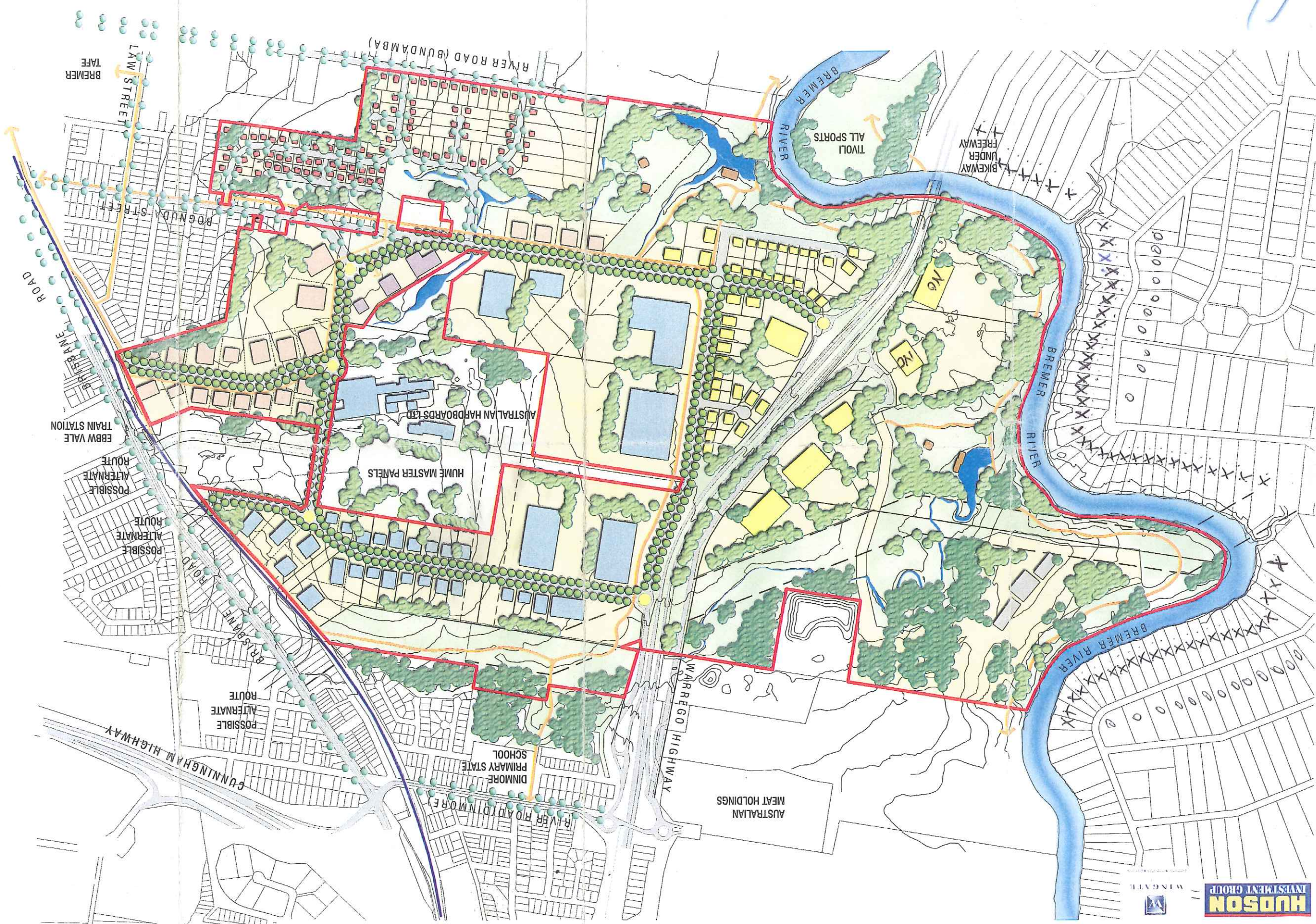


MASTER PLAN

DECEMBER 2002
SCALE 1:5000 @ B1

- LEGEND (INDICATIVE BUILDINGS ONLY)**
- RIVERSIDE PRECINCT
 - HIGHWAYS PRECINCT
 - FRAME INDUSTRIAL AND COMMERCIAL PRECINCT
 - CENTRAL INDUSTRY PRECINCT
 - RESIDENTIAL PRECINCT
 - OPEN SPACE PRECINCT
 - COMMUNITY CENTRE PRECINCT
 - MAIN BOULEVARD
 - STREETSCAPE TREATMENT TO LOCAL STREETS
 - EXISTING TREES
 - PARKLAND / BOUNDARY TREES
 - BICYCLE AND PEDESTRIAN TRACK
 - WATERWAY
 - SITE BOUNDARY
 - RAILWAY LINE
 - ENTRY ROUNDABOUT
 - PICNIC SHELTERS



A horizontal number line with arrows at both ends. It has major tick marks labeled 0, 100, and 200. There are also minor tick marks between the major ones, representing increments of 50.

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128

BREMER RIVER

2

Flooding in Ipswich &
Brisbane River flood-

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DA

Flooding in Ipswich &
Richmond River flood-

be issued over radio and TV. Take notice only of official statements and listen for them regularly during the emergency.

The BUREAU OF METEOROLOGY issues the following official statements:

FLOOD WARNINGS—these will apply anywhere on the Brisbane River system and will describe the flooding as minor, moderate or major.

FLOOD FORECASTS—when the flood appears to be large enough to affect houses, flood forecasts will be issued stating the expected height the flood will reach at a particular time at various flood gauges along the Brisbane and Bremer Rivers.

The POLICE will issue ALL OTHER official statements.

FLOODING INFORMATION

INTRODUCTION

The Brisbane River and the Bremer River both have a relatively long history of severe flooding. The 1974 flood was one of the most severe on record, of national disaster proportions, with an end result of widespread economic and social devastation and loss of life. However, it should be carefully noted that, on at least four occasions last century, Brisbane River floods exceeded the height of the 1974 flood. Less information is available on the Bremer River but it is clear that the relative severity of the Bremer River flooding in 1974 was greater than that which occurred in the Brisbane River.

In retrospect, it can be seen that the potential flood hazards of the Moreton Region were not widely enough appreciated for the Cities of Brisbane and Ipswich to be anything but ill prepared for the events of January 1974. The preparation of this series of flood maps is one part of a continuing effort by Federal, State and Local Government agencies to remedy this situation by providing information on flooding for future warning and planning purposes.

FUNDAMENTALS

A flood situation results when the channel of a river or creek cannot carry the volume of water entering it from a catchment and hence breaking of the banks by the flood-waters occurs. Flooding can be viewed as an excessive but natural component of the hydrologic cycle, potentially damaging to man wherever he has encroached upon flood plains which are an integral part of the river system.

In the case of the 1974 Brisbane and Bremer River floods, these were natural events which would have occurred with or without the activity of man in the catchment. Once the banks of these rivers are broken the inundation of the adjacent flood plains can be very extensive and, in fact, some properties not normally within sight of a river will be inundated.

Rainfall is the primary source of flood-waters. Three features of it are important—its quantity, its distribution over the catchment and its distribution in time.

The influence of the quantity of rain is obvious and it can generally be said that the greater the catchment rainfall, the greater the resulting flood.

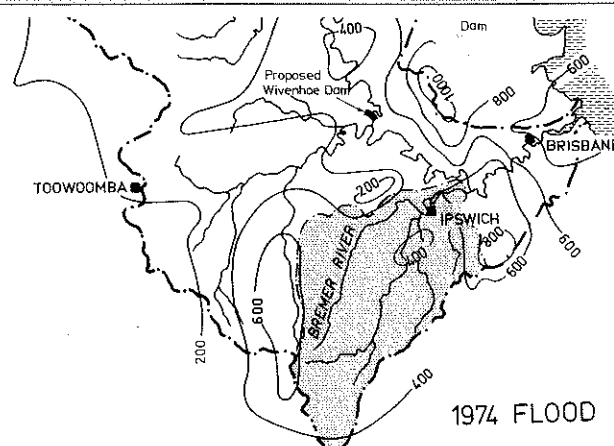


Figure 1 Rainfall Isohyets

The distribution of rainfall in time is also of importance as the shorter the time period in which a given volume of rainfall occurs the faster will be the rate of rise of the resulting flood and probably the peak flood height and peak flow will also be greater. Figure 2 shows the time distribution of rainfalls which occurred over various parts of the Brisbane River catchment in the 1974 flood.

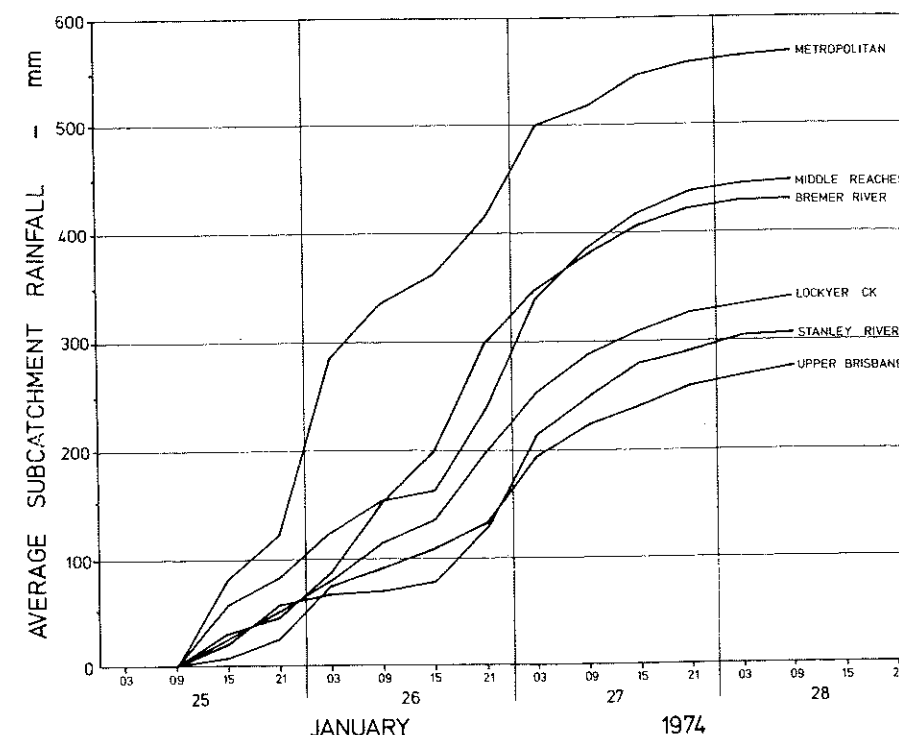


Figure 2 Time distribution of rainfall

The physical characteristics of the catchment itself are also important in determining the flood that can eventuate from a particular rainfall. These include geographical features such as catchment area and topography and hydrological features such as rainfall retained by vegetation, catchment evaporation and seepage into soils. All these features are interrelated and affect the time required for rainfall to appear as flood water in creeks and rivers.

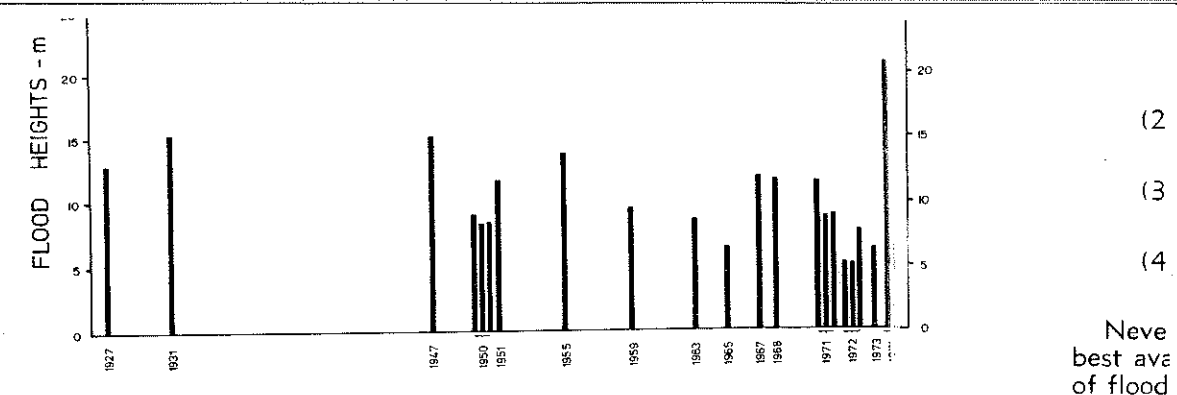


Figure 3b Bremer River Floods

FLOOD FREQUENCY

The chance that a flood in any one year will equal or exceed a particular height is referred to as its probable frequency. Large floods occur less frequently than small floods. Although considerable research has been applied to the subject, no universally accepted statistical procedure has been developed for calculating frequency. The view that floods occur in cycles has often been put forward but so far no statistical evidence has been produced to support it.

Engineers, hydrologists and others working on flood problems usually describe the frequency of floods in terms of their return period. The meaning of the term "return period" is best illustrated by reference to the 1974 flood. Following the 1974 flood, a flood frequency study was conducted for the Brisbane River and the theoretical statistical distribution known as the Logarithmic Pearson Type III distribution was fitted to the recorded annual flood peaks. On that basis the 1974 flood had a return period of about 500 years which meant that over a period of 500 years it could have been expected that about 10 floods equal to or greater in magnitude than the 1974 flood would occur. Another way of expressing this was that the 1974 flood level had a probable frequency of 1:500. This meant that there was a 1 in 500 chance that a flood equal to or greater than the 1974 flood could occur in any one year. Following the completion of Wivenhoe Dam, the 1974 flood levels have a return period of about 400 years.

The estimation of flood frequencies for the Bremer River required a different approach because of the limited amount of flood data available. Flood records for reasonably long durations were available at 10 stations in the Brisbane River catchment and these provided a suitable basis for the application of an alternative approach for the Bremer River known as a regional flood frequency analysis.

The results of the flood frequency analysis for both the Brisbane and Bremer Rivers are given in Table 1.

Table 1 — Probable Frequencies of Floods

Brisbane River (with Wivenhoe Dam)			Bremer River		
Probable Frequency	Brisbane City Gauge (metres)	Flood Peak (m ³ /s) †	Probable Frequency	Ipswich* City Gauge (metres)	Flood Peak (m ³ /s) †
1:25	2.0	4 040	1:11	8.5	1 100
1:125	4.0	7 150	1:28	12.0	1 620
1:700	6.0	10 150	1:60	14.5	2 100
1:3500	8.0	13 200	1:110	16.4	2 540
1:>10000	10.0	16 500	1:200	18.0	3 050

* The Ipswich City Gauge heights make no allowance for backwater from the Brisbane River. The inundation lines for the lower Bremer River are a result of backwater flooding from the Brisbane River and so do not correspond to these flood events.

† Denotes cubic metres per second.

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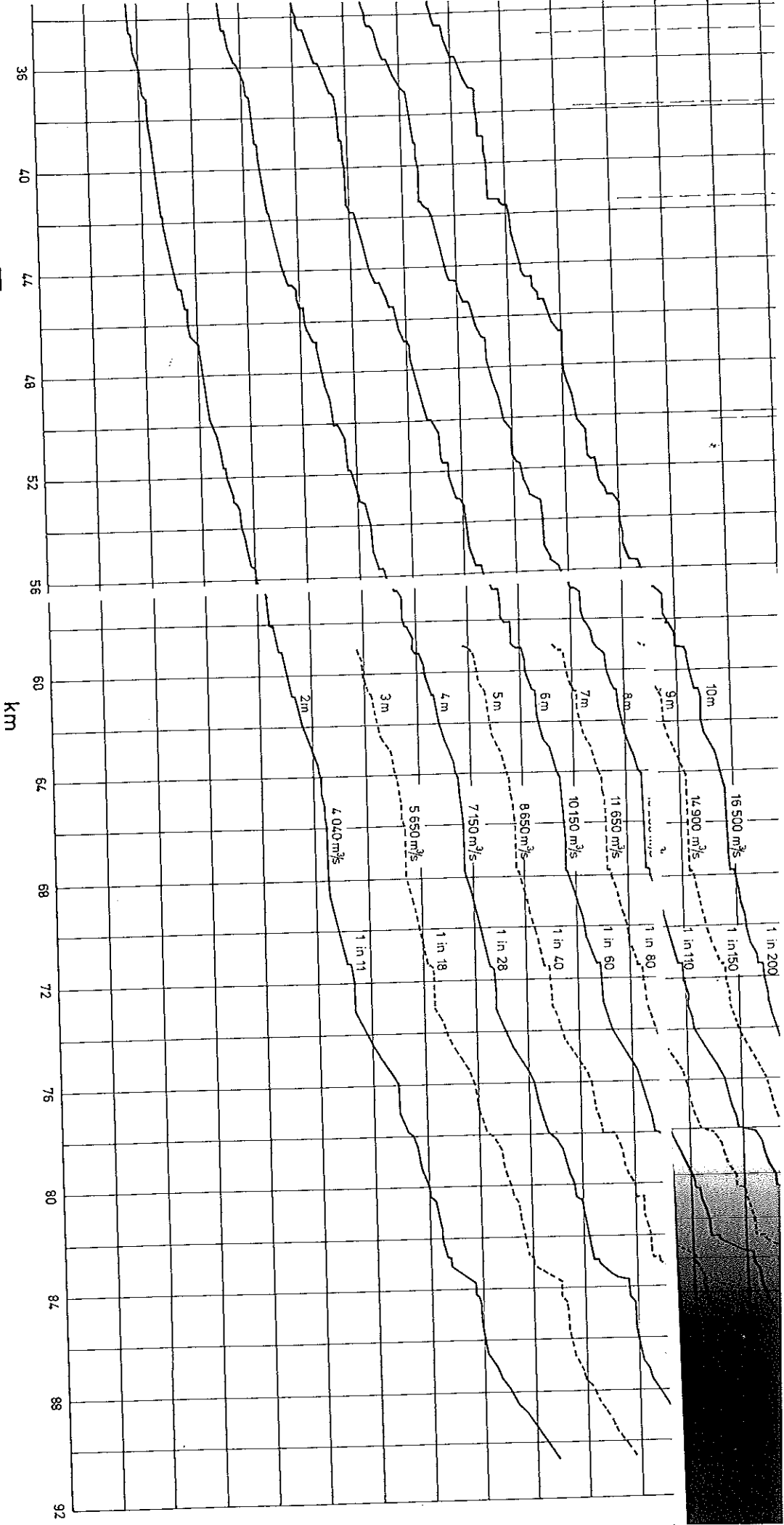


Figure 4 Brisbane River flood profile

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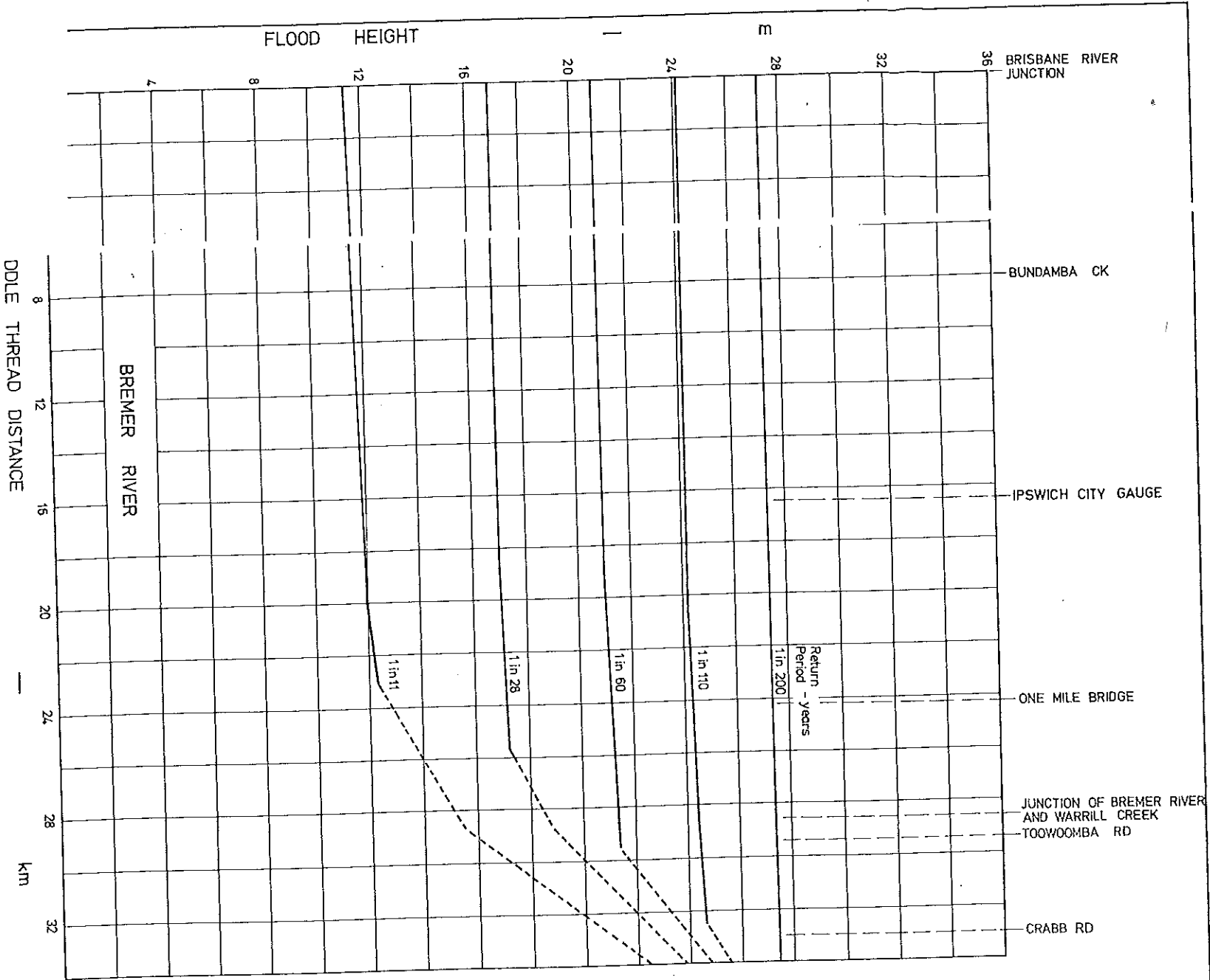
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backing-up at bridges.

flood maps provide the





Ipswich City Council

Customer Service Centre
143 Brisbane Street
Cnr Ipswich City Mall, Ipswich
PO Box 191
Ipswich QLD 4305
Australia

Tel (07) 3810 6666 or 1300 IPSWICH
Web www.ipswich.qld.gov.au

Cityswitch Applications			
7024/09	CA	Stages 2A, 2B + 2C	
10401/07	RAU	2 into 20 lots	
1294/10	CA	MCW + RAU	
9502/08	OW	Roadworks	
1250/10	CA	MCW + RAU	
9070/07	OW	Hoepner Road works	
1227/09	CA	MCW (Business use)	
8866/10	CA	3 into 7 lots	
953/10	OW	Roadworks - Ashburn Rd.	
7816/09	OW	Bulk Earth works	
+7540/10	OW	Stage 7 Earthworks	
7238/05	RAU	1 into 13 lots	
6847/07	CA	2 into 7 lots	

5415/09	RAL	4 into 122 lots.
5242/08	RAL	Easement (Access)
5134/10	RAL	1 into 4 plus balance lots
5062/09	RAL	Creation of road
4496/09	RAL	3 into 4 lots
4319/09	RAL	3 into 8 plus balance lot
4264/09	OU	Build earth works
4210/08	RAL	4 into 48 lots
4078/08	RAL	3 into 20 lots
2900/09	RAL	3 into 2 lots
2404/09	OU	Clearing vegetation
1837/07	RAL	3 into 27 lots

WALKER CORPORATION PTY LTD

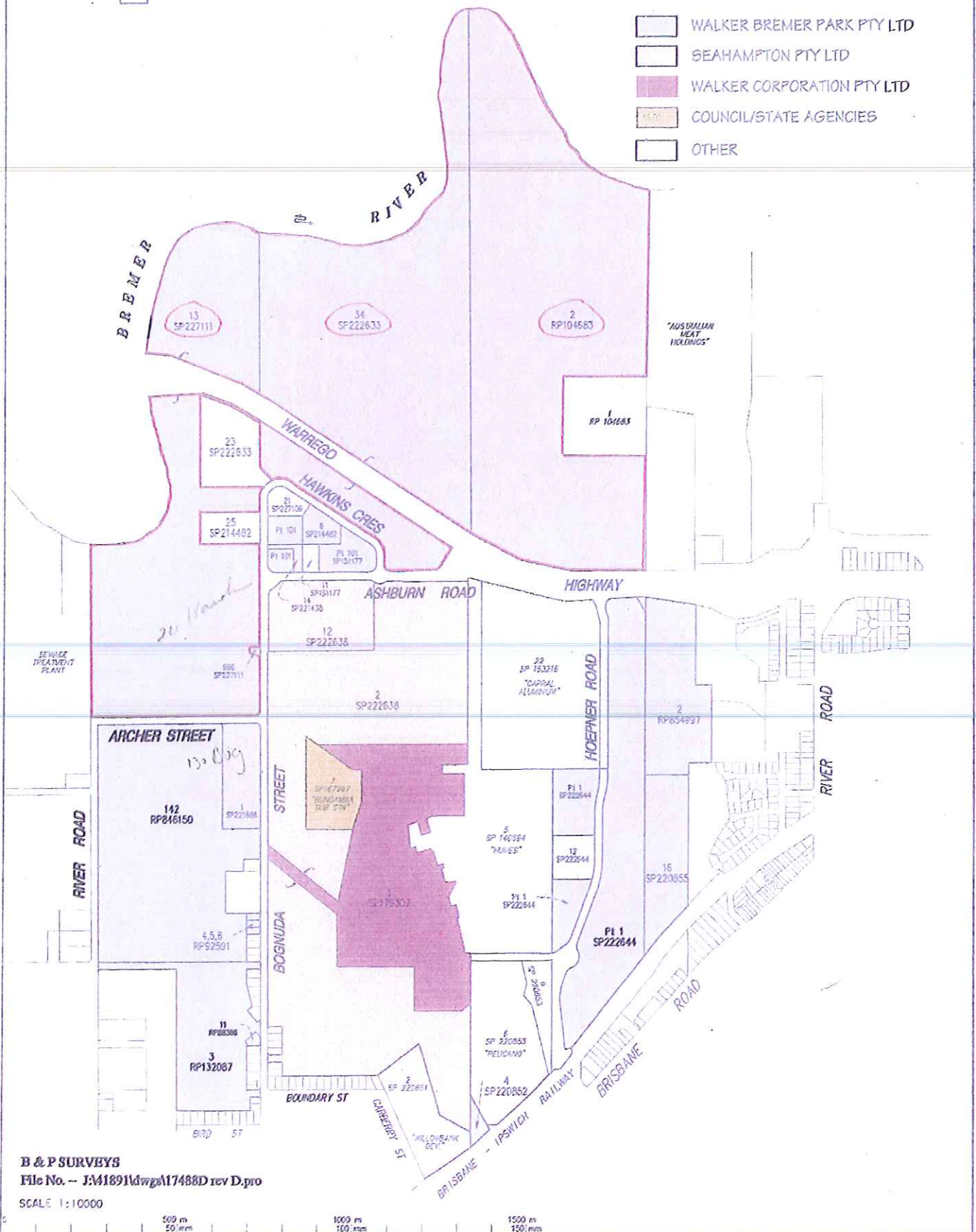
CITISWICH LAND HOLDINGS AND ADJACENT LAND HOLDINGS

AS AT 28th JUNE, 2010



LEGEND

- | | |
|-------------------------------------|----------------------------|
| <input type="checkbox"/> | WALKER BREMER PARK PTY LTD |
| <input type="checkbox"/> | SEAHAMPTON PTY LTD |
| <input checked="" type="checkbox"/> | WALKER CORPORATION PTY LTD |
| <input type="checkbox"/> | COUNCIL/STATE AGENCIES |
| <input type="checkbox"/> | OTHER |



B & P SURVEYS

File No. ~ J:\41891\dwgs\17488D rev D.pro

SCALE 1:10000

Ipswich City Council[Home](#) > [PD Online](#) >**Application Details****OW - 7540 / 2010 - Operational Works**[close all](#) | [open all](#)

Details

Description: Citiswich Stage 7 Bulk Earthworks
Submitted: 03/11/2010

Decision

There has been no decision recorded against this application.

Status

Appl. in abeyance

Properties

130 Boqnuda Street BUNDAMBA QLD 4304
24 Hawkins Crescent BUNDAMBA QLD 4304
239 Warrego Highway BUNDAMBA QLD 4304

People

Applicant : Walker Corporation Pty Ltd
Owner : Walker Bremer Park Pty Ltd

Events

Started

12/11/2010

Description

Information Request
Info. Request Reponse
Decision Stage
Negotiated Decision Notice
Maintenance Stage

Est Comp





18/11/2010

Completed

Officer

Responsible Officer: Cameron Hoger

Documents

(16/11/2010) 7540/10 Acknowledgement Notice (Author: Cameron Hoger) 
(08/11/2010) 7540/10 Application Forms 
(08/11/2010) 7540/10 Supporting Letter for Application 
(08/11/2010) 7540/10 DA Plans Lodged 

Email

Contact us about this application.



Citiswiche - Stage 7a

BULK EARTHWORKS APPLICATION

BUNDAMBA IPSWICH QLD 4304

FOR APPROVAL
11/10/2010



SCHEDULE OF DRAWINGS	
CONTRACT	
7702 44 03 000 - COVER SHEET	
EXISTING CONDITIONS	
7702 44 03 001 - OVERALL EXISTING CONDITIONS PLAN	
7702 44 03 001 - EXISTING CONDITIONS PLAN - SHEET 1 OF 4	
7702 44 03 002 - EXISTING CONDITIONS PLAN - SHEET 2 OF 4	
7702 44 03 003 - EXISTING CONDITIONS PLAN - SHEET 3 OF 4	
7702 44 03 004 - EXISTING CONDITIONS PLAN - SHEET 4 OF 4	
EROSION SEDIMENT CONTROL	
7702 44 03 005 - EROSION SEDIMENT CONTROL PLAN	
7702 44 03 006 - EROSION SEDIMENT CONTROL DETAILS	
EARTHWORKS	
7702 44 03 007 - OVERALL EARTHWORKS PLAN	
7702 44 03 007 - EARTHWORKS PLAN - SHEET 1 OF 4	
7702 44 03 008 - EARTHWORKS PLAN - SHEET 2 OF 4	
7702 44 03 009 - EARTHWORKS PLAN - SHEET 3 OF 4	
7702 44 03 010 - EARTHWORKS PLAN - SHEET 4 OF 4	

Dwg No.: 790244.03-000

Date: OCT 2010

Rev.: A

Level 11, 515 St Paul's Terrace, Fortitude Valley QLD 4006
Locked Bag 4006, Fortitude Valley QLD 4006
Telephone: 07 3308 8922
Facsimile: 07 3308 8722

Cardno (Qld) Pty Ltd
ABN 67 00 074 390

BREMER BUSINESS PARK

A New Western Gateway Strategy

Project Outline & Summary

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1. Bremer Business Park – A New Western Gateway Strategy

1.1. What is Bremer Business Park?

Bremer Business Park takes its name from the Bremer River which is synonymous with industrial and economic development since the founding days of Queensland. While exploring up the Brisbane and Bremer River systems in 1859, Alan Cunningham named the river after Sir James Gordon Bremer, commander of HMS Tamar and then the HMS Alligator. Bremer was attached to the colony of New South Wales at the time.

Bremer Business Park is a comprehensive and integrated industrial and commercial enterprise zone, comprising a total area of 319.09 hectares of industrial, commercial, residential and open space land, situated to the east of Ipswich.

1.1.1. Sustainable Economic Development

The project will deliver a wide range of opportunities for sustainable economic development taking advantage of the key location in Queensland's regional transport network. These opportunities will arise from further industrial activity relating to the existing operations of Australian Hardboards and Humes Masterpanel, as well as a wide range of operations servicing national, State, regional and local transport-based enterprises.

Importantly, Bremer Business Park provides alternative employment opportunities in a range of industry sectors for many of the 15,600 people who travel out of the City each day to their workplaces. The people who travel out of the City to work each day account for approximately 42% of the employed people in Ipswich.

1.1.2. Community Benefits

The project will set new a new benchmark in delivering community benefits through economic development. The project embraces an expansive riverside park and extensive areas of public open space for casual recreation and use by the local community and the workforce.

Bremer Business Park is expected to provide a range of community facilities and open space in a cost neutral arrangement with the Ipswich City Council and the Queensland Government.

Bremer Business Park also will respond to the existing need for the residents of Bundamba, Dinmore and Ebbw Vale to access community facilities such as aged care, medical services, retirement village, child care services, community services (library, internet access), convenience shopping, and local club and dining facilities. All of these services are to be provided in a small, integrated community centre in the heart of Bremer Business Park.

1.1.3. Community Engagement

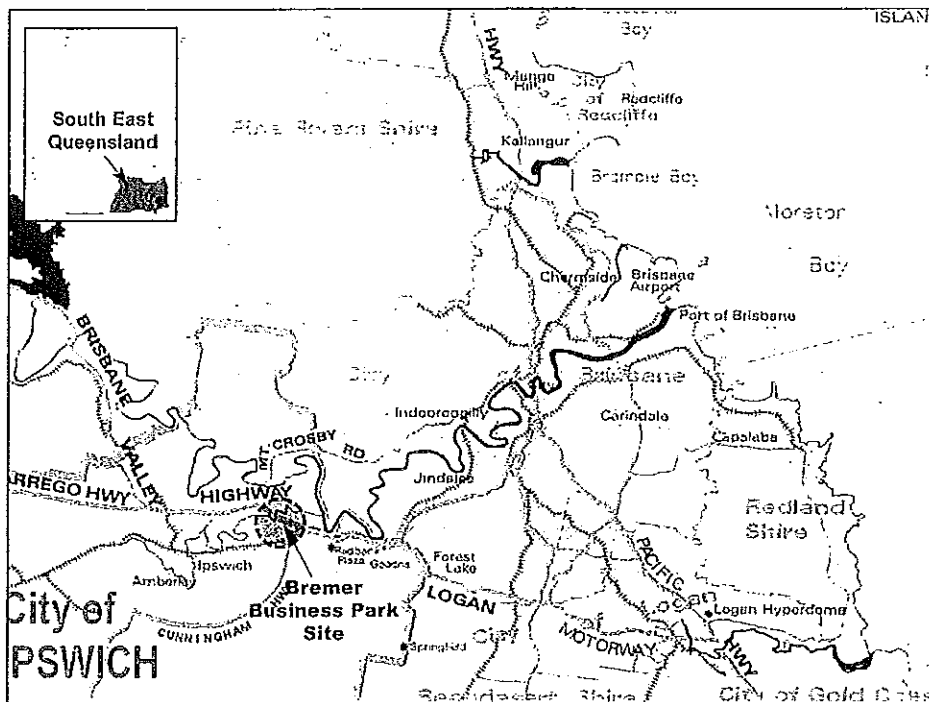
The range of community facilities and services provided in and adjacent to the community centre will provide opportunities for more residents and their families to stay living in the locality. Also, the needs of the workforce could be met from this centre.

The concept of Bremer Business Park has grown from a lengthy period of community engagement by the proponent Wingate Properties Pty Ltd. This engagement has included a number of community meetings, Workshops, and information sessions explaining the concept planning, identifying issues of community concern and concept revision.

1.2. Where is Bremer Business Park?

Bremer Business Park is situated at the heart of the regional transport network in the rapidly growing South West Corridor linking Brisbane with Ipswich. It fronts the Warrego Highway which links Brisbane with the regional hinterland of Toowoomba and the Darling Downs. It also fronts the Ipswich Railway which is the principal rail commuter route, and freight route between Ipswich and Brisbane. Bremer Business Park lies nearby and easily accessed from the Cunningham Highway which links Brisbane and Ipswich to South West Queensland and the southern States.

Bremer Business Park is about 25 kilometres to the west of the Brisbane central business district and about 7 kilometres to the east of the Ipswich central business district.



Location Plan

1.3. Project Description

1.3.1. Business & Other Activities in BBP

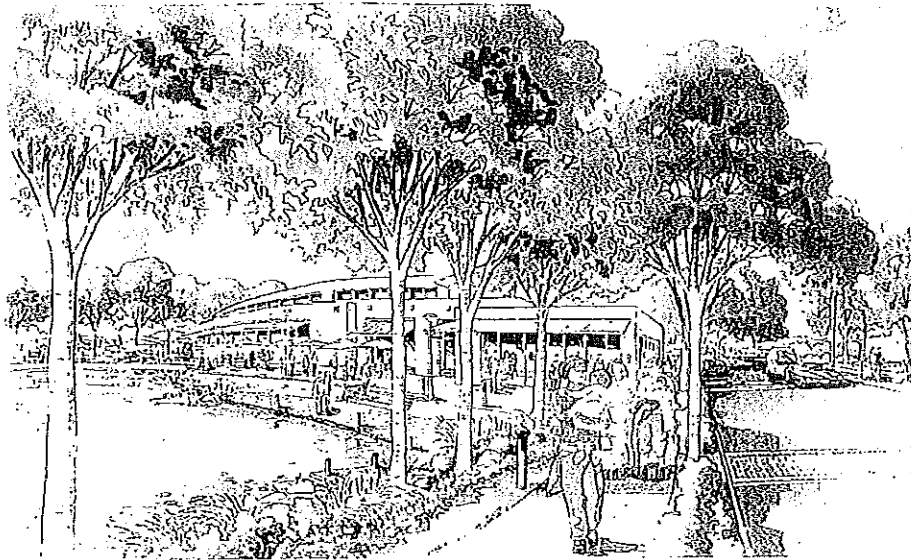
Bremer Business Park is a multi-faceted economic development project focussed on and integrated with the communities of Bundamba, Dinmore and Ebbw Vale. It includes:

- ✓ major industrial activities, both existing and proposed;
- ✓ opportunities for new, technology and research-based activities, possibly based on synergies with the existing industries and colleges at Australian Hardboards, Australian Meat Holdings, Humes Masterpanel and the Bremer College of Technical and Further Education (TAFE);
- ✓ transport-related activities capitalising on the outstanding strategic advantage of the location in the national transport network. These activities are likely to include major storage and distribution centres, re-packaging and wholesale enterprises, and major service providers (eg laundries, catering services for the correctional establishments at Borallan, Moreton and Wacol);
- ✓ 'start-up businesses' in flexible building arrangements to cater for the needs of small businesses;
- ✓ direct access to the Ebbw Vale railway station from the site and the adjacent residential areas;
- ✓ a community centre, previously described, to specifically offer a range of services and facilities to the communities of Bundamba, Dinmore and Ebbw Vale, and to the workforce within Bremer Business Park;
- ✓ a range of housing choices, in appropriate locations, with ready access to extensive areas of developed public park and district playing fields, and areas of public open space revegetated with local native species and provided with a safe and attractive system of walking paths, waterways and viewing points of the Bremer River.

1.3.2. The Bremer Business Park Landscape

Bremer Business Park is to be set in a landscaped parkland setting. Much of the site is to be given over to the Ipswich City Council for use as park and open space. The edges of the site are to be landscaped with locally occurring plant species to ease the transition from varying forms of commerce and industry to residential and rural residential.

There will be a creative and sympathetic use of water within the open space to draw the environment into Bremer Business Park and to provide functional ecological links between regionally important ecosystems beyond the site and the Bremer River.



Artist Impression of park system and community centre

The landscape of Bremer Business Park will also provide a visual and functional transition from the Bremer River and the rural pastures that existed along its banks up to the Warrego Highway and the more intensively used commercial and industrial precincts. The open space and landscape treatments will also provide a pleasing yet effective screen between the industrial activities in the central precincts and the less intense commercial and residential areas.

Bremer Business Park will establish the benchmark for high quality urban landscapes and for environmental management through landscape design and management. Streets will achieve a pleasing urban amenity through a combination of planting, paving, lighting and furnishings with high quality architecture of the buildings fronting the streets.

1.3.3. Infrastructure Support

The benefits of a master planned approach to the development of Bremer Business Park will be evident through the integrated approach to site and street landscaping, earthworks strategies and the provision of development infrastructure.

(1) Outstanding Accessibility

Bremer Business Park will achieve outstanding levels of accessibility through convenient connections to the Warrego Highway, Brisbane Road and the Cunningham Highway. Industrial and commercial traffic will access Bremer Business Park on dedicated transport routes away from the residential areas of Bundamba, Dinmore and Ebbw Vale. The accessibility of Bremer Business Park and other industrial sites would be further enhanced if the Council's planned option of a future connection, over the Ipswich Railway, to Brisbane Road is provided. That connection would provide enhanced access between the Cunningham Highway and the Warrego Highway with obvious regional transport and economic development benefits.

Other highway access will be gained to the Warrego Highway via a new interchange near the Bremer River and on the existing interchange at River Road, Dinmore.

Access to Bremer Business Park from the surrounding residential areas will be improved through the internal network of roads and paths. The internal ring road system will provide the local community with direct and safe access to local community facilities on Bognuda Street. The path system will provide easy, attractive and safe access from the residential and employment areas to attractors such as the Ebbw Vale railway station, the Bremer TAFE, the Dinmore State School and the proposed community centre on Bognuda Street.

Access to the Ebbw Vale railway station will be improved by the provision of internal pathways and improved cross-rail linkages.

(2) Urban Services

All necessary urban services, such as a reticulated water supply, sewerage system, drainage, power and gas, and telecommunications, will be provided to every site in Bremer Business Park. An Infrastructure Agreement will be created between the proponent and the Ipswich City Council to ensure the timely and efficient delivery of such services.

(3) Urban Water Management

A key feature of Bremer Business Park is the integration of 'best practice' urban water management strategies with site planning and development and with the park land and open space system.

A 'whole of catchment' approach underlies the strategy to capture and clean urban drainage water before it leaves each development site, during and after construction. From there it enters the open space system containing a range of water management features, such as wetlands and ponds for sediment retention and nutrient stripping, and detention basins for flow management. Upon its release to the environment in the Bremer River, the quality of the urban water from Bremer Business Park will achieve acceptable water quality standards. The rate at which the urban water is released will be controlled to replicate the natural flow regime that might have existed over 100 years ago when the natural wetlands were there.

Community Facilities

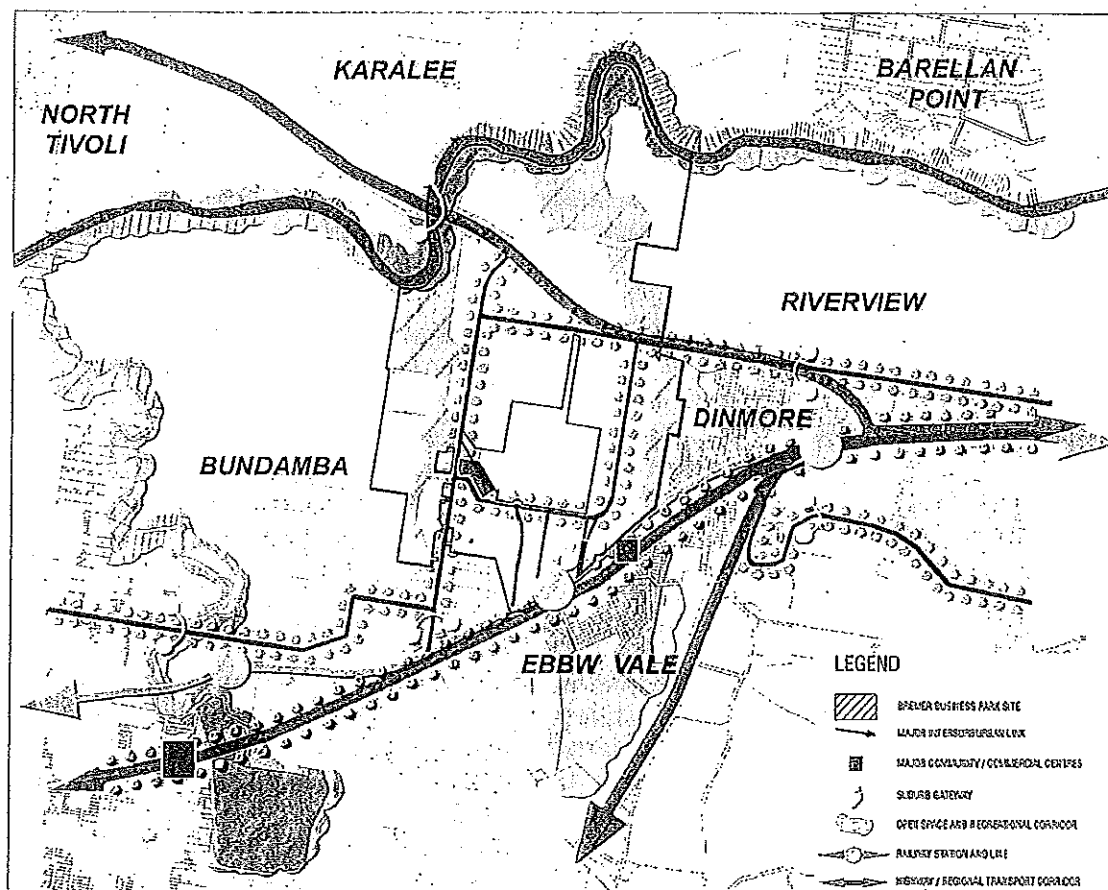
The availability of community facilities to the residents of Bundamba, Ebbw Vale and Dinmore will be greatly improved by the creation of a community centre on land in Bognuda Street. To provide a strong community focus, this proposed centre will be linked with the surrounding communities and the proposed residential areas by a new road network provided as part of the development of Bremer Business Park.

The community centre will become the focus for local community life, because of the inclusion of convenience supermarket shopping, medical services, aged care, and community health and welfare services, child care services and club and dining facilities. The focus for this community centre will be a village park situated beside a small lake off Bognuda Street.

1.3.4. Bremer Business Park Linkages

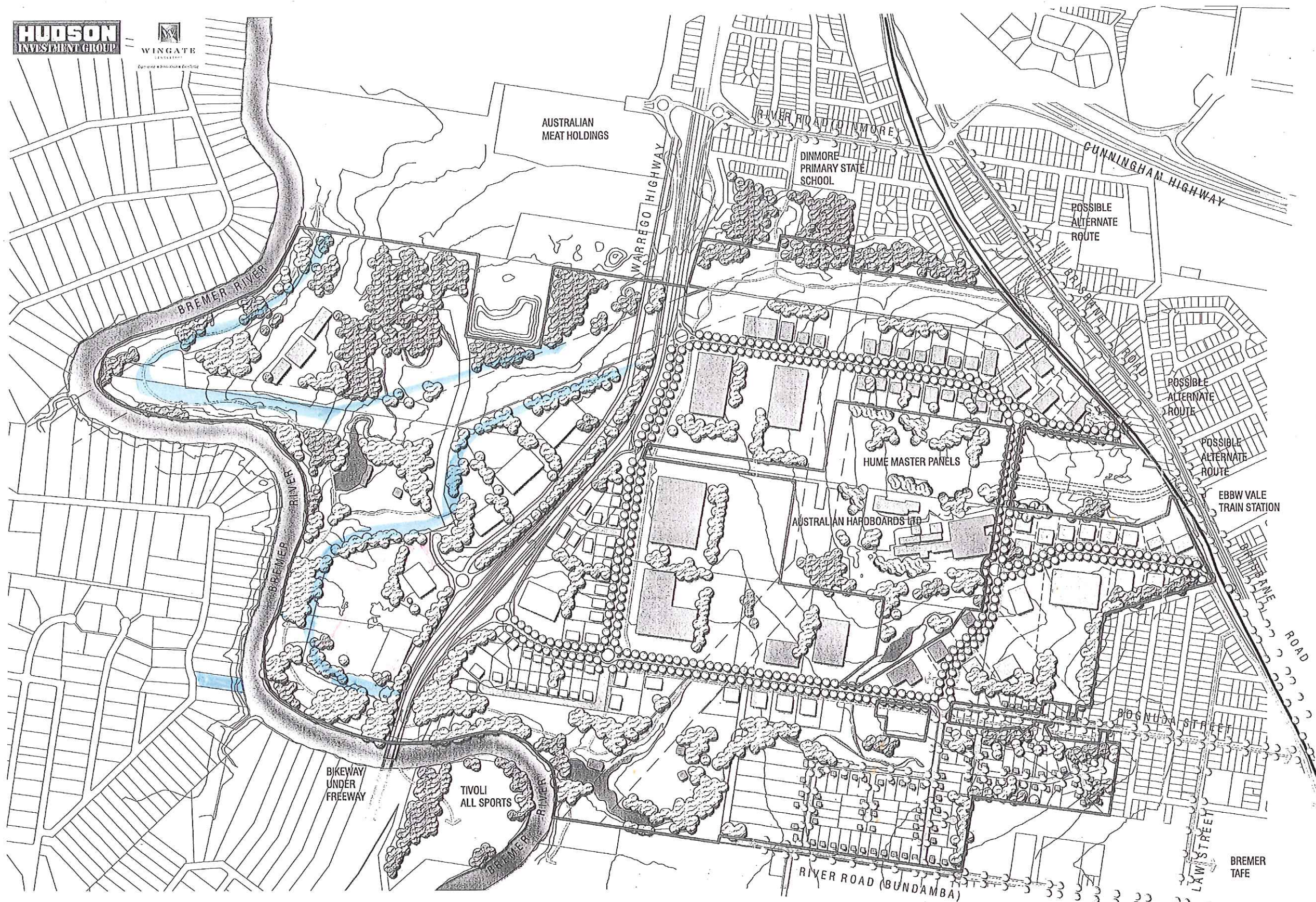
One of the strengths of Bremer Business Park is its linkages with:

- ✓ the regional road transport network via the Warrego Highway, the Cunningham Highway and Brisbane Road;
- ✓ the commuter rail network via the Ipswich Railway;
- ✓ the surrounding industries and technology institutions such as the central business districts in Brisbane and Ipswich, Australian hardboards, Humes Masterpanel, Australian Meat Holdings, the Bremer TAFE, and the three correctional institutions; and
- ✓ proximity of an industrial labour force in Ipswich City.



Regional context plan showing highway links

Other linkages will be exploited with the Bremer River riparian corridor, the surrounding residential communities and open space.



LEGEND (INDICATIVE BUILDINGS ONLY)

- RIVERSIDE PRECINCT
- HIGHWAYS PRECINCT
- FRAME INDUSTRIAL AND COMMERCIAL PRECINCT
- CENTRAL INDUSTRY PRECINCT
- RESIDENTIAL PRECINCT
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- SITE BOUNDARY
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- ENTRY ROUNDABOUT
- PICNIC SHELTERS

2. Project Justification

2.1. Overview

After an extensive process of feasibility and technical studies and consultation, Bremer Business Park is progressing through the planning phase to commence construction early in 2003. The justification for Bremer Business Park lies in the following key attributes:

- ✓ the strategic location in the transport network;
- ✓ achievement of the Ipswich City Council's strategic planning goal for the East Ipswich corridor;
- ✓ the potential employment benefits in both direct and indirect employment;
- ✓ the potential economic benefits during both the construction phase and the operational phase of the project;
- ✓ the provision of local community facilities for the residents of Bundamba, Ebbw Vale and Dinmore; and
- ✓ the provision of regional open space, playing fields and local parkland.

2.2. Strategic Location in Transport Network

The strategic advantage of the location in the regional transport network cannot be overstated. Bremer Business Park has highway access to:

- ✓ Brisbane central business district and the air and sea ports;
- ✓ Ipswich central business district;
- ✓ Brisbane and Gold Coast lifestyle destinations;
- ✓ southern States (New South Wales, Victoria) via the Cunningham, New England and Newell Highways
- ✓ western and south-western Queensland via the Warrego Highway.

2.3. Council's Strategic Planning

The Ipswich City Council's long-term land use planning anticipates the creation of a major industrial-based employment node on the Bremer Business Park land, through the land's designation in the Strategic Plan as *"Business and Industry Land of Regional Significance,"* and specifically as the *"Bundamba/Dinmore Major Industrial Area."*

Council's intentions build on the recommendations of the *South East Queensland Regional Framework for Growth Management* that the land will play a *"major part in providing low to medium impact business and industry activities, including:- Service Industry and Trade; Business Parks; and Manufacturing uses which are not incompatible with the surrounding land uses."*

The Strategic Plan intends that the Bundamba/Dinmore Industrial Area *"be further developed for industrial purposes, with low impact business and industry activities on the periphery and medium impact business and industry towards the centre"*.

The key objective for the industrial areas is *"for the establishment and orderly development of a range of employment activities ... which are highly accessible... will not impact on the environment and the existing and future amenity of the City and its residents"*. Bremer Business Park will achieve the Council's key planning objective by providing a diverse employment and economic base for the City, within an identified industrial area.

Bremer Business Park is ideally located in proximity to major transportation routes of the Warrego Highway and Brisbane Road connects the site to the Cunningham Highway.

The Ipswich Eastern Corridor Structure Plan anticipates the future provision of a connection road linking the Warrego Highway to the Cunningham Highway. *"Future transport strategies which should not be prejudiced until they are fully investigated include: a link between the Cunningham and Warrego Highways west of Dinmore"*. Bremer Business Park provides the opportunity and does not prejudice the potential for a connection between the Cunningham and Warrego Highways. The Master Plan, within the Plan of Development indicates one possible future solution for this objective.

Bremer Business Park will achieve the objectives and intentions of Council's long-term strategic planning.

2.4. Employment & Economic Benefits

Bremer Business Park will provide employment during the construction phase and the operational life of the project.

The jobs likely to be created by Bremer Business Park are summarised in the table below:

Project Phase	Employment Sectors	Forecast Jobs
Construction	Civil contractors	Person years:
	Building contractors	2170 (min)
	Landscaping contractors	3210 (max)
	Electrical contractors	
Post-construction	Industrial:	
	- Process working	
	- Fabrication & laminating	
	- Storage, distribution, logistics	
	- Service industries & trades	
	- Research & technology	Total employment:
		2500 (min)
	Commercial:	5120 (max)
	- Commercial services	
	- Community services	
	- Retailing	

It is anticipated that the employment generated by Bremer Business Park for both the construction and operational phases will be towards the upper end of each of the ranges given above.

Bremer Business Park will become one of the major employment centres of the South West Corridor. Consequently, it will create its own demand for second round employment in service providers and the like.

The direct impact of Bremer Business Park to the regional economy during its construction phase will be in the order of \$55 million and the value of the built project will be many times this figure.

It is anticipated that corporate investment in Bremer Business Park will exceed \$500 million on completion of construction and development. The flow-on benefits to the regional economy will be significant and enduring.

In terms of economic benefits arising from employment, it is anticipated that the operation phase, which will gear up over a 10 year period, will contribute in excess of \$200 million in wages and salaries to the regional economy per annum.

2.5. Regional Open Space

Bremer Business Park will enhance the community and environmental conditions. The project will contribute a regional park and open space to the community. The park will include formal gardens and passive recreation areas, as well as illuminated playing fields and associated facilities. The open space will include an extensive pedestrian and cycle path network linking with other foci in the locality, and environmental resource areas such as re-created native bushland, riparian corridors, wetlands and waterways.

This level of 'best practice' integrated environmental design and planning has not been achieved in other business park project in Queensland. Indeed few other projects in Australia will achieve the sustainable open space outcomes of Bremer Business Park. Bremer Business Park, and the City of Ipswich, will be at the forefront of integrated business park development in Australia.



Artist Impression of regional park

The provision of public park and open space will be at least cost neutral and possibly revenue positive for the Ipswich City Council in terms of construction and on-going management costs.

The construction costs will be met by the proponent. The management costs will be minimised through the adaptation of bushland and low-cost maintenance materials, surveys and plant species in the design and construction. The maintenance costs will be recovered through the elevated rate revenue received from the commercial, industrial and residential properties to be created as part of Bremer Business Park.

2.6. Community Facilities

The planning and consultation phases of the Bremer Business Park development have revealed a shortage in conveniently located community facilities and services available to the communities of Bundamba, Ebbw Vale and Dinmore, which currently includes approximately 7,260¹ residents.

Furthermore, the investigations have revealed the absence of a focal point for these residents. The local people need a place to meet friends and family, a place where they can shop for their daily grocery needs or access medical and other professional services, and a place where they can gather to dine and perhaps enjoy a small urban park setting.

The proposed community centre in Bremer Business Park responds directly to each of those needs in an integrated development to be situated on the shores of a lake to be created to the east of Bognuda Street.

The proposed community centre also will provide a focus for workforce activities during work breaks and after-work recreation, health care, community services and convenience shopping.

The community centre, of about 5,000m² floor area, is likely to include:

- ✓ community facilities (e.g. library, internet access);
- ✓ dining and licensed club facilities;
- ✓ a small, supermarket-based shopping centre, offering mostly convenience services to the residents and the workforce of Bremer Business Park;
- ✓ a medical centre offering a range of medical and paramedical services;
- ✓ community services, possibly including counselling, welfare, aged care, community health and employment services; and
- ✓ an urban park with picnic facilities, gardens and disabled access.

Bremer Business Park will provide a focus for community life as well as a source of rewarding and sustainable employment for local residents.

¹ ICC (1999) <http://icc.ipswich.qld.au/icc/documents/profile>

3. Consultation

3.1. Community Consultation

Since the announcement of the Bremer Business Park concept in February 2001, the proponent Wingate Properties Pty Ltd has embarked on a process of extensive consultation with the community, the Ipswich City Council and with State agencies.

Wingate Properties has conducted five (5) public meetings in which a range of issues have been identified, discussed and resolved through the master planning process. The outcomes of discussions on issues have been given back to the community groups attending to ensure their concerns have been addressed and met wherever practical and possible.

To support the meeting programme, Wingate Properties has also prepared and circulated in the local area a newsletter which explained the project concept and the resolution of issues raised.

3.2. Council Consultation

The Mayor, local Councillors and staff of the Department of Economic Development in Ipswich City Council are well aware of the Bremer Business Park process through an informal review of a preliminary master plan prepared for the purpose by Wingate Properties.

There is a high level of enthusiasm for Bremer Business Park in the Council, because it will achieve one of the Council's key land use planning strategies. That strategy, embodied in the Eastern Corridor Structure Plan, anticipates the creation of a major industry-based employment centre on the site.

A number of meetings at a technical level and a strategic 'pre-lodgement' level have been conducted with Council officers. These meetings have helped to identify planning and development issues which have in turn informed the master planning process.

3.2.1. State Agency Consultation

The Queensland Government is both a supporter and an assessor of the Bremer Business Park proposal.

A number of State agencies have an interest in the development of Bremer Business Park. From an assessment standpoint, the State agencies consulted include:

- ✓ the Department of Main Roads regarding access to the Warrego Highway;
- ✓ the Environment Protection Agency for the possible establishment of environmentally relevant activities, contaminated land and cultural heritage issues; and
- ✓ the Department of Natural Resources and Mines regarding the potential for impacts on the Bremer River.

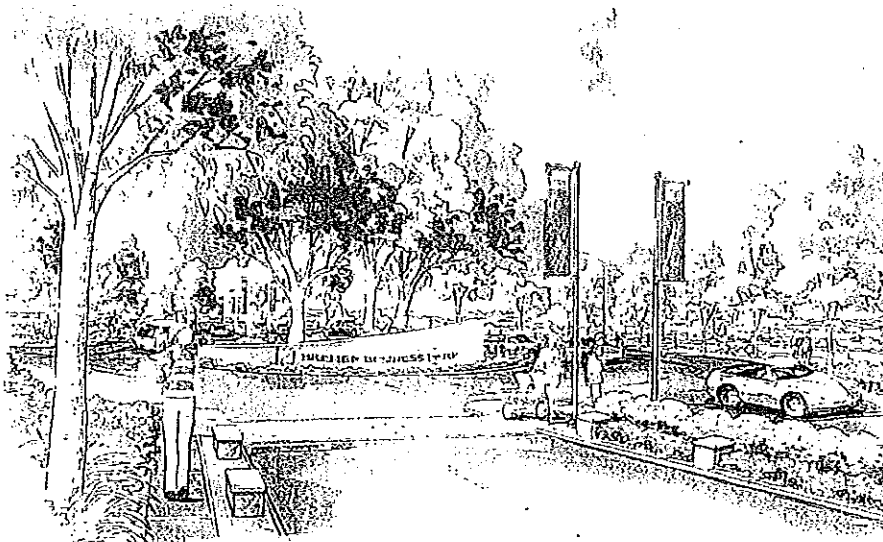
The master planning process has integrated the agency requirements into the final form of Bremer Business Park, such that:

- ✓ dedicated highway access is provided in an acceptable form and location;
- ✓ alternative access options to the Cunningham Highway have been identified and demonstrate that highway access is able to be provided with minimal disruption to the locality and local streets;
- ✓ access to Bremer Business Park minimises the traffic impacts on local streets;
- ✓ places of cultural heritage significance, or value, have been identified and management plans are in preparation to assist with the construction phase to ensure those values are protected;
- ✓ soil contamination issues will be addressed during construction in accordance with site management plans; and
- ✓ the flooding regimes in the Bremer River have been accommodated in the master plan and earthworks and drainage plans.

3.2.2. Consultation -- The Way Forward

There will be further opportunities for inputs from the community, the Council and the State agencies. Once the development application has been lodged and the due processes completed, the period of public notification will commence. Formal submissions, in writing, can be made to the Ipswich City Council in relation to any aspect of the application.

The Council will consider the submissions when deciding the application.



4. Master Planning Process

4.1. Overview

The master planning process was adopted as the most effective means of ensuring the complete integration of all the community inputs, Council and State agency inputs and the findings of the technical investigations.

The process allows for the careful consideration and balancing of competing interests in arriving at an integrated and sustainable development solution for such a strategically important site. The principal focus of the master planning process has been to identify and respond to the issues raised by the communities of Bundamba, Dinmore and Ebbw Vale.

The master plan provides a logical framework for the operation of the Plan of Development. The Plan of Development sets the regulatory measures, in the context of the Ipswich Planning Scheme, for subsequent development and the assessment of subsequent development applications.

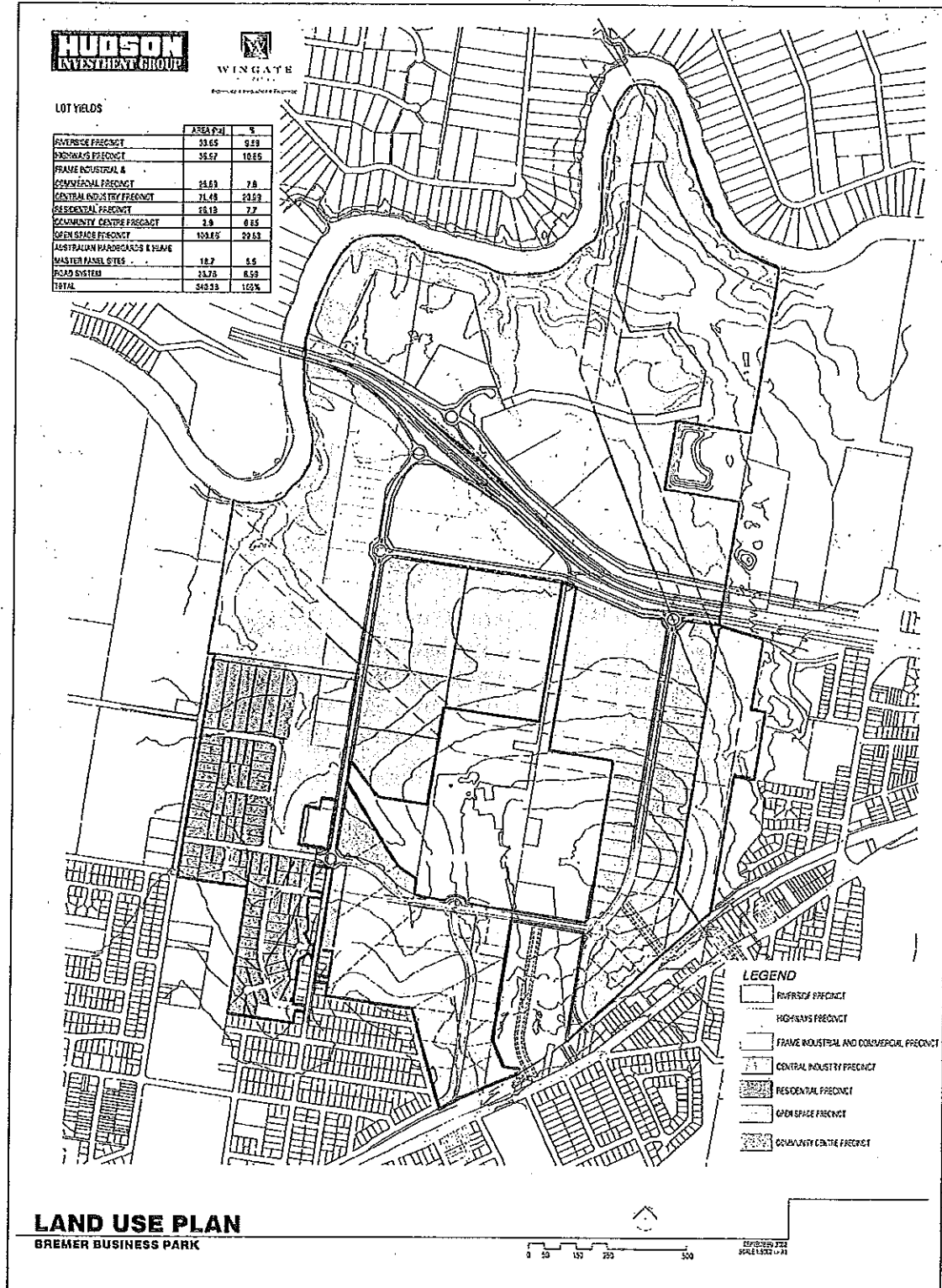
4.2. Key Issues & Master Plan Responses

During the planning and investigation phase, a range of key issues became apparent, requiring consideration and a carefully planned response. A summary of those issues and the master planning response is provided in the table below:

Planning Issue	Master Plan Response
1 Maximising the strategic advantages of Bremer Business Park	Create a land use plan which: <ul style="list-style-type: none">▪ optimises the intensity of uses adjacent to the highways and provides convenient access to the highways for the most intense industrial and commercial activities;▪ encourages transit-oriented land uses in key locations within the site;▪ provides for some large industrial sites (5 – 15 ha) for major activities to establish in this transport node;▪ provides opportunities for synergies with existing major industries and activities (eg Aust. Hardboards, Humes Masterpanel, Aust. Meat Holdings, Bremer TAFE)▪ provides for a strategic link to the rail network.

Planning Issue	Master Plan Response
2 Integration with the State road transport network	<p>Access to State road will be gained via:</p> <ul style="list-style-type: none"> ▪ a future connection to the Warrego Highway; ▪ possible future connections with Brisbane Road, and then to the Cunningham Highway, possibly by way of a bridge over the Ipswich Railway; and ▪ the designated B-Double route in River Road East and then the Cunningham Highway.
3 Minimising local traffic impacts	<p>Local traffic impacts are minimised by:</p> <ul style="list-style-type: none"> ▪ providing direct access to the State road network for all heavy vehicle traffic and most commuter traffic; ▪ providing an alternative access regime through an efficient internal ring road system; ▪ traffic calming in Bognuda Street to limit heavy vehicle and excessive traffic movements;
4 Minimising the risk of flooding as a consequence of development	<p>Flooding occurs either as a local event in the Bremer River or by inundation from backed-up waters from the Brisbane River.</p> <ul style="list-style-type: none"> ▪ for local (Bremer River) flood events, the channel for flood flow conveyance is to be maintained at present capacity; ▪ For Brisbane River events, increased flood plain storage will be created to compensate for filling of some development sites and to maintain a net fill/storage balance; ▪ Significant areas in the site are to be dedicated as open space to maintain flood plain capacity.
5 Improve the environmental quality of the locality	<p>Design and development measures to improve local environmental quality include:</p> <ul style="list-style-type: none"> ▪ provision of an open space system including a range of environmental management features (waterways, ponds, planted buffer areas); ▪ a gradation of land use intensity within the site, increasing with distance from sensitive activities such as residential; ▪ a requirement for on-site environmental management of waste streams and stormwater; ▪ the design and siting of buildings and earthworks to buffer residential areas from views and potential noise impacts and ▪ the creation of areas of bushland, planted with locally occurring native species, to assist with habitat, biodiversity and buffering.

Planning Issue	Master Plan Response
6 Provide a local community focus	<p>Recognising the absence of a community focus for Bundamba, Ebbw Vale and Dinmore:</p> <ul style="list-style-type: none"> ▪ provide a community centre for community facilities and services, medical services, local shopping and club and dining facilities; ▪ provide local open space and park land; ▪ provide improved access to the Ebbw Vale rail station with pedestrian and road links through the site; ▪ provide a regional park including gardens, illuminated playing fields and facilities, and an extensive path system for walking, jogging, cycling and possibly horse riding in some locations; ▪ in consultation with local groups, return a local memorial to its original location and plant with seedlings from existing memorial trees.
7 Provide more choices in housing	<p>Taking advantage of the size of Bremer Business Park:</p> <ul style="list-style-type: none"> ▪ provide for a possible range of housing densities, separated from the industrial areas by natural boundaries and open space corridors; ▪ provide for a possible retirement village or housing for groups with particular needs.



Bremer Business Park Land Use Plan

5. Infrastructure Planning

5.1. Community Benefits

The objectives in delivering infrastructure to Bremer Business Park are:

- ✓ To achieve a fair and equitable sharing of the costs between the benefited parties;
- ✓ To ensure that infrastructure is provided in a timely and efficient way; and
- ✓ To ensure that the long-term benefits to the community are real and sustainable in terms of management and enjoyment.

Bremer Business Park will provide its share of the development infrastructure required for it to function and deliver the economic development sought by the Council and the Queensland Government in the South West Corridor. The project will also deliver an extensive network of high quality park and open space to be enjoyed by the residents of Bundamba, Ebbw Vale and Dinmore, as well as residents living further afield in the City. There is no high quality park land or open space available to these residents at present.

Bremer Business Park will deliver increased rates revenues to the Ipswich City Council. The increased rates revenue will cover the annual maintenance costs for the park land many times over.



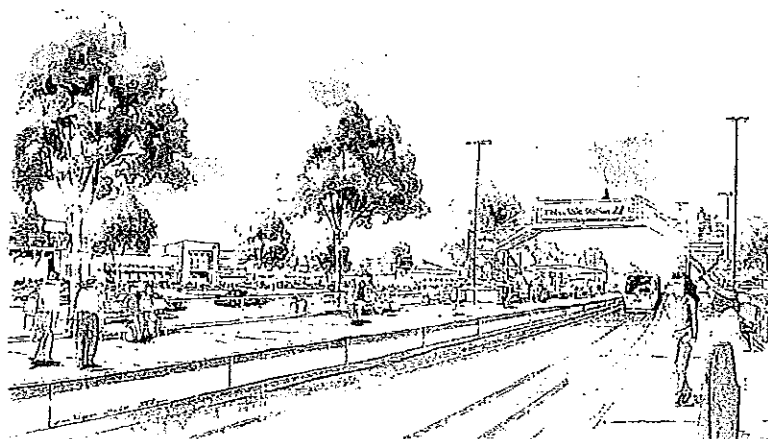
5.2. Works Proposed

The infrastructure to be provided as part of the Bremer Business Park project includes:

- ✓ Enhanced highway access to the Warrego Highway;
- ✓ Urban water, sewerage and drainage;
- ✓ Regional park land and open space;
- ✓ Connections to the electricity and gas networks.

Bremer Business Park also provides the Queensland Government and the Ipswich City Council with the opportunity to improve access between the Warrego Highway and the Cunningham Highway. The master plan provides for a possible future connection over the Ipswich Railway to Brisbane Road and then the Cunningham Highway via Aberdare Street. This will take the pressure off the existing route along River Road East. The master plan and subdivision plan provides alternative locations for consideration as part of the Council and agency responses to meeting the expectations of the Eastern Corridor Structure Plan.

The delivery of infrastructure will be undertaken in accordance with an infrastructure strategy. The development and use of land within Bremer Business Park will be linked to thresholds for the delivery of infrastructure, ensuring the orderly and efficient development of the project. This approach provides certainty to the Ipswich City Council and the proponent in terms of infrastructure delivery and project cost management.



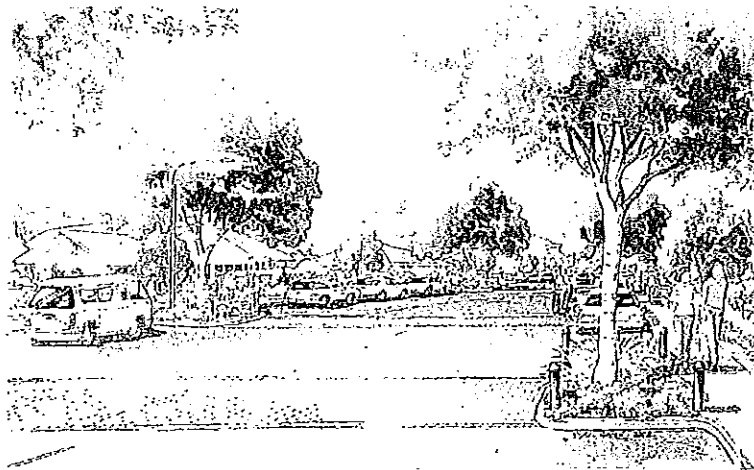
5.3. Infrastructure Agreement

For a project of this magnitude, the delivery of infrastructure is best handled through an infrastructure agreement between the proponent and the Ipswich City Council. The infrastructure agreement would be required as a condition of the approval of the development application to which this summary relates.

Consequently, the infrastructure agreement would relate to the land and Bremer Business Park.

To the extent that external transport infrastructure is required, an infrastructure agreement between the proponent, the Ipswich City Council and either Queensland Transport or the Department of Main Roads will be struck.

The benefit of entering into infrastructure agreements comes from the certainty for all parties in terms of the cost-sharing arrangements, the timing for delivery and the responsibility for delivery. This approach has worked with considerable success on many other major urban development projects in Queensland.



6. Conclusion

Bremer Business Park presents an opportunity for the Queensland Government, the Ipswich City Council and the communities living in the South West Corridor to gain long-term sustainable benefits from the delivery of a master planned major development initiative.

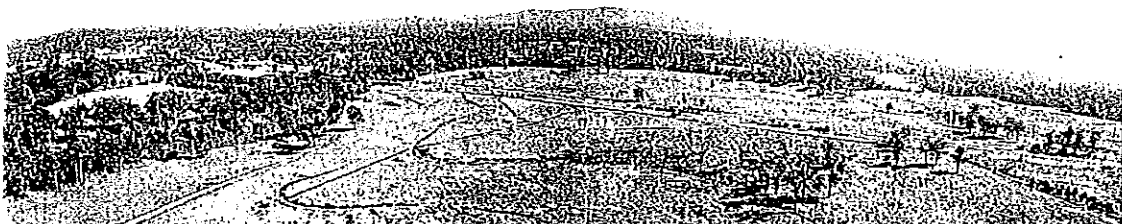
Bremer Business Park will establish a new benchmark for providing sustainable community benefits through economic development.

Bremer Business Park will

- ✓ maximise the efficient use of the existing State transport infrastructure available in this key location;
- ✓ provide sustainable employment for 2,500 to 5,100 people in a clean, accessible and managed environment;
- ✓ maximise the synergies with the existing major industries and institutions such as Australian Hardboards, Australian Meat Holdings, the Bremer TAFE and possibly the correctional centres at Borallan, West Moreton and Wacol;
- ✓ minimise the impacts of traffic flows on nearby local streets by providing attractive alternative transport routes, to provided on a shared-cost basis with the Queensland Government and the Ipswich City Council;
- ✓ contain and minimise the potential environmental impacts within the site through careful site planning, environmental management and the adoption of 'best practice' urban development techniques;
- ✓ deliver long-term sustainable community benefits in the form of a regional park and open space system, a community centre and improved access to the Ebbw Vale railway station and the surrounding areas; and
- ✓ provide opportunities ultimately for a range of attractive housing choices in clean, landscaped environments adjacent to the existing residential communities of Bundamba.

Bremer Business Park and the Ipswich City Council will be at the forefront of integrated business park planning and development in Australia.

Bremer Business Park provides a pathway to a sustainable future in the South West Corridor.



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2 Riverside Precinct

2.1 Riverside Precinct Definition

2.1.1 Location & Area

The Riverside Precinct is situated to the north of the Warrego Highway. It is bounded by the Bremer River, the highway and the Highway Precinct. The area of the Riverside Precinct is 33.65 hectares not including roads.

2.1.2 Description

Parts of the Riverside Precinct are formed by a low ridge running from the south of the Bremer Business Park, along the eastern boundary of the site to terminate in a meander of the Bremer River within the Riverside Precinct. This elevated land enjoys good views of the river and is above major (Q100) flood events in the Bremer River.

Other parts of the Riverside Precinct will be re-formed along the path of existing watercourses to provide additional flood storage, landscape features within an open space system, environmental linkages between the Bremer River and the southern precincts, and possibly water quality control features.

A electricity transmission line traverses the precinct on a north-south trending alignment.

2.2 Riverside Land Use Character

2.2.1 Land Use Strategy

To facilitate the establishment of low intensity industrial and related activities in keeping with the riverside setting and adjacent land uses

2.2.2 Outcomes

The preferred land use character for the Riverside Precinct is low intensity research, technology, education and some limited service industries, with some low intensity forms of recreation and open space provided in an open park

setting along the Bremer River and between development sites and the Highway Precinct.

Land uses will provide a transition from the intense industrial activities of the Central Industry Precinct and the Highway Precinct to the Bremer River corridor and the rural residential settlements on the northern side of the river. Land uses in the Riverside Precinct will also provide a buffer to the abattoir situated on land to the east of the site.

New uses established in the precinct will protect the heritage values of listed sites (such as the Westfalen Colliery site) and places of biodiversity, habitat and community value, such as the Bremer River riparian corridor.

2.3 Assessment Framework – Riverside

The assessment framework refers only to material changes of use, and if necessarily associated with the use, operational works and building works. Otherwise, section 1.5.4 prevails with regards building work and operational work.

Material Change of Use

(and associated building work and operational work)

Self Assessment	Code Assessment	Impact Assessment
<ul style="list-style-type: none"> Animal Husbandry Environmental Facility Open Space Local Utility Pastoral Production Outdoor Recreation (not involving building work or operational work) 	<ul style="list-style-type: none"> Agriculture Caretaker's Residence Educational Establishment Equestrian & Coursing Sports Horse Training Establishment Light Industry < 5000m² GFA Outdoor Recreation Public Utility Research & Associated Technology Activities Riding School Stable Temporary Sales Office Tourist Facility Turf Farm 	<ul style="list-style-type: none"> Any other material change of use

2.4 Riverside Precinct Code

2.4.1 Implementation

The Commercial and Industrial Development Code is the relevant code for material changes of use in the Riverside Precinct. In addition to this code, the following codes also apply:

- the Bremer Business Park Code; and
- the Design and Siting Code; and
- the Riverside Precinct Code.

2.4.2 Riverside Precinct Code

(1) Purpose

The purpose of the Riverside Precinct Code is to regulate certain aspects of development in the precinct to:

- (i) promote the establishment of industrial and related activities at suitable scales and intensities for the open, rural landscape setting as intended in the land use outcomes in section 2.2.2 of this Precinct Plan;
- (ii) take into account and allow for the flooding regimes of the Bremer River;
- (iii) adopt 'best practice' urban water management measures in accommodating stormwater flows and minimising the release of pollutants to the environment; and
- (iv) achieve the benefits of a riparian open space corridor to extend along the river and through the precinct.

(2) Code Provisions

Development for a material change of use (self-assessable) will comply with the acceptable solutions set out in the code. Development for a material change of use (code assessable) will comply with the performance criteria and may adopt the acceptable solutions as one means of complying with the code.

Performance Criteria		Acceptable Solutions	
P1	Promote the establishment of industrial and related activities at suitable scales and intensities for the open, rural landscape setting	A1	the land use outcomes in section 2.2.2 of this Precinct Plan;
P2	Provide an acceptable level of flood immunity for land uses in the precinct	A2	Buildings, structures and storage facilities are situated above the Q50 flood line, except for storage facilities containing hazardous substances which are situated above the Q100 flood line.
		A3	Road access to sites within the precinct are free from inundation in a Q50 rainfall event.
P3	Provide for the creation of a riverside open space network linking the precinct with other parts of the Bremer Business Park and localities beyond	A4	Land within the precinct and designated as Open Space on the Precinct Plan is dedicated to the Council as park.
		A5	Park land referred to in A4 above is developed for a range of active (walking, jogging, riding – cycles, equestrians) and passive recreational pursuits (nature appreciation, aesthetic benefits, picnicking).
P4	Allow for the passage of stormwater through the precinct and sites within the precinct in an environmentally responsible and equitable manner	A6	Stormwater originating from beyond the Bremer Business Park is conveyed to the Bremer River via the open space corridor designated on the Precinct Plan.
		A7	Stormwater originating from sites within the precinct is treated on site to remove sediments, oily residues, particulate matter and other undissolved water-borne pollutants, before being released to the Bremer River via the open space corridor designated on the Precinct Plan.
		A8	The use of sites within the precinct adopts 'best practice' water quality management techniques in accordance with <i>EPP Water</i> .
P5	Protect places of cultural heritage significance, and places of Indigenous cultural heritage values	A9	(i) Places on the Ipswich Heritage Register are protected by the provision of buffers not less than 10m wide. Or (ii) Places are included within development sites and protected with appropriate buffers and recognised with appropriate interpretative treatments.

Performance Criteria	Acceptable Solutions
	A10 Places of cultural heritage value are treated in accordance with a Cultural Heritage Management Plan which states, among other things that the interception of artefacts, human remains or other evidence of use of the land is properly recorded in consultation with representatives of the traditional inhabitants of the region.

2.5 Riverside Infrastructure Plan

- (1) Sites within the Riverside Precinct are to be connected to development infrastructure services in accordance with the Bremer Business Park Infrastructure Strategy, prior to the commencement of their use.
- (2) Open space within the Riverside Precinct is to be embellished with:
 - (i) A path system which follows the Bremer River and the internal drainage corridor to link with a path system provided as part of the development of the Highway Precinct;
 - (ii) Passive recreation facilities including picnic and bar-be-que facilities, walking paths to places of interest, viewing platforms to access views of the Bremer River and places beyond;
 - (iii) Active recreation facilities including a fitness trail associated with the walking path and possibly an equestrian trail if related to a use of a site in the precinct and if able to be provided separate from the pedestrian and fitness trail (for safety).
- (3) Infrastructure in the Riverside Precinct is to be provided in accordance with an Infrastructure agreement between the Ipswich City Council and the proponent.

BREMER BUSINESS PARK - DESIGN INTENT GUIDELINES

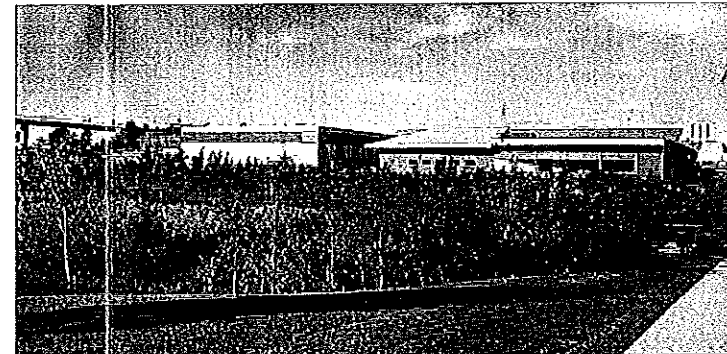
Precinct Guidelines

SEPTEMBER 2002

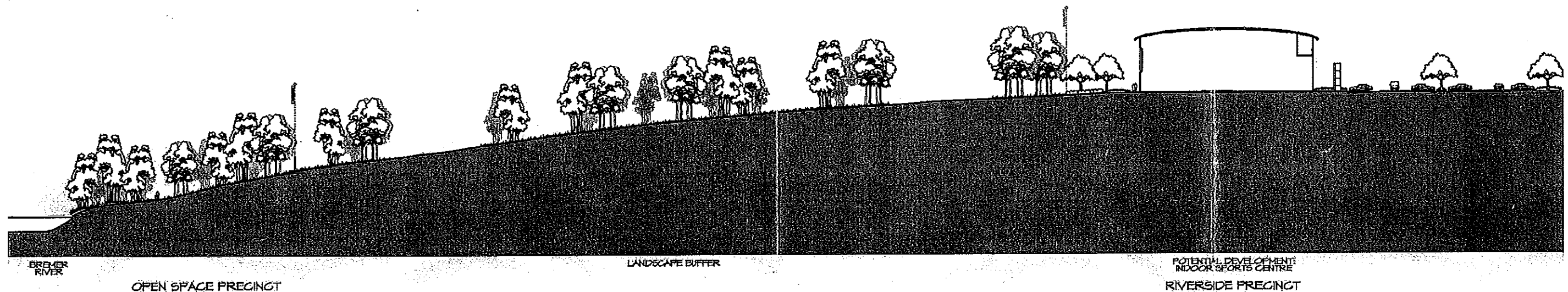
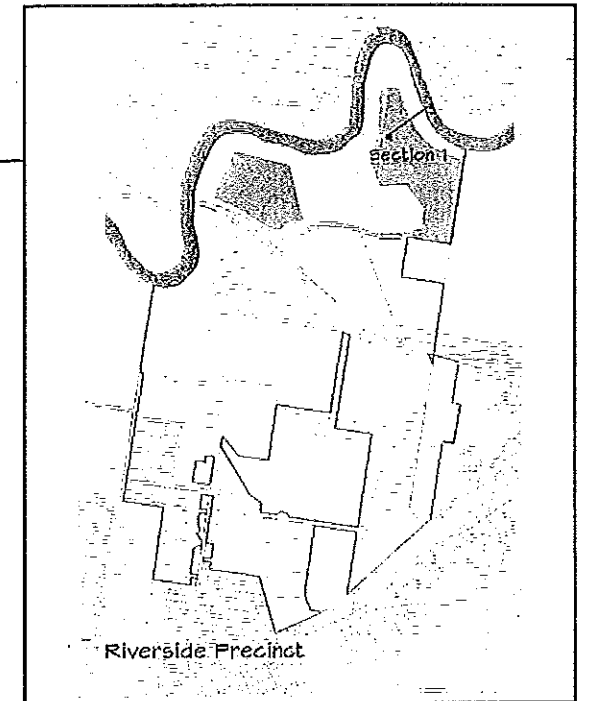


Riverside Precinct - Design Guidelines

- Intent:** That land within this precinct reflect a character that is land extensive and low building intensive, containing only low key development that is screened from the Bremer River and residential development on the north bank.
- Character:** The existing open space/natural character is to be maintained and influence future development, through indigenous tree and bushland planting. Development is low scale and visually consistent with the surrounding bushland.
- Carriageway:** Two-lane carriageway with on street parking.
- Footpaths:** 1200mm wide in-situ concrete pedestrian pathway on both sides of roads; 2500mm shared pedestrian/bike path.
- Lighting:** Standard Energex street lights and pedestrian pathway lighting with black powder coat finish.
- Furniture:** Contemporary design suite of street-type furniture.
Metal and natural finished timber bench seats with complementary metal litter bins and bollards. Metal finish to be black powder --coated.
- Signage:** Park type/standard metal pole for the pedestrian/bike path; other signage as detailed in the General Guideline section of this document.
- Planting:** Street Tree: Paperbark tea tree (*Melaleuca quinquenervia*)
Other planted areas: To be taken from the 'What to Plant Where Along the Lower Bremer River' document (refer to Appendix A)



The built form does not impact but complements environmentally sensitive areas



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Section 1 : Open Space and Riverside Precinct Interface

BREMER BUSINESS PARK - DESIGN INTENT GUIDELINES

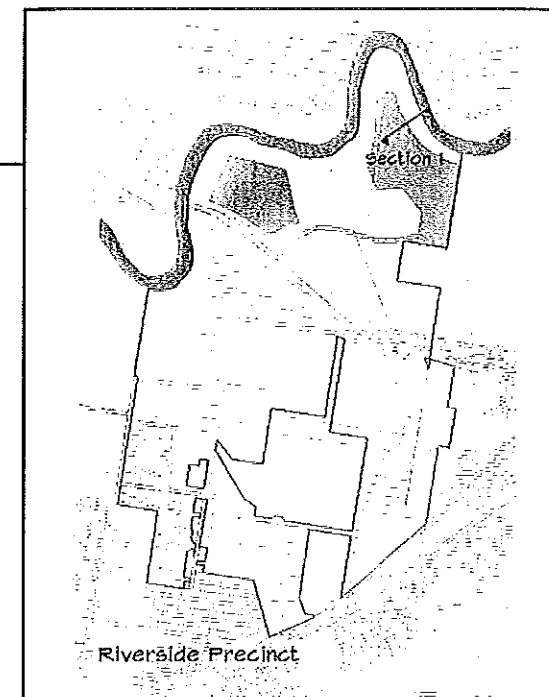
Precinct Guidelines

SEPTEMBER 2002



Riverside Precinct - Implementation Criteria

RIVERSIDE PRECINCT	
Implementation Criteria	Acceptable Solutions
Site Coverage	
Development site usage must be in accordance with the intent of the Precinct and respect the character of the Bremer River Corridor. Low key development to be located to higher ground areas.	The built site coverage does not exceed 50% of the area.
Building Height	
Building height to be suited to the intent of the Precinct.	Building height of no more than 3 storeys or 10 metres, which ever is less, is an acceptable limit from the ground level road frontage.
Building Setbacks/ Envelope	
Building setbacks can vary within this precinct to complement the natural character of the precinct; but development is to be limited to higher ground areas.	Minimum building setback is 10m from the property boundary. Development boundary should be sympathetic to the heritage features of this site.
Car parking	
On-site car parking must be designed so that the visual character of the street is not undermined and to ensure on-site parking areas do not become a dominant visual element on the site. The number of on-site car parking should reflect the needs of the users so on street parking is minimised.	Visitor carparking is to be located to the front of the building. Service vehicle access will be from one side of the building. Staff and other large vehicle parking to be located to the rear of the building. Parking areas should be dispersed, rather than concentrated on the site, to optimise tree retention and visual character.
Planting/Landscaping	
Refer to the 'Sitewide Guidelines' section of this document for details of planting to the front setback of buildings. Woodland planting should be extended into the allotments at the rear of the building to screen development from the Bremer River and development on the north bank.	A 10 metre minimum buffer of endemic vegetation is provided; consisting of trees and understorey planting. Endemic tree planting is provided to carparks at 1 tree per 5 carparking bays
Signage	
Signage should not dominate or detract from the precinct's character.	Refer to the 'Sitewide Guidelines' section of this document



3 Highway Precinct

3.1 Highway Precinct Definition

3.1.1 Location & Area

The Highway Precinct is situated in a corridor extending along both sides of the Warrego Highway. It is bounded to the north by the Riverside Precinct and to the south by the Central Industry Precinct. The western boundary of the precinct is formed by the Bremer River.

The Highway Precinct has an area of approximately 36.97 hectares (not including roads) and could be subdivided into as many as 11 sites.

3.1.2 Description

The Highway Precinct is highly visible from the Warrego Highway and, with the provision of access from the highway and its service road, will be the most accessible in the Bremer Business Park.

The Highway Precinct is situated on land most of which is affected by major flood events in the Bremer River. There are some places within the precinct which are above a Q50 flood event in the river.

Much of the precinct has been used for grazing and is open rural country in its appearance. There is some remnant vegetation in isolated stands along the Bremer River.

3.2 Highway Land Use Character

3.2.1 Land Use Strategy

To facilitate the establishment of transit-accessible activities and light industry and commercial activities that rely on and maximise the benefits of the highly accessible and visible location on the Warrego Highway.

3.2.2 Outcomes

Sites within the Highway Precinct are developed with buildings of high quality designs and construction standards, integrated with signage, landscaping and

street treatments to achieve a high level of urban amenity for the Bremer Business Park to the Warrego Highway.

Highway access is provided by appropriate road infrastructure including a highway service road and future highway interchange giving direct access to the Warrego Highway.

The preferred land use character of the precinct is predominantly light industrial and highway commercial, derived from transit-oriented activities such as highway service centres, possibly integrated with family restaurant and fast food centres, vehicle repairs, commercial premises possibly with an office component for corporate headquarters, storage and distribution facilities, some service trades and possibly some light industries on sites away from the highway frontage.

New uses established in the precinct will provide a transition from the highly intense industrial character of the Central Industry Precinct to the Warrego Highway. The Highway Precinct uses will be less intense and more open in their physical arrangement on sites, with a greater emphasis on landscape and urban design quality to present a high standard of visual amenity to the highway.

3.3 Assessment Framework - Highway

The assessment framework refers only to material changes of use, and if necessarily associated with the use, operational works and building works. Otherwise, section 1.5.4 prevails with regards building work and operational work.

Material Change of Use

(and associated building work and operational work)

Self Assessment	Code Assessment	Impact Assessment
<ul style="list-style-type: none"> Environmental Facility Open Space Local Utility Outdoor Recreation (not involving building work or operational work) 	<ul style="list-style-type: none"> Auction Depot Bulk Stores < 5000m² GFA Car Wash Caretaker's Residence Commercial Premises Emergency Services Depot Fast Food Premises Garden Centre Heavy Vehicle Parking Landscape Supply Outlet Light Industry < 5000m² GFA Mini Storage Complex Motel Plant Nursery (wholesale) Plant Sales & Hire Yard Public Utility Repair Station Research & Associated Technology Activities Service Station Storage Yard Temporary Sales Office Vehicle Sales Office Warehouse 	Any other material change of use

3.4 Highway Precinct Code

3.4.1 Implementation

The Commercial and Industrial Development Code is the relevant code for material changes of use in the Highway Precinct. In addition to this code, the following codes also apply:

- the Bremer Business Park Code; and
- the Design and Siting Code; and
- the Highway Precinct Code.

3.4.2 Highway Precinct Code

(1) Purpose

The purpose of the Highway Precinct Code is to facilitate development in the precinct by:

- (i) establishing highway related activities in high quality landscape settings as intended in the land use outcomes in section 3.2.2 of this Precinct Plan;
- (ii) maximising the land use potential of the precinct arising from the high level of accessibility to the Warrego Highway and the regional transportation network;
- (iii) accommodating the flooding regimes of the Bremer River;
- (iv) adopting 'best practice' urban water management measures in accommodating stormwater flows and minimising the release of pollutants to the environment; and
- (v) achieving the benefits of a riparian open space corridor to extend along the river and through the precinct.

(2) Code Provisions

Development for a material change of use (self-assessable) will comply with the acceptable solutions set out in the code. Development for a material change of use (code assessable) will comply with the performance criteria and may adopt the acceptable solutions as one means of complying with the code.

Performance Criteria	Acceptable Solutions
P1 Promote the establishment of highway-related commercial and industrial activities at suitable scales and intensities to maximise the high levels of accessibility and highway exposure while in keeping with the landscape setting	A1 The land use outcomes in section 3.2.2 of this Precinct Plan.
P2 Provide an acceptable level of flood immunity for land uses in the precinct	A2 Buildings, structures and storage facilities are situated above the Q50 flood line, except for storage facilities containing hazardous substances which are situated above the Q100 flood line.
	A3 Road access to sites within the precinct are free from inundation in a Q50 rainfall event.
P3 Provide for the creation of a riverside open space network linking the precinct with other parts of the Bremer Business Park and localities beyond	A4 Land within the precinct and designated as Open Space on the Precinct Plan is dedicated to the Council as park.
	A5 Park land referred to in A4 above is developed for a range of active (walking, jogging, riding – cycles, equestrians) and passive recreational pursuits (nature appreciation, aesthetic benefits, picnicking).
P4 Allow for the passage of stormwater through the precinct and sites within the precinct in an environmentally responsible and equitable manner	A6 Stormwater originating from beyond the Bremer Business Park is conveyed to the Bremer River via the open space corridor designated on the Precinct Plan.
	A7 Stormwater originating from sites within the precinct is treated on site to remove sediments, oily residues, particulate matter and other undissolved water-borne pollutants, before being released to the Bremer River via the open space corridor designated on the Precinct Plan.

Performance Criteria	Acceptable Solutions
	<p>A8 Drainage originating within the precinct is conveyed to the Bremer River via water quality control measures including gross pollutant traps, sediment traps and ponds.</p> <p>A9 The use of sites within the precinct adopts 'best practice' water quality management techniques in accordance with <i>EPP Water</i>.</p>
P5 Protect places of cultural heritage significance, and places of indigenous cultural heritage values	<p>A10 (i) Places on the Ipswich Heritage Register are protected by the provision of buffers not less than 10m wide; or (ii) Places are included within development sites and protected with appropriate buffers and recognised with appropriate interpretative treatments.</p> <p>A11 Places of cultural heritage value are treated in accordance with a Cultural Heritage Management Plan which states, among other things that the interception of artefacts, human remains or other evidence of use of the land is properly recorded in consultation with representatives of the traditional inhabitants of the region.</p>

3.5 Highway Infrastructure Plan

- (1) Sites within the Highway Precinct are to be connected to development infrastructure services in accordance with the Bremer Business Park Infrastructure Strategy, prior to the commencement of their use.
- (2) Open space within the Highway Precinct is to be embellished with:
 - (i) A path system which follows the Bremer River and the Internal drainage corridor to link with a path system provided as part of the development of the Riverside, Central Industrial, and Frame Industrial and Commercial Precincts;
 - (ii) Passive recreation facilities including picnic and bar-be-que facilities, walking paths to places of interest, viewing platforms to access views of the Bremer River and places beyond;

- (iii) Active recreation facilities including a fitness trail associated with the walking path and possibly an equestrian trail if related to a use of a site in the precinct and if able to be provided separate from the pedestrian and fitness trail (for safety).
- (3) Development Infrastructure in the Highway Precinct is to be provided in accordance with an infrastructure agreement between the Ipswich City Council and the proponent.
- (4) Transport Infrastructure, to the extent it is required as a consequence of development of Bremer Business Park, is to be provided in accordance with an infrastructure agreement between the Ipswich City Council, Queensland Transport (if relevant), Department of Main Roads (if relevant), and the proponent.

7. (6)

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BREMER BUSINESS PARK - DESIGN INTENT GUIDELINES

Precinct Guidelines

SEPTEMBER 2002



Highway Precinct - Design Guidelines

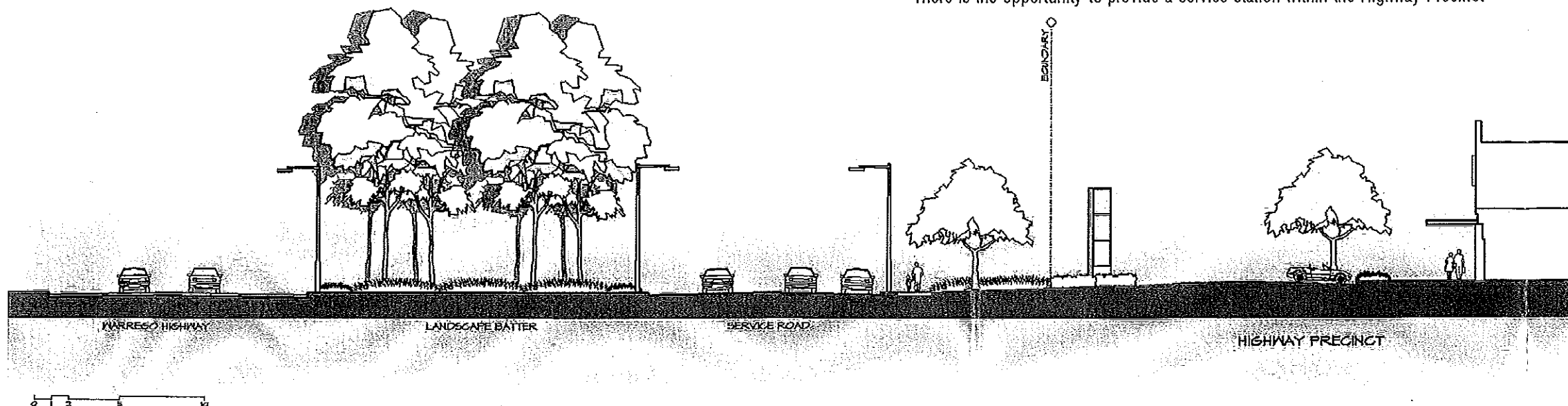
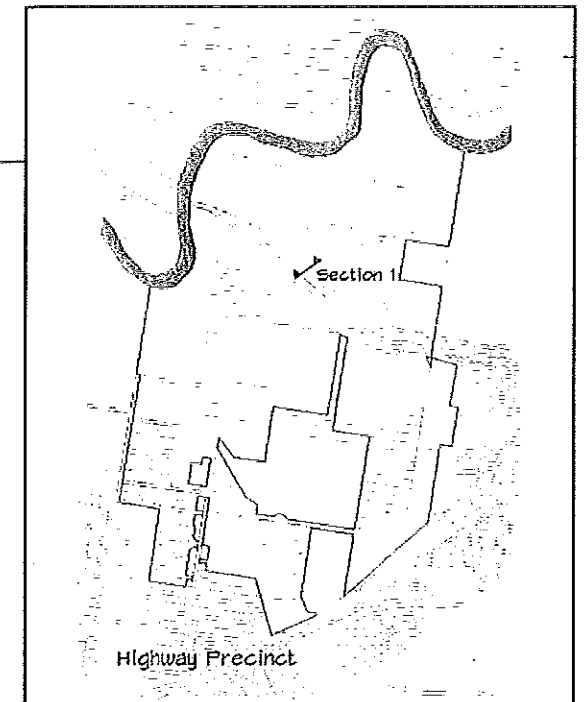
- Intent:** That land within this precinct capitalises on its visual relationship and proximity to the Warrego Highway; containing development types and built forms that are suited to its location. A parkland setting is to be created between the future development and the Warrego Highway; while maintaining visibility to development.
- Character:** A parkland setting is to be created for future development when viewed from the Warrego Highway; while maintaining visibility and capitalising on the proximity of the development to the Warrego Highway. High quality designs of building frontages and signage controls will create an attractive Highway frontage.
- Carriageway:** Two-lane carriageway with on street parking alongside development.
- Footpaths:** 1200mm wide in-situ concrete pedestrian pathway on the development side of the road.
- Lighting:** Standard Energex street lights with black powder coat finish.
- Furniture:** None.
- Signage:** All business signage is to follow the guidelines detailed in the 'General Guideline' section of this document.
- Planting:** Street Trees: Small leaved lilly pilli (*Syzygium leuhmannii*).
Highway Buffer: Endemic trees with tall clear trunks and understorey planting.
Other planted areas: To be planted in accordance to Section 1 & 2 in the 'Sitewide Guidelines' section of this document.



Planted landscape mounds provide an effective buffer to the highway



There is the opportunity to provide a service station within the Highway Precinct



Section 1 : Warrego Highway to Highway Precinct Interface



WINGATE
CONSULTANTS

HUDSON
INVESTMENT GROUP

BREMER BUSINESS PARK - DESIGN INTENT GUIDELINES

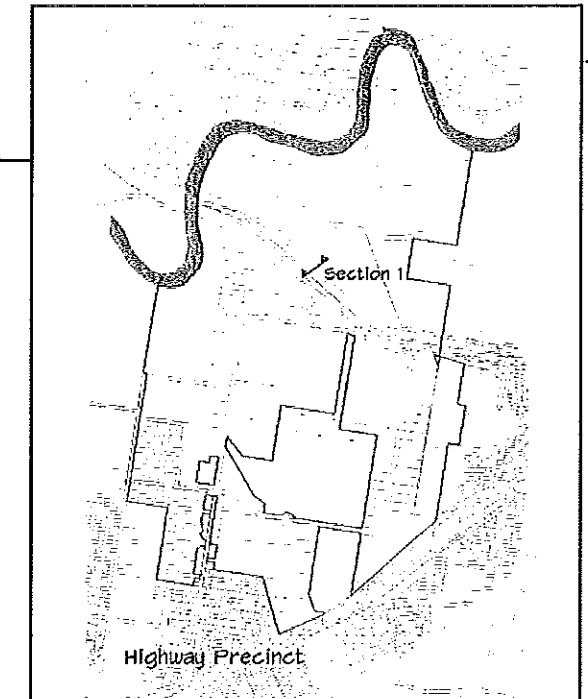
Precinct Guidelines

SEPTEMBER 2002



Highway Precinct - Implementation Criteria

HIGHWAY PRECINCT	
Implementation Criteria	Acceptable Solutions
Site Coverage	
Development site usage must be in accordance with the intent of the Precinct.	The built site coverage does not exceed 70%
Building Height	
Building height to be suited to the intent of the Precinct.	Building height of no more than 3 storeys or 12 metres, which ever is less, is an acceptable limit from the ground level road frontage
Building Setbacks/ Envelope	
Buildings are to be setback from the front property boundary in a consistent manner; so to not undermine the character of the streetscape	Minimum building setback is 8m; maximum setback is 30m.
Building Design	
High quality building design.	Buildings to address the Warrego Highway. Maximum setback 30m. Refer to building design guidelines.
Carparking	
On-site car parking must be designed so that the visual character of the street is not undermined and to ensure on-site parking areas do not become a dominant visual element on the site. The number of on-site car parking should reflect the needs of the users so on street car parking is minimised	Visitor carparking is to be located to the rear or side of the building. Service vehicle access will be from one side of the building. Staff and other large vehicle parking to be located to the rear of the building.
Planting/Landscaping	
Refer to the 'Sitewide Guidelines' section of this document for details of planting to the front setback of buildings. Endemic trees and understorey planting to be planted within the service road landscape buffer or grassed areas.	Tree planting is provided to car parks at 1 tree per 5 carparking bays. Shrub planting to screen front carpark areas. Understorey planting does not exceed 500 mm in height.
Signage	
Signage is to be well designed and must meet the guidelines detailed in the 'Sitewide Guidelines' section of this document.	Signage should reflect the materials and character of the built form.



7 Open Space Precinct

7.1 Open Space Precinct Definition

7.1.1 Location & Area

The Open Space Precinct extends throughout the Bremer Business Park as indicated on the Precinct Plan map and master plan. The Open Space Precinct is primarily associated with the Bremer River corridor and the major drainage paths through Bremer Business Park.

The Open Space Precinct has an area of 100.86 hectares (not including roads).

7.1.2 Description

The Open Space Precinct consists of land with multiple values for recreation, landscape, urban water management including water quality and flood storage. Some parts of the precinct will be re-created following the earthworks programme aimed at delivering a 'no net loss' of flood storage outcome for Bremer Business Park.

7.2 Open Space Land Use Character

7.2.1 Land Use Strategy

To create a world-class open space network, fulfilling multiple roles in Bremer Business Park, to meet environmental management, recreation and leisure, habitat and biodiversity, and community aspirations

7.2.2 Outcomes

- (1) A comprehensive, integrated system of public open space based on the Bremer River corridor, providing
 - (i) a network of recreational paths (walking, jogging, cycling, and possibly equestrian in some locations) and associated facilities (picnic areas, bar-be-ques, viewing platforms in strategic locations) for use by the workforce and local residents from Bundamba, Dinmore and Ebbw Vale;

- (ii) areas of habitat value (wetlands, refuges, remnant vegetation and rehabilitated vegetation);
 - (iii) areas of landscape value (gardens, corridors, waterbodies in strategic locations);
 - (iv) buffers between industrial and commercial activities and residential areas within Bremer Business Park and the surrounding localities; and
 - (v) areas for environmental management (buffers, wetlands and waterbodies, vegetation corridors).
- (2) A sustainable, cost-neutral approach to open space management, with community benefits extending beyond Bremer Business Park to include the communities of Bundamba, Ebbw Vale and Dinmore.

7.3 Assessment Framework - Open Space

The assessment framework refers only to material changes of use, and if necessarily associated with the use, operational works and building works. Otherwise, section 1.5.4 prevails with regards building work and operational work.

Material Change of Use

(and associated building work and operational work)

Self Assessment	Code Assessment	Impact Assessment
<ul style="list-style-type: none"> ▪ Environmental Facility (not involving building work or operational work) ▪ Open Space 	<ul style="list-style-type: none"> ▪ Car Park ▪ Community Building (kiosk or rest rooms only) ▪ Environmental Facility Involving building work or operational work ▪ Equestrian and Coursing Sports ▪ Outdoor Recreation ▪ Retirement Community ▪ Sports Complex ▪ Temporary Sales Office 	<ul style="list-style-type: none"> Any other material change of use

7.4 Open Space Infrastructure Plan

- (1) Public use sites within the Open Space Precinct are to be connected to development infrastructure services in accordance with the Bremer Business Park Infrastructure Strategy, prior to the commencement of their use.
- (2) Open space is to be transferred to the Council as public open space, or park, embellished and managed in accordance with an Infrastructure agreement between the Ipswich City Council and the proponent.

BREMER BUSINESS PARK - DESIGN INTENT GUIDELINES

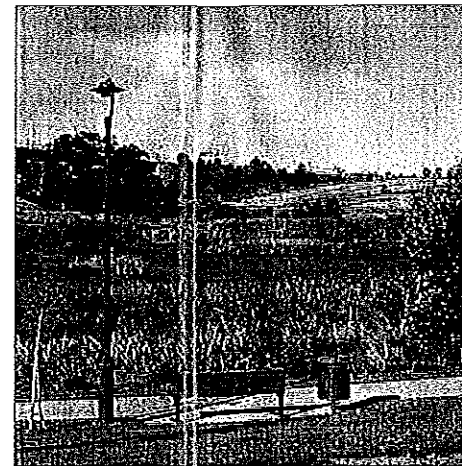
Precinct Guidelines

SEPTEMBER 2002

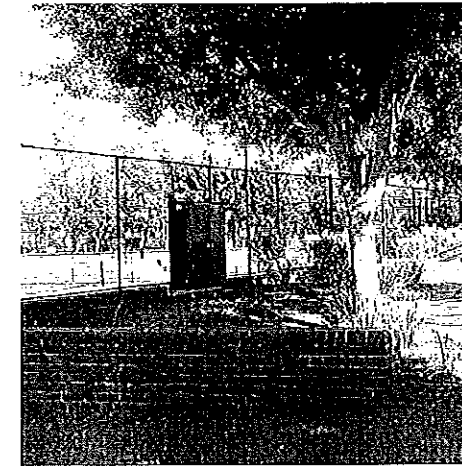


Open Space Precinct - Design Guidelines

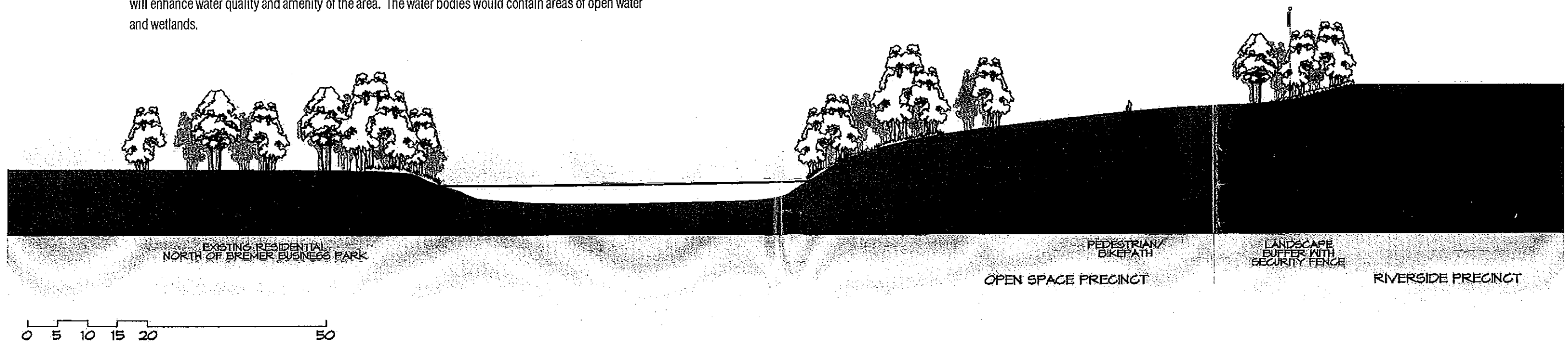
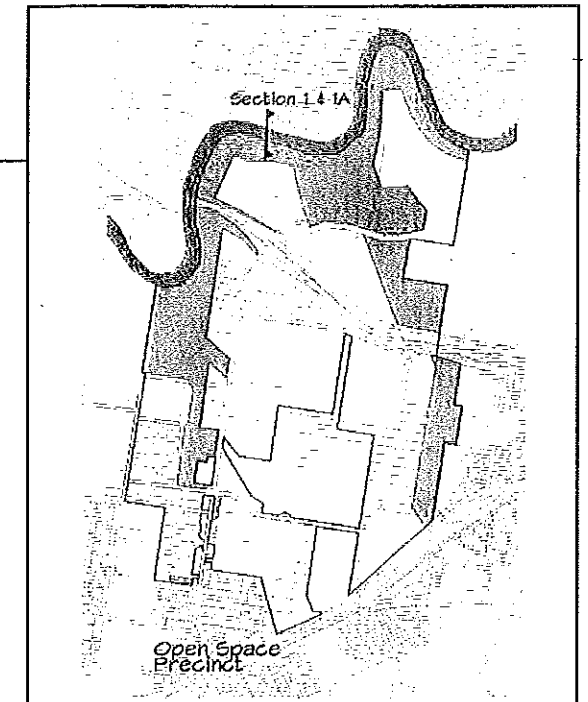
- Intent:** That this land is utilised for passive and active recreation, and be retained and enhanced for its environmental benefits along with its significance in providing regional and local open space linkages.
- Character:** Community open space to be utilised for passive recreation. Woodland character with understorey of native grasses and turf.
- Carriageway:** Limited park access roads will be provided with dispersed carparking to access recreation facilities.
- Footpaths:** 2500mm wide in-situ concrete; shared pedestrian/bike pathway system that links the Open Space Precincts.
- Lighting:** Standard Energex park and pedestrian lighting with black powder coat finish located at major.
- Furniture:** Contemporary design suite of park-type furniture and shelters.
Metal and natural finished timber bench seats with complementary metal litter bins and bollards. High quality picnic shelters and BBQ's are to be distributed in potentially high use areas. Metal finish to be black powder -coated.
- Signage:** Park type/standard metal pole for the pedestrian/bike path; other signage to be in accordance with the 'General Guideline' section of this Document.
- Planting:** Street Trees: Paperbark tea tree (*Melaleuca quinquenervia*)
Other planted areas: To be taken from the 'What to Plant Where Along the Lower Bremer River' document (refer to Appendix A).
- Special Features:** Permanently wet detention basins will be located at the end of each major tributary. These water features will enhance water quality and amenity of the area. The water bodies would contain areas of open water and wetlands.



Community nodes can be created along the Bremer River by providing furniture

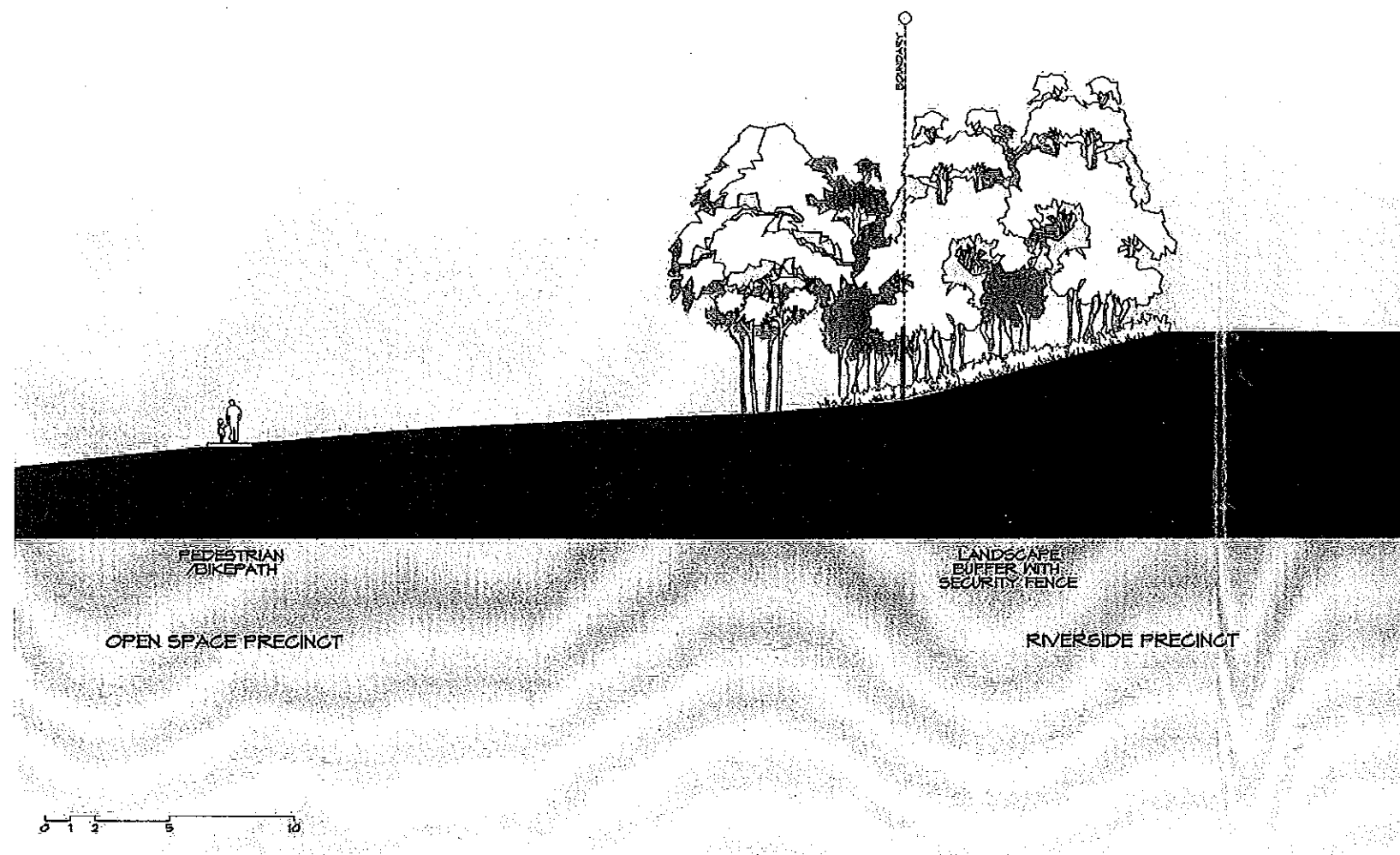
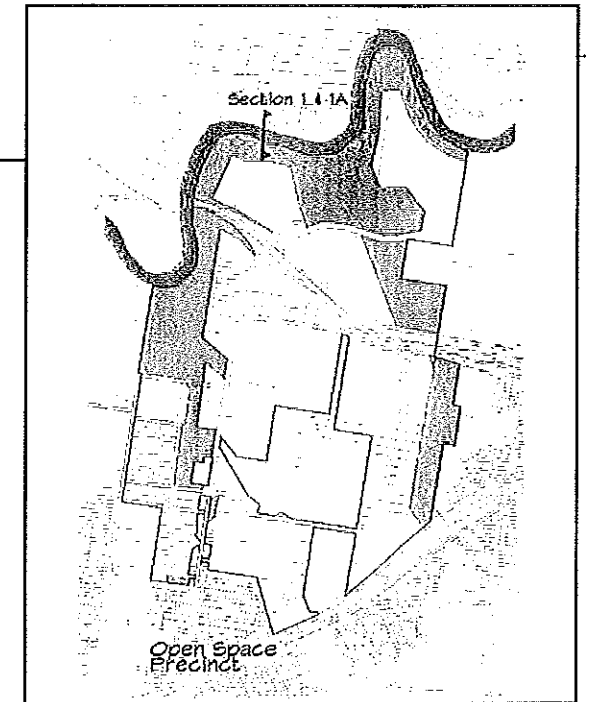


Community recreational facilities can be provided throughout the open space precinct



Section 1 : Existing Residential, Open Space and Riverside Precinct Interface

Open Space Precinct - Design Guidelines



Section 1A : Detail of Section 1, Open Space and Riverside Precinct Interface

BREMER BUSINESS PARK - DESIGN INTENT GUIDELINES

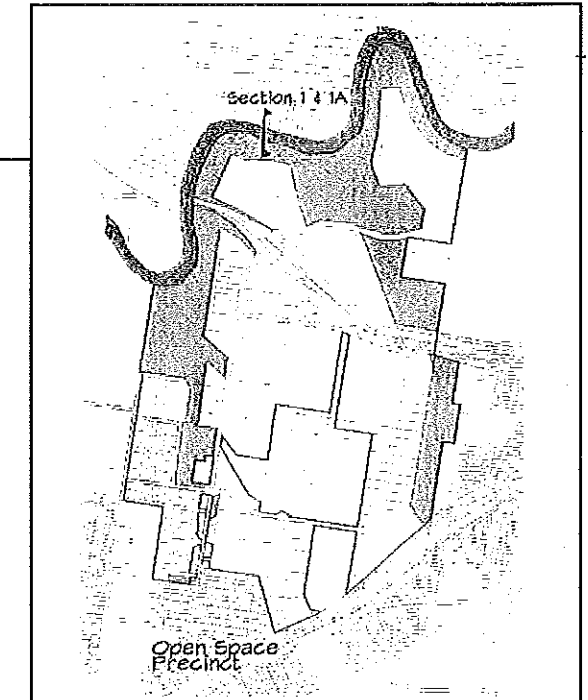
Precinct Guidelines

SEPTEMBER 2002



Open Space Precinct - Implementation Criteria

OPEN SPACE PRECINCT	
Implementation Criteria	Acceptable Solutions
Site Coverage	
Development site usage must be in accordance with the intent of the Precinct.	The built site coverage does not exceed 20% of the total Precinct.
Building Height	
Building height to be suited to the intent of the precinct.	Building height of no more than 2 storeys or 10m, which ever is less, is an acceptable limit from the ground level road frontage.
Building Setbacks/ Envelope	
Building setbacks can vary within this precinct to complement the natural character of the precinct.	Minimum building setback is 20m.
Carparking	
Any allowable on-site car parking should be kept to a minimum so that the visual character of the street and precinct is not undermined and to ensure on-site parking areas do not become a dominant visual element throughout the precinct.	Special car parking areas are to be provided adjacent to picnic and BBQ areas and sporting complexes. Carparking will be dispersed along the park access road.
Planting/Landscaping	
Planting within the precinct should enhance the precinct's character in both species selection and planting design.	Planting mounds should be utilised to reduce the visual impact of car parks within the precinct. Endemic vegetation should be used throughout the precinct with emphasis on native grasses; refer to the 'What to Plant Where Along the Lower Bremer River' document (see Appendix A) for species.
Signage	
Signage should not dominate or detract from the precinct's character.	Acceptable signage indicating carparking areas, pathways, picnic areas and other landscape elements should be provided where necessary and must meet the local council by-laws.



carol richards

From: "carol richards"
To: [REDACTED]
Sent: Wednesday, 4 May 2011 8:42 AM
Subject: 2011 flood impact in Karalee

Dear Shayne

Thank you for the opportunity to talk with you at the Karalee shops recently and for encouraging me to email you with my concerns in relation to the impact of the construction of the Citiswich Industrial Park on recent flood levels in the Karalee community.

I am a longstanding resident of Karalee and have lived in two residences since moving here from Brisbane in 1987. I was a survivor of the 1974 Brisbane floods so my first criteria for purchasing land here was that it had to be well clear of the 1974 flood levels. I checked the flood maps myself and therefore know the height of the 1974 flood in the streets in my local vicinity.

My residence in Lyndon Way was unaffected by the recent floods as was the case in 1974, However, one section of my street was severely affected by the recent floods with some houses impacted to roof level. This section of the street was not impacted to this degree in the 1974 floods. This is also the case for residences recently affected in Torrens Street, Albatross Avenue, Queensborough Parade, South Queensborough Parade and Voyager Street. The 1974 flood level did not reach these residences yet they were inundated, many to ceiling level, in the 2011 floods. Also, in 1974 the Bremer River reached a height of 20.6 meters yet in the floods this year it fell short of this at 19.5 meters. Based on this it would be expected, in an unchanged environment, Karalee should have been less flood impacted than in 1974

I am not an expert, however, common sense and basic knowledge about the flow of water would lead anyone to the deduction that a recent, major environmental change in this area would explain the greater flood impact in Karalee this year. This environmental change has been the construction of Citiswich Industrial Park.

The Citiswich project has involved major dirt works to build up the flood plain across the Bremer River from Karalee. This previously was an extensive flood plain on both sides of the Warrego Highway which once allowed the Bremer River, when in major flood, to overflow and spread out across the flood plain away from Karalee residences. Due to the dirt works, this flood plain is now as much as 6 metres (maybe more in places) higher than its natural state.

I travel to work through the Citiswich and over the past several years I have watched whole hills being dug up along Bognuda Street and shifted down onto the flood plain raising it well above its previous natural height. I have also witnessed truck load after

12/08/2011

truck load of dirt arriving and being dumped either on the flood plain or in a holding place nearby and then subsequently shifted onto to the flood plain contributing to its current height.

Little wonder that the water, not being able to spread out across its natural flood plain as previously, and now up against a wall at least a further 6 metres in height, backed up into areas on the opposite side to the flood plain (being Karalee) to a far more excessive height than recently. This of course impacted residences previously above the 1974 flood level.

It amazes me that there seems to be a law in relation to building and dirt works for everyday people which doesn't seem to apply to large corporations. When I built my current residence in Karalee on a sloping block of land, I was advised by Council, when having my house pad cut and prepared, that if my dirt works changed the natural flow of the water so that water impacted my neighbours' residences, I was legally accountable and had to put measures in place to take the redirected water away from my already existing neighbours' houses, or, if this could not happen, the dirt works could not be carried out.

Surely this same law applies to what has been happening in Citiswich Industrial Park. The normal flow of the flooded river out across the natural flood plain has been changed or prevented due to the importing of dirt to build up the flood plain opposite the Karalee residences, yet it seems that the developers are not accountable for the devastation that they have caused to many lives in some streets in Karalee. More to the point, this development was not stopped by Council even though the Karalee community objected strongly for this very reason.

People who lived in areas of Karalee long before Citiswich no longer have homes to live in. They are empty shells. Even if they had the money to rebuild their homes, why would they want to as Citiswich supposedly is going to continue to develop further on the flood plain between the Warrego Highway and the Bremer River. This will ultimately further diminish the flood plain. A future flood of recent proportion would probably see even more houses in Karalee impacted by water backing up because it cannot follow its natural flow across the flood plain.

It is too late for the people who were affected in January and who should have been safe. However, there is time to cease further proposed development in the Citiswich Park to ensure that many more lives in Karalee are not devastated in future floods, which are a certainty. Surely people come first especially when people have lived in an area long before industrial development was proposed.

I hope that you may be able to address this issue to at least cease the proposed, continued development of this industrial park on the flood plain between the Warrego Highway and the Bremer River. It may save lives!

I am happy to discuss this further with you or assist you in any other way with this matter.

Yours sincerely

Carol Richards



12/08/2011

The Chief Planning Officer
Ipswich City Council
Cnr Nicholas & South Streets
Ipswich 4305

18th January 2003

Dear Sir,

Re Bremer Business Park Planning Application No-3356/2002CA

As residents and land owners in Karalee we are extremely concerned and strongly object to any industrial use of land within one thousand metres of the Bremer river. In addition sample tests taken from the CSR transpiration trenches next to the Warrego Highway have indicated that the land is contaminated "results attached", making the use of this land unsafe for any workers involved with the building and running of the Business Park. A factor the industrial unions will view as a serious breach in the Workplace Health & Safety protocol.

Industry has proven time and time again that the protection of the environment is not a major priority and that industry will innovatively push the boundaries to the limit. [The CSR transpiration trenches are a classic example of this tendency to push the boundaries] Recent surveys conducted on the quality of the rivers in the South East quarter has shown that the Bremer River is the worst polluted river in the region and the proposed business park can only cause this situation to worsen.

Many landowners have over the past year, with the aid and support of the Bremer Catchment Association, been working to restore our river back to it's former state. Thousands of dollars have been spent by both Government and the private landowners in this regard. We as local residents take pride in our river and it's surrounds and would like to preserve it's beauty for future generations and not have it spoilt and polluted by industry because they have the funding and political clout to ride rough shod over the residents and rate payers concerns.

The erection of large industrial buildings on what was once beautiful rural Australian bush, is a factor that the Karalee rate payers will not ~~accept~~ and ask you to consider our concerns. As our duly elected representatives in the council we demand that our concerns be addressed and that the Ipswich City Council begin to make ecological and environmentally friendly decisions based on restoring the natural vegetation and beauty of this bush land.

As a possible alternative to this we would propose that the two buildings shown on the plan situated nearest the bridge on the northern side of the Warrego Highway [On what appears to be the site of the contaminated cattle dip] be removed. This area then be cleaned up and designated with a natural vegetation order for posterity. Also increase the buffer zone on the river to 200 metres.

This area then heavily replanted with native trees and vegetation previously common to this area.

Another alternative for this area would be that all the land on the northern side of the Warrego Highway be purchased by the State Government and cleaned up and heavily replanted with native vegetation. To be kept as a nature reserve , never to be built on in the future. This would show a true commitment by Government towards the rejuvenation of the polluted Bremer River and its surrounds.

Please find attached three pages of signatures from Karalee residents supporting this proposal.

Kind Regards

Wayne Fox
[redacted] Lyndon Way
Karalee Qld
4306
[redacted]



Queensland
Government

Enquiries
Telephone
Your reference
Our reference

STH606

Environmental Protection Agency

Incorporating the
Queensland Parks and Wildlife Service

29 January 2003

Mr Wayne Fox
Lyndon Way
Karales Qld 4306

Dear Mr Fox

Australian Hardboards site and Bremer Business Park proposal

I refer to your fax of 20 January 2003 and provide the following by way of response:

1. Australian Hardboards Limited site

The Bremer River Study undertaken for the South East Queensland Water Quality Management Strategy identified that there is a chronic input of dissolved organic carbon to the Bremer River ecosystem which fuels microbial production. River oxygen levels are thereby reduced, having detrimental effects on the aquatic ecosystem. In response to these findings, the Environmental Protection Agency (EPA) together with Ipswich City Council and Boonah Shire Council has developed a Bremer River Estuary and Catchment Audit Project. This requires that all industries conducting environmentally relevant activities (ERAs) in the Bremer Catchment will be audited. On completion of the project and after review by all stakeholders (i.e. CRC for Coastal Zone, Estuary and Waterway Management, EPA, Department of Natural Resources and Mines, the University of Queensland, Griffith University, CSIRO Marine Research and SEQ Regional Water Quality Management Strategy) a summary report of the audit findings will be made available to the public.

As mentioned to you via telephone on 17 January 2003, Australian Hardboards Limited (AHL) has already been audited as part of the project. Analysis of effluent samples from AHL showed very high levels of total organic carbon, biological oxygen demand, and chemical oxygen demand. This is not necessarily problematic unless effluent is reaching the Bremer River. As highlighted to you, it is a condition of AHL's licence that discharges do not reach the Bremer River. The EPA has requested that AHL investigate possible subsurface discharges from their site. The Bremer River study will discuss and clarify these issues in greater detail in its next stage.

The levels of some contaminants in soil and effluent from the AHL site have necessitated that AHL undertake a specified program of works (hence the proposed new wastewater treatment plant on site) in order to avoid any potential harm to soils and/or water.

As mentioned via telephone, pH, electrical conductivity, manganese, and phenols are issues in relation to the soils on the site. It is important to note that the levels are not high enough to fall within the levels required to fall within the definition of "contaminated land". However, there is one small area that does meet the definition of "contaminated land" for the reason that it is currently being used as a cattle dip. AHL will be required to undertake remedial works in relation to the cattle dip.

2. Proposed Bremer Business Park

AHL have committed to finding an alternative to irrigation of their effluent to land. To this end, they are proposing on installing a state of the art wastewater treatment plant on site. Furthermore, they cannot possibly continue to irrigate to land if the Bremer Business Park (BBP) gains approval, so would be forced to find a viable alternative.

It is highlighted that Ipswich City Council is the assessment manager for the BBP development application. The EPA's role is to provide advice only on certain aspects of the development. As mentioned, the EPA is consulting with Ipswich City Council and has recommended that noise, air and stormwater must be adequately addressed in the development application. As you are aware the company is proposing to establish a buffer zone which is likely to reduce the noise and visual impacts of the proposed development. If you have any concerns regarding the BBP it is advised that you forward a submission to Ipswich City Council.

If you have any further questions please do not hesitate to contact [REDACTED] on telephone [REDACTED]

Yours faithfully,

[REDACTED]

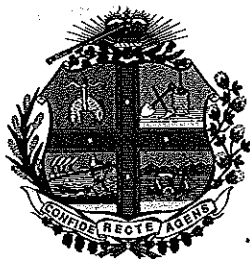
Kylé Roberts
Operations Manager – Heavy Industry
Southern Region

[illegible]

2

[illegible]

[illegible]



COUNCILLOR HEATHER MORROW

IPSWICH CITY COUNCIL - MEMBER FOR DIVISION 5

Address for Correspondence

PO Box 191

IPSWICH Q 4305

7 March 2003

W Fox

Lyndon Way

KARALEE Q 4306

Dear Sir/Madam

Re: Informatin Evening – Bremer Business Park held on 20 February 2003

We had another successful evening on the 20th where residents were able to voice their concerns to this development.

At the conclusion of the meeting, Mr Stephen Williams asked me to email him a list of questions which the residents had posed so that he could compile the answers for the next meeting which is scheduled to be held on Thursday, 13 March 2003 at the Karalee Community Hall at 7pm.

Listed below are the questions which I sent through for further clarification:

1. Definiation of River Precinct Uses
2. Definition of Highway Precinct Uses
3. Concern re possible 2 storey structure
4. Require construction in the Highway Precinct be located further to the east on the Warrego Highway ✓ OK ✓
5. Should a truck stop be included in the Highway Precinct – effects of noise (air brakes), visual appearance from residents homes looking toward the highway, lighting look @ this
6. Any development in the River Precinct and Highway Precinct to have minimal impact on residents
7. Wider buffer zone along river bank to be provided I site coverage 125m
8. Buffer zone to be set back from river bank
9. Forward tree planting ✓ GAGE
10. Plan of proposed planting e.g. Stage 1, 2, 3;
11. Lines of vision to be included
12. Odour. before end of this year

Shop 1, Jacaranda Centre, 2 & 3 Jacaranda Street, East Ipswich Qld 4305

Telephone: (07) 3281 8700 (W) Facsimile: (07) 3281 8600 (W)

Ipswich
It's a great place!

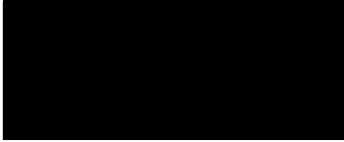
Web: www.ipswich.qld.gov.au



13. Prefer all green open-space north of the Warrego Highway
14. Actual measured emission from other Capral Sites

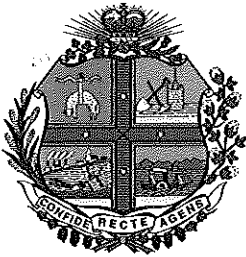
I would ask that all interested residents attend the next meeting on the 13th so that all outstanding issues can be clarified.

Yours sincerely



Cr Heather Morrow (C. Dec.)
Member for Division 5

*Review completed
- monitoring
- IAA - 3/2/20*



COUNCILLOR HEATHER MORROW

IPSWICH CITY COUNCIL - MEMBER FOR DIVISION 5

Address for Correspondence

PO Box 191

IPSWICH Q 4305

21 March 2003

Mr and Mrs P Brinckmann

Lyndon Way

KARALEE Q 4306

Dear Peter and Kerry

Re: Information Evening – Bremer Business Park held on 13 March 2003

We had another successful evening on the 13th. Mr Stephen Williams was happy to address the residents who attended and provide further information and responses to the questions that were posed to him prior to the meeting.

Mr Williams advised that the following amendments to the application were agreed to by Wingate Properties and are to be forwarded to Council:

1. Highway Precinct – 2 storey buildings in lieu of 3 storey as proposed
2. Section of Highway Precinct as highlighted on map to be changed to River Precinct
3. A minimum setback of 125m along river frontage was agreed.

Other points which were discussed are outlined below.

1. Copies of the Bremer Business Park – Self Assessable Uses schedule to be distributed to residents. Copy attached.
2. Residents were advised that Council had approved the establishment of a Reference Group to consist of residents of Division 4 and Division 5 as well as representatives of local industries. Should you be interested in becoming involved with this group, please contact Cr Trevor Nardi's Office on 3816 2444.
3. A landscape plan is currently being prepared for forward planting.

Shop 1, Jacaranda Centre, 2 & 3 Jacaranda Street, East Ipswich Qld 4305

Telephone: (07) 3281 8700 (W) Facsimile: (07) 3281 8600 (W)

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4. A water treatment plant will be in operation before the end of this year. When completed, the current practice of Hardboards of disposing of wastewater in open channels will cease. Water from Hardboards will be recycled by Hardboards.

The next meeting has been scheduled for Thursday, 3 April 2003 at the Karalee Community Hall at 7 pm..

Yours sincerely



Cr Heather Morrow (C. Dec.)

Member for Division 5



SINCLAIR KNIGHT MERZ

Sinclair Knight Merz Pty Limited

ACN 001 024 095

ABN 37 001 024 095

PO Box 246

Spring Hill QLD 4004


369 Ann Street

Brisbane QLD 4000

Australia

Telephone: +61 7 3244 7100

Facsimile: +61 7 3244 7306


Wingate Properties Pty Ltd
48 Wharf Street
KANGAROO POINT QLD 4169

13 March, 2003
L01kc_Wingate.Doc
RE07154

Dear Stephen

BREMER BUSINESS PARK – SELF ASSESSABLE USES

For your information, a list of the definitions of the self assessable uses (permitted uses) proposed in the Plan of Development for the Riverside and Highway Precincts, is outlined below:

Precinct	Self Assessable Use (permitted use)
Riverside Precinct	<ul style="list-style-type: none">▪ Animal Husbandry▪ Environmental Facility▪ Open Space▪ Local Utility▪ Pastoral Production▪ Outdoor Recreation (not involving building work or operational work)
Highway Precinct	<ul style="list-style-type: none">▪ Environmental Facility▪ Open Space▪ Local Utility▪ Outdoor Recreation (not involving building work or operational work)

Mr Stephen Williams
RIVERLINK DEVELOPMENT APPLICATION
19 January, 2003

Definitions (as described under the Ipswich City Council Planning Scheme)

Animal Husbandry: means any premises used for the non-intensive keeping, breeding depasturing and stabling of animals where the keeping of the animals will not, in the opinion of the Responsible Officer, create any deleterious impact on nearby properties by way of smell, noise; generation of dust or traffic; or any other aspect identified with such use of the premises. The term includes Apiaries kept pursuant to the *Apiaries Act 1982*.

Environmental Facility: means any premises used for –

- (a) Environmental education, nature study or display facilities such as walking tracks, board walks, observation decks, bird hides or the like, or
- (b) Environmental management and restoration facilities such as bush restoration, swamp restoration, erosion and run-off prevention works, creek bank restoration or the like.

Local Utility: means any premises used or intended for use by a Government, Semi-Government, Statutory Authority, Government Owned Corporation or Local Government in the course of a minor public utility undertaking relating to the provision of water supply, sewerage, electricity, gas, telecommunications, transport or drainage services where these activities do not involve the following:

- (a) The construction of electricity power lines, transformers or switching stations operating at or in excess of 48 000 volts; or
- (b) The construction or use of any building or other structure having a floor area greater than 100m² or a height greater than 4.5 metres; or
- (c) The use of land in excess of 1500m² in area.

Outdoor Recreation: means any premises used for the purposes of any recreational or sporting activity which is primarily conducted outdoors. The term includes:

- (a) Participation in or watching any sport or game, including those played upon a field and/or marked court;
- (b) Golf course;
- (c) Outdoor swimming pool;
- (d) Bicycle sports including velodrome and BMX tracks; and

Any other uses which in the opinion of the Responsible Officer are consistent with those listed above.

The term includes the following facilities when provided on the site and any other buildings, structures or uses which in the opinion of the Responsible Officer are ancillary to the predominate use:

- (a) Amenity building;
- (b) The supply of light refreshments to patrons on the premises;
- (c) Car parking areas; and
- (d) Facilities for the social and administrative activities of any organisation associated with the use of the land.

Open Space: not defined

Pastoral Production: means any premises used for the keeping and grazing of beef and dairy cattle, sheep horses, goats, emus, ostriches and other animals for commercial or business purposes.

SINCLAIR KNIGHT MERZ

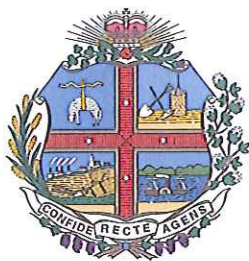
[REDACTED]
RIVERLINK DEVELOPMENT APPLICATION
19 January, 2003

Yours faithfully,

[REDACTED]

[REDACTED]
Senior Planner

Phone: 32447328
Fax: 32447306
E-mail: kcarusi@skm.com.au



COUNCILLOR HEATHER MORROW

IPSWICH CITY COUNCIL - MEMBER FOR DIVISION 5

3 February 2003

Dear Resident

Re: Public Meeting to discuss the Proposed Bremer Industrial Park

You are invited to attend a public meeting to discuss the proposed Bremer Industrial Park which will be situated on the Ipswich side of the Bremer River opposite your properties.

This meeting will give residents the opportunity to pose any questions or concerns that they may have, to the developer Mr Stephen Williams, the Councillor for Division 4, Cr Trevor Nardi and myself.

Meeting Date *Thursday, 6 February 2003*

Meeting Time *7.00pm*

Meeting Venue *Karalee Community Hall*

Please feel free to invite any other interested residents from your area who you feel may have a justifiable concern about this development.

Hope to see you there.

Kind Regards,



Cr Heather Morrow
Member for Division 5



[REDACTED]

① Surveyor points - Lyndon, Albion
1974 - establish height
" " of the one.

② Access

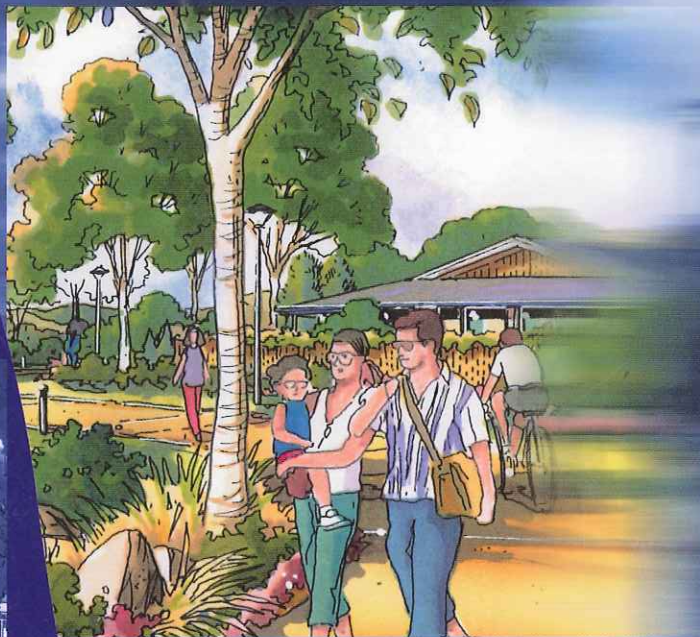
Forms filled out

St. h. One - ③ poor planning - major discrepancies
around planning of Lakeside



BREMER BUSINESS PARK

On 335 hectares,
where Brisbane
meets Ipswich...
your future is exceptional



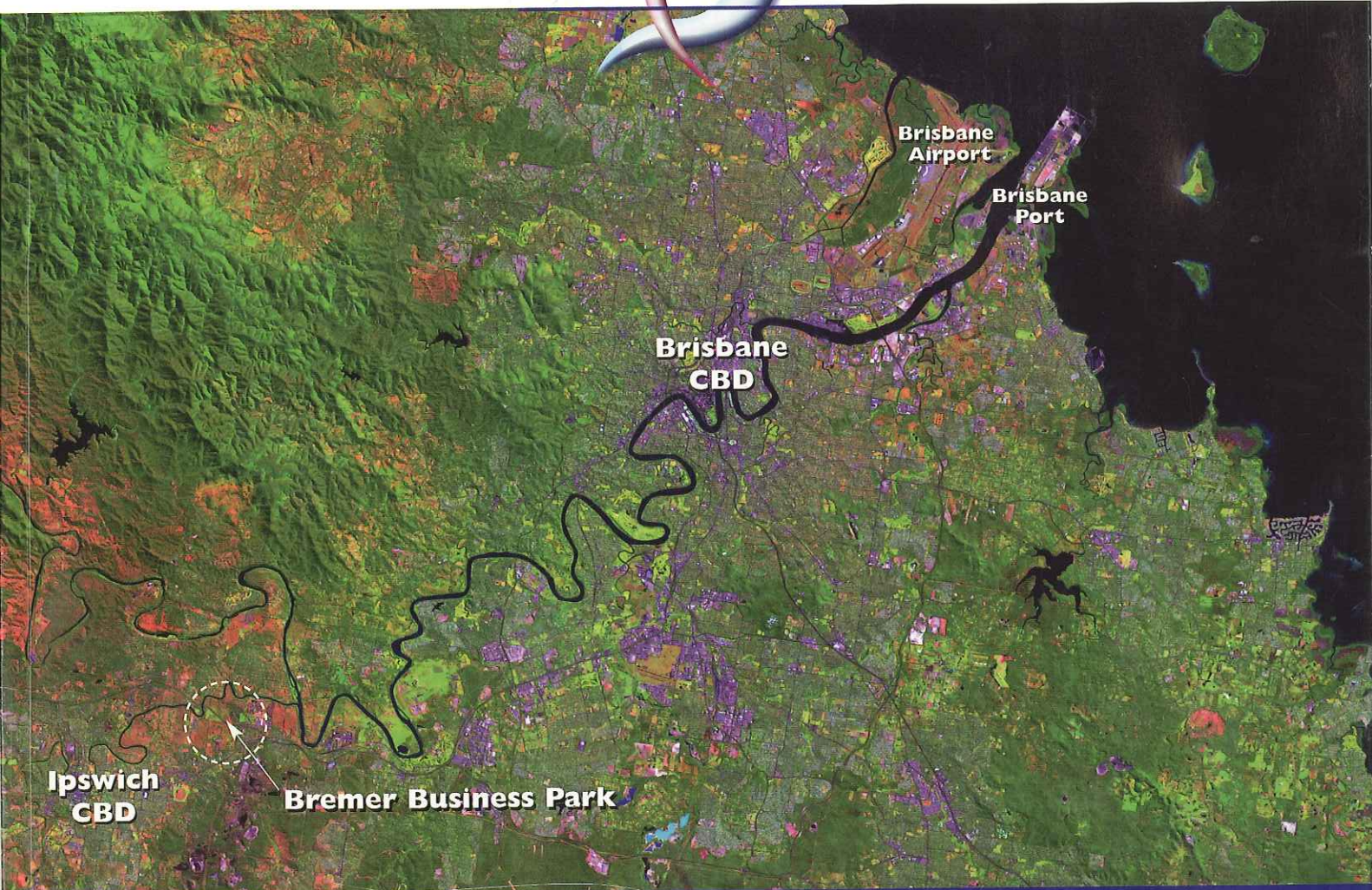
WINGATE
properties

Experience ■ Innovation ■ Excellence

HUDSON



BREMER BUSINESS PARK



A new western gateway

Bremer Business Park is being developed by a partnership between
Wingate Properties Pty Ltd and the Hudson Group



HUDSON

For further information please contact Wingate Properties Pty Ltd
Telephone (07) 3891 3022 Facsimile (07) 3891 3017

A gateway to a world of opportunities

Bremer Business Park will create more than 4,500 new jobs, and demand for support and professional services will further boost the existing economy of Ipswich.

To match the diverse employment opportunities created at Bremer Business Park with the skills of people in the community, Wingate Properties has entered into a collaborative agreement with the neighbouring Bremer Institute of Technical and Further Education. It is the first of many measures to ensure that Bremer Business Park is truly a partner in the economic and social prosperity of Ipswich.

Bremer Business Park will reduce the need for Ipswich residents to take themselves out of their community to work.

At Bremer Business Park, the city of Ipswich gets connected

With a unique location where two national highways converge, and at the gateway to a dynamic, fast growing city, Bremer Business Park connects business to the major transport and economic flows to and from Brisbane.

With the Ipswich Motorway running directly from central Brisbane, Bremer Business Park connects business to northern Australia's business capital with its commercial hub and one and a quarter million people.

With railway connections and Australia's most efficient freeways network, Bremer Business Park connects business to Brisbane's world-class airport and port facilities.

With unparalleled power and data infrastructure Bremer Business Park connects business to electricity at a cheaper rate than any other industrial site in South East Queensland and to the telecommunications capacity necessary for modern business.

With access to an increasingly sophisticated workforce and a region at the forefront of Queensland's sustained economic growth, Bremer Business Park connects business to the right kind of social setting for mutually rewarding enterprise.

At Bremer Business Park, your future is world class. More than a new western gateway – it's a gateway to a world of opportunities.

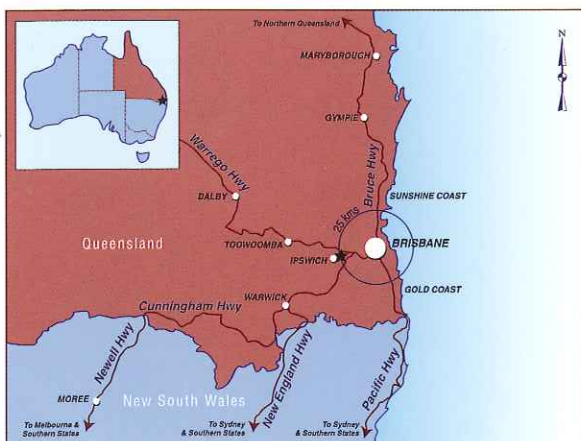


A new western gateway

Bremer Business Park is an outstanding base for progressive businesses. It provides enormous social, economic, environmental and community benefits for its immediate locality and beyond.

Queensland's rapidly growing south west corridor, centred on Ipswich city, is being driven by rapid population growth, attractive prices for land and services, and access to established infrastructure.

New facilities are in demand and there is a unique site waiting for them. Ideally located on the Ipswich Motorway in Ipswich city, and 25kms from Brisbane, it is here the vision of Bremer Business Park will be realised.

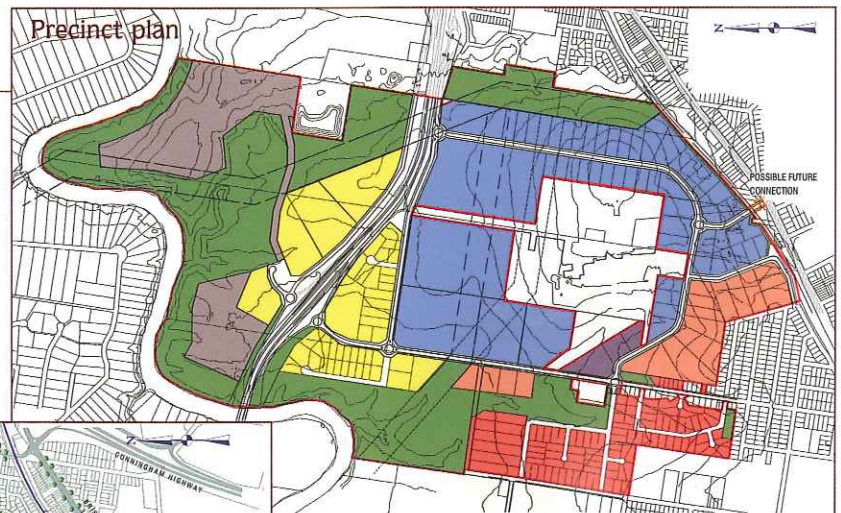


Site location

A truly unique site – 335 hectares, already zoned mainly for industrial use, positioned to meet the Ipswich Motorway where it joins the Warrego and Cunningham Highways. With rail at the park's southern edge, no other site, new or old, has such a complete set of land transport assets.

Land use

Bremer Business Park unites the needs of business and the Ipswich community in a master planned estate that will be a model for others to follow - another great achievement for Ipswich, which builds on the assets of which the community is justly proud.



Legend

Central industry precinct (86ha)	Residential precinct (27ha)
Highway precinct (37ha)	Open space precinct (100ha)
Community centre (2ha)	Riverside precinct (34ha)
Industrial & commercial precinct (22ha)	

Precinct vision

Central industry precinct

The central industry precinct is centred on the high point of Bremer Business Park, and slopes away in all directions. It will include a wide range of medium to large-scale industrial activities primarily associated with manufacturing, processing and treating goods for further use. Approximately 86 hectares.

Highway precinct

The highway precinct is highly visible from the Warrego Highway and will be the most accessible in the park. It will include light industry and commercial activities that maximise the benefits of the highly accessible and visible location of the Warrego Highway. Approximately 37 hectares.

Community centre

The community centre will be accessed by Bognuda Street. It will provide a range of community services such as childcare, medical, health and aged care facilities. Small-scale convenience facilities including a supermarket and speciality shops will cater for the day-to-day needs of the workforce and nearby residents. Approximately 2 hectares.

Industrial and commercial precinct

The industrial and commercial precinct is partly visible from Brisbane Road and highly visible from the Ipswich railway. It will provide a transition from the intense activities in the central industry precinct to the residential precinct and will include a diverse mix of low impact industrial and commercial activities. Approximately 22 hectares.

Residential precinct

The residential precinct adjoins the existing residential areas of Bird Street, Bognuda Street and River Road West. This precinct will be developed between pockets of existing residential land. It will include a range of housing choices and provide access to a wide range of employment opportunities and community facilities. Approximately 27 hectares.

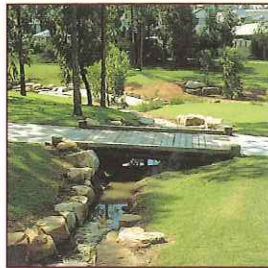


Precinct plans divide Bremer Business Park into sections, according to preferred land use character and infrastructure strategies

Community integration

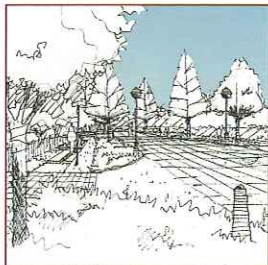
Open space precinct

The open space precinct consists of land with multiple values for recreation, landscape and urban water management. This precinct will create a world-class open space network to meet environmental, recreation, leisure, habitat and community aspirations. Approximately 100 hectares.



Riverside precinct

The riverside precinct enjoys good views of the Bremer River. This precinct will be formed along a path of existing watercourses and will include low intensity industrial and related activities in keeping with the riverside setting and adjacent land uses. Approximately 34 hectares.

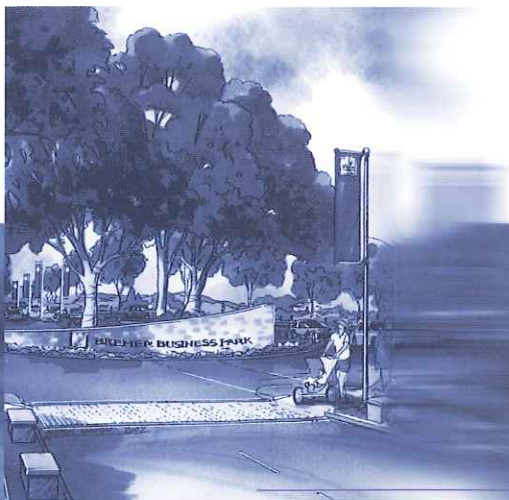
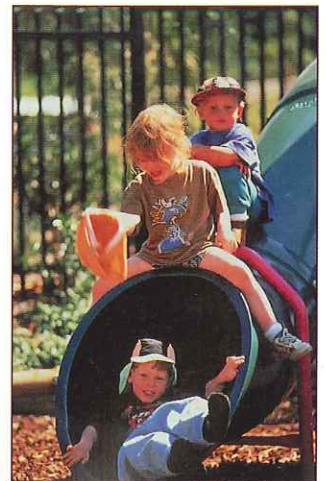


In keeping with Wingate's commitment to the residents of Dinmore, Ebbw Vale and Bundamba, Bremer Business Park has evolved to address the views expressed during extensive community consultation.

Wingate will establish both formal and informal links to these communities so they become 'partners' in the park's implementation. An unprecedented level of community consultation has already been established to ensure Bremer Business Park is a model of ordered and sensitive development.

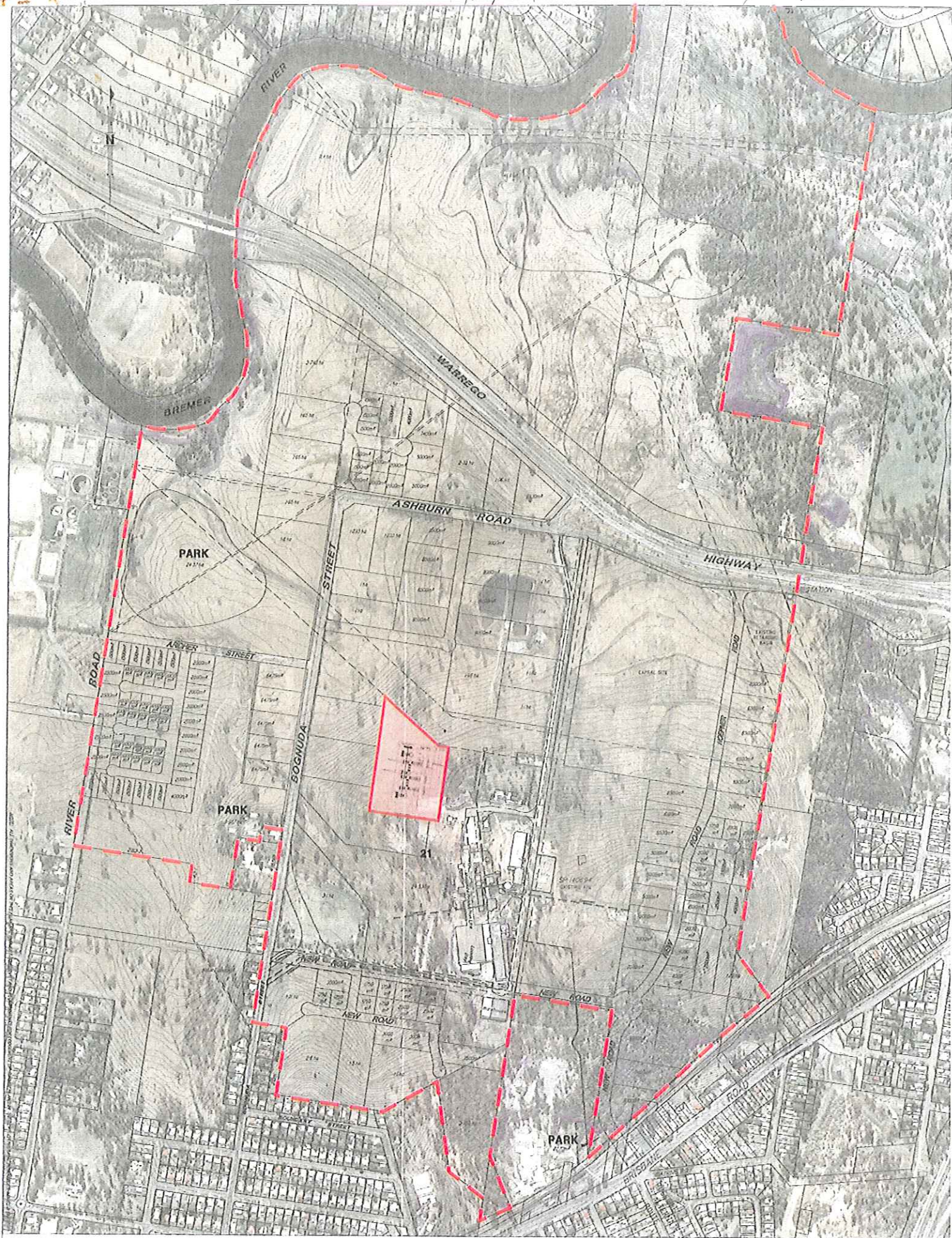
In establishing the best possible surroundings for business, Bremer Business Park also gives local residents and the Ipswich community significant improvements.

For example, residents in neighbouring Dinmore and Bundamba can reclaim their streets as the master plan delivers a street calming strategy for busy River Road. Heavy traffic currently using Bognuda Street will also be redirected away from residential areas.



1/5/04

BBP / ICI



BREMER
BUSINESS PARK

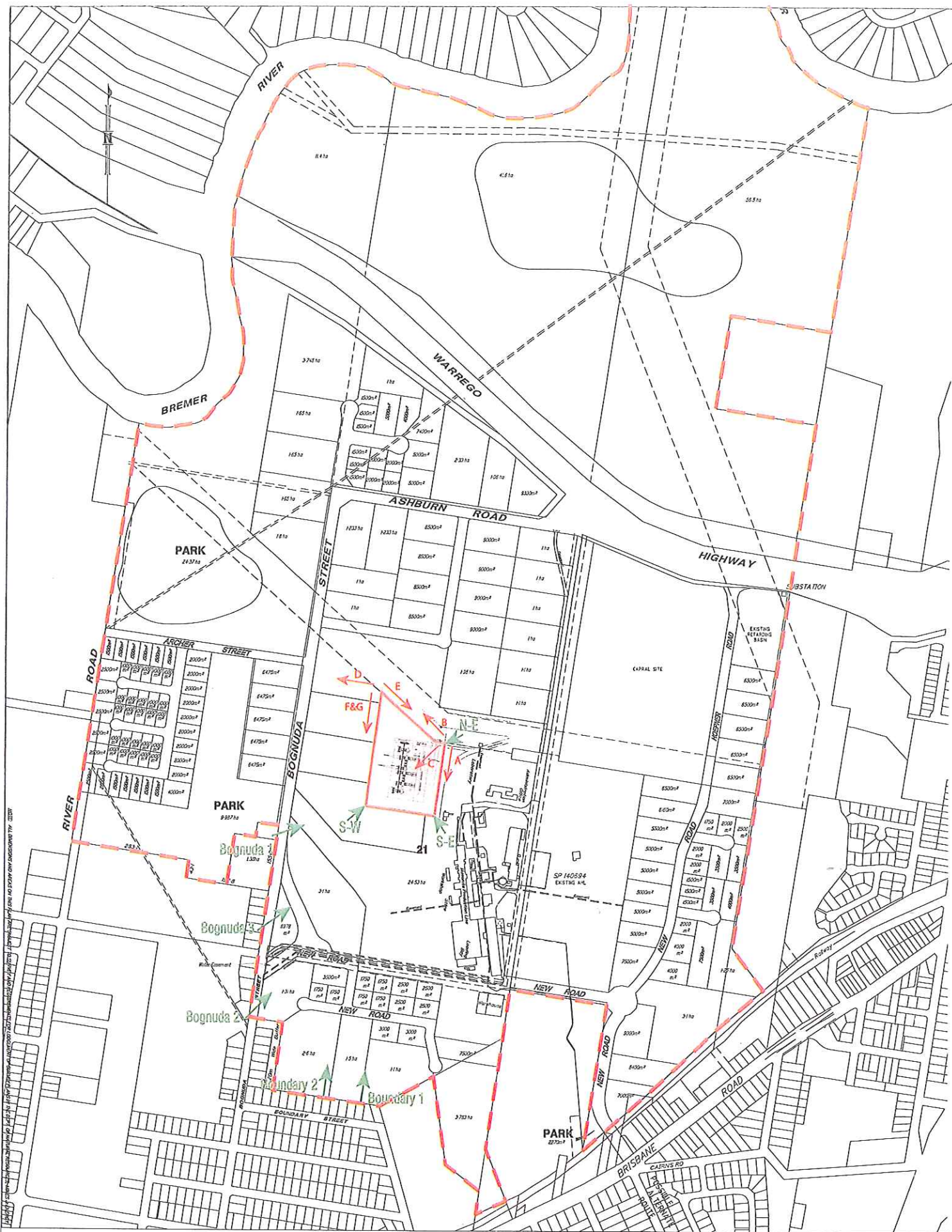
WINGATE
CONSTRUCTION

HUDSON
INDUSTRIAL GROUP

BREMER BUSINESS PARK

SUBDIVISION PLAN

THIS PLAN IS A PRELIMINARY
SUBDIVISION PLAN AND IS NOT
FOR CONSTRUCTION PURPOSES.
IT IS THE PROPERTY OF THE
BREMER BUSINESS PARK
DEVELOPMENT COMPANY.



BREXTER
PLANNING & DESIGN

WINGATE
PLANNING & DESIGN

HUDSON
INVESTMENT GROUP

BREMER BUSINESS PARK

PHOTO LOCATION PLAN



Scale 1:10,000
Date: 10/10/2011
Sheet 1 of 1

Photos From the Site



A



B



C



D



E



F



BREMER BUSINESS PARK

PHOTOS FROM THE SITE

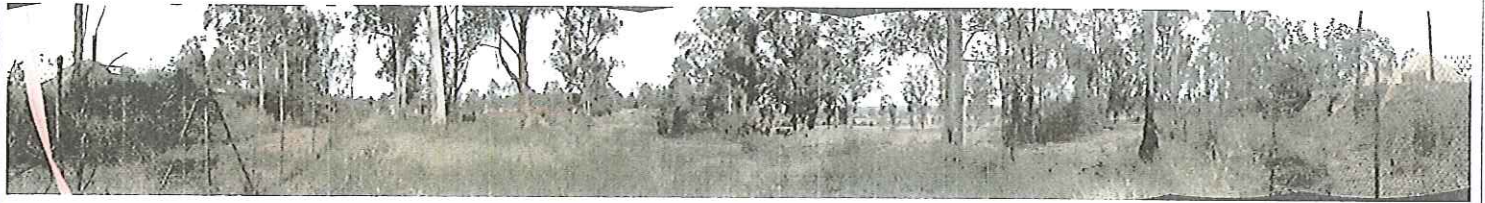
PHOTOGRAPHED BY
HASSELL
ON 10/10/01

HASSELL

From the Site



North-East Corner



South-East Corner



South-West Corner

From Bognuda street to South-West Corner of the Site (↓)



From Bognuda 1

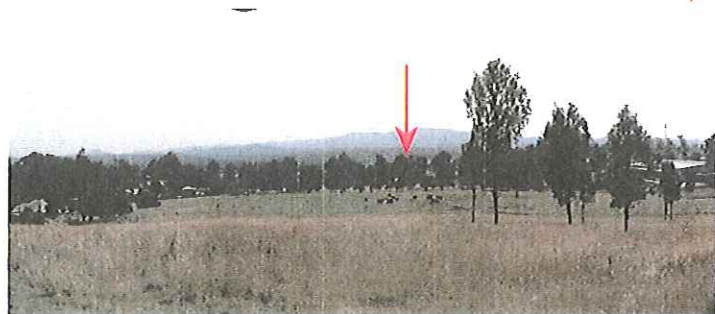


From Bognuda 2



From Bognuda 3

From South Boundary to South - East Corner of the Site (↓)



From Boundary 1



From Boundary 2

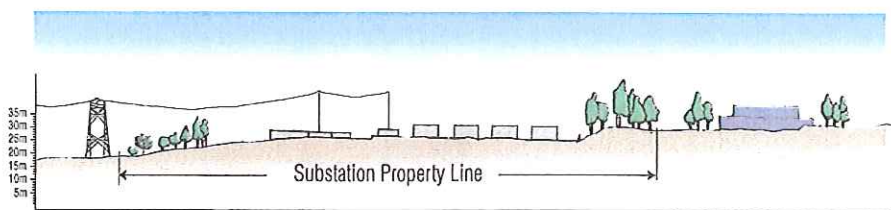
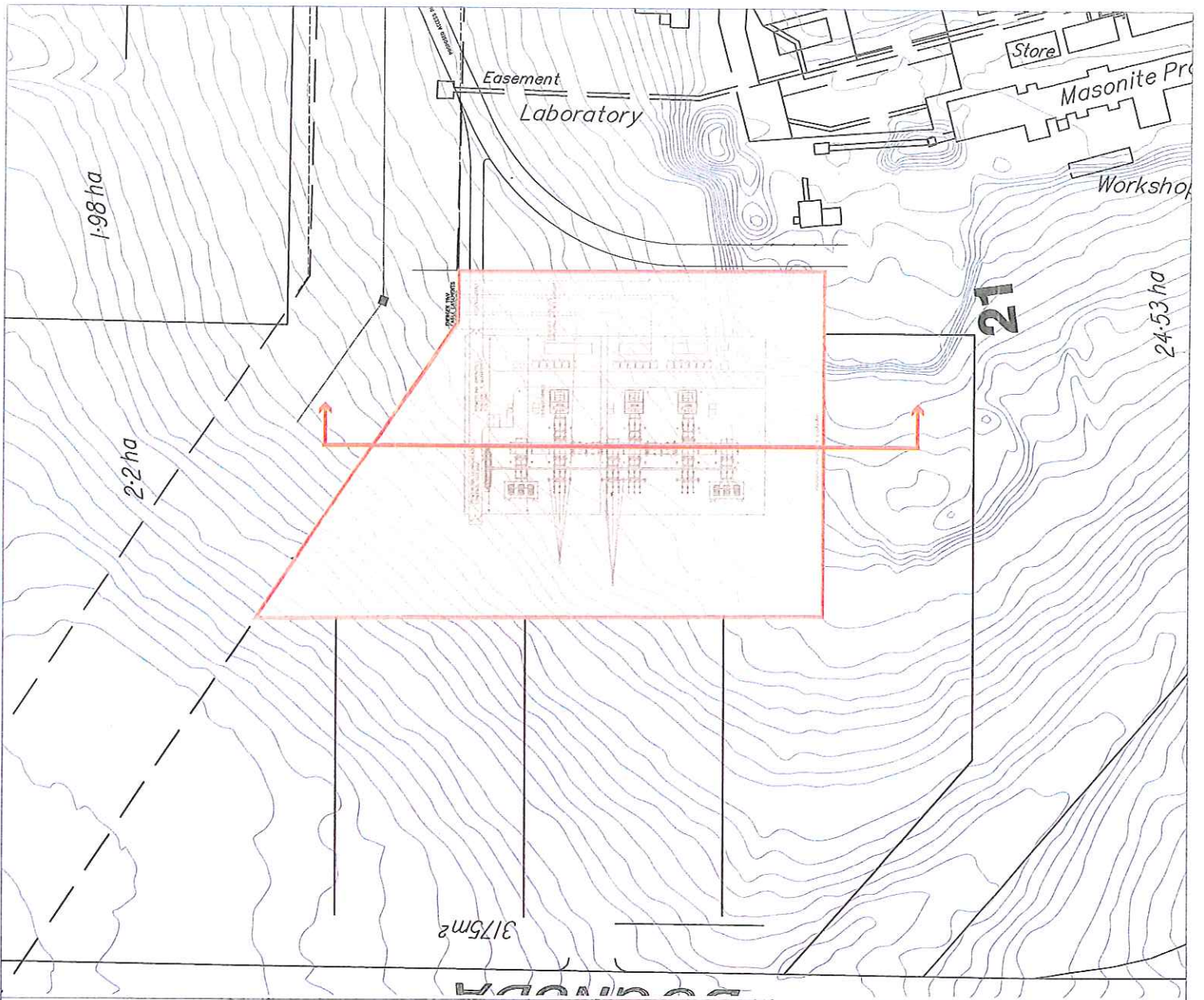


BREMER BUSINESS PARK

PHOTOS FROM THE SITE

HASSELL

10/5/04



SECTION

