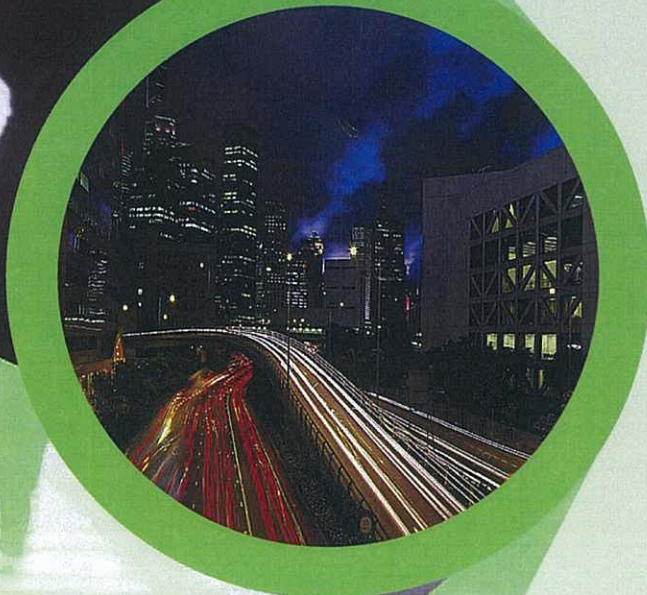


PLANS AND DOCUMENTS
referred to in the ULDA
APPROVAL dated 19/3/10

Hamilton Harbour, Hamilton
Transport Impact Assessment



Hamilton Harbour

Hamilton

Transport Impact Assessment

Client: Devine Limited
Reference: GB10605
GTA Consultants Office: Brisbane

Quality Record

Issue	Date	Description	Prepared By	Checked By	Approved By
A	15/10/08	Final Report	Belinda Pike Nathan Moresi	Beth Whelan (RPEQ)	Original Signed
B	10/12/08	Revised Plans	Renee Nystrom	Beth Whelan (RPEQ)	Original Signed
C	18/6/09	Amended Development	Renee Nystrom	Beth Whelan (RPEQ)	Original Signed
D	27/11/09	Amended Development	Angela Crawford	Beth Meehan (RPEQ)	Original Signed
E	27/11/09	Minor Amendment	Angela Crawford	Beth Meehan (RPEQ)	

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1. Introduction

1.1 Background

Planning approval has previously been granted by the Urban Land Development Authority (ULDA) for a mixed use development on land located at Kingsford Smith Drive, Hamilton (the subject site). The subject site is situated within the Northshore Hamilton Urban Development Area (UDA).

In accordance with the vision set for the Northshore Hamilton UDA, development in this area is intended to be based on transit oriented development principles and focussed on reclaiming the river and transforming this industrial area into a vibrant urban community. The aims of the Northshore Hamilton UDA are articulated as the need to facilitate development that will provide and improve access and views to the river, links between Brisbane City and Moreton Bay, useable public open space and vibrant mixed-use community development.

In keeping with the intents set for the Northshore Hamilton UDA, the approved development incorporated office, retail and residential uses with associated car parking and access.

Due to economic conditions, it was necessary to revise the development proposal. As such, it is proposed to increase the residential component of the development and reduce the retail and office uses.

In relation to the above, GTA Consultants was commissioned by Hamilton Harbour Unit Trust to undertake a transport impact assessment of the proposed revised development.

1.2 Purpose of this Report

This report sets out an assessment of the anticipated parking, traffic and transport implications of the proposed development, including consideration of the following:

- i the existing traffic and parking conditions surrounding the site
- ii the parking demand likely to be generated by the proposed development
- iii the suitability of the proposed parking in terms of supply (quantum) and layout
- iv the servicing requirements of the development and appropriateness of proposed facilities in terms of quantum and accessibility
- v the suitability of pedestrian and bicycle facilities within the proposed development
- vi the traffic generating characteristics of the proposed development
- vii the suitability of proposed access arrangements for the site
- viii the transport impact of the development proposal on the surrounding road network
- ix a preliminary construction management plan, in terms of impact on the surrounding access network.

1.3 References

In preparing this report, reference has been made to the following:

- Brisbane City Council's '*Transport, Access, Parking and Servicing Planning Scheme Policy*' (TAPS Policy)
- Brisbane City Council's '*Transport, Access, Parking and Servicing Code*' (TAPS Code)
- The Roads and Traffic Authority New South Wales (RTANSW), '*A Guide to Traffic Engineering Developments*', October 2002
- Australian Standard / New Zealand Standard, Parking Facilities, Part 1: Off-Street Car Parking AS / NZS 2890.1-2004
- Australian Standard, Parking Facilities, Part 2: Off-Street Commercial Vehicle Facilities AS / NZS 2890.2-2004
- '*Guide to Traffic Engineering Practice: Pedestrians*', AUSTROADS 1995
- plans for the proposed development prepared by Cox Rayner Architects, including drawing number A-11-01 dated 27 November 2009, and drawing numbers A-11-02, A-11-03, A-11-04 and A-11-05 all dated 25 November 2009
- traffic surveys undertaken by GTA Consultants as referenced in the context of this report
- an inspection of the site and its surrounds
- '*Northshore Hamilton Urban Development Area Development Scheme*', Urban Land Development Authority, dated July 2009
- other documents as nominated.

2. Site Environs

2.1 Subject Site

The subject site is located on Kingsford Smith Drive, Hamilton and is situated some 5km to 6 km from the Brisbane CBD. The site is bound by Kingsford Smith Drive to the north, Harbour Road to the west, Hercules Street to the south, and a proposed road link to the east.

In March 2008 the subject site became part of the Northshore Hamilton Urban Development Area (UDA). The site is detailed by the Northshore Hamilton Interim Land Use Plan (NHILUP), as Precinct 2(2b) – Waterfront West sub-precinct. The NHILUP states that:

"Precinct 2 is a mixed use area containing residential accommodation (long and short term) and office development. Some small scale retail uses will support the mixed use nature of this precinct, such as restaurants, cafes, taverns, shops and indoor sport and recreation..."

Sub-Precinct 2b will contain a mix of residential and office with some ground floor retail serving the daily convenience needs of workers and residents in the development. The ground floor retail will provide an active street frontage to Kingsford Smith Drive and links to sub-precinct 2a."

The surrounding properties currently include a mix of residential, commercial and industrial uses. To the west of the site there are a number of existing medium to high density residential apartments. Directly north of the site on Kingsford Smith Drive there are a number of residential properties as well as a service station and motel accommodation. The majority of land to the east of the site is included in the Northshore Hamilton UDA and will be redeveloped over time.

The location of the subject site and the surrounding environs is shown in Figure 2.1. Figure 2.2 identifies the subject site in the context of the Northshore Hamilton Development Precincts and boundary.

Figure 2.1: Subject Site and Its Environs

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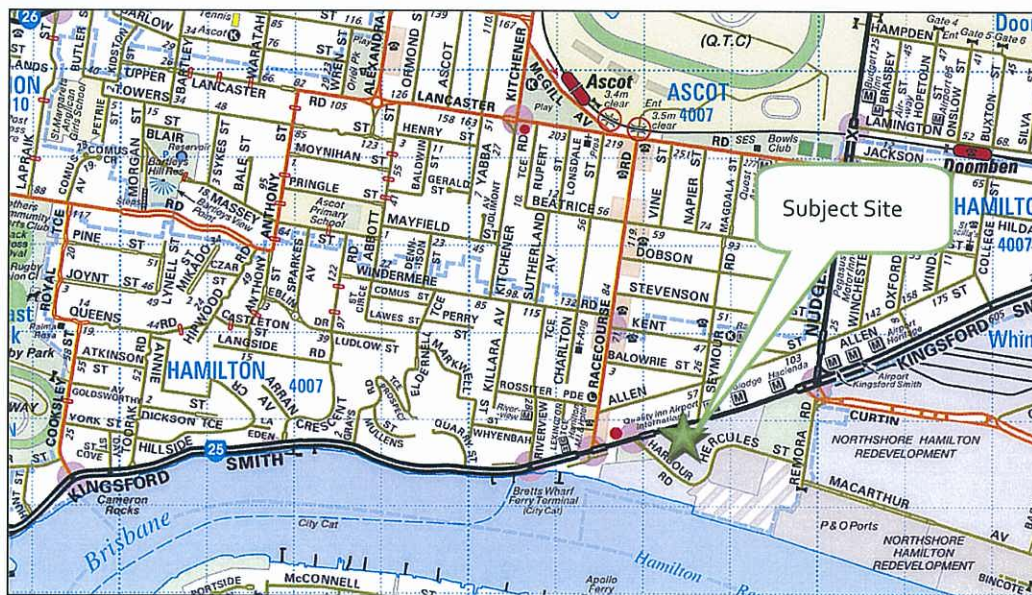
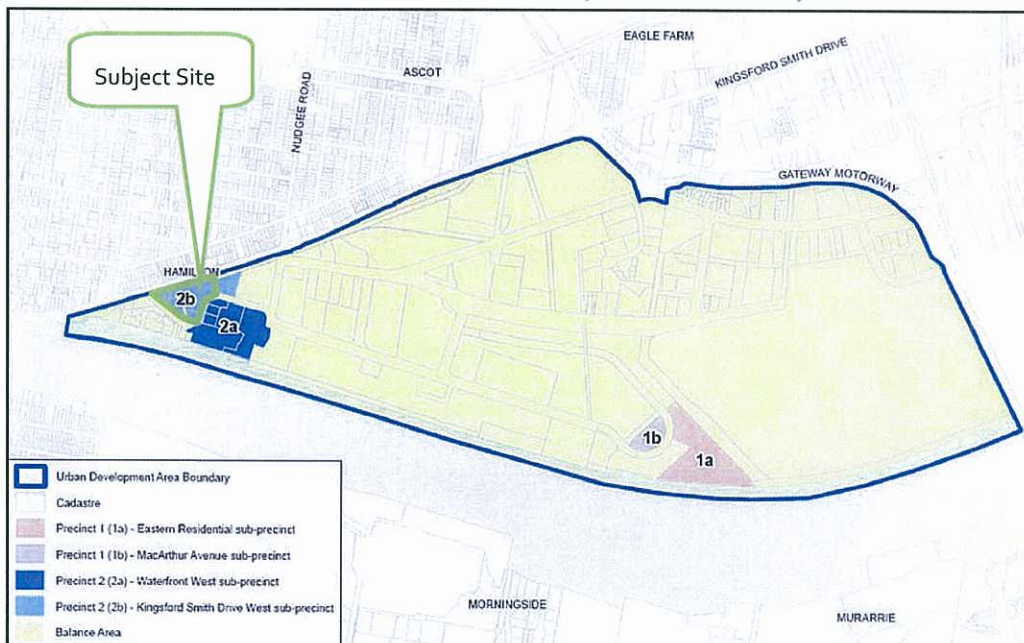


Figure 2.2: Northshore Hamilton Urban Development Area (Source: NHILUP, 2008)



2.2 Road Network

2.2.1 Adjoining Roads

Kingsford Smith Drive

Kingsford Smith Drive is identified by Brisbane City Council as an arterial route. It is aligned in the east-west direction and forms the northern boundary to the subject site. It is a two-way road configured with a four-lane, 15.5m wide carriageway set within a 25m wide road reserve (approx). Kerbside parking is not permitted.

In 2001, Kingsford Smith Drive carried approximately 31,000-32,000 vehicles per day¹. Kingsford Smith Drive is currently operating close to capacity and is planned to be upgraded to six traffic lanes. It is understood that, with forecast continued traffic growth (in part a result of the Northshore Hamilton UDA), Kingsford Smith Drive will remain capacity constrained in the area.

Harbour Road

Harbour Road is a local road which is generally aligned in an east-west direction. It extends between Kingsford Smith Drive and Hercules Street, forming the western boundary to the subject site. Harbour Road is a two-way road configured with a two-lane, 18m wide carriageway set within a 26.5m wide road reserve (approx). Unrestricted kerbside parking is permitted on both sides of Harbour Road.

Harbour Road carries approximately 3,600 – 3,650 vehicles per day².

Hercules Street

Hercules Street is a local road and is generally aligned in an east-west direction. It extends between Harbour Road and Remora Road, forming the southern boundary to the subject site. Hercules Street is a two-way road with a single lane in each direction. Unrestricted kerbside parking is permitted on Hercules Street in the vicinity of the subject site, however, to the east of the subject site car parking restrictions apply.

Kingsford Smith Drive, Harbour Road and Hercules Street are shown on Figures 2.3 to 2.8.

Figure 2.3: Kingsford Smith Drive Adjacent to Site
(facing east)



Figure 2.4: Kingsford Smith Drive Adjacent to Site
(facing west)



¹ Based on peak hour traffic counts undertaken by TTM Consulting in 2001 and assuming a peak-to-daily ratio of 10%.

² Based on peak hour traffic counts undertaken by GTA Consultants in August 2008 and assuming a 10% peak-to-daily ratio.

Figure 2.5: Harbour Road Adjacent to Site
(facing north west)



Figure 2.6: Harbour Road Adjacent to Site
(facing south east)



Figure 2.7: Hercules Street Adjacent to Site
(facing east)



Figure 2.8: Hercules Street Adjacent to Site
(facing west)



2.2.2 Surrounding Intersections

The following intersections currently exist in the vicinity of the site:

- Kingsford Smith Drive / Harbour Road (signalised)
- Hercules Street / Remora Road (unsignalised)
- Remora Road / Curtin Avenue (unsignalised)
- Remora Road / Kingsford Smith Drive (signalised).

2.2.3 Traffic Volumes

GTA Consultants conducted a survey of peak hour traffic volumes on Thursday 28 August 2008, at the intersection of Harbour Road and the access to Brett's Wharf Apartment Complex (including Windermere and Sutherland Tower and Villas, Lancaster Tower). Counts were conducted for the following peak periods:

- 8:00am and 9:00am
- 5:00pm and 6:00pm.

The survey results show a low number of vehicles entering and exiting the apartment complex. A total of 44 traffic movements are generated by the apartment complex in the AM peak and 40 movements in the PM peak. The recorded AM and PM peak hour traffic volumes are shown in Figures 2.9 and 2.10, respectively.

Figure 2.9: AM Peak Hour Traffic Volumes at Harbour Road / Apartment Intersection

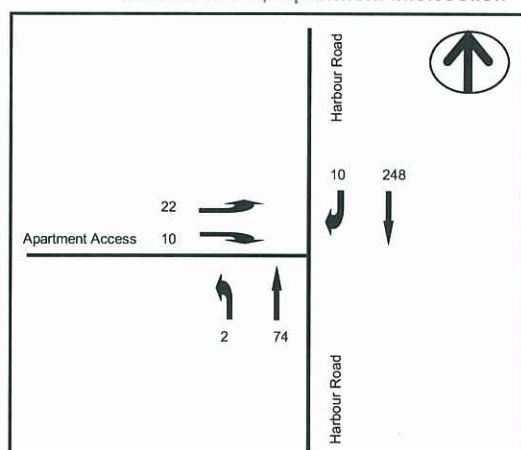
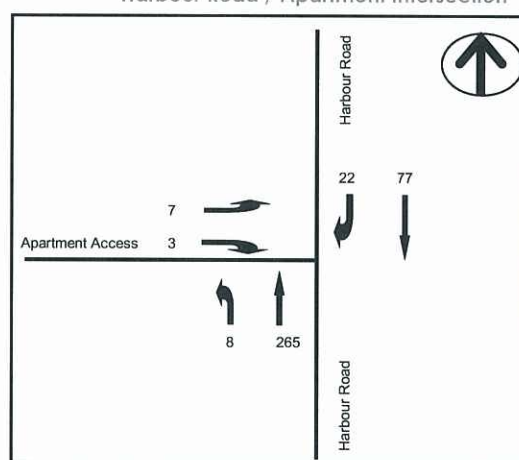


Figure 2.10: PM Peak Hour Traffic Volumes at Harbour Road / Apartment Intersection



2.3 Road Upgrades

It is understood that road works in the vicinity of the subject site are proposed by Brisbane City Council³. These works include upgrades to Kingsford Smith Drive and the construction of a new link road from Kingsford Smith Drive to Hercules Street at the eastern boundary of the site. Each of these upgrades will require land acquisition affecting the subject site.

Council's Concept Design Plan demonstrates the intent to widen Kingsford Smith Drive from four to six lanes, impacting on the northern boundary of the subject site. In addition to increasing the number of lanes, the works will also involve the construction of medians in the Kingsford Smith Road carriageway and localised flaring to provide right turn lanes at all signalised intersections. These works will require an 11.5m widening of the existing carriageway at the north of the subject site.

Improvements to Kingsford Smith Drive in the vicinity of the subject site will also incorporate a reconfiguration of the Kingsford Smith Drive / Harbour Road intersection (located at the north-west corner of the subject site). This will involve the installation of a left turn slip lane into Harbour Road for westbound traffic. There will also be an alteration to the flared lane configuration of Harbour Road at the intersection. The present configuration will be converted to a left turn only bus lane, single left turn lane and single right turn short lane.

Under Council's proposal, Harbour Road and Hercules Street will be upgraded to include a westbound bus lane.

In addition to the Kingsford Smith Drive upgrades, Council proposes a new link road that will join Kingsford Smith Drive to Hercules Street. This link will require the acquisition of land up to 20m along the site's eastern boundary. At the south-east corner of the subject site, the intersection of the link road and

³ As per road network upgrade plans provided to GTA Consultants by John Winkler, Network Information Coordinator at Brisbane City Council, via email on 25 August 2008. The same plan was obtained by Devine Limited at the time an application for Preliminary Approval was lodged with Council.

Hercules Street will be restricted to left turns only. The intersection of the new link road and Kingsford Smith Drive is to be signalised.

The proposed road works for Kingsford Smith Drive are shown on the Concept Design Plan (Ref. RPN381) prepared by Council, attached at Appendix A.

2.4 Integrated Transport Infrastructure

2.4.1 Public Transport

A review of public transport currently available in the vicinity of the site is summarised in Table 2.1.

Table 2.1: Summary of Public Transport Services

Service	Route #	Route Description	Distance to Nearest Stop	Frequency On / Off Peak
Bus	300	Toombul to City	200 m	10minutes peak / 20minutes off peak
	302	Pinkenba to City	adjacent to site	15minutes peak / 30minutes off peak
	303	Myrtle town to Eagle Junction	adjacent to site	20minutes peak / 35minutes off peak
	305	Hamilton to City	200 m	15minutes peak / 30minutes off peak
Ferry	Bretts Wharf Terminal	Bretts Wharf to UQ	500 m	20minutes peak / off peak
Train	Ascot Station	Ascot Line	1.4 km	30-50 minutes peak / off peak

Future public transport facilities expected to be provided in the vicinity of the subject site are further detailed at Section 5 of this report.

2.4.2 Pedestrian Infrastructure

Formal pedestrian paths are located as follows:

- both sides of Kingsford Smith Drive
- the western side of Harbour Road and southern side of Hercules Street
- along the river from Riverview Terrace west towards the City.

In addition, signalised pedestrian crossings are provided at the following locations:

- Harbour Road / Kingsford Smith Drive intersection (southern and eastern legs)
- Nudgee Road / Kingsford Smith Drive / Remora Road intersection (northern, eastern and southern legs).

3. Development Proposal

3.1 Land Uses

In line with the intent of the NHILUP, the development proposes to include office, residential, retail showroom and café / restaurant uses. The development uses and areas are summarised in Table 3.1.

Table 3.1: Development Schedule [1]

Use	Description	Size / Number of
Residential	Studio Apartment	34 Apartments
	1 Bedroom Apartment	333 Apartments
	2 Bedroom Apartment	255 Apartments
	3 Bedroom Apartment	25 Apartments
	TOTAL	647 Apartments
Office	Typical	18,672sq.m GFA
	Strata	457sq.m GFA
Retail	Cafe / Restaurant	1,301sq.m GFA
	Shop	2,301sq.m GFA
	Gymnasium	332sq.m GFA
	Showroom	1,715sq.m GFA

[1] As provided by Leighton Properties on 19 November 2009, Cox Rayner on 23 November 2009 and further clarified via phone with Mr Shane Dyer of Cox Rayner Architects on 25 November 2009.

Plans detailing the proposed ground plan and basement levels are provided at Appendix B to this report.

3.2 Vehicle Access

The development proposes two access points, one to Harbour Road and a second to Hercules Street from here on referred to as the western access point and eastern access point, respectively.

The eastern site access point is located some 40m from the proposed intersection of Hercules Street with the new link road. It will form a priority controlled intersection with Hercules Street and include a right turn lane of some 15m in length.

The western access point is located some 60m to the south of the Harbour Road / Kingsford Smith Drive intersection, opposite an existing private access. This access point will operate as a two-way road, with full turning movements, controlled by a roundabout style treatment.

3.3 Car Parking

A total of 924 car parking spaces are proposed for the development. This includes 71 spaces at the ground level, 227 spaces at the first level basement and 197 spaces at the second basement and 211 and 218 at the third and fourth basement levels respectively.

Of note, the car parking provision includes 31 small car spaces and 204 tandem car spaces (102 tandem pairs).

Further details regarding the suitability of parking provision and its suitability are provided at Section 4 of this report.

3.4 Bicycle Facilities

Bicycle facilities are incorporated in the proposed development, with the following provisions:

- 310 bicycle spaces for residents
- 60 secure bicycle parking spaces, 64 lockers and six showers at B2 for employee use
- Bike rails for 35 bikes for visitors and customers at ground level.

Further details on bicycle end-of-trip facilities are provided at Section 5 of this report.

3.5 Pedestrian Facilities

Pedestrian connections for the site are proposed to Kingsford Smith Drive, Harbour Road and Hercules Street. In addition, pedestrian connections are facilitated within the site adjacent to buildings and dedicated crossing points are proposed within the at-grade car park.

Further details on the suitability of pedestrian provisions is provided at Section 5 of this report.

3.6 Loading Areas

A loading area with loading docks for a total of three vehicles is provided at ground level. The loading docks are accessible by vehicles up to and including 12.5m long large rigid vehicles.

In addition, two van spaces are proposed within the loading area for use by delivery vehicles.

Further details on the loading provision are provided at Section 6 of this report.

4. Car Parking

4.1 Preamble

According to the vision set for the Northshore Hamilton UDA, development in this area is intended to be based on transit oriented development (TOD) principles. Essentially a TOD is an environmentally responsive approach to development that seeks to create mixed-use, higher density communities in close proximity to public transportation in order to reduce dependency on private vehicle travel. To help facilitate its aim of reduced car travel, two of the key features of a TOD include reduced parking provision and encouragement of alternative transport modes (i.e. other than private car).

In addition to the TOD principles, the restricted capacity of Kingsford Smith Drive contributes to a need to minimise any increase in car travel resulting from the development of the Northshore Hamilton UDA.

4.2 Requirement

The *Northshore Hamilton Urban Development Area Development Scheme*, dated July 2009 at Table 1 includes car parking rates to be provided for new developments.

This document includes 'Interim Period' and 'Long Term' car parking rates (i.e. those that could be provided prior to the provision of the first fixed public transport service and those that should be provided once fixed public transport comes on-line). Table 4.1, below summarised the provision for car parking in the interim and long term.

Table 4.1: Car Parking Requirements

Land Use	Interim Rate	Long Term Rate
Residential	1.5 spaces per dwelling unit	1 space per dwelling unit
Commercial	1 space per 50sq.m GFA	1 space per 100sq.m GFA
Retail	1 space per 30sq.m GFA	1 space per 100sq.m GFA

Application of these rates to the proposed development results in the following requirements:

- interim car parking: 971 resident, 383 commercial and 189 retail spaces, or a **total of 1,543 spaces**
- long term car parking: 647 resident, 192 commercial and 57 retail spaces, or a **total of 896 spaces**.

It is understood that the Interim Period car parking rates listed in the *Northshore Hamilton Urban Development Area Development Scheme* are for the benefit of developers who are unwilling to construct developments with 'Long Term' car parking rates whilst travel behaviour changes are still being realised. The provision of car parking at or near the 'Long Term' rates for this development from the outset goes hand-in-hand with the intent to set the correct travel behaviour from day one of the development's operation.

4.3 Appropriateness of Car Parking Provision

The development includes the provision of 924 car parking spaces. This provision is less than the Interim requirement, in aiming to reduce car dependency from the day of opening, however is higher than the Long Term requirements, as fixed public transport capabilities are not yet provided.

On this basis, the proposed car parking provision is appropriate.

4.4 Measures to Support Car Parking Limitation Policy

4.4.1 Green Travel Plans

A Green Travel Plan should be a requirement of every business taking occupancy within the development. Such a travel plan should seek to encourage alternate forms of transport to the private car including public transport, car pooling, walk and cycle trips. The plan should detail and promote to employees the available public transport facilities in close proximity of the site.

Consideration could also be given by employers to subsidising, to some degree, public transport trips by employees to encourage a travel mode shift from the private car.

4.4.2 Signage of Public Transport

Wayfinding signage within the proposed development should be provided to highlight the location of nearby public transport facilities. Signage would promote the proximity, regularity and ease of accessibility of public transport and include timetable information and directions to pedestrian routes which lead to public transport facilities.

This signage could be provided on key internal paths and also within foyers of the residential buildings.

4.4.3 Car Sharing Clubs

Car sharing clubs have recently been developed to provide accessibility to a motor car for those who occasionally need to use a vehicle, but do not need a car all the time or cannot afford to own / maintain one.

Car sharing clubs should be encouraged within this development to reduce reliance on motor vehicles and encourage alternate transport methods where appropriate, while also facilitating motor car use when essential.

As one method to support reduced car ownership, a car share scheme could be operated from the site. As such, a number of readily accessible car parking bays could be allocated for this purpose (i.e. two to three bays).

4.4.4 Shuttle Bus

Provision within the site has been made which would allow a shuttle bus to be provided between the site and nearby railway stations. This would be relevant until such time that public transport facilities are provided to Hamilton Northshore.

4.4.5 Pedestrian and Cyclist Facilities

In addition to the above, appropriate and attractive pedestrian and cyclist facilities should be provided. The appropriateness of the currently proposed facilities is discussed in more detail in Section 5 of this report.

4.5 Car Parking Management

4.5.1 External to Site

If the intended reduced car parking demands are not realised, there are a number of additional (reactive) management tools which may need to progress. By way of example, it could be possible for Council to restrict the on-street car parking supply within adjacent residential areas by creating residential permit parking zones, or time-restricting supply such that it is not attractive to users of the development (noting that users of this development should not be capable of qualifying for a parking permit)⁴.

In addition, the possibility exists for the ULDA to secure a central site within the Northshore Hamilton area, which is provided as a public off-street car parking station until such time that future public transport facilities are provided.

4.5.2 Internal to Site

The on-site car parking is to be, for the most part, allocated to specific users. To ensure that the available car parking is appropriately utilised, the following management techniques are recommended:

- To ensure that the ground level car parking is available for visitors to the development, restriction of ground level car parking to 2 hour parking, with the exception of six bays which are to be restricted to 15 minute parking.
- Reservation of Basement 1, 3 and 4 level for residents only.
- Reservation of Basement 2 level for the employee and commercially operated car parking.

As the nominated section of the Basement 2 car parking will be shared between public and employees, an appropriate pricing strategy will be implemented to significantly deter public vehicles from leaving vehicles on-site overnight. The ability to park on-site after typical business hours provides additional parking for retail and restaurant / café uses on the site, as well as residential visitors.

The above management of car parking is considered appropriate.

4.6 Car Parking Layout

The proposed parking layout has been checked against Australian Standard / New Zealand Standard for Off-Street Car Parking (AS / NZS2890.1-2004) and a summary of that review is provided below. This assessment includes a review of the following:

- space dimensions and aisle widths
- dead end aisles
- adjacent structures
- access and crossover widths
- parking for persons with a disability
- use of tandem parking
- ramp grades and transitions
- height clearances
- curved roadway ramp.

The review indicates that, subject to adoption of recommendations contained below and at Appendix C, the car park is expected to operate satisfactorily.

⁴ The political viability of such a scheme has not been tested with Council and could be resisted.

4.6.1 Car Parking Dimensions

The car parking dimensions at the ground level, for 90 degree parking bays are typically 2.6m wide by 5.4m long with an aisle width of 7.5m. This meets the requirement of AS / NZS 2890.1–2004 for high turnover parking. A number of recommendations are provided at Appendix C to ensure appropriate car parking dimensions are provided.

A number of parallel parking bays are located in the at-grade and basement level car parks. These bays are 2.4m wide by 6.0m long in the 'at-grade' car park and 2.1m wide by 6.6m long on basement levels. Given the access aisles are 7.5m (two-way) in the 'at-grade' car park and 6.2m in basement levels, these spaces meet AS / NZS 2890.1–2004 with regard to width and length.

Typical car parking dimensions on basement levels are 2.5m wide, 5.4m long with 6.2m aisles. This meets the requirements of AS / NZS 2890.1–2004 for medium-term parking. This is appropriate for employee, resident and commercially operated car parking. Some car parking bays on the basement levels are 2.4m wide, which meets the requirement of AS / NZS 2890.1–2004 for resident and employee (low turnover) parking. Minor recommendations are contained at Appendix C to ensure minimum parking dimensions are met.

Within Level B2 it is understood that this car parking may be commercially operated outside business hours. In this regard, AS / NZS 2890.1–2004 requires car parking bays to be 2.5m wide and 5.4m long, with a 5.8m aisle for medium-term parking. Typical parking bays at Level B2 meet this requirement noting that a number of car parking bays, due to door opening clearance requirements, are a minimum of 2.4m wide (plus 0.3m clearance), with a 6.2m aisle. In these few instances the reduced base bay width is considered acceptable as they meet the requirement for long-term parking, the bays are indeed 2.7m wide including their clearances and the increased aisle width assists with ease of accessibility of the car parking bays.

In relation to bay length, on all basement parking levels along the southern wall, columns encroach on the length of a number of tandem parking pairs. These columns reduce the overall length of the car parking pairs to a minimum of 10.5m. In this regard, the following are noted:

- The aisle widths at these locations are 0.4m wider than the requirement, which could accommodate an overhang of up to 0.3m (on the basis of the shortfall of the overall parking length requirement).
- The 85th percentile vehicle is 4.91m long, therefore, allowing an additional 0.3m clearance length for each car the anticipated length of parking is 10.42m.

On this basis, the reduced car parking length of tandem bays is acceptable.

In addition, AS / NZS 2890.1–2004 nominates minimum dimensions for small car bays of 2.3m wide and 5.0m long. These dimensions can be met for small car bays within the proposed development.

4.6.2 Dead End Aisles

There are a number of locations within the basement car parking levels where blind (or dead end) aisles are more than six bays in length. In this regard, it is noted that car parking within these levels will be allocated to particular users, as such, their use is considered appropriate. All blind aisles include the required 1.0m aisle extensions.

4.6.3 Adjacent Structures

The proposed development has been reviewed in terms of the requirements of AS / NZS2890.1-2004 with regard to structures adjacent to car bays (including walls and columns). This Standard requires that where a space is impacted by an obstruction adjacent to the space within the door opening clearance, the space is to be widened as follows:

- Where obstructed on one side, the space needs to be widened by 300mm (to minimum 2.7m for a typical low turnover car bay, or 2.6m for a small car bay).
- Where obstructed on both sides, the space needs to be widened by 600mm (to minimum 3.0m for a typical low turnover car bay, or 2.9m for a small car bay).

A number of spaces are affected, with the majority widened appropriately. Notwithstanding, a number of recommendations are contained at Appendix C to ensure all car parking bays have the required clearances.

4.6.4 Motorcycle / Motor Scooter Parking

Brisbane City Council's TAPS Code requires 2% of the total parking provision of car parking to be provided as motorcycle / motor scooter parking. This standard provides a useful guide for this development.

There are several locations within Basement levels where motorcycle parking could be accommodated. Noting that motorcycles can also use typical car parking bays, this is considered appropriate.

4.6.5 Parking for Persons with a Disability

Three disabled car parking bays have been provided at the Ground and two at basement Level B2, these bays have a maximum gradient of 1:40. The provision equates to 4% of the total supply at the Ground Level and 1% of the supply within basement Level B2.

It is recommended that a further six spaces be allocated on the basement levels for persons with a disability, this would equate to 1% of the total basement parking supply.

Subject to the adoption of the above recommendations, it would be GTA Consultants' opinion that this is an appropriate provision for residents and the commercial users, noting that the disabled car parking can be allocated / titled where there is a need for such parking.

4.6.6 Use of Tandem Parking

The proposed car parking arrangement includes:

- twenty-six (26) tandem pairs at Basement 1 (52 tandem spaces)
- twenty-four (24) tandem pairs at Basement 2 (48 tandem spaces)
- twenty-four (24) tandem pairs at Basement 3 (48 tandem spaces)
- twenty-eight (28) tandem pairs at Basement 4 (56 tandem spaces).

Whilst the use of tandem parking is appropriate for residents and employees, it is noted that both of the tandem spaces in a pair need to be assigned to the same unit / tenancy. This means that a number of residential dwellings will be assigned two car parking spaces.

When Level B2 is being operated commercially, only the spaces which are not capable of being parking in of each tandem pair will be utilised.