

Technical Services Reports

Committee Consideration – 14 July 2015 Council Resolution – 28 July 2015

Table of Contents

Item No.	Page No.
TS14.15	Swanbourne High School Subdivision – Closure of Nidjalla Loop
	at the Intersection with Alfred Road2
TS15.15	Tender No. 2014/15.18 Stormwater Drainage Construction 15
TS16.15	Tender No. 2014/15.19 Jetting and Educting Services19
TS17.15	Tender No. 2014/15.22 Refurbishment of Handrail Network at
	Swanbourne Beach23
TS18.15	Tender No. 2014/15.16 Supply and Installation of Signs29
TS19.15	Request for Street Tree Removal Referred for Council
	Consideration – 6 Finchley Rise, Mt Claremont

TS14.15 Swanbourne High School Subdivision – Closure of Nidjalla Loop at the Intersection with Alfred Road

Committee	14 July 2015
Council	28 July 2015
Applicant	City of Nedlands
Officer	Mark Goodlet – Director Technical Services
Director	Mark Goodlet – Director Technical Services
Director Signature	MG
File Reference	TS-DDS-00007
Previous Item	OMC 28 April 2015 Items 13.5, 14.1 and 14.2

Executive Summary

At its meeting on 28 April 2015 Council resolved to close the entry/exit (Nidjalla Loop) off Alfred Road into the old Swanbourne High School Subdivision for a period of two years. Council also resolved to employ a traffic consultant to assess the parking and traffic issues.

Under the requirements of the *Local Government Act 1995* s3.50, a public notice was released detailing the City's intention to close Nidjalla Loop at the intersection with Alfred Road and public submissions were invited on the matter. A traffic consultant was also engaged to provide an independent assessment of the issues.

The purpose of this report is to present the public submissions received throughout the submission period and the traffic consultant's report to Council for consideration.

Recommendation to Committee

Council, having received and considered the submissions in relation to the proposed road closure at Nidjalla Loop, and based on overall road safety concerns, resolves to no longer proceed with the road closure.

Or Alternative 1

Council, having received and considered the submissions in relation to the proposed road closure at Nidjalla Loop:

1. Approvals deferral of the implementation of the road closure pending the receipt of further traffic engineering advice to be reported to Council in

October 2015, setting out further options to mitigate the impact of through traffic in the Swanbourne High School subdivision; and

2. Approvals additional budget expenditure of \$20,000 for investigation and design purposes, with funds to be included in the mid-year budget review.

Or Alternative 2

Council, having received and considered the submissions in relation to the proposed road closure at Nidjalla Loop, resolves to proceed with the road closure and approves additional budget expenditure of \$38,000 for implementation purposes, with funds to be included in the mid-year budget review.

Strategic Community Plan

KFA: Transport

The Community Strategic Plan recognises "changing demands in transport" (and) parking" (p.10) and emphasises safe transport and the ease of getting around by any preferred mode of transport (p.16).

A Council outcome of great communities through protected amenity is also an aspiration for Nedlands (p.14).

Background

The Swanbourne High School subdivision was originally the site of the Swanbourne Senior High School. This site was subdivided by the Department of Education in November 2007.

The through access from Alfred Road to Narla Road was considered during the Town Planning Scheme amendment phase of the project and a focus group called the Administrative Liaison Working Group (ALWG), made up of councillors from the City of Nedlands and Town of Claremont, community representatives, staff, a Department of Education representative and a planning consultant, provided comment.

The initial proposal sought to limit the ability for traffic to travel through the subdivision from Alfred Road to Narla Road, however the ALWG commented that this was "not good planning practice. Better to allow through access and permeability".

However, when the developer Landcorp did the final design it was noted that, with the 5.5m wide Wongin Way link road, "the developer's traffic consultant is confident that this does not encourage through traffic and this can be managed through detailed design". This appears to contradict the intent of the development at the scheme amendment stage which deliberately provided for through access. Potentially even at design stage there was some conjecture as to the role of the road network within the Swanbourne High School subdivision. Nevertheless, the final design included an access road linking Alfred Road and Narla Road.

As it currently stands, the majority of the lots within the Swanbourne High School subdivision contain completed residential dwellings. There are ongoing construction activities within the subdivision including on both sides of Birrigon Loop at the intersection with Narla Road, and a small number of empty lots. There is a very large construction project being undertaken on an adjacent street, Milyarm Rise, along with some separate smaller residential construction activities.

In April 2014 Administration commenced investigations into the traffic behaviours within the Swanbourne High School subdivision in response to a resident complaint.

Traffic volume and speed data was collected and analysed and it was concluded that the results were not indicative of any issues through which engineering solutions were deemed to be required. No further action was taken at that time on account of the investigation identifying acceptable traffic volumes, low vehicular speeds and low recorded traffic accidents (one mid-block parking manoeuvring accident in Birrigon Loop in 2013).

With the commencement of a large construction project on Milyarm Rise, the ARIA apartments, and the construction activities within the subdivision itself, the area saw a rise in the number of commercial vehicles travelling through it, and a significant increase in long-term regular parking of personal vehicles belonging to construction workers.

The use of the subdivision by commercial vehicles, though legal, was flagged to the ARIA developers as being undesirable, following complaints from local residents. The developers subsequently implemented procedures for their subcontractors to use a different route to and from the construction site on Milyarm Rise, when delivering materials in large commercial vehicles.

A petition was presented at the Ordinary Meeting of Council on 24 March seeking the closure of Nidjalla Loop at the intersection with Alfred Road to establish a 'no thru road' within the subdivision. The petition was raised by a resident of Wongin Way and signed by both a number of residents living within the subdivision and outside of it. Council carried a resolution for the petition to be received and instructed Administration to review the petition and prepare a report for Council's consideration.

A report was prepared by Administration and presented in response to the petition at the next Ordinary Meeting of Council on 28 April 2015. Administration did not recommend closing Nidjalla Loop at the intersection with Alfred Road, and presented recommendations to review improvements to the intersections within the subdivision only. In summary the key reasons for the recommendation made after Administrations review of the petition were:

- Traffic and speed data indicate that the current road network in the Swanbourne High School subdivision road network is operating successfully and certainly at the high end of overall level of service for local roads.
- Residents would receive reduced traffic volume benefits from the closure of their road network, however, the benefit they would receive would cause an

adverse impact on the roads in the surrounding area, especially on Narla Road, which is the drop off area for the Swanbourne Primary School.

- A safety risk would be created through limiting entry to the subdivision to one access point adversely impacting emergency access and escape.
- Improvements to the Wongin Way intersections with Nidjalla Loop and Birrigon Loop will assist with delineation of right of way priority.

As a result Council resolved that the CEO investigate and make improvements to the intersections at Wongin Way / Nidjalla Loop and Wongin Way / Birrigon Loop to improve clarity of the priority routes.

Two related notices of motion were also raised by two Coastal Ward Councillors at the same meeting and as a result two further resolutions were carried. One resolution was that, subject to budget considerations, the City employ a traffic consultant to investigate parking and traffic issues. The other was to implement a road closure on Nidjalla Loop at the intersection with Alfred Road for a period of two years.

Reasons for the traffic consultant's investigation were:

- Due to traffic and parking issues within the subdivision, particularly since the commencement of construction of the adjacent Aria Development;
- There are concerns about existing acute traffic and parking issues, as well as the longer term impacts once the adjacent development is sold;
- Comprehensive understanding of the issues, opportunities and constraints is necessary to ensure that the best possible solutions are found, relating to both the short and long term traffic and parking matters in the immediate and surrounding area; and
- Before Council commits expenditure in this area it is essential that comprehensive planning and investigation take place, to ensure that the best possible outcome is found for the traffic and parking difficulties being experienced by residents.

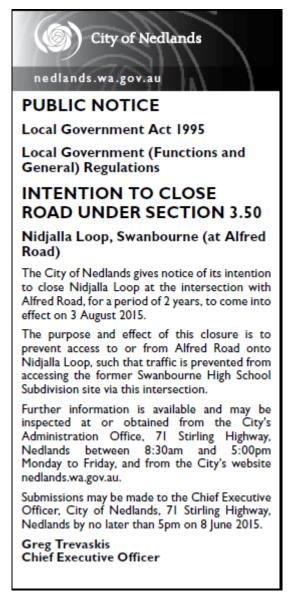
Reasons for the temporary closure were:

• There is almost complete agreement amongst residents of this area that the present situation is untenable and that something must be done now. Safety of the residents and children in particular is the major concern. Wongin Way is not suitable as a through road and is particularly unsafe. The parking situation from workmen on the two big unit developments is causing major parking problems which again is causing safety concerns. There is ongoing angst between residents and the work force. The stress for residents is considerable and they deserve to live in peace and harmony with the local environment.

An extract from the minutes of the Ordinary Meeting of Council can be found in Attachment 1. A map detailing the location of the road closure is provided in Attachment 2.

With the resolution to close the entry/exit (Nidjalla Loop) off Alfred Road into the old Swanbourne High School subdivision for a period of two years, applicable legislative requirements under s3.50 of the *Local Government Act 1995* stipulate that a public notice be released calling for public submission.

A notice was placed in the POST newspaper on Saturday 23 May 2015 calling for submissions up to 5pm on Monday 8 June 2015. Information was also placed on the City's website, at the City's Administration front counter, in the two libraries and notices placed in the public noticeboards.



Notice published in POST newspaper dated Saturday 23 May 2015

A total of 252 letters were distributed to key stakeholders inviting a submission, including utility providers, emergency services, Main Roads WA, the Town of Claremont, Swanbourne Primary School and all properties within the subdivision, on Narla Road, and within any cul-de-sacs on Narla Road. Where the property owners' postal address was different to the property address, a letter was released to the owner/occupier at both addresses.

While the submission period regarding the road closure was open, a further report was presented to the Ordinary Meeting of Council on 26 May 2015 recommending the implementation of new parking restrictions on Alfred Road and parts of Narla Road. The increase in parking throughout the area had resulted in drivers parking their vehicles in inappropriate locations, damaging infrastructure and creating safety issues on the south side of Alfred Road and at the intersection of Narla Road and Alfred Road and throughout the Swanbourne High School subdivision.

The recommendation to Council to implement the new parking restrictions was carried, and additionally Council resolved to also implement additional parking restrictions throughout Nidjalla Loop, Wongin Way and Birrigon Loop to improve the amenity of these streets for residents while there is significant demand for parking opportunities in the area, issuing each property three parking permits each.

The public submission period for the road closure ended at 5pm on 8 June 2015. A total of 119 submissions were received.

A petition opposing the road closure was also received by Council on 23 June 2015.

Key Relevant Previous Decisions

At the Ordinary Meeting of Council on 24 March 2015 a petition was received seeking the closure of the road link through the Swanbourne High School subdivision. Council resolved:

That the petition be received and a report be prepared by Administration for Council's consideration at the next Ordinary Meeting of Council.

At the Ordinary Meeting of Council on 28 April 2015 Council resolved the following:

Council requests that the CEO investigate and make improvements to the intersections at Wongin Way / Nidjalla Loop and Wongin Way / Birrigon Loop to improve clarity of the priority routes.

That subject to budget considerations, the City employ a traffic consultant as soon as possible to investigate the parking and traffic issues at the old Swanbourne High School subdivision site.

The Council agrees to close the entry/exit (Nidjalla Loop) off Alfred Road into the old Swanbourne High School subdivision for a period of 2 years.

At the Ordinary Meeting of Council on 26 May 2015 Council resolved the following:

Council approves the temporary implementation of:

1. No Parking (road or verge) restrictions on Alfred Road between Narla Road and Nidjalla Loop, to extend past the north-east entrance to the Swanbourne Primary School's playing field on Narla Road;

- 2. One Hour timed restrictions to the parking bays on Narla Road outside Swanbourne Primary School;
- 3. Parking in the overflow grassed parking area at Mt Claremont Oval during suitable times subject to determination of conditions acceptable to the City;
- 4. That no parking be allowed on Wongin Way, Nidjalla Loop and Birrigon Loop between 7.00am – 4.00pm Monday to Friday and 7.00am – 12.00pm Saturday issuing three resident only parking permits to Wongin Way, Nidjalla Loop and Birrigon Loop residents with permission for Council to provide additional permits for specific circumstances; and
- 5. Directs administration to review this every three months, removing the restrictions on all roads once it is deemed they are no longer required.

At the Ordinary Meeting of Council on 23 June 2015 Council a petition was received opposed to the closure of the road link through the Swanbourne High School subdivision and the following was resolved:

That Council;

- 1. Receive the petition as presented opposing the proposed road closure of the entry/exit of Nidjalla Loop off Alfred Road; and
- 2. The Petition be referred for consideration in conjunction with the Report on the proposed road closure scheduled for the July round of Council meetings.

Consultation

Required by legislation: Required by City of Nedlands policy:

Yes 🖂	No 🗌
Yes 🖂	No 🗌

Consultation was carried out between 22 May 2015 and 8 June 2015. There were a total of 119 submissions made to the City.

Emergency Services

The Department of Fire and Emergency Services is a prescribed organisation with whom consultation is mandatory. They provided the following response opposing the proposed closure.

Closure of Nidjalla Loop at this location will result in a delayed response to any incident requiring emergency services that may occur in the area south of Alfred Road.

Should the road closure proceed the concerns of the Department of Fire and Emergency Services (DFES) will need to be addressed. The City will seek solutions

such as knock over bollards in consultation with DFES. There are likely to be some additional cost associated with a specialised solution.

Public Submissions

119 public submissions were received to the consultation. Confidential Attachment 3 provides details of the submissions.

Seven respondents did not indicate any support or opposition (neutral) to closing the road. 21 respondents provided alternative suggestions within their submissions, such as one-way closure or relocated closure. These comments are also included in Confidential Attachment 3.

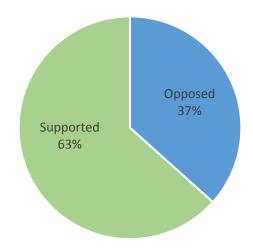
13 duplicate submissions were received, where the respondent provided two or more submissions. These have been counted as one submission for the statistics provided in this report.

Submissions From Within the Subdivision

Responses to the consultation from within the subdivision area are summarised below.

Public Submissions Response Summary from Within the Subdivision Area

Total Respondents:	46	
Opposed	17	37%
Supported	29	63%



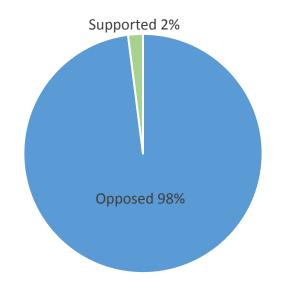
Of the 29 respondents that provided a clear indication that they were in support of the closure, several also indicated a full road closure would not be their first preferred option for the City to undertake. These comments are provided in Confidential Attachment 3.

Submissions External to the Subdivision

Responses to the consultation are summarised below.

Public Submissions Response Summary External to the Subdivision Area

Total Respondents:	65	
Opposed	64	98%
Supported	1	2%



Town of Claremont Submission

Although Narla Road is within the jurisdiction of the City of Nedlands, the residents who live on Narla Road and in the streets east and south of Narla Road, are located within the Town of Claremont district.

The Town of Claremont Administration put a report to their own Council regarding the planned closure and resolved to provide a submission opposing the closure. Their report and submission are contained in Attachment 4. The Town of Claremont also distributed letters to a number of residences in proximity to the subdivision, a copy of which is contained in Attachment 5.

Alternative Submissions

The common themes of the alternative suggestions provided throughout the consultation period are provided below:

Change speed limit to 40km within subdivision	2
Close at Birrigon / Narla	2
Close at Wongin	1
Improve intersections with subdivision	1
Left turn only onto Alfred.	6
Local traffic only signage	1
Narla Road issues - Traffic lights at Narla and Alfred - Parking changes on Narla	1
One way entry instead of full closure	7

Petitions

As noted in the background section to this report a petition containing 48 signatures was received by Council on 24 March 2015, seeking closure of the road (*note, of the totals on the petition: three repeat signatures were excluded and two that were not signed were also excluded*). Two of the signatories have subsequently provided submissions opposing the road closure and 17 of the signatories did not provide a submission.

Another petition opposing the road closure was received by Council on 23 June 2015. It contains 109 signatures. The Principal of the Swanbourne Primary School is a signatory to this petition.

Consultation Summary

There is a clear majority perception within the subdivision that supports a road closure and improved safety within the subdivision. There is an almost unanimous perception within the consultation area outside of the subdivision, that the road closure will detrimentally affect the area with increased congestion and a decrease in safety, particularly on Narla Road which fronts the Swanbourne Primary School.

Legislation / Policy

The Local Government Act 1995 s3.50 and the Local Government (Functions and General) Regulations section 4 stipulate the requirements for consultation.

Budget/Financial Implications

Within current approved budget: Requires further budget consideration:

Yes 🖂	No 🗌
Yes 🗌	No 🖂

The construction cost to implement the road closure is \$38,000, kerbing, special bollards, footpaths, line-marking, signage, mulch, traffic management. In addition City design and project management overheads are also to be provided.

The traffic engineering report suggests that additional investigation could identify other options which may be acceptable to Council. The cost to carry out this work would be \$20,000, and additional to the 2015/16 budget.

Risk Management

Implementation of the road closure in a safe manner has been managed through the provision of professional design services and application for approval to Main Roads WA for the proposal.

Discussion

Narla Road Traffic Volumes

In May 2015 a new traffic count was undertaken to bring the information up to date.

Location	Average	85 th % average	
	daily traffic	speed	
Between Alfred Road and Devon	2144	63 kph	
Between Servetus Street and Devon	742	56 kph	

Narla Road Traffic Counts March 2007

Narla Road Traffic Counts May 2015

Location	Average	Variance	85 th % average	Variance
	daily traffic	since 2007	speed	since 2007
Between Alfred Road	2658	24% increase	56 kph	11%
and Devon				decrease
Between Servetus	1040	40% increase	52 kph	7%
Street and Devon				decrease

Construction Traffic

The majority of the complaints regarding vehicles in the Swanbourne High School subdivision were in relation to the volume and appropriateness of construction worker parking in proximity to residences. Initially there was information provided to the City by residents that trucks making deliveries to the Aria apartments were laying up or circulating through the residential streets. There were also complaints about the construction vehicles servicing the subdivision housing parking illegally and driving dangerously within the subdivision itself.

These matters have been progressively addressed through dialogue with the Aria developer's contractor, ranger enforcement, and most recently, additional parking restrictions in and around the subdivision.

The Aria contractor has indicated that by August they will have basement carpark access constructed which will allow their vehicles to park within the lot, virtually eliminating the demand for street parking and it is anticipated that this will improve the amenity of the subdivision significantly for the residents during this time.

With 12 lots undeveloped within the subdivision there will, however, remain demand for contractors to access the subdivision for construction purposes. A road closure will not address this matter and in fact, a road closure at the proposed location in

Nidjalla Loop at Alfred Road will force construction traffic into Narla Road, which is an undesirable and less safe outcome.

Traffic Engineering Report

The traffic engineering report commissioned to further consider the parking and traffic issues is provided as Attachment 6. The summary of their initial assessment is provided below.

A review of existing traffic volumes through and in the vicinity of the Old Swanbourne High School subdivision indicates that from a purely theoretical position, the existing local road network has sufficient capacity to meet current and future traffic demands regardless of whether the Alfred Road/Nidjalla Loop intersection is closed. The current peak hour and daily traffic volumes through the subdivision are such that they are below what may be expected for a local Access road. Similarly, the closure of the Alfred Road/Nidjalla Loop intersection to address identified concerns would not have a significant impact on the performance of Narla Road from a capacity perspective, but would nevertheless cause additional traffic to travel past Swanbourne Primary School.

Whilst internal subdivision traffic volumes are relatively low, the fact that the City has received a petition indicates local concerns. Whilst the proposed parking management measures will reduce local parking and potential vehicle movements associated with this in the subdivision, preliminary investigations indicate that a large proportion of traffic can be considered to be pass-through movements.

The full closure of the intersection to address this pass-through movement would be contrary to the original intended purpose of the subdivision road network as debated during the Town Planning Scheme amendment phase and also results in an un-necessary risk from an emergency/escape route perspective.

Options however exist to still retain access to/from the subdivision via Alfred Road and hence meet the Town Planning Scheme amendment philosophy and emergency access concerns whilst also reducing through movements. The most appropriate option/technique to address this should be subject to further investigations based on confirming the actual amount of through movements as well as turning movements at the Alfred Road/Nidjalla Loop intersection, for instance to determine how effective restricted turning movements such as left in/out only would be in discouraging through movements.

The traffic engineering report suggests that other options could be explored which may provide more acceptable alternatives. This suggestion is provided as an Alternative 1 recommendation to Council with an undertaking to report back to Council in October 2015.

Public Questions

A number of questions were raised at the Ordinary Meeting of Council on 23 June 2015 pertaining to this matter during Public Question Time. A copy of the questions and answers are provided in Attachment 7.

Conclusion

Road closure is opposed almost unanimously from areas outside the Swanbourne High School subdivision, while within the subdivision the clear majority view supports the road closure.

The construction activity traffic has now been addressed in a number of ways and the ongoing impact of construction activity will now be managed through parking restrictions. There will be continuing impacts, however, until the subdivision is fully built out.

DFES opposition to the closure is based on delayed response times to areas to the south of Alfred Road. Should the closure proceed at any location, then the City will liaise with DFES to minimise the delay potentially by use of knock down bollards or other mechanisms.

The traffic engineering preliminary report position does not support a road closure, however, it suggests that options could be further explored which may provide a way forward.

Administration's view remains that overall safety on the road network is best served by maintaining permeability through the subdivision. Of particular concern is the impact on road safety in Narla Road in front of the Swanbourne Primary School. Administration therefore recommends that the road closure no longer proceed.

An Alternative 1 recommendation is provided to Council should it wish to explore further options to mitigate the subdivision through traffic. This alternative involves deferring implementation of the road closure while the options are investigated and provided back to Council in October 2015.

The Alternative 2 recommendation is provided should Council wish to continue with the temporary road closure in the interests of the safety of the residents within the subdivision.

Attachments

- 1. Extract of Minutes from Ordinary Meeting of Council 28 April 2015;
- 2. Map indicating location of Nidjalla Road closure;
- 3. Confidential table of submissions (not to be published);
- 4. Town of Claremont Submission and Reports;
- 5. Town of Claremont Letter to Residents;
- 6. OPUS Traffic Engineering Report; and
- 7. Public Question Time Extract from OMC 23 June 2015.

Council	28 April 2015
Applicant	City of Nedlands
Officer	Mark Goodlet - Director Technical Services
CEO	Greg Trevaskis – Chief Executive Officer
CEO Signature	Se sall
File Reference	TS-ILC-00008
Previous Item	Nil.

13.5 Swanbourne High School Subdivision Traffic & Parking

Regulation 11(da) - Not Applicable – Recommendation Adopted.

Councillor Hassell departed the Chambers at 8:55pm and returned at 8:59pm.

Councillor James returned to the Chambers at 8:55pm.

Moved – Councillor Horley Seconded – Councillor Smyth

Council Resolution / Committee Recommendation / Recommendation to Committee

Council requests that the CEO investigate and make improvements to the intersections at Wongin Way / Nidjalla Loop and Wongin Way / Birrigon Loop to improve clarity of the priority routes.

CARRIED UNANIMOUSLY 12/-

Executive Summary

This report provides an assessment of traffic and parking issues within the 'Swanbourne High School' subdivision including Wongin Way, Nidjalla Loop and Birrigon Loop. The subdivision traffic volumes and speeds are at levels that are well within those acceptable to a local access road network.

A road closure for this subdivision preventing vehicles from moving between Alfred Road and Narla Road would be based on amenity grounds given the modest traffic volumes and speeds that are currently being experienced within the subdivision.

Improvements to the intersections at Wongin Way / Nidjalla Loop and Wongin Way / Birrigon Loop should be sought to improve clarity of the priority route.

On street parking will remain problematic in this area during the construction of housing and apartments within the subdivision and in adjacent streets. This is likely to continue for another two or three years as nearby empty lots are built on. Ongoing

enforcement is warranted. Residents have the opportunity to purchase "No parking on verge" signs which they can then erect to act as a further deterrent for illegal verge parking and to assist with ranger enforcement.

Recommendation to Committee

Council requests that the CEO investigate and make improvements to the intersections at Wongin Way / Nidjalla Loop and Wongin Way / Birrigon Loop to improve clarity of the priority routes.

Strategic Plan

KFA: Transport

The Community Strategic Plan recognizes "changing demands in transport" (and) parking" (p.10) and emphasizes safe transport and the ease of getting around by any preferred mode of transport (p.16).

A Council outcome of great communities through protected amenity is also an aspiration for Nedlands (p.14).

Background

Subdivision Approval

The Swanbourne High School subdivision was originally the site of the Swanbourne Senior High School which was developed by the Department of Education from 20 November 2007.

The through access from Alfred Road to Narla Road was considered during the Town Planning Scheme amendment phase of the project and a focus group called the Administrative Liaison Working Group (ALWG), made up of councilors from the City of Nedlands and Town of Claremont, community representatives, staff, a Department of Education representative and a planning consultant, provided comment.

The initial proposal sought to limit the ability for traffic to travel through the subdivision from Alfred Road to Narla Road, however the ALWG commented that this was "not good planning practice. Better to allow through access and permeability".

However, when the developer Landcorp did the final design it was noted that, with the 5.5m wide Wongin Way link road, "the developer's traffic consultant is confident that this does not encourage through traffic and this can be managed through detailed design". This appears to contradict the intent of the development at the scheme amendment stage which deliberately provided for through access. Potentially even at design stage there was some conjecture as to the role of the road network within the Swanbourne High School subdivision.

The subdivision is shown in the aerial plan below:



Key Relevant Previous Council Decisions:

At the ordinary meeting of Council on 24 March 2015 a petition was received seeking the closure of the road link through the Swanbourne High School subdivision. Council resolved:

That the petition be received and a report be prepared by Administration for Council's consideration at the next Ordinary Meeting of Council.

Consultation

Required by legislation:	Yes 🗌	No 🖂
Required by City of Nedlands policy:	Yes 🗌	No 🖂

Legislation / Policy

Nil.

Budget/Financial Implications

Within current approved budget:	Yes
Requires further budget consideration:	Yes

No	
No	X

The recommendation for the investigation and improvement of the intersections within the subdivision can be accommodated within the existing operations budget.

Closure of the road would be preceded by a traffic study and consultation. Indicative costs would be:

- Traffic Study \$15,000
- Consultation \$10,000
- Road Closure \$80,000

Risk Management

Refer to the Discussion section on emergency access and fire escape.

Discussion

The Swanbourne High School subdivision road network today provides north and south access to Claremont and Nedlands including through access for vehicles.

Traffic Volumes and Speeds

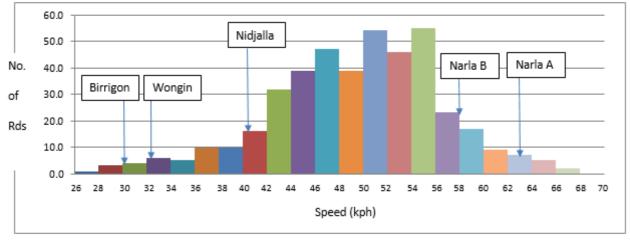
In May 2014 traffic volumes and speeds were assessed on Nidjalla Loop, Wongin Way and Birrigon Loop. The following data was collected:

Street	Location	Average Speed km/h	85 th % Speed km/h	Average Daily Traffic Volume	% Commercial Vehicles
Nidjalla Loop	Between Alfred & Wongin	33	40	527	7
Wongin Way	Between Nidjalla & Birrigon	26	32	469	3
Birrigon Loop	Between Wongin & Narla	25	30	531	4

Comparatively Narla Road has 2007 traffic data as follows:

Street	Location	Average Speed km/h	85 th % Speed km/h	Average Daily Traffic Volume	% Commercial Vehicles
Narla Road (A)	Between Alfred & Devon	53	63	2144	6
Narla Road (B)	Between Servetus & Devon	43	56	742	9

The diagram below shows that Wongin Way, Birrigon Loop and Nidgalla Loop are at the very low end of traffic speeds on local roads in the City of Nedlands:



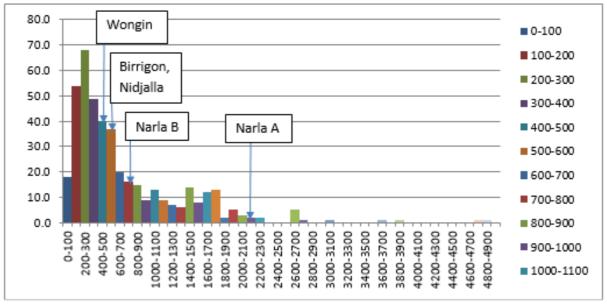
Number of Nedlands Access Roads in each Traffic 85% SPEED Interval

This data shows that, in the City of Nedlands:

- 99.5% of measured speeds are higher than Wongin Way;
- 99.3% of measured speeds are higher than Birrigon Loop; and
- 87.1% of measured speeds are higher than Nidjalla Loop.

Comparatively, the measured speeds at Narla Road are at the higher end of measured speeds and are in a range that mitigation options should be considered.

The diagram below shows Wongin Way, Birrigon Loop and Nidgalla Loop are very close to mid-range of traffic volumes in comparison to the other local roads in the City of Nedlands. These roads each carry the average amount of traffic for local roads in the City of Nedlands. Narla Road (A), however, at over 2,100 vehicles per day, is near the top end of local road traffic volumes and approaching the recommended maximum of 3,000 vehicles per day for a local road.



Number of Nedlands Access Roads in each Traffic VOLUME Interval

Accidents

The accident record in the five period 2009 – 2013 records one accident (2014/15 values are not yet available from Main Roads WA). This one recorded accident was a mid-block parking maneuvering accident in Birrigon Loop in 2013.

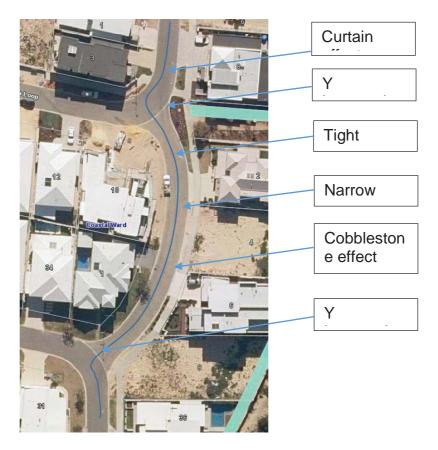
This accident rate and type does not signify undue problems with the subdivision and falls well short of Blackspot warrants for mitigation activity.

Traffic Calming

"Traffic calming" is a phrase encompassing various road features designed to slow traffic. It is clear that traffic calming measures were considered and built into the layout of the Swanbourne High School subdivision. Each of these help to create an environment which visually or physically slows vehicles down, as evidenced by the low speeds being achieved now. Features include the following:

- 1. Curtain effect road layout;
- 2. Y intersections;
- 3. Tight radius road;
- 4. Narrow link road (5.5m); and
- 5. Cobblestone effect providing a visual cue and a different road feel.

The image below shows where Nidjalla loop connects to Wongin Way, which then connects to Birrigon Loop, and where some of the traffic calming measures exist in this section of the subdivision road network:



Existing Road Traffic Calming Measures

The combined effect of these traffic calming measures has been to achieve the low 85th % speeds of the affected roads.

Road Closure

A recent petition to Council seeks the "northern road closure of Nidjalla Loop, Swanbourne, at Alfred Road thus establishing a 'No Thru Road' of Birrigon Loop, Wongin Way and Nidjalla Loop north, with one southern entry/exit at Birrigon Loop and Narla Road."

While there is little justification for closing the road for traffic speed or volume reasons, the prevention of through traffic to this subdivision will add to its exclusivity and amenity. It will effectively create a cul-de-sac effect for the subdivision with the benefits that this brings of reduced traffic and improved safety.

Should there be a resolution to close the road at some point on either Nidjalla Loop, Wongin Way, or Birrigon Loop, in order to improve the perceived amenity of the local residents, there would be a requirement for a full consultation carried out with the residents to determine their preferred position for the closure. Depending on access requirements there will be different access preferences for the various households and a majority road closure position will need to be determined.

Impact on the Surrounding Road Network

Closing the road network will have two effects. Firstly, it will prevent through traffic, which will displace the through traffic onto the surrounding local roads. Secondly, it will channel the traffic from the 65 lots within the subdivision entirely into Narla Road.

65 lots generate a design estimate of 520 vehicle trips per day, or 8 trips per household. However, closing the Alfred Road link will force all of the traffic onto Narla Road. This have a significant adverse impact on Narla Road, a road that is already carrying significant volumes and with some speed issues. Moreover it will push vehicles past the Swanbourne Primary School during morning peak hour past the school which is already experiencing congestion.

The improved amenity benefits achieved for the Swanbourne High School subdivision residents will have an opposite adverse effect on Narla Road, surrounding area residents and on the Primary School. Should Council wish to explore the option of closing the road network further it is recommended a comprehensive traffic impact study be carried out and that the residents and users of Narla Road and surrounds be surveyed and consulted to determine their views on this matter.

It is difficult to see however, that the traffic study will yield a finding other than that already provided above.

Y Intersection improvements

Y intersections are problematic because, although they help calm traffic, they create confusion about right of way priority. It is recommended that this be investigated with a view to improving clarity regarding right of way priority. 'Give way' signs are a potential solution at each end of Wongin Way. The installation of such signage would be subject to Main Roads WA approval however, but may assist in delineation of these intersections.

Emergency access and fire escape

There are currently two access roads into the subdivision. This provides alternative routes in the case where escape or emergency access is required. Reducing this to one access point is not recommended.

Construction Traffic

Construction traffic will remain problematic for the subdivision until the residences are fully built. About 12 houses are yet to be constructed in the area of Wongin Way, Nidjalla Loop and Birrigon Loop. Building construction works on both sides of an adjacent street, Milyarm Rise, will continue for another 18 months.

The City has been actively following up on the issues related to this and the following actions are being progressed:

- Implementation of 'no parking' at the entrance to Nidjalla Loop from Alfred Road;
- Regular liaison with residents and construction companies;

- Agreement with nearby apartment construction contractors that commercial vehicles will not use the subdivision as a route to and from the site on Milyarm Rise; and
- Increased Ranger activity to monitor and enforce parking.

Conclusion

Traffic and speed data indicate that the current road network in the Swanbourne High School subdivision road network is operating successfully and certainly at the high end of overall level of service for local roads, particularly in comparison to other City of Nedlands local roads.

Residents will receive amenity benefits from the closure of their road network, however, the benefit they receive will cause an adverse impact on the roads in the surrounding area, especially on Narla Road. Emergency access and escape will also be adversely impacted.

For the above-mentioned reasons closure of the road network is therefore not supported.

Improvements to the Wongin Way intersections will assist with delineation of right of way priority and it is recommended that this matter be investigated further and followed up with Main Roads WA.

Attachments

Nil.

14. Elected Members Notices of Motions of Which Previous Notice Has Been Given

Disclaimer: Where administration has provided any assistance with the framing and/or wording of any motion/amendment to a Councillor who has advised their intention to move it, the assistance has been provided on an impartial basis. The principle and intention expressed in any motion/amendment is solely that of the intended mover and not that of the officer/officers providing the assistance. Under no circumstances is it to be expressed to any party that administration or any Council officer holds a view on this motion other than that expressed in an official written or verbal report by Administration to the Council meeting considering the motion.

14.1 Councillor Horley – Investigation into Parking and Traffic Issues at the Old Swanbourne High School Subdivision Site

Moved – Councillor Horley Seconded – Councillor McManus

That the City employ a traffic consultant as soon as possible to investigate the parking and traffic issues at the Old Swanbourne High School Subdivision Site.

<u>Amendment</u> It was agreed to include 'subject to budget considerations' into the motion.

<u>Put Motion</u> Moved – Councillor Binks Seconded – Councillor Hodson

That the motion be put.

PUT MOTION CARRIED 9/3 (Against; Crs. Horley, McManus & Smyth)

Council Resolution

That subject to budget considerations, the City employ a traffic consultant as soon as possible to investigate the parking and traffic issues at the old Swanbourne High School subdivision site.

> CARRIED 7/6 Mayor Casting Vote (Against; Crs. Hay, James, Argyle, Hassell, Binks & Wetherall)

On 30 March 2015, via email Councillor Horley gave notice of her intention to move the following at this meeting:

That the City employ a traffic consultant as soon as possible to investigate the parking and traffic issues at the old Swanbourne High School subdivision site.

Reasons

There have been traffic and parking issues at the Old Swanbourne High School subdivision, particularly since the commencement of construction of the adjacent Aria Development.

There are concerns about existing acute traffic and parking issues, as well as the longer term impacts once the adjacent development is sold.

Comprehensive understanding of the issues, opportunities and constraints is necessary to ensure that the best possible solutions are found, relating to both the short and long term traffic and parking matters in the immediate and surrounding area.

Before Council commits expenditure in this area it is essential that comprehensive planning and investigation take place, to ensure that the best possible outcome is found for the traffic and parking difficulties being experienced by residents.

Administration Comment

This is being addressed in item 13.5 of this agenda, Swanbourne High School Subdivision Traffic & Parking.

14.2 Councillor McManus – Aria Development – Old Swanbourne High School Site

Ms M Granich left the chambers at 8:20pm and returned at 8:22pm.

Moved – Councillor McManus Seconded – Councillor Smyth

a. The Council agrees to close the entry/exit (Nidjalla Loop) off Alfred Road into the old Swanbourne High School subdivision;

Or alternatively:

b. The Council agrees to close the entry into the old Swanbourne High School site at Nidjalla Loop leaving only an exit.

Amendment 1

The mover and seconder agreed to include part a) only: The motion to be:

"The Council agrees to close the entry/exit (Nidjalla Loop) off Alfred Road into the old Swanbourne High School subdivision;"

<u>Amendment 2</u> Moved – Councillor Wetherall Seconded – Councillor Hay

"That the words 'for a period of 2 years' be included."

The mover and seconder of the original motion agreed to include the above into the motion, which became the substantive motion.

Mr P Mickleson departed the Chambers at 9:39pm and returned at 9:41pm.

Councillor Shaw departed the Chambers at 9:51pm and returned at 9:52pm.

Councillor Hodsdon departed the Chambers at 9:55pm and returned at 9:57pm.

Councillor James departed the Chambers at 9:59pm and did not return.

Moved – Councillor McManus Seconded – Councillor Smyth

Council Resolution

The Council agrees to close the entry/exit (Nidjalla Loop) off Alfred Road into the old Swanbourne High School subdivision for a period of 2 years.

CARRIED 6/5 (Against: Mayor Hipkins, Crs. Shaw, Horley, Binks & Hodsdon)

Reasons:

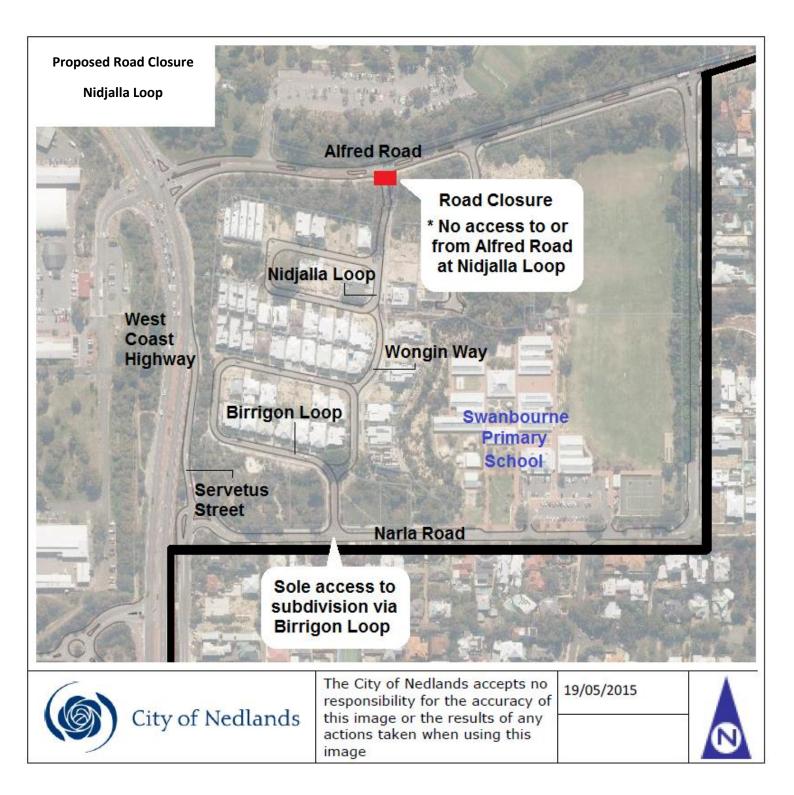
There is almost complete agreement amongst residents of this area that the present situation is untenable and that something must be done now. Safety of the residents and children in particular is the major concern. Wongin Way is not suitable as a through road and is particularly unsafe. The parking situation from workmen on the two big unit developments is causing major parking problems which again is causing safety concerns. There is ongoing angst between residents and the work force. The stress for residents is considerable and they deserve to live in peace and harmony with the local environment.

Administration Comment

This is being addressed in item 13.5 of this agenda, Swanbourne High School Subdivision Traffic & Parking.

Proposed Road Closure Nidjalla Loop

Submissions on the proposal are being accepted up to 5pm on 8 June 2015, under section 3.50 of the Local Government Act 1995.



TS14.15 - Attachment 4

Enquiries: Our Ref: Nicholas King NK/JW/CUS/00038-04

4 June 2015

Greg Trevaskis Chief Executive Officer City of Nedlands PO Box 9 Nedlands WA 6909



DIVISION	GITY	OFNE	LANDS	
Document	t#			50
File #				In
	~	8 JUN	2015	E
Redirect		a, Shine La Martina	(H	_
Action	ACK	NRN	OTHER	0
Enclosed		10730-2010 30738 7071		

Dear Mr Trevaskis

Submission – Proposed closure of Nidjalla Loop

I refer to your recent letter to the Town dated 26 May 2015, regarding the closure of Nidjalla Loop at the intersection of Alfred Road, Nedlands. A report was presented to Claremont Council at its meeting held 2 June 2015, to consider the proposal and Council resolved the following -

That Council

- 1. Make a submission opposing the permanent road closure of Nidjalla Loop off Alfred Road in the City of Nedlands for the following reasons:
 - Will have significant impact on residents and current users of Narla Road
 - Add further difficulty to the traffic exiting out of Narla Road and Alfred Road
 - Add further congestion to the Swanbourne Primary School traffic
 - The proposal is not based upon any technical requirements:
 - As the sole reason for the proposed closure is to improve the local exclusivity and amenity for the new residents within the old Swanbourne Senior School subdivision at the expense of the surrounding road networks residents
- 2. Requests that the City of Nedlands conduct a comprehensive traffic impact study prior to any final decision being made.
- 3. Requests that City of Nedlands, in the event that the decision is taken to close Nidjalla Loop at Alfred Road, implement a traffic management treatment at the intersection of Narla Road and Alfred Road to better facilitate safe and easy exit from Narla Road to Alfred Road.

CARRIED (NO DISSENT)

Number One Claremont 308 Stirling Highway CLAREMONT WA 6010 PO Box 54 CLAREMONT WA 6910 **Phone (08) 9285 4300** Fax (08) 9285 4301 toc@claremont.wa.gov.au www.claremont.wa.gov.au Please consider this submission, as we believe the impact on the surrounding streets will be significant. If you would like to discuss this further please contact Nicholas King, Manager of Engineering on 9340 6916 or by email to nking@claremont.wa.gov.au.

Yours sincerely

Stephen Goode Chief Executive Officer

13.3 INFRASTRUCTURE

13.3.4 CLOSURE OF NIDJALLA LOOP

Responsible Officer:	Saba Kirupananther Executive Manager Infrastructure
Author:	Marty Symmons Engineering Technical Officer
Proposed Meeting Date:	2 June 2015

Purpose

For the Town of Claremont to consider the proposed road closure of Nidjalla Loop, within the City of Nedlands off Alfred Road west of Narla Road in the old Swanbourne High School subdivision.

Background

Nidjalla Loop, Mt Claremont is a part of the newly built subdivision located between West Coast Hwy, Narla Rd, and Alfred Rd on the old Swanbourne Senior School site. Nidjalla Loop, Wongin Way and Birrigon Loop interconnect between Alfred Rd and Narla Rd, with through movement permitted. This development contains around sixty-five residential lots, the majority of which have recently been built upon. The remainder are still being developed.

The new owners of the lots on Nidjalla Loop, Wongin Way and Birrigon Loop, upon taking ownership of the lots, have petitioned the City of Nedlands for the closure of Nidjalla Loop from Alfred Rd. This would result in all access and egress to this subdivision coming via Narla Rd. The City of Nedlands resolved that the petition be received and a report be prepared by their administration for Council's consideration. The Nedlands officers' subsequent report recommended that Nidjalla Loop remain open at Alfred Road.

Nedlands Council decided, contrary to the recommendation, to continue to pursue the Nidjalla Loop closure. As per the Local Government Act for a road closure process Nedlands Council has now commenced advertising in local media for public comment as part of the closure process.

Discussion

Officers at the City of Nedlands Council assessed the road network and the current road traffic volumes and noted that the current traffic volumes on Nidjalla Loop were well within acceptable levels for a local access road network. Additionally the current volumes could be partly attributed to the ongoing developments in the area and the associated construction traffic, meaning volumes would be expected to lower upon completion of these works within eighteen months.

According to the officer report, the main resultant benefits from the proposed closure would be adding to the subdivisions exclusivity and amenity. The officer subsequently notes that this would have the opposite effect upon neighbouring roads, especially Narla Road. Additionally the closure would increase peak hour congestion around Swanbourne Primary School, an area already suffering from congestion. The City of Nedlands officers recommended that Nidjalla Loop remain open at Alfred Road.

The City of Nedlands Council has decided, contrary to the recommendation, to continue to pursue the Nidjalla Loop closure. Advertisement notifying the Council's intention to close Nidjalla Loop was placed in the local newspaper on Saturday 23 May 2015 advising that the closure would commence from 3 August 2015 if approved: Submission to be made to Nedlands CEO and to be received no later than 5pm, 8 June 2015.

Jurisdiction for Nidjalla Loop and the surrounding roads, including Narla Road, lies entirely with the City of Nedlands. Although Claremont's residents will be immediately affected, the final decision to close the road is with the Nedlands Council.

As this closure would be detrimental to the surrounding area and adversely affect Claremont residents, Claremont Council should be opposed to this proposed road closure, however options available to the Town are limited. Claremont Council's position could be conveyed to Main Roads WA and to the Minister for Local Government, however it is deemed unlikely that either authority would pose any objection to the closure.

The affected Claremont residents and Swanbourne Primary have been notified of the proposed road closure and its likely increase on traffic congestion in the area. The purpose is to raise awareness of the proposal, its probable adverse impact and allow Claremont residents to represent their concerns to the City of Nedlands.

If Nedlands Council decides to proceed with the proposed road closure, a request could be made to implement a traffic management treatment at the intersection of Narla Road with Alfred Road to make the exit from Narla Road safe and easy so that the queuing in Narla Road could be minimised.

Past Resolutions

There are no past resolutions relevant to this issue.

Financial and Staff Implications

N/A

Policy and Statutory Implications

Local Government Act 1995 and Regulations.

Publicity

N/A

Urgency

The comment period closes on 8 June 2015. Hence, Claremont Council needs to decide without further delay.

Voting Requirements

Simple Majority

OFFICER RECOMMENDATION

That Council

- 1. Make a submission opposing the permanent road closure of Nidjalla Loop off Alfred Road in the City of Nedlands for the following reasons:
 - Will have significant impact on residents and current users of Narla Road
 - Add further difficulty to the traffic exiting out of Narla Road and Alfred Road
 - Add further congestion to the Swanbourne Primary School traffic
 - The proposal is not based upon any technical requirements:
 - As the sole reason for the proposed closure is to improve the local exclusivity and amenity for the new residents within the old Swanbourne Senior School subdivision at the expense of the surrounding road networks residents
- 2. Requests that the City of Nedlands conduct a comprehensive traffic impact study prior to any final decision being made.
- 3. Requests that City of Nedlands, in the event that the decision is taken to close Nidjalla Loop at Alfred Road, implement a traffic management treatment at the intersection of Narla Road and Alfred Road to better facilitate safe and easy exit from Narla Road to Alfred Road.

TS14.15 - Attachment 5

File Ref: RDS/00255-02

27 May 2015



Town of Claremont Important Information Inside Proposed road closure – Nidjalla Loop, Nedlands

Dear Resident

PROPOSED ROAD CLOSURE - NIDJALLA LOOP, NEDLANDS

This letter is to advise you of an important matter being considered by the City of Nedlands which is likely to impact on your property. The City of Nedlands is proposing to close access to and from Nidjalla Loop from Alfred Rd. This would mean that the new subdivision which includes Nidjalla Loop, Wongin Way and Birrigon Loop would only have access to and from Narla Rd.

According to an assessment by City of Nedlands officers this proposed closure is solely to increase the exclusivity and amenity of (the properties located on) these three roads and is not based on any technical requirement. A officer report for the Nedlands Council recommended that the road remain open, as the likely outcome of this closure will be an increase in traffic on Narla Rd and the surrounding road network. The closure will also increase congestion around the Swanbourne Primary School during peak hours. Despite these findings and the council officers' recommendation that it remain open, Nedlands Council is undertaking public notice requirements prior proceeding with this closure.

Please be advised that <u>the Town of Claremont has no control over this</u> road closure and the decision rests solely with the Nedlands Council. However, a report is being presented to Claremont Council on Tuesday 2 June 2015 formally opposing the proposed closure. Should you object to the proposal you have the opportunity to write to the City of Nedlands to inform them of your objection. The comment period was opened for two weeks commencing 23 May 2015, therefore any objections to be considered must be submitted by 5pm 8 June 2015 and should be addressed to:

Chief Executive Officer City of Nedlands 71 Stirling Hwy Nedlands WA 6009.

You could also watch for when the matter appears on the agenda for the Nedlands Council meeting which will make the decision on this proposal and attend the meeting to present your concerns.

Yours sincerely

Stephen Goode Chief Executive Officer

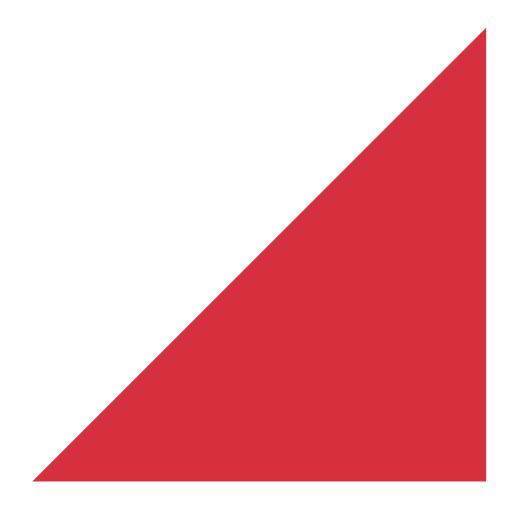
Number One Claremont 308 Stirling Highway CLAREMONT WA 6010 PO Box 54 CLAREMONT WA 6910 **Phone (08) 9285 4300** Fax (08) 9285 4301 toc@claremont.wa.gov.au www.claremont.wa.gov.au



City of Nedlands

Swanbourne High School Subdivision

Traffic Assessment – Preliminary Comments





City of Nedlands

Swanbourne High School Subdivision

Traffic Assessment – Preliminary Comments

Prepared By

Tim Selby Technical Principal - Traffic and Transport

Richard Farmer Traffic Engineer Opus International Consultants (Australia) Pty Ltd Perth Office Level 1, 142 Hasler Road P O Box 174, Osborne Park WA 6917 Australia

Telephone: Facsimile:

+61 8 9340 9900 +61 8 9340 9990

Date: Reference: Status: 28 June 2015 W-05252.00 Final v3

Reviewed By

Approved for Release By

Ian Thew

Business Manager, Perth

Contents

1	Inti	roduction	1
	1.1	Purpose	1
2	Exis	sting Situation	1
	2.1	Site Locality	
	2.2	Road Network	
	2.3	Traffic Data	
	2.4	Crash Data	6
	2.5	Walking and Cycling	6
	2.6	Parking	
	2.7	Nidjalla Loop/Alfred Street Intersection	7
	2.8	Narla Road/Alfred Road Intersection	8
	2.9	Wongin Way Intersection Arrangements	8
3	Opt	tions and Impacts	9
	3.1^{-}	Trial Full Closure of Nidjalla Loop/Alfred Street Intersection	9
	3.2	Alternative Options - Nidjalla Loop/Alfred Street Intersection	12
	3.3	Modification to Internal Subdivision Roads	13
4	Sun	nmary and Conclusions	13
Арр	oendi	x A Road Hierarchy and Speed Limits	15

1 Introduction

1.1 Purpose

Following recent complaints about traffic and parking issues in the Old Swanbourne High School subdivision which has included a petition to close the Alfred Road/Nidjalla Loop intersection, the City of Nedlands has requested a traffic and parking study be undertaken to understand the impact of the proposed closure. As part of this, the City wishes to better understand existing transport and road safety related concerns, opportunities and constraints in the area.

It is understood that the recent commencement of construction of the adjacent Aria residential development with access off Milyarm Drive has resulted in local resident's raising concerns with regards to parking throughout the subdivision (for instance due to construction traffic). There are also concerns regarding vehicles using the Birrigon Loop, Wongin Way and Nidjalla Loop as a through road between Alfred Road and Narla Road.

With regards to parking, it is noted that the City plans to install temporary parking restrictions at various locations within and around the suburb with three monthly reviews of the need for the continuation of such restrictions. Furthermore, as part of the above parking issue, it is acknowledged that on-site parking for construction workers in the form of approximately 360 parking spaces will be made available in July/August 2015¹. In addition, a number of lots are also in the process of being constructed and/or are available for construction within the subdivision and as such, trades people working on such developments tend to park within the subdivision.

This report sets out the independent findings of a preliminary traffic and parking assessment associated with the subdivision considering both the long and short term impact. Specifically, it provides initial comment with respect to:

- The suitability and impact of the closure of the Alfred Road/Nidjalla Loop intersection.
- Alternative closure options to minimise any potential impacts.
- Understanding and analysing any potential impact on Narla Road as a result of the closure including any issues relating to the existing road hierarchy.
- Reviewing the appropriateness of the existing Alfred Road/Narla Loop intersection including the proposed line marking as a result of re-distributed traffic.
- Any potential impact on Swanbourne Primary School.

2 Existing Situation

2.1 Site Locality

As indicated in Figure 2.1 overleaf, the subdivision site is effectively bounded by Alfred Road to the north, the Aria development and Swanbourne Primary School to the east, Narla Road to the south and the West Coast Highway to the west. Servertus Street provides a connection between Narla Road and the West Coast Highway, with a southbound off-ramp from the West Coast Highway providing direct access for south bound traffic. Narla Road itself provides a continuous connection between Alfred Road and Servetus Street given its dog-leg alignment. In addition, Nidjalla Loop, Wongin Way

¹ City of Nedlands. Council Minutes 26 May 2015.

and Birrigon Loop provide connections between Alfred Road and Narla Road – and form the internal subdivision road network.



As part of the overall site locality, it can be expected that the Swanbourne Primary School will be a major traffic generator, with the resulting proportion of peak hour traffic being higher than may generally be expected elsewhere on the road network: typically 10-12% of the 24 hour volume².

2.2 Road Network

Plans showing the existing road hierarchy and prevailing speed limits in the vicinity of the subdivision as set out in the Main Roads WA Road Information Mapping System are contained in Appendix A. As indicated in the plans, Alfred Road is classed as a Distributor A road with a 60km/h speed limit. Narla Road and Servetus Street are classed as Local Distributor roads with a 50km/h speed limit –albeit with part of Narla Road between Birrigon Loop and Alfred Road having a 40km/h school zone speed limit. Nidjalla Loop, Wongin Way and Birrigon Loop as well as Milyarm Rise are all classed as Access roads with a 50km/h speed limit.

Main Roads WA typically expect traffic volumes of less than 3,000 vehicles per day (vpd) on Access roads, between 3,000vpd and 6,000vpd on Local Distributors and up to 8,000vpd on Distributor A roads.

The internal subdivision roads are typically 6m in width with a footpath and verge provided on one side of the direct north-south route through the subdivision – albeit with footpaths not necessarily provided on some of sections of the loop roads.

² Ogden KW and Taylor SY. Traffic Engineering and Management. Institute of Transport Studies. Monash University. 1999

2.3 Traffic Data

2.3.1 Traffic Volumes

2014 traffic count data has been supplied by the City for Nidjalla Loop, Wongin Way and Birrigon Loop. In addition, 2007 and 2015 data for Narla Road between Servetus Street and Devon Street as well as between Alfred Road and Devon Street has also been supplied by the City. Furthermore, hourly weekday traffic count data for Alfred Street to the east of the West Coast Highway for 2005 and 2014 has also been obtained from the Main Roads WA database.

Table 2.1 shows a summary and breakdown of the most recent available traffic count data. Morning and evening peak hour volumes typically occur between 8am to 9am and 3pm to 4pm respectively with the exception of Alfred Road with an evening peak hour between 5pm and 6pm.

Road (& date)	Location	Direction	Average Weekday AM Peak (vehs/hour)	Average Weekday PM Peak (vehs/hour)	Average Weekday Volume (vehs/day)
Nidjalla	Between Alfred Rd and	Northbound	46	44	293
Loop	Wongin Way	Southbound	27	32	234
(12-19/5/14)		Combined	73	77	527
Wongin Way	Between Nidjalla Loop	Northbound	41	41	264
(12-19/5/14)	and Birrigon Loop	Southbound	27	30	205
		Combined	68	71	470
Birrigon	Between Wongin Way	Northbound	46	47	296
Loop	and Narla Rd	Southbound	36	35	236
(12-19/5/14)		Combined	83	83	532
Narla Road ³	Between Servetus St and	Eastbound	111	74	622
(28/4/15 –	Devon Rd	Westbound	66	94	537
4/5/15)		Combined	177	168	1159
Narla Road	Between Alfred Road	Northbound	198	203	1465
(28/4/15 –	and Devon Road	Southbound	231	164	1450
5/5/15)		Combined	429	367	2915
Alfred Road	East of West Coast Hwy	Eastbound	769	337	5,149
(24-25/2/14)		Westbound	491	711	6,044
		Combined	1,260	1,048	11,187

Table 2.1Traffic Volumes

Subdivision Internal Road Volumes

The traffic data indicates a higher northbound movement over the day (as well as at peak periods) through the subdivision in order to access Alfred Road. The subsequent destination of such northbound traffic in terms of heading eastbound or westbound along Alfred Road is not currently known.

A review of the WA Planning Commission (WAPC) Liveable Neighbourhoods document indicates that expected traffic volumes on local subdivision roads (Access street 'D') described as 'short, low volume and low parking demand streets' with a road width of 5.5m-6m to be in the order of 1,000 vehicles per day (vpd). As such, the current traffic volumes experienced by the internal subdivision roads fall well within the expected volume range for this type of road. Guidance contained in the

³ Average Weekday volumes based on Tuesday to Friday as Monday 27 April 2015 was Anzac Day and traffic count failure appears to occur for Monday 4 May 2015.

NSW Guide to Traffic Generating Developments (2002) further re-iterates the above, noting that 'in most cases, it is reasonable to require that the flow of traffic passing 85% of households should not exceed 1,500 vehicles per day, as a design objective' for residential subdivisions. The NSW Guide also notes research indicating that at 90 vehicles per hour (vph), children tend to stop playing in the street and a 300 vph limit is required for elderly pedestrians to safely cross the average street. Existing volumes fall within these limits.

The NSW Guide also sets out environmental capacity performance standards for residential streets with local roads (with a maximum speed of 40km/h) having a recommended maximum volume of 300 vph and an environmental goal of 200 vph. Local Access ways with a maximum speed of 25km/h are recommended as having a maximum peak hour volume of 100 vph. This volume is similar to those contained in the WAPC document which has a 150 vph traffic volume limit for 3.5m access roads with indented parking provided. Existing volumes fall within these limits.

Typically, peak hour volumes on the internal subdivision roads and Narla Road amount to 15%-16% of the total average weekday flow. Whilst a rule of thumb suggests that peak hour to 24 hour ratios in excess of 14% indicate that a road is being used as a rat-run⁴, given the adjacent land uses, it can be expected that school traffic as well as traffic associated with trades people servicing the construction of houses within the subdivision and the Aria development will affect peak hour volumes, and hence the ratio. Whilst the effect of school related traffic on these internal subdivision roads could be established with traffic counts outside of the School term, such data is not currently available. In comparison, the peak ratio is 11% on Alfred Road

As part of the above, the traffic data shown in Table 2.1 for the subdivision roads needs to be considered in terms of:

- traffic being generated (both in and out) by the existing residential development in the subdivision;
- non-local traffic passing through; and/or
- road users using the subdivision for parking and hence stopping within the subdivision (for example due to the construction of houses within the subdivision, the Aria development construction and/or the adjacent School).

Accordingly, the 46 northbound trips on Birrigon Loop during the morning peak hour cannot be directly linked to the 46 northbound trips on Nidjalla Loop. In reality, some of the 46 northbound (outbound) movements on Nidjalla Loop will be pass through traffic from Birrigon Loop whilst the rest will be internally generated. Similarly, in the evening peak hour, of the 44 northbound (outbound) movements on Nidjalla Loop, some will be pass through traffic from Birrigon Loop, some will be internally generated whilst the remainder will be those vehicles that have been parked for a period within the subdivision. A high level, simplistic assessment of this split in types of traffic is discussed in Box 1 overleaf.

Adjacent Road Network Volumes

With regards to Narla Road, traffic volumes are much lower on the western section compared to the eastern (northern) section suggesting that a significant amount of traffic into and out of the area uses Devon Road – also classed as Local Distributor. Whilst approximately 3,000 vehicles currently use

⁴ Ogden KW and Taylor SY. Traffic Engineering and Management. Institute of Transport Studies. Monash University. 1999

the section of Narla Road intersecting with Alfred Road, such volumes are at the bottom end of what would typically be expected for a Local Distributor road.

Over 11,000 vehicles per day currently use Alfred Street – in excess of what a Distributor A road is expected to carry. Tidal flows exist along Alfred Street with a heavy eastbound movement in the morning peak and a reverse heavy westbound movement in the evening peak period.

Box 1

During the May 2014 traffic survey, NearMap historic aerial images indicate approximately 50 dwellings within the subdivision. Based on typical residential trip generation rates of 1 trip/ dwelling during peak periods, this results in 50 in/out trips during the peak hour.

- A 75/25 split in out/in movements during the morning peak hour equates to around 38 outbound trips and 12 inbound trips.
- A 33/67 split in out/in movements during the evening peak hour equates to around 17 outbound trips and 33 inbound trips.

During the morning peak, 82 outbound movements from the sub-division occur (north and southbound). If 38 are internally generated, 44 vehicles can be assumed to pass through the suburb as no construction traffic will have been parked in the suburb overnight. If 73 inbound movements into the suburb occur during the morning peak hour and 12 of these are internally generated and 44 are pass through movements, the remaining 17 vehicles can be assumed to remain in the suburb – i.e. as parked vehicles. When applying the same trip distribution into and out of the suburb, it can be calculated that 25 pass through trips are northbound and 19 are southbound.

Similarly, during the evening peak, 79 inbound movements into the sub-division occur (from the north and south). If 33 are internally generated movements, 46 vehicles can be assumed to pass through the subdivision as minimal construction related traffic will be parking for the night. If a further 79 outbound movements from the sub-division occur in the evening peak hour and 17 are internally generated and 46 pass through, the remaining 16 vehicles can be assumed to have been parked in the suburb. When applying the same trip distribution into and out of the suburb, it can be calculated that 27 pass through trips are northbound and 19 are southbound.

Forty four and forty six vehicles passing through the sub-division in the morning and evening peak hours respectively can be considered to represent between 50% and 65% of two way movements on the internal subdivision road network.

Notwithstanding the above, vehicles arriving to park within the sub-division and/or leaving the subdivision having been parked there for part of the day will occur throughout the day.

Heavy Vehicles

A review of the traffic count data indicates that 8% of vehicles using Nidjalla Loop during weekdays were heavy vehicles, reducing to 3% on Wongin Way and 4% on Birrigon Loop. Given similar daily traffic volumes on Nidjalla Loop and Birrigon Loop, this suggests a number of heavy vehicles accessing the subdivision via Nidjalla Loop also exit the locality using the same access road. As such, heavy vehicles on Nidjalla Loop are counted twice (in and out) resulting in a higher percentage of heavy vehicles being recorded – which in turn, at first glance, results in an excessive percentage of heavy vehicles being perceived to use the road. These volume of heavy vehicles compares with 5% on Narla Road between Alfred Road and Devon Road; and 8% between Servertus Street and Devon Road. Four percent of weekday traffic on Alfred Street are heavy vehicles.

Traffic Growth

For completeness, historical traffic data for both Narla Road and Alfred Street has also been obtained and assessed.

Between 2007 and 2015, annual compound traffic growth on Narla Road amounted to 5.7% between Servetus Street and Devon Road and 3.9% between Alfred Road and Devon Road. These annual growth figures compare with 3.4% annual compound traffic growth on Alfred Street.

2.3.2 Traffic Speed

Traffic speed data from the 2014 survey for the internal subdivision roads indicate 85th percentile⁵ speeds of 40km/h (Nidjalla Loop), 32km/h (Wongin Way) and 30km/h (Birrigon Loop). These speeds reflect the local operating environment and appear appropriate given the nature of the roads.

85th percentile speeds along Narla Road range from 53km/h at the site between Servetus Street and Devon Road; and 56km/h at the site between Alfred Road and Devon Road. These speeds are slightly above the prevailing speed limit. Whilst none of the survey sites are within the school speed zone, it is noted that 85th percentile speeds at the start and end of the school day reduce compared to the rest of the day with speeds of 46km/h and 43km/h for the morning and evening peak hours at the site between Servetus Street and Devon Road.

2.4 Crash Data

Crash data for the most recent five year period between 2010 and 2014 has been obtained from Main Roads WA Crash Analysis Reporting System (CARS) for the various roads under consideration.

The data indicates that one crash was reported on the internal subdivision roads (Nidjalla Loop, Wongin Way and Birrigon Loop). This was reported as being midway along Birrigon Loop in 2013 and involved a vehicle manoeuvring into/out of a parking space. It resulted in property damage only.

Two crashes were reported as occurring at mid-block locations along Narla Road – both resulting in property damage collisions. One crash occurred between Birrigon Loop and Devon Road and the other between Glenway Crescent and Alfred Road. Both involved collisions into the rear of parked vehicles between 3pm and 3.30pm on a weekday.

Three crashes also occurred at the intersection of Alfred Road and Narla Road – one of which required a road user to be hospitalised, with the other two resulting in property damage only. No common contributory factors for the three crashes exist. No further crashes occurred along Alfred Street between Narla Road and Nidjalla Loop.

2.5 Walking and Cycling

Given the scope of the work, no specific comments on walking or cycling issues have been included.

⁵ The speed at/below which 85% of traffic travels at.

2.6 Parking

Observations made during a site visit on Wednesday 24 June 2015 indicated extensive on-street parking within the subdivision as well as along the verge of Alfred Road (between Milyarm Rise and Narla Road) and the western side of Narla Road which appeared to be primarily associated with either the on-going construction of housing within the subdivision or the Aria development.

Parking within the verge along the southern side of Alfred Road was noted to restrict visibility to the right for vehicles exiting Narla Road as well as potentially impacting on pedestrian movements – see Figure 2.2.



Figure 2.2 – Vehicle parking on Alfred Road verge encroaching into footpath/sightlines

Furthermore, given that angled/90 degree parking occurs along the verge, potential road safety concerns exist when vehicles have to reverse out into Alfred Road as well as such manoeuvres having an impact on the capacity of Alfred Road.

2.7 Nidjalla Loop/Alfred Street Intersection

The existing uncontrolled priority T-intersection at Nidjalla Loop and Alfred Street has a protected right turn bay provided on Alfred Street, albeit without a deceleration lane on the approach to the right turn bay due to the provision of raised median islands.

During the site visit, it was noted that the intersection has very limited sight distance to the left along Alfred Road when exiting from Nidjalla Loop due to the crest to the immediate west of the intersection – see Figure 2.3. Whilst no crashes have been recorded at the intersection over the past five years, this may simply be a reflection on the low traffic volumes that are/have been using Nidjalla Loop.



Figure 2.3 – Limited sightlines over the crest of Alfred Street

2.8 Narla Road/Alfred Road Intersection

The Narla Road/Alfred Road intersection is Stop controlled T-intersection with a 50m auxiliary right turn lane (including a short deceleration lane). Raised medians have been provided on all three approaches to the intersection with dropped kerbs and gaps in the median to allow pedestrian movements to occur on the Narla Road and Alfred Road (east) approaches. On the approach to Alfred Street along Narla Road, the northbound lane of Narla Road widens out approximately 50m back from the intersection from approximately 3m to 6.5-7m. Despite this widening, only a single northbound lane of traffic is currently marked and as such, the intersection would appear to operate with two informal lanes for left and right turning movements.



Figure 2.4 – Parked Vehicles on Narla Road on the approach to the Alfred Road intersection

Observations during the site inspection indicated on-road parking along Narla Road on the approach to the Alfred Road intersection limiting the ability of the intersection to effectively operate as having two approach lanes – see Figure 2.4.

2.9 Wongin Way Intersection Arrangements

It is noted and acknowledged that at present, no traffic control devices in the form of signs or pavement markings have been installed at either end of Wongin Way where it intersects with Nidjalla Loop and Birrigon Loop. To highlight the preferred priority movement, the City has submitted a proposed pavement marking plan to Main Roads WA for their consideration and approval which requires traffic on Wongin Way to give way to traffic on either Loop road – with continuity lines also provided along both Loop roads. Given the nature of the road network and general desire to discourage through traffic from using Wongin Way, the adopted approach in terms of the priority movement would appear appropriate and will help provide orderly and clearly defined priority movements at the intersections.

Notwithstanding the above, it is noted that Main Roads WA typically requires modified Tintersections (which in effect is what currently exists) to have a kerbed central island at the head of the T-intersection, and where possible, central curved medians on the through road i.e. on Nidjalla Loop and Birrigon Loop. The ability to provide/fit such measures within the existing carriageway however will rely on the width of the road and the tracking movements of design vehicles to ensure such vehicles can carry out turning movements without over-running the kerbed islands.

It is further commented that the need for vehicles on Wongin Way to give way is further enhanced by the different road surface that exists on Wongin Way compared to Nidjalla Loop and Birrigon Loop. As such, the need to install a corresponding Give Way sign as well as the proposed markings is not considered necessary, particularly as the north-south route (and vice versa) isn't in a straight line and hence doesn't give the impression of a direct through route for vehicles on Wongin Way.

3 Options and Impacts

The impact of any option as well as the Do-Minimum (i.e. no change to the existing situation) needs to be considered in light of both the parking and through traffic movement issues for the:

- Immediate term (1-2 months) prior to on-site parking being made available at the Aria development.
- Short to medium term (up to 2 years) with respect to construction traffic associated with the Aria development as well as continued subdivision development.
- Long term with regards to the operation of the Aria development when fully opened and changes in traffic distribution/times compared to the construction traffic. For example, for the short and medium term, traffic travels to the site during the morning peak. Following construction, traffic flows will dramatically alter/reverse with vehicles leaving the site in the morning peak etc.

As part of the above, the potential impact of preventing parking around the area, including in the subdivision, needs to be considered as this will impact on traffic movements on the adjacent and internal road network. Whilst the proposed parking management and soon to be permitted on-site parking within the Aria development will reduce on-street demand around the site and within the subdivision in the immediate term, it is likely that local trades' people constructing new houses within the subdivision will continue to seek to park within the subdivision itself.

3.1 Trial Full Closure of Nidjalla Loop/Alfred Street Intersection

3.1.1 Impact on Birrigon Loop/Narla Road Intersection

The full closure of the Nidjalla Loop/Alfred Street intersection will result in all vehicles accessing the subdivision having to use the Birrigon Loop/Narla Road intersection. Whilst this will inevitably prevent pass-through traffic using the roads, which as indicated previously may result in a 50%-60% reduction in traffic during peak periods, on its own, it won't prevent parking associated with the local construction projects (both house building within the subdivision and/or the Aria development) or the school from occurring.

Using the logic set out in Box 1 previously for the peak hours, little change in actual traffic volumes exiting the subdivision via Birrigon Loop will occur with the pass through traffic being replaced by the internal residential development generated traffic now having to use the only exit from the subdivision. As such, the current performance of the existing Birrigon Loop/Narla Road intersection is not expected to change.

3.1.2 Impact on Narla Road

The impact on the adjacent road network is less easy to directly forecast given a lack of knowledge about the origin/destination and approach/exit routes of traffic currently using the subdivision roads for through movement. Notwithstanding this, whilst actual pass through movements during the peak periods make up a high percentage of traffic volume on the subdivision roads, the actual numbers are relatively low. Assuming all the pass-through traffic was redistributed onto Narla Road, the forecast volumes during the peak hour may increase by 40-50 vehicles (combined direction) in addition to a further 35-45 vehicles generated by the subdivision housing when fully developed.

Austroads Guide to Traffic Management Part 3: Traffic Studies and Analysis notes that the typical mid-block capacity for urban roads with interrupted traffic flow is 900 passenger car units (pcu)/hour. Whilst mid-block Level of Service (LoS) is typically based on travel speeds, the NSW Guide to Traffic Generating Developments also provides strategic planning guidance on typical urban road peak hour flows relative to a determined LoS – see Table 3.1.

Level of Service	One Lane (vehicles per hour)	Two Lanes (vehicles per hour)
А	200	900
В	380	1400
C	600	1800
D	900	2200
E	1400	2800

Table 3.1 Urban Road Peak Hour Flows per Direction

Existing directional flows on Narla Road vary between 66vph and 231vph. Based on the above strategic advice and an assumption that all traffic will use Narla Road to the east of Birrigon Loop, the additional re-distributed traffic will result in the road still operating at LoS A or B. In this instance, LoS A is described as the top level with free flow and individual drivers being unaffected by other traffic. In this instance, drivers are free to choose their desired speed with an excellent general level of comfort. LoS B is the second highest level of comfort with stable traffic flow and drivers still having reasonable freedom to select their desired speed.

As such, the re-distributed traffic will have minimal impact on the capacity of Narla Road, with volumes well within the level expected for this class of road.

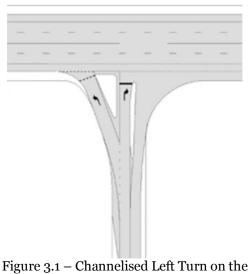
Notwithstanding the above, the potential closure of the Nidjalla Loop/Alfred Street intersection will force some existing pass-through traffic as well as traffic generated by the subdivision (both at present and in the future with full development having occurred) to pass Swanbourne Primary School. Whilst the increase in volumes will be relatively minor and despite a school speed zone being in operation, the extra traffic does increase the exposure to risk of a collision occurring, particularly at the start and end of the school day which need not occur, or at least not to the extent proposed if the full closure of the Nidjalla Loop/Alfred Street intersection occurs.

3.1.3 Narla Road/Alfred Road Intersection Arrangement

Comment has been sought by the City on the current Narla Road/Alfred Road intersection arrangement. As part of this, the Council resolution to ban parking (on the road and verge) along Alfred Road and the northern end of Narla Road is noted. Such action can be expected to improve capacity at the intersection by allowing left and right turning vehicles to informally queue side by side and improve safety given that sight visibility will be regained.

However, it should also be noted that research ⁶ has shown the crash rate for vehicles entering a major road such as Alfred Road at unsignalised intersections where separate left and right turn lanes exist on the minor road are much higher than for single lane approaches. This is due to the vehicles queuing in the right lane obscuring the views of drivers in the left lane and vice versa. As such, where traffic dictates the need to provide two approach lanes on the minor road, a channelised left turn treatment should be provided on safety grounds – see Figure 3.1.

It should be noted however that the actual performance of the intersection cannot be tested without carrying out turning count surveys and subsequently undertaking a Sidra analysis to determine the existing LoS as well as the future potential LoS assuming additional traffic using the intersection.



igure 3.1 – Channelised Left Turn on the Minor Road

3.1.4 Wider Impacts

A key consideration of the closure of the Alfred Road/Nidjalla Loop intersection relates to the stated intended purpose of the road to provide through movements as part of the Town Planning Scheme amendment. The closure of the intersection will effectively make the internal subdivision road into a cul-de-sac, albeit with the internal loop roads providing secondary internal access.

Whilst the closure of the intersection would not represent a true cul-de-sac for the internal subdivision road network as a whole, and WAPC Liveable Neighbourhoods guidance that culs-de-sac serve no more than 20 dwellings may not hold true, the closure of the intersection has a fundamental impact on access and movement for emergency services as well as the removal of a secondary escape route for residents in the event of a fire. This in itself is considered a major issue and direct consultation with the emergency services is strongly recommended as part of the overall planning process.

Should the intersection be closed, it is recommended that access for pedestrians and cyclists between Alfred Road and Nidjalla Loop be retained to ensure interconnectivity for such road users.

It should also be noted that if the intersection is closed off, it will be necessary to provide a turning circle to allow rubbish trucks to serve the northern most dwellings.

On a positive note, whilst not currently shown to be a road safety issue in terms of crash numbers, closing the Nidjalla Loop/Alfred Street intersection would potentially address road safety concerns related to sight distances, with traffic being forced to access Alfred Road at an alternative location with enhanced facilities and/or sight lines.

⁶ Austroads Guide to Road Design – Part 4A: Unsignalised and Signalised Intersections

3.2 Alternative Options - Nidjalla Loop/Alfred Street Intersection

3.2.1 Do-Minimum (No Change)

As indicated previously, existing peak hour and daily traffic volumes through the internal subdivision road network are low and well within their theoretical capacity. However, a large proportion of movements seem to be through movements rather than simply local travel accessing the subdivision. This in turn has an impact on the local amenity of the residents living in the subdivision, which has already resulted in the City receiving a petition to close the Alfred Road intersection.

Whilst the proposed parking restrictions will help reduce some traffic in the subdivision, a high level assessment (as shown in Box 1) suggest the majority of traffic during the peak periods to be through movements.

Accordingly, whilst maintaining the existing arrangements (with parking controls) will retain the intended purpose of the route as set out in the Town Planning Scheme amendment, it is likely that the City will continue to receive complaints subject to local resident perceptions relating to actual traffic versus parking numbers.

3.2.2 Restricted Turning Movements at Nidjalla Loop/Alfred Street Intersection

In order to maintain partial access to/from the subdivision and hence retain the intended purpose of the road as set out in the Town Planning Scheme amendment, consideration could be given to restricting turning movements to/from Nidjalla Loop. The most appropriate form of treatment in terms of minimising through traffic would need to be subject to the results of an intersection turning count survey. However, existing traffic count data for the roads through the subdivision do already highlight a larger northbound movement during the peak periods as well as generally throughout the day. As such, traffic volumes could be reduced by:

- Making the access between Alfred Road and Nidjalla Loop one-way southbound, thereby allowing turning movements into the subdivision only from both the east and west. This would require the northern end of Nidjalla Road at the intersection with Alfred Road to be narrowed down to discourage northbound vehicles from trying to use the access, as well as the provision of a turning area. This arrangement would also address safety concerns with regards to the limited visibility to the west along Alfred Road.
- Making the access between Alfred Road and Nidjalla Loop one-way northbound, thereby only allowing turning movements out of the subdivision. This option is less effective than the southbound only option given higher existing northbound traffic flows and doesn't address the road safety sight line concerns. It would also be difficult to enforce unless further turning restrictions were utilised in order to make turning movements into the subdivision extremely difficult.
- Restricting turning movements at the Nidjalla Loop/Alfred Street intersection to left-in/leftout only by closing the median with a raised island on Alfred Street. This still maintains twoway access into and out of the subdivision but discourages and prevents some through movements. The full extent of the effectiveness of this option would depend upon current turning movements.

3.2.3 Alternative Intersection Arrangements

During the site visit, it was observed that limited opportunity exists to change the existing type of intersection at Alfred Road/Nidjalla Loop. For example, an embankment on the northern side of Alfred Road as well as the need to relocate an existing power pole in order to provide sufficient deflection for traffic on Alfred Street prevents a roundabout option from being considered. Furthermore, such an alternative arrangement would also seem inappropriate given the Distributor A road status of Alfred Street and the Access road classification of Nidjalla Loop with the associated difference in traffic volumes – roundabouts tend to work best when traffic flows on each approach are balanced which is not the case in this situation. In addition, a roundabout may encourage more people to use the internal subdivision roads which would be counter to current local concerns regarding the use of the road for through movements.

3.3 Modification to Internal Subdivision Roads

Rather than amend/prevent turning movements at the Nidjalla Loop/Alfred Street intersection, alternative options include modifying the internal subdivision road network. Potential options include:

- Closing one end of Wongin Way (whilst retaining pedestrian and cycle access) to split the subdivision and hence prevent through movements in the same way as the closure of the Nidjalla Loop/Alfred Street intersection. This option results in a reduced share of the internally generated traffic being distributed onto Narla Road but is contrary to the intended purpose of the internal road network as set out in the amended Town Planning Scheme. It also requires a turning circle to be provided at the road closure which may be difficult to provide given the existing road reserve.
- Closing Nidjalla Loop and Birrigon Loop in the vicinity of Wongin Way to prevent the current direct route through the subdivision and forcing through traffic to use a longer, more arduous route to travel between Alfred Road and Narla Road. Such an option may discourage some through traffic given increased travel times compared to alternative routes elsewhere, but would push traffic that still wishes to use the route onto sections of Birrigon Loop and Nidjalla Loop that currently don't experience such volumes. As such, complaints from other residents may occur.
- Reducing the width of Wongin Way to 3.5m with indented parking forcing drivers to give way to on-coming vehicles and hence discourage its use as a through road due to potential delays. It is noted that such an option would not be suitable if similar volumes to those currently experienced continue after the road narrowing, and may result in local resident complaints if they were being held up as a result of external through traffic.
- Closing the Birrigon Loop/Narla Road intersection and retaining the Alfred Road access is not considered good practice given that a local Access road would solely connect to a Distributor A road rather than a lower class of road such as Narla Road. If only one access is the preferred option, good transport planning would suggest that this be on to Narla Road.

4 Summary and Conclusions

A review of existing traffic volumes through and in the vicinity of the Old Swanbourne High School subdivision indicates that from a purely theoretical position, the existing local road network has sufficient capacity to meet current and future traffic demands regardless of whether the Alfred Road/Nidjalla Loop intersection is closed. The current peak hour and daily traffic volumes through

14

the subdivision are such that they are below what may be expected for a local Access road. Similarly, the closure of the Alfred Road/Nidjalla Loop intersection to address identified concerns would not have a significant impact on the performance of Narla Road from a capacity perspective, but would nevertheless cause additional traffic to travel past Swanbourne Primary School.

Whilst internal subdivision traffic volumes are relatively low, the fact that the City has received a petition indicates local concerns. Whilst the proposed parking management measures will reduce local parking and potential vehicle movements associated with this in the subdivision, preliminary investigations indicate that a large proportion of traffic can be considered to be pass-through movements.

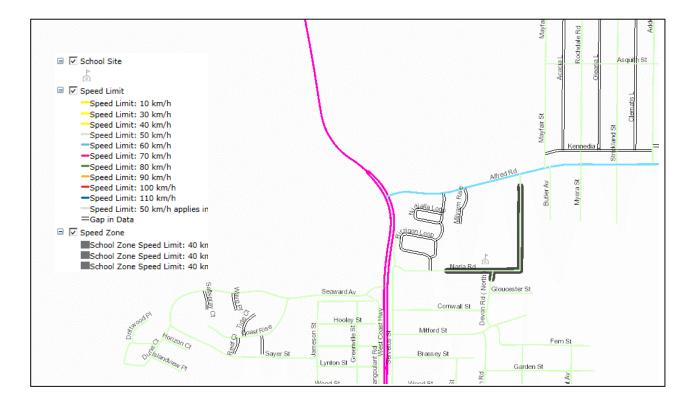
The full closure of the intersection to address this pass-through movement would be contrary to the original intended purpose of the subdivision road network as debated during the Town Planning Scheme amendment phase and also results in an un-necessary risk from an emergency/escape route perspective.

Options however exist to still retain access to/from the subdivision via Alfred Road and hence meet the Town Planning Scheme amendment philosophy and emergency access concerns whilst also reducing through movements. The most appropriate option/technique to address this should be subject to further investigations based on confirming the actual amount of through movements⁷ as well as turning movements at the Alfred Road/Nidjalla Loop intersection, for instance to determine how effective restricted turning movements such as left in/out only would be in discouraging through movements.

⁷ A simple origin/destination video number plate survey at each end of the internal subdivision road to confirm what is local and what is pass-through traffic could be up to \$7,500 for the morning and evening peak periods using a traffic survey company. This could potentially be done much cheaper (\$3,000 - \$4,000) using local resources, including establishing turning movements.

Appendix A Road Hierarchy and Speed Limits







Opus International Consultants (Australia) Pty Ltd Level 1, 142 Hasler Road P O Box 174, Osborne Park WA 6917 Australia

t: +61 8 9340 9900 f: +61 8 9340 9990 w: www.opus.com.au

PD14.15 Attachment 7 – Extract of Public Question Time from OMC 23 June 2015 Minutes

1. Public Question Time

Mr Kevin Williams, 52 Nidjalla Loop, Swanbourne

On 22 June 2015 Mr Kevin Williams submitted questions as below:

Question 1:

Has the Claremont Town Council been approached and asked to identify the source of the misinformation being used to fuel this disparaging, erroneous and selfish initiative aimed at the Nedlands Council and its ratepayers?

Answer 1:

No. The City of Nedlands residents should feel free to make enquiries with the Town of Claremont as they see fit; as the City of Nedlands would respond to residents of the Town of Claremont.

Question 2:

What action does the Nedlands City Council now propose to take in order to re-affirm its decision of the 28 April and to clarify the reasons for temporary road closure?

Answer 2:

The consultation on the closure is complete and a report will be brought to the Committee of Council on 14 July and to the Ordinary Meeting of Council of 28 July. Council will determine any course of action in July.

Ms Cheryl Sampson, 3 Nidjalla Loop, Swanbourne

On 22 June 2015 Ms Cheryl Sampson submitted questions as below:

Question 1:

What action has the Council of Nedlands taken to correct the public misinformation distributed by the Town of Claremont, primarily in their letter to residents?

Answer 1:

For Council to determine a response.

Mr Brian Reilly, 3 Nidjalla Loop, Swanbourne

On 22 June 2015 Mr Brian Reilly submitted questions as below:

Question 1:

Did the administration of the City of Nedlands inform the Town of Claremont of the decision to close Nidjalla Loop?

<u>Answer 1:</u>

Yes, the wording of the resolution was provided.

Question 1a)

PD14.15 Attachment 7 – Extract of Public Question Time from OMC 23 June 2015 Minutes

a) That it was to address safety issues related to through traffic not suited for the roadway?

Question 1b)

b) That it was not about improved exclusive amenity, but rather based on preserving amenity for informed home buyers who had not anticipated that State Government would override the City of Nedlands, and approve zoning for a development over 3 times the size of that which was previously approved, adjacent to the subdivision. Thus dramatically changing the use of a through road designed to accommodate only low volume local traffic and specifically designed to discourage through traffic?

Question 1c)

c) That it was for a two year period?

Question d)

d) That during this period there would be a traffic study?

Answer 1a) to d):

No, however they were invited to access the City's website to gain further information on the matter if they wanted this.

Question 2:

Did the Town of Claremont contact the City of Nedlands in any way to seek an explanation for the decision to close Nidjalla Loop prior to their 2 June Council meeting in particular before the resident letter was sent out?

Answer 2:

The City of Nedlands contacted the Town of Claremont to get a list of residents for the consultation. We referred them to the City's website for the agenda's and minutes.

Question 3:

Having become aware of the erroneous agenda paper presented to and subsequent flawed conclusion of the Claremont Council, which then consented to the distribution of a community letter, what action has the Council of Nedlands made to explain the true basis of the temporary closure decision to the Town of Claremont?

Answer 3:

For Council to determine a response.

Mr Chris Wiener, 12 Nidjalla Loop, Swanbourne

On 22 June 2015 Mr Chris Wiener submitted questions as below:

Question 1:

Given the reputation of the CoN has been diminished by the false characterisation of its decision to close Nidjalla Loop in the Media and potentially in representations to the Local Government Minister and state government agencies such as Main Roads, what action is the CoN taking to correct this?

PD14.15 Attachment 7 – Extract of Public Question Time from OMC 23 June 2015 Minutes

Question 2:

Noting that the Nedlands residents have already written to the Minister for Local Government lodging formal complaints with the behaviour of the ToC what action can the CoN take to support residents with this complaint?

Answer 1 & 2:

Council may determine what action, if any it wishes to take at the July Ordinary Meeting of Council.

Mr Sthen Boisen, 1 Nidjalla Loop, Swanbourne

Mr Sthen Boisen submitted questions on 21 June 2015 as below:

Question 1:

In view of resolution 14.2 from the Council Meeting of 28 April 2015 and recent actions by the Town of Claremont, has CoN been in communication with ToC concerning their misrepresentation of the facts and reasons for the temporary closure of Nidjalla Loop/Alfred Road access?

Answer 1: No.

Question 2:

If so (in reference to question 1) can CoN advise the outcome of such approach and when ToC will update their minutes to reflect actual facts?

Answer 2:

It is not necessary to update the minutes. Council's reason for its decision are in the minutes.

TS15.15 Tender No. 2014/15.18 Stormwater Drainage Construction

Committee	14 July 2015
Council	28 July 2015
Applicant	City of Nedlands
Officer	Nathan Brewer – Purchasing and Tenders Coordinator
Director	Mark Goodlet – Director Technical Services
Director Signature	MG
File Reference	TS-PRO-00071
Previous Item	Not Applicable

Executive Summary

To award the term contract for the provision of stormwater drainage construction in the City of Nedlands for capital and operational works where required.

Recommendation to Committee

Council:

- 1. Agrees to award tender no. 2014/15.18 to the contractor Remote Civils Australia Pty Ltd as per the schedule of rates submitted; and
- 2. Authorises the Chief Executive Officer to sign an acceptance of offer for this tender.

Strategic Plan

KFA: Natural and Built Environment

Award of this tender enables the City to maintain civil infrastructure as part of operational and capital works.

Background

The City of Nedlands includes a provision for stormwater drainage construction to maintain and improve the City's drainage infrastructure as part of the engineering services capital and operational works. Expenditure on this contract will exceed \$100,000. Therefore to comply with legislative requirements outlined in the *Local Government Act 1995* and ensure the best value for money for the City, this service must be tendered.

No 🖂

Tender documents were advertised on Friday 10 April 2015 in the West Australian Newspaper. The tender submission period commenced on Monday 13 April 2015 and submissions closed at 14:00 pm Tuesday 28 April 2015.

The City received 7 conforming tender submissions as follows:

- 1. Remote Civils Australia Pty Ltd;
- 2. MMM WA Pty Ltd;
- 3. Reilly Contractors Pty Ltd;
- 4. HAS Group WA Pty Ltd;
- 5. HAS Group Pty Ltd Alternative Tender;
- 6. Majestic Plumbing Pty Ltd; and
- 7. CGH Civil Pty Ltd.

Two non-conforming tender submissions were also received, as follows:

- 1. Allwest Plant Hire Australia Pty Ltd
- 2. TC Drainage Pty Ltd

Key Relevant Previous Council Decisions

Nil.

Consultation

Required by legislation:YesRequired by City of Nedlands policy:Yes

Legislation / Policy

Local Government Act 1995, section 3.57 Local Government (Functions and General) Regulations 1996, Part 4 City of Nedlands Policy – 'Purchasing of Goods and Services'

Budget/Financial Implications

Within current approved budget:	Yes 🖂	No 🗌
Requires further budget consideration:	Yes 🗌	No 🖂

Risk Management

Failing to appoint the contract will impact on the City's ability to maintain and upgrade City drainage infrastructure within agreed levels of service.

Key risk areas, including financial and regulatory risks, have been addressed through the control measures applied through the tender documentation and evaluation process. Reference checks were completed on the recommended contractor following the evaluation process.

Discussion

The tender was independently evaluated by three City Officers in accordance with the qualitative criteria specified in the tender documentation, as set out in the below table extract from RFT 2014/15.18.

Qua	litative Selection Criteria	Weighting
Organisation Capabilities A Tenderer must as a minimum, address the following information in an attachment and label it "Organisation Capabilities":		20%
a) b) c)	Nominate key personnel to be involved in this contract and provide relevant experience and industry-recognised qualifications and registrations of the key personnel; Demonstrate the ability to supply and sustain the necessary manpower, plant and equipment; and Demonstrate recent experience with contracts of a similar size and scope.	
 Performance A Tenderer must as a minimum, address the following information in an attachment and label it "Performance": a) The ability to supply and sustain the necessary technical resources, staff and equipment; b) Demonstrate ability to provide high quality and standard of work; and c) Demonstrate ability to meet specifications of this request. 		30%
 Demonstrated Understanding A Tenderer must as a minimum, address the following information in an attachment and label it "Demonstrated Understanding": a) An outline of proposed methodology, including equipment and material supply details; and b) Notice requirements to guarantee availability for works. 		20%

Price A Tenderer must as a minimum, address the following information in an attachment and label " Price ":	30%
The tendered price(s) will be considered along with related factors affecting total cost to the Principal. Early settlement discounts, lifetime costs, the major components to be utilised, the Principal's contract management costs may also be considered in assessing the best value for money outcome.	

The priced items were compiled into a spreadsheet for analysis of value comparison. A price criteria score was allocated based on the best value being scored at 100% and other values scored proportionally against this price.

The pricing was weighted at 30% of the assessment with the remaining % being allocated to the qualitative section criteria.

Evaluation

Remote Civils Australia Pty Ltd scored 71%.

The final evaluation score and price is published in Confidential Attachment 1.

Conclusion

After an assessment of the submitted tenders it is proposed that Council agrees to award tender no. 2014/15.18 to the contractor Remote Civils Australia Pty Ltd.

Remote Civils Australia Pty Ltd scored highly in a number of areas. The price schedule provided by Remote Civils, although within budget, was not the lowest of the assessed submissions. However, their organisation capabilities, performance and demonstrated understanding were exceptionally good and they scored highest overall in in the whole assessment, and the assessing Officers were in agreement that Remote Civils offered the best overall value for money.

Attachments

1. Confidential Tender Assessment (not to be published).

TS16.15 Tender No. 2014/15.19 Jetting and Educting Services

Committee	14 July 2015
Council	28 July 2015
Applicant	City of Nedlands
Officer	Nathan Brewer – Purchasing and Tenders Coordinator
Director	Mark Goodlet – Director Technical Services
Director Signature	MG
File Reference	TS-PRO-00072
Previous Item	Not Applicable

Executive Summary

To award the term contract for jetting and educting services in the City of Nedlands.

Recommendation to Committee

Council:

- 1. Agrees to award tender no. 2014/15.19 to the contractor Drainflow Services Pty Ltd as per the schedule of rates submitted; and
- 2. Authorises the Chief Executive Officer to sign an acceptance of offer for this tender.

Strategic Plan

KFA: Natural and Built Environment

Award of this tender enables the City to maintain drainage infrastructure as part of operational and capital works.

Background

The City of Nedlands includes a provision for jetting and educting services to maintain and improve the City's infrastructure as part of the engineering services operational works. Expenditure on this contract will exceed \$100,000. Therefore to comply with legislative requirements outlined in the *Local Government Act 1995* and ensure the best value for money for the City, this service must be tendered. Tender documents were advertised on Friday 8 May 2015 in the West Australian Newspaper. The tender submission period commenced on Monday 11 May 2015 and submissions closed at 14:00 pm Wednesday 27 May 2015.

The City received 7 conforming tender submissions as follows:

- 1. Drainflow Services Pty Ltd;
- 2. Solo Resource Recovery;
- 3. Veolia Environmental Services (Australia);
- 4. Perth Pressure Jet Services;
- 5. Western Maze Pty Ltd t/as Western Ducting Service;
- 6. Transpacific Industries Pty Ltd; and
- 7. TerraVac Pty Ltd t/as TerraVac Vacuum Excavation (trustee for the Upton Family Trust.

Key Relevant Previous Council Decisions

Nil.

Consultation

Required by legislation:	Yes 🗌	No 🖂
Required by City of Nedlands policy:	Yes 🗌	No 🖂

Legislation / Policy

Local Government Act 1995, section 3.57 Local Government (Functions and General) Regulations 1996, Part 4 City of Nedlands Policy – 'Purchasing of Goods and Services'

Budget/Financial Implications

Within current approved budget:	Yes 🖂	No 🗌
Requires further budget consideration:	Yes 🗌	No 🖂

Risk Management

Failing to appoint the contract will impact on the City's ability to drainage infrastructure within agreed levels of service.

Key risk areas, including financial and regulatory risks, have been addressed through the control measures applied through the tender documentation and evaluation process. Reference checks were completed on the recommended contractor following the evaluation process.

Discussion

The tender was independently evaluated by three City Officers in accordance with the qualitative criteria specified in the tender documentation, as set out in the below table extract from RFT 2014/15.19.

Qua	alitative Selection Criteria	Weighting
AT	anisation Capabilities enderer must as a minimum, address the following information in attachment and label it "Organisation Capabilities": Nominate key personnel to be involved in this contract and provide relevant experience and industry-recognised qualifications and registrations of the key personnel; Demonstrate the ability to supply and sustain the necessary manpower, plant and equipment; and Demonstrate recent experience with contracts of a similar size and scope.	20%
 Performance A Tenderer must as a minimum, address the following information in an attachment and label it "Performance": d) The ability to supply and sustain the necessary technical resources, staff and equipment; e) Demonstrate ability to provide high quality and standard of work; and f) Demonstrate ability to meet specifications of this request. 		30%
 Demonstrated Understanding A Tenderer must as a minimum, address the following information in an attachment and label it "Demonstrated Understanding": c) An outline of proposed methodology, including equipment and material supply details; and d) Notice requirements to guarantee availability for works. 		20%

Price A Tenderer must as a minimum, address the following information in an attachment and label " Price ":	30%
The tendered price(s) will be considered along with related factors affecting total cost to the Principal. Early settlement discounts, lifetime costs, the major components to be utilised, the Principal's contract management costs may also be considered in assessing the best value for money outcome.	

The priced items were compiled into a spreadsheet for analysis of value comparison. A price criteria score was allocated based on the best value being scored at 100% and other values scored proportionally against this price.

The pricing was weighted at 30% of the assessment with the remaining % being allocated to the qualitative section criteria.

Evaluation

The contractor that scored the highest in the evaluation was Drainflow Services Pty Ltd with a score of 92%.

The final evaluation scores are published in Confidential Attachment 1.

Conclusion

After an assessment of the submitted tenders it is proposed that Council agrees to award tender no. 2014/15.19 to the contractor Drainflow Services Pty Ltd.

Drainflow Services Pty Ltd scored the highest in all areas of the assessment including offering the best price.

Attachments

1. Confidential Tender Assessment (not to be published).

TS17.15 Tender No. 2014/15.22 Refurbishment of Handrail Network at Swanbourne Beach

Committee	14 July 2015	
Council	28 July 2015	
Applicant	City of Nedlands	
Officer	Daniel Lewis – Parks Projects Coordinator	
Director	Mark Goodlet – Director Technical Services	
Director Signature	MG	
File Reference	TS-PRO-00075	
Previous Item	Not Applicable	

Executive Summary

To award the contract for the replace the deteriorating handrail infrastructure at Swanbourne Beach Reserve.

Recommendation to Committee

Council:

- 1. Agrees to award tender no. 2014/15.22 to the contractor Living Iron Pty Ltd for the lump sum of \$117,375; and
- 2. Authorises the Chief Executive Officer to sign an acceptance of offer for this tender.

Strategic Plan

KFA: Natural and Built Environment

This KFA contributes to the provision of public facilities that are essential to community activities. Awarding of this tender enables the City to undertake renewal of critical community infrastructure.

Background

The existing steel handrail network was installed at the Swanbourne Beach Reserve in 2004, as part of major re-development of the area. The corrosive coastal environment has caused a significant and rapid deterioration of the handrail network. Significant maintenance works were carried out in 2010 to remediate corroded areas of the handrail in order to render it safe. Subsequent to the maintenance work, extensive corrosion returned in other areas raising safety concerns and negatively affecting the amenity the area.

An example of the condition of the existing network is presented in figure 1 below:



Figure1: Example of corrosion in existing handrail

The tender specification for the replacement of the handrail network is for replacement using stainless steel '316' which has a suitably high resilience to corrosion and, as a result, will reduce ongoing maintenance costs in future.

There have been three tenders released in total seeking submissions for the replacement of the network:

- Tender no. 2014/15.06 was initially advertised on 17 December 2014, for a Stainless Steel 316 Post and Cable network. This tender failed to receive a suitable submission.
- Tender no. 2014/15.13 was subsequently released with a slightly modified specification, advertised on 2 February 2015. This tender, like the first, was also unsuccessful in attracting a suitable submission.
- In a third attempt to attract suitable submissions, local companies were alerted to the up-coming tender to improve chances of receiving a suitable submission. This tender, no. 2014/15.22 was successful in receiving 7 submissions, of which five were identified as conforming to be assessed.

Tender documents were advertised in the West Australian Newspaper. The tender submission period commenced on Tuesday 28 April 2015 and submissions closed at 14:00 pm Wednesday 13 May 2015.

The City received 7 conforming tender submissions as follows:

- 1. Enviro Contracting Pty Ltd;
- 2. Living Iron Pty Ltd (Option 1);
- 3. Living Iron Pty Ltd (Option 2)
- 4. Elite Stainless Steel Fabrication Pty Ltd;
- 5. Unit Trust t/as Fencewright (Option 1);
- 6. Unit Trust t/as Fencewright (Option 2); and
- 7. Ozwest Steel Fabricators Pty Ltd.

Two non-conforming tender submissions were also received as follows:

- 1. Bendtech Group Pty Ltd; and
- 2. Protek Carpentry and Fencing Service Pty Ltd.

Key Relevant Previous Council Decisions

Approval of the 2014/2015 Annual Capital Budget.

Consultation

Required by legislation: Required by City of Nedlands policy:

Yes	
Yes	\boxtimes

No 🖂

No

Should the City award this tender, the City will liaise with the Swanbourne – Nedlands Surf Lifesaving Club and the Naked Fig Café, prior to commencing construction. This is to limit any disruption to these key stakeholders adjacent to the existing handrail network.

The project has been listed on the City's website and within a full page advertisement in the Post Newspaper.

Legislation / Policy

Local Government Act 1995, section 3.57 Local Government (Functions and General) Regulations 1996, Part 4 City of Nedlands Policy – 'Purchasing of Goods and Services'

Budget/Financial Implications

Within current approved budget:	Yes 🗌	No 🖂
Requires further budget consideration:	Yes 🖂	No 🗌

The 2014/2015 Parks Capital Budget included \$81,550 (exc gst) for the replacement and upgrade of the existing painted steel network to a stainless steel network. These funds are being carried over from the 2014/2015 budget.

The balance of funds will be allocated during the mid-year budget deliberations.

Risk Management

Failing to appoint the contract mean that the handrail network at the Swanbourne Beach Reserve remains in significantly poor condition.

Key risk areas, including financial and regulatory risks, have been addressed through the control measures applied through the tender documentation and evaluation process. Reference checks were completed on the recommended contractor following the evaluation process.

Future maintenance costs of the handrail network will be reduced in future as a result of awarding this tender through the use of a highly resilient stainless steel material.

Discussion

The tender was independently evaluated by three City Officers in accordance with the qualitative criteria specified in the tender documentation, as set out in the below table extract from RFT 2014/15.22.

Qualitative Selection Criteria	Weighting
Key Personnel, Skills and Experience A Tenderer must as a minimum, address the following information in an attachment and label it "Organisation Capabilities":	20%
 a) Nominate key personnel to be involved in this contract; and b) Provide relevant industry experience, current qualifications and registrations of the key personnel. 	Ł
Organisation Capabilities A Tenderer must as a minimum, address the following information in an attachment and label it "Organisation Capabilities":	10%
 a) Organisations to demonstrate industry-recognised qualifications and recent experience with contracts of a similar size and scope. 	
Performance A Tenderer must as a minimum, address the following information in an attachment and label it " Performance":	1 5%
a) The ability to supply and sustain the necessary technical resources, staff and equipment;	
 b) Demonstrate ability to provide high quality and standard of work; and 	
c) Demonstrate ability to meet specifications of this request.	

 Warranty A Tenderer must as a minimum, address the following information in an attachment and label it "Warranty": Are you willing to offer an extended warranty? a) If yes, please stipulate the terms of the warranty you are willing to offer. 	5%
Price A Tenderer must as a minimum, address the following information in an attachment and label "Price": The tendered price(s) will be considered along with related factors affecting total cost to the Principal. Early settlement discounts, lifetime costs, the major components to be utilised, the Principal's contract management costs may also be considered in assessing the best value for money outcome.	50%

The priced items were compiled into a spreadsheet for analysis of value comparison. A price criteria score was allocated based on the best value being scored at 100% and other values scored proportionally against this price.

The pricing was weighted at 50% of the assessment with the remaining % being allocated to the qualitative section criteria.

Evaluation

The contractor that scored the highest in the evaluation was Enviro contracting Pty Ltd with a score of 68%. Living Iron Pty Ltd were close behind with a score of 65%.

The final evaluation scores are published in Confidential Attachment 1.

The tender document requires that the handrail network must comply with:

- a) the Building Code of Australia Part D2.16; and
- b) all relevant Australian Standards including, but not limited to, AS 1170.1.2002 -Structural Design Actions – Permanent, imposed and other actions.

The submission from Living Iron Pty Ltd that offered the services required for a lump sum of \$117,375 was deemed to provide the best balance between price and other qualitative criteria. Quality of the services provided by Living Iron Pty Ltd was evident by works on high profile and award winning projects. Living Iron Pty Ltd also presented an alternative bid that was deemed not to represent comparable value for money.

The highest scoring submission from Enviro Contracting Pty Ltd was significantly above the allocated budget. With the minimal difference in the overall evaluation

scores between the two when compared to Living Iron Pty Ltd, it was deemed not to represent the best value to the City.

Conclusion

After an assessment of the submitted tenders it is proposed that Council agrees to award tender no. 2014/15.22 to the contractor Living Iron Pty Ltd as offering the most cost effective and best value option.

Attachments

1. Confidential Tender Assessment (not to be published).

TS18.15 Tender No. 2014/15.16 Supply and Installation of Signs

Committee	14 July 2015
Council	28 July 2015
Applicant	City of Nedlands
Officer	Nathan Brewer – Purchasing and Tenders Coordinator
Director	Mark Goodlet – Director Technical Services
Director Signature	MG
File Reference	TS-PRO-00070
Previous Item	Not Applicable

Executive Summary

To award the term contract for the supply and installation of signs in the City of Nedlands.

Recommendation to Committee

Council:

- 1. Agrees to award tender no. 2014/15.16 to the contractor Corsign WA Pty Ltd as per the schedule of rates submitted; and
- 2. Authorises the Chief Executive Officer to sign an acceptance of offer for this tender.

Strategic Plan

KFA: Natural and Built Environment

Award of this tender enables the City to provide and maintain signage throughout the City.

Background

The City of Nedlands includes a provision for the supply and installation of signage to maintain and improve the City's infrastructure as part of the engineering services capital and operational works. Expenditure on this contract will exceed \$100,000. Therefore to comply with legislative requirements outlined in the *Local Government Act 1995* and ensure the best value for money for the City, this service must be tendered.

Tender documents were advertised in the West Australian Newspaper. The tender submission period commenced on Wednesday 29 April 2015 and submissions closed at 14:00 pm Thursday 13 May 2015.

The City received two conforming tender submissions as follows:

- 1. Corsign WA Pty Ltd; and
- 2. Road Signs Australia Pty Ltd.

Key Relevant Previous Council Decisions

Nil.

Consultation

Required by legislation:	Yes 🗌	No 🖂
Required by City of Nedlands policy:	Yes 🗌	No 🖂

Legislation / Policy

Local Government Act 1995, section 3.57 Local Government (Functions and General) Regulations 1996, Part 4 City of Nedlands Policy – 'Purchasing of Goods and Services'

Budget/Financial Implications

Within current approved budget:	Yes 🖂	No 🗌
Requires further budget consideration:	Yes 🗌	No 🖂

Risk Management

Failing to appoint the contract will impact on the City's ability to provide and maintain infrastructure within agreed levels of service.

Key risk areas, including financial and regulatory risks, have been addressed through the control measures applied through the tender documentation and evaluation process. Reference checks were completed on the recommended contractor following the evaluation process.

Discussion

The tender was independently evaluated by three City Officers in accordance with the qualitative criteria specified in the tender documentation, as set out in the below table extract from RFT 2014/15.16.

Qua	litative Selection Criteria	Weighting
AT	anisation Capabilities enderer must as a minimum, address the following information in attachment and label it "Organisation Capabilities":	30%
a) b) c)	Nominate key personnel to be involved in this contract and provide relevant experience and industry-recognised qualifications and registrations of the key personnel; Demonstrate the ability to supply and sustain the necessary manpower, plant and equipment; and Demonstrate recent experience with contracts of a similar size and scope.	
AT	formance enderer must as a minimum, address the following information in attachment and label it " Performance":	20%
a)	The ability to supply and sustain the necessary technical resources, staff and equipment;	
b)	Demonstrate ability to provide high quality and standard of work; and	
c)	Demonstrate ability to meet specifications of this request.	
AT	nonstrated Understanding enderer must as a minimum, address the following information in attachment and label it "Demonstrated Understanding":	20%
e)	An outline of proposed methodology, including equipment and	
f)	material supply details; and Notice requirements to guarantee availability for works.	
	enderer must as a minimum, address the following information in attachment and label " Price ":	30%
The tendered price(s) will be considered along with related factors affecting total cost to the Principal. Early settlement discounts, lifetime costs, the major components to be utilised, the Principal's contract management costs may also be considered in assessing the best value for money outcome.		

The priced items were compiled into a spreadsheet for analysis of value comparison. A price criteria score was allocated based on the best value being scored at 100% and other values scored proportionally against this price.

The pricing was weighted at 30% of the assessment with the remaining % being allocated to the qualitative section criteria.

Evaluation

The contractor that scored the highest in the evaluation was Corsign WA Pty Ltd with a score of 89%.

The final evaluation scores are published in Confidential Attachment 1.

Conclusion

After an assessment of the submitted tenders it is proposed that Council agrees to award tender no. 2014/15.16 to the contractor Corsign WA Pty Ltd.

Corsign WA Pty Ltd scored the well in all areas of the assessment including offering the best price.

Attachments

1. Confidential Tender Assessment (not to be published).

TS19.15 Request for Street Tree Removal Referred for Council Consideration – 6 Finchley Rise, Mt Claremont

Committee	14 July 2015	
Council	28 July 2015	
Applicant	City of Nedlands	
Officer	Andrew Dickson – Manager Parks Services	
Director	Mark Goodlet – Director Technical Services	
Director Signature	MG	
File Reference	PAR-005279	
Previous Item	Item 12.4 - report CP31.12 – Council Minutes 24 July 2012	

Executive Summary

For Council to consider a request for street tree removal that cannot be approved by Administration under delegation with reference to Council's Street Trees policy.

Recommendation to Committee

Council refuses the request for the removal of a Tuart (*Eucalyptus gomphocephala*) street tree, Asset Identification Number 12980, located on the nature strip adjacent to the boundary between 4 and 6 Finchley Rise, Mt Claremont.

Strategic Plan

KFA: Natural and Built Environment

This KFA contributes directly to engaging community spaces and incorporates enhancement and protection of streetscapes.

Background

Council's Street Trees policy prescribes under which circumstances street trees may be removed (refer to Attachment 1, page 35 and 36 of Council Policy Manual). All requests for street tree removal are considered by Administration in accordance with policy and delegated authority.

The basis on which this request for street tree removal has been made is evidently addressed by policy. Administration has refused the request for removal in accordance

with policy provisions. The persons requesting removal are seeking further consideration of their request and this requires determination by Council.

Key Relevant Previous Council Decisions

Item 12.4 - report CP31.12 - Council Minutes 24 July 2012

Council approves the following policy: b. Street Trees.

Consultation

Required by legislation: Required by City of Nedlands policy: Yes □ Yes ⊠ No 🖂

No

Ongoing consultation between the applicant, Administration and Council.

Legislation / Policy

Local Government Act 1995 Street Trees Policy

Budget/Financial Implications

Within current approved budget: Requires further budget consideration:

Yes 🖂	No 🗌
Yes 🗌	No 🖂

It is recommended that the request for removal of the street tree be refused. If Council were to approve the removal request, or an alternative means of addressing the issue, consideration needs to be given in respect of the City accepting the associated costs or assigning these to the persons requesting removal.

Risk Management

The primary risks are reputational and governance related. Decisions made by Council have the potential to be perceived negatively within the community. Managing these risks entails decision making based on consideration of the information presented and current policy.

Discussion

A property owner in Finchley Rise, Mt Claremont is requesting the removal of a large Tuart tree located on the nature strip adjacent to the boundary between house numbers 4 and 6. The request has been made on the basis of the tree dropping nuts/seed capsules onto their property, specifically a driveway.

Correspondence regarding the tree was received by Coastal ward Councillors and forwarded to Administration on 7 April 2015, found in Confidential Attachment 2.

The correspondence from the property owner requested the tree be considered for removal as the owners believe it has become a danger. They have reported the tree sheds large amounts of nuts/seed capsules that accumulate on the road and their driveway.

A recent incident was outlined whereby the property owner's mother, whilst visiting, fell on their driveway as a result of slipping on the nuts. By their own admission, the steepness of the driveway contributed to the fall and they advised they believe the fall would not have occurred if the driveway had been flat.

The property owner's report:

- Spending considerable time removing the nuts from their property with this taking up to an hour a day;
- Being fearful of other visitors slipping on the driveway and injuring themselves;
- Feeling that the tree is aesthetically pleasing; however feeling the safety of people visiting their property is more important;
- Being open to having a replacement tree planted; and
- Being willing to bear some of the cost for removal and replacement of the existing tree.

The tree is a large specimen in good health and is listed in the City's tree asset database as being considerably important. Investigation indicates no previous record of complaint or safety concern regarding the tree.

It is not clear as to whether the City or an adjacent property owner may have planted the tree; however the size and prospective age of the tree does not rule out it being a smaller remnant tree that pre-existed residential development of the area.



Figure 1 – Tuart street tree (AIN - 12980)

The provision in Council's Street Trees policy that deals with this matter follows on from a common law principle arising from precedent in Australian courts. The courts have found that people who chose to live in urban environments, and in particular where they are to benefit from having trees in such an environment, must expect to maintain the exterior of private property inclusive of house and grounds. This principle leads to a reasonable expectation that property owners remove tree debris from the surrounds of their houses, and those parts of the nature strip for which they are responsible for maintaining in accordance with local laws, on a regular basis and this is to be regarded as typical property maintenance.

Conclusion

Administration does not support removal of the street tree and recommends Council refuse the requested street tree removal in accordance with current policy. Administration believes that, if Council were of the view the tree causes unacceptable inconvenience to the property owner, there would be greater benefit in investigating alternative options for alleviation other than removal of the tree.

Some alternative management options that might be considered for this particular tree are as follows:

- Undertake property boundary clearance pruning, so as to assist alleviate maintenance requirements associated with nuts dropping onto the private property, in accordance with AS 4373 and to the extent it will not compromise the viability of the tree long term, noting this would not remove the inconvenience entirely - Parks supports this approach as an alternative to removal of the tree;
- Significantly prune the tree to reduce its size, its height and the associated debris
 production, accepting that this will have a detrimental effect on the tree long term
 and has the potential to increase Council's future exposure to liability Parks does
 not support this approach;
- Provide assistance with removal of the nuts from the crossover and driveway on a
 once off basis annually Parks has limited support with this approach as crossover
 maintenance is the responsibility of the property owner in accordance with local
 laws and the property owner has the means to carry this out. Additionally Parks
 does not support providing services on private property for reasons of liability and
 therefore this approach would not address the maintenance issues on the driveway
 from which they are seeking relief; or
- Provide assistance with removal of the nuts from the crossover and driveway on a monthly basis – Parks does not support this approach (noting the above) with the additional belief this approach has the potential to set a precedence that could give rise to future significant consequences in service delivery and budgetary impositions; the courts have established that property owners in urban areas should expect to have to carry out maintenance of the outside of their property including removal of tree debris, especially where they are to benefit from trees in such an environment.

Attachments

- 1. Page 35 & 36 of Council Policy Manual (Street Trees policy excerpt); and
- 2. Confidential correspondence requesting removal (not to be published).

Council Policy Manual

Where appropriate, tree selection is to enhance gardens and trees already
planted on the private property abutting to the verge concerned.

Pruning

- In the interests of public safety and the health of street trees, pruning is only to be undertaken by personnel authorised by the City of Nedlands.
- Pruning will be carried out where it is identified that part of the tree is dead, diseased or dangerous or to comply with statutory requirements. All pruning of street trees will be in accordance with Australian Standard AS 4373.
- Programmed pruning, including under-pruning, will be carried out on street trees in order to:
 - Maintain statutory clearances around and under Western Power infrastructure;
 - Remove traffic hazards and ensure trees do not interfere with vehicle movements; and
 - Remove hazards or potential risks to members of the public.
- Non-programmed pruning of street trees will be carried out where necessary to remove a portion of a tree that is dead, diseased or hazardous.
- If a resident requests a street tree abutting their property to be pruned and it does not require pruning in the opinion of the CEO, the ratepayer shall bear 100% of the cost to prune the tree if the pruning is approved.

Removal

Street trees may not be removed unless one or more of the following criteria applies:

- The tree is dead, post mature or in decline and no further remedial techniques are appropriate;
- The tree poses a hazard whether to persons or property and pruning or other techniques cannot effectively remedy that hazard;
- The tree is diseased or damaged to an extent that remedial techniques are unlikely to restore it;
- Prior to planning approval, plans are to be adjusted to accommodate existing street trees with a two (2) metre buffer zone where practicable. Where a development is approved that necessitates the removal of a street tree, as there are no design options available allowing retention, the developer shall replace the tree and bear 100% of the cost for the City to remove the tree and plant a replacement tree of an appropriate size and species at a suitable location on the same verge;

Council Policy Manual

- To facilitate a Council approved works program (i.e. road works, drainage, utilities etc);
- The Council decides to remove and replace trees on selected main or other streets, to provide an avenue effect, or
- Council may approve requests for street tree removal and replacement, to a similar size, with a preferred species where a property owner agrees to compensate the City the full amenity value of the tree (as determined under an independent valuation) and accepts all associated removal, planting and maintenance costs.
- Prior to the removal of a street tree Administration shall assess the tree and where practicable notify ward Councillors as a matter of courtesy of any proposed street tree removal one week prior to the removal and the reasons why in accordance with above.
- Unless circumstances dictate otherwise a street tree that has been removed shall be replaced by another tree of a suitable size and species.
- Removal of significant trees will only be authorised upon advice of a qualified arboriculturist and approval of Council.
- Leaf, flower, nut or bark fall, protection or enhancement of views or reduction or eradication of shade shall not constitute a reason for street tree removal.
- In the interests of public safety, pruning and removal is only to be undertaken by personnel authorised by the City of Nedlands.

Notification requirements will be as outlined in the Council's Community Engagement Policy and Strategy.

All applications for development shall indicate the location of adjoining street trees on site plans.

Public Safety and Potential Liability

In the interest of public safety and potential liability issues, structures such as, but not limited to, swings, cubby houses, ladders etc are not permitted to be constructed in street trees.

Species Selection

- Tree species will be determined by the Council from time to time.
- The City will develop a Species Selection database of generally available stock suitable to local conditions (to be displayed on the website) from the below Preferred Species Selection List: