# Gateway Upgrade Project

# Land Use Section Supporting Information

# **Brisbane City Plan 2000 -The Strategic Plan Maps**

eway upgrade l

# Gateway Upgrade Project a de Project ...



Queensland Connell Wagner Connell Wagner

### FIGURE D1 City Strategic Plan City Structure

# Gateway Upgrade Project a de Project ...





FIGURE D2 The Strategic Plan Green Space System Values

# Gateway Upgrade Project



**Connell Wagner** 

Queensland Government

The Strategic Plan Green Space System Gateway Upgrade Project 200 Project



Connell Wagner

FIGURE D4 The Strategic Plan Movement System

# Compliance with Relevant State, Regional and Local Policies

angu l

### Appendix D2 GUP Project Compliance with State, Regional and Local Policies

### 1. State Planning Policies

A State Planning Policy (SPP) is a statutory instrument developed by the State Government under the IPA on matters of state interest. SPPs apply when development is assessed, land is designated for community infrastructure and when new planning schemes are made or amended under the IPA. Unless otherwise stated within the policy, each SPP has effect throughout the State. An assessment of the compliance of the proposed project with all applicable SPPs has been undertaken, as if the proposed project were assessable development.

There are currently five SPPs that apply:

- Development in the Vicinity of Certain Airports and Aviation Facilities State Planning Policy (SPP) 1/02;
- Planning and Managing Development Involving Acid Sulfate Soils SPP 2/02;
- Mitigating the Adverse Impacts of Flood, Bushfire and Landslide 1/03;
- Conservation of Koalas in the Koala Coast SPP 1/97; and
- Development and the Conservation of Good Quality Agricultural Land SPP 1/92.

## 1.1 Development in the Vicinity of Certain Airports and Aviation Facilities — State Planning Policy 3/02

### 1.1.1 Overview

This SPP aims to protect certain airports and aviation facilities whose efficient operation is an essential element of Queensland's transport infrastructure network or Australia's national defence system. In order to achieve this aim, the SPP and the accompanying guidelines determine the necessary land use and development controls for various areas around certain airports and aviation facilities. The SPP does not apply throughout the state, only for land that is around certain specific airports and aviation facilities. One of these airports is Brisbane Airport, which also has many associated aviation facilities.

### 1.1.2 Relevance to GUP

There are several trigger mechanisms for applying the SPP's requirements to development, which the SPP Guidelines detail, these include development that is:

- beneath, or in the vicinity of, the airports' operational airspace;
- *in the vicinity of the aviation facilities;*
- within areas defined by the 20 Australian Noise Exposure Forecast (ANEF) contour at and around each airport; and
- the public safety areas identified in Annex 3.'

The requirements of this SPP apply to the proposed project, as not only is a significant part of the project corridor beneath, or in the vicinity the operational airspace for Brisbane Airport, but the corridor crosses over Brisbane Airport land, as well as land directly adjacent. In addition, the SPP Guideline also states that:

'As a general guide, buildings and structures exceeding 12m in height should be assessed for their potential impact on operational airspace.'

As the proposed new river crossing near the existing Gateway Motorway Bridge, will exceed 12m in height, it will need to be assessed for its potential impact on operational airspace. The SPP Guideline also advises that under the Civil Aviation Safety Authority (CASA) regulation *CAAP 89W-2(0): Reporting Tall Structures*, "...persons involved in the planning, construction or provision of tall structures..." are to notify the Royal Australian Air Force (RAAF) of any structures higher than 30m that are within 30km of an airport.

The SPP Guideline states that development in the vicinity of certain airports and aviation facilities that is compatible includes:

• 'Roads/railways, although specific frequent, high occupancy links (such as multi-lane high use arterial roads or railway stations) should be risk assessed.'

The main issues associated with the proposed project that would need to be risk assessed using the SPP are:

- the height of the proposed new bridge;
- the height of any machinery used in the construction of the proposed project;
- lighting associated with the proposed new bridge and deviation; and
- air particulate emissions during construction of the proposed project.

The SPP Guidelines states that there is certain information that is necessary in order to properly assess development applications against the SPP outcomes. The Table below shows which information that is generally required, is applicable to the proposed project.

Issue	Sub-Issue	Applicable
Is the development is likely to penetrate operational airspace ?	Due to the height of any physical structures.	Yes
	Due to the emission of plumes or airborne particulates.	Yes
	Due to aviation activities such as parachuting or hot air ballooning?	No
	Due to a propensity to attract wildlife, particularly birds and bats, into operational airspace?	No
	Due to significant external lighting, including street lighting?	Yes
Whether the development is likely to impair the functioning of aviation facilities by resulting in the following penetrating a facility's sensitive area.	Due to physical structures.	Yes
	Due to reflective surfaces on structures.	Yes
	Due to significant electro-magnetic transmissions such as those associated with arc welding.	Yes
The location of the site relative to ANEF contours.		No
Whether the development is within a public safety area.		No
Any strategies intended to manage any potential adverse effects of the development proposal on operational airspace, or the functioning of aviation facilities.		Yes

### 1.1.3 GUP Compliance

### **Operational Airspace – Physical Structures**

The SPP is concerned with protecting Operational Airspace particularly any permanent physical obstruction (natural or man-made) of operational airspace. The SPP Guideline states that:

'When considering height restrictions for buildings or structures, the boundaries of operational airspace in relation to local topography need to be taken into account.'

'However, depending on local topography, the further the distance from the runway(s), the higher any structure can be without impinging on operational airspace because the height of operational airspace above level ground increases with increased distance from the airport runways. The appropriate height restrictions need to be determined following advice from the airport operator.

The SPP is also concerned with a 'temporary physical obstruction (natural or man-made) of operational airspace' The SPP Guideline states that:

'Consideration should also be given to any ancillary objects (e.g. antennae or satellite dishes) on buildings **and any cranes** that are likely to be used during construction, for which CASA may consider imposing short-term restrictions on aircraft operations.'

When assessing whether tall buildings and structures within the operational space of an airport pose a hazard to airport operations, the SPP allows for 'blanket shielding' to be taken into account. This is where the impacts of a proposed new development would be shielded by existing structures. The SPP Guideline states that

'This shielding enables those development that would otherwise impact on operational airspace to be considered as consistent with the SPP.'

In this case the existing Gateway Bridge would provide 'blanket shielding' of the proposed new river crossing, ensuring that during the operational phase of GUP, the project will comply with the requirements of this SPP. The Construction EMP will contain all necessary mitigation measures relating to construction machinery (eg cranes) penetrating the OLS and reflective surfaces on structures.

### **Operational Airspace – Lighting**

The SPP is also concerned with '*lighting that could distract or confuse pilots*' The SPP Guideline states that:

'Development would have adverse effects on operational airspace where that development is within 6km of the airport runway and has lighting with the potential to:

- Confuse pilots because of similarities with approach or runway lighting; or
- Distract or interfere with a pilot's visibility through brightness or glare while in control of approaching or departing aircraft.

Configurations of lights in straight parallel lines 500m to 1000m long, particularly in the vicinity of large unlit areas, can replicate the appearance of airport runways at night. Such lighting configurations could be associated with roads, large parking/storage handling areas, container parks, wharves and sporting fields. Glare or flashes from sporting stadia, flare plumes, refineries, upward shining lights, flashing or sodium (yellow) lighting can distract pilots at critical moments.

Therefore, development involving significant external lighting, flare plumes and other such bright light sources within 6k of an airport needs to be designed so that the lighting does not increase the risk of an aircraft incident. CASA guidelines: Lighting in the vicinity of aerodromes: Advice to lighting designers provides advice on how to meet aviation safety requirements.'

The proposed new road bridge and deviation will be within 6km of the Brisbane Airport, from the point where the project corridor crosses the Brisbane River. This is shown on *Figure 14.3 Restricted Light Zones – Ultimate Development of the Brisbane Airport 2003 Master Plan – Draft for Public Comment.* This part of the master plan has specific requirements for the maximum intensity of light sources (measured at 3° above the horizontal). Much of the project corridor for the two sections from the Cleveland Branch Railway Line to Nudgee Road lies within Zone D of either the existing main runway strip or the proposed western parallel runway strip. In Zone D, the limit is 450 CD maximum intensity of zero candella above the horizontal. Lighting associated with the proposed project must be below this maximum intensity, so as not to 'distract or interfere with a pilot's visibility through brightness or glare while in control of approaching or departing aircraft.'

As lighting must also not confuse pilots because of similarities with approach or runway lighting, so lighting for the two sections of the project corridor between the Cleveland Branch Railway Line and Nudgee Road, will need to be designed in accordance with the appropriate CASA guidelines. These guidelines are *Lighting in the Vicinity of Aerodromes: Advice to Lighting Designers On How To Meet Aviation Safety Requirements.* 

### **Operational Airspace - Airborne Particulates**

The SPP is also concerned with the 'emission of airborne particulates that may impair the visual conditions in the vicinity of an airport.' The SPP Guideline states that:

'Development with the potential to produce sources of steam, dust, smoke, ash and other airborne particles or pollutants into operational airspace may affect visibility and so require a change from visual to instrument flight rules. A change of flight rules caused by such intrusions can reduce the handling capacity of the airspace by as much as 50 percent. Such development would therefore be incompatible with operational safety and efficiency.'

'For example, extractive industries causing significant increases in airborne particulates may affect aircraft safety by reducing pilot or air traffic control visibility, or by impacting on engine operation. The assessment of such development on land beneath operational airspace should include the potential impacts on aircraft operations.'

There is potential for the emission of airborne particulates, during construction of the project, if the appropriate prevention/mitigation measures are not undertaken. The Construction EMP will need to contain all necessary mitigation measures relating to prevention of air particulate emission such as dust penetrating the OLS.

### Aviation Facilities – Electro-Magnetic Transmissions

There is potential for the emission of electro-magnetic transmissions, during construction of the project, if the appropriate prevention/mitigation measures are not undertaken. The Construction EMP will contain all necessary mitigation measures relating to prevention of air electro-magnetic transmissions impairing aviation facilities supporting the operations of Brisbane Airport.

### Conclusion

In conclusion, the GUP will comply with the requirements of this state planning policy, particularly the key requirements of the height of the proposed Gateway Bridge, construction and operational lighting, and air particle emissions from construction activities. The Construction EMP and MDP will contain all necessary mitigation measures relating to construction lighting, air particulate emission and construction machinery (eg. cranes) penetrating the OLS. The proposed new Gateway Bridge will penetrate the OLS of Brisbane Airport, but as the new bridge will be of similar height and design to the existing bridge, the new structure will have no additional impact (during the operational phase) on the OLS due to blanket shielding of the new bridge by the existing bridge. Operational lighting for the proposed new Gateway Bridge will be designed in accordance with CASA guidelines.

### 1.2 Planning and Managing Development Involving Acid Sulfate Soils — SPP 2/02

### 1.2.1 Overview

'This State Planning Policy (SPP) sets out the State's interests concerning development involving acid sulfate soils in low-lying areas'.

The SPP states that:

**'General**: Under the Integrated Planning Act 1997 (IPA), the SPP has effect when certain development applications area assessed, when planning schemes are made or amended, and when land is designated for community infrastructure.

**Area to Which the Policy Applies**: Within the local government areas listed in Annex 1, the SPP applies to all land, soil and sediment at or below 5 metres Australian Height Datum (AHD) where the natural ground level is less than 20 metres AHD.

**Development to Which the Policy Applies**: Within the area described in 2.2 above, the SPP applies to development involving any of the following activities:

- Excavating or otherwise removing 100m<sup>3</sup> or more of soil or sediment; or
- Filling of land involving 500m<sup>3</sup> or more of material with an average depth of 0.5 of a metres or greater.'

### 1.2.2 Relevance to GUP

The requirements of this SPP apply to the proposed project, as not only is a significant part of the project corridor at or below 5 metres AHD, it also involves excavating in excess of 100m<sup>3</sup> of soil or sediment, and filling of land involving 500m<sup>3</sup> or more of material at an average depth of 0.5m. The majority of the project corridor north of Old Cleveland Road is at or below 5 metres AHD.

Also, as the proposed project will involve significant excavation and filling, requiring a high level of treatment, an Environmental Management Plan will need to be prepared, in accordance with the SPP standards.

### Assessment of Impacts

The SPP outcome for development states:

'When undertaking development to which this SPP applies, the release of acid and associated metal contaminants in the environment is avoided by:

- not disturbing acid sulfate soils when excavating or otherwise removing soil or sediments, extracting groundwater or filling land; or
- treating and, if required, undertaking ongoing management of any disturbed acid sulfate soils and drainage waters.'

### 1.2.3 GUP Compliance

The GUP will comply with the requirements of this state planning policy, where possible the proposed project will avoid areas with the project corridor where PASS occur, as the preferred option. Where this is not practical, treatment and ongoing management will occur. Prior to construction, investigations will be undertaken to quantify the presence/absence of ASS affected material underlying the project corridor, in order to determine the appropriate mitigation measures. Section 10 of the EIS further discusses ASS issues associated with the project.

### 1.3 Mitigating the Adverse Impacts of Flood, Bushfire and Landslide – 1/03

### 1.3.1 Overview

'This State Planning Policy (SPP) sets out the State's interest in ensuring that the natural hazards of flood, bushfire, and landslide are adequately considered when making decisions about development.'

The SPP states that:

'Under the Integrated Planning Act 1997 (IPA), the SPP has effect when certain development applications area assessed, when planning schemes are made or amended, and when land is designated for community infrastructure.

Area to which the Policy Applies: The SPP applies throughout the state for flooding, and for bushfire and landslide it applies to certain specific local government areas, including Brisbane City Council.

### 1.3.2 Relevance of GUP

The SPP applies to certain developments in natural hazard area, and also to various types of community infrastructure including State-controlled roads.

The SPP states:

'Wherever practicable, community infrastructure to which this SPP applies is located and designed to function effectively during and immediately after natural hazard events commensurate with a specified level of risk.'

The SPP requires new community infrastructure to be designed to be capable of carrying out its role in natural disaster events, where this can be achieved. However, the SPP notes that it is unrealistic to expect community infrastructure to be located and designed in such a manner as to be able to withstand any natural hazard event.

As Cityplan does not contain any mapping showing defined natural hazard management areas, the default mapping produced by the Rural Fire Service for bushfire and landslip applies.

The threshold for determining a landslip natural hazard management area is land with a slope of greater than 15%. The default mapping for landslip shows almost no land within or adjacent to the project corridor that has a slope greater than 3%. The only exception is between Mt Gravatt-Capalaba Road and Old Cleveland Road where there is land on both sides of the project corridor that has a slope between 3% and 10%. So in regard to landslip hazards the SPP does not apply.

The threshold for determining a bushfire natural hazard management area is land which has a High or Medium risk of Bushfire Hazard, as shown on the Bushfire Risk Analysis mapping. This mapping shows no land within or adjacent to the project corridor that has a high bushfire hazard. There is however significant land between Mt Gravatt Capalaba Road and Old Cleveland Road where there is land on both sides of the project corridor which has a medium bushfire hazard. So in regard to bushfire hazards the SPP does apply.

With flood mapping not included in City Plan, technically the SPP does not apply in regards to flooding.

### 1.3.3 GUP Compliance

The GUP will comply with the requirements of this state planning policy, particularly as the project corridor does not traverse land in either a landslip or flooding natural hazard management area. The GUP will traverse areas within a Medium bushfire hazard management area, particularly within the southern section of the corridor, where the Koala Coast area is adjacent. In this section there is good access to the road batters on both sides of the Motorway for fire fighting vehicles and good access to the contiguous bushland on the eastern side of the Motorway from Mt Petrie Road. This road also provides a firebreak between the Motorway and the bulk of the Koala Coast bushland. Providing that the appropriate mitigation measures to minimise bushfire risk are implemented, the GUP in both the construction and operational phases of the project will comply with this SPP.

### 1.4 Conservation of Koalas in the Koala Coast — SPP 1/97

### 1.4.1 Overview

The State Planning Policy for the Conservation of Koalas in the Koala Coast "addresses planning issues concerning the conservation of koalas (Phascolarctos cinereus) and their habitat in the Koala Coast" area, SEQ.

The Koala Conservation Area has the following characteristics:

Within the Koala Conservation Area, a significant planning objective should be to conserve koalas and their habitat in ways that do not affect existing uses and development rights or remove development commitments. The boundary of the Koala Conservation Area is determined by this Policy.

The Koala Conservation Area designation comprises a large, integrated and relatively undisturbed area of koala habitat. While koalas are found throughout this area, individual animals generally use large established home ranges. A conservation area is needed to allow koalas to move and disperse for breeding, social behaviour and feeding purposes. Such movements enable koala sub-populations to interact, which is necessary to maintain genetic diversity and the population's long-term sustainability.

The koala Conservation Area generally comprises areas of intact or partly cleared bushland with intrinsic koala habitat values, together with some areas cleared of habitat. Although the quality of koala habitat varies, the overall area provides a highly favourable habitat for koalas.

Some existing urban development and areas designated for future urban development are included in the Koala Conservation Area, but only where considered necessary to achieve a cohesive area.'

### 1.4.2 Relevance to GUP

Appendix 1: Policy Map of the SPP, defines the extent of the Koala Coast area, to which the policy applies. The southern section of the project corridor from Mt Gravatt-Capalaba Road to the southern side of the Cleveland Branch Rail Line, is the only section within Koala Coast Area.

The area directly adjacent to the eastern side of the existing Gateway Motorway from the start of the southern section of the project corridor at Mt Gravatt-Capalaba Road to Belmont Road, is within the *"Koala Conservation Area"* of the Koala Coast Area. This area comprises the suburbs of Mackenzie, Belmont and Gumdale.

Mackenzie is a residential suburb with substantial areas of undeveloped rural, emerging community and low density residential land. Belmont consists of conservation areas and also sport and recreation facilities associated with shooting and archery. Gumdale is predominantly a rural residential area, zoned "environmental protection" to reflect its inclusion within the Koala Coast precinct.

### 1.4.3 GUP Compliance

The GUP project will comply with the requirements of this SPP. For the part of the southern section between Mt Gravatt-Capalaba Road and Belmont Road, where the Koala Coast area is adjacent, the existing Gateway Motorway is to be widened to six lanes. This widening is to occur predominantly within the existing road reserve, between the existing southbound and northbound carriageways. There will be no widening outside of the existing carriageways, apart from a small section of corridor between Mt Gravatt-Capalaba Road and Wecker Road, on the eastern side of the existing Gateway Motorway. Outside of this area there will be no direct property impacts on koala habitat that is part of the Koala Coast area. For the Koala Coast area between Mt Gravatt Capalaba Road and Wecker Road, the vegetation is predominantly not environmentally significant, as it is separated from adjacent koala habitat by Mt Petrie Road. In order to mitigate against further impacts, the appropriate mitigation measures will be undertaken in the construction phase to mitigate against edge effects. For further information see the Section 16 (Terrestrial Ecology) of the EIS.

### 1.5 Development and the Conservation of Good Quality Agricultural Land — SPP 1/92

### 1.5.1 Overview

The State Planning Policy for the Development and the Conservation of Agricultural Land "addresses the conservation of good quality agricultural land and provides guidance to local authorities on how this issue should be addressed when carrying out their range of planning duties."

Good Quality Agricultural Land (GQAL) is very important, and the SPP states that this land is a valuable resource and must where possible be protected from incompatible development. However, when considering development on GQAL, the Assessment Manager should consider whether there is an overriding need in terms of benefit to the community that can be demonstrated.

### 1.5.2 Relevance to GUP

Only the southern section of the project corridor has any rural land either within the corridor or directly adjacent. At the start of the southern section, there are several rural residential properties on both sides of the existing Gateway Motorway in the suburbs of Wishart and Mackenzie, between Mt Gravatt-Capalaba Road and Wecker Road that are predominantly areas classified as rural uses under *Brisbane City Plan 2000*. None of these rural holdings are GQAL, and in any case, there will only be one lot zoned as a Rural Area that will be significantly affected by the widening outside of the existing carriageways.

### 1.5.3 GUP Compliance

The GUP will comply with this SPP. At the northern end of the southern section, there are several rural properties on both sides of the existing Gateway Motorway in the suburb of Murarrie, between Wynnum Road and the Cleveland Branch Rail Line that are predominantly classified as rural use areas under *Brisbane City Plan 2000*. None of these rural holdings are GQAL, and not used for agriculture, however there are some grazing uses associated with the Brisbane Polo Grounds. There is no land required for widening among these rural lots. There are no other rural land use areas within the GUP corridor.

### 2. Land Use and Transport Policies

Key state and regional land use and transport planning guidelines applicable to the Gateway Upgrade Project include:

- The Regional Framework for Growth Management 2000;
- The Integrated Transport Planning Framework 2003;
- The Integrated Regional Transport Plan for South East Queensland 1997;
- The Transport 2007 An Action Plan for South East Queensland 2001;
- Cycle South East 1999; and
- Integrated Regional Cycle Network Plan for South-East Queensland 2003.

### 2.1 Regional Framework for Growth Management 2000

### 2.1.1 Overview

The Regional Framework for Growth Management 2000 is the primary regional planning strategy used for managing growth in South East Queensland amidst a climate of rapid regional development. It is a broad strategy with a vision that includes the:

'Movement of people and freight within and between major centres will be by flexible and efficient public transport and rapid transit systems which will increase energy efficiency in metropolitanwide travel patterns.'

### 2.1.2 Relevance to GUP

The transport policy section of the Regional Framework for Growth Management states that all transport proposals should be assessed against the following criteria (in addition to any other ecological or cost impacts):

'The public transport, freight and roads systems should be used to achieve:

- 1. The desired pattern of development for the year 2011;
- 2. Improved quality of life for all residents;
- 3. Improved levels of accessibility;
- 4. Environmental protection; and
- 5. Economic development." (RFGM, p84)

In terms of freight routes and industry, the RFGM promotes:

- 1. A continuous and integrated system of high capacity freight routes;
- 2. Separation of heavy freight traffic from urban areas;
- 3. Freight priority;
- 4. Protection of industrial uses from incompatible adjacent development
- 5. The maintenance and development of existing industrial areas.'

One of the main transport objectives of The Regional Framework for Growth Management, is the implementation of the Integrated Regional Transport Plan for South East Queensland and Transport 2007 Action Plan for South East Queensland.

### 2.1.3 GUP Compliance

The Regional Framework for Growth Management provides the fundamental land use objectives for guiding growth in the SEQ region, and it is these objectives that guide the overall goals and objectives of the GUP. The project aims to improve the safety and efficiency of a significant part of the regional transport system, in order to more effectively manage the extensive future growth anticipated in the area, particularly in relation to Brisbane Airport and the ATC area.

### 2.2 The Integrated Transport Planning Framework 2003

### 2.2.1 Overview

The Integrated Transport Planning Framework is a guide to applying an efficient integrated transport planning process that identifies both current and future access needs whether for people, places, goods or services.

### 2.2.2 Relevance to GUP

The Integrated Transport Planning Framework recommends the following seven step planning process when undertaking integrated transport planning. These planning steps are:

- 'initiate planning defines the purposes and scope of the planning exercise and determines how to manage it.
- Define current and desired future state defines the future characteristics and performance of the transport system and assesses it against current and forecast demands and planning scenarios;
- Identify and assess options identifies and evaluates potential options against assessment criteria to determine how effective they will be in achieving the desired outcomes;
- Develop strategy recommends an appropriate plan of action to implement the preferred option or package of measures
- Develop organisational delivery plan helps each organisation to assess its implementation responsibilities and incorporate relevant actions into business- and budget- planning processes;
- Implement ensures study recommendations are implemented, and assesses whether implementation is on track and actions are achieving what was expected

• Conduct post-implementation review – determines if the study recommendations have achieved what was expected after they have been operating over a period of time.'

The GUP is currently at Step 4 (Develop Strategy), where the aim is to recommend an appropriate plan of action to implement the preferred option or package of measures. This step of the transport planning framework lists a number of relevant desired outcomes in achieving the preferred option, including 'Environmental Responsibility', and 'Liveability, Connectivity and Amenity'.

### 2.2.3 GUP Compliance

The GUP complies with the *Integrated Transport Planning Framework*, particularly Step 4 of the planning step process, where the aim is to develop an effective strategy to solve a problem. It is the aim of this EIS, to recommend a plan of action for implementing a package of measures that will ensure that the GUP achieves the two Desired Outcomes of 'Environmental Responsibility', and 'Liveability, Connectivity and Amenity'. Achieving 'Liveability, Connectivity and Amenity' is the aim of the project, in trying to improve the regional and local transport efficiencies of the Gateway Motorway, so as to provide better connectivity for existing and future adjacent land uses, and regional cross movements. In achieving this goal, the aim of this EIS also achieves the other goal of 'Environmental Responsibility', in determining the potential impacts of the project, and providing the appropriate mitigation measures to ameliorate these potential impacts.

### 2.3 The Integrated Regional Transport Plan for South East Queensland 1997

### 2.3.1 Overview

Developed following extensive community consultation, the Integrated Regional Transport Plan for South East Queensland 1997 (IRTP) is a 25 year plan to develop and manage South East Queensland's transport system in a way that supports the agreed plans for accommodating the region's expected major population and employment growth. The IRTP aims for an approach that will balance the need for general motor traffic, non-motorised transport, public transport, freight and travel demand reductions in one integrated process.

### 2.3.2 Relevance to GUP

The IRTP identifies the predicted significant growth of the SEQ region which includes significant growth in both jobs and people for the Brisbane area and the need for enhanced transport infrastructure to service the needs of the community, both the Brisbane community, the SEQ community, and long haul traffic.

The ITRP highlights the importance of the Gateway Motorway as a central spine for the movement of regional traffic, and the need to maintain the motorway as a high standard urban bypass of Brisbane. It also indicates that an upgrade to the Gateway Motorway is a strategic transport opportunity that would play a key role to enhancing regional movement and economic development.

### 2.3.3 GUP Compliance

The proposed upgrading of the Gateway Motorway is consistent with agreed actions and strategic transport opportunities identified in the IRTP. The GUP is in response to a clear need identified in the IRTP to maintain our ability to move around the region, and to 'both to serve new urban development areas, and to accommodate demands on the existing road system'. More importantly, the GUP is the most appropriate solution to address this need. The IRTP states that 'additional lanes on the Gateway Motorway' is a necessary action in order to improve road freight efficiency and recommends the 'upgrading of the Gateway and Logan Motorways to maintain a high standard urban bypass of Brisbane'.

Another GUP action, the provision of pedestrian and cycling routes along much of the GUP corridor is an action recommended by the IRTP which requires that: 'safe walking and cycling paths and lanes are incorporated in the design of new roads and railways where appropriate'. This provision of infrastructure is in order to achieve the IRTP requirement to: 'Progressively plan and develop pedestrian and cycling networks including pathways, bicycle paths, bicycle lanes and sealed road shoulders to provide safe and direct access for non-motorised transport across communities.'

### 2.4 Transport 2007 – An Action Plan for South East Queensland

### 2.4.1 Overview

The IRTP aims to ensure a coordinated approach to meet the transport needs of this fast growing region, by providing an overall strategic framework for transport planning in the region.

### 2.4.2 Relevance to GUP

Since the IRTP release, SEQ has experienced change. Rapid population growth, changing work patterns and dispersed housing settlements mean that plans have to be regularly reviewed. Transport 2007 - An Action Plan for South East Queensland (Transport 2007), produced in 2001, compliments the IRTP as a medium term action plan for SEQ. It reassesses the challenges facing the region and provides clear direction for the future by identifying the transport priorities over the next 7 years.

Transport 2007 aims to create a transport system that facilitates efficient and cost effective passenger and freight movement and enhances economic development, environmental sustainability, safety and quality of life in SEQ.

The desired outcomes of Transport 2007 are:

- 1. "Ensuring social justice by providing a safe and equitable system for all;
- 2. Providing an ecologically sustainable transport system;
- 3. Making better use of our existing system through travel demand management;
- 4. Creating transport-friendly communities through better land use planning;
- 5. Developing a high quality, integrated public transport system;
- 6. Providing improved facilities for cyclists and pedestrians;
- 7. Developing a road network that links people, goods and services;
- 8. Ensuring the efficient movement of freight."

### 2.4.3 GUP Compliance

The GUP complies with the provisions of Transport 2007, which identifies that Gateway Motorway as a major road-based freight corridor, that presently in the vicinity of Brisbane Airport and the toll gates is already experiencing significant traffic congestion in peak periods. To alleviate this and future congestion, it states the need to widen sections of the existing Gateway Motorway to six lanes, to ensure that freight movements within the Brisbane region and between Brisbane and other regions is improved. In addition to the widening, it recommends that "planning is needed for a possible second river crossing near the Gateway Bridge to support regional travel and freight movement along the corridor".

Transport 2007 also supports ensuring effective road access to important economic nodes such as the Port of Brisbane and Brisbane Airport as a priority. The importance of the road network, has the potential to constrain economic development, in situations where freight is unable to access important economic nodes efficiently.

### 2.5 Cycle South-East

### 2.5.1 Overview

Cycle South East is an integrated cycle strategy for south east Queensland with several objectives including:

- To integrate cycling into the planning process (eg transport planning process;
- To provide safe cycling networks; and
- To increase awareness of cycling.

### 2.5.2 Relevance to GUP

One of the key aims of the key aims of the strategy is to:

'Progressively upgrade existing main roads, where practicable, to increase separation safety for all users, an in particular cyclists. A number of opportunities such as roads as roads accessing the Brisbane CBD and key regional centres... should be considered.'

### 2.5.3 GUP Compliance

The GUP EIS recommends providing for longer distance cycle trips by incorporating a dedicated shared pedestrian/ bikeway separated from the traffic lanes. This shared route will commence at Lytton Road, cross the proposed new bridge, then will grade separate from the proposed duplication, but continue to follow the duplication route from Lavarack Avenue up to Kingsford Smith Drive. For further information see the Section 6 (Pedestrians and Cyclists) of the EIS.

### 2.6 Draft Integrated Regional Cycle Network Plan for South East Queensland

### 2.6.1 Overview

This plan follows from the policy framework established by Cycle South East, setting down a physical framework for the consolidation of existing cycle networks. A key goal of this document is to integrate existing smaller cycle networks in order to provide the necessary infrastructure for long distance cycling trips.

### 2.6.2 Relevance to GUP

One of the key aims of the IRCNP is to support 'cycle trips, including longer-distance trips, in SEQ by identifying desired routes between key centres and other major cyclist attractions'.

### 2.6.3 GUP Compliance

If the bikeway is approved as part of the GUP, the project will comply with the *Draft Integrated Regional Cycle Network Plan for South-East Queensland*, by providing for longer distance cycle trips by incorporating a dedicated shared pedestrian/bikeway separated from the traffic lanes. This shared route will commence at Lytton Road, cross the proposed new bridge, then will grade separate from the proposed duplication, but continue to follow the duplication route from Lavarack Avenue up to Kingsford Smith Drive. For further information see the Section 6 (Pedestrians and Cyclists) of the EIS.

### 3. Gateway Ports/TradeCoast Area Planning Documents

- Land Use Strategy Port of Brisbane Corporation, November 2001;
- Development Guidelines Port of Brisbane Corporation, January 2002; and
- Brisbane Gateway Ports Area Strategy, March 1998.

### 3.1 Land Use Strategy and Development Guidelines - Port of Brisbane Corporation, November 2001

### 3.1.1 Overview

Under the *Transport Infrastructure Act 1994*, each Queensland port authority must prepare a land use plan for approval by the Minister responsible for administering the *Transport Infrastructure Act 1994*. These land use plans must specify details of both existing and proposed future Strategic Port Land, and the current and proposed uses for this land. The Port of Brisbane Corporation has an approved land use plan, known as the *Land Use Strategy*, November 2001.

The *Land Use Strategy* aims to guide the Port of Brisbane Corporation in its decision making on the future development of its strategic port land. It also aims to provide guidance on the Port of Brisbane Corporation's preferred development of key areas near or adjacent to strategic port land, so as to guide planning and development assessment of those areas by other agencies.

### 3.1.2 Relevance to GUP

The *Development Guidelines*, as a performance based code for assessing development on strategic port land that is subject to *the Land Use Strategy*. As the project corridor is not located within strategic port land, these guidelines are not applicable.

The *Land Use Strategy* divides the Port of Brisbane area into nine different precincts. One of these precincts, Queensport is both within and adjacent to the section of the proposed project between the Cleveland Branch Railway Line and the Pinkenba Branch Railway Line. The other two sections of the project corridor are not located within any precincts.

The Queensport precinct is located on the southern side of the Brisbane River, north of Lytton Road and stretches on both sides of the project corridor to Colmslie Road in the west and Gibson Island in the east. This section centres on strategic port land located around the existing bulk sugar terminal.

### 3.1.3 GUP Compliance

All strategic port land within the Queensport Precinct is located to the west of the existing Gateway Motorway. The land within the project corridor is designated as "Frame" land, being land that is considered necessary as "backup" land for port related activities that require a location close to port facilities.

While the Land Use Strategy, does not have statutory control over non-strategic port land, it states that:

"the Corporation may provide third-party comment on proposed development on non-strategic port land in the Strategy area that may impact on the Corporation's ability to meet its objectives."

The intent for the Queensport precinct, is to encourage the diversification of activities in the area, and encouraging expansion of development. The *Land Use Strategy* then states that expansion may require the consideration of alternative access arrangements, such as a connection to the east under the existing Gateway Bridge. This connection will not be possible, but not solely due to the GUP, with an industrial subdivision to the east of the motorway a further barrier to any such connection, as access to the subdivision does not provide for such a connection.

In conclusion, the GUP complies the Land Use Strategy where possible, with only minimal impact on minor strategy goals, but the strategy and accompanying development guidelines have no statutory control over the project, and so compliance is not mandatory.

### 3.2 Brisbane Gateway Ports Area Strategy, March 1998

### 3.2.1 Overview

The Brisbane Gateway Ports Area Strategy is a strategic planning document that aims to identify the best possible methods for promoting the optimal development of the Brisbane Gateway Ports Area. The document was produced by the then Department of Economic Development and Trade, with contributions by various important stakeholders such as BAC, Brisbane City Council, the Port of Brisbane Corporation and other state government departments.

### 3.2.2 Relevance to GUP

The document applies to both the northern and bridge sections of the project corridor, which are both within the area covered by the strategy. The document however only makes brief reference to issues associated with the project. The strategy states that:

'A well developed land transport network serves the BGPA but there are a number of fundamental constraints that can inhibit long-term development. A number of these are being addressed in current planning by various stakeholders:

the capacity of the Gateway Arterial ...'

### 3.2.3 GUP Compliance

As this project aims to address capacity issues associated with the Gateway Motorway, and aims to increase the efficiency of transport to and from the Gateway Ports Area, the project is consistent with the aims of the strategy.

### 4. Waterway Planning Documents

The following waterway planning documents are relevant to the GUP:

- The SEQ Regional Water Quality Management Strategy 2001;
- The Waterways Management Plan 1998;
- The Water Quality Management Strategy 1998;
- Moreton Bay Strategic Plan 1993; and
- DRAFT South East Queensland Regional Coastal Management Plan 2004.

### 4.1 The SEQ Regional Water Quality Management Strategy 2001

### 4.1.1 Overview

The SEQ Regional Water Quality Management Strategy 2001 is:

"the first integrated water quality planning document for south-east Queensland waterways and catchments. It provides the framework for future actions to protect our most vital resources."

"The Strategy is a joint Federal, State, Local Government, industry and community initiative covering the South East Queensland Region, including coastal waters, estuaries and freshwater streams from Noosa to the Gold Coast and west to the Great Dividing Range. Its aim is to provide a co-ordinated process for the development of management actions to deal with water quality (including habitat, wildlife and ecological health) impacts from activities and point and non-point pollution sources in the region."

### 4.1.2 Relevance to GUP

The region includes 15 major catchments. The GUP is located within the Lower Brisbane Catchment. Sub-catchments of the Lower Brisbane Catchment include:

### Brisbane River Estuary

Breakfast Creek Bulimba, Slacks and Scrubby Creek Cabbage Tree Creek Cubberla, Sandy, Toowong and Witton Creeks Jindalee and Mt Ommaney Creeks Kedron Brook and Boggy, Jubilee and Crab Creeks Moggill Creek Norman and Perrin Creeks Nundah and Nudgee Creeks Oxley Creek Pullen Pullen, Bellbowrie, Farm Kholo and Little Ugly Creeks Wolston and Woogaroo Creeks Six Mile, Goodna and Sandy Creeks

Those waterways highlighted cross the project corridor or feed directly into a waterway that does cross the project corridor.

### 4.1.3 GUP Compliance

This EIS addresses potential water quality impacts (refer Section 12). The EMP will contain appropriate mitigation measures to address, construction and operational water quality issues (refer Section 23).

### 4.2 The Waterways Management Plan 1998

### 4.2.1 Overview

The Management Plan recognises the extensive use of the Brisbane River and waterways of the Moreton Bay catchment; the need to protect a system which supports healthy populations of dugongs, turtles and commercial and recreational fishing grounds; and the pressure from a rapidly growing population.

This plan is a joint publication from the Brisbane River Management Group (BRMG) and the Brisbane River and Moreton Bay Wastewater Management Study (BRMBWMS). The 1998 Waterways Management Plan builds on the earlier Draft Brisbane River Management Plan.

### 4.2.2 Relevance to GUP

A Healthy Waterways vision has been formulated by stakeholders in the community, industry and government to reflect, coordinate and help integrate the diversity of interests and actions involved in managing the waterways of the Moreton Bay catchment. This policy is relevant to the GUP, as there are several waterways whose water quality could potentially be affected as a result of the project.

The Plan has been developed as part of a strategic response by government, community and industry to the need for coordinated waterways management and planning. The Plan identifies the key outcomes drawn from the established vision, coordination and implementation options, and management actions including outcomes and recommended strategies, actions, responsibilities, timeframes and measures to assess performance.

### 4.2.3 GUP Compliance

This EIS addresses potential water quality impacts (refer Section 12). The EMP will contain appropriate mitigation measures to address, construction and operational water quality issues (refer Section 23).

### 4.3 The Moreton Bay Water Quality Management Strategy 1998

### 4.3.1 Overview

"The purpose of the Moreton Bay Catchment Water Quality Management Strategy (1998) is to help manage human impacts on the waterways and identify what standards of water quality are needed to maintain and improve the ecosystem, while supporting human values."

### 4.3.2 Relevance to GUP

The Strategy supports the Waterways Management Plan (1998). It was prepared jointly by the Brisbane River and Moreton Bay Wastewater Management Study (now the SE Qld Regional Water Quality Management Strategy) Group and the Brisbane River Management Group. The Strategy covers Moreton Bay and tidal and non-tidal waterways in its catchment including the Brisbane, Bremer, Pine and Caboolture Rivers." (Source: ttp://www.nrm.qld.gov.au/planning/lans/moreton\_water\_quality\_strategy .html).

As above, this policy is relevant to the GUP, as there are several waterways whose water quality could potentially be affected as a result of the project. However the Strategy has no statutory force, and is only a technical document designed for use by technical officers and other interested parties. It also has an important secondary aim of making Moreton Bay water quality information available so that interest groups can use the document to assist in improving and conserving waterways in the catchment area.

### 4.3.3 GUP Compliance

This EIS addresses potential water quality impacts (refer Section 12). The EMP contain appropriate mitigation measures to address, construction and operational water quality issues (refer Section 23).

### 4.4 The Moreton Bay Strategic Plan 1993

### 4.4.1 Overview

The Moreton Bay Strategic Plan provides a philosophy for planning and management decision making for Morton Bay and to identify preferred land uses and levels of protection. The outcome is for ecologically sustainable use of Moreton Bay's limited resources; minimising conflict between activities; and protection of the natural, recreational, cultural heritage and amenity values. The Queensland Government has adopted this Strategic Plan as policy in February 1993 and Government departments and agencies are required to observe the plan's provisions.

### 4.4.2 Relevance to GUP

One of the key goals of the Strategic Plan is the improvement of water quality. The plan states:

### 'Water Quality

### Aim

Ensure the quality of waters in Moreton Bay is maintained to meet the needs and requirements of users, uses and natural systems.

### Objectives

- Establish water quality guidelines designed to protect and enhance the quality of the waters in Moreton Bay.
- Ensure water quality guidelines are achieved by:
  - implementing waste management strategies which encourage waste minimisation and the use of alternative low-impact waste treatment and disposal methods;
  - developing catchment-wide waste management strategies designed to minimise the impact of point source waste discharges on the Bay;
  - encouraging use of improved catchment management practices to reduce the quantity of pollutants entering Bay waters via catchment runoff; and
  - ensuring that the activities and uses of Moreton Bay, the streams entering the Bay, and adjacent terrestrial areas do not adversely affect the Bay's water quality.
- Establish water quality monitoring programs to measure the effectiveness of water quality and waste management strategies.'

One of the key goals of all the above waterways planning document is the maintaining and/or improving of water quality for key waterways and water bodies in the Moreton Bay region.

### 4.4.3 GUP Compliance

This EIS addresses potential water quality impacts (refer Section 12). The EMP contains appropriate mitigation measures to address, construction and operational water quality issues (refer Section 23).

### 4.5 DRAFT South-east Queensland Regional Coastal Management Plan 2004

Upon commencement (or at least public display) of the South-east Queensland Regional Coastal Management Plan 2004, the GUP project should be assessed against the plan for compliance.

### 5. Local Planning Documents

Key local planning documents applicable to the GUP include:

- The Brisbane City Plan 2000 (City Plan);
- Transport Plan for Brisbane 2002-2016; and
- Bicycle Brisbane Plan

### 5.1 Brisbane City Plan 2000

### 5.1.1 Overview

The Brisbane City Plan 2000 (City Plan) is the document that provides the core regulatory framework at the local level for the Brisbane City Council area. The relevant zoning controls and Local Area Plans have been previously described in the Statutory Land Use Controls section. Strategic Plan (Chapter 2 of the IPA Planning Scheme) is the key strategic planning document for Brisbane City, identifying key planning issues and directions for development. It is a strategic level document, setting down broad guidelines towards the achievement of vision objectives and the desired pattern of development.

The Desired Environmental Outcome (DEO) for Access and Mobility in the City Plan favours the economical, equitable, comfortable and convenient movement of people and goods, within the framework of a compact development pattern and reduced automobile usage (City Plan, Ch.2, p10).

Strategies contributing to the achievement of Economic & Access and Mobility DEOs that affect freight traffic include:

- 1. Co-location: seeking opportunities to reduce road freight through co-location of suitable industries;
- 2. Compatible development: seeking to prevent development near the major movement network and ports (air and sea) that would restrict their continued operation and expansion;
- 3. Alternatives to road freight: seeking opportunities for alternative movement methods such as rail, conveyor belt, pipeline, or river borne transport;
- 4. Movement system capacity: matching the location and type of development with the capacity of the Movement System and avoiding increased pedestrian traffic conflicts and vehicle turning movements on major roads;
- 5. Transport: improving the City's transport linkages, including its air and sea ports;
- 6. Location: locating industries appropriately, according to their economic viability, ecological sustainability and their need for proximity to other activities and the Movement System;
- 7. Reserves: ensuring that important extractive reserves (sand, gravel, quarry, rock) can be accessed and developed without being prejudiced by incompatible development;
- 8. Movement systems: local residential traffic and industrial/office traffic are not in conflict on minor roads.

The Strategic Plan is further discussed in the Land Uses Section of the EIS (Section 4).

The Natural Assets Planning Scheme Policy is a document that identifies valuable natural asset within the Brisbane City Council area that require protection. This policy contains five schedules: Valuable ecological features, Significant sites, Significant flora species, Significant fauna species, and Significant vegetation communities.

### 5.1.2 Relevance to GUP

The GUP, aims to improve movement system capacity and will also help to make improve linkages to both Brisbane Airport and the Port of Brisbane. The project, will therefore help to advance the aims of the Strategic Plan.

The project corridor is identified in Natural Assets Planning Scheme Policy as supporting significant vegetation. The mangrove communities observed along Bulimba Creek and its unnamed tributary adjacent to the southern section of the project corridor are listed under Schedule 5 – Significant Vegetation Communities of this policy. Schedule 2: Significant Sites also lists many areas directly adjacent to the project corridor, especially the Southern Section. These sites include the Belmont Hills Bushland, Minnippi Parklands, Hemmant Quarry Reserve, Mt Petrie Bushlands as well as areas along Bulimba Creek and Brisbane River near the project corridor. The areas along Bulimba Creek in particular would require careful consideration during any construction of the project.

### 5.1.3 GUP Compliance

There are potential impacts from the GUP project on the on the terrestrial flora and fauna of remnant vegetation areas within and adjacent to the project corridor, especially on the Koala Coast Area and the Belmont Hills Bushland. These matters are addressed in Section 16 (Terrestrial Ecology).

There are also potential impacts from the GUP project on the water quality of Bulimba Creek. These can occur during both the construction phase (eg. erosion and sediment rich run off) from activities such as pylon driving, and the operation phase (run-off entering waterways containing fuel, and wear and tear from motor vehicles eg rubber from tyres). Refer to Section 12 for information of potential impacts upon the water quality of waterways.

### 5.2 Transport Plan for Brisbane 2002-2016

### 5.2.1 Overview

The Transport Plan for Brisbane, is BCC's major transport policy document identifying current inadequacies in the Brisbane Transport Network, objectives for achieving a sustainable and efficient network, and the key actions and implementations measures needed to achieve these objectives.

"The Transport Plan for Brisbane 2002-2016 provides the critical information needed to understand the transport challenges facing the city and presents transport solutions Council has identified to 2016.

### 5.2.2 Relevance to GUP

Assessing compliance with the *Transport Plan for Brisbane 2002-2016* is necessary, as the GUP is located completely within the Brisbane City Council area. This plan has six key objectives, of which objectives 4-6 are particularly relevant.

- Strategic Objective 1: Quality Public Transport
- Strategic Objective 2: Managed Travel Demand
- Strategic Objective 3: Coordinated Transport and Land Use
- Strategic Objective 4: A Safe and Efficient Road Network
- Strategic Objective 5: Delivering The Goods On Time To The Right Place
- Strategic Objective 6: More Clean And Green Personal Transport

Strategic Objective 4, states that:

- Other major road projects to be implemented to achieve a high quality, orbital road network for the city are:
  - upgrading the Gateway Motorway to six lanes south of the river and constructing a new four-lane deviation between Kingsford Smith Drive and Toombul Road

Strategic Objective 5, states that:

"Efficient freight transport is critical to Brisbane's economy. The transport network must support key industrial areas, such as the Australia Trade Coast and the Brisbane-Ipswich corridor, which are major employers and economic generators."

Strategic Objective 6, states that:

"Enhancing on and off-road infrastructure to create the Detailed Bikeway Network as identified in the Bicycle Brisbane Plan".

### 5.2.3 GUP Compliance

The GUP will not only comply with Transport Plan for Brisbane 2002-2016, but will actively advance several key objectives, particularly in relation to the provision of road and bikeway infrastructure, and the efficient movement of freight.

The GUP will improve freight efficiency, particularly to the ATC area, by carrying out the road network upgrades to the Gateway Motorway, as stated in the transport plan. This will achieve one of the key objectives of maintaining a high quality orbital network of Brisbane.

Map 12: Strategic Bikeway Network of the Transport Plan shows a proposed on-road route from Lytton Road, across the Brisbane River and all the way to the Gateway Motorway at Nudgee. The GUP EIS recommends a separated pedestrian and bikeway lane adjacent to the proposed new carriageways from Lytton Road, across the proposed Gateway Bridge until Lavarack Avenue, then grade separating from the proposed Motorway and continuing adjacent to the carriageways until terminating at Kingsford Smith Drive. For further information refer to Section 6 (Pedestrians and Cyclists) of the EIS.

### 5.3 Bicycle Brisbane Plan

For information on GUP provision of pedestrian and cycling infrastructure, and compliance with BCC's Bicycle Brisbane Plan, refer to Section 6 (Pedestrians and Cyclists) of this report.



# **BAC Master Plan Land Use Areas**

# Gateway Upgrade Project 200 Project ...



and and the superior



APPENDIX D3 BAC Master Plan Land Use Areas

T

# **TradeCoast Central Master Plan**

app. adc

# Gateway Upgrade Project 200 Project ...



