

## Petition

Registration No.	20
Title	Stop Barneson Boulevard
Presented on	13 March 2018
Presented by	Hon Kezia Purick MLA (Member for Goyder)
Referred to	Minister for Infrastructure, Planning and Logistics (Hon Nicole Manison MLA)
Date referred	13 March 2018
Response due	21 June 2018
Response received	12 April 2018
Response presented	1 May 2018

### Petition

#### PETITION AGAINST BARNESON BOULEVARD - THE ROAD TO NOWHERE

We the undersigned are opposed to the proposed construction of Barneson Boulevard.

With funding from the Australian Government, Darwin City Council and the NT Government are planning to spend \$39.5 million of taxpayer dollars to build a new four-lane arterial road into Darwin CBD. The road will cross over McMinn Street, cut straight through the middle of the Frog Hollow arts precinct and stop at a traffic light T-intersection at Cavenagh Street (outside Woolworths) blocking Wood Street completely. No parking plan is evident to deal with the diversion of traffic into the centre of the city.

For residents who live in the heart of the CBD the proposed road will mean more cars, more diesel fumes and more parking issues. This is despite public opinion on the Darwin City Master Plan clearly demanding reduced reliance on cars and improved public transport (and recently, no more traffic lights!). For motorists driving in and out of the CBD, Barneson Boulevard WILL NOT solve traffic congestion but WORSEN IT and Impair traffic flow particularly for people using Tiger Brennan Drive.

We want a clean live-able, walking/cycling, tropical city. Please stop Barneson Boulevard.

### Response

The Barneson Boulevard project is a culmination of numerous traffic and transport planning studies over a number of years, and conceptualised to suit current and future requirements.

All concerns raised by the petitioners have been addressed in the Frequently Asked Questions document on the Barneson Boulevard and Tiger Brennan Drive Stage 3 project at Attachment A. I encourage the petitioners to download a copy from the Department of Infrastructure, Planning and Logistics website [www.dipl.nt.gov.au](http://www.dipl.nt.gov.au), which provides answers to a range of queries compiled during the community consultation period.



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Mr Michael Tatham  
Clerk  
Legislative Assembly of the Northern Territory  
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Dear Mr Tatham

Thank you for your letters dated 14 and 15 March 2018, regarding Petitions 19, 20 and 21 on Barneson Boulevard.

The Barneson Boulevard project is a culmination of numerous traffic and transport planning studies over a number of years, and conceptualised to suit current and future requirements.

All concerns raised by the petitioners have been addressed in the Frequently Asked Questions document on the Barneson Boulevard and Tiger Brennan Drive Stage 3 project at Attachment A. I encourage the petitioners to download a copy from the Department of Infrastructure, Planning and Logistics website [www.dipl.nt.gov.au](http://www.dipl.nt.gov.au), which provides answers to a range of queries compiled during the community consultation period.

Yours sincerely

NICOLE MANISON

11 APR 2018





# Frequently Asked Questions

## *Barneson Boulevard & Tiger Brennan Drive Duplication Project*



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## 1. General

### 1.1. *Why is the road being built?*

Tiger Brennan Drive currently receives high traffic volumes, which will grow as the population of greater Darwin increases, placing further strain on the current entry points to the narrow peninsula. The construction of Barneson Boulevard and duplication of Tiger Brennan Drive will help to reduce peak period congestion by dispersing traffic entering and exiting the CBD.

Construction of Barneson Boulevard will provide an important third arterial link into the centre of the CBD, improving the distribution of traffic and relieving pressure on the existing TBD and Stuart Highway routes. The link will also provide access for future land development on the periphery of the city. Barneson Boulevard is consistent with the 10 year infrastructure plan.

### 1.2. *What evidence is there to indicate that the road will be beneficial?*

Economic analysis carried out as part of the business case showed that the project is estimated to result in a number of benefits, including improved travel times for commuters entering and exiting the CBD.

Additionally, the project will open up a substantial area of high value city centre land for development increasing the effective catchment area of the city through reduced travel times.

### 1.3. *Where will the road be built?*

The Boulevard will provide a new link between Tiger Brennan Drive and Cavenagh Street, intersecting McMinn Street and Woods St. The Boulevard follows a corridor that was established for this purpose many years ago.

The corridor to accommodate Barneson Boulevard was identified 20 years ago in the Central Darwin Planning Concepts and Development Opportunities (1996) and was subsequently preserved through a Proposed Main Road zoning. Services in the area have been future-proofed to facilitate it. This corridor was identified as the best route to meet future planning objectives, including to better disperse traffic entering and exiting Darwin CBD.

### 1.4. *Why is the road being built there?*

The corridor to accommodate Barneson Boulevard was identified 20 years ago in the Central Darwin Planning Concepts and Development Opportunities (1996) and was subsequently preserved through a Proposed Main Road zoning. This corridor was identified as the best route to meet future planning objectives, including to better disperse traffic entering Darwin CBD as the road connects to the Centre of the CBD, thus helping in efficient movement of traffic.

### 1.5. *Were other routes considered for the dispersal of traffic?*

Yes. A previous planning study in 2014 by the Department of Transport examined options to construct a new realigned section of the Stuart Highway at Stuart Park. The results of the planning study showed that although it would assist in alleviating the currently congested section of the Stuart Highway through Stuart Park and increase capacity at the Stuart Highway/Daly Street/McMinn Street intersection, it

## FAQ – Barneson Boulevard and Tiger Brennan Drive Duplication Project

would not relieve the Tiger Brennan Drive/Bennett Street/McMinn Street intersection. Traffic approaching the CBD would still be concentrated at the two entry points.

### 1.6. Was Knuckey Street considered as an alternative to Barneson Boulevard?

The proposed future extension of Knuckey Street to Frances Bay is a separate project to the development of Barneson Boulevard. Both projects are identified in the Darwin City Master Plan as improving connections and links to Darwin city centre.

The point at which Barneson Boulevard connects with Cavenagh Street is ideally situated at an equal distance from Tiger Brennan Drive on the eastern side of Darwin peninsular, and the Stuart Highway on the western side of the peninsular. This strategic position means that it is ideally located to evenly disperse traffic which is the primary objective of Barneson Boulevard.

### 1.7. Why was the original tunnel option disregarded?

A tunnel option was originally considered for Barneson Boulevard, however it was not feasible due to multiple drawbacks including:

- High cost exceeding \$80 million plus as opposed to \$20 million for current proposed design.
- High construction impact such as the excavation, treatment and disposal of a large quantity of acid sulphate and soils.
- Large volume of undispersed traffic delivered to Cavenagh St, creating congestion and amenity issues
- Lower accessibility and network connectivity, with inferior street level visibility making it undesirable for pedestrians.

### 1.8. What factors determined the entry point for the road?

Factors included:

- land availability for future road reserve
- an entry point which delivered traffic to the centre of Darwin CBD
- a point that was equal distance from Tiger Brennan Drive and the Stuart Highway
- a suitable entry point that would meet the objective to disperse traffic and ease congestion.

### 1.9. How much of a *reduction in travel time can commuters expect when the construction of Barneson Boulevard and duplication of Tiger Brennan Drive are complete?*

The construction of Barneson Boulevard and duplication of Tiger Brennan Drive will help to ease congestion entering and exiting the Darwin CBD and is focussed on dispersing traffic, rather than increasing or speeding up traffic. Time savings will primarily be realised in the future when higher traffic volumes are expected. Commuters will benefit in the immediate term by having an alternate route if other roads to the CBD become blocked as a result of incident management.

### 1.10. How will this project be funded?

The project is worth \$39.5 million and is made up of funding from the Australian Government (\$29 million), NT Government (\$5 million) and City of Darwin Council (\$5 million). The funding will be broken



into two major components - the construction of a new iconic entry into the city through Barneson Boulevard worth \$20 million and the duplication of Tiger Brennan Drive from Dinah Beach Road to McMinn St worth \$19.53 million.

**1.11. What will be the speed limit along Barneson Boulevard?**

50km per hour.

**1.12. What will be the speed limit along Tiger Brennan Drive from Dinah Beach Road to the city?**

50km per hour.

## **2. Construction**

**2.1. When will construction begin and how long will it take?**

It is expected that construction on this project will commence later in 2017 and finish by end of 2019 subject to various project approvals.

Construction will take place over two key stages:

- Stage 1 – Barneson Boulevard from Dinah Beach Road to Cavenagh Street
- Stage 2 – Divert all traffic on the completed Barneson Boulevard and then duplicate Tiger Brennan Drive from Dinah Beach Road to McMinn Street intersection and the Cross Road to link Barneson Boulevard and Tiger Brennan Drive.

The construction sequencing will help reduce the risk of working under traffic and the need for extensive traffic management.

**2.2. What is the timeline?**

The planning phase is expected to be completed in 2017. Subject to project approvals, construction is expected to commence soon after.

2.3. Will construction of the Boulevard impact traffic entering and exiting the CBD from Tiger Brennan Drive?

Construction works on the duplication of Tiger Brennan Drive are expected to take approximately six months. During this time, traffic will be diverted on to the newly constructed Barneson Boulevard.

DURING CONSTRUCTION:



Graphic 1. Construction staging and road closures

Barneson Boulevard will be built as stage one. This means that when it comes time to widen Tiger Brennan Drive, traffic can be diverted onto Barneson Boulevard to allow works to take place. Once the duplication of Tiger Brennan Drive is complete, both arterial routes will be opened for operation.

At all times during construction, one major road will be in operation facilitating movement in and out of the south-eastern side of the city.

A Traffic Management Plan will be developed to minimise the impact of construction on existing traffic flow and construction will take place in a staged approach.

2.4. How will the construction of Barneson Boulevard impact existing peak hour congestion issues?

Major works will be conducted outside of peak times. A Traffic Management Plan will be developed to minimise the impact of construction on existing traffic flow.

2.5. Will construction to Barneson Boulevard and the widening of Tiger Brennan Drive happen at the same time?

No. Barneson Boulevard will be constructed first and when it is completed the duplication of Tiger Brennan Drive will commence. Traffic will be diverted to the completed Barneson Boulevard while construction on Tiger Brennan Drive takes place.

2.6. Will power and water services in the area be affected?

Barneson Boulevard will follow a corridor that was established for this purpose many years ago, and services in the area have been positioned to facilitate it. The Department is working with Power and Water to plan and construct future services in the area.



## FAQ – Barneson Boulevard and Tiger Brennan Drive Duplication Project

The road will run adjacent to the Power and Water Control Box at Woods Street. It will not be impacted by the road works. During construction there may be some temporary disruption to services. Notification will be provided to affected residents as per Power and Water processes.

### *2.7. How can I find out about jobs/contracts?*

The construction project will deliver jobs in the civil construction and supporting sectors. The construction tender will be advertised in the last quarter or the 2016/17 financial year, with work planned to begin in the second half of 2017 subject to approvals.

### *2.8. Will any local companies benefit from a project this big?*

The construction of the project will deliver hundreds of jobs in the civil construction and supporting sectors during the duration of the project and is expected to go to public tender in September 2017.

## **3. Neighbourhood and surrounding environment**

### *3.1. Will trees be removed as part of the project?*

Yes, some trees will be removed to create space for the road, footpaths, drains and other associated infrastructure. This includes some mangroves. As part of the construction of the road, new landscaping and tree planting will occur to create shade and a sense of place.

### *3.2. What about sacred trees/trees of significance?*

DIPL has obtained an Authority Certificate from the Aboriginal Areas Protection Authority (AAPA). The Authority Certificate identifies registered sacred sites and sacred trees. A search of the NT Heritage Register has also been conducted. The results include three sacred trees on the site of the Frog Hollow Centre for the Arts and a boab tree located in the middle of the Post Office Car Park. No registered sacred sites (including trees) or trees listed on the NT Heritage Register are anticipated to be impacted by the planned works.

### *3.3. Will One Mile Dam be affected?*

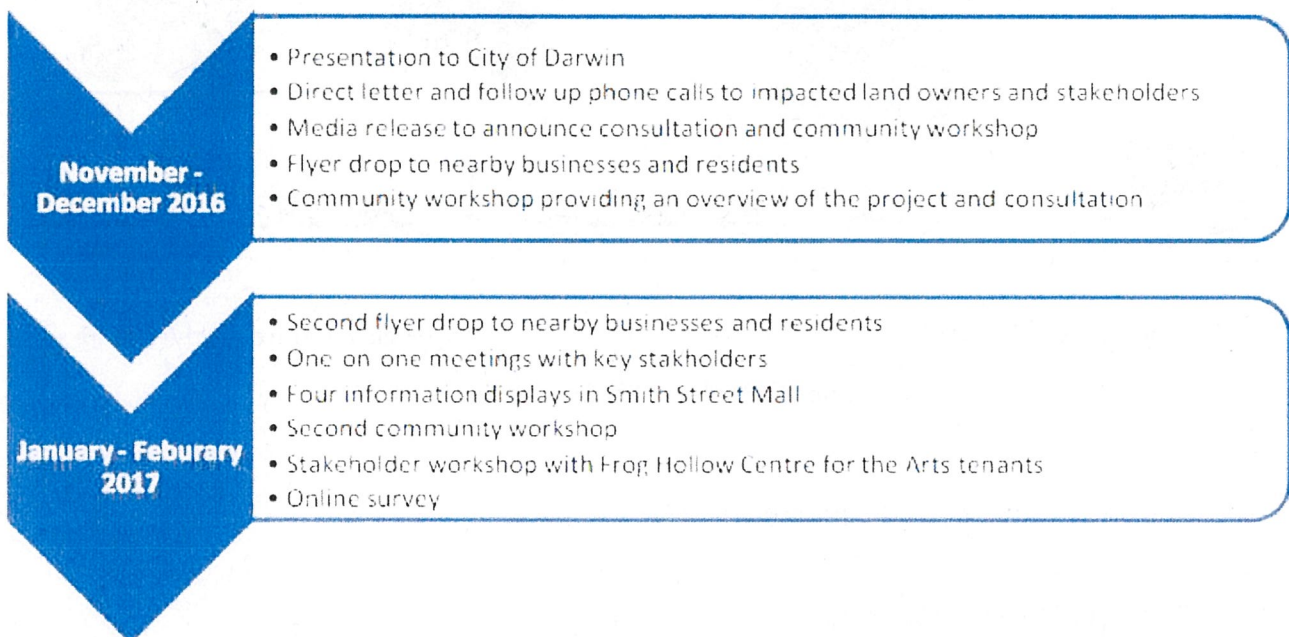
No works are proposed within Lot 5027 Town of Darwin (the lot in which One Mile Dam is located). During construction, residents at One Mile may experience temporary noise, vibration and dust impacts. Potential impacts and management measures are being assessed in accordance with the Environmental Assessment Act and Waste Management and Pollution Control Act. A Communication Plan is being developed to inform One Mile and other potentially impact stakeholders of potential works, timing, measures in place to reduce potential impacts, complaints procedures and the like.

## 4. Consultation process

### 4.1. What is the consultation process for this project?

Consultation regarding the project occurred in 2013 as part of the Darwin City Master Plan process. In 2015 the Department of Infrastructure, Planning and Logistics met with a limited group of key stakeholders to discuss the vision of the project and potential impacts. In December 2016, a broader consultation program commenced, inviting feedback on the concept design from key stakeholders and the broader community.

This consultation program ran over three months from December 2016 to February 2017. It involved:



Graphic 2. Consultation program December 2016 – February 2017 inviting feedback on the concept design.

Concept designs are now being reviewed to incorporate feedback from the consultation program. Final designs will be announced for a further round of public consultation prior to construction commencing later in 2017.

### 4.2. How will the Frog Hollow Centre for the Arts tenants be engaged in the consultation process?

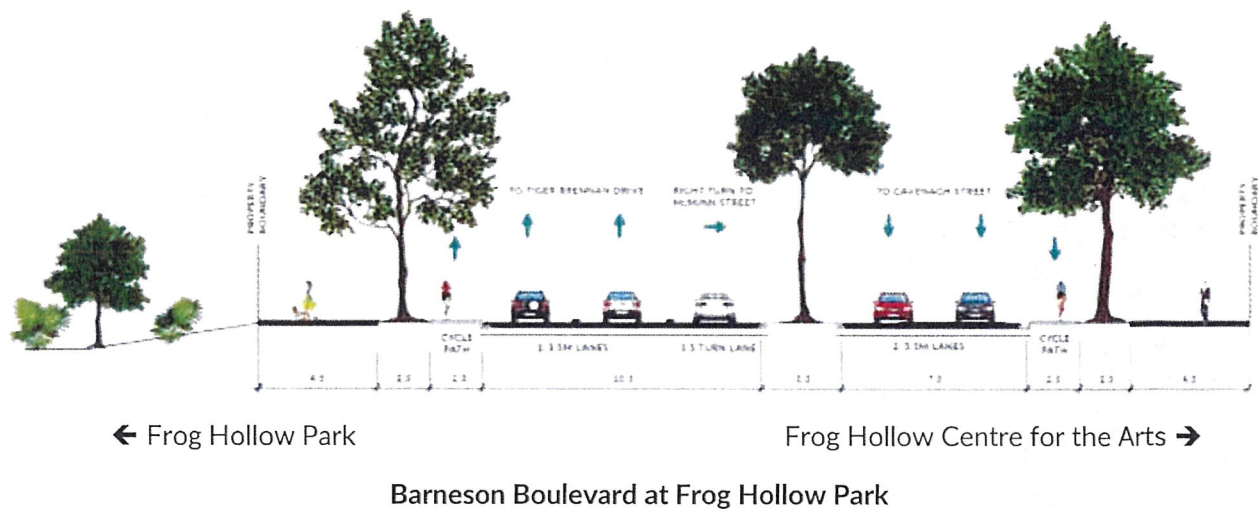
The consultation process included meetings and a dedicated workshop with the tenants of the Frog Hollow Centre for the Arts, identifying issues and solutions to impact at this site. The next stage will include the development of a communication plan to inform tenants and other impacted stakeholders about construction timelines.



## 5. Landscaping and Public Art

### 5.1. What will the streetscape look like?

Barneson Boulevard will be wider than most Darwin streets, and will feature landscaping and provide a leafy shaded entry to Darwin's CBD.



Graphic 3. Cross section drawing Barneson Boulevard near Frog Hollow Park

### 5.3. What sort of trees will be used?

Landscaping will take place after the road has been constructed. The species of flora will be in keeping with the surrounding area. Trees will include natives selected to respond to the particular environment such as Milkwood, Rain Tree, Yellow Flame Tree, White Bush Apple, Mataranka Palms, Beach Hibiscus, Paperbark, Pongamia and Pandanus.

Final species selection subject to detailed design and in particular the space available for both canopy and root system development.

### 5.4. Are there any environmental risks?

Potential environmental risks are being considered in accordance with:

- The Northern Territory Environment Protection Authority (NT EPA) environmental assessment processes, and;
- Department of Infrastructure, Planning and Logistics policies.

A Notice of Intent is being prepared for referral to the NT EPA.

*5.5. I live nearby; will I be affected by dust and noise pollution during construction?*

During construction, machinery will generate noise during operation and dust may be generated from activities such as clearing, excavation, and stockpiling (particularly in the Dry Season). Potential noise and dust impacts will be assessed in accordance with the NT EPA environmental assessment process and DIPL policies. Management measures will be implemented such as use of water carts, restricting works at night where possible, an Erosion and Sediment Control Plan and a Noise Management Plan.

*5.6. Residents, businesses, commuters and visitors will receive targeted communications during the construction phase informing them of the progress of works and updates such as any proposed works are night. I live nearby; will I be affected by traffic noise when the road is completed?*

Traffic generated noise is anticipated to impact nearby residents. A noise mitigation measure is incorporated into the road design i.e. the road surfacing will be dense graded asphalt. Dense graded asphalt combined with a low speed limit will assist to minimise noise impacts.

*5.7. Will there be opportunities for community art around the site of Barneson Boulevard?*

A new entry statement public art project to Darwin will be created in conjunction with the project. The Darwin arts community and the public will have an opportunity to provide input into the planning for this element of the project.

*5.8. Why are Cafes and Shops included in the artist impressions of the road?*

The construction of Barneson Boulevard and completion of the full duplication of Tiger Brennan Drive is a landmark project that will help unlock the potential of the city's eastern end. The Boulevard's cool and shady ambience will incorporate urban landscaping and amenities to support activities such as al fresco dining and other potential commercial developments in the future.

## 6. Cyclists and Pedestrians

*6.1. Will there be provisions for pedestrians and cyclists?*

Yes. Barneson Boulevard will contain wide footpaths and segregated cycle ways for pedestrians and cyclists. To ensure planning is carried out in the interests of cyclists, the Northern Territory Government will continue to liaise with the Bicycle Network as a key stakeholder in this project.

*6.2. How will existing bike paths connect to the bike paths on Barneson?*

The segregated cycle way which runs along Barneson Boulevard from Cavenagh Street to Tiger Brennan Drive connects with the existing shared path on Tiger Brennan Drive. See below image:

Please refer to the *Darwin Region Cycling and Walking map* and also the Barneson Boulevard concept design on our webpage at [dipl.nt.gov.au](http://dipl.nt.gov.au).

*6.3. Will the pathways be sheltered?*

No. Trees which are prominent in the design of the Boulevard will grow to provide shade along the route, however hard structure shade or rain shelters are not included.

**6.4. *What safety measures have been put in place for pedestrians using Barneson Boulevard?***

Intersections along Barneson Boulevard will be signalised, this has been identified as the safest and most effective traffic management approach to intersection especially for pedestrians, cyclists and disabled people.

**6.5. *What will be the cyclist and pedestrian connectivity from Woods Street on to and across Barneson?***

Following community consultation on the concept designs, the draft plans will be reconsidered to provide for pedestrian connectivity at Woods St.

## **7. Bus stops**

**7.1. *Will any existing bus routes or timetables be affected?***

During construction of the Cavenagh Street / Barneson Boulevard intersection, the Cavenagh Street bus stop may be temporarily relocated elsewhere in the CBD for safety and congestions reasons.

Upon completion of construction, no changes to current bus routes are planned as part of this project.

Bus timetables will need to be varied slightly following completion of the project to accommodate the reduction in available bus bays at the reconfigured Cavenagh Street bus stop outside Woolworths. The community will be notified of the changes to bus services related to the project.

**7.2. *Will buses run along the new road?***

Currently, there are no services planning to run along Barneson Boulevard. However, the road will have the capacity to accommodate both commercial and public buses if required in the future.

**7.3. *Will there be a bus stop on Barneson Boulevard?***

A bus stop is not proposed along Barneson Boulevard at this stage.

The current bus network does not run along Barneson Boulevard, therefore there is no need to make provision for any bus bay. There is capacity to include Barneson Boulevard into the existing bus network in the future should demand warrant it.



#### 7.4. *What will happen to the Woolworths bus stop?*

During construction of the Cavenagh Street / Barneson Boulevard intersection, the Cavenagh Street bus stop may be temporarily relocated elsewhere in the CBD for safety and congestions reasons.

The Woolworths Bus Stop will be redesigned to accommodate the new intersection with Barneson Boulevard and the number of bus bays will be reduced by one. This will require changes to the allocation of bus stops and adjustments to the departure times of some services. The changes to departure times will only be by a couple of minutes. This will assist in managing bus traffic at the reconfigured bus stop. Passengers will be advised of the necessary changes as part of the move back to Cavanagh Street following construction.

## 8. Intersections

#### 8.1. *Are any intersections being upgraded or changed as part of the project?*

Yes. There will be three new intersections along Barneson Boulevard at Cavenagh St, McMinn St and Tiger Brennan Drive.

#### 8.2. *Will the new intersections be signalised?*

Yes. Traffic signals have been identified as the most effective and safest traffic management approach to these intersections, especially for pedestrians, cyclists and disabled people.

#### 8.3. *Were roundabouts considered as an alternative to signals?*

Yes. Roundabouts work well when there are even amounts of traffic approaching on all arms. In the case of Barneson Boulevard, traffic studies have indicated that roundabouts will adversely impact the traffic flow on the roads with lower traffic volumes.

Barneson Boulevard presents potential for new mixed use development along the corridor. The success of such development will be dependent on attracting sufficient foot traffic, something which roundabouts will not encourage.

Roundabout intersections pose greater safety risks for pedestrians and cyclists, particularly when traffic volumes are high, and are thus generally not suitable for a CBD environment. High pedestrian activity is a necessity for a successful and vibrant CBD.

#### 8.4. *Why is McMinn Street being signalised?*

The Barneson Boulevard / McMinn Street intersection is part of long term planning for the eventual duplication of McMinn Street.

Other options, such as a roundabout at this intersection would also encroach on the boundaries of the heritage listed Frog Hollow Park.

#### 8.5. *Are there any intersection treatments options other than signals and roundabouts?*

Not that will meet the objectives of this project to disperse traffic and ease congestion in a safe manner.

**8.6. Why aren't roundabouts being used?**

Traffic signals have been identified as the safest and most effective traffic management approach to these intersections, especially for pedestrians, cyclists and disabled people. Roundabouts work well when there are even amounts of traffic approaching on all arms. In the case of Barneson Boulevard, traffic modelling has indicated that roundabouts will adversely impact the traffic flow on the roads with lower traffic volumes.

**8.7. Will this project mean more traffic lights to slow us down on the road?**

The signalised intersections are planned on major intersections only at Cavenagh, McMinn and Tiger Brennan Drive. These signals will read the demand of each of the approaches and ensures there is a continuous flow of traffic. This system operates on a priority basis dictated by demand, which limits waiting time.

**8.8. How will the exit onto Cavenagh Street be handled – will there be a bottleneck?**

Traffic modelling indicates, with the construction of Barneson Boulevard, Darwin's CBD will have a third entry point and therefore will disperse traffic and ease congestion. It will also provide direct access to the Cavenagh Street Car Park from Cavenagh and Woods Streets.

**8.9. Will there be right turn access from Harvey Street?**

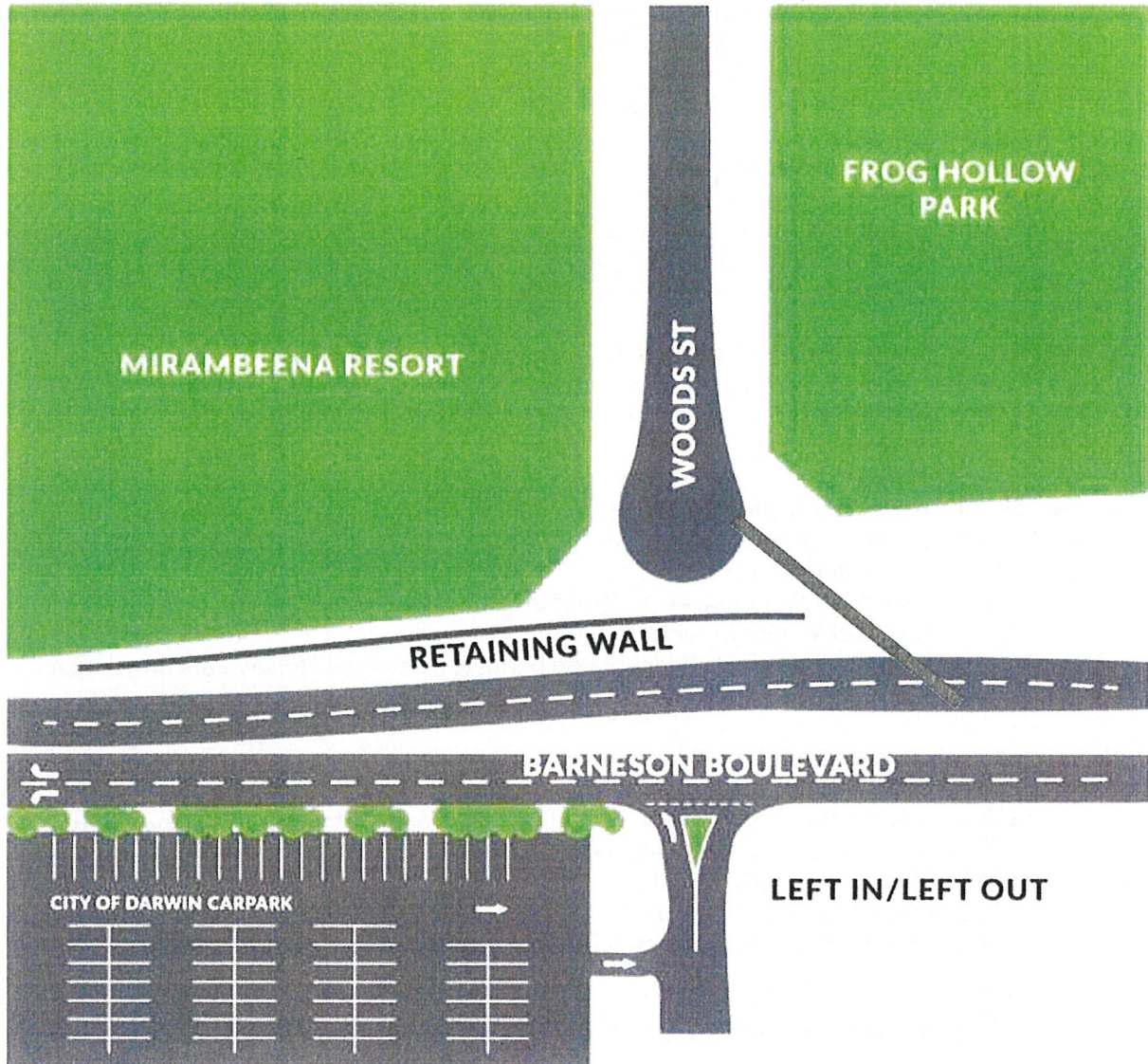
No. Left-in Left-out only. This is for safety reasons. The proximity to other intersections is too close to warrant any other type of traffic treatment at Harvey Street. Residents will have access to McMinn Street from Day Street.

**8.10. Was a fly over bridge considered instead of signalised lights at the Tiger Brennan Drive and Barneson Boulevard intersection?**

Yes, however this type of intersection treatment was determined as cost prohibitive at this stage due to the limited benefits it offered. A grade separated option in proximity of an existing signalised intersection did not offer any benefits to justify high capital cost investment.



## 9. Woods Street



Graphic 4. Proposed design for Woods Street including pedestrian connectivity to Barneson Boulevard

### 9.1. Why is Woods Street proposed as cul-de-sac in the designs?

There are a number of reasons that a cul-de-sac is proposed at Woods Street as the optimal treatment for this intersection. These include:

#### a) Gradient issues:

- The current design of Barneson Boulevard follows a gradual incline when travelling city-bound toward Cavenagh Street. The level at which Woods Street would be required to be built-up to match the road level of Barneson Boulevard would require significant earthworks affecting the rear access to Travelodge Mirambeena.



## FAQ – Barneson Boulevard and Tiger Brennan Drive Duplication Project

- There are a range of other controlling factors which determined the proposed road level for Barneson Boulevard. These include:
  - The existing road level at Cavenagh Street
  - The existing levels along the adjacent Cavenagh Street Car Park
  - The levels adjacent to the existing Power and Water Corporation switching station building in Woods St
  - The levels adjacent to the existing Arts Centre buildings (Frog Hollow).
  
- b) **Against AustRoads Guidelines:**
  - If Barneson Boulevard was to be constructed to a level that would allow Woods St to remain as a cross road, Barneson Boulevard would need to be constructed with a one way cross fall in excess of 5% which exceeds the 3% recommended by AustRoads Guidelines.
  
- c) **Maintaining rear-access to Woods Street for Travellodge Mirambeena**
  - There is a need to maintain Mirambeena's existing rear access to Woods Street. Adjustments to the level of Woods Street will impact this; therefore an at-grade solution is the most suitable alternative.
  
- d) **Avoiding impact on heritage-listed Frog Hollow Park**
  - Two alternative at-grade solutions were considered for the intersection at Woods Street and Barneson Boulevard. These catered for:
    - left-in (from Barneson) and left-out (from Woods St); and
    - left-out (of Woods St) only.
  - Both of these options would impact on the heritage listed Frog Hollow Park and therefore were undesirable design alternatives.
  
- e) **Limited impact on traffic flow in this area**
  - Road-traffic that is generated along Woods Street is generated beyond Lindsay Street (there are no properties that front Woods Street between Lindsay Street and Barneson Boulevard). Traffic that might opt to travel along Woods Street will have access to alternative options along McMinn or Cavenagh Streets.
  - In the Cul-de-sac option for Woods Street, pedestrian and bicycle access from Woods Street to Barneson Boulevard will be catered for as part of the proposed design.

### *9.2. If Woods Street is made into a cul-de-sac, how will it affect the nearby road network?*

Effects on the local road network are expected to be minimal. Woods Street does not carry significant volumes of through traffic and primarily serves as access to abutting property.

### *9.3. How will pedestrian and cycle access be maintained?*

A pedestrian and cyclist crossing will be provided where Woods Street meets Barneson Boulevard. This will include a ramp to provide access at the retaining wall.

### *9.4. How long/tall will the retaining wall be?*

Approximately 50m long and 1.5metres high.

## 10. Parking

### 10.1. Will Barneson Boulevard include on street parking?

No, Barneson Boulevard will not include on street parking. One reason for this is to ensure safety of cyclists using the adjacent segregated cycle paths. On street parking was considered as part of preliminary designs however the small number of bays that could be included had a negligible effect on the overall design benefits.

Barneson Boulevard is designed to provide a streamlined entry and exit to the city for motorists and shared path users. Car parking on the arterial route would slow traffic and not be compatible with the segregated cycle paths.

### 10.2. Will there be a loss of parking spaces?

Approximately 188 of existing formal and informal parking spaces will be affected by the construction of Barneson Boulevard. City of Darwin projections show there is capacity in existing parking sites to meet demand.

### 10.3. Is there capacity for parking in the CBD if these car parks are taken away?

Yes. Provision and management of parking facilities in the CBD is monitored by City of Darwin.

City of Darwin projections show there is capacity in all day parking sites at the China Town car park, West Lane and within Zone C to meet the parking demand.

### 10.4. Does this mean there are less free parking spaces in Darwin CBD?

Approximately 80 informal, free-parking spots along the current Barneson Street will be affected. All day parking in Zone C still available in Darwin CBD. Refer to the *Parking in Darwin's City Centre* brochure available for download from [www.darwin.nt.gov.au](http://www.darwin.nt.gov.au).

### 10.5. What will be the impact to parking on Cavenagh Street?

Approximately ten existing car parks on Cavenagh Street will be impacted. These are currently located in front of the Cavenagh Street Car Park.

Entry/exit to the Cavenagh Street Post Office Car Park will be relocated for safety reasons and to ease traffic congestion and queuing in close proximity to the Cavenagh Street / Barneson Boulevard intersection.

## 11. Frog Hollow Park

### 11.1. Will Frog Hollow Park be affected?

No road infrastructure or associated works are planned within Frog Hollow Park (Lot 5665 Town of Darwin).



## FAQ – Barneson Boulevard and Tiger Brennan Drive Duplication Project

In 1996, the Minister for Lands, Planning and Environment declared Frog Hollow a heritage place with cultural significance. Utilised as worker camps in the initial years of Commonwealth jurisdiction over the Northern Territory, Frog Hollow is valued as natural parkland within the central area of the city.

The road reserve for Barneson Boulevard runs adjacent to Frog Hollow in Lot 5672 Town of Darwin. The proposed new road will be located between the Frog Hollow Park on the north-western side of the Boulevard, and the Frog Hollow Centre for the Arts on the south-eastern side of the Boulevard.

While the corridor for the Boulevard will travel between these two important historical sites, design has been devised with preserving the heritage values of this space as a key priority. Sacred trees and areas of historical significance have been identified as part of planning works and will be preserved.

The project may also result in improved community access to Frog Hollow with a dedicated pedestrian and cyclist paths and a landscaped strip running alongside the Park from Woods to McMinn Streets.



Graphic .5 Standing at intersection of McMinn Street and Barneson Boulevard looking towards Cavenagh Street at Frog Hollow Park.

### 11.2. *What is the size of the Frog Hollow Park before and after works?*

Frog Hollow Park (Lot 5665) is, and will remain, approximately 1.13 hectares.

### 11.3. *Was there an idea to build a tunnel under Frogs Hollow to protect it from a road going through the park?*

A tunnel option was considered however as per Section 1.7 it was not economically feasible and would limit network connectivity and pedestrian accessibility with inferior street level visibility making it undesirable for pedestrians.



## 12. Old Darwin Primary School

### 12.1. *Will the old Darwin Primary School Building be impacted?*

A number of arts organisations which make up Frog Hollow Centre for the Arts occupy the building which is the old Darwin Primary School. See section 13.

## 13. Frog Hollow Centre for the Arts

### 13.1. *Will the Frog Hollow Centre for the Arts building be affected?*

The Centre for the Arts is an important historical landmark with cultural ties to the old Darwin primary school. The site has also been discussed in an urban planning context as a possible future location for a new, multi-storey school. Preserving the cultural value of this site is important to some sectors of the Darwin community and the current building tenants.

The proposed works will require relocation of the Arts Centre's toilet block, external stairwell and carpark access from McMinn Street. The infrastructure will be relocated elsewhere within the same Lot.

Tenants and user groups have been consulted with one-on-one meetings and workshops and we listened to their ideas and concerns. Construction will be carried out in a way that mitigates noise and dust impacts and will be timed outside of Darwin Festival period.

### 13.2. *What will happen with the external staircase?*

In the current plans, external stairs will be removed to make room for the pedestrian path on Barneson Boulevard. This will not impact the attached storage block.

### 13.3. *Where will the toilet block be moved to?*

This is being considered in consultation with current tenants.

### 13.4. *How long construction will take, specifically along the section which runs along Frog Hollow Centre for the Arts?*

At least six months. The overall project is expected to be completed by 2019, weather permitting.

### 13.5. *How many car parks will be taken and added to compensate for the lost car parks on McMinn St?*

Approximately 17 car parks will be relocated from the car park on the McMinn St side of the Centre for the Arts. The Woods St car park will be redesigned to compensate this loss.

**13.6. *Will the Frog Hollow Centre for the Arts tenants be relocated during construction?***

There is no plan to relocate the tenants of Frog Hollow Centre for the Arts. The tenants of the Centre for the Arts are being consulted to identify how this project will affect them and what can be done to minimise impact during the construction period.

**13.7. *How will people access the Frog Hollow Art Centre***

Staff and visitors will access the Centre for the Arts via Woods Street. This central access point will improve site security and traffic/pedestrian safety.

**13.8. *How will pedestrians cross from Frog Hollow Park to the Frogs Hollow Centre for the Arts?***

While provisions hadn't been made for pedestrian access between these sites, the Department is now reviewing the concept designs to provide this access. It will likely be a pedestrian island in the median strip near the intersection of Barneson Boulevard and Woods Street.

**13.9. *Will the works impact the security of the Centre for the Arts site?***

Security of the site is expected to be enhanced with improved fencing running along the site adjacent to Barneson Boulevard.

**13.10. *What will be done about potential asbestos on site?***

DIPL is aware of asbestos being present in the outside toilet block. Works will be undertaken in accordance with DIPL standard specifications and legislation.

**13.11. *What improvements will be made to the site?***

As well as creating a third arterial entry and exit point to the city, Barneson Boulevard will open up the development potential of surrounding land and enhance the style and amenity of the city centre and the area immediately surrounding Frog Hollow. Provision of fencing and pedestrian access is expected to contribute to the overall improvement and positive flow on effect for the Frog Hollow site. There may also be opportunities for community art around the site as a result of the works.

**13.12. *During and after the construction phase, will the current access system between the main buildings be impacted and / or changed?***

This is yet to be determined as concept designs are still underway.

**13.13. *Will construction works cause noise pollution, and if so, what are the identified mitigation measures?***

During construction, machinery will generate noise during operation and dust may be generated from activities such as clearing, excavation, and stockpiling (particularly in the Dry Season). Potential noise and dust impacts will be assessed in accordance with the NT EPA environmental assessment process and

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DIPL policies. Management measures will be implemented such as use of water carts, restricting works at night where possible, an Erosion and Sediment Control Plan and a Noise Management Plan.

Residents, businesses, commuters and visitors will receive targeted communications during the construction phase informing them of the progress of works and updates such as any proposed works at night.

### 13.14. *How will the road traffic generated noise pollution be mitigated? Will the mitigation measures detrimentally impact the Frog Hollow tenancies?*

Traffic generated noise is anticipated to impact nearby residents'. A noise mitigation measure is incorporated into the road design i.e. the road will be dense graded asphalt. Dense graded asphalt combined with a low speed limit will assist to minimise noise impacts. Noise mitigation will be in accordance with the NTG Road Traffic Noise on NT Government Controlled Roads. Roads (DoT 2014). No mitigation/action is required for land uses adjacent to arterial roads where existing roads, exiting road upgrades or future road currently planned roads are.

## 14. Other

### 14.1. *What is happening to the old tank farm?*

Barneson Boulevard does not affect the old tank farm.

### 14.2. *Does this project affect the proposed light rail alignment?*

The potential corridor for light rail does not follow the Barneson Boulevard alignment.

The Darwin City Master Plan identifies McMinn Street as a potential corridor option for light rail, tram or rapid bus transit system.

## 15. More questions?

Please contact the project team on 8924 7118 or [projects.tipd@nt.gov.au](mailto:projects.tipd@nt.gov.au) for more information.



