



4 June, 2013

P0719B Moonee Beach TIA Ver 01.docx

JW Planning
Level 1 Suite13/478 The Esplanade
Warners Bay NSW 2282

Attention: Trevor Allen

Dear Trevor

Site at Residential Subdivision Lot 1 & 6, Moonee Beach, Pacific Highway NSW

Further to your request, we have now completed our site investigations for the above project. The following traffic and access assessment has been prepared in accordance with the RTA Guide to Traffic Generating Developments and the Austroads Guides. Consideration has been given to the NSW Government's Integrating Land Use and Transport Policy package and the NSW Planning Guidelines for Walking and Cycling.

This assessment also addresses transport and accessibility matters raised by the Department of Planning in their Amended Director-General's Requirements for Environmental Assessment February 2010, Section 5.

| Item | Issue | Comment |
|--------------------------------|-------|---|
| 2. Existing Situation | | |
| 2.1.1 Site Location and Access | NO | Moonee Beach is located on the north coast of NSW approximately 15 kilometres north of Coffs Harbour between Coffs Harbour and Woolgoolga. The vacant site is located on the eastern side of the Pacific Highway, with access provided from the Pacific Highway. The site is coastal/rural land. |
| 2.2.1 Road Hierarchy | NO | Main roads through the locality are the Pacific Highway west of the site and Moonee Beach Road, to the south of the site. The Pacific Highway is a state road providing the main vehicular thoroughfare north-south along the eastern seaboard. It carries significant numbers of heavy vehicles as well as connecting various townships along the coast. Moonee Beach Road is a local road terminating in the village of Moonee Beach. As such it acts as a collector road providing access for the 1,566 inhabitants (censusdata.abs.gov.au) to the Pacific Highway west of the village. A review of the local roads to the immediate south of the site show that Collector Road currently provides a stub that allows for a future road connection (refer Photo 1 below). Collector Road connects with Estuary Drive to the south which then connects with Moonee Beach Road via a 4-way roundabout controlled intersection. Collector Road and the length of Estuary Drive that connects to Moonee Beach have been built to a local road standard with an overall carriageway width of 8.0 metres and an off road shared path. Other local roads e.g. Tidal Crescent provides an overall width of 5.5 metres with no footpath which are classified by Council as Minor Roads only. |

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| 2.2.2 Roadworks | NO | The Pacific Highway upgrade is currently being constructed in the locality of the subject site. This important road upgrade will provide two lanes of travel in both directions with a central median to control right turns. As part of the upgrade, the RMS has reviewed the access points along the length of the highway with regards to limiting the access points. As part of this policy, the intersection of the Pacific Highway and Moonee Beach Road will be upgraded to provide full grade separation of turning movements. |
| 2.2.3 Traffic Management Works | NO | None noted. |
| 2.2.4 Pedestrian and Cycling Facilities | NO | As the site is vacant there are no footpaths or cycle facilities. Footpaths are provided inconsistently elsewhere within the area. It is noted that the Pacific Highway / Moonee Beach Road upgrade includes refinements to footpaths and cycleways in the vicinity of Moonee Beach Road and Estuary Drive. |
| 2.2.5 Public Transport | NO | There is minimal public transport within the area. Ryans Bus Service of Woolgoolga provides services between Coffs Harbour and Woolgoolga plus twice daily services north to Grafton and return. (Refer Appendix E) The main services are on school days only and are associated with student transportation. This service drops of and picks up within Moonee Beach in the vicinity of main shopping area. |
| 2.3 Traffic Flows | | |
| 2.3.1 Daily Traffic Flows | NO | Existing traffic flows along Estuary Drive and Collector Road have been observed during both the morning and afternoon peak periods and the flows are reasonably low. The two way flow on Collector Road where it connects with Moonee Beach Road are less than 100 vehicles per hour 2-way. |
| 2.3.2 Daily Traffic Flow Distribution | NO | Daily traffic flow distributions reflect the demographics of the area with the median age being 41 (Census 2011). Daily traffic flows associated with employment and education are distributed out of the village west to the Pacific Highway with the majority of traffic travelling south to Coffs Harbour. Locally the shopping centre to the south of the site is a significant generator of traffic whilst in the summer months east to the coast becomes significant. |
| 2.3.3 Vehicle Speeds | NO | No speed surveys were completed as part of the study work. However it is considered that traffic does not speed in this location due to the design and residential nature of the streets and its holiday atmosphere. |
| 2.3.4 Existing Site Flows | NO | The site is currently vacant and therefore generates no traffic movements. |
| 2.3.5 Heavy Vehicle Flows | NO | Limited heavy vehicle flows, only associated with deliveries to nearby commercial and retail outlets. The Pacific Highway carries significant heavy vehicle flows including B-Doubles. |
| 2.3.6 Current Road Network Operation | NO | Observations on site during the morning peak show that the road network adjacent to the site operates very well with limited delays to road users. Existing two-way flows on Collector Road/ Estuary Drive during the morning peak are less than 100 vehicles per hour. |
| 2.4 Traffic Safety and Accident History | NO | Accident data provided by the RMS indicates that this is not an area of high risk. The low accident numbers reflect the low traffic volumes in the vicinity of the site. (Appendix C). No accidents have been recorded along Collector Road or its intersection with Moonee Beach Road with only one accident (non injury crash-run off road) between this intersection and the Pacific Highway. |

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| 2.5 Parking Supply and Demand | | |
| 2.5.1 On-street Parking Provision | NO | Parking allowed on the local roads in the vicinity of the subject site. |
| 2.5.3 Parking Demand and Utilisation | NO | Low demand for on-street parking noted with adequate off-street parking available within the surrounding residential development. |
| 2.5.4 Set down or pick up areas | NO | There are no designated set down areas in the immediate locality of the subject site. |
| 2.6 Public Transport | | |
| 2.6.1 Rail Station Locations | NO | The closes railway station is at Coffs Harbour, 15 kilometres south of the village with daily services to and from Sydney and Brisbane. |
| 2.6.2 Bus Stops and Associated Facilities | NO | Bus stops are located on Moonee Beach Road adjacent to the Moonee Beach Shopping Centre. These are temporarily relocated during the upgrades to the Pacific Highway. |
| 2.7 Other Proposed Developments | NO | North of the site is the proposed residential development of The Glades. |
| 3. Proposed Development | | |
| 3.1 The Development | | Proposed residential subdivision with 159 lots to be constructed over 15 stages as market requirements demand. The northern lot includes 101 residential lots with 58 residential lots proposed for the southern lot. |
| 3.1.1 Nature of Development | | Residential subdivision |
| 3.1.2 Access and Circulation Requirements | NO | In line with the Council S94 work and the Land and Environment Court proceedings for the land to the south, a network of local roads is proposed that will allow for future connection to the residential sub divisions proposed in the locality, including the subject site. This is considered appropriate as access to the Pacific Highway will then be provided via the new grade separated interchange at Moonee Beach Road. This intersection will provide the highest level of road safety for the connection between these two roads and there will be no capacity issues associated with the future operation of this grade separated interchange. A proposed simple grid pattern of streets provides ease of circulation through the development. |
| 3.2 Access | NO | All access is proposed from the Collector Road with no direct permanent access proposed from the Pacific Highway. |
| 3.2.1 Driveway Location | NO | A review of the findings from the L&E Court work for The Glades land shows that a connector road is proposed to link with the existing residential roads to the south of the site. A review of the local roads to the immediate south of the site show that Collector Road currently provides a stub that allows for a future road connection (refer Photo 1 below). Collector Road connects with Estuary Drive to the south which then connects with Moonee Beach Road via a 4-way roundabout controlled intersection. A review of the site plan (Appendix B) indicates that the development proposes a number of simple T-intersection accesses onto the collector road. A small number of lots will also require direct access to the collector road. Lot B103 will provide access to the residential dwelling of Lot 2 (K&S Albert). |
| 3.2.2 Sight Distances | NO | Collector Road and the length of Estuary Drive that connects to Moonee Beach have been built to a local road standard with an overall carriageway width of 8.0 metres and an off road shared path. Other local roads e.g. Tidal Crescent provides an overall width of 5.5 metres with no footpath which are classified by Council as Minor Roads only. The proposed extension of Collector Road will provide a suitable environment with adequate site distances for safe access. |

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| 3.2.3 Service Vehicle Access | NO | Via the road network. Access will be provided to enable the collection of refuse and the occasional delivery vehicle in accordance with the Council DCP. |
| 3.2.4 Queuing at entrance to site | NO | The proposed development provides for a number of access points onto Collector Road avoiding queuing within the site. |
| 3.2.5 Comparison with existing site access | NO | Existing site is vacant with vehicular access from the Pacific Highway. The proposed development provides for no direct access from the Pacific Highway although access may be required in the initial stages of site development from the Pacific Highway. This is anticipated to be in a manner similar to that approved for The Glades to the north of the site. |
| 3.2.6 Access to Public Transport | NO | Access to existing school and public bus routes is available at the existing bus stops on Moonee Beach Road. The proposed development has been planned in such a way as to enable access and circulation by a bus through the development should demand justify an extension or modification to current services. Provision of a bus service along the collector road would provide the majority of residents' access to the bus service within a 400m walk regardless of the staging. |
| 3.3 Circulation | | |
| 3.3.1 Pattern of circulation | NO | All vehicles will be able to enter and exit the site in a forward direction. |
| 3.3.2 Road width | NO | Collector Road and the length of Estuary Drive that connects to Moonee Beach have been built to a local road standard with an overall carriageway width of 8.0 metres and an off road shared path. Other local roads e.g. Tidal Crescent provides an overall width of 5.5 metres with no footpath which are classified by Council as Minor Roads only. All internal circulating roads to be designed and constructed in accordance with Council requirements. |
| 3.3.3 Internal Bus Movements | NO | Internal bus movements can be accommodated within the road design should demand enable the provision of bus services in this location. |
| 3.3.4 Service Area Layout | NO | There is no need for a service area layout within the development. Kerbside rubbish collection will be managed by individual households. |
| 3.4 Parking | | |
| 3.4.1 Proposed Supply | NO | In accordance with Council requirements. |
| 3.4.2 Authority Parking | NO | The Coffs Harbour Draft DCP 2013 provides for: <ul style="list-style-type: none"> •Small (<100m² GFA) one space (behind front setback) •Large (>100m² GFA) two spaces (at least one space behind front setback) |
| 3.4.3 Parking Layout | NO | It is anticipated that dwellings will provide parking per Council requirements |
| 3.4.4 Parking Demand | NO | Parking demand will be able to be adequately accommodated within the site |
| 3.4.5 Service Vehicle Parking | NO | There is no anticipated demand for service vehicle parking. Any service vehicles will be able to be managed where necessary within the site including vehicles associated with the construction of the development. |
| 3.4.6 Pedestrian and Bicycle Facilities | NO | A shared pathway is proposed to be built in conjunction with the extension of Collector Road. Detailed design of the subdivision and its connection to this will meet Council's pedestrian and cycling requirements and will be consistent with the objectives and principles of the NSW Government Integrating Land Use and Transport Policy and the NSW Planning Guidelines for Walking and Cycling Access to the local shopping centre by walking and cycling (approximately 500 metres from the site) is considered desirable however given the remote nature of the development, access via active transport to the education and employment hub of Coffs Harbour (15 kms away) may be considered less |

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| | | practical except by regular commuter riders. Connection is also proposed to a coastal walk connecting the site eastwards to the coast (See Appendix D). |
| 4. Impact of Proposed Development | | |
| 4.1 Traffic Generation | NO | <p>Standard traffic generation rates provide by the RTA Guide to Traffic Generating Development have been used as a basis for determining the future traffic flows associated with the development, The RTA Guide to Traffic Generating Developments indicates that the typical peak hour generation rate for a residential subdivision is 0.85 trips per lot per hour. A review of the plans prepared for the residential subdivision on the subject site indicates that there will be in the order of 159 residential lots developed. Applying the RMS rate the traffic generated by the complete development will be in the order of 136 trips in the traditional AM and PM peak periods.</p> <p>Given the remote nature of the development opportunities to minimise traffic generation is limited. The provision of suitable pedestrian and cycling facilities to connect the site to the local shopping centre and coastal area may encourage active transport for travel within the village. Travel times and regularity of services for bus travel impact on the choice of public transport travel over vehicle travel to attractors throughout the region.</p> |
| 4.1.1 Daily and Seasonal Factors | NO | Limited annual variation expected. |
| 4.1.2 Pedestrian Movements | NO | <p>The proposed development is located over 500 metres from the local shopping centre and a kilometre to the coast. Pedestrian paths within the site and a proposed shared cycleway along Collector Road will provide connectivity to the south. East of the site a pedestrian path connects the site to the Coastal Walk.</p> <p>There are no local schools within the vicinity. Pedestrian movements are adequately catered for within this proposal.</p> |
| 4.2 Traffic Distribution and Assignments | NO | Major attractors are the local shopping centre and then west to the Pacific Highway to connect with Coffs Harbour to the south. Coffs Harbour is the main centre for employment and education in the district. |
| 4.2.1 Origin / destinations assignment | NO | All traffic will connect with Moonee Beach Road via Estuary Drive. The majority of traffic (75%) would connect to the Pacific Highway through the newly constructed grade separated interchange. The balance of traffic would be contained within the village of Moonee Beach. |
| 4.3 Impact on Road Safety | NO | Relatively low overall traffic flows associated with the proposed development. The RMS accident data shows very low accidents on the local roads in the vicinity of the subject site. The upgrade of the Pacific Highway in the vicinity will provide a safe environment for traffic accessing from Moonee Beach Road. As part of the safety measures adapted by the RMS in conjunction with the Pacific Highway upgrade, the RMS is working towards having service roads running parallel to the highway that allow for access to a number of lots that then gain access to the Pacific Highway via appropriate major intersections such as that proposed at Moonee Beach Road. |
| 4.4 Impact of Generated Traffic | | |
| 4.4.1 Impact on Daily Traffic Flows | NO | The existing traffic flows on the Collector Road and Estuary Drive during the peak periods are less than 100 vehicles per hour. Extension of the Collector Road is planned to provide access to the subject site and the proposed development of The Glades north of the subject site. The development of this land does not require any upgrade of Collector Road. |

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| 4.4.2 <i>Peak Hour Impacts on Intersections</i> | NO | Similarly, it is considered that the roundabout controlled intersection of Moonee Beach Road and Estuary Drive will have adequate capacity to cater for the additional traffic movements associated with the subject site. It is further considered that the roundabout will have capacity beyond the requirements of the subject site and as such will not require any upgrade over the existing layout. This roundabout is well laid out with good visibility and observations during the peak periods indicates it currently operates with minimal delays and no queues. |
| 4.4.3 <i>Impact of Construction Traffic</i> | NO | <p>Construction work contained within site, so minimal impact upon external road network. Will be a requirement for construction machinery to access site and traffic associated with workers. A Traffic Management Plan will be required for work on site and access controls. This will be completed as part of the detailed design process by the contractor on site.</p> <p>Construction access to the site may be required in a manner similar to that permitted for The Glades development north of the site with a left in/left out access off the Pacific Highway. Reliance upon The Glades access is not considered applicable.</p> <p>The current modifications to the Pacific Highway in this location will impact on the existing access to the site. This will be taken into consideration in the detailed design phase of the project.</p> |
| 4.4.4 <i>Other Developments</i> | NO | <p>The proposed development of "The Glades" residential subdivision north of the subject site has a concept plan providing for the development of 524 lots. This development will be staged and released to meet market demands. The Bateman development south of the site is proposed for 20 lots.</p> <p>Release of all lots will be determined by market demands however Collector Road and the roundabout at Estuary Drive and Moonee Beach Road have adequate capacity to meet the needs of these developments.</p> |
| 4.5 Public Transport | | |
| 4.5.1 <i>Options for improving services</i> | NO | The development in itself is not considered large enough to demand an extension of public bus routes however as both this development and surrounding developments are released the combined demand may provide an opportunity for the rerouting of buses along Collector Road. The extension of bus services is subject to review by the private bus provider and Transport NSW and is dependent upon demand. |
| 4.5.2 <i>Pedestrian Access to Bus Stops</i> | NO | Pedestrian facilities will be provided to meet Council requirements. Given the low volumes of traffic on the local roads and the remote nature of the development pedestrian access will be available along the verges and nature strips within the subdivision which will connect with Collector Road and access to local bus stops. |
| 4.6 Recommended Works | | |
| 4.6.1 <i>Improvements to Access and Circulation</i> | NO | None required. Accesses to Collector Road, internal roads and driveways will be designed and constructed in accordance with Council requirements. |
| 4.6.2 <i>Improvements to External Road Network</i> | NO | None required as the future traffic flows associated with the development can be adequately catered for within the capacity of the planned local road network. Background traffic flows on the local roads are low reflecting the remote nature and low population of Moonee Beach. The peak hour traffic movements associated with the development are less than 140 vehicles per hour and can be accommodated on the local road network with limited additional delays and congestion for road users. |

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| 4.6.3 <i>Improvements to Pedestrian Facilities</i> | NO | Pedestrian and cyclist facilities will be provided in accordance with the Council DCP and will be confirmed as part of the detailed design of the development. |
| 4.6.4 <i>Effect of Recommended Works on Adjacent Developments</i> | - | No impact as the proposed development has been designed in consideration of the adjacent developments. |
| 4.6.5 <i>Effect of Recommended Works on Public Transport Services</i> | - | Nil |
| 4.6.6 <i>Provision of LATM Measures</i> | - | None required |
| 4.6.7 <i>Funding</i> | - | Funding will be provided in accordance with Council requirements. |

In summary, it is considered that the proposed development should be approved on traffic and access grounds. The access to the site can be provided in a safe manner consistent with Council requirements and the additional traffic movements will have an acceptable impact upon the operation of the local road network planned to be built adjacent to the site.

Please feel free to contact me directly on 02 4940 0025 should you have any queries.

Yours sincerely



Sean Morgan
Manager – Traffic Engineering

Appendix

- A – Site photos*
- B – Site plans*
- C – Accident Data*
- D – Landscaping plan*
- E – Public Transport Data*
- F – Pacific Highway Upgrades at Moonee Beach Road*

Appendix A. Site Photos



■ *Photo 1 Existing stub on Collector Road (8.0 metres wide) allowing for future access for residential land*



■ *Photo 2 View along Tidal Crescent showing reduced road width (5.5 metres)*



■ *Photo 3 – View along Collector Road showing the cross section. Note off road shared path to left hand side of photo.*



■ *Photo 4 – View north showing roundabout controlled intersection of Moonee Beach Road and Estuary Drive*



Appendix C. Accident Data

Katie Barkley

From: SYNOTT Jim D <Jim.SYNOTT@rms.nsw.gov.au>
Sent: Thursday, 23 May 2013 1:11 PM
To: Katie Barkley
Subject: RE: Accident Data Request - Our Ref P0719B

Katie

Crash data comments below for the 5 years 1/1/2008 to 31/12/2012.

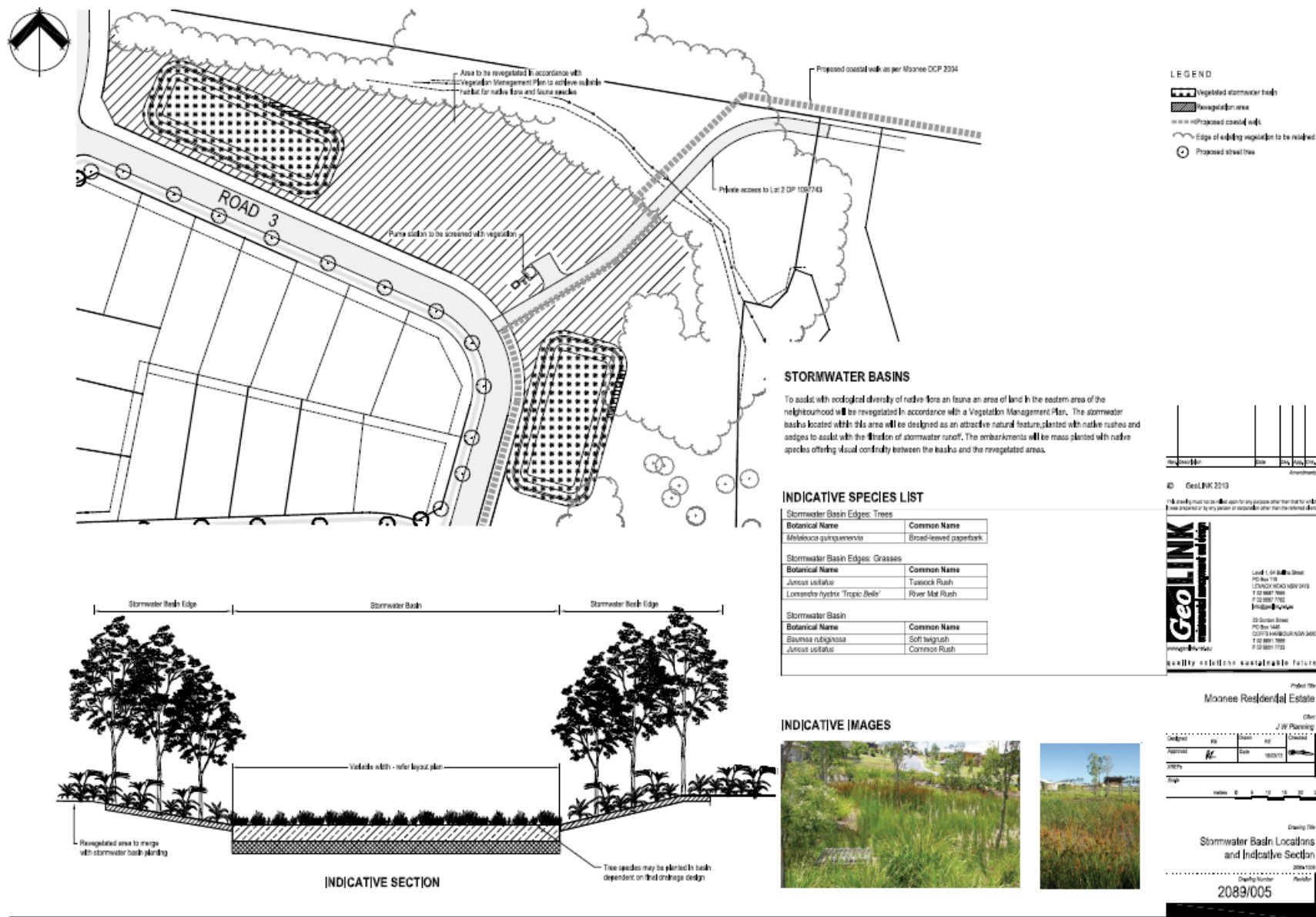
From: Katie Barkley [<mailto:kbarkley@bettertransport.com.au>]
Sent: Thursday, 23 May 2013 12:33 PM
To: SYNOTT Jim D
Subject: Accident Data Request - Our Ref P0719B
Importance: High

Dear Jim,

Can you please provide me with the most recent accident data for the following locations in Moonee Beach NSW?

- The intersection of Moonee Beach Road and Estuary Drive/Collector Road - [Nil crashes](#)
- The Length of Collector Road - [nil crashes](#)
- Moonee Beach Road from its intersection with Estuary Drive to its intersection with the Pacific Highway. - [1 non injury crash \(run off road\)](#)
- The intersection of Moonee Beach Road and the Pacific Highway - [NA intersection layout has completely changes with the highway upgrade.](#)
- The length of the Pacific Highway for 500 metres north of its intersection with Moonee Beach Road - [NA intersection layout has completely changes with the highway upgrade](#)

Appendix D. Landscaping plan showing pedestrian connectivity to Coastal Walk



Appendix E. Public Transport Data

COFFS HARBOUR - WOOLGOOLGA - GRAFTON

| MONDAY TO FRIDAY SERVICES | | | | | | | | | | | | SATURDAY | |
|----------------------------|--|---|------|--------|-----------------------------------|-------|--|---|--|--|--|----------|-------------------|
| Departs | AM | AM | AM | AM | AM | AM | PM | PM | PM | PM | PM | AM | PM |
| Coffs Hbr Park Ave Carpark | 6.55 <small>No service from Coffs to Red Rock</small> | 7.30 <small>No service Coffs to Red Rock</small> | 8.00 | - | 9.30 | 10.15 | 1.00 | 3.20 <small>No service for south of Woolg.</small> | 3.30 | 4.15 | 5.30 | 8.30 | 1.00 |
| Park Beach Plaza | - | - | - | - | 9.35 | 10.20 | 1.05 | 3.35 | 3.35 | 4.20 | 5.35 | - | 1.05 |
| Korora Bridge | 7.02 | 7.37 | 8.07 | - | 9.37 | 10.25 | 1.15 | - | 3.45 | 4.30 | 5.40 | 8.35 | 1.10 |
| Sapphire - Hwy | 7.05 | 7.40 | 8.10 | - | 9.40 | 10.28 | 1.20 | - | 3.50 | 4.35 | 5.43 | 8.40 | 1.20 |
| Moonee Beach | - | - | 8.15 | - | - | - | 1.25 <small>O/R for Coffs pax</small> | - | 3.55 <small>O/R for Coffs pax</small> | 4.40 | 5.48 <small>O/R for Coffs pax</small> | - | O/R for Coffs Pax |
| Moonee - Highway | 7.05 | 7.42 | - | - | 9.45 | 10.32 | 1.25 | - | 3.55 | 4.35 <small>For nth bound pax</small> | 5.48 | 8.45 | 1.25 |
| Emerald Beach | - | - | - | - | 9.50 | - | 1.35 | - | 4.05 | 4.45 | 5.53 <small>O/R for Coffs pax</small> | - | 1.30 |
| Emerald - Highway | 7.10 | 7.45 | 8.20 | - | - | 10.37 | - | - | - | - | 5.53 | 8.47 | - |
| Sandy Beach | - | 7.50 | - | - | 10.00 <small>full loop</small> | - | 1.45 <small>full loop</small> | - | 4.10 | 4.55 | O/R for Coffs pax | 8.50 | 1.40 |
| Raj Mahal | 7.25 | 8.05 <small>Nth Bound Only</small> | 8.40 | 9.22 | 10.10 | - | 1.50 | 4.05 | 4.15 | 5.05 | - | - | - |
| Woolgoolga Oval Beach St | 7.22 | 8.00 | 8.55 | 9.20 | 10.25 | 10.45 | 2.10 | 4.00 | 4.30 | 5.05 | 6.15 | 8.55 | 1.50 |
| Safety Beach | 7.26 * | 8.06 * | - | 9.23 * | O/R | - | O/R | - | O/R | O/R | - | - | - |
| Mulleway Store | 7.28 * | 8.08 * | - | 9.24 * | O/R | - | O/R | 4.10 * | O/R | O/R | - | - | - |
| Ararawarra Headland | 7.29 * | 8.09 * | - | 9.25 * | O/R | - | O/R | 4.11 * | O/R | O/R | - | - | - |
| Ararawarra Beach Rd | 7.30 * | 8.10 * | - | 9.26 * | O/R | - | O/R | 4.12 * | O/R | O/R | - | - | - |
| Darlington Park | 7.33 | 8.13 * | - | 9.27 * | O/R | - | O/R | 4.25 | O/R | O/R | - | - | - |
| Corindi Beach | 7.35 | 8.15 | - | 9.30 | O/R | - | O/R | 4.30 | 4.45 | O/R | - | - | - |
| Red Rock | 7.25 | 7.35 | - | 9.35 | O/R | - | 3.50 | 4.35 | O/R | - | - | - | - |
| Kungala Rd | 7.49 | 8.30 | - | - | - | - | - | 4.55 | 5.10 | - | - | - | - |
| South Grafton - Bi-Lo | 8.10 | 8.50 | - | - | - | - | - | 5.15 | 5.30 | - | - | - | - |
| Grafton - Prince St | 8.40 | 9.00 | - | - | - | - | - | 5.25 | 5.35 | - | - | - | - |

GRAFTON - WOOLGOOLGA - COFFS HARBOUR

| MONDAY TO FRIDAY SERVICES | | | | | | | | | | | SATURDAY | |
|--------------------------------|------------------------|-------|------|-------|------|-------|-------------------|-------|----------------------|------|----------|------|
| Departs | AM | AM | AM | AM | AM | PM | PM | PM | PM | | AM | PM |
| Grafton - Prince St Market Sq | 6.55 | 6.55 | - | - | - | - | 3.20 | 3.30 | - | | - | - |
| South Grafton Skyline Car Care | 7.00 | 7.00 | - | - | - | - | 3.40 | 3.40 | - | | - | - |
| Kungala Rd | 7.20 | 7.20 | - | - | - | - | 4.05 | 4.00 | - | | - | - |
| Red Rock | - | 7.35 | - | 7.25 | - | 9.35 | - | - | - | | - | - |
| Corindi Beach | 7.35 | 7.42 | - | 7.30 | - | 9.50 | - | 4.25 | 4.18 | - | - | - |
| Darlington Park | 7.40 | 7.45 | - | - | - | 9.55 | - | 4.30* | 4.20* | - | - | - |
| Ararware Beach Rd | 7.41 | 7.46* | - | - | - | - | - | 4.30* | 4.20* | - | - | - |
| Ararware Headland | - | 7.47* | - | 7.40 | - | 10.05 | - | 4.35* | 4.25* | - | - | - |
| Mulleway Store | 7.43 * | 7.47* | - | 7.45 | - | 10.10 | - | 4.35* | 4.25* | - | - | - |
| Safety Beach | 7.45 * | 7.48* | - | 7.50 | - | 10.15 | - | 4.40* | 4.28* | - | - | - |
| BP Service Station Woolgoolga | 7.55 | 7.50 | - | 7.55 | - | 10.16 | - | 4.40 | 4.28 | - | - | - |
| Raj Mahal | - | - | - | - | - | 10.10 | 1.50 | - | 4.10 | - | - | - |
| Woolgoolga Oval Beach St | - | 8.00 | 7.35 | 8.00 | 9.00 | 10.30 | 2.00 | 4.30 | 4.30 | 6.15 | 9.00 | 2.00 |
| Sandy Beach | - | - | 7.40 | - | 9.10 | - | 2.10 full loop | - | O/R for Woolg Pax | - | - | - |
| Emerald Beach | - | 8.10 | 7.52 | 8.10 | 9.20 | 10.40 | 2.20 | - | O/R for Woolg Pax | - | 9.10 | - |
| Emerald - Highway | - | - | - | - | - | - | - | 4.40 | 4.40 | 6.25 | - | 2.08 |
| Moonee Beach | - | - | 7.55 | - | - | 10.50 | - | - | - | - | 9.20 | - |
| Moonee Roundabout | - | 8.15 | - | 8.15* | 9.25 | - | 2.25 | 4.45* | 4.45 | 6.30 | - | 2.10 |
| Sapphire - Highway | - | 8.20 | - | 8.20 | 9.30 | 10.57 | 2.27 | 4.49 | 4.49 | 6.34 | 9.25 | 2.23 |
| Korora Bridge | 8.10 for Park Ave | 8.25 | 8.10 | 8.25 | 9.35 | 11.00 | 2.30 | 4.52 | 4.52 | 6.37 | 9.30 | 2.25 |
| Park Beach Plaza | 8.20 | 8.35 | - | 8.35* | 9.40 | 11.10 | 2.35 | 4.55 | 4.55 | - | 9.40 | 2.30 |
| Coffs Hbr Park Ave Carpark | 8.25 | 8.40 | 8.30 | 8.45 | 9.45 | 11.20 | 2.40 | 5.00 | 5.00 | 6.40 | 9.45 | 2.35 |

Ryans Bus Service
COFFS HARBOUR - WOOLGOOLGA - GRAFTON

Due to Pacific Highway Upgrade from 2010-2013, times may vary due to delays



HOW TO USE THIS GUIDE

1) Please check the colour coded times on the timetable. We use three different colours for our services.

Black is for bus services all year round.

Green is for school days only.

Red is for school holidays only.

2) Please check any notes on the times listed in the timetable.

An * means that there is Highway Pick up only.

An i means that you will be required to interchange buses—please check with the driver in this case.

O/R means On Request. Please check with driver or office on these occasions.

O/R for Coffs Pax means the service will only enter the area at the request from a passenger boarding at Coffs Harbour.

O/R for Woolg Pax means the service will only enter the area at the request from a passenger boarding at Woolgoolga.

Full Loop means service runs the full loop around Ironbark Avenue in Sandy Beach. All other services within Sandy Beach, the bus will loop around Acacia Avenue.

Please note: If you wish to catch the 3.20pm service from Coffs Harbour to travel north of Woolgoolga and you are boarding north of the Plaza, you will need to contact our office prior to 2.30pm to organise this request.



Appendix F. Pacific Highway Upgrades at Moonee Beach Road

