Mains Road and Kessels Road Intersection Upgrade Project

Frequently asked questions

Background and pre-construction related questions

What is the background of the Mains Road and Kessels Road Intersection Upgrade?
Kessels Road is part of the Brisbane Urban Corridor (BUC) which is an 11.5 kilometre corridor between the Gateway Motorway and the Ipswich Motorway; and part of the National Land Transport Network. The 2003 BUC Planning Study identified this intersection as a ‘hotspot’ and recommended an investigation to upgrade.

What community consultation has been done?
The local community, including residents, local property and business owners near the intersection, have been consulted on an ongoing basis through five stages, beginning in 2002 with the first Brisbane Urban Corridor Traffic Planning Study.

The Mains Road and Kessels Road Intersection Upgrade Planning Study started in 2006 to address traffic, safety, and access issues, as well as air, noise and visual quality in and around the intersection.

The project team developed several options for upgrading the intersection that were presented to the community for comment in late 2006. During extensive community and stakeholder consultation 850 feedback forms were received, enabling the team to develop a thorough understanding of community views.

The preferred option was presented to the community in early 2008 via a newsletter and public displays, and received a largely favourable community response. Targeted consultation focused on directly affected stakeholders within the business precinct with a Stakeholder Reference Group established, providing input to the preliminary design.

What was the preferred option?
The preferred option was a short four lane underpass on Kessels Road beneath Mains Road with six lanes continuing along Kessels Road to the Pacific Motorway overpass. The project was then developed on this basis.

In short what does the project deliver?
The project is upgrading 2 kilometres of Kessels Road, provides a short underpass under Mains Road for Kessels Road traffic with improved turning and intersection lanes; and new provisions for buses, pedestrians and cyclists.
What does the upgrade involve?
The upgrade will involve:
- a short Kessels Road underpass beneath Mains Road, with two lanes each way
- upgrading of 2 kilometres of Kessels Road
- two right turn lanes from Kessels Road onto Mains Road
- one-way access (ramp) lanes along each side of Kessels Road over the underpass
- three through lanes and two right turn lanes in each direction on Mains Road
- a 2.5 metre wide shared off-road paths for pedestrians and cyclists
- significant reduction in intersection delays
- noise reduction and air quality benefits in and around the intersection as heavy vehicles will travel through the underpass without stopping
- new traffic signals at the Mains Road/Omeo Street/QSAC intersection to improve road safety for pedestrians and road users
- dedicated on-road cycle lanes along Kessels Road and wide shared bus/cycle lanes along Mains Road
- safer signalised u-turn facilities at intersections for most vehicles
- left in/left out only at the QSAC Kessels Road access to improve safety
- improving bus priority on Mains Road in both directions
- catering for over 20 years of forecast traffic growth from the completion date of the intersection upgrade.

What are the benefits of the upgrade?
The benefits include:
- improved road safety, travel times and traffic flow by separating Kessels Road traffic from Mains Road
- reduced traffic delays and congestion
- extended life for the intersection to cater for forecast traffic growth
- improved provision for cyclists, on-road and off-road
- improved amenity for the local community though urban design.

What is the timeframe for the project?
Procurement of the design and construction contractors was undertaken from October 2010 to September 2011. Main construction started in early 2012 with work expected to be completed by mid 2014.

What was involved in the tendering process prior to construction?
Construction and design of the project is being delivered under what is called a double early contractor involvement process (dECI).

Prospective companies tender for the project over a number of stages with only two shortlisted companies reaching the final stage. Both companies compete for the final contract and undertake preliminary planning and design work. The winning tenderer for this project, construction contractor Baulderstone QLD with design partner Parsons Brinckerhoff, was selected on 2 September 2011.
The benefits of this process is that companies compete to develop the best offer through a process which maximises opportunities for both teams to gain input from TMR and deliver a competitive, financial outcome.
Construction related questions

Will there be impacts on my property, business or parking?
The project aims to minimise impacts on residents and businesses in the area and will maintain access routes and parking as much as possible. In some instances, access will be altered to enable construction activities, but temporary access arrangements will be put in place and the community will be advised in advance of the changes.

Will there be any night works?
Some works will be done at night between 8 pm and 5 am when there are fewer pedestrians and vehicles in the area. For safety reasons, temporary lane closures may be needed and traffic controllers will be on site at those times. The extent of night works will be communicated to residents, businesses and motorists as part of community engagement and through the broader distribution of weekly email notifications, newsletters, SMS messages, letterbox drops, website updates and face-to-face briefings.

What hours of work can I expect during the construction period?
The standard hours of work for the project are 6.30 am to 6.30 pm Monday to Saturday (weather permitting). For the safety of onsite workers and motorists there will be some weekend and night works. The local community will be notified in advance about night works.

What can I expect during construction?
At various times, businesses and residents may experience short-term impacts such as noise and vibration from machinery, increased site activity, lighting at night works, some traffic delays and temporary access changes.

Residents and businesses will be notified in advance about the duration of works to occur in their area and how impacts will be minimised.

Will there be dust impacts associated with the project?
Proven mitigation measures will be used to help reduce dust. However some dust will result from the construction works. These measures will minimise project machinery and vehicle generated dust. Truck loads are covered when leaving the site and dust suppressant products are used as required.

Will there be noise and vibration impacts associated with the project?
The works will generate noise and vibration. The team will monitor noise and vibration during the works and provide information about noise and work activities to local residents and businesses. The team will program work to minimise noise intensive activities during late night/early morning periods wherever practical.

What about road traffic noise concerns?
During project planning, a road traffic noise assessment was undertaken to identify properties that may exceed the department’s criterion. All owners of identified properties have been consulted with and noise barrier construction started in May 2012.
What about noise barriers – will they need to be installed as part of the project?
The Department of Transport and Main Roads - *Road Traffic Noise Management Code of Practice* is the basis for the assessment, design and management of the impact of road traffic noise on the community.

The Code of Practice identifies which property owners are entitled to provide feedback. This is limited to property owners whose properties exceed the noise criteria. Only property owners entitled to a noise treatment have been contacted by the project team and asked for feedback.

Community consultation is also an important part of determining whether or not noise barriers should be constructed in a particular area as a result of the road upgrade. The department has undertaken consultation with residents that could be affected by road noise as a result of the road upgrade.

The Mains Kessels upgrade is constructing noise barriers in two stages. Installation of a barrier on Mains Road began in May 2012 and a second barrier will be constructed on Kessels Road (west of the intersection with Mains Road) in the second half of 2012.

**What is the speed limit during construction?**
During construction, the aim is to keep three traffic lanes open in each direction through the intersection during peak travel times. There will be some lane closures at night when there is less traffic.

The speed limit during the construction phase will vary at locations along the project between 40 km to 60 km per hour. Motorists should expect changes.

**What will the final speed limit be after the upgrade is complete?**
The final speed limit through the intersection towards the Pacific Motorway overpass will remain at 60 km per hour. The speed heading west as you exit the underpass will remain 70 km per hour.

**What construction activities need to be completed to upgrade the intersection and road corridor?**
Public Utility Plant (PUP), also known as underground services, in the existing road corridor needs to be relocated to allow the upgrade project to start. When roads are built, many services such as telecommunications, electricity, and water are located in the road reserve and underground.

The Mains Kessels upgrade will provide an improved intersection and wider road corridor. As a result, existing underground services need to be relocated away from the expanded road alignment. This will allow safe access to the services once the upgrade is completed.

**What can be expected when excavation works are underway near my property?**
Excavation and earthworks are required to install underground services, and to construct the new road pavement, retaining walls and the underpass.

When these works occur, the project will do everything it can to minimise impacts. Fill from the excavation works will either be reused on site or taken away to an official fill site.
The project will endeavour to undertake excavation works during the day, where possible to minimise disruptions to the local community. Residents may experience some noise and dust from excavation and construction vehicles.

In some instances, excavation works may occur at night due to their proximity to the road requiring lane closures for the safety of motorists and onsite workers. During night works, residents may be impacted by temporary lighting towers and flashing lights from construction vehicles.

What can be expected when piling works are underway near my property?

Piling works are required across the project for a number of new structures such as retaining walls and bridges. Piles will either be bored or driven depending on the conditions of the soil. There will be a total of 516 piles installed across the project.

At Mimosa Creek, the piles for the new bridge will be driven into the ground whereas the piles for the underpass are bored.

The project will endeavour to install piles during the day, where possible to minimise disruptions to the local community. Residents may experience some noise and dust from the works and construction vehicles.

In some instances, piles will be installed at night due to their proximity to the road requiring lane closures for the safety of motorists and onsite workers. During night works, residents may be impacted by temporary lighting towers and flashing lights from construction vehicles.

What can be expected when asphalting works are underway near my property?

Asphalting works are an important part of any road upgrade.

Construction of new sections of pavement will involve natural underlying material replacement and/or compaction, working platforms, subsoil drains, pavement layers (granular or asphalt), bituminous seals, and asphalt wearing course layers.

The project will also reconstruct and/or overlay some existing pavement areas. These works will also involve the use of a road profiler to remove existing asphalt.

Vibrating and non vibrating rollers are used to compact both the gravel and asphalt to the required densities during laying operations. Residents and businesses near these works may experience vibrations.

Sometimes there is a strong odour associated with these kinds of works. It is not harmful and will reduce soon after the works are complete.

The project will endeavour to undertake asphalting works during the day, where possible to minimise disruptions to the local community. Residents may experience some noise and dust from works and construction vehicles.
In some instances, asphalting works will occur at night due to their proximity to the road requiring lane closures for the safety of motorists and onsite workers. During night works, residents may be impacted by temporary lighting towers and flashing lights from construction vehicles.

**Mimosa Creek is an important local waterway, how will the project manage construction to minimise impacts on the creek?**

A site-specific erosion and sediment control plan will be implemented to protect the water quality in Mimosa Creek and its surrounds during construction.

**How will Mimosa Creek Bridge be constructed and what impacts may be experienced by the local community during its construction?**

The Mimosa Creek Bridge will be constructed in two halves to allow traffic to use the bridge while works continue.

The first side to be constructed is the eastbound section. Initial works will involve installing underground services along the new road alignment on the northern side of Kessels Road.

The next step is to install the piles for this section of the new bridge. Each pile will be driven into the ground with a pile driving machine. There will be noise associated with these works and residents and businesses in close proximity to the area may feel vibrations. To minimise impacts, the majority of these works will be done during the day.

Once the piles have been installed, the project team will prepare the site for the installation of the bridge beams. 63 beams will be lifted into place with a crane. Due to the constrained space at the site, some of these works will occur at night under traffic controlled conditions. The deck section of the bridge will then be poured before traffic is switched onto the eastbound lanes of the bridge.

Before works can start on the westbound lanes, the existing bridge will be demolished in a staged fashion where spans are cut and lifted off, then removed from site. The supporting structures will be demolished on site. These works will be carried out during the day, wherever possible, to minimise impacts to local residents and businesses.

Construction works for the westbound lanes will be the last section of the bridge to be completed. After the piles have been driven into the ground, the spans will be lifted into place, similar to the eastbound lanes of the bridge.

Once complete, the bridge will have capacity for three lanes in each direction.

**How will the underpass be constructed under live traffic conditions?**

Traffic will be moved around works to allow for construction to continue under live traffic conditions. These traffic sequences are called ‘switches’ and will allow the construction of the underpass to occur without impacting traffic flow.

Most of the piling works for the northern wall on the underpass were completed by April 2012. Piles for the southern wall are expected to start in October 2012. Once complete, works for the bridge structure will start.
By 2013 the project team will start the construction of the southbound lanes of the bridge. Following on from this, the northbound lanes will be constructed and connected to the southbound section. Once complete, the project team will then switch traffic around the intersection to allow for the excavation of the underpass underneath the newly constructed bridge.

Stage five will see the start of finalisation works for the underpass involving the installation of the concrete panels against the piles, drainage, pavement works, line marking, traffic signals, road signs, lighting and painting.

During the construction of the upgraded intersection, the same number of traffic lanes will be maintained through the intersection during peak travel times.

**Why will the median breaks be closed at the Benaud and Estoril Street intersections with Kessels Road, allowing left in and left out access only?**

To improve safety and traffic capacity, the planning and design for this project closes a number of existing median breaks but has left the major intersections open. The median breaks on Kessels Road from Grout Street to Mains Road, and west of Mains Road to and including Estoril Street will be closed.

U-turn facilities will be provided at major signalised intersections. This will enable road users to turn with greater safety and will improve the traffic flow along the corridor.

**Will non-local traffic numbers increase on side streets as a result of construction for the Mains Kessels upgrade?**

Traffic capacity will be maintained at existing levels on both Mains and Kessels Roads during peak times. This will ensure road users will not have to deviate from their current travel routes. During peak times, there will be six lanes of traffic in each direction through the Mains and Kessels Road intersection and four lanes through the Kessels and Grout Street intersection. There will be some temporary lane closures, mostly at night.

The traffic speed limit will also be maintained at the existing 60 km/h limit during peak times. During the temporary lane closures at night, the traffic speed will be reduced to 40 km/h.

At the completion of the project, it is expected that the upgraded intersection will improve travel times and reduce delays, encouraging non-local traffic to travel on Mains and Kessels roads, not local streets.

**This road project is being delivered in a busy urban environment, how can possible impacts from construction be minimised?**

The project team is mindful the upgrade is being undertaken in a vibrant business and residential hub. Detailed plans for construction have been prepared to minimise impacts and inconvenience by:

- managing construction in five stages, moving traffic around the work areas while maintaining the existing number of lanes through the intersection during peak travel times
- keeping through traffic and public transport moving
- maintaining access to residences, businesses and side streets
- maintaining visibility for local businesses
- minimising dust by using suppression measures
- construction vehicles using dedicated haul routes.
How and when will the Mains Road traffic switch be implemented?
The first traffic switch to occur as part of the project will be the Mains Road traffic switch. It will occur in two phases over an approximate six week period, temporarily realigning traffic to the west to facilitate ongoing construction of the upgrade. This switch is planned to occur in September.

The first stage involves Mains Road northbound realigning to the west to allow works on the northern underpass wall to continue.

Approximately six to eight weeks later the second stage of the switch will involve realigning Mains Road southbound to the west to accommodate the remaining northern underpass wall works.

Stage One:
- A temporary road will be constructed on land between the former service station site and land acquired from the Queensland Sports and Athletic Centre.
- The road will be approximately 500 mm higher than the current level of Mains Road.
- The tie-ins for the temporary road were constructed during July and August.
- New traffic signals and line markings will be installed to facilitate the traffic switch.
- Night works will be required to complete the overlay, tie-ins and switch the traffic from the current alignment to the temporary road.
- The traffic switch will take one night to implement.
- During Stage One, pedestrians crossing Mains Road will be required to undertake a split crossing.
- The median break on Mains Road north of the intersection will be closed, requiring access to the Mercedes dealership to be left-turn in/out only.

Stage Two:
- In preparation for the second stage of the switch, a temporary road for Mains Road southbound will be constructed.
- Tie-ins and overlay works will be carried out.
- Traffic signals and line markings will be re-arranged.
- The pedestrian crossing at Mains Road will revert to a single crossing.
- Access to the Mercedes dealership and residential properties on Mains Road (539 and 537 Mains Road) will be maintained, however temporary driveway accesses to the road will be required.
Staging related questions

What work is planned to be undertaken during stage one?
Stage one will involve work on the northern side of Kessels Road between Mains Road and Grout Street. Activities include:
- providing safe, temporary pedestrian access around works areas between safety barriers and fencing
- relocation of services, works on footpaths and accesses to businesses
- piling works for the northern wall of the Kessels Road underpass
- installing a median strip and new u-turn locations (to occur six to eight weeks prior to Stage two works commencing)
- installation of retaining walls
- drainage works near Mimosa Creek.

What work is planned to be undertaken during stage two?
Stage two will involve works on the southern side of Kessels Road between Mains Road and Pacific Motorway overpass. Activities will include:
- traffic switches to realign Mains Road to the west. Northbound lanes will move in September 2012 (Stage One) and the southbound lanes will realign in six to eight weeks later (Stage Two).
- works on footpaths and accesses to businesses
- construction works for the new Mimosa Creek bridge
- piling works for the southern wall of the Kessels Road underpass
- reinstatement of driveways on the northern side of Kessels Road east of the intersection
- a traffic switch to move Kessels Road to the north using newly constructed eastbound lanes.

What work is planned to be undertaken during stage three?
Stage three will involve work at the Mains Road and Kessels Road intersection and at Mimosa Creek. Activities to be undertaken include:
- piling works for the underpass
- construction of the Mains Road intersection bridge platform (southbound)
- excavation works to create the underpass
- construction works for the new Mimosa Creek Bridge.

What work is planned to be undertaken during stage four?
During stage four works will continue at the Mains Road and Kessels Road intersection. Activities to be undertaken include:
- a traffic switch to move Mains Road to the east
- construction of the Mains Road intersection bridge platform (northbound)
- excavation works to create the underpass
- construction of the Kessels Road upgraded westbound lanes and median strip, installation of the cycle lane and reinstatement of driveways.
What work is planned to be undertaken during five?
Stage five will see:

- Kessels Road traffic will be moved into the underpass
- Kessels Road west improvement works
- final asphalting of road surface, finishing works, line marking, and installation of traffic lights and road signs.
Compensation related questions

Will any businesses potentially lose viability as a result of construction?
The project team is committed to working with local business and property owners to maintain access during construction and reduce impacts wherever and whenever possible. The Mains Kessels upgrade team will assist businesses by:

- maintaining access during business hours
- providing signage at the project site to help business customers use accesses
- reinforcing messages that businesses are open in project communication materials
- if possible some construction work may be adjusted to suit peak trading times
- three lanes of traffic in both directions will be maintained through the Mains Kessels intersection during peak times and during business hours.

Can businesses apply for compensation, if so how?
Businesses can apply for compensation under the Acquisition of Land Act 1967 if they have an interest in land being resumed for the project.

Any business thinking about preparing a claim should first contact the Property Services Division of TMR for information and advice about the process. Property Services Division can be contacted on 3834 8183.
Mains-Omeo intersection related questions

Why was the Omeo Street intersection on Mains Road upgraded?
The Mains Omeo intersection upgrade was part of early works for the Mains Kessels upgrade. Improving this smaller intersection before the main construction works aimed to immediately improve safety and help minimise the traffic impacts of the whole project.

The upgraded Mains Omeo intersection provides safer turning for vehicles entering and exiting Mains Road and improved safety for users of the nearby Park ‘n’ Ride facility. Key benefits at Omeo Street are:

- improved safety with traffic and pedestrian signals
- safer pedestrian movements for students, spectators, park n ride and community users
- pavement rehabilitation across the intersection
- reconstruction of the park-and-ride entrance on Mains Road to allow improved access for large vehicles including bus movements
- improved line-marking with reflective markers.

These works were completed in mid-2011.
Community engagement related questions

Will further community engagement occur?
Community engagement as part of the Mains Kessels Upgrade will continue right through to the end of construction in mid 2014. Information about construction activities will be provided to the community through a number of initiatives including:

- Transport and Main Roads website
- weekly email notifications
- advertisements
- e-newsletters, fact sheets and posters
- the Visitor Centre
- public displays at community events
- briefings with community members and stakeholders
- letters
- 1800 free call number
- free SMS alert system.

How can I contact the project team?
The community engagement team for the Mains Kessels upgrade is available to answer any queries you may have about the project.

Phone: 1800 227 804 (Free call Australia wide, higher rates apply from mobile phones and pay phones).
Fax: 3066 4100
E-mail: mainskessels@tmr.qld.gov.au
Post: Mains Road and Kessels Road Intersection Upgrade Project
Reply paid
GPO 2439
Brisbane Qld 4001
Website: www.mainroads.qld.gov.au (search “Mains-Kessels”)
SMS: Register at www.mksms.com.au (free service)

Should I register for updates?
Yes. By sending your email address to the project team you can receive regular updates electronically including the weekly works notification. Registering for the free SMS service will also ensure you can stay updated with the latest traffic and project changes leading up to and during construction.

How can I learn more about the project?
A Visitor Centre (VC) at the site office on the corner of Mains Road and Kessels Road has opened. The Visitor Centre provides a point of contact for the community to meet project staff and share information.
You're invited to learn about road building, the innovative processes to keep traffic flowing during construction, ensuring safety for our workers and road users, and protecting the environment.

Please contact the project team if you:

- would like more information about the project
- are interested in booking a group visit to the VC
- are keen to invite members of the team to attend an event.

The VC will be open 9 am–5 pm, Monday to Friday (excluding public holidays).