additional spaces) would also be fully utilised. It is highly likely that the large majority of users of the new western side car park would continue to be commuters, meaning that car parking spaces would be used only once during the day and the majority of traffic and parking activity associated with the western side car park would occur during the morning and afternoon peak periods.

As a worst-case scenario, it is assumed that the majority of parking activity would occur within a 1-hour period in each of the morning and afternoon peaks. In this scenario, the likely level of traffic that would be generated on the western side by the commuter car parking area in the existing situation (219 spaces) during each of the morning and afternoon peaks would be 219 vehicles/hour over the peak 1 hour. In the scenario incorporating the proposed additions to car parking (514 spaces in total) on the western side of Glenfield Station, during each of the morning and afternoon peaks the western side commuter car park would generate 514 vehicles/hour over the peak 1 hour. In the worst case scenario, 295 additional vehicles per hour would be generated by the additional 295 car parking spaces on the western side of Glenfield Station in each of the morning and afternoon peaks.

The Glenfield Road intersection provides the only access point to the western side car park and would distribute traffic to and from surrounding districts primarily via Glenfield Road and Cambridge Avenue. It has been assumed that the traffic generated from the car parking area would be distributed evenly via these two major roads.

The RTA *Traffic Volumes for the Sydney Region* (2002) states that the current quantity of average annual daily traffic carried by Glenfield Road is 12,424 vehicles per day. Assuming a worst-case scenario peak hour flow of 12% of this number (number based on PB's previous traffic analysis experience), the existing peak hour flow on Glenfield Road is 1,490 vehicles per hour. In assuming the worst-case scenario for the new car park where all vehicles would enter/exit the additional car parking spaces provided in a 1-hour peak period (6:30-7:30am in the morning and 5:30-6:30pm in the afternoon), the additional impact of 295 vehicles on the existing Glenfield Road traffic flow would result in a peak flow of 1,785 vehicles per hour. This represents a significant increase of 20% over the existing situation during the morning and afternoon peak periods on Glenfield Road. Furthermore, this increase in traffic generation represents a 5% increase in overall average annual daily traffic on Glenfield Road.

The Glenfield Road intersection roundabout would bear the impact burden due to the additional vehicles accessing the car park area. It would need to be confirmed whether this roundabout would have sufficient capacity to deal with the additional traffic prior to construction. TIDC would undertake intersection counts at the intersection in the morning and afternoon peaks in order to profile existing traffic flows. This data would be used to

forecast the impacts on traffic flows through the intersection and clarify the need for any traffic management measures. This has been added to TIDC's SoC for Stage A (see Appendix A).

It is likely that many park-and-ride commuters who would usually park in the 120 car spaces to be lost due to the SWRL works on the eastern side of Glenfield Station would cross the rail line to the western side of the station in order to park in the proposed new western side car park. The recent car parking study titled: *Commuter carparking study – Rail stations from Glenfield to Macarthur*, prepared by G Creber and Associates in December 2004, stated that it is relatively straightforward and efficient for cars to cross between either side of Glenfield Station to access parking areas. The study found that cars parked on the eastern side of the Station originate from a variety of localities in the surrounding district. Because of this, there is not likely to be a significant increase in traffic on specific roads on the eastern side of Glenfield Station despite the likelihood that many vehicles would be accessing the western side of the Station instead of the eastern side. This is because the variety of trip origins for vehicles usually parking on the western side of the Station would mean that a variety of road routes would be used, thereby minimising impact on traffic levels on roads in the area.

The level of traffic likely to occur from the additional car parking on the western side of Glenfield Station has been based on the worst-case scenario where an additional 295 vehicles per hour would be accommodated on Glenfield Road. This increased level of traffic would incorporate the former users of the 120 parking spaces lost on the eastern side of Glenfield Station, plus an additional level of traffic generation accommodating anticipated increased demand.

The Hurlstone Agricultural High School, located adjacent to the western side of the station access road on the western side of Glenfield Station, is accessed via the station access road and Roy Watts Road. It shares the same access as the current and proposed parking areas on the western side of Glenfield Railway Station. The same applies to the smaller Campbell House, Glenfield Park and Ajuga Schools. It is unlikely that the additional traffic flows generated by the additional car parking to be provided on the western side of Glenfield Station would impact on or cause congestion for users of the Hurlstone Agricultural High School. The reason for this is that the traffic peaks for the schools and the car parking on the western side of the Station would occur at different times.

At the Hurlstone Agricultural High School, classes on weekday mornings begin at 8:40am, meaning that peak traffic flows generated by users accessing the school would likely occur between 8:10am and 8:40am, being 30 minutes before the start of classes. As the likely morning peak traffic flows for the car parking area on the western side of Glenfield Station would occur between 6:30am and 7:30am, the impacts on access at the Hurlstone Agricultural High School from traffic generated by the car park would be minimal. On most weekday afternoons, classes at the Hurlstone Agricultural High School finish at 2:55pm, meaning that peak traffic flows generated by users exiting the school would likely occur between 2:55pm and 3:25pm, being 30 minutes after the end of classes. As the likely afternoon peak traffic flows for the car parking area on the western side of Glenfield Station would occur between 5:30pm and 6:30pm, the impacts on access at the Hurlstone Agricultural High School from traffic generated by the car park would be minimal.

2.4.3 Further assessment and mitigation

In addition to the recommendations for further assessment and mitigation in Technical Paper 1 of the EA and Concept Plan, it is further recommended that:

- intersection counts are undertaken at the Glenfield Road roundabout in the morning and afternoon peaks in order to profile existing traffic flows (This data would be used to forecast the impacts on traffic flows through the intersection and clarify the need for any traffic management measures.)
- a turning circle is considered at the southern end of the Station access road in the revised designs for the existing car park so as to facilitate efficient vehicle movements.

3. Construction works at Glenfield (Stage A)

3.1 Background

PB's previous assessment of the proposed construction works for the SWRL Environmental Assessment and Concept Plan, as found in *Chapter 7 of Technical Paper 1 – Traffic, transport, parking and access*, provides an analysis of construction traffic and transport impacts from the proposed works, including an analysis of the location of worksites, likely heavy vehicle haulage routes, estimates of the likely quantity of haulage vehicle trips and the likely impact on the surrounding road network.

TIDC has made minor changes to the planned construction works for the SWRL at Glenfield (i.e. the Glenfield Stage A early works) and has additional information on the construction process for these works. The proposed changes are analysed in this Section.

3.2 Worksites and haulage routes

The location of worksites presented in Tenix's *Construction sequence for the early opening of Glenfield Junction North* (2 March 2007), have not changed from the previous locations presented in Figure 8-2 and 8-3 of PB's *South West Rail Link Concept Plan and Environmental Assessment* (November 2006). As a result there is not likely to be a change to the construction haulage routes previously proposed by PB in Figure 7-1 of *Technical Paper 1 – Traffic, transport, parking and access*.

3.3 Construction staging and haulage trips

Tenix's *Revised preliminary construction programme* (6 March 2007), and Tenix's *Construction sequence for the early opening of Glenfield Junction North* (2 March 2007), make minor changes to the planned timing of construction works for the SWRL at Glenfield. The key change is the bringing forward of works for the construction and commissioning of the Glenfield North Junction as part of the Stage A early works, to allow for an earlier opening of the Junction which would provide improved operational advantages for the rail line. The Glenfield North Junction works would be a component of the Stage A construction works for the SWRL. A full description of the Stage A works is provided in Chapter 5 of the main Submissions Report. As shown in the main report, Stage A also includes construction of the new commuter car park with up to 280 spaces on the western side of Glenfield Station (during Stage 1C). Earthworks would occur during Stages 2 & 3 of the Stage A works. All the Stage A works would occur prior to the Glenfield Station upgrade and the other Stage B works proposed for the SWRL.

PB's previous estimates for construction vehicle haulage trips in *Section 7.1.5 of Technical Paper 1 – Traffic, transport, parking and access* presented the likely number of construction vehicle trips to be generated to and from different sections of the SWRL alignment works, based on the quantities of earthworks to be transported, the time taken for construction works to occur and the haulage routes to be used. Due to the concept level of assessment undertaken for Technical Paper 1, only earthworks transportation was assessed (i.e. materials delivery was not included). Table 7-1 from the Technical Paper presented the estimated haulage vehicle trips that would be generated by the SWRL works, which were classed according to different worksites in order to gain an indication of traffic generation from these individual sections. The Table also aggregated these estimated trips by road in

order to gain an indication of the total trips likely to be generated on each haulage route during construction.

The previous analysis indicated that the earthworks associated with construction of the Glenfield North Junction works would generate approximately 0.7 trips per work day on Glenfield Road/Cambridge Avenue for earthworks transportation during the construction period. Including materials delivery, it is expected that up to 20 trucks per day would access the Glenfield site. In addition, workers' personal vehicles would access and park within the Glenfield compound. The construction of the additional commuter car park (up to 280 spaces) on the western side of Glenfield Railway Station is unlikely to generate any significant level of haulage vehicle trips, as the location of this car park is relatively flat. Other worksites associated with Stage A are not likely to generate earthworks activity or require earthworks transportation during the Stage A construction period.

Overall, the construction heavy vehicle trips generated from the Stage A works would be relatively minor (20 trips) in comparison to trips generated from other sites on the SWRL during Stage B and would be insignificant in terms of impact on the surrounding road network. As construction of the Stage A works would be brought forward earlier than the more significant Stage B works, the trips generated from these works would occur at a separate time to the other trips and would reduce the cumulative impact on the surrounding road network.

The construction traffic movements expected from the Glenfield Stage A work sites are not considered large enough to have a noticeable impact on the surrounding road network.

3.3.1 Further assessment and mitigation

No further assessment or mitigation of construction traffic and transport is considered necessary for the Stage A works in addition to those measures outlined in PB's previous *Technical Paper 1 – Traffic, transport, parking and access*.

4. Summary

This additional traffic and transport assessment has assessed the traffic and transport impacts associated with changes and revisions made to the Concept Plan for the SWRL.

In relation to the planned additional off-street commuter car park and additions to the existing on-street commuter car park at the western side of Glenfield Station, this assessment has made the following conclusions:

- In the worst-case scenario, where all 295 additional car parking spaces would be utilised in a 1 hour period in the morning and afternoon peaks, this would increase traffic on Glenfield Road by 20% in the peak periods, and increase average annual daily traffic by 5%.
- That intersection counts are undertaken at the Glenfield Road roundabout in the morning and afternoon peaks in order to profile existing traffic flows, forecast the impacts on traffic flows through the intersection and clarify the need for any traffic management measures
- a turning circle should be considered at the southern end of the Station access road in the revised designs for the existing car park so as to facilitate efficient vehicle movements.

In relation to changes to the construction staging for the SWRL works, particularly the bringing forward of works for the Glenfield North Junction, this assessment has made the following conclusions:

- The earlier construction of the Glenfield North Junction would not have a significant impact on the level of haulage vehicle trips. PB's previous analysis of haulage vehicle trips was based on the worse-case scenario where all trips from worksites on the SWRL would occur simultaneously. As the Glenfield North Junction works would now occur earlier than other works, this would result in a reduced level of overall cumulative traffic generation.
- An additional 20 heavy vehicle deliveries per day to the Glenfield North Junction would not have a significant impact to existing traffic movements in the area.
- Parking for construction workers could be accommodated on-site (e.g. on the James Meehan Estate worksite) and, therefore, would not impact on existing parking on the road network.

5. Reference list

TIDC, 2006a, *South West Rail Link Concept Plan and Environmental Assessment*, prepared by PB

TIDC, 2006b, *Technical Paper 1 – Traffic, transport, parking and access* (in Volume 2), prepared by PB

TIDC, 2007, *Technical Paper: Revised car parking arrangement west of Glenfield Station*.

G Creber and Associates, December 2004, *Commuter carparking study – Rail stations from Glenfield to Macarthur*.

Roads and Traffic Authority of NSW, 2002, *Traffic Volumes for the Sydney Region*

Tenix, 2 March 2007, *Construction sequence for the early opening of Glenfield Junction North*

Tenix, 6 March 2007, *Revised preliminary construction programme*