ORDINARY COUNCIL

ORD05

SUBJECT: **CAMDEN TOWN FARM FUNDING REQUEST**
FROM: Acting Director Works & Services
BINDER: Section 355 Town Farm

PURPOSE OF REPORT

This report seeks Council approval to allocate $52,120.00 to Camden Town Farm Committee to undertake agricultural activities on Camden Town Farm.

BACKGROUND

Camden Town Farm was bequeathed to Council by Miss Davies and is managed by a voluntary community management committee, appointed by Council and delegated the "care and control" of the Town Farm under Section 355 of the *Local Government Act,* within the parameters set by Council in the Community Management Committee Manual.

MAIN REPORT

The Town Farm Committee has requested funding to enable them to undertake agricultural activities on the farm, which the committee believe will generate income. Currently, the Town Farm does not receive any direct funding but does receive some income generated from activities held on the farm and rental income from the existing residence on the property. Last financial year the total income from all activities was $36,987.15, of which $23,122.60 were spent on improvements, slashing, equipment servicing and similar expenses. The value of the large number of volunteer hours spent by committee members undertaking activities have not been included in these calculations.

The capital improvements proposed by the Town Farm Committee require an investment of $52,120. These activities are:

- Power and irrigation equipment;
- Planting of lucerne and fertilisation;
- Weed management and control;
- The purchase of cattle; and
- Fencing.

The committee anticipates that this investment would provide an income for the Town Farm which would be used to make further improvements to the property. The full details of the proposal are contained in **Attachment 1 to this report.**

Council is reviewing the current classification of the land, which will be reported to a future meeting of Council. Importantly, all of the activities proposed can be undertaken regardless of the classification.

FINANCIAL IMPLICATIONS

The $52,120 requested could be funded from the Capital Works Reserve which has a current balance of $1,000,000.

As a delegated committee of Council, the income and expenditure of the Town Farm Committee is monitored by Council and the income generated from this investment would be reported through our regular reporting mechanisms. Further, the Town Farm Committee shall include information in relation to this funding via financial statements incorporated as part of their minutes each month. In addition, the Town Farm Committee will be asked to include this funding and the results of the activity as a separate item in their annual report to Council.

CONCLUSION

The Town Farm Committee has members who bring a range of farming skills and experience to the activities of the Town Farm. Their request for an initial investment will allow them to continue the valuable work and could provide an additional income stream for the Town Farm.

RECOMMENDED

That Council:

i. allocate $52,120 to the Town Farm Committee for the purposes outlined in this report from the Capital Works Reserve; and

ii. thank the members of the Town Farm Committee for their proposal.

ATTACHMENTS

1. Town Farm Report & Required Capital

TOWN FARM REPORT 27th March 2013

The purpose of this report is to demonstrate the potential agricultural income earning capacity of the farmland on Miss Lewella Davies Camden Town Farm. This report will also demonstrate areas in which expenditure is required to allow optimum earnings from the farmland without undue workloads for committee, volunteers or council staff and with the purchase of minimal farm equipment. This can be achieved by the use of reliable agricultural contractors who will act in a safe efficient manner and the rates given in this report are taken from historic operations.

Farming is a complex business and to maintain maximum earnings would require maximum inputs both financial and physical and carries an increased risk. For the purpose of this report only average inputs and earnings have been used and average seasonal conditions and rainfall are assumed.

IRRIGATION

The utilisation of the irrigation licence, (pump owned by Mr. David Buckley) and irrigation water infrastructure, which are already in place, would serve as a safety net in a serious drought. There is, at the moment, no power connected to the pump and no irrigator (sprinkler). Included in this report is the purchase of only a basic irrigator which would require more labour than a more elaborate and expensive model.

The big advantage of the ability to irrigate is that in a dry season fodder (hay and silage) is in high demand and consequently provides high returns. Seasonal hay and silage production can provide a sound income through share cropping or contract harvesting. The main risk associated with stockpiling hay and silage on farm is spoilage due to flood inundation.

PASTURE

Lucerne requires replanting every 4 or 5 years. The replanting of lucerne on the river (Lucerne) paddocks can be staged with 30% planted annually. It is assumed that the current stand is more than 5 years old and 1/3 of the paddocks appear to be reasonably productive, however expenditure to replant 30% p/a is included. Other grazing paddocks should ideally be oversown with winter fodder species (ryegrass and clover) and a selective herbicide applied annually. Soil fertility tests would ideally be carried out annually to determine any deficiencies and fertiliser applied periodically. Strategic fertiliser use will increase production considerably and is generally a wise investment.

CATTLE

Cattle trading has been carried out on the Town Farm by the Committee in the past and currently there is a small herd (19) of European type steers. These have been purchased at auction and are grass fed for approximately 200 days then resold at auction. Growth rates of 1kg/head/day can be achieved, with prices received in 160c/kg - 200c/kg range. Included in this report is an average margin of $320/head/8mths or $480/head pa with 50 head pa turnover being a fairly conservative estimate. A unique feature of this enterprise is the fact that the farm can 'winter' cattle well and take advantage of the southern tablelands weaner sell off prior to winter, then hold them until spring.

Cattle agistment has been provided to local schools for free, on a limited basis and generally has provided little income. Whilst we wish for this to continue it must be recognised that there will be an element of foregone income of $480/head pa. Other agistment has been provided to some

individuals, however due to the difficulty in tracing cattle movements, this has not provided any worthwhile revenue so no income is included from this enterprise.

FENCING

The fencing on the Town Farm was basically non- existent when the 355 committee was formed and has been gradually improved with many new fences being erected by Council, Contractors, High School Primary Industry students and Committee members.

An ongoing fencing program will be needed to maximise grazing management. An estimated 1500 metres@$18/metre would see an easy to manage system. Most paddocks now have access to water via troughs or a dam. Fortunately fencing, if properly constructed, will normally last for decades, excluding flood damage.

WEEDS

There are a range of weeds on the Town Farm, the most difficult to control is the aquatic alligator weed (Alternanthera Philoxeroides). Council weed staff have in the past been of great assistance with this and it is hoped that they will continue. Alligator weed doesn't affect the agricultural income of the farm.

Other weed infestations are woody weeds mainly small leaf or Chinese Privet (Lingustrum Sinense), Gleditsia (Gleditsia Tracanthos) Blackberry (Rubus Fructiosis) and African Boxthorn (Lycium Ferocissimum) are all present and all of which are in need of control. In the past the Town Farm Committee has paid a casual worker to monitor and treat weeds, however this has not continued over the last couple of years. A combination of mechanical and chemical control will be necessary, this class of weed is the most costly to control and will need an ongoing control program, but doesn't have an immediate economic impact, however, if left unchecked will reduce the available area for agricultural uses and as a consequence reduce income.

Pasture weeds like thistles, fireweed and onion weed are an ever present problem, the economic impact of not controlling these weeds is mainly through downgrading of quality of hay and silage and ultimately the price received. These weeds can be controlled in a cost effective way with the strategic use of selective herbicides and will be treated as part of pasture management.

A farm of this size has most of the elements required to give the residents pride in their community. Grazing livestock, rolling green fertile pastures, free from weeds and run in a sustainable way can give residents and visitors a pleasing aspect. The items addressed in this report are essential to a well-managed farm. The profitability of the agricultural enterprises will benefit the "community use" portions with profits being used to enhance the areas of the farm that the majority of the community visits regularly and therefore give the people of Camden confidence that Miss Lewella Davies Camden Town Farm is being run in accordance with the masterplan and is in good hands.

TONY BIFFIN

ORD05

Attachment 1

CAMDEN TOWN FARM

UPFRONT CAPITAL REQUIRED 2013/14

POWER POLE	$7,000.00
SUBMERSIBLE PUMP	$6,000.00
IRRIGATOR & FITTINGS	$6,000.00
FERTILISER APPLIED	$5,000.00
PLANTING LUCERNE	$1,500.00
SOIL TEST	$120.00
FENCING	$10,000.00
CATTLE PURCHASE 30@$450	$13,500.00
WOODY WEED CONTROL	$3,000.00
TOTAL CAPITAL REQUIRED	**$52,120.00**

ORDINARY COUNCIL

ORD06

SUBJECT: **NARELLAN ROAD UPGRADE REVIEW OF ENVIRONMENTAL FACTORS**
FROM: Acting Director Works & Services
BINDER: Traffic and Transport / Planning / Traffic

PURPOSE OF REPORT

To consider a Council response to the Review of Environmental Factors (REF) for the Narellan Road Upgrade project being progressed by NSW Roads and Maritime Services.

BACKGROUND

NSW Roads and Maritime Services (RMS) has placed a REF for the Narellan Road Upgrade project on public exhibition. This report considers the detail of the REF and proposes a formal response on behalf of Council.

MAIN REPORT

Project Description

RMS is proposing to progressively upgrade Narellan Road between Camden Valley Way, Narellan, and Blaxland Road, Campbelltown, to improve traffic flow and road safety. Key features of the upgrade include:

- three continuous lanes and shoulder in each direction, with four eastbound lanes and shoulder between Tramway Drive and the Hume Motorway;
- additional turning lanes at intersections;
- additional noise mitigation;
- a continuous off-road shared pedestrian / cyclist path on the southern side with crossing provisions at traffic lights;
- reconfiguration of bus stops;
- new traffic lights at Kenny Hill Road and Hume Motorway intersections;
- lengthening the southbound exit ramp from the Hume Motorway and providing additional lanes to the intersections with Narellan Road;
- widening the bridges over Sydney Water Canal and Hume Motorway;
- provision of a heavy vehicle inspection bay at Kenny Hill (westbound); and
- provision of a traffic incident response facility on the eastern side of the Hume Motorway interchange.

In June 2012 some preparatory works were undertaken between Mount Annan Drive and Waterworth Drive in parallel with long-term planned maintenance. Additionally for safety reasons, an interim westbound lane was added in September 2012 between the Hume Motorway and the Australian Botanic Garden. These sections of road will be further upgraded as part of the Narellan Road Upgrade.

The scope of the Narellan Road Upgrade project does not include any changes to speed limits except the section posted at 60km/h where there are narrow lanes. This will be returned to 80km/h once the lanes are widened.

Project Phasing

The Upgrade is proposed to be undertaken in three stages:

Stage A Hume Highway (east) to 400 metres east of University / TAFE access road

Stage B Botanic Garden Access Road to Hume Highway interchange and 400m east of University / TAFE access road to Gilchrist Drive / Blaxland Road

Stage C Camden Valley Way to Botanic Garden Access Road

The RMS has a funding commitment of $15.4 million for the detailed design development and construction of stage 1. Detailed design works will take place upon successful completion of the REF process and it is proposed by the RMS that stage 1 construction will commence in June 2014. The RMS is actively seeking additional funding for the remainder of the project.

Consultation Undertaken

RMS launched preliminary community consultation on 28 November 2012 for 24 days. Councillors were advised to forward queries or comments to the Traffic Team and Council officers provided feedback to RMS on significant issues needing to be addressed by the project.

RMS undertook a Preliminary Risk and Constructability Workshop on 7 December 2012 and a Risk Assessment Workshop on 15 February 2013, to assess factors which would impact on the delivery of the project. These workshops involved representatives of major stakeholders including Council.

From February to May 2013 the RMS gathered relevant background information on issues such as heritage and adjacent developments from Council officers.

The RMS presented the project to Councillors at a Councillor Workshop on 2 April 2013. The REF was then placed on public exhibition on 16 May 2013 for 27 days.

Council has been advised that a resolution from the meeting on 11 June 2013, will be accepted as a formal response to the REF.

The RMS has produced a Community Consultation Report in May 2013 (as shown in **Attachment 1**) which details RMS responses to community comments.

Review of Environmental Factors (REF)

The Narellan Road Upgrade is subject to assessment under Part 5 of the *Environmental Planning and Assessment Act 1979*. No development consent is required from Camden Council for these works. As part of their requirements the RMS has prepared a REF which has been placed on exhibition for comment. Council's proposed response to the REF covers the environmental issues raised in the REF as advised by specialist officers. The proposed response is detailed in **Attachment 2** and significant issues are identified below:

Heritage

Heritage items within Camden LGA identified by the Statement of Heritage Impact are:

- The Upper Canal;
- Remnants of the Campbelltown to Camden railway line;
- Smeaton Grange Homestead; and
- Struggletown HCA

It is recommended that Council stresses that works in the vicinity of the Upper Canal and remnants of the Camden tramway must comply with recommendations in the Statement of Heritage Impact. Any road signage in the vicinity of Struggletown should also comply with the recommendation in the Statement of Heritage Impact. It is not considered that the proposals will impact on the Smeaton Grange Homestead.

Noise & Vibration

The noise assessment adopts the NSW EPA Road Noise Policy. It has established that at least 167 existing residences would experience noise in excess of the policy criteria (greater than 60 dB(A)). To attempt to mitigate the noise exceedance, the report provided some “in-principle” noise control solutions to reduce noise impacts for at least 49 residences which are “acutely” affected by noise (greater than 65 dB(A)). It is recommended that the REF considers suitable noise mitigation for all 167 residences affected by excessive traffic noise and not just those acutely affected.

Solutions detailed in the report include the provision of suitably high noise barriers positioned around groups of residences. These barriers have been modelled at 4 metres and 5 metres high. The assessment recognises that any barrier must also be visually acceptable and access for residents are to be maintained. Treatment options for properties are only considered where other noise mitigation measures, such as the provision of barriers, are exhausted, not feasible or not cost effective.

Contamination / Salinity

The REF confirms that there is a potential for topsoil in shallow areas of fill on Narellan Road to contain elevated levels of lead as a result of vehicle emissions. It is recommended that Council requests soils within the road corridor be investigated for contamination and soils be managed with respect to their potential reuse or disposal.

The REF acknowledges that there is a moderate salinity potential or impact along Narellan Creek. It is therefore recommended that Council requests that prior to final road design a salinity investigation be undertaken to determine the level of salinity and aggressivity of soils to proposed infrastructure.

Air Quality

The REF does not provide any air pollution vehicle emission data for the Narellan Road area. Further, there is no recognition of existing air quality and its impact on existing residents. It is recommended that the REF provides additional information that identifies the air quality impacts from existing and future vehicle emissions with recommendations for mitigation and control.

Biodiversity

It is recommended, that prior to the removal of any logs identified to be retained for fauna habitat outside of the construction area, that they are checked for any native habitat, and that appropriate measures are instigated to minimise any stress.

Modifications to the canal bridge should be referred to the NSW Office of Water for consideration, as a Constructed Activities Approval may be required.

Stormwater / Floodplain Management

Stormwater pollution is already known to occur from Narellan Road and it is recommended that suitable stormwater pollution treatment devices should be considered for the Narellan Road Upgrade. It is recommended that Council requests the RMS to assess and incorporate stormwater quantity management access provisions, along the full length of Narellan Road.

A flood study of Narellan Creek is currently underway and the results of this Narellan Creek Flood Study are expected in August 2013. After the flood study for Narellan Creek has been completed, Council will prepare a Floodplain Risk Management Plan for Narellan Creek. It is proposed that Council recommends that the RMS liaise with Council and consider a proposed floodplain management strategy for Narellan Creek in the planning and design for the upgrade of Narellan Road.

Council's Engineering Design Specification requires a 50% blockage factor should be applied to drainage culverts, drainage structures in low points of the road and pipes with headwalls. It is proposed that this factor is applied to the Narellan Road Upgrade.

Road Design

It is noted that some of the proposed road shoulder widths within the Camden LGA are shown to be 2.0 metres wide. It is recommended Council advises that shoulder widths are to be 3.0 metres, with an absolute minimum width of 2.5 metres.

Street Lighting

No proposal for the street lighting of Narellan Road Upgrade has been documented within the REF. As Narellan Road is gazetted as a Controlled Access Road, it is recommended that Council requests that any maintenance and energy costs for the street lighting of Narellan Road be fully covered by the Traffic Route Lighting Subsidy Scheme (TRLSS).

Landscape Character

It is recommended that the Currans Hill, Mount Annan and Narellan Vale landscapes be considered to be moderately sensitive given the site topography, road alignment and established roadside planting. Great care is required at the detailed design stage to mitigate any potential visual impacts at these locations and it is recommended that Council requests the height of any noise or acoustic walls or retaining walls be minimised to manage visual impacts.

Land Acquisition

Parts of five lots of land are proposed to be acquired within Camden LGA, all of which are in the ownership of Council. Acquisition has been identified along the boundary of the Mount Annan Leisure Centre which will impact on the Leisure Centre Stage 2 design and layout. It is recommended that Council requires the RMS to clarify the boundary at the earliest opportunity and commit to reimburse Council for re-design costs. On the north side of Narellan Road boundary adjustment is proposed in the vicinity of Tramway Drive. This land is vegetated and clarification is being sought as to vegetation proposed for removal and extent of revegetation. It is also recommended that the height of a relocated retaining wall be minimised and reconstructed in similar natural stone material to the current retaining wall.

Traffic and Transport / Project Delivery

The traffic model demonstrates that the Narellan Road Upgrade will cater for existing traffic and moderate growth but not for significant development anticipated in South West Growth Centre and other new precincts in Camden and Wollondilly Council areas. This highlights the need for the State Government to investigate alternative road corridors between Camden and Campbelltown LGAs and the Hume Motorway at an early opportunity.

It is recommended that Council accepts demand-operated traffic signals at Kenny Hill Road and a formalised vehicle inspection bay at Kenny Hill and the preferable options for these features.

It is recommended that Council requests additional footpaths and indented bus bays be incorporated into the project. Concern is expressed about the potential road safety hazard of the proposed shared path in the vicinity of Camden Bypass.

It is recommended that Council supports the revised project staging which has been simplified and prioritises the most congested sections – particularly the Hume Motorway and TAFE intersections.

FINANCIAL IMPLICATIONS

There are no financial implications to Council with the design and construction of the Narellan Road Upgrade. There may be future maintenance changes if street lighting is modified and Council will also remain responsible for maintaining assets within the road verge.

CONCLUSION

The Narellan Road Upgrade project has been developed over the last twelve months in consultation with the local community and key stakeholders. In general the project should deliver traffic and transport improvements for the Camden community. Some concerns have been identified and will be included in a formal response from Council to the REF. Further detailed design issues will be formally raised with RMS following the successful completion of the REF process.

RECOMMENDED

That Council:

i. supports in principle the REF for the Narellan Road Upgrade; and

ii. submits a formal response to the RMS as detailed in Attachment 2.

ATTACHMENTS

1. Narellan Road Upgrade - Community Consultation Report
2. Narellan Road Upgrade REF - Response by Camden Council

Transport Roads & Maritime Services

Community Consultation Report

Narellan Road Upgrade

Camden Valley Way, Narellan to Blaxland Road, Campbelltown

MAY 2013

RMS 13.273
ISBN 978-1-922245-37-3

ORD06

Attachment 1

Table of Contents

Cover picture: Looking east from The Australian Botanic Garden intersection at Narellan Road.

1. Background

Roads and Maritime Services (RMS) is currently investigating the upgrade of Narellan Road between Camden Valley Way at Narellan and Blaxland Road at Campbelltown to help improve traffic flow and road safety in the road corridor.

Earlier work completed by RMS during 2012 includes:

a. **Essential maintenance** on a 700-metre long section of Narellan Road at Mount Annan in late August 2012. The work carried out in both directions between Hartley Road and Mount Annan Drive, involved:

- Repairing the existing road pavement.
- Narrowing the median to allow the number of traffic lanes to be increased from two lanes to three lanes in each direction.
- Line marking.
- Installing a wire rope in the median to improve safety.
- The extra lanes provided by the maintenance project complement the NSW Government's plan to upgrade Narellan Road from two traffic lanes to three traffic lanes between Mount Annan Drive and the Hume Motorway.

b. Construction of **a third lane, westbound on Narellan Road** between the Hume Motorway interchange and the Australian Botanic Garden entrance at Mount Annan was opened for motorists on Saturday 8 September 2012.

- The speed limit was **reduced from 80km/h to 60km/h westbound only** on Narellan Road between Hume Motorway interchange and the Australian Botanic Garden intersection as a result.
- The additional westbound lane provides a dedicated lane for vehicles exiting the south bound loop off-load ramp at the Hume Motorway interchange.
- This work improves road safety and traffic flow during the afternoon peak time for motorists exiting the Hume Motorway.

c. **Removal of the 40 km/h school zone on Narellan Road** in consultation with Mount Annan Christian College, Member for Camden Chris Patterson MP, Camden Council and Busways.

- To facilitate the school zone removal, during the school holidays, RMS made changes to the Mount Annan Christian College local access road involving:
  - Localised widening of the bend in Mount Annan Church Road to allow buses and cars to safely negotiate the bend.
  - Changes to the traffic signal timing to minimise delays for drivers exiting the school onto Narellan Road.
  - New traffic management arrangements to safely allow bus access to and from the school. This will give priority for vehicles entering the school. Vehicles exiting the school will be required to give way to vehicles entering.

Preliminary investigations during 2012 for the Narellan Road upgrade project included undertaking ground surveys, geotechnical investigations, flora and fauna studies, noise monitoring, and identification of heritage issues along the corridor.

The preliminary concept design for upgrading Narellan Road to a six-lane divided road has been prepared. The preliminary concept design proposes five stages of work for Narellan Road to be delivered into the future. The first stage between Mount Annan Drive and the Hume Motorway interchange is expected to be completed by 2014.

Five stages of the proposed upgrade:

Stage 1 - Provide three lanes on Narellan Road in both directions between Mount Annan Drive and the Hume Motorway interchange. Provide new traffic lights at the Hume Motorway southbound ramps.

Stage 2 - Provide three westbound lanes between the UWS/TAFE access road and the Hume Motorway interchange. Provide three eastbound lanes between the Hume Motorway interchange and Blaxland Road. Upgrade the UWS/TAFE intersection with dual right turn lanes into UWS/TAFE access road.

Stage 3 - Improve the right turn lanes on Narellan Road at the Blaxland Road / Gilchrist Drive intersection to provide dual turning lanes into Blaxland Road and lengthen the dual right turn lanes into Gilchrist Drive.

Stage 4 - Widening to three lanes in both directions between Hartley Road/Waterworth Drive and Tramway Drive/Mount Annan Drive (some temporary road work was completed in 2012). Widening to three lanes westbound between Camden Bypass and Waterworth Drive. Provide dual right turn lanes into Camden Valley Way, Hartley Road and Waterworth Drive and triple right turn lanes into Narellan Road (eastbound) from Camden Valley Way (northbound).

Stage 5 - Widen the eastbound bridge over the Hume Motorway to provide three lanes at the interchange and improve the southbound exit ramp (to Campbelltown). Provide four eastbound lanes between Tramway Drive and Hume Motorway.

Benefits of stage one are to:

- Reduce congestion through provision of additional capacity at locations experiencing the highest traffic flows on the corridor.
- Improve road safety through improvements to locations with highest number of crashes, principally at the Hume Motorway interchange where on/off ramps meet Narellan Road.
- Improve access to the Hume Motorway, a key attractor of traffic during both peak and non-peak periods.
- Improve efficiency of movement for freight traffic on Narellan Road, including access to the Hume Motorway.

The NSW Government's Long Term Transport Master Plan outlines the following in regards to Narellan Road:

- The road forms a strategic corridor linking the South West Growth Centre with Campbelltown and Macarthur.
- The corridor is identified as experiencing medium constraints, which will become worse. By 2031 the corridor will not have sufficient capacity to accommodate the predicted level of demand.
- A package of upgrades on major arterial roads to service growth in the South West specifically identifies intersections on Narellan Road at Mount Annan, as being at capacity resulting in queuing extending onto the Hume Motorway.

2. Purpose of consultation

RMS undertook consultation activities during November and December 2012 on the preliminary concept design, including the proposed five stages for the upgrade of Narellan Road to:

- Seek comment, feedback, ideas, and suggestions from the community for RMS to consider when developing the proposal, including consultation outcomes into the environmental assessment known as Review of Environmental Factors (REF).
- Build a database of interested and concerned community members who RMS can continue to engage during the proposal's development.

3. Method of consultation

Community members were encouraged to provide their feedback, leave comments and make submissions at the information sessions or via mail, email or phone contact with the project manager.

Local media Newspaper advertisements	• Macarthur Chronicle on 27 November 2012. • Campbelltown Macarthur Advertiser on 28 November 2012. • Camden Advertiser on 28 November 2012.
Community update newsletter	• Delivered to residents in Narellan, Harrington Park, Narellan Vale, Currans Hill, Mount Annan, and Campbelltown. Direct mailed to emergency services, schools and universities, large businesses, religious centres and community groups in the local area.
Webpage	• Project webpage updated 27 November 2012 with latest project information including community update newsletter.
Information sessions	• Shopping centre displays held at Narellan Town Centre on Thursday 6 December from 3pm to 7pm. • Two information sessions held at Campbelltown Civic Hall on Thursday 29 November from 3pm to 8pm and Saturday 8 December from 9am to 1pm. • A total of 50 people visited these RMS staffed displays.
Static poster display	• Project posters were on display during the comment period at Campbelltown and Camden Council Libraries, Narellan and Campbelltown Motor Registry, Narellan Town Centre shopping centre and the Australian Botanic Garden information centre.
Stakeholder briefings	• Camden Council • Campbelltown City Council

4. Review of community comments and feedback

Issue		RMS response
Traffic congestion		• Stage one work to install traffic lights at the intersection with the Hume Motorway southbound will improve safety at the intersection as well as provide increased traffic capacity with dual turning lanes for vehicles travelling towards Goulburn.
		• All improvements proposed for Narellan Road will help to manage traffic congestion; this includes work which complements the interim third lane installed in late 2012.
		• The proposed realignment of the intersection and installation of additional turning lanes westbound on Narellan Road requires traffic lights to appropriately control and time traffic movements at the intersection. This provides appropriate capacity on both Narellan Road and the exit ramp to effectively manage traffic flow during congested periods.
		• A traffic and transport study conducted as part of the investigations to improve congestion on Narellan Road considers the surrounding road network including the recent Hume Motorway upgrade and proposed changes at the intersection. The report will be available with the public exhibition of the environmental assessment in early 2013.
		• Further investigations will be undertaken to review this suggestion, with a view to incorporate any changes in the next phase of road design.
	• Upgrading Tramway Drive to include dual right turns would be beneficial.	• Traffic modelling indicates that an upgrade at Tramway Drive is not necessary, as the existing arrangement in Tramway Drive caters for current and future traffic demand.

		• The proposed upgrade of Narellan Road, including changes at Gilchrist Drive and Blaxland Road would improve traffic congestion at connecting roads like Kellicar Road. A flyover is not part of the Narellan Road upgrade project scope.
		• Suggestions to build matching loop ramps at the intersection of Narellan Road and the Hume Motorway are not part of this project. All turning movements are catered for at the current intersection.
Road safety		• RMS will modify the proposal in response to comments from the community, and will extend the pedestrian fencing along Narellan Road near the pedestrian bridge.
Noise		• It is RMS' responsibility to treat noise impacts resulting from the project appropriately. Consultation would occur with directly impacted property owners. Urban design would be considered in the design of any noise mitigation measures. Landscaping design completed as part of the environmental assessment would include considerations to minimise the reduction of privacy to properties.
		• Detailed design will consider which noise mitigation measures are feasible and reasonable. The results of the noise assessment and proposed treatment strategy would be discussed with affected property owners.
	Truck noise • Building a truck parking area so close to homes is very noisy.	• An alternate location for the Heavy Vehicle Inspection Bay away from residential areas is being investigated as part of the environmental assessment. Installation of noise reduction signs will also be considered as part of the project.

		• Noise generated from truck operations would be reduced with removal of the informal truck parking area near the residential area. This would be achieved through the installation of gates to prevent the bay being used outside of daytime operating hours.
Kenny Hill Road		• Further investigations into alternative access arrangements are continuing as the proposal develops and RMS will continue ongoing consultation with the businesses and residents of Kenny Hill Road as part of the environmental assessment (REF).
		• Kenny Hill Road is under the care and control of Camden Council. RMS is working with Camden Council regarding the gravel road surface run off onto Narellan Road.
Road design		• RMS will continue to investigate the merge length at the Hume Motorway southbound on ramp.
		• As part of the upgrade to Narellan Road, there are no proposed changes for the access to Smeaton Grange. The Smeaton Grange Industrial Precinct can also be accessed from Camden Valley Way via Smeaton Grange Road and Anderson Road.
	• The Hume Motorway northbound exit ramp to Narellan Road westbound is dangerous as the angle of the road makes it hard to see traffic travelling on Narellan Road.	• During 2012, the northbound exit ramp from the Hume Motorway to westbound on Narellan Road was converted from a merge lane to a high angle entry treatment with a give way sign to improve sight distance to oncoming vehicles.

Bus transport		• Dedicated bus lanes are not considered necessary as part of this project. The upgrade of Narellan Road would reduce traffic congestion, improving travel time for buses along the route. • Through a review of existing bus stops as part of the proposed upgrade, RMS, Transport for NSW and local bus operators are working on some changes to bus stops along Narellan Road. Currently, it is proposed to provide an additional bus stop near the Australian Botanic Garden, Mount Annan (westbound) and removing the bus stop near Kenny Hill Road. • During 2012, RMS made changes to College Access Road allowing for school buses to enter Mount Annan Christian College from Narellan Road. Students are also able to use route bus services which stop on Narellan Road.
Pedestrian / cycle paths		• RMS is planning for a 2-metre shoulder along Narellan Road in both directions which could be used by on-road cyclists. • RMS is currently investigating provision of a shared path along the southern side of Narellan Road, with connections to local streets, bus stops and intersection crossings for pedestrians. • Investigations for a shared path along Narellan Road would also consider pedestrian access to UWS, TAFE and the Australian Botanic Garden.
Formal truck inspection bay		• As Narellan Road is an important route for road transport, heavy vehicle compliance is required along the route. RMS is currently investigating an alternate location near the Hume Motorway interchange for the truck inspection bay.
Landscaping	• Native verge will be destroyed with the proposal.	• Landscaping and flora along the route will be investigated during urban design and visual assessment studies as part of the environmental assessment (REF).

UWS/TAFE access		• Narellan Road upgrade includes dual right turn lanes into and out of the UWS/TAFE campus. RMS is planning to upgrade the UWS/TAFE intersection (William Downes Avenue) and the roundabout to increase capacity for vehicles waiting at the Narellan Road intersection in peak periods.
		• Alternate access to UWS/TAFE is outside the scope of the current project, although RMS will continue to work with UWS and TAFE. The existing access to/from Maryfields Friary and Poor Clares Bethlehem Monastery will be combined with the upgrade of the UWS/TAFE intersection.
Stages and funding		• Construction on a project like this takes several years to complete. An investigation into which components of Narellan Road would benefit most from improvements enabled RMS to develop the stages for the upgrade.
		• Future residential developments are factored into traffic modelling assessments which has helped RMS develop the upgrade proposal for Narellan Road. The modelling helps in deciding the stages.
	• Work for stage two should be delivered with stage one work to improve benefits dramatically for motorists. • Work for stage five at the Hume Motorway interchange where realigning the southbound exit ramp and building traffic lights should be included in stage one work.	• With some construction funding confirmed, RMS is working with Transport for NSW to finalise a package of work for stage one and to secure funding for the remaining stages of the project. The number of stages may be reviewed as part of ongoing project development. If this changes RMS would advise the local community accordingly.

Additional suggestions outside the project scope		• Suggestions for overpasses, tunnels, bypasses, fly-overs and grade separated intersections are outside the scope of this project due to property, construction footprint, noise, environmental and other impacts associated when considering the costs and benefits for improving road safety and congestion. • Camden Bypass is not identified for further improvements in Transport for NSW's Long Term Transport Master Plan. • Traffic volumes on Camden Bypass in the vicinity of Narellan Road have been considered in RMS' investigations.
		• Additional entry/exit ramps to and from the Hume Motorway are outside the scope of this project due to property, construction footprint, noise, environmental and other impacts associated when considering costs and benefits to road safety and congestion.
		• Narellan Road is an approved B-Double route for 19, 23, 25 metre vehicles. Narellan Road is an important freight route for South West Sydney.
	Local road connections • What are the upgrade plans for The Northern Road and Camden Valley Way to access Oran Park? Work is needed at the north leg of The Northern Road at Camden Valley Way junction. • When will the local roads through Gregory Hills be completed to allow for alternative access to travel from Mount Annan to Oran Park. • Remove the Narellan Road entrance to the Australian Botanic Garden to where it originally was. Remove the entrance to Mount Annan Christian School to Tramway Drive to reduce congestion on Narellan Road.	• RMS opened the upgrade of Camden Valley Way between Oran Park Drive (formerly Cobbitty Road) and Narellan Road in June 2012. Investigations for improvements at the intersection of The Northern Road and Camden Valley Way are continuing. • Concerns around local road construction in Gregory Hills should be directed to Camden Council. • Suggestions to remove access to/from the Australian Botanic Garden and Mount Annan Christian College are outside the scope of this project.

		• Concerns around the operation of bus timetables are noted, the improvements planned along Narellan Road aim to ease congestion for all road users.
		• Suggestions for rest areas and refuges for pedestrians are outside the scope of this project although will be raised with both Campbelltown and Camden Councils.
	UWS/TAFE Access • Need other ways to access TAFE and UWS without the weave movement from Hume Motorway southbound exit ramp to the entrance.	• As mentioned above, suggestions for alternative access ramps, bypasses, tunnels and overpasses are outside the scope of this project.

5. Issues summary

RMS received 43 different comments on the proposal from members of the community who identified as local residents, commuters, business operators, organisations and pedestrians. Issues raised by the community will continue to be recorded and considered by RMS as the proposal progresses.

During the comment period RMS received/held and reviewed:

- 30 emails.
- 3 phone calls.
- 411 unique visits to the project website.
- 1 fax.
- 1 feedback form.
- 50 face to face discussions.

The most commonly raised concerns from the community were:

- The new traffic lights at the Hume Motorway southbound exit loop ramp and entry ramp.
- Road noise increases along Narellan Road.

An analysis of all the comments received by the project team shows a general support for the project with very few negative and/or unsupportive comments from the community.

Several of the suggestions, comments and queries have lead to changes to the proposal as a result of further investigations undertaken during the first part of 2013. Some of these amendments include an alternative location for the proposed heavy vehicle inspection bay, a review of bus stop locations and bays, provision of a median pedestrian fence, inclusion of cycle and pedestrian paths, and ongoing investigation of access arrangements at Kenny Hill Road.

6. Next steps

Comments and submissions received and summarised in this report help RMS develop the concept design and environmental impact assessment.

Proposed next steps:

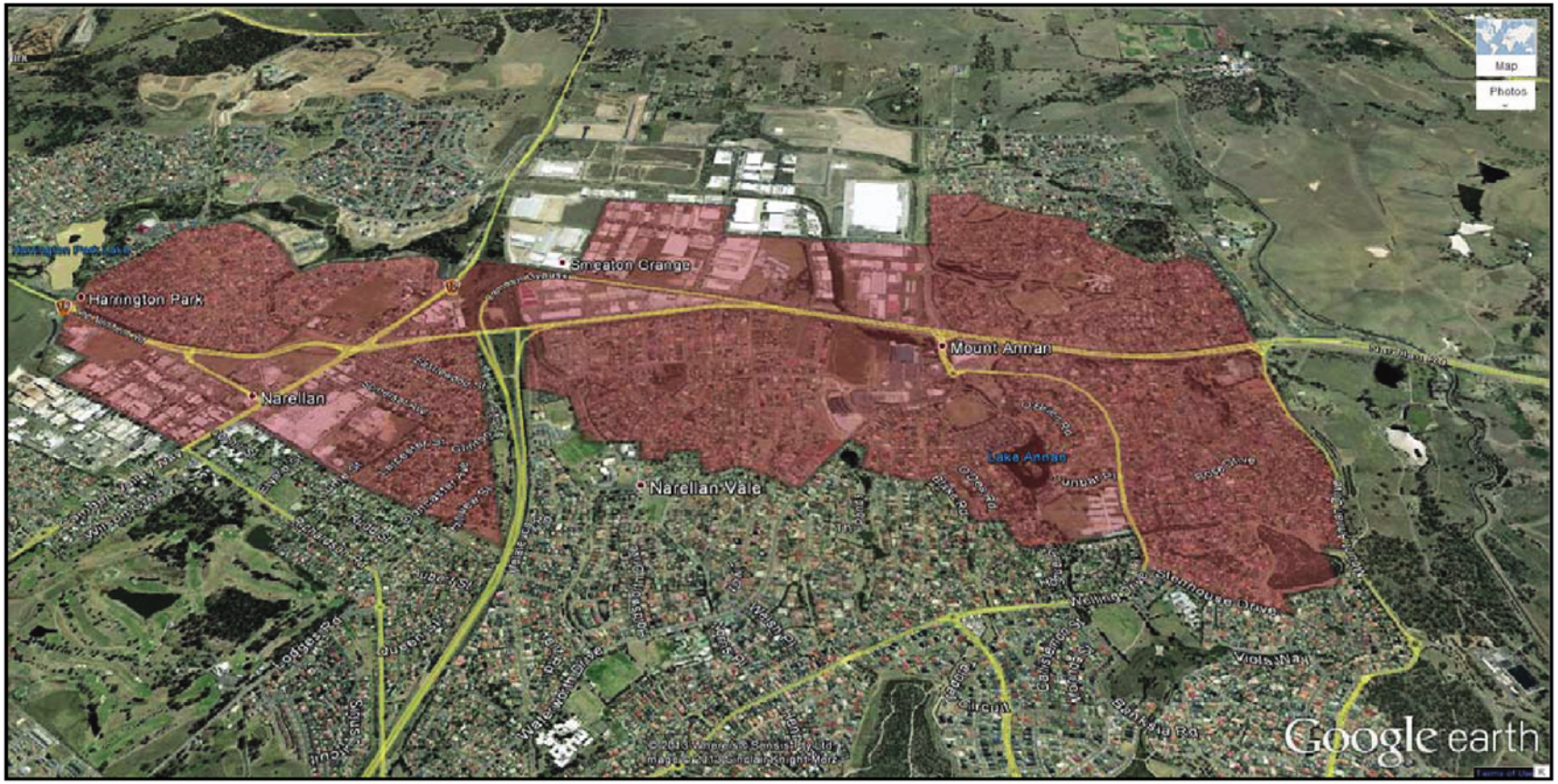
- Follow-up meetings during 2013 to discuss the road concept design with property owners impacted by the proposal, especially Kenny Hill Road residents.
- Continue noise investigations to document existing noise levels and model future predicted noise levels in the road corridor.
- On-going meetings with local councils, federal and state government agencies including the Australian Botanic Garden, TAFE, UWS and with bus operators.
- Continue investigation into peak period congestion on the Hume Motorway (southbound), including making amendments to the proposal.
- Continue work to ensure efficient and effective staging of the upgrade to minimise re-work while maximising benefits for the whole corridor and all road users.
- Finalise the road concept design and REF, including making amendments as a result of community feedback.

Further community comment will be sought during May and June 2013 when the Review of Environmental Factors (REF) report and revised road concept design for the proposal are publicly displayed.

The project team will keep the community informed as the project progresses through regular updates on the RMS website (www.rms.nsw.gov.au/roadprojects).

Appendix A

Delivery area of the community update



Above: Google Earth tracking map of hand delivery to homes closest to Narellan Road at Harrington Park, Narellan Vale, Mount Annan and Currans Hill.

Appendix A

Delivery area of the community update

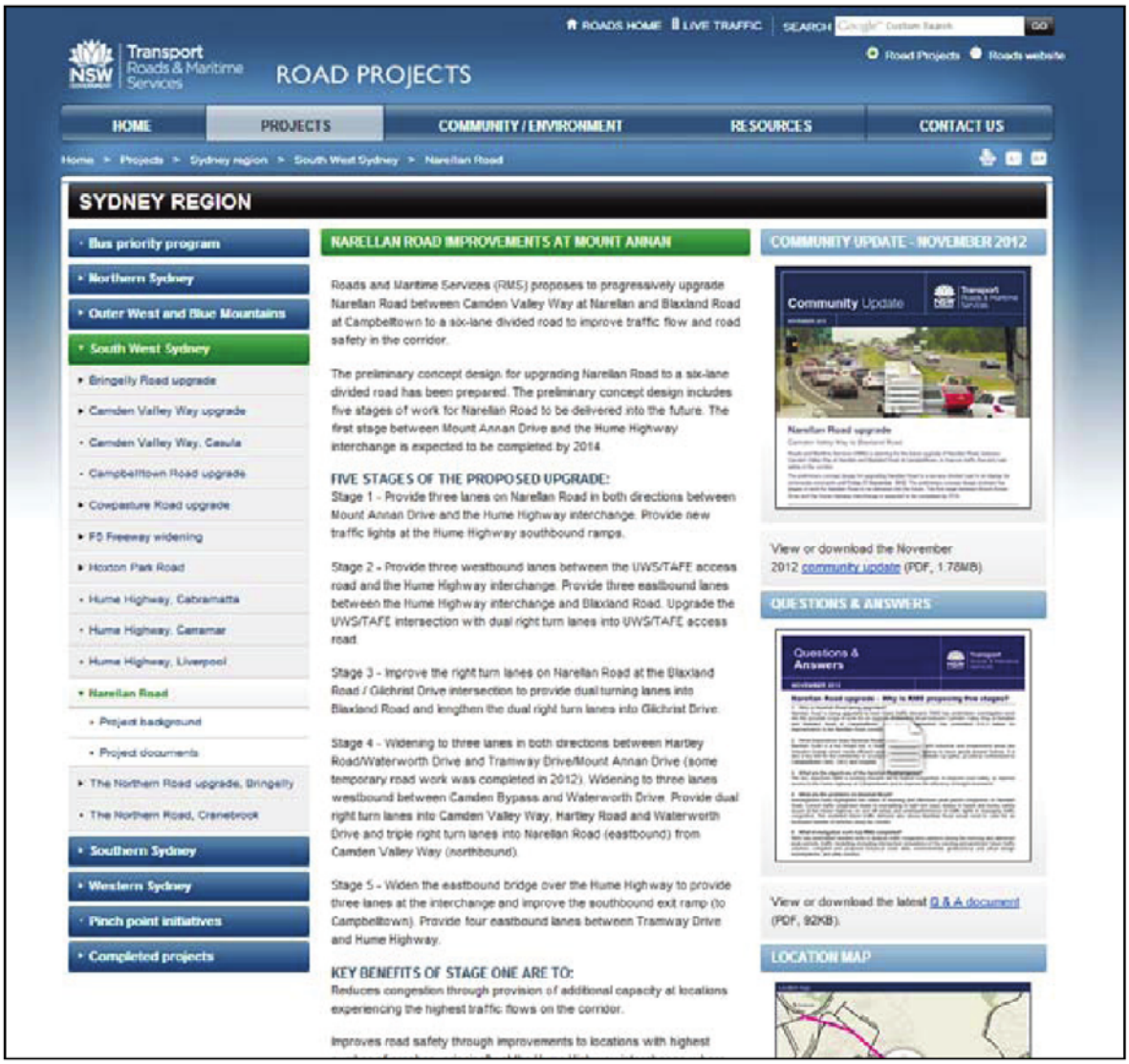
Above: Google Earth tracking map of hand delivery to homes closest to Narellan Road at Campbelltown.

ORD06

Attachment 1

Appendix B

Project webpage



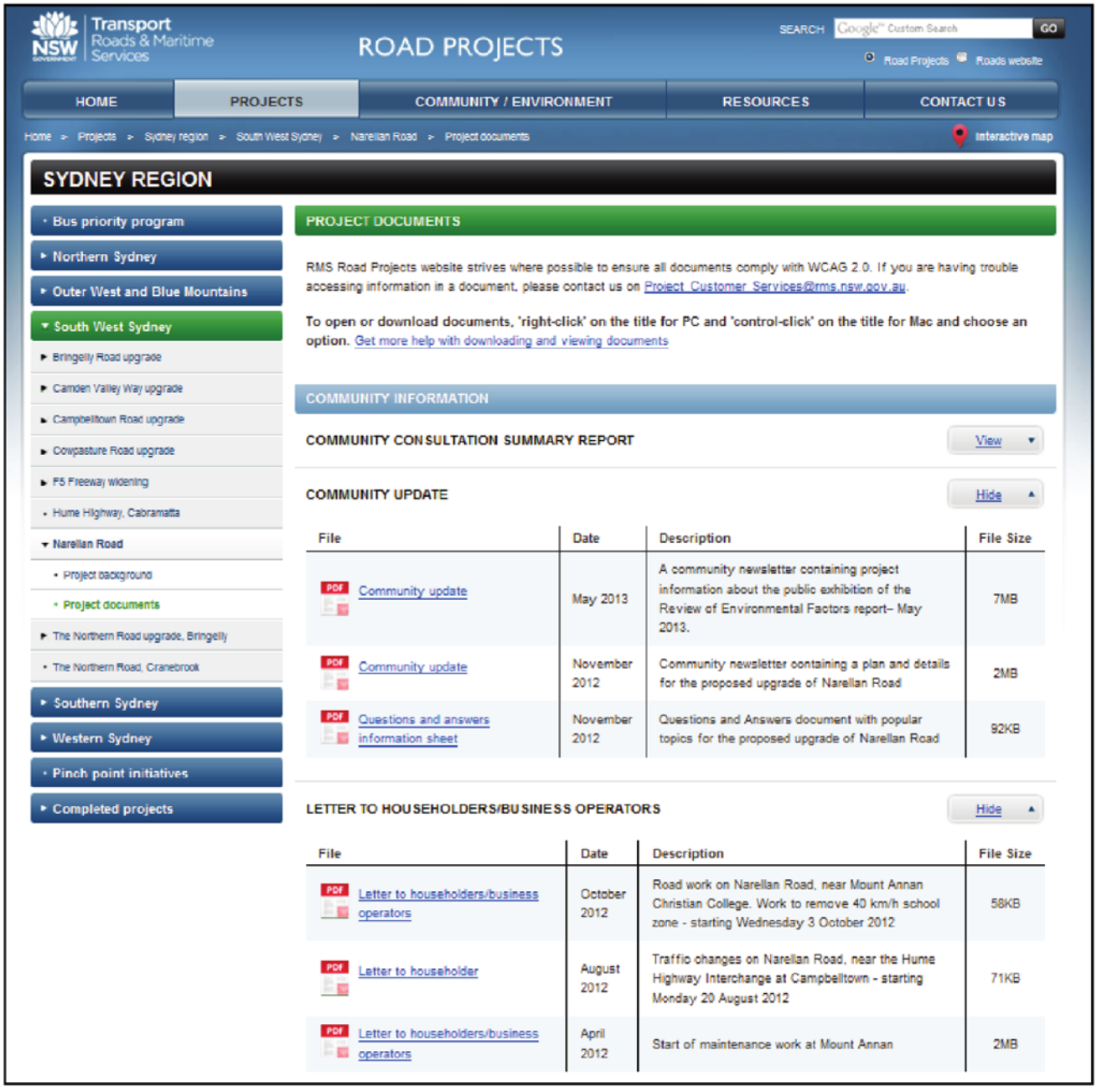
Above: RMS project webpage – main screen (November 2012)

ORD06

Attachment 1

Appendix B

Project webpage

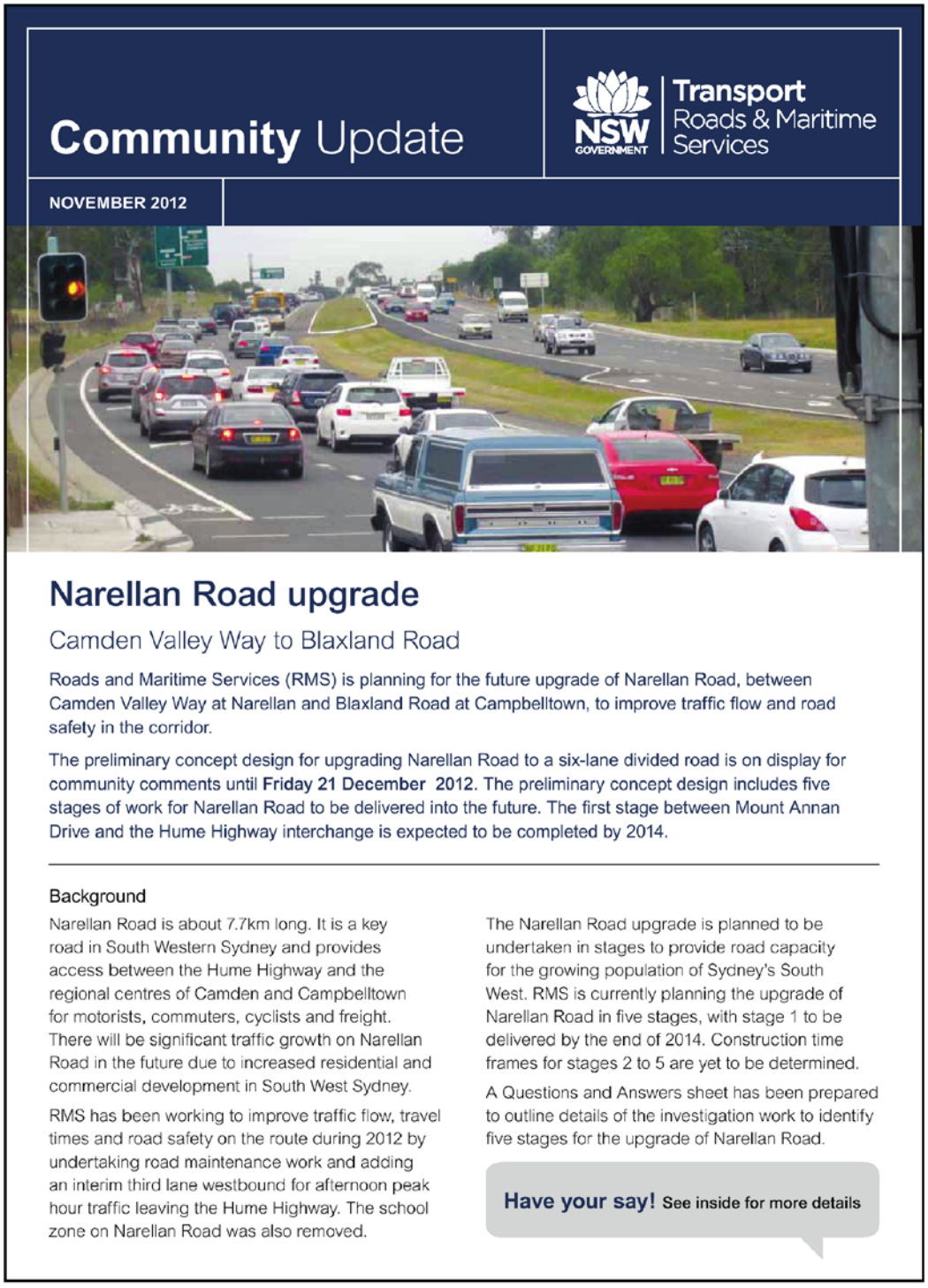


ORD06

Attachment 1

Appendix C

Community update newsletter



Community Update

Transport Roads & Maritime Services

NSW GOVERNMENT

NOVEMBER 2012

Narellan Road upgrade

Camden Valley Way to Blaxland Road

Roads and Maritime Services (RMS) is planning for the future upgrade of Narellan Road, between Camden Valley Way at Narellan and Blaxland Road at Campbelltown, to improve traffic flow and road safety in the corridor.

The preliminary concept design for upgrading Narellan Road to a six-lane divided road is on display for community comments until **Friday 21 December 2012**. The preliminary concept design includes five stages of work for Narellan Road to be delivered into the future. The first stage between Mount Annan Drive and the Hume Highway interchange is expected to be completed by 2014.

Background

Narellan Road is about 7.7km long. It is a key road in South Western Sydney and provides access between the Hume Highway and the regional centres of Camden and Campbelltown for motorists, commuters, cyclists and freight. There will be significant traffic growth on Narellan Road in the future due to increased residential and commercial development in South West Sydney.

RMS has been working to improve traffic flow, travel times and road safety on the route during 2012 by undertaking road maintenance work and adding an interim third lane westbound for afternoon peak hour traffic leaving the Hume Highway. The school zone on Narellan Road was also removed.

The Narellan Road upgrade is planned to be undertaken in stages to provide road capacity for the growing population of Sydney's South West. RMS is currently planning the upgrade of Narellan Road in five stages, with stage 1 to be delivered by the end of 2014. Construction time frames for stages 2 to 5 are yet to be determined.

A Questions and Answers sheet has been prepared to outline details of the investigation work to identify five stages for the upgrade of Narellan Road.

Have your say! See inside for more details

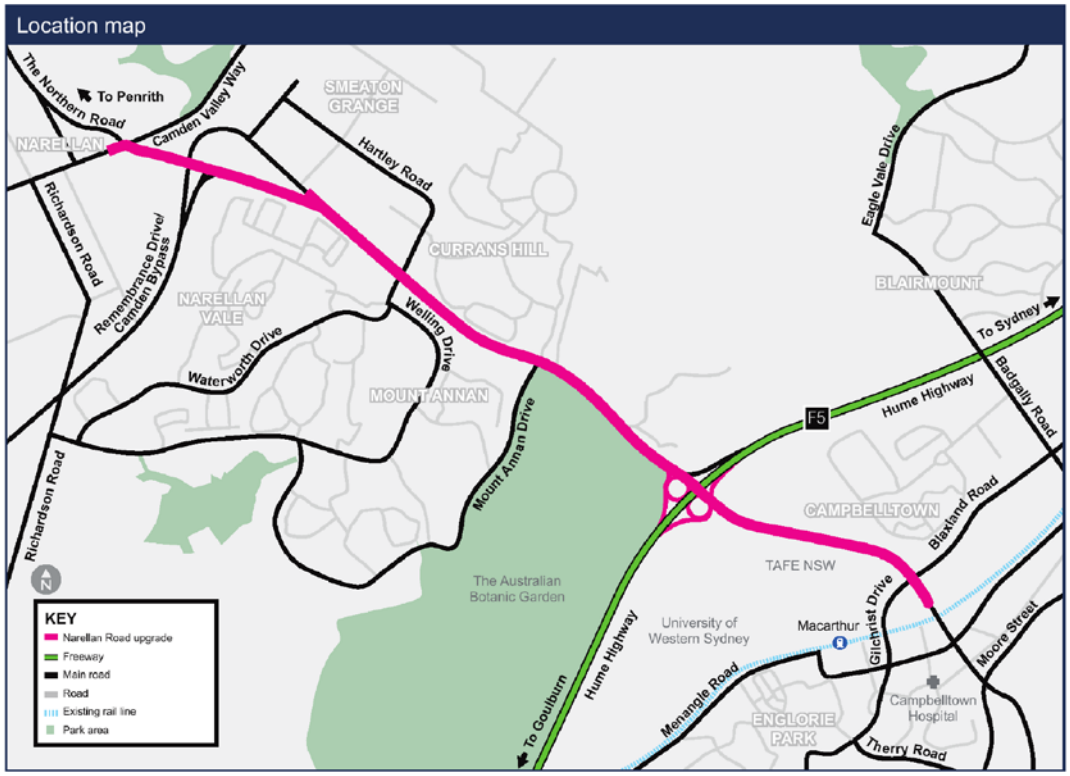
Above: Cover page of the 8 page community update public newsletter (November 2012)

Appendix C

Community update newsletter

Five stages of the proposed upgrade:

- Stage 1 – Provide three lanes on Narellan Road in both directions between Mount Annan Drive and the Hume Highway interchange. Provide new traffic lights at the Hume Highway southbound ramps.
- Stage 2 – Provide three westbound lanes between the UWS/TAFE access road and the Hume Highway interchange. Provide three eastbound lanes between the Hume Highway interchange and Blaxland Road. Upgrade the UWS/TAFE intersection with dual right turn lanes into UWS/TAFE access road.
- Stage 3 – Improve the right turn lanes on Narellan Road at the Blaxland Road / Gilchrist Drive intersection to provide dual turning lanes into Blaxland Road and lengthen the dual right turn lanes into Gilchrist Drive.
- Stage 4 – Widening to three lanes in both directions between Hartley Road/Waterworth Drive and Tramway Drive/Mount Annan Drive (some temporary road work was completed in 2012). Widening to three lanes westbound between Camden Bypass and Waterworth Drive. Provide dual right turn lanes into Camden Valley Way, Hartley Road and Waterworth Drive and triple right turn lanes into Narellan Road (eastbound) from Camden Valley Way (northbound).
- Stage 5 – Widen the eastbound bridge over the Hume Highway to provide three lanes at the interchange and improve the southbound exit ramp (to Campbelltown). Provide four eastbound lanes between Tramway Drive and Hume Highway.



Above: Inside 4 page spread of community update public newsletter

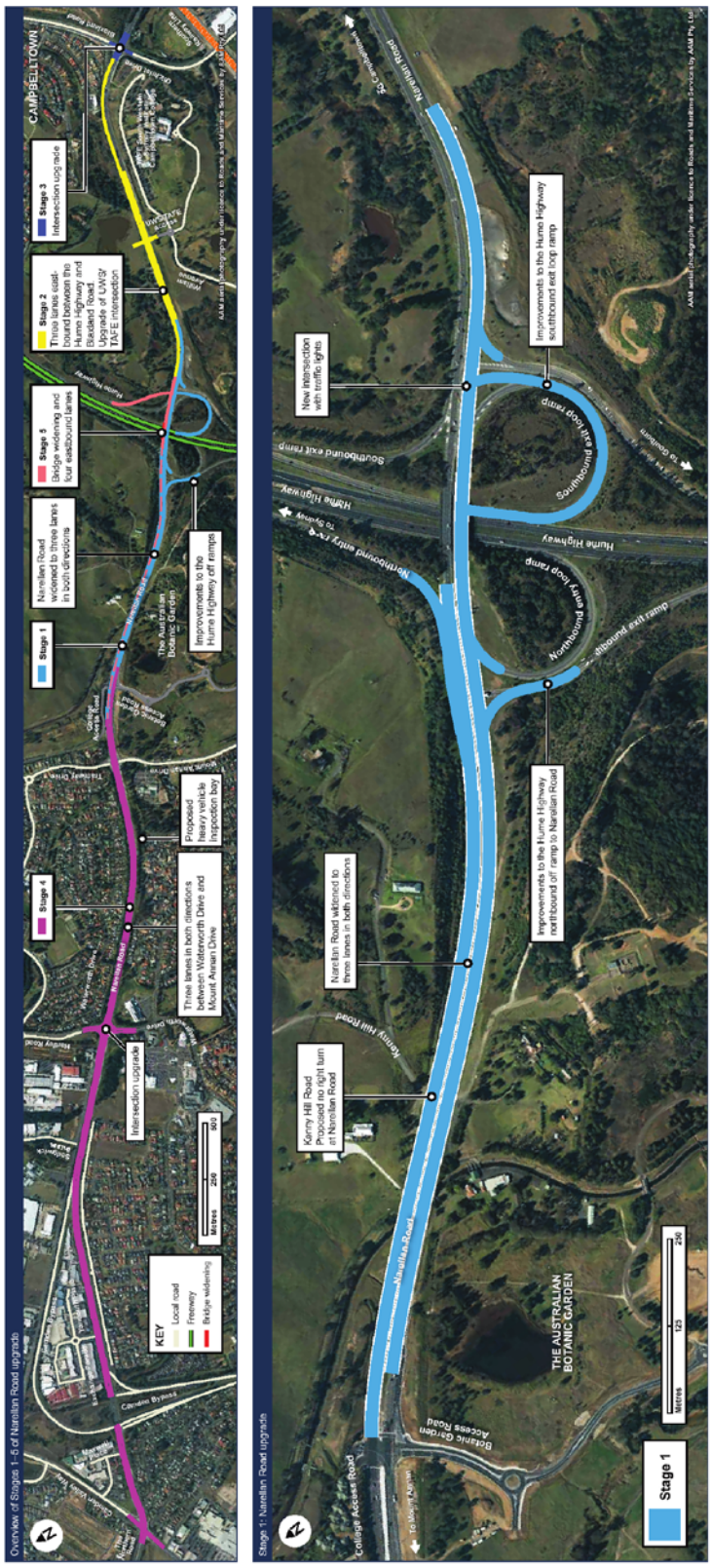
Narellan Road Upgrade – Community Consultation Summary Report

ORD06

Attachment 1

Appendix C

Community update newsletter



Above: Inside 4 page spread of community update public newsletter

Narellan Road Upgrade – Community Consultation Summary Report

Appendix D

Newspaper advertisement

Transport Roads & Maritime Services

Narellan Road upgrade between Camden Valley Way and Blaxland Road – community feedback invited on preliminary road design

Roads and Maritime Services is proposing to **upgrade Narellan Road between Camden Valley Way at Narellan and Blaxland Road at Campbelltown** in five stages to continue to improve traffic flow and road safety in the road corridor.

RMS is seeking community feedback on the proposal.

A community update newsletter including a plan of the five stages and frequently asked questions and answer sheet is available online.

Please visit the project webpage: **www.rms.nsw.gov.au/roadprojects** and navigate to projects in South Western Sydney.

RMS is hosting a community information session at Campbelltown Civic Hall, 91 Queen Street, Campbelltown. Please drop in to talk to the project team on Saturday 8 (TBC) December 2012 between 3-7pm.

Your feedback is greatly appreciated. Please provide your feedback by **Friday 21 December 2012.**

For further information please contact: RMS project manager Marjorie Yan during business hours on (02) 8849 2214 or NarellanRoadUpgrade@rms.nsw.gov.au

For more information visit: www.rms.nsw.gov.au/roadprojects

NARELLAN ROAD UPGRADE REVIEW OF ENVIRONMENTAL FACTORS
Response by Camden Council

Heritage

The Statement of Heritage Impact: Narellan Rd project (HIS) prepared by Niche Environment and Heritage, dated April 2013. It is generally acceptable. The following assessment notes and summary of the recommendations of the HIS are made.

The Upper Canal

The Upper Canal is a heritage item of state significance listed on the State Heritage Register.

The work will have no impact on the significant fabric of the canal. The visibility of the canal is already obscured at this point by existing bridge. There may be indirect impacts from vibration.

Recommendations for Upper Canal (Section 9.1.7 of HIS):

1. Follow guiding principles for the canal in CMP by Higginbotham and Assoc in 2002.
2. The work may be exempt under clause 57(2) of the Heritage Act. An exemption notification must be submitted for assessment by the Heritage Council.
3. Consultation with Heritage Office of OEH and Sydney Catchment Authority (SCA) on the appropriate design and construction
4. If design is altered a new HIS is required.
5. Impacts of vibration should be undertaken by a suitably qualified and experienced structural engineer.
6. Identifies what is significant fabric of the canal which must not be impacted upon.
7. Consultation with Camden Council.
8. Demolition requires consultation with Heritage Council.
9. Heritage inductions to workers.
10. If archaeology associated with canal or former railway siding uncovered work must cease and Heritage Council consulted.

Council concurs with these recommendations.

Remnants of the Campbelltown to Camden Railway Line

The railway line was one of 14 steam tramways approved by the NSW government in 1880s.The Campbelltown to Camden line was closed in 1963 and has been substantially altered since then, so that now only remnants survive.

There is potential for archaeological relics to be discovered during the road widening and new intersection works.

Recommendations for tramway (Section 9.3.7 of HIS):

1. This HIS is referred to Council for comment.
2. Proponent to consider reducing width of eastern shoulder to not affect the tramway remnants.
3. Impacts of vibration on the culvert should be undertaken by a suitably qualified and experienced structural engineer. If damage is likely it must not be used as a compound/ stockpile site.
4. Archaeological testing in the siding area to identify tramway remnants and the location of the culvert. An excavation permit is required from Heritage Office.
5. A record of Maryfields railway station archaeology was not possible due to poor accessibility and is required prior to works commencing.
6. The Archaeological investigation is to determine the final location of site compound which may require further consent of the Heritage Council.

Council concurs with these recommendations. It is appropriate that further archaeological investigation of the impact on the tramway is conducted in consultation with the Heritage Office who has the jurisdiction on archaeological matters.

Smeaton Grange Homestead

The work is outside of the property boundary of Smeaton Grange. It proposes no change and no impact to the item, views have already been altered. Therefore there is no heritage issue.

Struggletown HCA

The work is proposed outside of the property boundary of the Struggletown HCA within the current road reserve. No impact on heritage significance is proposed. However there may be obscuring of views to the heritage item at No. 2 Sharman Close by new road signs. It is recommend that vehicle access and road signage to the Struggletown precinct must be generally in accordance with the heritage (Chapter B 3.1.1) and signage provisions (B3.4) of the Camden DCP 2011.

Kenny Hill Reservoir

The work is outside the s170 identified curtilage. It proposes no change and no impact to the item. Therefore there is no heritage issue. Campbelltown Council's opinion should be sought.

The Stations of the Cross in Campbelltown LGA

This item is a memorial marking an area of religious congregation in the past. The work proposes no impact but requires resumption of a small portion of land identified in the curtilage. This is within Campbelltown Council LGA.

Noise and Vibration

A noise and vibration assessment was undertaken by Renzo Tonin (April 2013) for the proposed Narellan Road upgrade. The assessment focussed on operational traffic and construction noise and vibration works.

Operational Traffic Noise

The recently released NSW EPA Road Noise Policy (RNP) was adopted by RMS and the acoustic consultant for the assessment. The RNP provides criteria for roads where they are proposed to be redevelopment (Narellan Road) by adopting new criteria of 60dB(A) (Laeq,

15 hour) for Day periods (7am to 10pm) and 55dB(A) (Laeq, 9 hour) for Night periods (10pm and 7am). This new criteria increases the existing traffic noise criteria of 55dB(A) by 5 dB(A).

The acoustic report determined that there is already very high levels of traffic noise from Narellan Road which is well above the existing noise criteria of 55 dB(A). Given this outcome it was further established that even with the higher criteria of 60 dB(A) at least 167 existing residences are affected experiencing noise above the higher criteria.

Further, there are at least 49 residents of the 167 who are "acutely" affected by traffic noise (i.e., receive greater than 65 dB(A) being 10 decibels above existing criteria and 5 dB(A) above the new criteria). It is acknowledged that the main reason for this existing noise impact is that existing fences and earth mounds provided along Narellan Road are currently not sufficiently high enough to effectively control road traffic noise.

To attempt to mitigate the above noise exceedance the report provided some "in- principle" noise control solutions to reduce noise impacts for residents who are "acutely" (greater than 65 dB(A)) affected by noise. The most feasible solutions elaborated on in the report involved the provision of suitably high noise barriers positioned around residences are grouped together. It was recognised that any barrier must also be visually acceptable either covered by appropriate landscaping or embedded themes.

The suggested barriers would vary in length based on the cluster of dwellings to be protected and could be between 370 meters and 600 metres in length. The height of the barriers was modelled at two heights of 4 metres or 5 metres high (that resulted in a different number of residents receiving noise protection). Barriers were not considered if they blocked driveway access to the main road.

In consideration of the above Council requests that the REF considers suitable noise mitigation for all 167 currently affected residents affected by traffic noise and not just limit noise mitigation for the identified 49 residents that are "acutely" (greater than 65 dB(A)) noise affected.

The option of providing treatment at the property or dwelling is only considered where other noise mitigation measures, such as the provision of barriers is exhausted, not feasible or not cost effective. Property treatments typically consist of upgrading of windows (glazing), doors (solid core), and acoustic seals, sealing of air vents, provide external acoustic screen walls or acoustic boundary fences, and provision of fresh air ventilation. It was stated that the treatment of dwellings is not suited if dwellings do not have acoustic insulation in the walls.

Location of Heavy Vehicle Inspection Station

The report considered two options (locations) for a new heavy vehicle inspection station. The first option being on the southern side of Narellan Road, west of Mount Annan Drive, with Collins Grove and Martin Place on the south. The second option was on the southern side of Narellan Road, approximately 100m west of the F5 interchange. Both of these locations are within the Camden LGA.

From the assessment of noise for both options it was recommended that option 2, near the F5 interchange is a more appropriate location as it is located away from residents and therefore Council acknowledges that Option 2 would cause significantly less noise disturbance.

Construction Noise and Vibration Assessment

Construction noise was assessed to be likely to exceed noise criteria for the day and night time construction periods with the greatest impact expected to occur during the night.

Recommendations for in-principle noise mitigation include a combination of management measures, noise source controls, and pathway controls.

Management measures involve community consultation via resident letterbox drops and individual residential briefings, employee site inductions, influencing employee behavioural practices, and noise monitoring.

Controlling noise at the source involves scheduling high noise work appropriately, providing respite periods, selecting the best equipment and maintaining this, siting and use of equipment, planning worksites, and using non-tonal reversing alarms for heavy vehicles.

Pathway controls involve shielding sensitive receivers using structures such as earth mounds, temporary noise screens, and noise enclosures that block or limit the noise path between source and receiver.

Council recommends that the above noise mitigation options are implemented during construction with the most suitable option adopted for each noise affected location.

Construction vibration has the potential to disturb building occupants and cause structural damage to buildings and existing infrastructure.

The report concludes that the risk to buildings, other than the Sydney Water Upper Canal, is assessed as being low risk. The canal however, could be adversely impacted from bored piling activities and the vibration consultant has recommended that buffer distances be determined and a pre-construction survey be undertaken of the condition and integrity of the canal prior to commencement of piling works.

Council supports the recommendation that additional vibration investigations are undertaken and suitable protection controls be adopted to ensure that the Sydney Water Upper Canal is protected from damage by the proposed construction works.

With respect to the potential for disturbance to building occupants who are close to the construction works the report advises that there is a medium risk of adverse comment. Mitigation of such impact involves ensuring that there are recommended minimum buffer distances from vibration equipment to sensitive receivers. A complaints management procedure shall be implemented that involves investigation that may lead to additional management of the vibration. Dilapidation surveys will also be carried out at all buildings where it is perceived that vibration may have caused damage.

Council supports the mitigation strategy proposed to address potential vibration.

Contamination

The REF confirms that there is a potential for topsoil in shallow areas of fill on Narellan Road to contain elevated levels of lead as a result of vehicle emissions. Despite this comment, the REF does not recommend soil investigations be undertaken of the existing soils to identify potential soil contamination.

Council recommends that soils within the road corridor be investigated for contamination and soils be managed with respect to their potential reuse or disposal.

Southern Railways Aqueduct, off Narellan Road, Mount Annan has been identified on the NSW Contaminated Site list as occurring near the proposed Narellan Road Upgrade site. It is a Management Class G, which means the Environment Protection Authority (EPA) does not consider it to be significantly contaminated enough to warrant regulatory intervention. However the NSW Contaminated Sites list does not provide specific location details for this site. Investigation of more specific location details is recommended, checking if further information is available from the EPA, to ensure that the identified contaminated site is not likely to impact the project.

The report considers that soil loss calculations from the construction catchment is not likely to warrant the construction of large scale sediment retention basins and that a series of smaller temporary sediment sumps positioned at key locations along the road corridor would be sufficient to manage the sediment laden runoff from disturbed areas during construction. Council advises that the REF identifies robust measures to ensure sediment sumps are checked and maintained on a regular basis, and specifically during and after storm events, to ensure that they are working to their full capacity.

Council requests that if a spill or contamination incident occurs that Council be informed. It is also recommended that current Material Safety Data Sheets (MSDS) be kept onsite for all chemicals/fuels and that an inventory of these chemicals/fuels and their quantities be kept and maintained on site.

The report has suggested that it is possible to use mulched vegetation onsite as a form of sediment and erosion control. Council advises that the REF identifies robust measures to ensure such mulch is certified that is free from noxious and environmental weeds or alternatively treated in such a way that any weed seeds or propagules would not germinate.

Council recommends that the REF identifies that any garbage receptacles used for waste management have lids that closed or are designed in such a manner to minimise the potential of native and exotic fauna, birds in particular from scavenging in the bins. To minimise illegal dumping it is recommended that any waste skips have lids that are able to be locked at the end of each working day. It is also important that all waste receptacles are serviced regularly so that there is no overflow of waste entering the environment.

Salinity

The REF acknowledges that there is a moderate salinity potential or impact along Narellan Creek. In addition, the geology confirmed that the soil landscapes in the area contain potentially high levels of salinity, sodicity and soil acidity.

Despite the above, the REF does not indicate whether any soil or groundwater assessment for salinity has been undertaken within the road corridor. In response, Council recommends that prior to final road design a salinity investigation be undertaken to determine the level of salinity and aggressivity of soils to proposed infrastructure i.e. concrete and steel.

Air Quality

The REF advises that local air quality is influenced by diffuse source emissions such as motor vehicles, surface coatings, commercial solvents, solid fuel burning. However, the main source of emissions in the Camden locality is from motor vehicles on Narellan Road.

The proposal will increase the traffic capacity of Narellan Road and it is expected that this will ease existing traffic congestion that could reduce emissions caused by vehicles idling and from stop start movements.

Despite the above, the REF does not provide any air pollution vehicle emission data for the Narellan Road area. Further, there is no recognition of existing air quality and its impact on existing residents. Information needs to be provided about increased vehicle use on Narellan Road and any emission impact on the local area.

Council requests additional information that identifies the air quality impacts from existing and future vehicle emissions with recommendations for mitigation and control.

Biodiversity

As the proposed upgrade of Narellan Road is considered to be a scheduled activity under the Protection of the Environment Operations Act 1997 it is required to have an environmental protection licence. Council requests that once this environmental protection licence has been granted by the EPA, that both Camden and Campbelltown Councils receive a copy of this licence for our records and that it is made available on the RMS website for the public to access.

Vegetation Communities

The Flora and Fauna Assessment identifies the vegetation in the vicinity of the proposed realignment of the F5 off – ramp (chainage 5300) consisted mostly of highly degraded pasture which also contains noxious weeds Blackberry (Rubus fruticosus) and African Boxthorn (Lycium ferrocissimum). However the location of these noxious weeds needs to be clearly identified to ensure effective removal and disposal to minimise further risk of being spread.

Logs

Council recommends that prior to the removal of any logs identified to be retained for fauna habitat outside of the construction area, that they are checked by a qualified ecologist for any native fauna that may be utilising them and that appropriate measures are instigated to minimise any stress to fauna that have been observed using the logs when they are relocated. Further advice should be sought from the NSW Office of Environment and Heritage (OEH) or WIRES.

Bridges and Culverts

The REF does not indicate if the NSW Office of Water has been contacted or provided comments regarding the modifications of the canal. Modifications to the canal bridge should be referred to the NSW Office of Water for consideration as a Constructed Activities Approval may be required. The REF should identify consideration of the Water Management Act 2000, particularly as there are going to be which modifications to the canal bridge which crosses a waterway and would be considered to be on waterfront land.

Aquatic Habitat Features

The Flora and Fauna Assessment indicates that Gillanganadum Dam within the Australian Botanical Garden is not expected to be impacted upon by the proposed upgrade of Narellan Road. However this contradicts the main report which identifies the potential of the dam as being environmentally sensitive. This is due to the potential to be indirectly impacted upon by the proposed development if it receives polluted stormwater runoff that may contain sediments or hydrocarbons.

Vegetation and Habitat Trees

The Flora and Fauna Assessment identifies three remnant trees with hollows and a tree that contains a stag in the vicinity of driveways opposite the entrance to the University of Western Sydney. It is noted that these trees are not anticipated to be removed as part of the proposed Narellan Road Upgrade. However the trees are not clearly identified in Figure 5b: Vegetation and Habitat Trees.

Stormwater Quantity Management

Narellan Road is a major access road (route) which is traversed by several creeks and tributaries, including Cross Creek (Tributary 2 of Narellan Creel), Narellan Creek and Sydney Catchment Authority Water Supply Channel in the Camden Local Government Area (LGA); and Bow Bowing Creek in the Campbelltown LGA. It is therefore important that this route remain open as a key transport corridor and evacuation route under emergency conditions.

Council requests that the RMS assesses and incorporates stormwater quantity management access provisions along the full length of Narellan Road. The RMS will need to ensure that they have the most up to date hydrologic and hydraulic modelling of the catchment to ensure that any waterway crossing is designed with the ultimate development of the catchment in mind. This means that the catchments are undergoing urban development and redevelopment for residential, commercial or industrial use at some point in the future and would require stormwater quantity measures in accordance with Council's requirements. Council also points out that different design standards exist between Camden Council and Campbelltown City Council.

As previously mentioned Narellan Road crosses Narellan Creek and Cross Creek in the Camden LGA. The road formations at these two creek crossing points act as a 'dams' and restrict the flow of flood waters through a culvert structures or bridging structures. It is critical through the design of the upgrade of Narellan Road that the RMS considers the impacts of flooding on upstream properties through the design of the ultimate road formation. Council recommends that the RMS consider and investigate 'bridging' structures sufficient to manage the floodwater flows which prevail at each of the respective creek crossings.

These bridging structures should also be designed to be most economically and environmentally possible. The RMS should review the appropriateness of their existing bridges or culverts with a view towards replacement if possible, and not just augmentation of these structures.

Floodplain Management

The Floodplain Development Manual – "The Management of Flood Liable Land" April 2005 states on page 1 that "The management of flood prone land is, primarily, the responsibility of Councils… the State Emergency Service (SES) shall provide specialist technical assistance on all flooding and land use planning matters." With this policy in mind, a Floodplain Management Plan is expected to be prepared for Council for Narellan Creek. A flood study of Narellan Creek is currently underway and the results of this Narellan Creek Flood Study are expected in August 2013. After the flood study for Narellan Creek has been completed, Council will prepare a Floodplain Management Plan for Narellan Creek. Although it is expected that it may be sometime before the Floodplain Management Plan for Narellan Creek is completed, it is also expected that the detailed design and construction of the Narellan Road upgrade will be underway sometime in the future. Council strongly recommends that the RMS to liaise with Council and consider a proposed floodplain management strategy for Narellan Creek in the planning and design for the upgrade of Narellan Road.

Further considerations which need to be reviewed by the RMS in relation to Floodplain Management are blockage allowances for drainage structures within low points in the road, drainage culverts and pipe with headwalls; flood immunity and any evacuation centres and associated key access routes. Council notes that on page 26 of the Flooding and Drainage Investigation Report prepared by Lyall and Associates, that 'no allowance for the partial blockage of the inlet of existing cross drainage structures was made in the assessment of the hydrologic standard of the road corridor at these structure locations.' Council's Engineering Design Specification requires a 50% blockage factor should be applied to drainage culverts, drainage structures in low points of the road and pipes with headwalls and it is proposed that this factor is applied to the Narellan Road Upgrade. Storm events up to and including the Probable Maximum Frequency (PMF), need to be considered for all evacuation routes within the floodplain along The Northern Road.

It is recommended that Council seek a revised response from the RMS regarding the flood immunity and evacuation routes in accordance with the State Government's Floodplain Development Manual and the SES requirements along the sections of Narellan Road within any floodplain.

Stormwater Quality Management

The existing water quality has the potential to be affected due to the generation of additional pollutants directly attributable to the widening of the road and associated increase in future traffic volume.

The REF identifies that "the quality of the water entering local waterways is a function of the runoff from local catchments and resulting contaminants in the stormwater system." It acknowledges that the quality of the stormwater generated from the road is not treated. Some of the water drains into an existing pollution trap and linear wetland leading to Gilanganadum Dam. Other sections of Narellan Road appear to not have any known stormwater treatment devices. Stormwater pollution is already known to occur from Narellan Road and it is recommended that suitable stormwater pollution treatment devices should be considered for the Narellan Road Upgrade.

The REF does not mention what Standard the water quality criteria should satisfy. Council recommends that the REF should mention that the water quality objective should be consistent with the RMS's Water Policy 1997 (RTA, 1997), Code of Practice for Water Management 1999 (RTA, 1999) and Council's Design Standards and Specifications.

The REF has not been indicated whether there would be any preliminary water quality monitoring of the existing dam within No. 168 Narellan Road and Gilanganadum Dam prior to construction, during construction and post construction of Narellan Road. It is recommended that a water quality monitoring regime is implemented at the receiving dams as this would provide a more accurate assessment of the impacts on the water quality. It would also identify whether the pollution controls to improve water runoff quality are working or whether further measures need to be implemented.

Narellan Road existing corridor consists of significant stands of vegetation which have been part of the character of this road for many years. The details provided by the RMS and the REF to date do not provide evidence or documentation on how this vegetation corridor will be managed, retained and/or offset. Maintenance considerations of any proposed spill basins should be detailed or specified in the information provided to date.

It is recommended that Council seeks the detailed advice from RMS on the vegetation management strategy and hence the stormwater quality management strategy which

accompanies the route strategy for the upgrade of Narellan Road. Council also recommends that the RMS reviews Council's standards and specifications for water quality objectives.

Service and Public Utility Coordination

Council notes that on page 26 of the Flooding and Drainage Investigation Report that the locations of underground utilities within the Narellan Road corridor have been determined by 'desktop review' only. Council recommends that further discussion and consultation continue to be held with the public utilities during the detailed design and construction stages of Narellan Road. Previous experience suggests that the public utility authorities are constantly maintaining and upgrading their assets even after the completion of a newly reconstructed road pavement and/or footpath surface.

Alignment and Widening

The alignment and widening of Narellan Road as a result of the upgrade is vital to the success of the project. Equally however, the alignment and widening is a constraint and determining factor on the design of existing intersections and expected traffic volumes. Council request details of the alignment and widening required to facilitate the upgrade of Narellan Road and that the RMS advance the design process of Narellan Road upgrade to facilitate the planning and integration with Camden Valley Way.

Council notes that some of the proposed road shoulder widths within the Camden LGA are shown to be 2.0 metres in width. Council advised that shoulder widths should be 3.0 metres, with a minimum width of 2.5 metres to safely accommodate emergency vehicles.

Street Lighting

Council notes that no proposal for the street lighting of Narellan Road upgrade has been documented within the REF. As Narellan Road is a control access road, Council requests that if the RMS proposes to street light Narellan Road then the maintenance and energy costs for the street lighting of Narellan Road be fully covered by the Traffic Route Lighting Subsidy Scheme (TRLSS).

Landscape Character

The Landscape Character/Visual Impact Assessment identifies Struggletown and Australian Botanic Garden is high sensitivity visual landscapes. However the Currans Hill, Mt Annan and Narellan Vale landscapes are considered to be moderate sensitivity (as opposed to the moderate-low described in the study) given the site topography, road alignment and established roadside planting. While it is recognised that the landscape response is very conceptual, owing to the REF, great care is required at the detailed design stage to mitigate any potential visual impacts at these locations. The height of any noise or acoustic walls or retaining walls must be minimised to manage visual impacts.

It is recommended that environmental values are listed in the urban design objectives.

Property Acquisition

The project proposes acquiring sections of five lots of land within Camden LGA, all of which are in the ownership of Council. It is noted that final acquisitions required would be confirmed through detailed design in consultation with landowners. All property valuations and acquisitions would be carried out in accordance with the Land Acquisition Information Guide (Roads and Traffic Authority 2011b) and the Land Acquisition (Just Terms Compensation) Act 1991.

Waterworth Drive (West Side) (Lot 211 DP 843880)

The small parcel required to accommodate additional exit lanes to Narellen Road is considered to have minimal impact.

Narellen Road (South Side) (Lots 53 DP 857052 and 1101 DP 884135)

A strip of land is identified along the boundary of the Mount Annan Leisure Centre. This is required accommodate an additional right turn lanes from Narellan Road in to Hartley Road. This will impact on the design and layout of Mount Annan Leisure Centre Stage 2 with the current design required to be amended to accommodate the boundary change.

To allow Council to undertake a redesign of the facility formal confirmation is required from the RMS of the following within the next two months:

- The proposed boundary location to allow Council to coordinate the redesign of the MALC layout;
- Commitment from the RMS to reimburse Council for adjustment/re-work of the preliminary concept drawings and site layouts to accommodate the site boundary adjustment.

Due to the closer proximity of the proposed carriageway to the Leisure Centre, Council requests that the replacement boundary fence is more substantial than the current fence, subject to further consultation with Council.

Tramway Drive (Both Sides) (Lots 182 DP 850094 and 183 DP 850094)

Strips of land are identified along the boundary of these lots to accommodate an additional (fourth) eastbound through lane. The proposal is to re-construct the existing retaining wall on the boundary of the western lot to a height of 2.5 metres. The vegetation on the site is not identified as an Endangered Ecological Community. However, further clarification as to vegetation proposed for removal is requested. Council advises that the height of the relocated retaining wall be minimised and clad in similar natural stone material to the current retaining wall. Re-vegetation should be identified in the REF to sensitively minimise the visual impact of the wall.

Traffic and Transport

RMS has developed a robust micro-simulation model between Camden Valley Way and Blaxland Road to evaluate traffic benefits of the Narellan Road upgrade modelling existing 2011 base traffic plus 20% growth to represent traffic levels in approximately 2018. It is noted that based on 2011 data the proposal would deliver a Level of Service of at least C at all intersections except Blaxland Road / Gilchrist Drive which would deliver a Level of Service D in the PM Peak. Even with the upgrade, by 2018 Blaxland Road / Gilchrist Drive delivers a Level of Service F and Hartley Road / Waterworth Drive a Level of service E in the PM peak. Tramway Drive / Mount Annan Drive delivers a Level of Service E in the AM Peak.

This model illustrates that the Upgrade will cater for existing traffic and moderate growth but not for significant development of the South West Growth Centre and other new precincts in Camden and Wollondilly. This highlights the need for the State Government to investigate alternative road corridors between Camden and Campbelltown LGAs and the Hume Motorway at an early opportunity.

Kenny Hill Road Access

Regarding Kenny Hill Road access the four options identified by RMS are noted:

a) Do nothing. Maintain the existing access to Kenny Hill Road through an opening in the median, which allows movements in all directions.
b) Provision of demand-operated traffic signals at Kenny Hill Road (with right turn bays).
c) Close median, allow left in / left out access only.
d) Additional access to the west to utilise the proposed signalised intersection at College Access Road.

Based on the constraints identified Council accepts Option B as the preferred option.

Heavy Vehicle Inspection Bay

a) Continued use of the current enforcement site, located adjacent to the Narellan Road westbound lanes about 250 metres to the west of Mount Annan Drive.
b) Provision of formalised heavy vehicle inspection bay at the current location.
c) Provision of a new heavy vehicle inspection bay adjacent to the Narellan Road westbound lanes and about 200 metres to the west of the Hume Highway northbound off-ramp. Discontinue use of the current site.

Council accepts Option C as the preferred option noting this option has less noise and visual than the other options.

Paths

As a general point, it is not desirable for paths to be installed from the back of kerb. A minimum 1m grass strip is preferable, except at bus stops. Footpaths are preferably 1.5 metres wide and shared paths 3.0 metres wide.

Further information is requested concerning the shared path crossing entry lane from Camden Bypass to Narellen Road and entry lanes from Narellan Road to Camden Bypass. Council is concerned about the potential road safety hazard that would created by uncontrolled crossings. It is recommended that the shared path to Watson Road is relocated to the vicinity of Chainage 3050. The proposed termination of the path at the intersection with Bransby Place is considered less safe.

Council proposes that the Upgrade incorporates sections of footpath to complement the shared path along the Narellan Road corridor, including:

- South side between the intersections with Exchange Parade to Camden Bypass;
- North side between the Exchange Parade intersection eastwards to the bus stop with bus stop boarding point;
- North side between Hartley Road intersection eastwards to the bus stop;
- West side of Mount Annan Drive along the Flower Power boundary;
- Both sides of Tramway Drive to the existing footpaths.
- Retain footpath on north side between Tramway Drive and retirement village to facilitate seniors accessing bus services.

Bus Facilities

In consultation with local bus operator, Busways, Council recommends the following:

- Existing bus stop on Camden Valley Way (west side) north of Narellan Road intersection - There are safety concerns with this bus stop in the travel lane. An indented bay should be incorporated into the Narellan Road Upgrade with a bus boarding point and footpath between the bus stop and the intersection.
- Bus stop on the north side around Chainage 1300 - The removal of this bus stop is accepted.
- Bus stop on south side near Alamein Avenue - It is recommended that a short connecting is installed the existing path to Blamey Place
- Bus stop on Tramway Drive (west side) – There are safety concerns with the bus stop in the travel lane. An indented bay should be incorporated into the Narellan Road Upgrade.
- Busways, has expressed concern about the relocated eastbound bus stop close to the intersection with Tramway Drive due to its close proximity to a bus stop on Tramway Drive (east side) and due to it being immediately downstream of the intersection negating the benefit of the bus jump lane. Busways has requested that the bus stop is placed on the upstream side of the intersection or retained in its original location. Council supports Busways position.
- An additional bus stop is proposed westbound in the vicinity of the Australian Botanic Garden. An eastbound bus stop, downstream of the college access is also proposed due to the distance to the nearest eastbound stop.

Project Staging

The project revised staging proposes to complete the section between the Hume Motorway and the UWS/TAFE access under Stage A. It is considered that this will address the most significant traffic congestion on Narellan Road. Works between Tramway Drive and the Hume Motorway and between the UWS/TAFE access and Gilchrist Avenue are now proposed to be undertaken in Stage B. Stage C incorporates the section between Camden Valley Way and Tramway Drive. Camden Council supports the staging of the project.