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31 July 2017

Mr Toby Philp
Department of Planning & Environment

By email: <a href="mailto:toby.philp@planning.nsw.gov.au">toby.philp@planning.nsw.gov.au</a>

Dear Mr Philp

### The Northern Road Upgrade (SSI 7127)

I refer to your notice of proposed development dated 16 June 2017 regarding the above state significant infrastructure proposal for upgrade of The Northern Road between Mersey Road and Glenmore Parkway.

The Environmental Impact (EIS) Statement indicates that The Northern Road upgrade project (the project) has been designed to accommodate the future growth that is planned for Western Sydney, including the Western Sydney Airport (WSA), and the Western Sydney and South West Priority Growth Areas (WSPGA & SWPGA). This approach is strongly supported however there are a number of key matters for further consideration which are raised below for address in the assessment of the application.

## **Strategic Planning Considerations**

## Future Land Uses / Traffic and Transport Planning

- The EIS provides limited detail on the underlying land use assumptions, particularly for the WSPGA. It is presumed that the RMS and its consultants have had detailed discussions and shared information with relevant State and Federal government agencies to ensure the EIS is based on reliable traffic forecasts to inform the design of the project and assess traffic and transport impacts. It is requested that further information on the underlying land use assumptions for the WSPGA is made available and addressed within an addendum or revision to the EIS.
- The EIS indicates that traffic forecasts are based on the operation of the WSA by the mid-2020s (p 188). The EIS relies upon the *Western Sydney Airport Draft Environmental Impact Statement 2016* (DIRD, 2016) as its information source. The independent peer review of the WSA Draft EIS (to which Council contributed), identified some issues with the traffic and transport assessment for Stage 1 (2030) of the WSA. They included that freight traffic generation within the airport precinct (outside of air cargo) and private vehicle traffic generation from land uses within the airport precinct (outside of air passengers and direct airport employees) had not been assessed. While this additional traffic generation may be relatively minor, it is suggested that RMS and its consultants review the traffic forecasts attributed to the WSA to ensure all traffic generation is included, given a key objective of the project is to provide a resilient connection to the WSA site for freight and people (p 31).



• The EIS does not consider the alternative of a combination of public transport (rail) and road development (p 34), but recognises that there are a number of large public transport projects currently being constructed or planned, including the Joint Scoping Study on Western Sydney rail needs. While it is appreciated that the EIS cannot consider Western Sydney rail needs at this time, the north south rail link is critical to connect the broader Western Sydney region, including the WSA, WSPGA and SWPGA, and as such an upgraded, integrated road network should not be solely relied upon to provide these critical north south connections.

## Socio-Economic and Land Use Considerations

- The EIS states that "Roads and Maritime will, in consultation with Liverpool Council, provide appropriate support for preparation of plans to revitalise Luddenham town centre, for the purpose of encouraging motorists to continue to pass through or visit the town" (pp 420 and 424 (SE-14)). Given part of the village of Luddenham is within Penrith City, Council would also like to be included in this environmental management measure.
- The EIS identifies 142 properties for full and partial acquisition. Clarification is sought on when information on acquisition is likely to be provided to Council for inclusion on Section 149 certificates.

#### **Cumulative Impacts**

- Chapter 9 of the EIS discusses the potential cumulative impacts of this
  project and other projects proposed in the area, including the WSA. The
  construction timeframe for this project and the aviation infrastructure works
  for the airport is outlined on page 672. There are, however, site preparation
  activities associated with the airport, including substantial earthworks,
  scheduled to commence in 2018 ahead of the aviation infrastructure works
  which should also be considered in this assessment.
- Chapter 9 considers cumulative traffic impacts and suggests that, during construction, vehicles may use alternative routes to travel north or south through the area to avoid delays, such as Mulgoa Road, Luddenham Road and Mamre Road. The environmental management measures suggest that consultation be undertaken with local communities potentially affected (p 688). Council should also be included in this consultation process.

#### Other comments

- There are various references throughout the EIS to footpaths on the eastern side of The Northern Road "where required" (pp 4 and 77), "as required" (p 79), "where warranted" (p 109) and "such as between bus stops and adjacent intersections" (p 210). It is recommended that this be clarified in the detailed design phase.
- The EIS indicates that "wherever possible compound site locations have been limited to areas that would not require vegetation clearing beyond that already required for the project" (p 579). This is supported. Clarification, however, is requested on whether the large number of scattered remnant trees on site C17, north of the water supply pipeline, will all need to be removed.



 The EIS identifies a range of construction environmental management subplans (pp 729-735) and identifies who will be consulted in their preparation.
 While "other relevant agencies" are identified, Council should be consulted on all sub-plans.

## **Urban Design and Landscaping Considerations**

- Sheet 13 of the Urban Design Concept Plans (Page 87) indicates the
  planting of clumps of trees to balance screening with occasional views from
  the road corridor. The Mulgoa Valley has an established landscape and
  heritage character and replanting along the corridor should suitably respond
  to this character in terms of species type, groupings and plant locations.
- In the Urban Design Strategy (5.2), the general principles for vegetation and views for all three zones are considered to be inadequate. To guide a coordinated design, additional principles should be included to address:
  - conflicts between the provision of best conditions for vegetation to thrive, and potential constraints such as compacted sub-soil and ground conditions in areas of cut and fill, underground and other services infrastructure e.g. power, maintenance access requirements.
  - Further clarification on how Councils can safely, effectively and efficiently maintain verges with respect to batters, plant species and intended management measures;
  - Further clarification on how RMS contractors can safely, effectively and efficiently maintain medians
- Figure 25 of the Urban Design Strategy does not address the local government boundary between Penrith City and Liverpool. Further consideration should be given to the provision of signage and other potential landscape features to mark the boundary.
- Road elements (5.3) does not address the following, which have the potential to impact the landscape amenity of the road corridor and surrounding landscape context:
  - Infrastructure such as underground power and drainage. These should be coordinated with the vegetation and views concepts so they are located and aligned to not compromise optimum locations and conditions for planting
  - Signage including identity gateway markers at the LGA boundary
- Road elements cuttings (5.3.3) soils should be ameliorated to enable planting to restore landscape character and bushland areas.
- The following comments regarding 'Landscape Design' (Section 5.4) should be further considered and addressed:-
  - Vegetation plants should be grown provenance stock
  - Hoop and Bunya Pines are recommended over coastal Norfolk Island Pines
  - o Cumberland Plain Woodland species should include Melaleuca sp.
  - Riparian species should include Casuarina, Ficus coronata, Melia, Callistemon and Acacia
  - Median and verge species should include pasture grasses



- The following comments regarding 'Urban Design Concept Plans' (pp81-89) should be further considered and addressed:
  - o The description of PM4 is not clear it should include tree planting
  - Sheet 7 The feature avenue of Hoop Pines into Luddenham should be planted on both sides of the road to enable an 'avenue' effect. Power should be relocated underground if necessary. An extension of the avenue towards the intersection will enable it to be appreciated by TNR users, and promote the town as a bypass destination. Similarly, other landscape features including Council branded signage should be incorporated into the intersection
  - Sheet 7 The statement should address unsightly views into the incident response facility by northbound traffic, through vegetation, built form design excellence, improved circulation routes to reduce visual impact
  - Sheet 7 –The statement should address the change in local government areas through Council branded signage and other features
  - Sheet 10 there is opportunity for PM2 ie. inclusion of planted trees between CH10050 and 10325 (east) and this should be further explored
  - Sheet 11 the VMS at the pipeline is considered inappropriate given this is a feature in the landscape which has potential to be highlighted.

# **Environmental Management Considerations**

#### Land Contamination and Remediation

- Whilst detailed contamination investigations have not yet been conducted, it
  is expected that land contaminated through existing and historical uses will
  be disturbed through the construction program. It is requested that the RMS
  ensure that comprehensive and detailed contaminated land investigation,
  remediation and validation procedures and protocols are prepared and
  implemented as part of the Contaminated Land Management Plan and that
  consultation with the NSW EPA occur, should land contamination be
  identified.
- It is recommended that the RMS ensure that the recommendations of the Stage 1 Contamination Assessment, as detailed in Section 6.2 'Recommendations' are considered during the Phase 2 assessment. To mitigate impacts to human health and the environment, intrusive sampling and analysis of soils should be undertaken prior to the disturbance of any known or potentially contaminated land.
- All remediation works in the Penrith Local Government Area require development consent. Clause 11(4) of SREP 20 states that consent is required for remediation of contaminated land, and clause 9(d) of SEPP 55 identifies any remediation work as Category 1 remediation work (work needing consent) where it is required by a Regional Environmental Plan. A Remediation Action Plan (RAP) should be included for consideration and approval by the consent authority in line with Clause 17 (1) (C) of SEPP 55 should land remediation works be required. A notice of completion of remediation work on any land within the Penrith Local Government Area



should also be provided to Penrith City Council. The Contamination Land Management Plan as part of the broader CEMP and the Unexpected Finds Protocol should be prepared with consideration to the above.

## Construction and Waste Management

It is requested that the RMS ensure that a comprehensive Waste
Management Plan is prepared and implemented to ensure that all waste
arising from the construction of the project, including contaminated material
and asbestos, is appropriately collected, transported and disposed of lawfully
at a lawful waste management facility. Measures to this effect should be
included in the plan.

#### Noise Management

- Construction is to be staged, with construction anticipated to occur over a three-year period (early 2018 to late -2020), with works generally being carried out during standard working hours "where feasible and reasonable." It is noted that to minimise disruption to the Northern Road and the surrounding road network, some construction activities will be carried out outside of standard hours, including installation of traffic controls, night paving and key bridge construction works; however, as a standard noise management practice, where possible, the noisier activities should be restricted to standard work hours.
- Generally, the assessment concludes that the project's construction phase will substantially impact the community, including triggering some receivers to be moderately and highly noise affected, particularly during periods where noise-intensive processes operate at their nearest point to receivers. Further, modelling predicts that during out of hour's works, some residences may be exposed to exceedances of more than 25dB (A) above the sleep disturbance screening criteria. It is requested that the RMS commit to undertaking the detailed design identified in the Noise and Vibration Impact Assessment with subsequent community consultation to ensure that construction noise and vibration impacts upon nearby receivers residential and non-residential are minimised and scheduled for the shortest possible duration.
- It is requested that the project's CNVMP specifically nominate the additional
  mitigation and community consultation measures it will apply to mitigate the
  predicted noise and vibration criteria exceedances identified in the Noise and
  Vibration Assessment. In particular, the CNVMP should explicitly assess the
  potential for sleep disturbance and address how the identified maximum
  noise level events would be managed to alleviate impacts to sensitive
  receivers.
- Where exceedances of the human response vibration criteria are identified at the detailed design stage, RMS should ensure that additional assessment is undertaken in line with the recommendations of the Noise and Vibration Impact Assessment.

#### **Operational Noise**

 Once road upgrades are complete, modelling predicts that without noise mitigation, most receivers in the study area are expected to experience some



increase in traffic noise. For receivers close to the alignment, the increase may result in an exceedance of the operational noise criteria. Further, some properties may also experience sleep disturbance impacts. In turn, there are 77 receivers that qualify for consideration of noise mitigation. All triggering receivers are residences other than three classroom buildings at Luddenham Public School. This list may be further refined during the detailed design phase. The assessment determines that mitigation of operational impacts will be delivered as at-building acoustic treatments rather than as either low noise road pavement or noise barriers, as this is the most "reasonable" application of mitigation given the proximity of the dwellings to the roadway and the spatial separation of the eligible buildings. It is requested that the RMS commit to undertaking the further detailed design identified as being required in the NVIA, along with subsequent community consultation to ensure that appropriate and effective noise mitigation measures are implemented. The selected mitigation measures and at-building acoustic treatments should be selected and implemented so as to respond to the concerns of the noise-affected community and ensure that the noise levels at sensitive receivers comply with applicable noise criteria.

In line with the recommendations of the NVIA, post-construction traffic
measurements should be collected to verify that traffic volumes and
characteristics are not materially different from the forecast numbers
considered in the NVIA. Where material differences are identified, further
assessment should be completed to confirm that the level of impacts remain
consistent with the predictions of this study.

### Air Quality Management

- During construction, the primary risk to local air quality is dust emissions (particulate matter and combustible matter) generated during works involving the stripping of topsoil and clearing of vegetation, earthworks, stockpiling, the movements and handling of soils, and traffic movements on unpaved roads. Those receivers located close to the site works (~ 20m) and in the direction of prevailing winds will be the most susceptible to air quality-related impacts, particularly during dry hot periods. Potential impacts to air quality during the operational phase of the project are generally associated with motor vehicle emissions arising from changes in the volumes of motor vehicles and proximity to sensitive receptors. Safeguards and environmental management measures have been identified to manage and mitigate impacts predicted as a result of the proposed work; these measures, including air quality monitoring, reporting and compliance requirements, will be further developed and detailed in the Construction Environmental Management Plan (CEMP) which should form conditions of consent.
- Whilst odour arising from uncovered contaminated or hazardous materials is identified as a local air quality risk and subsequent management measures proposed, there is further potential for air quality impacts to arise through the disturbance of unidentified contaminated land. Measures and safeguards to minimise air quality impacts and risk to human health associated with disturbance of these lands, should be addressed in the CEMP.



## Water Quality Impact:

• The project footprint contains and is in relatively close proximity to a number of water bodies and other sensitive receiving environments, which may be impacted during the construction and operation of the development. The proposed works have the potential to impact on surface water quality during the construction works due to the movement of sediment-laden runoff caused by excavation activates, vegetation removal, and other surface work, particularly before or during periods of heavy rainfall. The erosion, sediment and water quality control measures proposed to be implemented prior to, during and post construction works should effectively manage potential water quality issues during the construction stage provided scheduled monitoring and regular maintenance of these measures is undertaken.

# **Biodiversity Considerations**

• The proposal seeks to remove over 387 hectares of remnant native vegetation from the Cumberland Plain, almost all of which is already listed as Endangered or Critically Endangered. The EIS states that "The BIO Map (Office of Environment and Heritage 2015a) has not been approved by the Chief Executive of OEH and therefore these biodiversity links have not been included in the FBA (Framework for Biodiversity Assessment) calculations" (pp 293-294). The biodiversity links referred to include land on the site of the Orchard Hills Defence Establishment and regional corridor 17 linking the Mulgoa Nature Reserve to vegetation on the Defence Establishment site. This statement is concerning and it is considered to be reasonable and necessary that these links are included in the FBA as widening of The Northern Road will increase its barrier effects and result in the core area on the Defence Establishment site (which is also Priority Conservation Land) being further isolated with long term impacts on its viability.

The OEH's website indicates that the BIO Map "comprises core areas of bushland and corridors that are important at a state and regional level for biodiversity outcomes". It does not suggest that the BIO Map should not be used to guide government decision making These links are also zoned E2 Environmental Conservation under Penrith LEP 2010, and as such, considered important to Penrith City's biodiversity network.

- Further consideration should be given to having a u-turn facility in Kings Hill Road and whether this has potential to reduce the fragmentation of a potential west-east biodiversity corridor between the Mulgoa Valley and the Defence Establishment site, or at least through the Mulgoa Valley.
- At least two Threatened Ecological Communities, two threatened plants, six threatened animals and two migratory birds will be impacted by the upgrade:
  - Cumberland Plain Woodland CEEC approx 29.15ha
  - River Flat Eucalypt Forest EEC approx. 4.29ha
  - Pultenaea parviflora (4 known plants) - Endangered (NSW) Vulnerable (Cth)
  - Marsdenia viridiflora subsp. viridiflora (35 known plants) Endangered (NSW) Vulnerable (Cth)
  - Cumberland Plain Land Snail (Meridolum corneovirens) Endangered (NSW)



- Regent Honeyeater (Anthochaera Phrygia) Critically Endangered (Cth and NSW)
- Grey Headed Flying Fox (Pteropus poliocephalus) Vulnerable (Cth and NSW)
- Eastern Bentwing-bat (Miniopterus schreibersii oceanensis) Vulnerable
- Eastern False Pipistrelle (Falsistrellus tasmaniensis) Vulnerable
- Eastern Free-tail Bat (Mormopterus norfolkensis) Vulnerable
- Latham's Snipe
- Cattle Egret
- It is noted that Table 4.2 of the Biodiversity Technical Working Paper states that *Marsdenia viridiflora subsp. Viridiflora* cannot withstand further loss. The project however proposes to remove 35 known individuals. Further, the offset strategy identifies this as a having 'Red Flag' status and no credits being available to purchase. Justification has not been provided as to why this is an acceptable loss and this needs to be further addressed.
- Mitigation measures have not been identified in detail and should be identified in order to determine the level of impact. Mitigation measure must include:
  - 1. Use of local provenance seed in all plantings.
  - All areas that are to be grassed are to use direct seeding of native grasses and herbs as per Greening Australia's Grassy Groundcover Restoration.
  - 3. Reuse of topsoil from high quality bushland patches in vegetated fauna crossings and other areas to be revegetated.
- The loss of habitat, especially the loss of hollows and remnant trees has not been adequately assessed or quantified in the EIS. The EIS must identify the number of tree hollows, standing dead trees and large, remnant trees will be impacted by this proposal. It must also include the areas of vegetation that have not been included in the impacts assessments as outlined above. Several habitat trees are located within the road shoulder or median strip and can be retained rather than removed.
  - Mitigation measures have not been identified and must be identified in order to determine the level of impact. Mitigation measure must include:
    - 1. Re-use of natural hollows in nearby bushland and reserves
    - 2. Re-use of large woody debris in nearby bushland and reserves
    - 3. Installation of suitable habitat boxes (made from hardwood and species specific) in nearby bushland and reserves
  - There are three key points where regional connectivity will be impacted as a result of the road widening. Two of these are within the Penrith LGA being:
    - Kings Hill Rd Mulgoa
    - Glenmore Park Biodiversity Corridor this is also identified in the Cumberland Conservation Corridors Map and in OEH's BIO Map which falls under the Cumberland Plain Recovery Plan. This importance of this linkage is not fully assessed as the EIS does not identify the connection through to Mulgoa Nature Reserve via the Glenmore Park



Biodiversity corridor. This should be rectified and a full assessment of the impacts undertaken.

Loss of connectivity is a major threat on the Cumberland plain. No measures have been identified to mitigate these impacts on regional connectivity. The EIS states that they will refer to RMS Guidelines, but nothing is detailed. A number of connectivity mitigation measures must be implemented at these key locations. Mitigation measures need to include:

- A flood Culvert PXD2 is already proposed at the key connectivity point at Surveyors Creek. Alongside flood Culvert PXD2, a fauna underpass culvert is to be located to link the Glenmore Park/Surveyors Creek Biodiversity Corridor with the vegetation on the defence land. This would require the culvert to be doubled so that one side can allow for fauna movement. The fauna underpass must be independent of the drainage culvert, elevated above regular drainage levels, and a natural earth floor and with a slight angle to self-drain any water entering. The culvert for fauna must be a minimum of 3m high to provide for Eastern Grey Kangaroos, with a natural earth bottom as outlined above, and contain hardwood logs and rocks to allow escape from flooding and predators. Suitable vegetation is to be provided on either side to provide protection to fauna on approach and departure. Due to security, the culvert would need to have a grate across it to prevent access, but it would mean that in future the potential is there to open it up for fauna movement and would avoid the road upgrade sterilising future connectivity opportunities.
- Fauna rope bridges and glider poles with vegetated rest points in the median strip to provide a two-stage crossing at suitable points along the roadway.
- Suitably placed floppy-top fencing to manage and guide fauna crossings.
- The Cumberland Plain Mitchell Landscape is an over-cleared landscape with 89 per cent of native vegetation having been cleared. Due to the likely expansion of western Sydney further impacts to biodiversity are likely to result in this region. The EIS outlines other projects that are having or will have an impact on the regions biodiversity:
  - The predicted impacts from the Northern Road Upgrade Glenmore Parkway, Glenmore Park to Jamison Road, Penrith are anticipated at about 2.4 ha of remnant native vegetation and up to 3.9 ha of planted vegetation along the M4 Motorway (6.3 ha in total)
  - The predicted impacts from the Northern Road Upgrade Narellan to Bringelly are anticipated at about 59.2 ha of native vegetation
  - The construction footprint of the M4 Managed Motorway project is anticipated to impact on about 31.25 ha of planted and remnant vegetation in various states of condition. This area of clearing includes 3.82 ha of remnant vegetation
  - The footprint of the Western Sydney Airport is predicted to impact on 280.8 ha of native vegetation
  - Additional future impacts include the South West Growth Centres, realignment of transmission lines, provision of water pipelines, and the proposed M12 Motorway and other future orbital road links.



## **Traffic Management Considerations**

#### M12 Motorway connection to The Northern Road

- Council requests continued involvement in the design of The Northern Road upgrades including the proposed connection to the M12 Motorway.
- Road Widening The proposed increased number of lanes along The Northern Road is supported.
- The increase to the number of lanes would improve road capacity and travel times.

## **Bus Shelters**

- The design proposes a continuous bus lane in each direction between Mersey Road, Bringelly and Glenmore Parkway, Glenmore Park. The bus lanes are to be 24 hour with parking not permitted in the bus lanes.
- The provision of dedicated bus lanes is supported, however, there is no
  provision made to provide bus shelter infrastructure along the upgraded
  route. It is not reasonable to expect Council to provide this infrastructure.
  The bus shelters are a key facility of a major public transport route and
  enhance the public transport experience, promoting mode shift.
- RMS has just completed the Werrington Arterial Road project and provided bus shelters in both directions. Council has received confirmation from RMS that TNR3 will be providing bus shelters to suit Council's requirements. Bus shelters have been provided at each bus stop location by RMS. It is imperative that all stages of TNR are consistent in their delivery of infrastructure including bus shelters. Therefore, Council is urging RMS to reconsider its commitment for provision of bus shelters along TNR project.
- As part of the bus shelters supply and installation process the RMS must ensure that the supplier provides a certificate that bus infrastructure has been designed and installed to meet all relevant standards and DDA compliance.

## a) Tuck Layby Areas

The proposed TNR project has not provided any truck layby area within this project. At a Council meeting in March 2017, concerns were raised about the upgrade of TNR regarding removal of the existing lack truck layby area south of Glenmore Parkway. Council wrote a letter to RMS in April 2017, seeking their advice regarding the RMS Strategy/Policy on the provision of truck layby areas. Council believes that this an important road safety initiative and therefore Council is urging RMS to reconsider its commitment for provision of a truck layby area along TNR project.

### Consultation with Affected Local Residents

- Council requests that RMS consult with local residents and respond to any substantial objections prior to proceeding with the proposed new local road connections and upgrades for the following:
  - o New eastern extension of Littlefields Road



- New roundabout in the proposed eastern extension of Littlefields Road
- New connection from Gates Road through to Littlefields Road
- New extended Vineyard Road
- New roundabout in Kings Hill Road
- New alignment of The Northern Road and Elizabeth Drive (south of the current Elizabeth Drive)

#### Kings Hill Road

- As outlined within the Biodiversity comments within this submission, Council supports in principle the provision of a roundabout to facilitate U-turns in Kings Hill Road. However, it should be noted that an existing load limit applies to the section between The Northern Road and proposed extension of Vineyard Road. An application must be made to Council's Local Traffic Committee (LTC) to remove the load limit on that small section of Kings Hill Road from The Northern Road to the proposed roundabout.
- The Kings Hill Road from The Northern Road to the proposed roundabout would require significant pavement upgrade to cater for the increase in heavy vehicle movements. As would the pavement design for the new roundabout.

### Luddenham Town Centre

• The proposed upgrade TNR project has realigned the existing The Northern Road to an easterly direction to bypass Luddenham town centre. The prosed realignment will reduce in traffic within the town centre, at the same time which may impact on local businesses that rely on passing trade. Consideration should be given to provide appropriate directional signage for traffic in the vicinity for easy access to the Luddenham town centre. Brown Tourist signage to attract passing trade into the community and for historic sites may be considered.

#### Shared - Use Path (SUP)

- The proposed provision of a new shared path improving safety for pedestrians and cyclists also provides an alternative mode of transport. Whilst the inclusion of safe infrastructure for cyclists and pedestrians is acknowledged and welcomed, the nature of any cycling facility should meet the needs of the likely future user groups of the facility. The automatic provision of a shared-use path for bike riders is not always appropriate. Consideration should be given to the following points:
- The Northern Road is currently used by long distance and club riders. As a major transport link to the airport, the road should provide for all modes of transport. In the case of cycle infrastructure, it should not only provide for the existing users, but also the likely future users, being riders who may choose to commute to/from work in and around the airport precinct. In this regard, the cycle facility should be continuous and direct, to be attractive to the user.
- Intersection crossing treatments should be provided to give the same priority
  to bike riders as other vehicles. It should not be expected that bike riders are
  required to stop and cross at intersections with bicycle crossing lanterns on
  the same phase as pedestrians. The multiple crossing points and delays for
  a long distance bike commuter is not reasonable. A long distance rider will



alternatively use the road, rather than ride on a slow, disconnected shareduse path. This particularly applies to the club training cyclists, riding long distances every weekend, often every day.

- Complimentary on-road and off-road facilities are typically not necessary; a separated continuous on-road facility is preferred in this instance to cater for the likely users. However, if the discontinuous SUP only is proposed, then on-road lanes should also be included. Improved separation to travel lanes is also preferred for the cycle facility.
- It is important that RMS consult with the local cycling clubs regarding the nature of the facility and ensure that the design, separation and intersection treatments are supported.

Should you require any further information or clarification on the above comments, please don't hesitate to contact me on (02) 4732 8125.

Yours sincerely

Gavin Cherry

**Development Assessment Co-ordinator**