

MINUTES OF MEETING

Meeting Number 28

CLG	Toombul Community Liaison Group				
Location:	Visitor Information Centre, Lutwyche	Date:	08/03/11	Time:	6:00pm

These minutes are not intended to be a verbatim account of the CLG meeting but are a summary of the key issues raised, actions arising from the meeting and outcomes of actions raised at previous meetings.

Chaired By: Barrie Spring	Minuted By: Thiess John Holland	Distribution Date: 22.03.11
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Attendees: Denise Keim (DK), Richard Clare (RC), Robert Standish White (RSW), Ray Duggan (RD), Toby Murdoch (TM)
Anthea Craig (AC) – TJH, Daniel Hockey (DH) – TJH, Georgina Thrum (GT) – TJH, Deirdre McCue (DMc) – TJH, David Hake (DHk) – TJH, Tim Lennon (TL) – TJH, Russ Beynon (RB) – TJH, Louise Litchfield (LL) – CNI, Evan Smith (ES) – CNI, Michelle Barisic (MB) – BrisConnections, Ashleigh Auckland (AA) – CNI, Barrie Spring (BS) – Facilitator, John Bergin (JB) - TJH, Phil Kleinschmidt (PK) - RPS
Apologies: Mitchell Bright (MB), Peter Maddern (PM), David Russo (DR), John McDonnell (JD) – TJH, Charles MacDonald (CMac) – BrisConnections
Not Present: Paul Atkinson (PA), Darren Bodimeade (DB)

Distribution (Method e.g. email): Email
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Item	Summary
1.0	<p>MEETING OPENED</p> <p>The Facilitator opened the meeting and apologies were noted.</p>
2.0	<p>ACTION ITEMS</p> <p>Action 1 – TJH to use the access road as opposed to residential streets when decommissioning the Kalinga Park Site. This action remains open and will be covered in the construction presentation. Updates re the demobilisation of Kalinga Park will continue</p> <p>Action 2 – Re Kalinga Park site - present more details of the demobilisation plan This action will be covered in the construction presentation.</p> <p>Action 3 – Investigate raising the bank of the Schulz Canal where it meets Widdop Street. TJH is still investigating what options are available to address this concern. In terms of hydrology for the area and what has been done to the area, the outcome will be the same.</p> <p>To mitigate flood impacts in the Toombul/Clayfield area, Schulz Canal has been widened and a number of mangroves have been removed further east along Schulz Canal.</p> <p>To get 100 year flood immunity, TJH placed a 100m long hump along Sandgate Road. This type of infrastructure would not be suitable along Widdop Street due to the location of the Widdop Street bridge, which is approximately 5.4 m high.</p>

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	<p>There is the possibility of perhaps placing a hump on the northern side of Schulz Canal, however, this is out of TJH's scope of works and would need to be addressed by BCC.</p> <p>Placement of a bund may work, but there is a possibility that it would affect the hydrology of the area and would need to be approved by BCC.</p> <p>Action 4 – Advise drivers to make segment deliveries via the Construction Access Road when entering the worksite and exiting (weather dependent).</p> <p>There are currently a reduced number of segments being delivered to site and this will continue for the foreseeable future.</p> <p>Action 5 – Speak to supervisors and ask them to address workers at pre-start meetings re vehicles continuing to make illegal right turns from the Widdop Street intersection and Aviation High car park.</p> <p>TJH continues to address this issue with workers at pre-start meetings.</p> <p>TJH is also looking at how the full length of the construction access road can be utilised, instead of vehicles exiting onto Widdop Street.</p> <p>TJH has undertaken a number of initiatives including placement of line marking at the entry/exit to the car park and a submission has been made to BCC to extend this line marking onto the pavement or street.</p> <p>Action 6 – Present an overview of the mechanical and electrical fit out of the tunnels.</p> <p>This will be covered in April CLG meeting.</p> <p>Action 7 – Advise the outcome of the investigation into the noise barrier along the northern side of Wongara Street which rattles when vehicles drive past.</p> <p>TJH advised that the company who installed the noise barrier will be coming in mid to late March 2011 to investigate the issue. TJH also advised that the CLG member who initially raised this as an issue had been contacted and advised the same.</p> <p>Action 8 – Note to be made on slide in minutes re clarification of noise goals applied to 54 Kalinga St.</p> <p>Amendment was made on the slide and included in the February 2011 CLG meeting minutes.</p> <p>Action 9 – Investigate pre-construction noise monitoring at 66 Wongara Street.</p> <p>TJH advised that the results of this monitoring session had been located. The data was collected to identify background noise pre-construction.</p> <p>TJH further advised that the results of the monitoring session were not reported because the monitoring was external to the residence to gather pre-construction background information.</p> <p>Action 10 – Bring an example of a field sheet and noise monitoring equipment to demonstrate the monitoring process to the group.</p>

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	<p>This action was to be covered in the environment presentation. Due to lack of time it will now be addressed at the April meeting.</p> <p>Action 11 – Advise if it is possible to add an additional shipping container at Elliott Street. TJH advised that noise modelling for construction activities identified that the extent of mitigation met noise goal requirements. As properties have received individual mitigation the additional barrier will not be installed. Ongoing monitoring will take place at these locations to ensure TJH are complying with CoG noise goals.</p> <p>A member questioned whether the modelling shows that mitigation is not necessary? TJH advised that noise modelling shows which properties would exceed the CoG noise goals and TJH have implemented mitigation at these properties. TJH further advised that should residents feel they are being impacted post mitigation, they should contact TJH and further investigation will be conducted.</p> <p>Action 12 – Re Widdop St - Follow up with road authorities about the traffic island and traffic lights. TJH installed the traffic lights and pedestrian island as a temporary measure during construction. TJH are speaking with BCC to ascertain whether it is their intention to keep these in place once the project has been completed. The decision as to whether they stay as they are or if they will be changed rests with BCC as this is out of TJH's scope of works.</p> <p>ACTION: TJH to continue following up with BCC and report back to CLG once a decision has been made. No set date for this action.</p> <p>Action 13 - Confirm how long the liability period is e.g. damaged or dead trees. BrisConnections advised that that the liability period is 18 months as stated in the Project Deed.</p> <p>ACTION: BrisConnections to advise which section of the Deed is referred to.</p> <p>Action 14 - Look into signal phasing options for lights at Widdop Street. TJH advised that the signals run on detector loops. These are triggered when a vehicle drives over the detector which is placed just under the road surface which causes the lights to turn red.</p> <p>The traffic management team have investigated the issue and found that as vehicles were turning left in the construction access road form Widdop Street, they were running over these detectors and causing the lights to turn red. TJH will be reinstating line marking along the construction access road so that turning vehicles do not run over the detector loops. TJH will continue to monitor the intersection.</p> <p>TJH also advised that the CLG member who initially raised this as an issue had been contacted and advised the same.</p>

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	<p>Action 15 - Provide an update on transparency of the noise barrier. TJH advised that options to address the issue of transparency were still being investigated.</p> <p>TJH has trialled a number of different options which were not satisfactory, including installation of one way vision mesh, which is still in place at the rear of the vacant block diagonally opposite Franz Road should members be interested in viewing it.</p> <p>TJH is currently looking to apply paint or placement of a 3mm film on the rear of the panels with the successful option requiring a 10 year design life. TJH is trialling these options over the next couple of weeks and will have more information available at the next meeting.</p> <p>Discussion and questions arising:</p> <p>A CLG member asked whether sandblasting the rear of the panels was an option? TJH advised that the panels have a UV protection layer which would be destroyed through sandblasting and would negate the warranty period for the panels.</p> <p>Action 16 - Send out a larger image of the hydrology slide to CLG members. Action completed and email sent.</p> <p>Discussion and questions arising:</p> <p>A CLG member advised that she could not read the writing on the map, including the legend.</p> <p>ACTION: TJH to check map and resend if necessary.</p>
3.0	<p>TOOMBUL LANDSCAPING Presentation by John Bergin, Design Manager, and Phil Kleinschmidt, Urban Designer. Questions were welcomed throughout the presentation. The presentation is provided as an appendix to these minutes.</p> <p>Points covered:</p> <p>Design development and approval process (refer presentation)</p> <p>A CLG member asked who prepared the specifications. TJH advised that the specifications are provided by CNI as part of the Project Deed.</p> <p>A CLG member asked if the tender was as it was for 2008? TJH confirmed that was largely the case but in some circumstances either governed by external regulatory authorities or other higher priority governing effects such as hydrology impacts some changes had to be made from the concept design. These changes will be highlighted as part of the “walk through presentation” of the urban design.</p> <p>The intention of the design review process was to highlight these changes as they became known so that internal and external stakeholders could be consulted – a no surprises approach was always</p>

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	<p>preferred.</p> <p>A CLG member commented that although the concept design was viewed by the community in 2008, with changes being made throughout the review process, then some of the final design elements may be a surprise to the community. The member questioned why there wasn't another step to include the community in the later stages of the review process?</p> <p>TJH advised that the contract has been set up for consultation to take place at Concept Design stage and progressive approval stages in consultation with the relevant authority</p> <p>CNI advised that their role was to ensure that TJH delivered the concept design and that changes can only happen due to feedback from a regulatory agency such as BCC or DERM.</p> <p>TJH commented that changes to the design would be due to elements that were not covered in the initial consultation, for example the maintenance requirement. As such the Final Design should be similar to the Concept Design.</p> <p>TJH suggested that interested community members come to the Visitor Information Centre and view the concept and design changes which have been made. TJH further stated that there haven't been many changes from the Concept Design.</p> <p>A CLG member asked for an example of a change to the Concept Design? TJH advised that this will be identified as the presentation progresses.</p> <p>External Review Parties</p> <ul style="list-style-type: none"> • Department of Primary Industries and Fisheries <p>Landscape Overview</p> <ul style="list-style-type: none"> • Due to the ecological importance of Kalinga Park, a wide range of Australian native species will be used • Connection from Kalinga Park to Widdop Street will be via the Northern Schulz Canal Pathway • Extensive footpath network providing connectivity. • The Sandgate Road Bridge underpass has been moved to the northern side providing improved safety • Pathways will be 3m wide as per BCC requirements • Directional signage will be located throughout as per BCC requirements • Upgrade of Sandgate Road footpath including garden beds <p>Lewis Street and Kalinga Park</p> <ul style="list-style-type: none"> • Reinstating as much as possible that was there previously, for example the open playing field • Extensive shade tree planting around playground and behind properties • New improvements will include playground equipment, BBQ area and a soft play area. <p>A CLG member asked how the Lewis Street drain will be maintained, whether the profile of the drain's embankment will change and whether trees will be planted along its bank?</p>

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	<p>TJH advised that the drain will be maintained by BCC, the embankment profile will not change and that a mix of species will be replanted along the bank. TJH showed the group a slide showing a cross section of the drain.</p> <p>A CLG member asked if all levels within Kalinga Park will be back to levels pre-construction? TJH confirmed that levels and mounding would be provided to closely match those pre-existing.</p> <p>A CLG member asked how the Lewis Street drain and Schulz Canal would be landscaped? TJH advised that due to hydrology there had been a change to the Concept Design. Hydrology modelling shows that the initial placement of the drain would not work as the location was a pinch point for water flow and would create significant flooding issues. Realignment of the drain to the east of North Coast Railway improves hydrology. This change will take place pending approval from BCC and QR.</p> <p>TJH further advised that there have also been some minor changes to some of the footpaths but this did not affect connectivity. The area may be subject to further changes but will stay to theme of wetlands and contemplation areas.</p> <p>A CLG member questioned what a contemplation area was? RPS advised that it is an area that consists of plantings and seating area.</p> <p>A CLG member asked how many of 5000 trees would be planted on the western side of QR and if there would be as many trees as pre-construction? TJH advised that the trees to be planted are indicated on the drawing presented however, it had not physically counted them on the western side. Hydrology indicates that a definitive number of trees can be planted in this area.</p> <p>A CLG member asked for clarification of what the red shaded area on the landscaping map was? TJH advised that this represented placed stone rock pitching. Planting would not be successful in low lying areas such as under the AirTrain which is why rock will be used in these areas.</p> <p>Kalinga Park East</p> <ul style="list-style-type: none"> • Landscaping to the east of the QR line will be over the tunnel structure. Constraints associated with landscaping over structures include soil depth and therefore the size of trees. As such the majority of this area will be kept open with grassy areas. • Extensive planting will take place at the back of properties and around the edge of the Ventilation Station Outlet and Substation. <p>A CLG member asked what the slope of the area east of the QR line? RPS advised that the slope will be at approximately 5%.</p> <p>A CLG member asked if the mangroves in Schulz Canal were being removed? TJH advised that based on the hydrology report, which has been reviewed by BCC, mangroves need</p>

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	<p>to be removed from this area to negate impacts on upstream flooding.</p> <p>A CLG member asked how TJH intend on keeping the mangroves away? TJH advised that BCC will be responsible for the area post construction and TJH understands they are looking at ways to address this requirement.</p> <p>A CLG member asked if landscaping took into account the stability of the Schulz Canal banks? TJH advised that the design of the banks is so that they wouldn't be affected during high tides and flooding events. Rocks up to 500mm in diameter will be placed along the banks so that in times of flood they will not be washed downstream.</p> <p>A CLG member asked why the rocks needed to be placed parallel? The CLG member commented that this offered a poor long-term result as variation from parallel placement would make a positive difference for stream life. TJH advised that based on the hydrology report it is very difficult to place this rock inside or outside these banks. TJH is however looking at making some adjustment to the alignment near the drain in response to feedback from the member's previous correspondence.</p> <p>A CLG member asked if the mangrove removal was stipulated by TJH or a government agency? TJH advised that the decision was based on the hydrology report with BCC's involvement.</p> <p>A CLG member asked if this was because of what is built up now? TJH advised that it is a mandatory project requirement that flood levels cannot be made any worse upstream from Q100 flood predictions.</p> <p>A CLG member asked whether this will affect biodiversity? RPS confirmed that yes this was the case in terms of terrestrial biodiversity. TJH further advised that the mangrove removal did require the project to provide suitable offsets in accordance with DERM and that there was a multiplier on the area to be replaced from that removed – this is ongoing.</p> <p>Ross Park</p> <ul style="list-style-type: none"> • A new bridge over Schulz Canal will provide connectivity to Sandgate Road • New pathways • Tree planting up to the BMX track • The basketball court will be permanently removed based on BCC request • Replanted pine trees from the Airport Roundabout Upgrade project. This was a change from concept design; however this was seen as a positive contribution to the area. <p>A CLG member asked if planting along the canal provides shading? RPS advised that no shading would be provided over the water and little over flow zones as a requirement to negate impacts on hydrology</p>

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	<p>Centro Toombul Overflow Carpark</p> <ul style="list-style-type: none"> Will now be significantly used for replanting <p>A CLG member asked what was being placed under the bridge? TJH advised that this area will be paved.</p> <p>A CLG member asked about connectivity to the eastern side of Sandgate Road? TJH advised that the Concept Design contained a new bridge connecting the northern and southern sides of the Canal east of Sandgate Road. This bridge was originally placed at an angle to be aligned with Airtrain, however, this bridge created issues with achieving hydrology requirements. TJH is currently looking at utilising the existing bridge which is already proven to satisfy the hydrology requirements.</p> <p>A CLG member asked how pedestrians would get across Widdop Street? TJH advised that this area is not part of the project's scope. TJH construction area finished on the western side of Widdop Street. Although the pedestrian refuge is there for construction purposes, TJH is liaising with BCC to determine whether this will stay to maintain the connectivity. The decision will be at the discretion of BCC.</p> <p>A CLG member asked if cycle groups were consulted about the design? CNI confirmed that members were aware of the design. TJH further advised that a cyclist reference group was formed at the beginning of the project and included representatives from BCC, DTMR and local cycle groups such as Airport Bug, which CLG member Mitch Bright is part of. Meetings were held quarterly and these types of issues were raised by members of the group.</p> <p>A CLG member asked whether BCC, TJH or CNI are responsible for access between the east of Sandgate Road? CNI advised that it is aware of a BCC project that is looking at this connectivity.</p> <p>A CLG member asked if there is a footpath on the southern side of Schulz Canal west of the existing bridge to the overflow carpark. TJH advised that a service track would access through this area to service the stormwater quality improvement device (SQID). Signage would be placed at the end of the footpath to deter pedestrians and cyclists from accessing this area. The service road would be made of gravel so would not be ideal for walking or riding on.</p> <p>A CLG member asked what the area was surrounding the oval and whether it would have any sporting facilities? TJH advised that the area in question was a footpath that circumnavigated the oval and that there would not be sporting facilities located in this area.</p> <p>A CLG member asked what landscaping was taking place along Sandgate Road? TJH advised that a concrete footpath with some street planting would be installed along both sides of Sandgate Road south to Junction Road.</p>

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	<p>Plantings will be low set in accordance with Department of Transport and Main Roads requirements. Trees cannot be planted due to frangibility requirements and site lines.</p> <p>A CLG member asked whether TJH are replacing the bus stops as they extend quite a distance into the footpath and with both cyclists and pedestrians using it, the current set up poses a danger for pedestrians?</p> <p>TJH advised that the footpath is not a shared user path and cyclists should not be using it. It is not part of the scope to have these changed.</p> <p>A CLG member asked if TJH is aware of plans to widen Sandgate Road?</p> <p>CNI advised that they were not aware of any plans to widen Sandgate Road. TJH advised that they are aware of this being addressed over the next 10-15 years.</p> <p>Wongara Street Corner</p> <ul style="list-style-type: none"> Numerous underground services which preclude planting of trees <p>A CLG member asked what tree types were being planted in this area?</p> <p>TJH advised that ground covers and grasses that are hardy have been chosen to suit road side conditions. Shrubs have been precluded as a choice due to their tendency to grow in width as opposed to height, which can cause issues for passing vehicles.</p> <p>TJH commented that several trees were removed from the end of Wongara Street and due to stakeholder feedback TJH are looking at incorporating more trees in this area. TJH confirmed that the option of pushing the cul de sac further east to allow the planting of trees at end of Wongara Street was being investigated.</p> <p>A CLG member asked what will happen to 916 Sandgate Road?</p> <p>TJH advised that the house belongs to the Department Transport and Main Roads and it will be returned to them at the conclusion of the project.</p> <ul style="list-style-type: none"> TJH is currently looking at glare and reflective issues of the water tanks and possible colour options <p>A CLG member asked if riffles are incorporated into the Schulz Canal design?</p> <p>TJH advised that unlike Kedron Brook, Schulz Canal is tidal and therefore riffles are not suitable.</p> <p>CNI advised that the heritage society had provided feedback that highlighted Diggers Drive as an area of interest.</p> <p>TJH advised that the contract with Brisconnections stipulates that graffiti management and maintenance will be looked after by Brisconnections.</p> <p>A CLG member asked if the drain was open?</p>

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	<p>TJH advised that the drain was open for most parts but was closed for pedestrian crossings and beneath the QR North Coast Railway to enable maintenance access.</p> <p>A CLG member asked how big the drain under QR was? Box culvert sizes were yet to be determined but in the order of 3m high by 6m wide.</p> <p>ACTION: TJH to report back to the CLG once issues with the drain have been resolved. No set date for this action.</p> <p>A CLG member asked when landscaping work would be starting? TJH advised that planting would commence in the fourth quarter this year after the holes of the ventilation station have been covered and the shed has been dismantled. TJH further advised that backfill of Kalinga Park has commenced which is the first step of the landscaping process.</p>
4.0	<p>CONSTRUCTION UPDATE Presentation made by Russ Beynon, Construction Manager, Thiess John Holland. The presentation is provided as an appendix to these minutes.</p> <p>Points covered</p> <p>New work:</p> <ul style="list-style-type: none"> • Construction of the BMX Track • Installation of bridge deck units • Wongara Street corner • Activities immediately west of NCR <p>Jacking box:</p> <ul style="list-style-type: none"> • Both walls have now been poured • Starting to scaffold for the full box to be built • Will start pushing from the third week of April and will be approximately a one month activity • Once the push of the first box is completed, jacks will be moved to the second box to continue pushing • Slab work in 430, between QR line and Sandgate Road • Backfilling of Kalinga Park <p>Kalinga Park West Worksite:</p> <ul style="list-style-type: none"> • After both boxes have been pushed, will need to come back to repack the dirt to hold up the QR line. • This will require the use of a crane and a bell skip to take away the dirt. There is the possibility of taking dirt back through the site which is still being investigated • Installation of portable screens on the top and either side of the ventilation station.

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	<p>Kalinga Park Backfill</p> <ul style="list-style-type: none"> Grass and landscaping will cover this entire area Numerous conduits go across the ventilation station and into the into equipment rooms located within the 430 worksite Mechanical and electrical fit out team (MEFT) have started fitting out the ventilation station and substation <p>On & Off-Ramps</p> <ul style="list-style-type: none"> Showed location of on and odd ramps on slide <p>A CLG member asked what the two openings were? TJH advised that the openings are being used to deliver equipment and materials into the station and will eventually be closed and landscaped over.</p> <ul style="list-style-type: none"> Intend to use the on and off-ramps from Sandgate Road once completed so vehicles don't need to come up and over After roundabout has been realigned, will have access into the area to continue reinstatement work <p>Sandgate Road, East West Arterial Road and Ross Park</p> <ul style="list-style-type: none"> 50% of slabs have been completed All piles are now in Bridge deck installation will commence shortly Location of BMX track in Ross Park was shown on the slide <p>A CLG member asked where the fill was coming from to backfill Kalinga Park and whether if it is top soil. TJH advised that the backfill material had been coming from the trough excavation at East West Arterial Road. Approximately 1m of topsoil will be placed as part of the landscaping.</p> <p>A CLG member asked what powers the jacks pushing the jacking box. TJH advised that large electric power packs are used.</p> <p>A CLG member asked how noisy the jacking box operation will be. TJH confirmed that it was not a noisy operation compared to construction of the boxes. TJH further advised that investigations are underway to find the best way to demolish the soil face to start the box pushing operation. That the noisier component of the work is when the box pushes through the piles and soil nails and will be jacking. Once through the soil face, the jacking box will be firmly imbedded into the ground.</p> <p>A CLG member asked how long the jacking box operation will take. TJH advised that a push cycle would take approximately four days and consists of placing jacks, pushing and excavating the soil. The jacks are then repositioned and pushing starts again. The ground</p>

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	<p>needs to be stabilised in front of operation for the process to progress.</p> <p>A CLG member asked if the operation will be 24 hours. TJH confirmed that yes the operation will be 24 hours 7 days a week. The purpose of this is the operation needs continuity of movement.</p> <p>A CLG member asked whether soil that is being excavated during the operation can come back through the site. TJH advised that this is being investigated and if this cannot occur, then TJH will utilise a crane and bell skip operation.</p> <p>A CLG member asked if TJH can use the spoil conveyor. TJH advised that this option was considered, however, the conveyor belt cannot be overloaded and as such the option would not be feasible.</p> <p>Incident Response Unit</p> <ul style="list-style-type: none"> • 6m x 4m building with connection to power and sewerage • Location of building was shown on the slide <p>Demobilisation of Kalinga Park</p> <ul style="list-style-type: none"> • No access to Kalinga Park west on construction access road from time CC410 is closed up. Access to complete demobilisation and completion works west of the railway will revert to Diggers Drive and Lewis St. • Access to build pedestrian bridge BR407 will have to be off Lewis St, south of CC410 • No access to Kalinga Park east on construction access road from time CC422 is closed up and backfilled. Access to complete landscaping and drainage will be via Alma Road, Stuckey Road and Elliot St. • Tunnel Boring Machine operations are scheduled to finish in July 2011 • Mechanical and electrical fit out of the tunnel will require the use of the high-bay crane to provide equipment and materials down the two access holes <p>TJH advised that the shed is due to be decommissioned in October/November 2011. Prior to this happening, the jacking box operation needs to be completed and diaphragm walls of the box need to be pinned.</p> <ul style="list-style-type: none"> • Landscaping – pedestrian bridges intersect with the noise barriers so they will need to be pull down for reinstatement to commence <p>A CLG member asked if TJH were decreasing the ground levels of Kalinga Park. TJH advised that reinstated levels would be the same as prior to construction.</p> <p>A CLG member asked how the material will be taken out.</p>

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Item	Summary
	<p>TJH advised that the majority of material will be taken out via Widdop Street. Some material will be used to backfill in the park and that some will be removed via Diggers' Drive and Lewis Street.</p> <p>A CLG member asked if the material would go out the way it came in and what was the volume or percentage of material went in? TJH advised that approximately 60-75% would be removed via the construction access road.</p> <p>A CLG member asked if there was a cap on the number of vehicles using Lewis Street as there were a number of issues from when TJH previously used this access. The stakeholder commented that approximately 15 truck and dogs were travelling down Lewis Street an hour. TJH advised that limiting access along Lewis Street is being looked at however TJH will need to use the local streets to some degree. The majority of trucks will remain on site and go out via the access road</p> <ul style="list-style-type: none"> • Landscaping down both eastern and western sides of Sandgate Road including concrete footpaths and planter boxes • There is a hold up in the Sandgate Road and East West Arterial Road intersection due to inaccessibility of gas lines • The last area to be demobilised will be the Toombul site sheds • TJH will need to complete landscaping at the end of Stuckey Road and Elliott Street which will require access via these streets.
5.0	<p>TUNNELLING CONSTRUCTION UPDATE</p> <p>Presentation made by David Hake, TBM Construction Manager, Thiess John Holland. The presentation is provided as an appendix to these minutes.</p> <p>Points covered</p> <p>TBM Progress as at 8 February</p> <p>TBM</p> <ul style="list-style-type: none"> • Breakthroughs to the Kedron Caverns achieved • Excavation to recommence on Rocky and Sandy early April • Expected to reach Lutwyche early-mid June • Repairs are underway on both machines including replacement of cutterheads due to wear • Machines are located 80m and 40m into cavern <p>Smoke Duct</p> <ul style="list-style-type: none"> • Form, reo, pour activities ongoing – follows TBM • Concrete delivery by site access road <p>Cross Passages</p> <ul style="list-style-type: none"> • Excavation commenced at XP41, total duration approx 5wks • Excavation to start at following XP's weekly, follows smoke duct

MINUTES OF MEETING

Meeting Number 28

CLG	Toombul Community Liaison Group				
Location:	Visitor Information Centre, Lutwyche	Date:	08/03/11	Time:	6:00pm

Item	Summary
	<ul style="list-style-type: none"> Excavation of one cross passage per week <p>A CLG member asked how much needed to be dug out in the cavern? TJH advised that it was approximately 25m².</p> <p>A CLG member asked how frequently the cross passages are located along the tunnel alignment? TJH advised that cross passages are located every 120m and that they are approximately 10m long.</p> <p>TBM Burial Presentation made by David Hake, TBM Construction Manager, Thiess John Holland. The presentation is provided as an appendix to these minutes.</p> <p>A CLG member asked how much of the TBMs are reusable? TJH advised that the majority of the gantries are reusable.</p> <p>Settlement Drawings were provided for the CLG Members to view.</p> <p>A CLG member asked TJH to show on the map the location where the TBMs broke into the Kedron Caverns and how they progressed through the cavern? TJH showed the location on the TBM breakthroughs on the map and advised that both machines would progress through this area by excavating the floor section of the cavern.</p>
6.0	<p>ENVIRONMENTAL MONITORING UPDATE Presentation made by Tim Lennon, Environment Coordinator, Thiess John Holland. The presentation is provided as an appendix to these minutes.</p> <p>Points covered Due the meeting running out of time, TJH was requested to only report on the exceedances.</p> <p>Mitigation Initiatives</p> <ul style="list-style-type: none"> Following feedback from community members relating to noise concerns from the vent fans in the 420 box, which is jacking box operation, TJH have placed extensive cladding around the fans. The fans have also recently been moved into the acoustic shed with the cladding. The acoustic shed will offer additional mitigation. The fans have been turned off and remain so until July 2011. A silencer was placed on the favco crane resulting in a 9DB noise reduction. <p>Discussion and questions arising: A CLG member asked if a NCR was raised for noise exceedances? TJH confirmed that NCRs were raised for all exceedances.</p>
7.0	<p>COMMUNITY RELATIONS UPDATE Presentation made by Anthea Craig, Community Liaison Coordinator, Thiess John Holland. The</p>

MINUTES OF MEETING

Meeting Number 28

CLG	Toombul Community Liaison Group			
Location:	Visitor Information Centre, Lutwyche	Date:	08/03/11	Time: 6:00pm

Item	Summary
	<p>presentation is provided as an appendix to these minutes.</p> <p>The community presentation was not presented at the meeting. Information will be available as part of the meeting minutes.</p>
8.0	<p>GENERAL BUSINESS</p> <p>The facilitator introduced Toby Murdoch, the new community member of the CLG.</p>
	<p>Next meeting: Tuesday, 12 April 2011, 6pm – 8pm Visitor Information Centre, Lutwyche</p>

Upcoming Meetings in 2011

10 MAY
14 JUNE
12 JULY
9 AUGUST
13 SEPTEMBER
11 OCTOBER
8 NOVEMBER
13 DECEMBER

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Toombul Landscaping

John Bergin, TJH
Philip Kleinschmidt, RPS

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All design elements of the Project are subject to an extensive design development and approval process prior to construction:

- Internal review and approval
- External review and approval

Designs are reviewed and approved to ensure:

- Relevant standards and specifications are met
- Project scope is achieved

3rd Party Stakeholder approvals vary with consideration for:

- Who will own the asset
- Who will operate the asset
- Who will maintain the asset

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Design development process

- Concept designs have been developed with consideration for the Project's:
 - Reference design process
 - Environmental Impact Statement (EIS)
 - Bid development
- Match the design with the construction program
- Design to incorporate the construction methodology
- Design for safe practice

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Review and consultation

Community consultation was undertaken in May 2008 as part of the Request For Project Change.

Community notification is ongoing throughout construction and distributed to inform the community of programmed activities and likely construction impacts.

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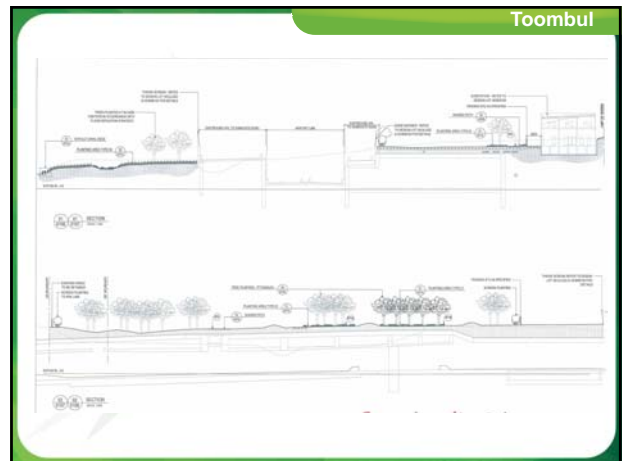
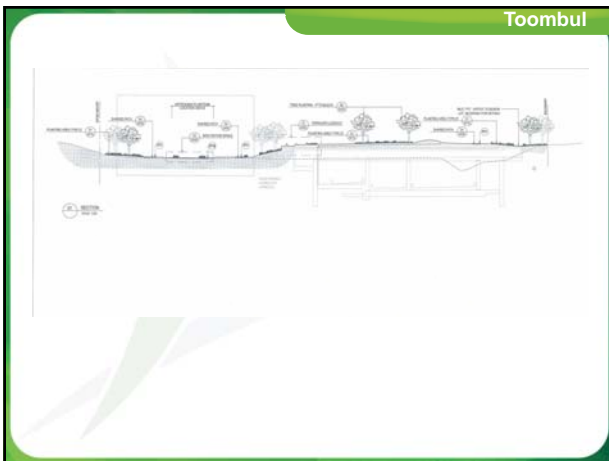
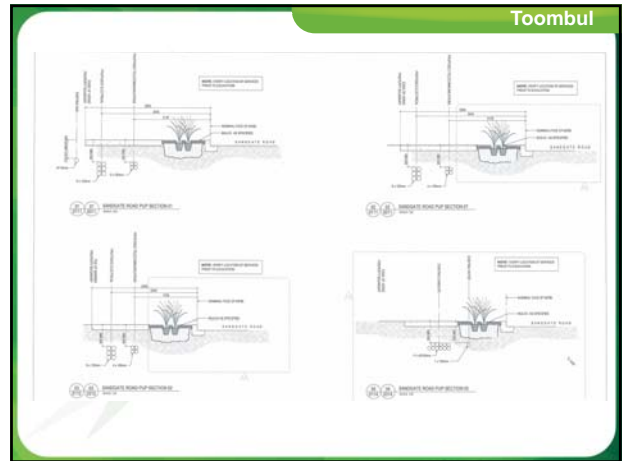
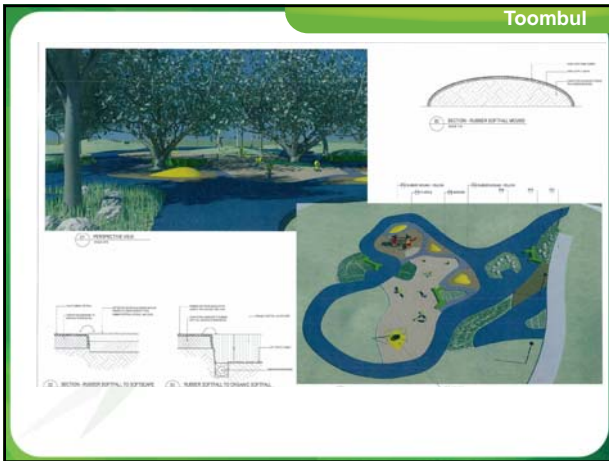
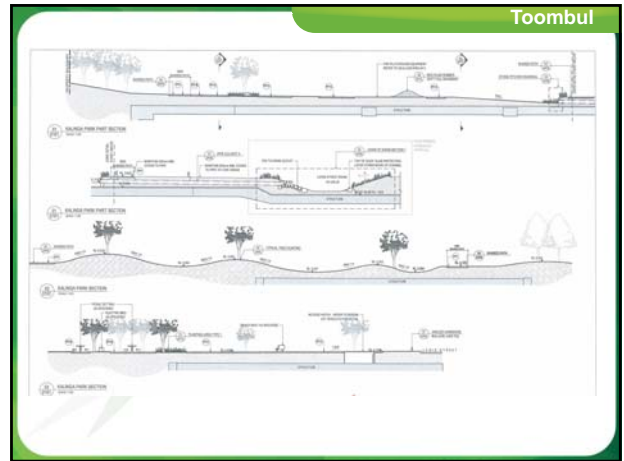
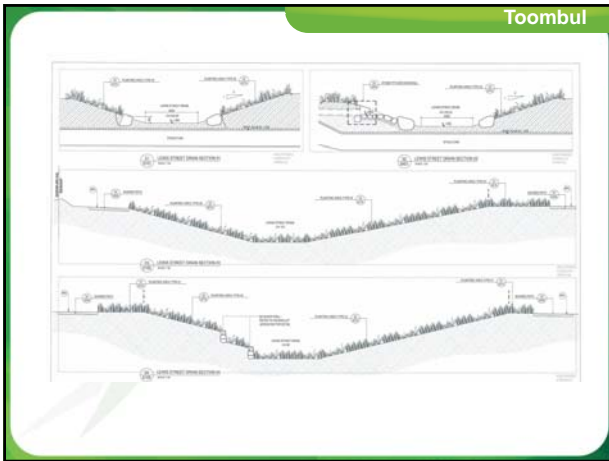
External Review Parties

- BrisConnections (O & M elements)
- City North Infrastructure
 - Queensland Transport / Translink
 - Department of Transport & Main Roads (DTMR)
- 3rd Party Stakeholders
 - Queensland Rail (QR)
 - Brisbane City Council
 - Qld Fire and Rescue Services
 - Public Utility Plant owners
 - Department of Infrastructure & Planning
- Independent Verifier

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Landscape Overview

- 5000 trees will be planted of 40 species
- 2.5 km of pathways connecting:
 - Alma Road, Stuckey Road, Elliott Street, Jackson Street, Lewis Street and the Northern Schulz Canal Pathway
- Connection from Kalinga Park to Widdop Street will be via the Northern Schulz Canal Pathway
- Pathways will be 3m wide
- Directional signage will be located throughout
- Upgrade of Sandgate Road footpath including garden beds



BRISCONNECTIONS | airportlink
northernbusway
airport roundabout upgrade | THRESHOLD
JOINT PROJECTS | Queensland
Government

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Construction Update

Russ Beynon, Construction Director

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New Work

- Construction of the BMX Track
- Installation of bridge deck units
- Wongara Street corner
- Activities immediately west of NCR


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Jacking Box




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Kalinga Park West



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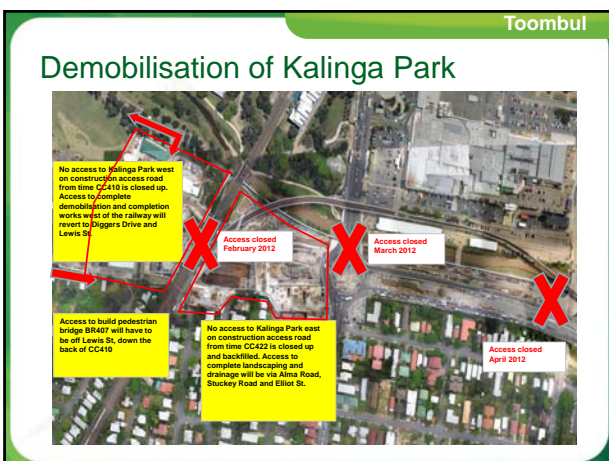
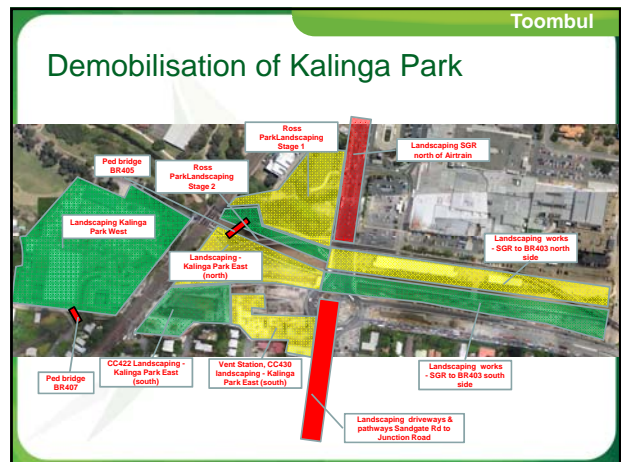
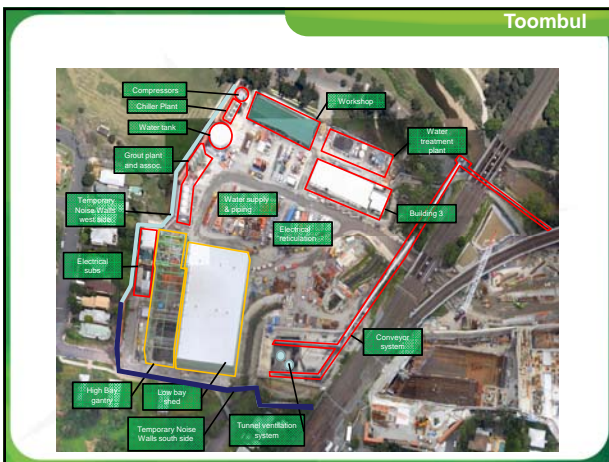
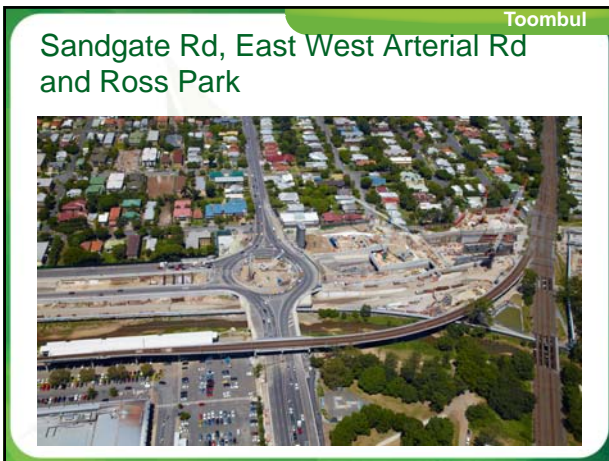
Kalinga Park Backfill



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On and Off-Ramps





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Tunnelling Update

David Hake, TBM Manager

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TBM Update



- TBM
 - Breakthroughs to Caverns achieved
 - Excavation to recommence on Rocky and Sandy early April
 - Expected to reach Lutwyche early-mid June
- Smoke Duct
 - Form, reo, pour activities ongoing – follows TBM
 - Concrete delivery by site access road
- Cross Passages
 - Excavation commenced at XP41, total duration approx 5wks
 - Excavation to start at following XP's weekly, follows smoke duct

TJH-GL-FRM-CY-0003-0-00

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TBM Progress as at 8 March

	Rocky	Sandy
Excavation	1288 m	1273 m
Depth from surface to tunnel crown	29 m	28 m
Metres since last meeting	213 m	367 m

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Tunnel Breakthroughs



Rocky TBM 17 Feb

Sandy TBM 1 March

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Cavern Partial Mining



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Concrete pours for Smoke Duct



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Cross Passage Excavation



BRISCONNECTIONS | airportlink northernbusway | THRESHOLD JOINT PROBLEMS | Queensland Government

airportlink northernbusway
airport roundabout upgrade

CLG March 2011

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Burial of TBM shield

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Burial Chamber location plan

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Why a portion of the TBM is being buried

- End of TBM tunnels are:
 - Under Northern Busway for NB tunnel
 - Under residential property for SB tunnel
- TBM shield is larger than tunnel diameter so can only be removed through a vertical shaft to the surface.
- Reduces community impact as shed and shaft for removal is no longer required.
- The remainder of the TBM is removed via the existing tunnel portals through in-tunnel disassembly.

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Burial Chamber & Pit - 3D View

12m deep
14.5m wide
14.5m long

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Section to be buried.

Shield and cutterhead 11.5m

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Section to be retrieved.

Buried Shield and cutterhead 11.5m
Retrieved 185m

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Strand jack lowering system

STAGE 1

- LAUNCH TBM ONTO TLB (BY T.H.).

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STAGE 2

- INSTALL PORTAL FRAME ON TOP OF PORTAL BEAM.
- HOOK UP SMU 330 TO TLB.

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STAGE 3

- LIFT TLB AND TBM WITH SMU 330.
- REMOVE SECTION OF PORTAL BEAM (CORBEL).

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STAGE 4

When the TBM is in the lowering position and the portal installed the Jacks on the heavier end will need to lower 864t (4 x SMU 330) and jacks on the lighter end 486t (2 x SMU330)

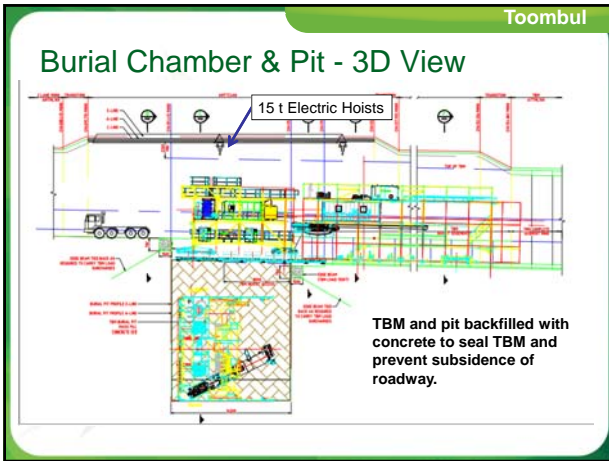
- LOWER TLB AND TBM TO BASE OF PIT.

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Burial Chamber & Pit - 3D View

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Burial Chamber & Pit - 3D View



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Environment Update

Tim Lennon

8th March 2011

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Monitoring Summary

● Noise external
 ● Noise internal
 ● PM10 monitoring
 ● Dust deposition
 ● Vibration

*Please note all 5 vibration monitoring points are not listed on this map - 50 Lydya St, 29 Lydya St, 4 Jimbour St, 32 Roseleigh St and 105 Kent Rd.

	Noise	Vibration	Air quality
# of monitoring sessions	130	5	3
# of exceedances	9	0	0
# of sessions requested by TJH & declined	6	0	0

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Construction Noise Monitoring Results

Location	Monitoring Period	Measured Noise	COG Goal	Measured Noise	COG Goal	Comments
		L(A)eq	L(A)eq	L(A)10	L(A)10	
J4/10 Wongara St, Clayfield, 2 nd floor bedroom	1553 - 1608					Windows and doors open. Monitoring indicates CoG goals are being exceeded. TJH noise sources included piling, excavators tracking, bang/drops in addition to traffic, wildlife and trains. Mitigation offered.
	11/02/2011	61.9	45	59.5	55	
78 Elliott St, Clayfield, Dining room.	1554 - 1608					Windows and doors open. Monitoring indicated elevated LAeq levels. TJH noise source included scaffolding, engine revs, TJH horn, bang/drop in addition to resident, birds, wind chime, train and plane. It should be noted that the session was heavily influenced by non-TJH noise sources including trains and resident's speaking. The LAeq level after excluding non-TJH noise sources was 37.5dB, therefore satisfying CoG goals. Mitigation provided.
	14/02/2011	46.4	45	46.5	55	

* indicates long term night time noise goals are being applied

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Construction Noise Monitoring Results

Location	Monitoring Period	Measured Noise	COG Goal	Measured Noise	COG Goal	Comments
		L(A)eq	L(A)eq	L(A)max	L(A)max	
54 Cairnsa St, Clayfield, Bedroom	1935 - 1950					Windows and doors closed. Monitoring indicates elevated LAeq levels. TJH noise sources included bang / drop, engine rev in addition to air-conditioner, resident, train, plane, washing machine. Please note that the air-conditioner operating contributed to the elevated LAeq levels. Mitigation provided.
	07/02/2011	39.2	35*	43.8	50*	
3 Mabel St, Clayfield, Bedroom	1936 - 1950					Windows and doors open. Monitoring indicates elevated LAeq and LAmax levels. Elevated LAeq levels due to overhead plane, resident, train and wildlife (cockroaches and gecko) whilst elevated LAmax levels due to wildlife. No audible TJH noises throughout this period. Mitigation provided.
	09/02/2011	45	40	60.7	50	
3 Mabel St, Clayfield, Bedroom	2036 - 2051					Windows and doors open. Monitoring indicates elevated LAeq and LAmax levels. Elevated LAeq levels due to fridge motor, ceiling fan, wildlife, traffic, trains, and debris hitting the roof whilst elevated LAmax levels were due to a barking dog. Mitigation provided.
	10/02/2011	45.5	40	71.9	50	

* indicates long term night time noise goals are being applied

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Construction Noise Monitoring Results

Location	Monitoring Period	Measured Noise	COG Goal	Measured Noise	COG Goal	Comments
		L(A)eq	L(A)eq	L(A)max	L(A)max	
3 Mabel St, Clayfield, Bedroom	2053 - 2108					Windows and doors closed. Monitoring indicates elevated LAmax levels, this was due to a horn being nearby. TJH noise sources include bangs on site with external sources comprising fauna, sirens, resident and fridge. Mitigation provided.
	10/02/2011	37.9	40	60.8	50	
79 Elliott St, Clayfield, Bedroom	2007 - 2022					Windows and doors closed. Monitoring indicates that CoG goals for LAeq and LAmax are being exceeded. TJH noise sources included vibrators, concrete pumps, bangs and engine revs in addition to trains, car horn, plane, resident and wildlife. Mitigation provided.
	15/02/2011	44.5	40	51.4	50	
79 Elliott St, Clayfield, Bedroom	2046 - 2102					Windows and doors open. Monitoring indicates that CoG goals for LAeq and LAmax are being exceeded. TJH noise sources included crawler crane, vibrations from agitators, concrete pumps, engine revs, bang/drops. Mitigation offered.
	15/02/2011	49.4	40	57.6	50	
79 Elliott St, Clayfield, Bedroom	2105 - 2120					Windows and doors closed. Monitoring indicates that CoG goals for LAeq and LAmax are being exceeded. TJH noise sources included crawler crane, bang/drops, concrete pumps, engine revs. Mitigation offered.
	15/02/2011	41.5	40	52.7	50	



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Community Relations Update

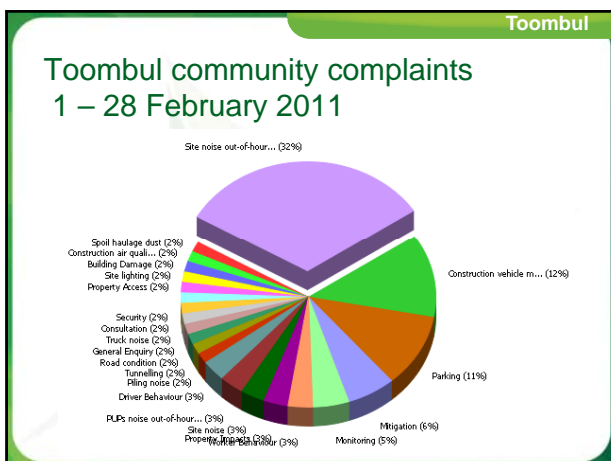
Anthea Craig, Community Liaison Coordinator

8 March 2011 smarter ways to move

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Toombul community feedback 1 – 28 February 2011

Community feedback	Total for February	Total for Jan/Dec	Total for November
Complaints	45	82	48
Stakeholders	25	56	24
Issues/enquiries	27	49	39
Stakeholders	24	37	31



- Toombul
- ### Community notifications
- Total of 5,550 flyers distributed in February:
- February Construction Update
 - Emergency Response Building
 - Tunnelling Works Update x 2
 - Saturday Night & Sunday Work - Ventilation Station
 - Night works drainage Sandgate Rd footpath
 - Night works Sandgate Road service installation

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Community relations activities

- Doorknocks for night works Sandgate Road & EWA Rd
- Doorknocks and resident phone calls for Kalinga Park East night time concrete pours
- SMS distribution list being established
- Doorknocks of residents along TBM alignment for tunnel progress
- Monitoring road condition of Alma Road and worker parking on local streets
- CLG site tour – Saturday 19 February 2011