



**Pacific Highway Upgrade
Brunswick Heads to Yelgun
Community Liaison Group Meeting No. 10
1 February 2006**

Attendees:

Pauline Millington
Colin Tarbox
Jack Taylor
Tony Stupka
Gillian Secombe
Frank Mills
Barry Hutton
Sue Stirton
Greg Milham

Brett Lee (BSC)

Bill Gardyne (EMR – DoP Representative)

Will MacDonald (Abi)
Mark Sabolch (Abi)
Terry Paxton (Abi)
Wendy Dooley (Abi)

Peter Borrelli (RTA)
Ron Holmes (RTA)
Rachel Sadler (RTA)

Apologies: Malcolm Murray, Kathy Norley-Farmer, Patricia Warren, David Purdy

1.0	Welcome Terry Paxton welcomed CLG members back from the Christmas break and introduced Sandi Drikibau who was standing in for Wendy Dooley for the first part of the meeting and assisting with note-taking.
1.1	Apologies Apologies had been received from: - <ul style="list-style-type: none">• Malcolm Murray;• Kathy Norley-Farmer;• Patricia Warren; and• Dave Purdy (RTA)
1.2	Comments on Notes of Previous Meeting

<p>1.3</p>	<p>The notes were accepted and one member of the CLG congratulated the Project Team on the quality of notes produced from the meetings.</p> <p>Tonight's Agenda</p> <p>Terry ran through the agenda for the evening and noted that as it was the first meeting of the new year since the Christmas break, the Abigroup Construction Manager Will MacDonald would not be providing his usual construction update but rather would, among other items, provide an overview of the year ahead with indicative timings for significant aspects and project milestones.</p> <p>Mark Sabolch, the project Environmental Manager would then provide a presentation on the Use and Operation of Sediment Basins, before the group addressed general business.</p>
<p>2.0</p>	<p>Outstanding Actions from Previous Meeting</p>
<p>2.1</p>	<p>Historic Marker Locations</p>
	<p>Peter Borrelli of the RTA stated he had met with the Council representative and a possible location had been identified in the desired area. The site being considered was on the western side of the existing highway at the Salad Bowl site where the project team had established a compound. This could provide a safe pull off area for traffic with space for the historic marker.</p>
<p>2.2</p>	<p>Text for Historic Marker</p>
	<p>Frank Mills had commenced a draft of the text for the marker and a copy of Frank's draft was provided to members to take home and review so they could provide feedback on what they believed should be included. Peter Borrelli of the RTA offered that the RTA would assist in the design and preparation of the Historic Marker.</p>
<p>3.0</p>	<p>Project Manager's Update</p>
<p>3.1</p>	<p>Flood Report</p>
	<p>Will MacDonald opened his presentation with a report to the group on the impacts of the recent flood on the project.</p>
	<p>Will noted the project team had recorded over 400mm of intensive rainfall and that Abigroup was generally happy with the way the works had coped with the deluge. There had however been some damage including the loss of steel reinforcement that had been in place ready for a concrete pour in the Coolamon Scenic Drive underpass area. This had now been reinstated and the works had advanced despite that setback.</p>
	<p>The key impact of the wet weather had been in terms of erosion of some of the topsoil from the batters and it had been imperative to repair and re-vegetate the batters and re-establish all erosion and sediment controls along the alignment as a priority. Will pointed out that the project team had always targeted getting the earthworks to this stage prior to the wet season and the effort and resources required to do this had paid off during the recent event.</p>
	<p>With the earthworks now approximately 90% complete, most of the larger earthmoving equipment was being demobilized and earthwoks had now</p>

3.2

generally been scaled back. This also included the truck fleet and there was now only minimal road haulage taking place.

Program Overview for 2006

With the earthworks at this stage the focus for the project would now move to other aspects of the project, especially the bridgeworks. Currently there are 13 bridges under construction. At the Brunswick River Bridges, the first pier was completed and soon the pier heads would be constructed and the traveling forms installed to commence construction of the super-structure.

Concrete paving was also scheduled to commence around August to September 2006, all going well, which would mean the concrete batch plant would have to be established on site around May or June 2006. The plant was a 'twin drum' plant that was coming from the M7 project in Sydney and had a capacity of 58-60,000m³. The actual sequence of paving was dependent on settlement in various areas but generally most settlement was behaving in the predicted manner and had not presented the team with any surprises.

Landscaping would be started as early as possible and would focus on areas which would not require further disturbance, such as establishing natives on batters. Several local nurseries had already been engaged in propagation of plant stock from seed collected along the route.

Local road connections would also be a focus this year with tie-ins to such roads as Banana Road, Tunnel Road, Tweed Street (Brunswick Heads Road), the Local Service Road and the Yelgun rest area taking place as soon as possible.

As mentioned at earlier meetings, retaining walls and noise barriers were a significant part of the project. Most of the retaining walls along the local service road were now largely completed but there were still architectural concrete facing panels to be installed. Completing these walls was a significant consideration in allowing all traffic to be switched to the completed local service road.

Drainage works were also progressing and the project was slowly transitioning from construction drainage systems to final drainage systems, and this would continue as space and construction sequencing allowed.

Program Questions

Q What is the timeframe for the traffic switch onto the new alignment of Coolamon Scenic Drive and the Tunnel Road?

A We would anticipate about April.

Q Are you currently on program?

A It is very tight. We would rather be further ahead with the bridge and of course we have to allow for variables such as the weather, which have the potential to slow the project down.

Q Where is the concrete batch plant to be located?

A We are considering a site on the RTA owned property north of Shara Boulevard on the west of the existing highway but there is still

<p>3.3</p>	<p>environmental assessment and approvals to be obtained for the site. We have to address issues such as noise, water, air quality, power supply etc to get the necessary approvals.</p> <p>Q Is there to be any disruption to the use of Stockroute Road?</p> <p>A We will maintain access at all times and once the Yelgun Rest Area local service road is completed we will switch traffic to the new alignment, probably around April 2006.</p> <p>Night Works</p> <p>Will indicated that in order to stay close to the target completion date, there would need to be night works in some areas. As agreed at previous CLG meetings, these would largely be confined to areas where there was little chance of community impact unless it was either emergency work or work being carried out at night for safety reasons. One of the key areas where night works were likely to happen would be at the Brunswick River Bridge as it was on the critical path for the project. Night works had already been occurring there for several weeks without complaint or concern from residents and the project team was relatively comfortable it could maintain that position.</p> <p>Will pointed out that a major night time concrete pour was scheduled for that locality in the next two weeks. This would involve pouring concrete for the southern abutment and would require in the order of 750m³ of concrete. In this case the work was being undertaken at night for technical reasons. As the hardening of concrete is an exothermic reaction (it generates heat), the internal temperature of the concrete could reach around 80 degrees, setting up significant tensions that had the potential to cause cracking. One measure being taken to assist the process was to work at the coolest time of the night, so the pour would commence about 11pm. Two local batch plants would be required to work through the night to deliver this quantity of concrete and they were also getting the necessary approvals to work at night.</p> <p>Will outlined some of the measures being taken to minimise noise, such as circuiting trucks to avoid reversing beepers etc. As access would be via the construction gate off Tweed Street, the approaches to the bridge effectively buffered most of the work area. The closest neighbours were the Ferry Reserve Caravan Park residents who were also separated from the work by both the existing highway and the large noise wall on their boundary.</p> <p>It was noted there was no objection to this ongoing arrangement.</p> <p>Q What time are you generally finishing the current night works on the Brunswick River Bridge and is there much noise?</p> <p>A Generally around midnight. The current works are not very noisy and as I stated before, we have been working in this location for some time with no complaints because it is quite protected from any residents.</p> <p>Barge</p> <p>Will also noted that the project team is looking at using a barge on the river to allow positioning of some components of the bridge works, but that the team was still going through the necessary approval processes for this work. The main use for this would be the initial erection and recovery of the</p>
<p>3.4</p>	<p></p>

	<p>traveling forms once they had reached the final segments for the bridge (midway between the piers). Will noted that there could be periods of up to five or six hours when the river channel would be closed, however it was also noted that a boat ramp was located on either side of the work area so little disruption to river traffic was likely to result. Signposting and advertising would be in place to notify all river users.</p>
<p>4.0</p>	<p>Sediment Basins</p> <p>The Abigroup Environmental Manager, Mark Sabolch, gave a presentation to the group on sediment basins.</p> <p>Mark commenced his presentation by making the distinction between 'erosion' control and 'sediment' control. Basically erosion relates to the dislodgement of particles and sedimentation relates to particles that are already in motion, generally suspended in water.</p> <p>While the principle topic for this presentation is sediment basins, there are a whole range of other control measures being applied on the project as part of the overall erosion and sediment control strategy.</p> <p>There are guidelines for sediment and erosion control required for construction projects. This is the 'Blue Book' (full title is "Managing Urban Stormwater - Soils and Construction"). According to these guidelines sediment basins are sized to cope with a five day rainfall volume. Where space is available, basins are sized for a 90th percentile of the rainfall one could expect, based on historic rainfall data given in the book. In the case of this project, the data used is rainfall records for Tweed Heads, the highest rainfall region in NSW recorded in the 'Blue Book'.</p> <p>In the flood event encountered in January 2006, 413mm had been recorded on the site in three days. This well exceeded the 90th percentile design factor and the consequence was overspill or over topping of the sediment basins. During such over topping events, the sediment basins do not completely contain the site run off water, but they do offer the opportunity for some sediment particles to settle out into the bottom of the basin before reaching the overflow, principally removing the coarser particles.</p> <p>Mark pointed out that the basin sizes were chosen on a risk versus impact basis. The impact of building basins large enough to cope with the maximum possible rainfall event could be considerable in terms of the land and disturbance which would be required and in sensitive environments this outweighed the risk of encountering an event above the 90th percentile probability.</p> <p>Mark indicated the process for developing the sediment basin strategy for the project, starting with a review of the alignment to assess the available space and the natural topography to actually locate where sediment basins could physically fit within the existing site constraints. Where there were space limitations, other control measures such as sediment traps and erosion control measures were applied.</p> <p>A key relevant feature of the overall management strategy was to maintain separation of clean water pathways from 'dirty' water, and that this was an important consideration in minimising 'dirty' water runoff. In some cases temporary plastic lined drains had been installed across the formation in order to maintain that clean water flow path right across the project site from one side to the other.</p>

Mark also indicated that the sediment basins generally were a construction phase item and once the road was operational, some would be removed completely. Others would be retained as permanent water quality basins – or ‘constructed wetlands’. The strategy was, where possible, to install the final water quality basins during the construction phase and utilise these for construction stage sediment basins. Not all the permanent water quality basins can be built early, however, because of the construction sequencing and levels of the final road design.

Mark then gave an overview of the basins along the route and provided information on the features, catchments and capacity of the specific basins.

Mark also discussed the management, maintenance and operation of the basins along the corridor. Water quality in the basins had to be checked against DEC (formerly EPA) criteria for such issues as turbidity, oil etc. Gypsum could be added to manage turbidity, or lime could be used to manage acidity prior to the release of water. During establishment of the basins, even the temporary basins were top-soiled, vegetated and had the overflow areas stabilised.

Where the available space was limited for full sized sediment basins, other management measures and techniques were used, such as: -

- Slowing velocity of run-off water with check dams;
- Multiple series of (cascading) sediment traps;
- Extensive use of geo-textiles as temporary liner;
- Batter chutes and pipes to capture and divert water from batters;
- Diversion drains and contour banks;
- Managing the size of contributing catchments; and
- An inspection and maintenance regime.

Each week there was a complete site inspection of the sediment and erosion controls and the output of those inspections was an “inspection report” that identified areas of concern, possible measures to address those concerns and timeframes in which to do so. This weekly inspection often included the project Soil Conservation consultant, Abigroup Environmental Manager the project Environmental Management Representative, RTA representatives and key field staff. Also, during and/or following each significant rainfall event there is a crew checking, reinstalling and cleaning sediment traps and other controls. On a monthly basis there is also an environmental site inspection by Government Agencies.

Our inspection and maintenance regime closes the loop, to make sure that what we plan and design is operational on the ground.

Questions and Discussion

Q Is the entire road corridor and catchments covered by sediment basins that can cope with a 90th percentile rainfall event?

A No. We have eight significant basins and several more to be constructed shortly as the construction sequencing progresses, but where for space reasons we can not physically fit the basins, we often design slightly smaller basins (eg 80th percentile) in combination with other erosion controls and sediment trap systems as outlined

previously.

Q Why did dirty water enter the Billinudgel Nature Reserve and what can be done to prevent it happening again?

A Because the rainfall event just experienced was well above the rainfall event that is the Abigroup controls were designed to cope with we had overflow throughout the system, including upstream from the Nature Reserve. Abigroup have repaired all the sediment traps and controls and are diverting as much clean water around this area as possible to reduce the load on the traps. Abigroup have a number of control measures in this catchment, and as we reshape the earthworks in this area there are opportunities to design and install new measures, including sandbag sediment traps in the drainage channels, new larger sediment traps, re-instating contour banks to slow the velocity of water and thereby reduce its erosive potential. As well as these measures we are currently focusing on stabilisation of the soils through revegetation and are currently hydro-mulching as many exposed batters as possible. This will establish new grass, the roots of which are one of the best forms of batter stabilisation and erosion control.

Q Are there any Acid Sulfate Soils (ASS) on the site?

A Yes, there are a few areas with ASS potential, and our first strategy is to not disturb these where ever possible possible. The risk areas were identified in advance and the works largely designed with this knowledge in mind. Where we do disturb these, such as drilling out the piles for the Brunswick River Bridge, we treated the ASS with lime and arranged laboratory tests to confirm it had been correctly neutralized, at which time the soils could be incorporated into the general fill works without risk.

Q What was the level or design storm event for this most recent flood event?

BSC That is not known yet. Council is currently finalising a report on the June 2005 event and we have asked for some additional maps that would make an otherwise highly technical report comprehensible to a greater number of readers.

Q How deep are the basins and are they fenced off for safety?

A At its maximum level, the deepest basin may be 2-3 metres deep. The basins are fenced off with para-webbing. While we do get ducks, we have had no other issues with people or wildlife getting caught in them.

Q What plantings will go around Basin Nine?

A This will be covered in the Landscaping Plan, and as this particular basin is in a pastoral setting it will have pasture grass on the batters.

Q What happens to the sediment that is actually trapped in the basins?

A We clean the sediment out regularly once it reaches a pre-determined capacity. It is then dried out at a suitable location and reincorporated into the general fill works.

Q Do you remove sediment from behind the fences?

	<p>A Yes, as part of the general maintenance regime.</p> <p>Q Will the permanent water quality basins be maintained by Abi?</p> <p>A Yes, as part of the 10 year maintenance contract.</p> <p>Q Is there any intention to increase the controls in the Yelgun area?</p> <p>A Yes, along with our Soil conservationist, we are reviewing ways to increase capacity in our control measures at the moment.</p>
<p>5.0</p> <p>5.1</p> <p>5.2</p> <p>5.3</p>	<p>General Business</p> <p>Business Impacts</p> <p>One Billinudgel representative indicated that he had been asked by another local business to table that he believed his Christmas trade had been well down and attributed this to the loss of visibility because of the surcharge on the new road embankments outside their premises.</p> <p>The Byron Shire Council representative noted that through representation to Council he was aware that Byron Bay business had also noted a downturn in Christmas trade this year and in that case were attributing it to the parking issues in town. Other business operators also noted a downturn in trade but stated that they believed it was general and more likely to be attributed it to a more global cause, such as increased fuel prices and the effect it was having on people's spending.</p> <p>Habitat Boxes</p> <p>Terry Paxton advised the group that he had lodged an Expression of Interest (EoI) for some potential funding for the Habitat Box project and had also held a meeting over the break with a representative from Southern Cross University and both were positive. It was anticipated we would hear back on the EoI in several weeks and if successful, a full proposal would be required.</p> <p>Mr Jack Taylor, who had instigated the habitat box proposal reinforced that he would like any acknowledgement for the project to remain associated with the CLG, rather than the specific groups represented by him.</p> <p>Meeting Notes</p> <p>One CLG member said he would like to congratulate the team on the quality of the meeting notes and presentations and asked if there was any restriction of distribution of this material to other parties.</p> <p>Terry Paxton responded that the notes and many of the presentations go onto the website and are public documents and were presented in a way that would make sense to people who are not at the meetings so we are more than happy for this information to be more widely distributed through informal channels.</p> <p>Peter Borrelli from the RTA also encouraged this, and suggested this would assist in keeping the broader community informed and encouraged two way dialogue through the CLG members to the project team. He also noted that should any queries be raised from this broader distribution, the project team would be happy to assist.</p>

<p>5.4</p>	<p>Bus Stops</p> <p>Mr Jack Taylor who raised the issue of bus stops at a previous meeting asked the Council representative where that issue was up to and also reinforced that he believed that associated landscaping was a critical consideration. The Council representative responded that there was support from Council for bus shelters but in a style that met their guidelines.</p> <p>The other prime consideration was actually who should be responsible for providing such facilities. Countrylink, for example, who were providing the coach alternative to the rail system were actually generating some of the demand so it would be reasonable to expect they had a certain responsibility to provide some facilities for the community.</p>
<p>5.6</p>	<p>Safety On Site</p> <p>One group member asked the project team about the safety performance on site, especially risks associated with working in 38 degree heat. Will noted that the record to date on site was quite good and no major injuries had been reported. Most of the injuries were relatively minor allowing those injured to take on light duties until fully recovered. This was a good outcome considering the hazardous nature of the work and the fact there were still over 300 workers on site.</p> <p>Will also pointed out that every Abigroup vehicle contained a first aid kit and there were several people on site trained in first aid as well as a dedicated first aid room at the project office. The project also had two full time Safety Officers.</p> <p>Peter Borrelli also noted that each of the RTA vehicles also contained first aid kits, and that safety was of high importance to the RTA and featured in all inspection checklists and regular safety audits of the site. Peter Borrelli also noted that a specific emergency plan for the project site had been developed (with areas set aside for the rescue helicopter to land if required) and that regular meetings were held with the emergency services providers.</p>
<p>5.7</p>	<p>1st Six Monthly Environmental Compliance Report</p> <p>Terry Paxton advised the CLG that in accordance with the Conditions of Approval for the project, Abigroup had recently completed the first Six Monthly Environmental Compliance report for the project which had now been sent to the Department of Planning and all other regulatory agencies. Terry advised that the Six Monthly Environmental Compliance report was also publicly available in the Community Display Centre and on the project website for those who may be interested in such environmental compliance matters.</p>
<p>6.0</p>	<p>Next Meeting</p> <p>The meeting was closed and the date for next meeting confirmed as Wednesday 1 March, 2006.</p>