

# 1. Introduction

Legacy Way (LW), formerly known as the Northern Link Road Tunnel Project, was the subject of an Application for Project Change (APC) in October 2010 following the selection of a preferred contractor (Transcity Joint Venture) for the design, construction, operation and maintenance of the project for Brisbane City Council (Council).

One of the proposed changes to the project included the proposal to establish a dedicated off-street workforce car park (required by the imposed conditions) for the western worksite within a section of Anzac Park for up to 300 vehicles.

The proposed Anzac Park workforce parking area, as described in the APC, and further refined in response to public submissions, was refused in the Coordinator-General's report on Project Changes of December 2010. The Coordinator-General concluded that while there was merit to the proposal that further assessment was needed in order to understand if locating the off-street parking elsewhere would reduce disturbance to the community while still providing a workable solution for the project.

## 1.1 Purpose

The purpose of this report is to document and assess, against a range of criteria, a number of sites potentially suitable for construction workforce car parking associated with the western worksite during the construction of Legacy Way. The site(s) would be rehabilitated or returned to an approved use following construction, estimated to be approximately 4 years from commencement.

The aim is to ultimately deliver off-street parking in a location (or locations) that minimises disturbance to the community while providing sufficient car parking spaces for the contractor's construction workforce. Primarily, the construction workforce car parking area needs to support the requirement of the Coordinator-General's condition 18(k) (Schedule 3) that the construction workforce must not park in local streets. A dedicated and adequate construction workforce off-street parking area must be provided and shuttle transport must be provided between car parks distant from a construction area.

## 1.2 Background

Legacy Way has been evaluated by the Coordinator-General in accordance with the *State Development and Public Works Organisation Act 1971*. An EIS (September 2008) and a supplementary report (June 2009) were prepared for the Reference Design (RD) with the evaluation report and associated approval conditions provided by the Coordinator-General in April 2010.

As part of the Project, the RD proposed establishing dedicated off-street workforce parking areas for the western construction area in the overflow car park across Mt Coot-tha Road

from the entrance to the Mt Coot-tha Botanic Gardens and/or in areas along Sir Samuel Griffith Drive between Mt Coot-tha Road and Simpsons Road.

The Coordinator-General's April 2010 report evaluated the EIS, and noted the following about the proposed locations for dedicated workforce parking:

■ **4.2.8.3 – Construction workforce car parking**

Construction workforce car parking on local streets has the potential to inconvenience local residents and cause traffic impacts.

The EIS states that site vehicles and construction vehicles would park within the construction worksites. Staff vehicles would park in designated parking areas with dedicated workforce parking facilities to be provided at the eastern end of Victoria Park between Gilchrist Avenue and the ICB, and at the western end either in the overflow car park across Mount Coot-tha Road from the entrance to the Mount Coot-tha Botanic Gardens or in areas along Sir Samuel Griffith Drive between Mount Coot-tha Road and Simpsons Road.

Based on recent experience with other infrastructure projects in Brisbane, I consider that there is potential for both:-

- the actual construction workforce to be greater than predicted for the reference design in the EIS leading to overflow of off-street parking identified in the EIS
- and consequently, if not specifically prohibited, unsupervised parking of project related staff in local streets around worksites.

Therefore, I require that construction workforce parking must be in accordance with imposed Condition 18 (k) and (l) – General construction, Schedule 3, Appendix 1. Condition 18(k) requires that the construction workforce must not park in local streets. A dedicated and adequate construction workforce off-street parking area must be provided. All construction workforce vehicles must be directed to project construction workforce car parks. To avoid construction workforce car parking in local streets, shuttle transport between construction workforce car parks distant from a worksite or work area is to be provided for the duration of the period the worksite or work area is in use. At the completion of the project Condition 18(l) requires that construction workforce car parks must be rehabilitated as quickly as is reasonable and practicable.

A dedicated off-street workforce car parking area within Anzac Park was included as part of the Legacy Way Application for Project Change (APC) submitted by Council in October 2010. The APC also included at the western end of the project a revised western surface connection to enable both TBMs to be launched outside the Centenary Motorway alignment and the Tollroad Control Centre (TCC) being located in the Botanic Gardens overflow car park area.



During consultation on this report it became clear that, while meeting many key criteria, the car park was not seen as suitable by the local community in its current format and significant community opposition was presented in public submissions on the APC to the Coordinator-General.

In response to these submissions, including the decision by Council to no longer proceed with the TCC being located within the Gardens overflow car parking area, the design of the proposed Anzac Park workforce car parking area was modified.

The design modifications included a reduced parking area to accommodate up to 200 vehicles (rather than 300) and also revised access to significantly reduce the impact of traffic accessing the parking area, including the associated safety concerns.

The Coordinator-General gave merit to the Anzac Park proposal and the design refinements to address the identified concerns of the local community. It was noted, however, that further consideration of alternative locations was required in order to understand if locating parking elsewhere would reduce disturbance to the community while still providing a workable solution for the project.

The APC request to locate temporary car parking in a section of Anzac Park was therefore refused.

### **1.2.1 Coordinator-General's Recommendation**

In refusing the proposed project changes to locate a construction workforce car park in Anzac Park, the Coordinator-General made a Recommendation in the imposed conditions (Schedule 3 of Appendix 2) in the Coordinator-General's Report on project changes to the Legacy Way Project. Recommendation 35 Temporary Construction Car Parking states:

- a) It is recommended that the proponent investigate, in the making of a parking plan, a range of options to satisfy the project's construction workforce parking requirements for the western works.
- b) Should the plan propose options that require a change to the project, for example, construction on a new site not currently used for parking, consideration by the Coordinator-General of the project's workforce parking plan for the western works is required through the making of an application under section 35C of the State Development and Public Works Organisation Act 1971.
- c) **The plan should demonstrate that a range of options have been explored in detail prior to the making of any application.** The parking location options should be considered individually and collectively, and assessed using criteria including community impacts, cost, suitability, opportunities and risk. Mitigation measures for risk and impacts should also be considered.

- d) Regardless of whether an application is made as per above, it is recommended that the proponent undertake consultation with the community on its parking plan.

The Coordinator-General's report of the project changes advised BCC as proponent for the Legacy Way Project to:

- Investigate existing parking areas in the vicinity of the western works, such as the park and ride car park adjacent to the Toowong bus depot and available space in the worksite.
- Investigate optimising use of the existing botanic gardens overflow car park on Mount Coot-tha Road as a part of its parking strategy. It was noted in the Report that the use of this area is allowable given that use of this area was addressed with the EIS and is not part of the consideration of project changes.
- Investigate areas along Sir Samuel Griffith Drive which are also not part of the consideration of project changes.

### **1.2.2 Botanic Gardens Overflow Car Park**

In accordance with the Coordinator-General's recommendations, Council decided to use the existing botanic gardens overflow car park on Mount Coot-tha Road as a part of the workforce parking plan for the LW project. Aside from a small modification Council has decided not to seek major optimisation of the Botanic gardens overflow car park. Council has made this decision in response to feedback from the Mount Coot-tha Residents Group regarding the impact that use of the existing car parking area will have on adjacent homes.

With a small modification the Botanic Gardens overflow car park provides 81 car parks for construction workers with an additional allowance of spaces for worksite visitor parking.

Council has also made a decision not to use the Botanic gardens overflow carpark at night to minimise the impact on adjacent residents, and to ensure the availability of the area to local attractions at the busiest times, including Sundays.

As such there will be a full 300 car parks (including the existing parking areas within the Gardens) available for the Gardens use on Sundays throughout the project.

### **1.3 Methodology**

The car park options assessment has been undertaken in conjunction with the workforce car park consultation process. Key steps undertaken as part of this process included:

- identification of workforce car parking options, including existing parking areas and suggestions made in community submissions to the APC during November and December 2010;

- identification of key requirements of the workforce car park, including construction workforce numbers;
- first pass assessment of car park options based on the key project requirements;
- further development of car park options which meet the first pass criteria;
- phase 1 consultation - Workforce Parking Consultation Group;
- phase 2 consultation - Community Consultation Sessions;
- assessment of car park options against multiple criteria including community, suitability, environmental and economic;
- consideration of options individually and collectively, including mitigation measures for risks and impacts; and
- phase 3 consultation – stakeholder consultation.

#### **1.4 Report Structure**

The workforce car park requirements and first pass criteria are discussed in **Section 2**. The preliminary car park options and first pass assessment are summarised in **Section 3**, with more detail included in **Appendix A**.

The car park options are outlined in **Section 4** and the criteria are outlined in **Section 5**. The stage 1 and 2 consultation activities and outcomes are reported in **Section 6**, with the community information materials included in **Appendix B** and details of the community feedback comments included in **Appendix C**. The car park option evaluation is summarised **Section 7** with further detail included in **Appendix D**. **Section 8** provides conclusions on the parking plan based on the investigation contained in this report together with the community consultation undertaken during the investigation.

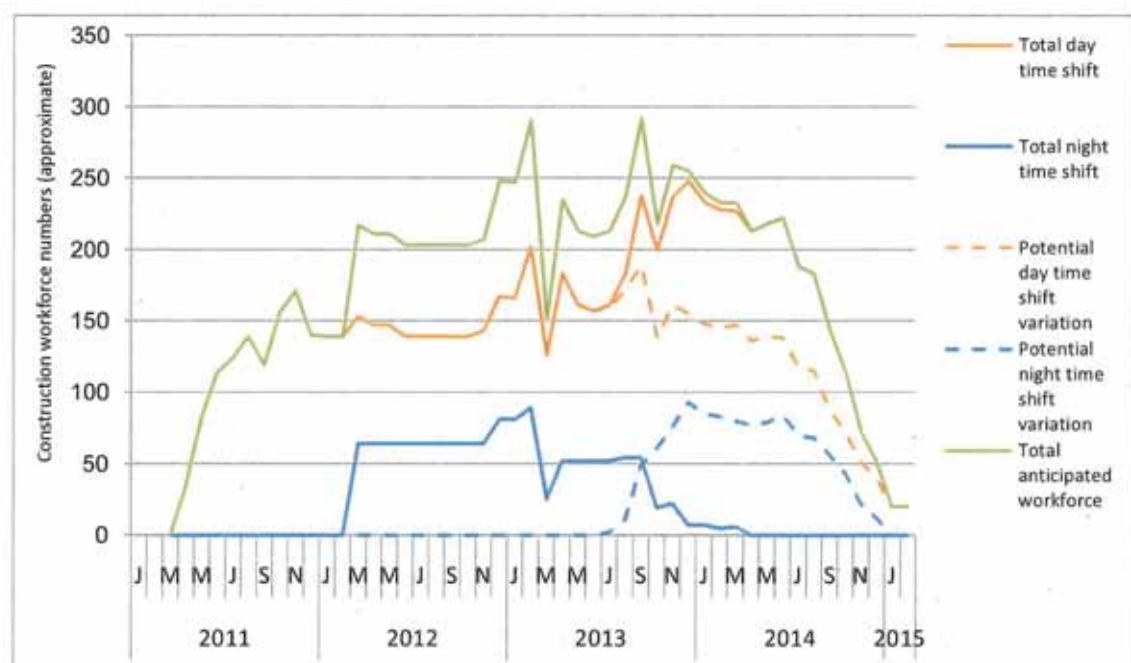


## 2. Workforce Car Park Requirements

The key requirement of the workforce car park is to provide convenient and useable access to the western worksite of Legacy Way to avoid the construction workforce parking on local streets.

Workforce car parking will need to be available for use prior to construction commencing at the western worksite. The number of car parks required will fluctuate with the construction workforce numbers. The peak workforce at the western worksite is expected to be approximately 290 in early 2013. From 2012 to the end of 2013 the workforce would be split between a day shift and a night shift. As surface works will only be undertaken between 6.30am to 6.30pm Monday to Saturday, the day shift will generally be larger in size than the night shift. Underground works such as tunnelling will be split between the day time and night time shift. The night time shift is proposed to be between 7pm to 7am, 7 days a week.

An overview of anticipated workforce numbers at the western worksite is shown in **Figure 2-1**.



■ **Figure 2-1 Legacy Way western worksite construction workforce numbers**

### 2.1 First Pass Criteria

First pass criteria which articulate key requirements have been developed to assess the preliminary workforce car parking options. These criteria are:

- A site is able to be secured and constructed within 3 months.
- A site contributes at least 80 car parking spaces.

- A site is no further than 2km from the western worksite.

#### **2.1.1 The site is able to be secured and constructed within 3 months**

Car parking will need to be operational and available for use by early 2011. Initially the construction workforce will be able to park in the Gardens overflow car park which was included in the Reference Design for the project. However, from June 2011 onwards workforce numbers would exceed the available number of car parks in the Gardens overflow car park. Therefore additional car parking would be required from June 2011. As such, car park options which may have a lengthy lead time to secure land tenure or require lengthy construction works are unlikely to be feasible for the project.

#### **2.1.2 The site contributes at least 80 car parking spaces**

Although a combination of smaller car parks could be suitable, the need to travel to multiple parking areas to find an available space is a potential deterrent for construction workers to use the car park. Additionally, in the event that a shuttle bus is required, the need to stop at multiple locations would reduce the efficiency of bus operations. Therefore the use of small car parks is not considered practical. Acceptable car park options should have at least 80 car park spaces.

#### **2.1.3 The site is no further than 2km from the western worksite**

To be suitable for the project needs, the car parking area will need to provide convenient access to the western worksite. Although it would be possible to use a shuttle bus to transport workers from a car park that is more than 2km away from the worksite, it is not considered to be practical due to delays between parking and reaching the worksite as workers wait for the shuttle bus. The delays would make the parking less desirable for construction workers and would also have commercial implications for the project. The use of a shuttle bus for travel over a distance of between 800m to 2km is considered practical. Car park sites which provide direct pedestrian access to the worksite (within 400m) would be considered highly desirable.

### 3. Preliminary Workforce Car Parking Options

A number of workforce car parking options have been identified that include:

- Existing parking areas in the vicinity of the western works such as the park and ride car park adjacent to the Toowong bus depot, areas within the western worksite and areas within the Botanic Gardens.
- Areas excluded from the assessment of project changes as they were covered by the Coordinator-General's report on the Reference Design (RD), being:
  - the use of the existing overflow car park for the Botanic Gardens on Mt Coot-tha Road; and
  - areas along Sir Samuel Griffith Drive between Mount Coot-tha Road and Simpsons Road.
- Potential new car parking areas, which may be needed to meet project requirements.

The preliminary options include suggestions from community groups made in submissions to the application for project change, options identified by Council and options identified by Transcity.

These preliminary options have been subject to a first pass assessment to determine which options will be taken forward through the multi-criteria assessment. Details of the preliminary options and their first pass assessment are included in **Appendix A**.

The first pass assessment of the car park alternatives is summarised in **Table 3-1** below.

■ **Table 3-1 Car park alternative first pass assessment**

| Site Name                         | Approximate capacity >80 | Within 2km of worksite? | Available within 3 months? | Take onto further assessment? |
|-----------------------------------|--------------------------|-------------------------|----------------------------|-------------------------------|
| Freer's northern area             | ✓                        | ✓                       | ×                          | ×                             |
| Freer's southern area             | ✓                        | ✓                       | ×                          | ×                             |
| Silky Oak picnic area             | ×                        | ✓                       | ✓                          | ×                             |
| Hoop pine existing car park area  | ×                        | ✓                       | ✓                          | ×                             |
| Hoop Pine picnic area             | ✓                        | ✓                       | ✓                          | ✓                             |
| Slaughter Falls picnic area       | ×                        | ✓                       | ✓                          | ×                             |
| Mount Coot-tha Road Park and Ride | ✓                        | ✓                       | ✓                          | ✓                             |
| Botanic Gardens existing parking  | ×                        | ✓                       | ✓                          | ×                             |
| Toowong Cemetery internal roads   | ×                        | ✓                       | ✓                          | ×                             |
| Toowong Bus Depot                 | ×                        | ✓                       | ✓                          | ×                             |
| Western worksite                  | ×                        | ✓                       | ✓                          | ×                             |
| Scenic Drive upper park           | ✓                        | ✓                       | ✓                          | ✓                             |
| Scenic Drive lower park           | ✓                        | ✓                       | ✓                          | ✓                             |



| Site Name                                      | Approximate capacity >80 | Within 2km of worksite? | Available within 3 months? | Take onto further assessment? |
|--|--------------------------|-------------------------|----------------------------|-------------------------------|
| Mt Coot-tha Quarry                             | x                        | ✓                       | ✓                          | x                             |
| Botanic Gardens new parking site               | x                        | ✓                       | ✓                          | x                             |
| Purtell Park car park, Carwoola Street         | ✓                        | x                       | ✓                          | x                             |
| Dog Off-leash area, Anzac Park                 | ✓                        | ✓                       | ✓                          | ✓                             |
| Anzac Park North                               | ✓                        | ✓                       | ✓                          | ✓                             |
| Sir Samuel Griffith Drive, road                | ?                        | ✓                       | x                          | x                             |
| Fortitude valley commercial car park           | ✓                        | x                       | ✓                          | x                             |
| East end parking area (EKKA overflow)          | ✓                        | x                       | ?                          | x                             |
| Moggil Road / Centenary Motorway               | ?                        | x                       | x                          | x                             |
| Milton Tennis court site                       | ?                        | x                       | x                          | x                             |
| Seventeen Mile Rocks Road / Centenary Motorway | ?                        | x                       | x                          | x                             |

## 4. Car park alternatives

Based on the first pass evaluation, the potential car park alternatives are defined in **Table 4-1** below.

■ **Table 4-1 Potential car park alternatives**

| Alternative                                     | Site 1                              | Site 2   | Site 3  | Approximate Total Car parks |
|---|-------------------------------------|--|---|-----------------------------|
| <b>Option 1: Hoop Pine Picnic Area</b>          | Gardens overflow parking (81 parks) | Hoop Pine Picnic Area (approximately 200 parks)          |   | 281                         |
| <b>Option 2: Mt Coot-tha Road Park and Ride</b> | Gardens overflow parking (81 parks) | Park and Ride (110 parks)                                | An additional site will be required from 2012 to provide sufficient numbers | 191                         |
| <b>Option 3: Scenic Drive Combined Car Park</b> | Gardens overflow parking (81 parks) | Scenic Drive upper park (approximately 170 parks)        | Scenic Drive lower park (approximately 90 parks)                            | 341                         |
| <b>Option 4: Dog Off-leash area, Anzac Park</b> | Gardens overflow parking (81 parks) | Dog Off-leash area, Anzac Park (approximately 200 parks) |   | 281                         |
| <b>Option 5: Anzac Park North</b>               | Gardens overflow parking (81 parks) | Anzac Park North (approximately 200 parks)               |   | 281                         |

Each of these five alternatives involve using one of the five options identified as potentially suitable in the first pass assessment in combination with the Gardens Overflow car park. The location of these five sites is shown in **Figure 4-1** below.



**Key**

- |                            |                                   |                      |
|----------------------------|-----------------------------------|----------------------|
| 1 - Hoop Pine Picnic Area  | 3 - Scenic Drive combined Carpark | 5 - Anzac Park North |
| 2 - Existing Park and Ride | 4 - Dog off leash area            |                      |

■ **Figure 4-1 Car park options location overview**

Each of the five options was investigated in further detail. The concept designs of each option are outlined below.

**4.1 Option 1: Hoop Pine Picnic Area (Hoop Pine)**

This option involves expanding the existing parking area at the Hoop Pine Picnic Area (Hoop Pine) to cover the existing cleared, grass area. The total capacity of the car park would be approximately 200 car parks. This area would be closed to public access. A bus turn-around and pick up point would be located close to the car park entrance off Sir Samuel Griffith Drive. An indicative car park layout is shown in **Figure 4-2**.





Figure 4-2 Option 1 Hoop Pine Picnic Area

#### **4.2 Option 2: Mount Coot-tha Road Park and Ride (Park and Ride)**

This option involves using the existing park and ride site at Mt Coot-tha, located at Mt Coot-tha Road between Dean Street and Miskin Street. The existing car park has approximately 110 parking spaces. The current access arrangements are egress in and out onto the westbound Mt Coot-tha Road and egress in from Dean Street. This option would use the existing parking spaces and alter the Dean Street access to be two way. An indicative car park layout is shown in **Figure 4-3**.

#### **4.3 Option 3: Scenic Drive Combined Car Park (Scenic Drive)**

The Scenic Drive option involves two car park sites in relative close proximity to each other on Scenic Drive, an 'upper' and 'lower' site. The 'upper' Scenic Drive option involves establishing a car park within an existing cleared area located adjacent to where Scenic Drive and Sir Samuel Griffith Drive diverge to hold approximately 170 vehicles. The 'lower' Scenic Drive option would utilise an existing gravel area adjoining Scenic Drive which is currently used as informal parking and can hold approximately 88 vehicles. Indicative car park layouts are shown in **Figure 4-4** and **Figure 4-5**.

#### **4.4 Option 4: Dog Off-leash area, Anzac Park (Dog Off-leash)**

The Dog Off-leash option involves utilising the existing dog park area in the south west of Anzac Park for car parking. The dog off-leash area would be relocated into a different area of Anzac Park. An access point from Wool Street would provide entry to the car park area with an exit onto Broseley Road. Pedestrian access would be provided to the worksite through a new pedestrian pathway along the existing fire trail between the dog off-leash area and the Centenary Motorway. The car park area would provide for approximately 200 car parks with the removal of a number of landscape trees planted within the area. An indicative car park layout is shown in **Figure 4-6**.





Figure 4-3 Option 2 Mt Coot-tha Road Park and Ride



