



Coordinator-General's evaluation report for an environmental impact statement

Northeast Business Park Project

October 2009

**Under part 4 of the *State Development and Public
Works Organisation Act 1971***



Northeast Business Park Project

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Synopsis

This report has been prepared pursuant to s.35 of the *State Development and Public Works Organisation Act 1971* (Qld) (SDPWO Act) and provides an evaluation of the environmental effects of the Northeast Business Park project (the project).

The proponent for the project, Northeast Business Park Pty Ltd, proposes to develop the site into an integrated mixed industry and business area (MIBA), and a marine and residential precinct. Significant marine works are proposed including construction of a major marina facility and dredging of the navigation channel in the lower reaches of the Caboolture River.

In undertaking my evaluation of the Environmental Impact Statement (EIS), I have considered the EIS, issues raised in submissions, the Supplementary EIS (SEIS), and the advice I have received on a range of key issues from state agencies and the Australian Government Department of the Environment, Heritage, Water and the Arts (DEWHA). I am satisfied that the requirements of the SDPWO Act have been satisfactorily fulfilled, and that sufficient information has been provided to enable me to finalise the required evaluation of the potential impacts, attributable to the project.

Economic and social Impacts on the surrounding region

I am satisfied that the development of new employment generating land on the site would provide considerable economic and social benefits for the region. I accept that the MIBA format in conjunction with other elements of the project is well formulated and has clear advantages over the alternative – a traditional industrial development of the land zoned as District industry. The proposal offers the opportunity to develop an attractive living and working environment and promotes a high degree of self-containment consistent with the objectives of the South East Queensland Regional Plan. Co-location of the MIBA with the marina close to existing urban areas and transport links is a rare opportunity to develop a new marine industry cluster in the region.

I recognise that there is significant demand for new marine facilities in the region with access to Moreton Bay and I am satisfied that the level of proposed commercial activity would not adversely impact on economic activity in nearby areas.


I am satisfied that the proposed retail and residential uses would have net positive economic and social impacts on the surrounding communities. The residential precincts would provide a useful contribution to forecast shortage of new houses in the area and could assist in encouraging further intensification of the adjacent areas. In addition, the dedication of large areas of open space for public use and the provision of associated facilities would become a significant asset to the community.

Infrastructure impacts

The ultimate development of the project would yield approximately 350 hectares of urban uses supporting an estimated 13 600 employees and 5 500 permanent residents. The scale and nature of the proposal will necessarily impact on the existing infrastructure including the existing local and regional road network. Infrastructure upgrades that are likely to be needed to accommodate the increased loads include capacity upgrades for a number of road sections and intersections including Buchanan Road and the Bruce Highway.

Given the difficulties in reaching firm conclusions at this point (i.e. the project is still in concept stage) about the ultimate extent of road impacts and the appropriate level of contributions required by the development, I accept that a staged approach to mitigation is necessary. Detailed traffic impact assessments would be required as part of development approvals for individual stages of the project in accordance with an overall strategy. Given this further traffic analysis and approval, I am therefore satisfied that the project will not lead to any significant adverse traffic impacts on the local and regional road network.

I note that a range of measures supporting active transport (pedestrian and cycling) and public passenger transport are proposed, including provision for: bus routes and bus stops; bicycle lanes within internal road corridors; dedicated walking/cycling paths within the marina



precinct and open spaces; and golf buggy paths for commuter travel between residential, marina, MIBA precincts and open spaces. I am therefore satisfied that suitable requirements for active transport (pedestrian and cycling) and public passenger transport can be provided.

Existing water supply and wastewater infrastructure exist to the west of the site, however I note that it is of insufficient size to service the proposed usage. I am satisfied that the proponent's proposed augmentation of this infrastructure and the utilisation of recycled water will ensure an adequate reticulation of water, recycled water and wastewater within the project site.

Impacts on the coastal environment

The project site has nine kilometres of tidal Caboolture River frontage and is approximately eight kilometres, by boat, from the river mouth and Moreton Bay. The entirety of its tidal sections is within the declared Deception Bay declared fish habitat area (management A area) and is also part of the Moreton Bay wetland aggregation that has been listed as a wetland of international importance in accordance with the Ramsar convention. The Moreton Bay Marine Park extends upstream almost to the eastern boundary of the site.

I note that the survey of the existing condition of the river banks shows many sections are currently suffering an erosion trend. I accept that increased vessel traffic and dredging may result in further impacts to the bed and banks in some sections of the river. The proponent has committed to develop and implement the Caboolture River Estuary Management Plan (CREMP) that would specify necessary actions to address the project related impacts on the bed and banks of the river. I am therefore satisfied that suitable requirements for protecting the river bed and banks can be provided.


I note the existing poor river water quality condition of the Caboolture River estuary. I accept the potential benefits of the project for improving water quality of the Caboolture River through the best practice management of stormwater inflows and the rehabilitation of riparian areas and wetlands on-site. The diversion of treated wastewater from the Caboolture South treatment plant and, in later stages, from the Burpengary East treatment plant for use on the site would yield further improvements by reducing nutrient inflows into the Caboolture River.

I note that some impacts to water quality are expected from the proposed channel dredging, construction activities and marina operations, however I accept that these would be manageable. Careful design of the project and management of construction and operational activities would be necessary to ensure risks of impacts are minimised. I am satisfied that the net impacts on water quality are likely to lead to an overall improvement in the longer term.

I note that, in an overall sense, the project would have generally positive impacts on coastal ecological values through improved water quality and the proposed rehabilitation and revegetation of coastal land on-site. However some activities, such as the direct loss of areas of aquatic habitat, disturbance of benthic fauna and shorebirds, and loss of riparian habitat (due to the potential exacerbation of the bank erosion), would have potential adverse impacts. The proponent has committed to addressing all project-related impacts through the funding of rehabilitation works in the affected sections of the estuary through the implementation of the CREMP. I am therefore satisfied that the project would not lead to significant adverse impacts on coastal ecological values.

I note that the development of the marina related components of the project would require several separate authorisations prior to an application for development approval under the *Integrated Planning Act 1997*. This includes the setting aside of a works area in the Moreton Bay Marine Park. I find that the proposed development would provide facilities for use by, or the benefit of, the public and that any adverse impacts in the Marine Park can be managed. Accordingly, I recommend that the Minister for Sustainability and Climate Change consider the setting aside of a works area in the lower Caboolture River and Deception Bay to enable the proposed channel deepening and realignment. In the event that a works area is declared in the Marine Park, I note that a requirement for an appropriate biodiversity offset would be determined at that time.

An amendment of the part of the Deception Bay declared fish habitat area in the Caboolture River affected by the project from a 'management A area' to a 'management B area'



designation would also be required to allow applications to be made for the construction of the proposed marina entrance, fishing platform and canoe landing structures. An amendment to the boundary of the declared fish habitat area would also be required to allow for dredging outside of the current channel marked by aids to navigation. Accordingly, I recommend that the Minister responsible for the *Fisheries Act 1994* considers the necessary amendments to the Deception Bay declared fish habitat area to enable the development of the project.

I note that over the last 30 years there have been extensive changes in the distribution of marine plants in Moreton Bay including the loss of seagrass cover in Deception Bay. I accept that there are opportunities for the design and management of the project to maintain and in some cases, restore and improve aquatic habitats in the Caboolture River. However, I note that some adverse impacts on fish habitat values are expected, including: direct loss of marine plants (although these have been assessed as having little aquatic value); additional boat traffic from the marina may exacerbate river bank erosion; and direct loss of shallow water habitat by capital and maintenance dredging. Nonetheless, I am satisfied that impacts to fish habitat values would be minor and localised and would be outweighed by the benefits to fisheries resources of the other aspects of the project including long term improvements in water quality, the rehabilitation of on-site riparian and wetland areas and the proponent's contribution to the development of the Caboolture River Plan. The new marina and other public facilities would also provide enhanced access to the river and Bay for recreational fishing.

Environmental management within the project site

Certified regional ecosystem mapping identifies 15.5 ha of 'endangered' and 2.7 ha of 'not of concern' remnant native vegetation located inside the south western boundary of the site fronting the Bruce Highway. The proposal includes clearing 12.4 ha of remnant vegetation, including 10.73 ha of 'endangered' remnant vegetation. To offset this clearing, the proponent has agreed to provide a vegetation offset consisting of 35.84 ha of 'endangered' and 4.4ha of 'of concern' remnant native vegetation at another location.

I am satisfied that the proposed vegetation clearing is necessary for the development of the project, particularly the portion on the Bruce Highway frontage for the MIBA precinct. I accept that the development would result in a vegetation offset with a replacement ratio of three to one (3:1), in addition to a substantial net gain of other vegetated habitat areas including the proponent's commitment to preserve and revegetate 86 ha of riparian vegetation and 64 ha of wetland vegetation.

A preliminary acid sulfate soils (ASS) investigation confirms the presence of ASS within the project site and in the area proposed for channel dredging in the lower reaches of the Caboolture River. Given the scale of proposed soil disturbance, proximity to the river, and likelihood of ASS occurrence, all earthworks and dredging would require careful monitoring and management of the potential impacts. A range of other matters will be addressed in a Construction Environmental Management Plan to ensure satisfactory environmental outcomes are achieved.

Conclusion

I have determined that on balance there is a significant positive net benefit to the community from the development of the project and that it can proceed, subject to a number of specific conditions (detailed in Appendix 1 of this report) to manage its design, construction and operation. Therefore, I recommend that the project can proceed, subject to the conditions contained in Appendix 1 of this report.

Colin Jensen

Coordinator-General

Date: Signed 31 October 2009



1. Introduction

This report has been prepared pursuant to s.35 of the SDPWO Act and provides an evaluation of the Northeast Business Park Project (the project). The EIS was conducted by the proponent, Northeast Business Park Pty Ltd and prepared on its behalf by Cardno Pty Ltd.

An initial advice statement (IAS) was lodged with the Coordinator-General in May 2006 and on 21 June 2006 the project was declared to be a 'significant project for which an environmental impact statement (EIS) is required' pursuant to s.26(1)(a) of the SDPWO Act.

On 12 July 2006, the project was determined to be a controlled action pursuant to s.75 of the *Environmental Protection and Biodiversity Conservation Act 1999* (reference number EPBC 2006/2912) under the controlling provisions of:

- sections 16 and 17B (Wetlands of international importance)
- sections 18 and 18A (Listed threatened species and communities)
- sections 20 and 20A (Listed migratory species)

Under a Bilateral Agreement with the Australian Government, this report will be used by the Australian Government Minister for the Environment, Heritage and the Arts to make an assessment of the controlled action for the purposes of the EPBC Act.

The objective of this report is to evaluate the key issues associated with the potential impacts of the project on the physical, social and economic environments at the local, regional, state and national levels. It is not intended to record all the matters which were identified and subsequently settled. Instead, it concentrates on the substantive issues identified during the EIS process.

This report represents the end of the State's impact assessment process and details my evaluation of the environmental effects of the project, based on information contained in the EIS, SEIS, subsequent technical reports, submissions made on the EIS and information and advice from advisory agencies and other parties.

I note that two applications for preliminary approval for material change of use overriding the planning scheme have been lodged with Moreton Bay Regional Council (MBRC), as assessment manager under the *Integrated Planning Act 1997* (IPA). My conclusions set out in this report relate to the approval of these applications by MBRC and state conditions under which the project may proceed. I have not considered details of the final form and composition of the proposed industrial and urban uses, which are not accurately known. These details will be dealt with by the MBRC Assessment Manager as part of subsequent development permits under the *Integrated Planning Act 1997* (IPA).

I have considered the operational works that would be associated with the proposed development and have specified conditions that include requirements relating to approvals of subsequent development permits.

For the purpose of this report, the EIS comprises the following documents:

1. Northeast Business Park, Environmental Impact Statement, 31 January 2008
2. Northeast Business Park, Supplementary Report to the Environmental Impact Statement, August 2008.
3. Revised report on siltation and coastal processes study Northeast Business Park (Cardno Lawson and Treloar, April 2009)



2. Project description

2.1 The proponent

The proponent for the project is Northeast Business Park Pty Ltd, which is a Queensland registered company with shares held by the shareholders of Port Binnli Pty Ltd, Laing O'Rourke Caboolture Developments Pty Ltd and a number of smaller shareholders.

2.2 The project

2.2.1 Site

The project site is a 769 hectare ex-pine plantation located approximately four kilometres east of the Caboolture town centre, bounded by the Bruce Highway to the west and by the Caboolture River to the north. The site has approximately nine kilometres of direct river frontage and is about eight kilometres, by boat, from the river mouth.

2.2.2 Proposal

The project scope was described in the EIS completed in January 2008 and released for public notification on 16 February 2008. The proposal is to develop the site into a major integrated mixed-use business park, marine and residential precinct. The development will comprise of a range of business and industry uses integrated with commercial, retail, residential, recreation and environmental areas. The project includes development of 169 hectares of industrial land and more than 100 hectares of mixed density residential development. Around 55 per cent of the site would be set aside as open space. Significant marine works are proposed including the construction of a major marina facility and dredging of the navigation channel in the lower reaches of the Caboolture River.

The SEIS presented further information regarding the project details, impacts and mitigation. There was no change to the layout and project features as described within the original EIS report, other than minor alterations to proposed uses within the industry and business precincts.

The project is predicted to yield a net benefit of \$2.5 billion (in 2007 terms), with \$2.3 billion dollars indirect net benefit to stakeholders other than the proponent. Through the 15-year development phase of the project, up to 1500 new jobs are expected to be provided, with a total of more than 13 600 direct full-time jobs provided in the operational phase. Direct construction costs are estimated to be approximately \$628 million over the course of the development.

The marina component of the project is to be located on the eastern portion of the site and would accommodate 911 'wet' berths. A dry boat shipyard will provide further accommodation for 300-500 boats. These facilities would assist in meeting future boat storage/berthing demands for south-east Queensland.

The open space provided within the proposal totals 420 hectares, which is equivalent to 55 per cent of the total site area. Significant rehabilitation works and development of public recreation facilities are proposed.



Figure 1 - Overall project layout



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2.3 Project rationale

2.3.1 Need for industry land

The EIS and SEIS provide planning justification for the project. Planning reports, prepared by Conics Limited, describe the need for a continuing supply of industrial land within the Caboolture area. In alignment with this need, part of the site had already been designated as district industry under the current planning scheme administered by Moreton Bay Regional MBRC (formerly Caboolture Shire Council).

In addition to identifying the need for industrial land, Conics also state that a mixed industry business area (MIBA) as proposed in the project is a land-use that can successfully provide strong positive economic benefits and good environmental outcomes. The EIS states this as the justification for the proposed mix of retail and commercial uses interspersed with, and adjacent to, “traditional” industrial activities. The MIBA concept provides the opportunity for a relatively dense employment node, targeting high value industry and offering greater amenity, including on-site recreation facilities.

The EIS and SEIS argue that whilst there is a case for the district industry zoned land to be developed in a “traditional” format to support identified industrial land needs, the submitted proposal provides more economic, in particular employment, benefits in its current form. MBRC has advised its support for this approach.

2.3.2 Demand for marine industry and marina facilities

A marina demand study prepared by Pacific Southwest for the EIS indicates that current and proposed marina projects within south-east Queensland are not adequate to support growing recreational boating needs. Pacific Southwest found that in 2005 there were 21 marinas across South East Queensland (SEQ), with a combined estimated deficit of 1 500 marina berths. The study predicts that, based on mid-range modelling, 3 641 additional berths will be required in SEQ by 2010. The proposed Northeast Business Park marina would cater for approximately 25 per cent of the anticipated demand at that time.

The proposed marina and shipyard would be a key component of the MIBA development. The Caboolture Industry and Employment Lands Project report (2007) prepared for the former Caboolture Shire Council recommends that at least 15–25ha of suitable land should be provided for a marine industry cluster with deep-water access to the Caboolture River to cater for the burgeoning recreational boating manufacturing/servicing sector. The EIS contends that the subject site is an appropriate location for an all-tide access which is not available elsewhere in the region.

The EIS sets out the need for the associated dredging within the Caboolture River to support the marina and industry precinct. It has determined that whilst there is current river access to the site, this is limited during some tide conditions. The EIS finds that a reliable and safe access to the marina site would be critical for the financial and practical viability of the proposal.

2.3.3 Co-locating industrial uses with residential, commercial and recreational uses

The EIS maintains that the amalgamation of a range of commercial and retail uses with industrial activities provides opportunity for superior economic outcomes. Similarly, the residential component of the proposal supports the MIBA and marina functions by supplying a permanent residential population to utilise the development. In addition to this, there is a level of self-containment within the development that allows residents to work and/or recreate within the site.

The EIS contends that the development of part of the site zoned District Industry for residential allotments represents the most effective use of land not suited for industry. Using



this land for industrial purposes would be heavily constrained due to potential impacts of noise, lighting, emissions and heavy vehicle movement upon adjoining rural residential uses.

The proposed open space and recreational uses support the residential population, an increased level of amenity for local employees and encourage a range of opportunities for visitors to the site. The large river-side park is constrained by flood levels and other environmental constraints which would otherwise see it remain as undeveloped rural land for long into the future. The proposed combination of rehabilitation and active use of this area ensures that not only are environmental values protected, but the land also becomes a valuable resource for the local community.

2.3.4 Improved navigation of the Caboolture River

Correspondence from the Regional Harbourmaster (Brisbane) confirms that the proposed deepening of sections within the Caboolture River would improve safety for a range of marine craft. This includes marine emergency response and enforcement agencies, who currently find it difficult to respond to situations given the depth restrictions. The realignment of the navigation channel, additional lit beacons and the associated dredging, would enable safer and more efficient use of the Caboolture River for the wider public benefit and is proposed to be delivered at no cost to government.



3. Impact assessment process

3.1 Review and refinement of the EIS terms of reference

An initial advice statement (IAS) was released for public information and draft TOR were advertised for public comment on 16 October 2006. Comments were accepted until close of business on 13 November 2006. A final TOR was issued to the proponent on 22 December 2006.

Comments on the TOR were received from¹:

- Department of Education, Training and the Arts
- Department of Emergency Services
- Department of Housing
- Department of Local Government, Planning, Sport and Recreation
- Department of Main Roads
- Department of Natural Resources and Water
- Department of Primary Industries and Fisheries
- Energex
- Environmental Protection Agency
- Office of Urban Management
- Queensland Transport
- Department of State Development
- Brisbane Regional Environment Council
- Sunfish North Moreton Inc.
- A member of the public

3.2 Public review of the EIS

The EIS was approved for release and advertised publicly on 16 February 2008 inviting submissions until close of business on 4 April 2008. A CD ROM copy of the EIS was available free of charge from the proponent.

The EIS was displayed at:

- Caboolture Shire Council library
- State Library of Queensland, Info Zone, South Bank, Brisbane

Information on the project was available via the proponent's and Coordinator-General's web site and general consultation was undertaken using methods such as agency briefings, distribution of community newsletters (February 2008) and newspaper articles.

The following advisory agencies² were approached formally to conduct an evaluation of the EIS:

- Department of Communities
- Department of Education, Training and the Arts
- Department of Emergency Services
- Department of Housing
- Department of Industrial Relations
- Department of Local Government, Planning, Sport and Recreation
- Department of Main Roads
- Department of Mines and Energy

¹ Names of organisations are as they were at the time of submission and may have subsequently changed

² Names of these organisations may have subsequently changed




- Department of Natural Resources and Water
- Department of Primary Industries and Fisheries
- Department of State Development
- Environmental Protection Agency
- Queensland Health
- Queensland Police Service
- Queensland Transport
- Queensland Treasury
- Caboolture Shire Council
- Australian Government Department of the Environment, Heritage, Water and the Arts

Following the six-week public review of the EIS, a total of 29 submissions were received with the following distribution.

Distribution		Number
Advisory agencies ³	Department of Communities Department of Emergency Services Department of Housing Department of Infrastructure and Planning (DIP) Department of Main Roads Department of Natural Resources and Water Department of Primary Industries and Fisheries Department of Tourism Regional Development and Industry Environmental Protection Agency Queensland Health Queensland Transport Queensland Police Service Moreton Bay Regional Council (replacing the former Caboolture Shire Council) Australian Government Department of the Environment, Heritage, Water and the Arts	14
Industry	Trask Corporation Pty Ltd Marine Queensland Kangaroo Bus Lines	3
Interest groups	Caboolture Central Business District Retailers and Traders Association Wildlife Preservation Society of Queensland Bayside Branch	2
Individual	Various private submitters	10

³ Names of Advisory Agencies may have subsequently changed



Submissions were forwarded to the proponent and, following discussions with the proponent's representatives and its technical consultants, it was determined that the preparation of a supplementary report to the EIS was necessary to address issues raised.

3.3 Review of supplementary report to the EIS

On 2 August 2008, the SEIS was forwarded to advisory agencies⁴ and respondents to the EIS.

The following agencies advised that they were satisfied that all issues had been addressed:

- Department of Communities
- Department of Emergency Services
- Department of Mines and Energy
- Department of Tourism, Regional Development and Industry
- Queensland Police Service
- Queensland Treasury

The following agencies either provided advice or recommended conditions:

- Department of Housing
- Queensland Transport
- Department of Main Roads
- Department of Natural Resources and Water
- Environmental Protection Agency
- Department of Primary Industries and Fisheries
- Queensland Health
- Moreton Bay Regional Council
- Australian Government Department of Environment, Water, Heritage and the Arts

Substantive issues raised in submissions are discussed individually in the following section.

⁴ Names of Advisory Agencies may have subsequently changed



4. Evaluation of environmental effects

4.1 Introduction

The *SDPWO Act* defines 'environment' to include:

- (a) ecosystems and their constituent parts, including people and communities
- (b) all natural and physical resources
- (c) the qualities and characteristics of locations, places and areas, however large or small, that contribute to their biological diversity and integrity, intrinsic or attributed scientific value or interest, amenity, harmony and sense of community
- (d) the social, economic, aesthetic and cultural conditions that affect, or are affected by, things mentioned in paragraphs (a) to (c).

'Environmental effects' means "the effects of development on the environment, whether beneficial or detrimental". These effects can be direct or indirect, of short, medium or long-term duration and cause local or regional impacts.

This section outlines the major environmental effects identified during the EIS process, including those raised in the EIS, SEIS, in submissions on the EIS and in consultation with advisory agencies and other key stakeholders. I have provided comments on these matters and, where necessary, I have set conditions or made recommendations to mitigate adverse impacts.

The Moreton Bay Regional Council (MBRC) will be the assessment manager for development approvals pursuant to the IPA. Two applications for preliminary approval for material change of use overriding the planning scheme have been lodged with MBRC, as follows:

- in 2002, Lensworth Pty Ltd applied for preliminary approval for a mixed industry and business development over the western portion of the site
- in 2004, Noosa Events Pty Ltd lodged an application for a marina/residential development on the eastern portion.


In November 2007, the then Caboolture Shire accepted changes to both applications reflecting the additional information provided in the EIS.

The EIS provides only a level of detail consistent with the two applications for preliminary approval. Accordingly, my evaluation of the project has only considered that level of detail.

I note that the proponent has received advice from the Office of Urban Management (now incorporated within DIP) that the Regulatory Provisions of the *South East Queensland Regional Plan 2009-2031* (SEQRP) do not apply to the proposed development given that development permit applications were lodged before the provisions commenced. Additionally, the Regulatory Provisions don't apply to a project declared a significant project pursuant to s.26 1(a) of the *SDPWO Act*.

4.2 Economic and social impacts on the surrounding region

The EIS has investigated a range of matters related to the project's potential contribution to the economic development of the region and its complex interactions with the surrounding community.



MBRC has in turn made significant effort in assessing the project's impacts within the region; in some cases commissioning separate peer reviews of the EIS findings. I acknowledge the detailed advice from MBRC on these matters.

4.2.1 Context

The Caboolture sub-region has a diverse settlement pattern with the areas of highest urbanisation and commercial activity concentrated in the “urban spine” surrounding the major road and rail corridor. Large tracts of the hinterland to the east and west remain largely undeveloped or support rural or low density residential use.

The project site is located in a low density, semi-rural neighbourhood adjacent to the urban spine and strategically positioned with a one kilometre frontage to the Bruce Highway. The surrounding area is characterised by larger rural residential lots, bushland and open grassland areas with some (limited) agricultural and recreational land uses. The land on the opposite side of the Bruce Highway is fully developed for urban purposes.

The site has a significant exposure to the Caboolture River and a large proportion of the land lies within its floodplain. The northern boundary of the site is defined by the high water mark of the Caboolture River.

The Caboolture sub-region, along with many parts of the SEQ region, is undergoing a period of significant transition. The EIS Community Context Study (Appendix F of the EIS) has captured and summarised the key issues facing the local community, as follows:

- *Rapid urbanisation - which is changing the existing character of the study area, challenging the capacity of infrastructure and services and changing the composition and dynamic of the community. The emergence of new master planned communities on greenfield sites in particular is introducing a new resident mix.*
- *Housing affordability – recognising that whilst in relative terms, Caboolture still offers a relatively affordable lifestyle, house prices have doubled since 2003 and local wages have not kept pace. Local people are often priced out of the housing market and are forced to look further north and west to buy homes. Rising capital prices has reduced rental stocks and the availability of public housing has also declined significantly relative to demand.*
- *Economic development – the level of self containment is less than 50 per cent and commuting to Brisbane is a way of life for this community. There is a need for more jobs in absolute terms to keep pace with population growth and meet self containment targets, but there is also a need for further diversification of the labour market to meet the expectations of incoming residents and increase the capacity of the existing local community. Opportunities for youth are particularly significant in the context of regional growth and development. This community experiences significant pockets of structural unemployment and there is prevailing evidence of skills gaps and under-employment across the study area.*
- *Social issues and allied welfare needs – there has been an historical dependency on welfare prevalent across the study area and there are still pockets where considerable and multi factorial disadvantage are evident. There is increasing evidence of social polarisation by education, affluence and age across the study area as well as a trend towards increasing ethnicity – the introduction of new people with different needs has challenged the existing capacity of social, cultural, human services and infrastructure. There is a shire wide issue with respect to ‘rowdy youth’, young people who are not engaged or participating because they have no inclination, funds or transportation. More youth opportunity is an imperative.*
- *Movement – the road network is reliant on the Bruce Highway to facilitate car borne trips between settlements. There is evidence of congestion at a local level during peak periods exacerbated by heavy goods vehicles using key routes through neighbourhoods. There is a lack of east west connections between communities on either side of the Bruce Highway. Whilst the rail service is excellent, there is an*



inadequate bus service, with many parts of the study area lacking options out of key hours.

- *Image and identity – there is a lack of alignment between the identity of the shire as it is understood by residents and the image perceived by the rest of the region.*

The above findings provide a context for development of the project which would deliver improved economic/ employment opportunities for the local community as well as improved social and community amenities.

4.2.2 Northeast Business Park Area Plan

Regulation of the development of the site would be controlled by a site-specific variation to the local government planning scheme set out in the draft Northeast Business Park (NEBP) Area Plan. The NEBP Area Plan dated 12 October 2009 provides a statutory framework to ensure the orderly development of the project and includes:

- the proposed Structure Plan for the site describing the various precincts and their inter-connection
- provision for Sector Plans – these would address specific areas of the Structure Plan and anticipate preliminary approvals for material change of use at a more detailed level than the overall site
- assessment tables and development codes for various components of the project.

Conclusions

The draft Area Plan has been developed in conjunction with MBRC. Based on expert advice from MBRC staff, I am satisfied that the draft NEBP Area Plan would provide satisfactory planning and environmental outcomes for the project site and should be adopted.

In order to ensure the orderly development of the site in accordance with overarching planning principles for the region, I state conditions (Conditions 1 – 18, Schedule A, Appendix 1) that must be attached to a preliminary approval for the project relating to the NEBP Area Plan.

4.2.3 Proposed mixed industry and business area

The proposed MIBA use is located within part of the site which is currently zoned District Industry under the current local government planning scheme. The District Industry zoning envisages a range of uses including general industry, service industry, warehouse, utilities, hotel etc. The MIBA format is designed to expand the allowable uses to include related activities such as offices and retail. As described by the EIS, the intention is to create opportunities for greater diversity of businesses and more intense development and employment generation.


The proponent has also embraced the concept of industrial ecology in the design of the MIBA⁵. The goal is to create a governance model that promotes mutual cooperation between businesses and the local community. This is predicted to improve overall efficiencies by sharing information and resources, reducing waste and building economies of scale.

The proposed MIBA development, with a total area of 169 hectares, is predicted to support over 13 600 direct full time equivalent (FTE) positions during operation, with the potential to indirectly create another 13 400 positions. The proponent is also committed to enhancing employment opportunities for local indigenous groups through the preparation of an Indigenous employment strategy for the project⁶.

The EIS reports significant positive support from local business operators for the proposed development and the MIBA concept. As discussed above, the findings of the community

⁵ Refer to Commitment 8, Appendix 2

⁶ Refer to Commitment 5, Appendix 2



context study indicates that the regional economy stands to benefit significantly from the creation of new employment and economic activity.

Despite the general support, a limited number of concerns were raised in EIS submissions that the composition of the proposed MIBA is contrary to the intent of the District Industry zoning and its composition would have potential to detract from the future viability of the nearby Caboolture Morayfield Principal Activity Centre (PAC).

The SEQRP sets out a hierarchy of activity centres to promote the orderly development of defined areas where business, services and high density residential uses should be concentrated. This is for a number of reasons including to ensure viability of existing centres, reducing private vehicle trip generation and maximising links with public transport. Within the project area, the intention is for residential and commercial development to be focused in the Caboolture Morayfield PAC to consolidate existing uses and economies and promote transit-oriented development.

The concerns raised in EIS submissions are primarily about the quantity of office and retail space to be offered in the development and its potential to compete with the PAC. This issue was investigated in detail by MBRC and as a result the relative mix of uses in the MIBA has changed since its initial presentation in the EIS report. The draft Area Plan no longer supports the stand-alone office use and has reduced the total allowable Retail Warehouse component from 45 000 m² gross floor area (GFA) to 25 000 m². In addition, land for Retail Warehouse use would be released in stages generally in accordance with demand.

The specialist investigation commissioned by MBRC on this matter advises that the amended format of the MIBA precinct would have no significant adverse impact on the commercial viability of the Caboolture Morayfield PAC. This was confirmed through MBRC's consultation with local business operators. MBRC has advised its support for the inclusion of this limited area of Retail Warehouse use on the project site.

Buffer zones

The proposed MIBA precinct would have a frontage along the Bruce Highway of approximately one kilometre. The majority of other boundaries of the MIBA are adjacent to open space areas and require little in the way of buffer treatments.

The portion of the MIBA precinct fronting the highway was initially envisaged in the EIS as having a visual prominence that 'will attract businesses that require ready highway access and some level of exposure'. Building heights up to 15 m are proposed.

In response to concerns raised by MBRC, the highway frontage is now intended to be screened by a vegetated buffer area. The proposed MIBA layout incorporates a service road adjacent to the highway frontage offset by ten metres. The MIBA code in the draft Area Plan includes specific requirements for vegetation screening within this buffer.

Conclusions

It is clear that development of employment supporting industry land is highly desirable in this location. I accept the EIS findings that the proposed MIBA format offers the potential for strong economic development and employment growth for the region.

I am satisfied that the proposed MIBA uses are appropriate and that, taking into account the development controls provided for in the draft NEBP Area Plan, the potential impacts on the future commercial activities of the surrounding region are minimal.

In order to ensure the orderly development of the MIBA, I state conditions (Conditions 1 - 18, Schedule A, Appendix 1) that must be attached to a preliminary approval for the project.

4.2.4 Proposed marine precinct

The proposal for the MIBA includes 17.8 hectares intended specifically for marine related industries. The project's stated intention is to promote the creation of a new marine industry cluster north of the Brisbane River to satisfy current and future demand. Based on economic forecasts in the EIS, continuing rapid growth in this sector is predicted to create additional domestic and export demand for the manufacture and servicing of recreational boats.



Supporting the MIBA marine industry precinct is the shipyard and marina with direct access to the Caboolture River and Moreton Bay. Along with these industrial components, the marine precinct also proposes:

- recreational boating facilities with an estimated 911 marina berths and storage of up to 500 additional boats in a multi-storey “stacker”
- approximately 17 000 square metres of retail space, envisaging restaurants, a supermarket, a tavern and general specialty retail
- residential towers of up to 12 storeys
- hotel facilities, up to 200 rooms
- public open space areas.

Location and need

The EIS includes specialist economic studies providing justification for the proposed marina and marine industry facilities. A (mid-range) projected demand of 3 641 marina berths for boats over eight metres in length is forecast by 2010. This is supported by advice from the former Department of Tourism, Regional Development and Industry that points to the shortage of publicly available boating facilities and the need to provide facilities to support Queensland’s recreational boat-building industry. The department therefore strongly supports the development of the proposed marina facilities, particularly in terms of its potential to avoid constraints on future development of the recreational boat market. In addition to this, a number of EIS submissions gave in-principle support for the proposed marina and marine industry precinct.

The EIS finds that there are very limited locations suitable for development of a marina/marine industry facility between the Brisbane River and Noosa. The site provides opportunities for tall-mast and relatively deep-draft access to Moreton Bay, which are generally otherwise unavailable. The project site is also well placed in the northern Brisbane conurbation and is of a size and scale to facilitate the marine industry precinct. The inclusion of vessel maintenance facilities in the project is targeted to provide services to recreational boat owners throughout the northern part of Moreton Bay and Sunshine Coast, which are currently limited.

The EIS concludes that the marina is necessarily located outside the urban footprint, as defined by the SEQRP, to enable connection to the Caboolture River estuary. This finding is supported by advice from DIP.

Commercial impacts


Combined with other retail uses in the MIBA precinct, the project would create a level of commercial activity equivalent to a “district activity centre”.

Several submissions to the EIS raised concerns about the quantity of retail space to be offered in the proposed marine precinct and its potential to detract from other commercial activities in Burpengary and the Caboolture Morayfield PAC. This issue was reviewed in a specialist investigation commissioned by the MBRC and I am advised that the proposed 17 000 m² gross floor area of retail space, with a limit of one supermarket of not more than 2 500 m², would not adversely impact on the centres hierarchy.

Conclusions

I recognise the demand for new marine facilities in the region with access to Moreton Bay. I accept the EIS findings that there are very limited opportunities for development of a marina/marine industry facility in the northern section of the SEQ region between the Brisbane River and Noosa. I am satisfied that the level of proposed commercial activity in the marine precinct would not adversely impact on economic activity in nearby areas.

The suitability of the proposal in terms of its impacts on the coastal environment is discussed in section 4.4.



In order to ensure the orderly development of the marina precinct, state conditions (Conditions 1 – 18 of Schedule A and condition 1 of Schedule B , Appendix 1) that must be attached to a preliminary approval for the project.

4.2.5 Caboolture River navigation channel

EIS findings

The project includes a proposal to provide a dredged channel in the lower section of the Caboolture River to create an all tide access for vessels up to 18m in length. The EIS considers that the channel improvements are essential for the viability of the marina and marine industry precinct. This is based on both an economic consideration and also the need to provide a safe navigation access to the facility.

Maritime Safety Queensland (MSQ) maintains navigation beacons in sections of the existing channel in the Caboolture River. Recreational vessels regularly navigate the river and there are a number of existing facilities including boat ramps, permanent moorings and a commercial marina and shipyard (Monty's Marina) downstream from the project site.

At present, deep draft vessels can access the river however only during favourable tidal and weather conditions. The EIS notes potential safety concerns for existing users, particularly near the entrance during low tide conditions and periods of strong winds. These concerns have also been advised by the Regional Harbourmaster who has noted safety concerns for recreational vessels navigating the river and the limited access for emergency response vessels.

Similar to many other river entrances in Queensland, the navigation channel has never been dredged. Some sections of the channel have limited depths, in the order of 0.5 m below the lowest astronomical tide (LAT). Deepening the channel to 3m below LAT and straightening a section is proposed. New fixed navigation beacons would be installed and include standard navigation lighting to aid night visibility. The channel improvements, including the alignment, have been designed in consultation with the Regional Harbourmaster. It is noted that the proposed minimum navigable depth would be -2.5 m LAT; initial dredging to -3 m is proposed to allow for siltation between maintenance dredging works.

Responsibilities

The EIS recognises that the project will have to fund the full costs of the capital dredging and make at least a significant contribution to ongoing maintenance of the navigation channel. A separate commercial entity would be created to manage the marina and associated facilities and a levy for ongoing maintenance would be charged to all berth owners and tenants of the marine industry precinct⁷. This would cover costs for ongoing channel dredging, maintenance and operation of the lock facility and other works, including funding for environmental management.

It is the proponent's view that the state should contribute to maintenance costs of the improved channel because of the benefits it provides to other users. The proponent also notes the recent initiative of the state government to utilise revenue from increased boat registration fees directly for upgrade and maintenance of boating facilities such as boat ramps, harbours and channels. I am advised by the Department of Transport and Main Roads (DTMR) that limited funding for channel maintenance works may be available in-principle however this would depend on an assessment of priorities across all facilities in the state.

The project would fund the installation of the proposed new navigation beacons and the removal of the existing structures. Once installed, MSQ would assume responsibility for their ongoing maintenance.

The channel improvement works would require approximately 550 000 m³ of capital dredging and an estimated average annual ongoing maintenance dredging of 21 000 m³ per year. All dredged material would be pumped to the project site via a temporary pipeline, dewatered and treated for reuse or disposal. The EIS describes the establishment of a dredge material

⁷ Refer to Commitment 10, Appendix 2



rehandling facility in the south eastern corner of the project site. This facility would need to be maintained on a permanent basis, or until an acceptable alternative is found.

Conclusions

I accept the need to provide a safe navigation access for the proposed marina to make the project commercially viable and to provide an acceptable level of safety for users. My conclusions regarding the environmental impacts of the marina and channel dredging are provided in section 4.4.

I acknowledge the benefits to other users in the Caboolture River that would derive from the proposed channel improvement works. It is noted that in future, DTMR may provide a contribution to the maintenance of the navigation channel however this would be based on a case by case decision and having regard to state-wide priorities.

It is critical that future berth owners are made aware of their responsibilities to contribute to funding of the ongoing maintenance of the navigation channel and other associated works. It is important to note that the cost of these requirements may vary in the future due to factors such as natural variability (eg river flooding) and changes in environmental management standards.

Conditions

In order to ensure the appropriate development and maintenance of the navigation channel in the Caboolture River, and to ensure that future berth owners are made aware of their financial responsibilities to ongoing maintenance and associated works of the navigation channel, I state conditions (Condition 2, Schedule B, Appendix 1) that must be attached to a preliminary approval for the project.

4.2.6 Proposed residential use

The proposal includes a mix of residential uses totalling approximately 2 200 dwellings, to be constructed in stages over 15 or more years. The marina precinct would include approximately 900 waterfront villas and apartments ranging from two to four bedrooms in buildings of up to 12 storeys. The residential precincts (a total of 110 hectares) would comprise approximately 1 300 mixed housing types including detached dwellings and a small number of medium density blocks up to 3 storeys. Lot sizes for detached dwellings would vary from 350 m² to 600 m². Overall the project would support approximately 5 500 residents.

The EIS identifies a number of benefits from the inclusion of residential uses in the project. The justification is primarily based on the economic support that it would provide to the recreational and community facilities and the open space precincts that are incorporated in the project. The permanent residents on-site would also contribute to the commercial activities in the marine precinct and the MIBA as customers and/or employees. The EIS also finds that the development of the residential precincts provides a high value alternative use of land that is not viable for industry or agriculture.


Concerns were raised in a limited number of EIS submissions that residential development in the project site is not appropriate, including for the following reasons:

- urban development (part of the residential precinct and the marina precinct) outside the urban footprint is contrary to the SEQRP
- the use of land zoned as district industry for residential use is questionable given the need for employment generating land in the region
- the proposed residential uses would adversely impact on the quiet, semi rural character of the adjoining area.

These concerns are discussed in the following sections.

New urban uses proposed outside the urban footprint

The EIS acknowledges that the proposed development creates a new residential area east of the Bruce Highway that is not contemplated in the SEQRP. Under normal circumstances such



a proposal would result in the regulatory provisions of the SEQRP being applied and the development would be unlikely to be approved. However, lodgement of planning applications for the project prior to the SEQRP coming into force and the project's declaration as a significant project, means that the regulatory provisions don't apply.

Notwithstanding the above, the policies of the SEQRP have been considered as part of my evaluation of the project. The EIS and the SEIS provide a justification for the proposed residential uses outside the urban footprint, including:

- the residential components are critical to the success of the project. The permanent population on-site would contribute significantly to the funding of recreation and community facilities and the open space areas
- the proposed residential housing provides a limited but valuable contribution to meeting future demand for new housing in the region. Recent population forecasting has estimated that 38 500 new dwellings in the Caboolture area will be needed by 2027 – the project would supply approximately 6 per cent of this projected demand
- the residential areas would be developed in a compact form (including medium and high density blocks) and are relatively well located close to employment, transport and service infrastructure
- the proposal would represent a natural extension to the urban footprint. Additionally, the new residential precincts are likely to encourage intensification of the adjoining large lot residential land to the immediate south of the project site, consistent with the objectives of the SEQRP
- the co-location of residential uses on the project site with the MIBA (within walking and cycling distance) enhances the functionality of the MIBA and promotes a high degree of self containment
- the proposal has negligible impact on regional landscape and rural production (RLRP) values. The parts of the site proposed for urban development within the RLRP have very low visibility from external viewpoints and have limited agricultural values.

Residential use on land zoned for District Industry

A substantial portion of the residential (west) precinct lies within the District Industry zoning. The EIS and SEIS examine the potential for this part of the site to be used for industrial use and conclude that only limited MIBA uses could be possible and that the proposed residential use is preferable. The reasoning, includes:

- given the flooding constraints, an industrial area in this location would be separated from the primary MIBA precinct and its highway access
- due to its location adjacent to existing residential areas the possible industrial uses would be constrained. Mitigation, such as the establishment of buffers to the boundary, would reduce the usable area and restrict certain activities
- it may be difficult to avoid heavy traffic on the adjacent road network
- the potential for the project to encourage intensification of the adjoining large lot residential land would be reduced.

Advice from MBRC on this matter indicates no concerns and that the proposed residential use in this area appears logical given the site constraints.

Impacts on adjacent residential areas

One submission to the EIS noted that proposed residential uses, including medium to high density apartments, would conflict with the quiet and semi-rural character and amenity of the adjacent area. Several other submissions raised concerns with the residential traffic generated by the development and its impact on the adjacent road network, particularly along Buckley Road. MBRC expressed concern in relation to the 12-storey residential buildings in the marina precinct and the visual impact on adjoining residential areas.



The development of the project would generate additional impacts compared to those expected from the district industry use anticipated in the planning scheme. The site would be transformed from its existing agricultural use into a highly urbanised setting, supporting an estimated 5 500 new residents and the associated traffic.

The EIS examined these issues and found that the positive benefits of the development would outweigh any adverse impacts. The EIS suggests that residents in the surrounding areas would benefit from the recreational and community facilities created by the project. The critical mass of new residents east of the Bruce Highway would generate opportunity for redevelopment, improved infrastructure, improved provision of public transport and positively influence property values.

Given the targets in the SEQRP for intensification of residential areas inside the urban footprint, it is likely that the quiet and semi-rural nature of the adjacent residential areas would be affected in the future irrespective of the project proceeding. The timing of the proposed development however may bring forward these changes. Similarly, the development of the site in accordance with the District Industry zoning would also result in increased traffic flows on Buckley Road. Traffic impacts are examined in section 4.3.2.

I accept that the development would be 'out of character' with its existing surroundings but it is questionable whether this would be an unexpected or inappropriate outcome. The impacts would be broadly consistent with the intent of the SEQRP. Additionally, I note the results of public consultation reported in the EIS and the finding that there is little community opposition to the proposed residential precincts. Rather, the community feedback indicates significant overall public support for the proposal.

The EIS examined the potential impacts of the high residential towers in the marina precinct. The analysis of scenic amenity in the EIS indicates that the 12 storey buildings would be noticeable from only a limited number of places in the adjoining residential areas and finds that buildings of that scale would be visually compatible with aesthetic and recreational values inherent with the proposed marina. The EIS also notes that 12 storeys would maximise the opportunity for the provision of higher density development, which is a key objective of the SEQRP (in appropriate locations) and that comparable development already exists within the MBRC area.

MBRC has expressed its preference for residential building heights to be limited to a maximum of six storeys, which would be broadly consistent with the Caboolture Shire Plan and the superseded planning scheme for an activity centre of this scale. MBRC also raised concern about the visibility of 12 storey buildings in the proposed location.

Affordable housing

The EIS community context study notes that demand for affordable housing in the region is high. In the recent past, housing stock in the Caboolture area has been seen to offer good value for money despite the relatively low availability.

Some lower cost housing options are included in the proposed development. The housing mix in the residential precincts includes a number of smaller allotments, smaller apartments and detached studio apartments. These products would help to meet some of the demand for lower cost housing types.

In addition, the proponent has committed to a voluntary contribution in the order of \$2 000 from each residential lot sale to a housing trust for the provision of affordable housing in Caboolture⁸. The trust fund would be used by a non-profit agency to help leverage the provision of affordable housing in the area.

Community facilities

In response to the findings of the community context study, the draft Structure Plan includes provision for a range of community facilities on-site to cater for the proposed 5 500 new residents and the adjoining residential areas. The EIS finds that the additional permanent

⁸ Refer to Commitment 4, Appendix 2

residents would have minor impact on demand for external social infrastructure such as schools, medical facilities and emergency services.

The community context study identified a potential need for a new primary school to service the development and the surrounding area. Although a site for a new primary school has been included in the draft Structure Plan, I am advised by the then Department of Education and Training that a new school in the area is not included within its 20 year forward planning.

Queensland Police Service has advised that a suitable site may be needed within the development to accommodate an appropriate policing presence when the development is fully established. The development will be monitored and, if deemed necessary, arrangements would be negotiated directly with the proponent.

Conclusions

The concept masterplan presented in the EIS has been strongly supported by a number of advisory agencies and private submitters. The project has received generally strong support in the local community.

I accept the arguments presented in the EIS supporting the proposed residential uses within the project site and that the project would make a positive contribution to the construction of new housing that will be needed in the region. I am satisfied with the planning requirements incorporated in the draft NEBP Area Plan in relation to residential areas and the provision for community and/or recreational facilities.

I conclude that social impacts on surrounding residential areas would be relatively minor and that benefits outweigh any adverse outcomes. The introduction of 2 200 new dwellings on the project site would positively assist in stimulating redevelopment and intensification of adjacent areas. I note the forecasts in the SEQRP for a demand of an additional 84 000 dwellings in the Moreton Bay Region by 2031.

I am conscious of MBRC's concerns in relation to building heights in the marina precinct and I have concluded that a maximum height of six storeys is not necessary. The proposed 12 storey buildings in this location, appropriately controlled through the planning process would enable the provision of appropriate development densities without significant adverse visual impacts in the surrounding area.

In order to ensure the development results in acceptable visual amenity from viewpoints external to the site, I state conditions (Conditions 5 and 6, Schedule A, Appendix 1) that must be attached to a preliminary approval for the project. This includes requirements for development density, massing and other architectural controls within the proposed marina residential precinct.

4.2.7 Riverine flood and storm tide risk

A substantial portion of the project site lies within the Caboolture River floodplain. The project proposal includes significant earthworks and other works to ensure acceptable mitigation of flood and storm tide risks.

Riverine flood risk

The extent of the developable area and the nature of the flood mitigation works are largely dictated by the requirements of the local government in relation to storm water drainage. These include:

- all development is to be located above the calculated 100 year average recurrence interval (ARI) ultimate flood level plus 0.3 m freeboard
- development is not to adversely affect flood storage or increase flood levels on adjoining properties for all floods up to the 100 year ARI event.

The proponent has commissioned detailed flood modelling as part of the EIS which in turn has influenced the design and layout of the proposal. The flood model includes:

- two dimensional non-steady flood simulation using best available topographical and hydrological data



- a downstream 'tailwater' boundary condition of 2.3 m above AHD - this corresponds to a level of 0.95m above the highest astronomical tide (HAT) at Beachmere
- calibration and verification against documented flood events
- sensitivity testing of sedimentation in the dredged channel in the Caboolture River.

Detailed review of the flood study has been undertaken by MBRC including the commissioning of an expert peer review of the modelling. Subsequent additional refinements to the flood study have been completed to demonstrate compliance with MBRC's requirements. I am advised by MBRC that the flood model study undertaken for the project is satisfactory for the purposes of assessing the applications for preliminary approval and further detailed information would be required for subsequent approvals.

The proposed building pad minimum levels of 4 m above AHD correspond to more than 0.5 m above the calculated 100 year ARI flood level. The extensive earthworks and flood diversion banks proposed within the site would avoid adverse material impacts on the adjoining properties and reduce overall water levels across the flood plain for the 100 year ARI case.

The EIS includes a draft stormwater management plan for the project site. Various water sensitive urban design measures are proposed including the use of vegetated treatment trains and buffer areas. These treatment areas would be designed to filter suspended sediments and pollutants from stormwater flows prior to ultimate discharge into the Caboolture River. The treatment trains would be located within the open space areas, covering approximately 11 per cent of the project site, and would include sufficient storage to manage smaller overland flood flows (up to 1 year ARI) such that peak flows are no greater than the undeveloped case.

Compliance with MBRC's stormwater drainage requirements would require construction of mitigation works within the project site including earthworks to improve overland flood conveyance and diversion banks at six locations within the site to avoid impacts on the neighbouring property. Ongoing maintenance of these works, including control of vegetation growth in floodways, are necessary to ensure overland flood impacts are managed. The allocation of the ongoing maintenance responsibilities of these works within open space areas is discussed in the following section.

The proposed flood mitigation measures presented in the EIS assume the channel in the Caboolture River is maintained at a minimum depth of 2.5 m below LAT. Prior to the development of the portions of the site that rely on the dredged channel for flood conveyance, it is critical that the requisite channel deepening works have been completed and necessary approvals and funding arrangements are in place to ensure its continued maintenance.

Storm tide risk

I note that storm tide risk has not been modelled for the proposed development. I accept that this is not necessary as it is sufficient to assume (conservatively) that storm tide levels affecting the site would be equivalent to maximum water levels at the river entrance.

The potential for rising sea levels associated with global climate change must be included when considering storm tide risk. MBRC has currently adopted a value of 0.3 metres (over a 50-year planning period) for sea level rise allowance. A report recently released by the DERM's (formerly the Environmental Protection Agency) Office of Climate Change entitled *Climate Change in Queensland: what the science is telling us* discusses the current scientific understanding of potential sea level rise. From this it can be concluded that a reliable estimate of predicted sea level rise is 0.8 metres by 2100.

The proposed minimum building pad level of 4 m AHD is more than 2.6 m above the HAT at Beachmere and is well above the 100-year storm tide level of:

- 2.8 m AHD adopted by MBRC (which includes a 0.3m sea level rise allowance)
- the corresponding level of 3.3m AHD when incorporating the predicted 0.8m sea level rise allowance by 2100

Conclusion

I note that the draft NEBP Area Plan requires that development of certain stages of the project can only proceed if flood mitigation works are completed. The sector plan code and reconfiguration of a lot code includes necessary requirements to ensure that flood immunity is considered prior to development of each project stage. Accordingly, I am satisfied that the risks of riverine flood can be appropriately managed for the site. I acknowledge the expert advice provided by MBRC on this matter.

Given that the minimum developed ground levels on the project site would be more than 2.6 m above HAT, I am satisfied that the risk of storm tide inundation affecting the site would be acceptably low and that the proposed development complies with requirements of coastal hazard policies established pursuant to the *Coastal Protection and Management Act 1995*.

In order to ensure the development minimises risks to people and property from flood and storm tide hazards, I state conditions (Conditions 19, 20, 21, 23, 25 of Schedule A) that must be attached to a preliminary approval for the project.

4.2.8 Open space

The project site is currently a degraded ex-pine plantation, largely cleared and used for cattle grazing. The proposal includes the creation of 419 hectares of open space precincts – the majority of which is flood constrained.

A draft landscape master plan provided in the EIS outlines the proposed open space areas. The intent of the various uses include habitat protection and enhancement⁹, flood conveyance, a heritage park¹⁰, river access and picnic areas, sports fields¹¹ and a golf course. The primary objectives are to manage flooding hazards and to enhance the value of the other elements of the project by providing attractive surroundings. Significant environmental benefits and benefits for the community in the surrounding areas are also intended.

A substantial component of the open space would be utilised for stormwater management. This includes sections of the proposed golf course which would incorporate Raff Creek and a series of vegetated treatment and retention areas.

In addition to the open space precincts there would be public open space areas within other precincts including local parks and pedestrian spaces in the vicinity of retail areas.

The current MBRC planning scheme sets out the requirements for open space contributions as a mandatory part of a development of this nature. The requirements include

- an area representing 10 per cent of the site must be dedicated to open space
- the dedicated area to be above the 20 ARI flood level
- 50 per cent of the dedicated area to be above the 100 year ARI flood level.

MBRC has advised that the proposal, in its preliminary form, would be able to satisfy the requirements, given the extent of revegetation, public facilities and other works to be provided across the site.

The EIS proposes that tenure of the open space precincts remain largely as private freehold, with appropriate arrangements in place for public access and management responsibilities. This was preferred to allow the site owners to actively manage the amenity and thereby control the attractiveness and overall value of the project. MBRC has advised a preference that all the public open space areas should be converted to public ownership to ensure that functions such as public access and flood mitigation are adequately maintained.

⁹ Refer to Commitment 1, Appendix 2

¹⁰ Refer to Commitment 6, Appendix 2

¹¹ Refer to Commitment 2, Appendix 2



The different forms of ownership would have implications for funding arrangements. Where a body corporate retains ownership of open space as common property, it would also have responsibility for the funding of ongoing maintenance and public liability insurance. Conversely, public ownership would require an ongoing allocation through the MBRC's general open space management program.

In subsequent discussions, a dual management arrangement has been proposed for the open space precincts of the project. Under this arrangement, ownership of a large proportion of the open space areas would be transferred to MBRC. The transfer would occur after completion of rehabilitation and other works and would be on the basis that the proponent is provided management access (e.g. in the form of a lease) over all or part of the area. This would enable the body corporate to undertake maintenance tasks (to an agreed standard) whilst guaranteeing ongoing public access.

The site owners (body corporate) would retain selected elements of the open space areas in the form of common property. Easements would be created to allow public access and for drainage purposes. Elements would include:

- water features and entry statements
- golf course
- public walkways and plazas within the marina and MIBA precincts
- areas required for access to the navigation lock.

Where these areas would be publicly accessible, the owners would need to ensure adequate public liability insurance cover is maintained.

Conclusions

I am satisfied that the proposed ownership and management arrangements for the open space are feasible and would provide both MBRC and the site owners an acceptable level of management control.

I note that the transfer of open space land to public ownership is in addition to that otherwise required by the planning scheme or by state legislation. Similarly, the proposed rehabilitation and revegetation works would also be considered as an addition to that normally required as part of a development of this type.

In order to ensure the development provides appropriate management of public open space within the project site, I state conditions (Condition 8, Schedule A, Appendix 1) must be attached to a preliminary approval for the project.

4.2.9 Alternative uses

As reported in the EIS, there are only two realistic alternative uses for the site other than the development proposed in the two current planning applications.


1. The land within the District Industry zoning (and the urban footprint) could be developed as a "traditional" industrial subdivision.

The EIS compares the employment generation and the economic potential of this option against the fully developed proposal. Substantial benefits to the local economy would be generated, including more than 10 000 operational jobs, however these would be significantly less than those predicted for the current proposal (i.e. 13 000 operational jobs).

It could be assumed that the balance land, outside the urban footprint and within a Rural zoning, would be retained for cattle grazing. Therefore the predicted environmental and social benefits of the proposed open space precincts would be unlikely to be realised.

2. Alternatively, the existing rural use could continue.

The EIS includes an assessment of the value of the agricultural land on the project site. The site has historically been used for pine plantation, grazing and limited



cropping which has resulted in significant clearing and degradation. A total of 21.4 ha (2.8 per cent) of the site was assessed as Agricultural Land Class A and 116.7 ha (15.1 per cent) of the land was classed as Class A-B. These two classes are considered to be 'good quality agricultural land'. A further 12.2 per cent was Class B suitable for grazing, 51.4 per cent was Class C also suitable for grazing and 18.5 per cent is Class D which is non-agricultural land.

The Class A and A-B lands are located within the urban footprint, as designated in the SEQRP, and are constrained by topography. The EIS finds that the areas suitable for agricultural pursuits are relatively small and are unlikely to produce viable economic returns.

Advice from the DERM (formerly Department of Natural Resources and Water) confirms the EIS assessment that the land has negligible agricultural future.

4.2.10 Overall conclusions – economic and social

Having examined the project proposal and supporting information I am satisfied that the development of new employment generating land on the site would provide considerable economic and social benefits for the region.

I accept that the MIBA format in conjunction with other elements of the project is well formulated and has clear advantages over a traditional industrial development of the land zoned as District Industry. The proposal offers the opportunity to develop an attractive living and working environment and promotes a high degree of self-containment. Co-location of the MIBA with the marina close to existing urban areas and transport links is a rare opportunity to develop a new marine industry cluster in the region.

I am satisfied that the proposed retail and residential uses would have net positive economic and social impacts on the surrounding communities. The proposed development is generally in accordance with the strategic directions of the SEQRP. The residential precincts would provide a useful contribution to forecast shortage of new houses in the area and could assist in encouraging further intensification of the adjacent areas, as supported by the SEQRP.

4.3 Infrastructure impacts

4.3.1 Impacts on the existing road network

The project site is strategically located adjacent to the Bruce Highway, which is the primary northern route from Brisbane for commercial vehicles and trucks and also carries significant commuter and recreational vehicle loads. The rapid growth of the region has resulted in heavy use of the highway and other major road access routes often leading to congestion problems during peak periods. Current planning by DTMR suggests that at least eight lanes will be required on the Bruce Highway in the vicinity of the project site by 2020.

The ultimate development of the project would yield approximately 350 hectares of urban uses supporting an estimated 13 600 employees and 5 500 permanent residents. The scale and nature of the proposal will necessarily impact on the existing road network including the Bruce Highway.

The EIS reports on the results of a detailed assessment of traffic impacts on the road network. The studies list a number of works that are likely to be required to accommodate traffic flows generated by the project over and above background population/traffic growth.

The analysis undertaken for the EIS and supplementary EIS indicates that a majority of the traffic generated by the development is expected to pass through the Buchanan Rd interchange to access the Bruce Highway and broader road network. Similarly, the Uhlmann Road interchange and other nearby roads are expected to experience impacts from development traffic.



Figure 1 shows the principal transport routes for the project. Infrastructure upgrades that are likely to be needed to accommodate the increased loads include:

- upgrade of the Buchanan Road overpass to achieve sufficient capacity east and west of the highway. A high capacity signalised interchange will also be required
- the Buchanan Road link to Morayfield is expected to require a four-lane upgrade by 2030, both east and west of the highway. Significant intersection upgrades at the western end of Buchanan Road, including the rail crossing, are also required. The impacts of the project would bring forward the timing of these works
- increased traffic loads on the Bruce Highway are predicted and the timing of the likely upgrading of the Bruce Highway to eight lanes may need to be brought forward. An additional lane would be needed on the highway off ramp to Buchanan Road.

As shown in Figure 1, the internal road layout of the NEBP is based around a central east-west boulevard which extends from the Buchanan Road entry point. Connections will be made to the south primarily through Buckley Road. Limited access would be available via Nolan Drive in the short to medium term. Further east-west links between precincts would service local traffic.

The EIS discusses upgrade works expected for the local road network to the south of the project site. Buckley Road, the secondary access to the site, would need to be upgraded to sub-arterial standard. The planned upgrade of the Buckley Road/Uhlmann Road intersection would need to be brought forward, including a signalised intersection.

Works by 2020 on the Bruce Highway also include an upgrade of the existing Uhlmann Road overpass and roundabouts to a four lane cross-section, due to a general increase in local traffic. Additional traffic loads generated by the project may bring these works forward. A signalised intersection on the Uhlmann Road ramps west of the Bruce Highway is identified as already overdue.

Both DTMR and MBRC raised concerns that the extent of road network upgrades discussed in the EIS may not be adequate to mitigate all likely impacts. MBRC's concerns were based on an independent traffic modelling study that indicated that impacts may be expected over a larger area than anticipated by the model results in the EIS. In particular, significant traffic loads are anticipated on parts of the road network to the west of the project site.

Conclusions

Given the format of the MIBA development, the trip generation for this land-use is likely to be higher than that expected for a typical district industry development. Taken with the additional urban uses on the site (residential and marina), the associated network impacts on state and local roads are expected to be greater than originally envisaged within local and regional infrastructure planning. These impacts would need to be addressed as part of implementation of the project.

There is considerable uncertainty of the actual traffic generation of the project compared to the background growth over its 15-20 year staged development. Traffic loads in the project would be affected by the final configuration of the MIBA and other parts of the development. Similarly, continuing growth of the region including redevelopment and intensification of surrounding areas will affect background traffic loads and can't be accurately predicted over the timeframe.

It is therefore difficult to reach firm conclusions at this point about the ultimate extent of impacts and appropriate level of contributions required by the development. Accordingly, I accept that a staged approach to mitigation is necessary. Both DTMR and MBRC agree that the traffic and road impacts of the project be monitored and addressed at each stage of development on a cumulative basis. Detailed traffic impact assessments would need to be prepared as part of development approvals for individual stages.

In order to ensure that the impacts of the development on the adjacent road network are adequately mitigated, I state conditions (Conditions 26–31, 33 of Schedule A and Condition 3 of Schedule B, Appendix 1) that must be attached to a preliminary approval for the project.

