

**CITYWIDE INDUSTRIAL LAND USE
STRATEGY**

ROCKHAMPTON CITY PLAN

November 2002

COUNCIL RESOLUTION MEMO

PLANNING AND DEVELOPMENT COMMITTEE
ADOPTED BY COUNCIL

18 NOVEMBER 2002
2 DECEMBER 2002

Action as per Resolution set out below	
Name	Strategic Planner
Action to be completed	In accordance with the resolution
Date Resolution Emailed	3 December 2002
Action Finalised	
File Ref	ILS1/2/1 & ILS1/4

***Citywide Industrial Land Use Strategy (FINAL) - Outcome of Councillor
Bus Tour and Further Discussion with the Residents of Lakes Creek***

File Ref: ILS1/2/1 & ILS1/4

Summary

The committee members and other Councillors will recall at the Planning and Development Committee meeting held on 1 July 2002, a bus tour was conducted to obtain comments and evoke discussion amongst Councillors on the draft Citywide Industrial Land Use Strategy. In addition, Committee members will recall the report presenting the submissions received on the draft Citywide Industrial Land Use Strategy, the subsequent changes to the document and the amended mapping.

The report by the Strategic Planner dated 8 July 2002 provides comments on the outcomes of the Councillors' inspection regarding the Citywide Industrial Land Use Strategy. Further consultation with the residents of Lakes Creek has also taken place through Councillor Fisher, which the time necessary to do so has led to the delay in finalising the matter.

It is recommended that the draft Citywide Industrial Land Use Strategy be endorsed with the proposed changes as set out in the report.

COMMITTEE RESOLUTION

THAT the committee recommends to Council that:

1. The Citywide Industrial Land Use Strategy be received by Council as a foundation strategy and essential tool in the preparation of the new City Plan, which is to also be taken into consideration when ensuring sufficient land is appropriately located for future industrial growth and development.

COUNCIL RESOLUTION MEMO

2. The report by the Strategic Planner dated 8 July 2002 and Council's resolution be [attach](#)ed to the Citywide Industrial Land Use Strategy for easy reference by any person who may wish to view the Strategy in the future.
3. Council adopt the Overall Recommendations numbered 1-16 in Section 2 of the Strategy with the following exceptions:
 - ? The second part of recommendation 9, recommending that investigations be made for alternative consumption based industry in the south part of Rockhampton not be adopted as the rejection of Port Curtis as an 'investigation area' provides no other opportunities within the City's boundaries.
 - ? The reference to Alexandra Street in overall recommendation 11 be rejected.
 - ? Council rejects the part of overall recommendation 13 that Port Curtis is an 'investigation area' for industry.
4. Council note the Overall Recommendations numbered 17-21 in Section 2 of the Strategy.
5. Council adopt the Precinct Recommendations numbered 1-6 in Section 2 of the Strategy with the following exceptions:
 - ? The part of recommendation 2, recommending that an area in the vicinity of Thomasson Street, Richardson Road and Alexandra Street be returned to residential use be rejected and that it instead be an option to the land owners with the area designated as Sales and Service Industry.
 - ? The part of recommendation 5 that Port Curtis be designated as an 'investigation area' for industry be rejected.
6. For the purposes of developing the City Plan, in addition to the changes in the recommended land use patterns within the strategy that result from the above:
 - ? The land bound by Stanley, Campbell and George Streets and land owned by Queensland Rail not be designated for residential purposes as recommended in the Strategy and instead be designated as Sales and Service Industry.
 - ? The five (5) residential allotments along Lion Creek Road be removed from the Airport investigation area.
 - ? Land fronting onto the southern side of Hunter Street west of Western Street be included within the Airport Investigation Area as Airport Industry.

MOVED: Her Worship the Mayor
SECONDED: Councillor Bastin-Byrne
MOTION CARRIED UNANIMOUSLY

Report



To: Chief Executive Officer

Committee: Planning and Development Committee

Subject: Citywide Industrial Land Use Strategy (FINAL) - Outcome of
Councillor Bus Tour & Further Discussion with the
Residents of Lakes Creek

Author: Strategic Planner

File Ref: ILS 1/2/1 & ILS 1/4

Attachments: (3) Previous Report
Part 4.2.3 Lakes Creek Precinct
Citywide Industrial Land Use Strategy (FINAL)
(Separate Booklet)

Date: 8 July 2002

Summary

The Committee and other Councillors will recall at the Planning and Development Committee meeting on 1 July 2002 a bus tour was conducted to obtain comments and evoke discussion amongst Councillors on the draft Citywide Industrial Land Use Strategy. In addition, Committee members will recall the report [attached](#) to this bus tour (and this report) presenting the submissions received on the draft Citywide Industrial Land Use Strategy, the subsequent changes to the document and the amended mapping.

This report provides comment on the outcomes of the Councillors inspection regarding the Citywide Industrial Land Use Strategy. Further consultation with the residents of Lakes Creek has also taken place through Councillor Fisher, which the time necessary to do so has led to the delay in finalising the matter.

It is recommended that the draft Citywide Industrial Land Use Strategy be endorsed with the proposed changes as set out in this report.

OFFICER'S RECOMMENDATION

THAT the committee recommends to Council that:

- 1 The Citywide Industrial Land Use Strategy be received by Council as a foundation Strategy and essential tool in the preparation of the new City Plan, which is to also be taken into consideration when ensuring sufficient land is appropriately located for future industrial growth and development;

Citywide Industrial Land Use Strategy (FINAL) - Outcome of Councillor Bus Tour & Further Discussion with the Residents of Lakes Creek (Cont.)

- 2 This report and Council's resolution be attached to the Citywide Industrial Land Use Strategy for easy reference by any person who may wish to view the Strategy in the future;
- 3 Council adopt the Overall Recommendations numbered 1-16 in Section 2 of the Strategy with the following exceptions;
 - ? The second part of recommendation 9, recommending that investigations be made for alternative consumption based industry in the south part of Rockhampton not be adopted as the rejection of Port Curtis as an 'investigation area' provides no other opportunities within the City's boundaries;
 - ? The reference to Alexandra Street in overall recommendation 11 be rejected;
 - ? Council rejects the part of overall recommendation 13 that Port Curtis is an 'investigation area' for industry;
- 4 Council note the Overall Recommendations numbered 17-21 in Section 2 of the Strategy;
- 5 Council adopt the Precinct Recommendations numbered 1-6 in Section 2 of the Strategy with the following exceptions;
 - ? The part of recommendation 2, recommending that an area in the vicinity of Thomasson Street, Richardson Road and Alexandra Street be returned to residential use be rejected and that it instead be an option to the land owners with the area designated as Sales and Service Industry;
 - ? The part of recommendation 5 that Port Curtis be designated as an 'investigation area' for industry be rejected;
- 6 For the purposes of developing the City Plan, in addition to the changes in the recommended land use patterns within the strategy that result from the above;
 - ? The land bound by Stanley, Campbell and George Streets and land owned by Queensland Rail not be designated for residential purposes as recommended in the Strategy and instead be designated as Sales and Service Industry;
 - ? The five (5) residential allotments along Lion Creek road be removed from the Airport investigation Area;
 - ? Land fronting onto the southern side of Hunter Street west of Western Street be included within the Airport Investigation Area as Airport Industry.

REPORT

This report will deal with three (3) separate issues, the first being the outcome of the areas viewed on the bus tour inspection on 1 July 2002 (Part A). The second issue looks at items previously outlined in the report [attached](#) to the bus tour inspection on 1 July 2002 which was essentially submissions received in the public consultation (Part B). The third addresses issues raised by Councillor Fisher and residents of Lakes Creek.

Citywide Industrial Land Use Strategy (FINAL) - Outcome of Councillor Bus Tour & Further Discussion with the Residents of Lakes Creek (Cont.)

PART A

Stanley Street Precinct – Relocatable Industry at the lower end of East, Quay and Wharf Streets.

Overall recommendation 8 of the Citywide Industrial Land Use Strategy (page 4) aims to discourage the continued existence of hazardous industry and noxious or offensive industry in the City. The area at the lower end of East, Quay and Wharf Streets is currently zoned Hazardous Industry and is recommended as Relocatable Industry within the Stanley Street Precinct. Councillors, on the bus tour, supported this recommendation.

Stanley Street Precinct – Not Required for Industry Use on land bound by Stanley, Campbell and George Streets and land owned by Queensland Rail.

This area is currently zoned Service Industry and abuts land used by Queensland Rail for rail purposes, including passenger and freight operations. This area is dominated by residential development, however, it does include 3 non – residential activities. The Citywide Industrial Land Use Strategy recommends this area be designated as Not Required for Industry Use, however, due to its proximity to Queensland Rail and their activities, which generate impacts such as noise, this change was not supported by Councillors on the bus.

Alternatively, Councillors recommended this area retain its current industrial zoning and adopt a similar designation in the Strategy. Due to the areas proximity to Queensland Rail and designation of the Sales and Service Industry land across Stanley Street it is recommended the area between Stanley, Campbell and George Streets and land owned by Queensland Rail also be designated as Sales and Service Industry.

Stanley Street Precinct – Not Required for Industry Use on land bound by Stanley, Murray and George Streets and Queensland Rail.

Again this area is currently zoned Service Industry, however, the dominant land use activity is residential. The Citywide Industrial Land Use Strategy recommends this area be designated as Not Required for Industry Use. This designation was supported by Councillors, given Murray Street is the dominant vehicle access point to the railway. It was seen as important to retain a strong residential element to this section of Murray Street, as this is the first impression of Rockhampton for a number of visitors to the City.

Please note Young's Bus Service on George Street is designated as Transport Terminal in the Draft Citywide Industrial Land Use Strategy, and will form part of the Planning Area with the Queensland Rail activities in the new City Plan.

Citywide Industrial Land Use Strategy (FINAL) - Outcome of Councillor Bus Tour & Further Discussion with the Residents of Lakes Creek (Cont.)

Stanley Street Precinct – Sales and Service Industry on land bound by Derby, Campbell, Stanley and George Streets.

The area bound by Derby, Campbell, Stanley and George Streets is currently a mix of zonings, such as Residential 'A', Local Business and Service Industry. The land use activities in this area reflect the various zonings, that is the land use activities include activities such as dwelling houses, vehicle showrooms and motor vehicle workshops. Given the areas proximity to other industrial activities it is seen as appropriate to give this area an industrial designation. Councillors on the bus tour supported this recommendation.

B-Double Haulage Route – proposed change from Stanley Street to Derby Street

The B-Double haulage route to access the Stanley Street industrial precinct was originally Stanley Street. However, submissions from Main Roads and Council's Works Department identified the more appropriate B-Double haulage route for the precinct is via Derby Street, not Stanley Street. Councillors supported this recommendation especially given the location of the signalised intersection at Derby Street and the Highway.

Port Curtis (Industrial Investigation) Precinct – Low Impact Industry

The Citywide Industrial Land Use Strategy recommends the designation of an area of land for Low Impact Industry activities at Port Curtis. The precinct, as stated in the Strategy, has been set aside for investigation on the possibilities of locating industrial activity in the area. The major issue requiring investigation before industrial activities could locate in this precinct is the issue of flooding.

Councillors present on the bus did not support this precinct as an investigation area for industry, based on past flooding problems in the area. It was concluded that the flooding in this area was too extensive to nominate the area for future investigation on the possibility of industrial development.

Kawana – Park Avenue Precinct – Non – Industrial designation of land off Alexandra Street.

A large portion of land off Alexandra Street is currently zoned General Industry, however the Citywide Industrial Land Use Strategy has designated the area as Non – Industrial. In addition, overall recommendation 11 of the Strategy currently states the Strategy recommends to Council that it support the transition of land into residential pursuits in specific locations. This is the preferred approach for some land in the vicinity of Alexandra Street, Stanley Street and in the area of Lakes Creek. The Citywide Industrial Land Use Strategy recommended that in the short-term existing industrial uses remain, and alternatively, long-term uses may include day care centres, meeting halls, sports centres and the like which are generally more compatible with residential living. Councillors present did not completely support this recommended

Citywide Industrial Land Use Strategy (FINAL) - Outcome of Councillor Bus Tour & Further Discussion with the Residents of Lakes Creek (Cont.)

approach for future activities on these sites. Councillors did agree the area is not best suited for General Industry activities. Rather, the Councillors felt a designation that more accurately reflects current activities on the site would be more appropriate.

On this basis, the designation of Non – Industrial is not supported, Councillors showed a preference for a Sales and Service Industry designation. The Councillors did recognise a need to be flexible in this area, based on the large size of the parcels of land, thus Council would also support Community Uses on site, such as day care centres, meeting halls, sports centres etc.

PART B

The second part of this report will look at other recommendations of the Citywide Industrial Land Use Strategy that were not inspected on the bus trip, but where discussed on the bus, or later in the day at the Planning and Development Committee Meeting, however some items were not discussed on the day and are outlined below.

Parkhurst Precinct

The question raised on the bus tour was “Did the Councillors have any concerns with what was recommended for Parkhurst?” The Strategy’s recommendation of the Parkhurst Precinct largely reflects current land use activities in the area, so as a result, there was no issues raised with the recommendations of the Strategy or the amended mapping for the Parkhurst Precinct.

Kawana / Park Avenue Precinct

Two parcels of land in the Kawana / Park Avenue Precinct were not designated in the draft Citywide Industrial Land Use Strategy. As per the report on the Strategy put to the Planning and Development Committee on 1 July 2002 these sites have been given a designation that reflects the surrounding land use designations.

Lakes Creek Precinct

Based on Council’s previous resolutions, the Transition 1 – Vestey Street Area has been amalgamated with the Transition 2 Area titled Preferred Residential. In addition, a number of parcels of land previously included in the Transition 1 Vestey Street area owned by the Crown have been included in the Non Urban designation.

Land north-west of CMG’s current operations was designated as Industry Buffer Green Space in the draft Citywide Industrial Land Use Strategy. However, based on a submission from CMG this designation was altered to Industry Buffer Green Space and Special Industry. It was highlighted at the Planning and Development Committee on 1 July 2002 that residents in the area preferred the original designation of Industry Buffer Green Space as it was misinterpreted that this made the land available for public activities and therefore access to the Fitzroy River via this site. However, it

Citywide Industrial Land Use Strategy (FINAL) - Outcome of Councillor Bus Tour & Further Discussion with the Residents of Lakes Creek (Cont.)

was identified that persons accessing the River, ie for activities such as fishing on this site, are actually trespassing on private property. Thus designating the site for Industry Buffer Green Space and Special Industry does not negatively impact on people's right to this site, as access to use this land is currently restricted as the land is under private ownership.

On this basis, it is recommended the land north-west of CMG's current operations retain its designation as Industry Buffer Green Space and Special Industry as access to the Fitzroy River remains as it does today via an unformed Cooper Street.

Please note, as per previous resolution from Council the designation of Industry Buffer Green Space at Lakes Creek is to be changed to Industry Green Belt.

Stanley Street Precinct

Land currently used by the Salvation Army, as proposed in previous reports to the Committee and Council is recommended to be designated as Sales and Service Industry to more appropriately reflect the intent of the site and surrounding activities.

Airport Precinct

As outlined in the previous reports to the Committee and Council 5 residential allotments on Lion Creek Road are currently designated as Airport Industry in the draft Citywide Industrial Land Use. However, based on further research and submissions received it is recommended these allotments be excluded from the Airport Investigation Precinct.

In addition, based on further research and submissions received, land fronting Hunter Street is to be included in the Airport Industrial Investigation Precinct and designated Airport Industry.

Please note the designation Airport Commercial is recommended to be altered to Airport Related Business.

These items can be viewed in more detail in the attached report previously reported to the Planning and Development Committee and Council.

PART C

Councillor Fisher and various residents in Lakes Creek (particularly Vestey Street) also provided comment on the content and policy direction of the Draft Citywide Industrial Land Use Strategy. The major thrust of their comments was to ensure that future residential options for development in the Lakes Creek precinct are clearly stated in the Draft Industrial Strategy.

Citywide Industrial Land Use Strategy (FINAL) - Outcome of Councillor Bus Tour & Further Discussion with the Residents of Lakes Creek (Cont.)

- ✍ Section 4.2.3 of the Strategy was altered to include reference to the Future Urban designation of the Lakes Creek precinct in Council's current Strategic Plan, as well as reference to the protection of existing residential development.
- ✍ Section 4.2.3.2 Environmental Sustainability currently details the impact of industry on the creek and river system in the precinct. However, this section failed to detail similar impacts are also placed upon the gullies in this precinct.
- ✍ Section 4.2.3.3 Cost Effectiveness for Infrastructure contained out of date information on the status of water supply capacity for the precinct. The reference to limited water supply capacity has been deleted, and replaced with a more appropriate reflection on the status of water supply for the area.
- ✍ Section 4.2.3.7 Land Use Compatibility has been expanded to reiterate Council's recent stance and view on the issue of an equal balance in the co-location of residential and industrial development in this location.
- ✍ Section 4.2.3.9 Recommendations was also altered to more accurately reflect the location and development of buffers in the precinct.
- ✍ The draft Citywide Industrial Land Use Strategy has been amended to delete reference to the Consolidated Meat Group (CMG). The term has been replaced with 'Lakes Creek Meatworks'.
- ✍ Clause 4.2.3 has been amended to identify the area bound by Vestey, Montgomerie and Hartington Streets and Lakes Creek Road as zoned Noxious or Offensive Industry.
- ✍ The definition of Development as defined in the IPA has been included in Part 5 – Dictionary of the draft Citywide Industrial Land Use Strategy.
- ✍ Clause 4.2.3.3 has been amended to reflect how the timely and efficient movement of emergency vehicles can be compromised when the level crossing is being used on Lakes Creek Road to move stock.
- ✍ Clause 4.2.3.8 – Conclusions has been amended to include written comment on the existing use rights of residential activities in the area.
- ✍ The Rural Residential recommendation for land in Lakes Creek has been amended to include a statement on non-residential uses in the area not impacting on existing residential uses in the area.

Other minor changes were made, these were wording changes to make the Strategy concise. Please find attached Part 4.2.3 Lakes Creek Precinct which details all of these changes.

ROCKHAMPTON CITYWIDE INDUSTRIAL
LAND USE STRATEGY
VIII

Planning and Development Committee

ILS 1/2/1 & ILS 1/4

**Citywide Industrial Land Use Strategy (FINAL) - Outcome of Councillor Bus Tour & Further Discussion
with the Residents of Lakes Creek (Cont.)**

Conclusion

In summary, the draft Citywide Industrial Land Use Strategy has been altered having taken into consideration all submissions received, issues raised and result of the Councillors bus tour. The Strategy has also been altered in areas to make the document concise in its meanings and terminology. The amended Citywide Industrial Land Use Strategy will travel into the City Plan to guide and nurture Rockhampton's industrial growth for the next twenty (20) years.

Katrina Clarke
Strategic Planner

Marco Alberti
Manager Planning Services

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Rockhampton City Council

PLANNING AND DEVELOPMENT COMMITTEE

Citywide Industrial Land Use Strategy - Outcome of Councillor Bus Tour & Further Discussion with the Residents of Lakes Creek

Previous Report

**18 November 2002
Attachment 1
Pages 32**

Report



To: Chief Executive Officer

Committee: Planning and Development Committee

Subject: Citywide Industrial Land Use Strategy

Author: Strategic Planner

File Ref: ILS 1/2/1 & ILS 1/4

**Attachments: (3) Citywide Industrial Land Use Strategy
Citywide Industrial Land Use Strategy Maps
Industrial Strategy – Possible Use of Differential Rating
(CONFIDENTIAL)**

Date: 31 May 2002

Summary

The Committee will recall that at the Planning and Development Committee Meeting on 22 October 2001, Mr. Ron Parker and Ms. Melissa Simpson presented to Committee the draft Citywide Industrial Land Use Strategy. Consequently, this draft strategy was received and the recommendations adopted for the purpose of public consultation by Council on 5 November 2001.

Public consultation was undertaken on the draft Citywide Industrial Land Use Strategy through a variety of measures, including three (3) public meetings.

Industry and associated activity contributes to more than 16% of the City's employment and is a major generator of wealth. The Citywide Industrial Land Use Strategy analyses the future industrial land use requirements for the City to the year 2020. The strategy is a planning tool that will be used to indicate the future of the City's industrial precincts in the Council's new City Plan.

This report is divided into four (4) parts, these are:

Part 1 – Background

Part 2 – Submissions received on the draft Citywide Industrial Land Use Strategy

Part 3 – 'Tracked' changes to the Citywide Industrial Land Use Strategy

Part 4 – Amended mapping

Part 5 – Financial Incentives

Citywide Industrial Land Use Strategy (Cont.)

It is recommended that the draft Strategy be endorsed with the proposed changes as set out in this report.

OFFICER'S RECOMMENDATION

THAT the committee recommends to Council that the Citywide Industrial Land Use Strategy be endorsed as a final document (including the proposed changes to the document and the amended mapping) with:

1. The overall recommendations 1 – 16 set out in Section 2 adopted, and recommendations 17 – 21 noted.
2. The contents of the Citywide Industrial Land Use Strategy incorporated into the drafting of the City Plan.

REPORT

Part 1 – Background

On 5 November 2001 Council resolved that:

1. The draft report be 'received'.
2. The recommendations for the industrial precincts be adopted for the purposes of consulting with key stakeholders and other members of the public.
3. The Planning Services Unit undertakes a consultation period for 20 business days with the public and stakeholders.
4. The draft strategy be forwarded to all stakeholders who took part in the drafting of the strategy.
5. All comments received be reported to the Planning and Development Committee, and any recommended changes to the strategy confirmed at that time.

On 14 January 2002 Planning Services distributed letters to 14 key stakeholders and over 750 letters to landholders within all identified industrial precincts. Planning Services also held three (3) public focus group meetings at various locations in the City during the public notification period. In addition, two (2) displays were erected, one (1) at City Hall in the Customer Service Area and one (1) display at the Customer Service Centre at K-Mart Plaza. The draft document and maps were also available for viewing and downloading on Council's Internet Website. The public notification period began on 14 January 2002 and the final date for receipt of submissions was Friday 22 February 2002, the draft strategy was on public display for a period of 28 business days.

The major issue triggered by the public notification of the Strategy was the 1 km area around the CMG Meatworks. The 1 km distance had only been originally applied to the Vestey Street area as it is land currently zoned for Industrial purposes. Understandably those residents questioned why the same 1 km area had not been

Citywide Industrial Land Use Strategy (Cont.)

applied to areas west of the CMG holding paddocks. These lands, given that they are residential, are not covered by the Industrial Land Use Strategy. Therefore, the recent resolutions of Council regarding these areas will travel directly into the City Plan preparation whereas the resolutions of Council regarding the lands in Vestey Street will go directly into this Industrial Strategy to then go into the City Plan preparation. At this time it is important to note that 878 people made submissions against the imposition of a 1 km area of influence around the CMG Meatworks.

Council received 28 submissions (other than the 878 mentioned above) relating to the findings, views and recommendations in the Citywide Industrial Land Use Strategy. These submissions are detailed in Part 2 below.

Part 2 - Submissions received on draft Citywide Industrial Land Use Strategy

This section will outline each submission, identifying issues raised and provide comment on each of the issues.

Submission 1

Name: **Kerry Walsh**
Issue: Stanley Street – Relocatable Industry
? Supports phasing out of industrial activity.
? Hazardous Industry is not appropriate for a flood prone area.
Response: Noted and agreed.

Submission 2

Name: **Karen Corrie**
Issue: Airport
? Boundary relocation to exclude Residential 'A' land fronting Lion Creek Road from Airport Industrial Precinct.
? Defence forces do not want to purchase her property.
? The Industrial Strategy does not include Residential 'A' zoned land in Western and Kalare Streets, so why does it include her land?
? Persons are not able to get a home loan if land designation is changed to industry.
Response: This precinct was established for the purposes of defining an area that would be investigated for future industrial purposes. There are five (5) parcels of land zoned Residential 'A' along Lion Creek Road, adjoining Defence Force owned land. These five (5) allotments range in area from 519 m² to 1062 m², with the length of the allotments ranging from 32-40 metres. Therefore, it is evident the allotments are restricted in size, dimension and area for use for industrial activity, especially given the fact the Defence Force has shown no interest in including these parcels of land in any expansion of their land holdings. There is therefore no strong need

Citywide Industrial Land Use Strategy (Cont.)

to keep these five (5) parcels in the Airport Industrial Investigation Precinct.

On this basis, the five (5) Residential 'A' zoned properties are to be excluded from the Airport Industrial precinct.

Submission 3

Name: **Walter Attard**

Frame Constructions Pty Ltd

Issue: **Parkhurst**

- ? Amount of infrastructure required to develop land in Parkhurst makes it very costly to businesses.
- ? There is no potable water available at the site.
 - Cannot build with no water on site.
 -
- ? Council requires concrete kerb and channel, plus 2 m of bitumen pavement widening for full length of road frontage.
- ? Council requires pedestrian pavement at least 1.5 m wide for full length of road frontage.
- ? Council requires vehicles or machinery to be visually screened (what about caryards).
- ? There is no stormwater drainage and Council requires it.
- ? Council requires landscaping 6 m in depth.
- ? The last 5 items put extra and added cost on businesses to set up.

Response: Planning Services contacted several Real Estate Agents to establish the cost of purchasing industrial land at Parkhurst. There is currently two parcels of land for sale in Wade Street, these parcels are 5,000 m² in area, the sale price on these properties is \$95, 000, plus GST. This equates to approximately \$20 per square metre in area. However, other land currently for sale on Farm Street is asking approximately \$60 per square metre, however, this land has not sold. One agent stated that, as a 'ball park' figure serviced land at Parkhurst asks \$40 to \$50 per square metre when for sale. This demonstrates there is a difference in the price of land on Farm and Wade Streets. This may be attributed to the difference in services and infrastructure available. For example, the land in Farm Street has kerb and channelling, while the land on Wade Street does not have such infrastructure.

Therefore, Council must recognise and advise the submitter that in promoting land at Parkhurst, while it is unserviced, it is generally cheaper to purchase. The installation of infrastructure as a part of development in Parkhurst offsets the lower purchase price.

Citywide Industrial Land Use Strategy (Cont.)

Submission 4

Name: **Lyn Hopes**

Issue: **Airport**

- ? Boundary change to exclude property from the Airport Precinct.
- ? Devaluation of property if it is designated from Residential to Airport Industry.
- ? These 4 houses currently act as a buffer between Army land & Talbot Estate (Retirement Village).
- ? Defence Base is not interested in purchasing this property.
- ? Increase in rates.
- ? Banks will not give residential loan for industrial land.

Response: Agreed. Please refer to response to Submission 2 above.

Submission 5

Name: **Ron O'Brien**

Issue: **Airport**

- ? Boundary change to exclude property from the Airport Precinct.
- ? Devaluation of property if it is designated from Residential to Airport Industry.
- ? These 4 houses currently act as a buffer between Army land & Talbot Estate (Retirement Village).
- ? Defence Base is not interested in purchasing this property.
- ? Increase in rates.
- ? Banks will not give residential loan for industrial land.

Response: Agreed. Please refer to response to Submission 2 above.

Submission 6

Name: **Olive Grieves**

Issue: **Airport**

- ? Boundary change to exclude property from the Airport Precinct.
- ? Devaluation of property if it is designated from Residential to Airport Industry.
- ? These 4 houses currently act as a buffer between Army land & Talbot Estate (Retirement Village).
- ? Defence Base is not interested in purchasing this property.
- ? Increase in rates.
- ? Banks will not give residential loan for industrial land.

Response: Agreed. Please refer to response to Submission 2 above.

Citywide Industrial Land Use Strategy (Cont.)

Submission 7

Name: **Queensland Government – Main Roads**

Issue: **Parkhurst Precinct**

- ? Support relocation of intersection from Boundary Road to intersection of Bruce Highway with Yeppoon Road.
- ? Southern connection to precinct via Alexandra Street at Moores Creek Road can accommodate any increase in traffic.

Response: Noted.

Issue: No support for south-eastern connection from precinct to Bruce Highway via Carlton and Farm Streets, configuration not suited to storage lanes on side roads.

Response: Agreed that Carlton Street should not be used as an access route from the Bruce Highway to the Parkhurst Precinct, Carlton Street is to only be used for Residential traffic use. Consolidation of the eastward movements of heavy vehicle traffic to the national highway is required. As identified in the strategy, one suggested option is via Farm Street, however, to maintain safety and reduce potential conflicts of road users around the school it is proposed to restrict the hours of these movements. On this basis, Richardson Road may form an alternative access point to the national highway in those hours that Farm Street is unavailable. This rationalisation will see Richardson Road used as the access route in day light hours and Farm Street at night, when the school is not in use.

Issue: **Kawana/Park Avenue Precinct**

- ? The proposed residential designation for Richardson Rd, Alexandra & Thomasson Sts does not recognise the department's Depot & Workshop facilities. The department's facilities should be zoned Special Purposes as it is unlikely to relocate in the life of the City Plan.

Response: Current land uses would remain, however, Council's City Plan should be encouraging the relocation of land uses when convenient. It is important that Council have a long term vision for its City, particularly the land use direction for industrial land use activities and their location and interaction / impact with surrounding land use activities. The short-term use of the land may be for Parkland. Or alternatively, long term uses could include day care centres, meeting halls, sports centres and the like, which are generally more compatible with residential living.

This land immediately abuts residential dwellings. It is the intent to return this area to a residential area to provide a high residential environment to existing residential areas, while also encouraging infill residential development. This would only occur, however, if

Citywide Industrial Land Use Strategy (Cont.)

the Department chooses to vacate the land. No change to the Strategy is recommended.

Issue: The proposed road network can accommodate an increase in traffic resulting from infill.

Response: Noted.

Issue: Lakes Creek Precinct

- ? Department concerned Meatworks Holding Yards is having adverse impact on standard & safety of Lakes Crk Rd - namely entry/exit of B-Double cattle trucks onto State-controlled road.
- ? Clause 4.2.39 paragraph 6 should be amended to recommend removal of stock gates & replaced with a cattle underpass.
- ? Improving entry/exit of vehicles carrying stock should also be inserted.

Response: Lakes Creek Road is an Arterial Road, as such it is under the control of the State Government, being the Department of Main Roads. These items of concern at Lakes Creek are items, which should be discussed as part of the Capricornia Integrated Regional Transport Plan. No change to the Strategy is proposed.

Issue: Stanley Street Precinct

- ? Access to & from this precinct should be by Derby Street where there is an existing controlled intersection with the Bruce Highway.
- ? Amendment to clause 4.2.4.9 paragraph 4 to reflect department's view.

Response: The relevant amendments have been made to the Strategy and mapping. Council's Works Services has also confirmed that Stanley Street is inappropriate.

Issue: Airport Precinct

- ? Existing access points from the State-controlled road are considered inadequate for a major increase in use.
- ? Clause 4.2.6.9 paragraph 5, the department is not in favour of another high level crossing of the Yeppen flood plain.
- ? A low level crossing may be tolerable at Council's cost.

Response: Noted. The first issue to resolve for the area in investigating its potential for industrial development is alleviating flood issues for the area, upon satisfactorily alleviation of flooding concerns, the issue of access to and from the area, along with assessing proposed access routes will be investigated. The Department's position is to be noted in the Strategy.

Citywide Industrial Land Use Strategy (Cont.)

Issue: Road and Rail

- ? Paragraph 2 of clause 7.3.3.2 discusses a western bypass of the City. An eastern bypass of the City along a high speed limited access road could be a consideration to meet some requirements of paragraph 3 of that clause & should be given some consideration for long term.

Response: This is an issue for the CapIRTP.

Submission 8

**Name: M.A. Bleines
“St Aubins”**

Issue: Airport Precinct

- ? The grouping of St Aubins with other land (Airport Commercial) not of a historic nature is detrimental to the St Aubins site.
- ? Request that St Aubins remain as a historic site & be classified for special purposes.

Response: The subject site is referred to in the strategy highlighting the heritage importance of the site. It is identified that this site could develop conference space, small scale accommodation and further food catering services, all having regard to flooding and aircraft noise. It is not envisaged this site is detrimentally affected by its designation as Airport Related Business.

This is, however, an investigation area only and therefore the land will remain in its current state for the purposes of developing the City Plan. Further consultation and investigation with the land owner would take place before any changes were recommended.

Submission 9

Name: Barry Funch

Issue: Airport

- ? Boundary change to include all owners' property fronting Hunter Street (fronting the southern boundary of Hunter Street) in the Airport Precinct.
- ? Because of frontage to Hunter St & sites location next to entrance to airport, the front blocks fronting Hunter St be designated Airport Commercial.
- ? If this is not appropriate, all land be put in Industrial designation.

Response: Agree a boundary change is appropriate to include all of the land fronting Hunter Street (southern boundary) between Western and Canoona Road within the Airport Industrial (Investigation Area) Precinct. It is recommended all of this land be included in the

Citywide Industrial Land Use Strategy (Cont.)

Airport Industry designation as this maintains land parcels of an adequate size for Airport industrial activity.

Submission 10

Name: **Ian Musker**

Issue: **Kawana/Park Avenue**

- ? Proposed change from General Industry zone to Residential activities.
- ? Land should stay as industrial as these sites provide a buffer between the rail-line and residential areas.
- ? Restrictions on artificial light pollution, noise & visual pollution lessen the impact of industrial activity on residential areas.
- ? A fence & landscape buffer are not going to reduce rail-line impact on proposed residential.
- ? Prefer to provide buffer between rear of existing houses fronting Alexandra St & front portion of submitters site.
- ? Don't assume all industrial development needs to locate at Parkhurst or Gracemere / Stanwell.

Response: Current land uses would remain, however, Council's City Plan should be encouraging the relocation of land uses when convenient. It is recommended that this area be redesignated to a land use that is compatible with urban development. Given the proximity to the railway, such use could be some form of medium density housing specifically designed to contain noise problems. Or alternatively, other uses for this site could include day care centres, meeting halls, sports centres and the like, which are generally more compatible with residential living. The new uses may therefore not be specifically residential. In any event, the current use of the land would be able to continue as long as the owner wished to do so.

Submission 11

Name: **Peter Boyle, Rooftech Australia**

Issue: **Stanley Street**

- ? The document is illogical because it suggests moving industry from a flood affected area into another flood affected area for no good reason.
- ? Expectation that residents will return to areas Council proposes to vacate is crazy, why would people come back to areas that can be flooded ?

Response: The Port Curtis Industrial (Investigation Area) is only an investigation area, it is proposed that the issue of flood mitigation and alleviation be assessed to establish if it is appropriate for industrial land activity. Upon investigating this issue with a satisfactory outcome, no new industrial activity is encouraged on flood affected land at Port Curtis.

Citywide Industrial Land Use Strategy (Cont.)

The lower end of Stanley Street is not considered suitable for industrial uses and particularly, hazardous industries, because of:

- ? The close proximity to the Fitzroy River, and the potential risk to downstream environments (such as the Great Barrier Reef) from contamination by undesirable pollutants, whether a result of accident or flooding;
- ? The close proximity to other residential areas of the City, and the potential reduction of amenity from new industries;
- ? The existing residential development already existing in the area; and
- ? The close proximity to the CBD and access routes that traverse the CBD, and the potential risk to persons and property from the transportation of dangerous and/or hazardous material through the CBD.

The Strategy is supporting relocating industrial development out of the lower end of Stanley Street, however, it is not supporting industries moving instantly to the Port Curtis Precinct. Port Curtis is earmarked as an investigation area only.

The Strategy is also not encouraging the current land zoned Hazardous Industry at the lower end of the Stanley Street precinct to revert to a residential designation. The types of uses suitable in this Area in the future, are ones which:

- ? Do not involve the provision of significant infrastructure;
- ? Do not have a detrimental impact on residential amenity; and
- ? Do not compromise flood flow and flood storage.

The Strategy is not encouraging the potential to increase population densities or the potential to create environmental harm in flood affected areas, thus, development is required to be low in intensity and infrastructure.

Issue: The strategy has not thought of the effect on the City Centre, which will continue to die at an accelerated rate.

Response: The intent for the Stanley Street precinct, is not to push industry out of this area, to alternative locations, throughout the City. That is, it is not intended to force the employment base of this area to another location, which in turn would reduce the employment and population base which supports south Rockhampton. Stanley Street is an important consumption based industrial area in south Rockhampton, it is the only significant industrial area in south Rockhampton, and it is intend to preserve this industrial precinct and its employment base in its close strategic position to the CBD.

Citywide Industrial Land Use Strategy (Cont.)

Submission 12

Name: **Alan Carswell**

Issue: **Parkhurst – Industry Buffer Green Space**

? Understand that this land is not suited for industrial use, but what is more appropriate is a buffer similar to the other side of the creek with the remainder of the land being Non-Urban B.

? If Council feels a buffer is important, it should have been incorporated into the industrial park on Council land.

Response: These comments are noted and will be investigated further in the detailed drafting of the City Plan. However, it is important to note that this is a strategy, which offers future direction in a conceptual pattern for industrial precincts in the City.

These issues are relevant concerns that do require clarification, however, the Citywide Industrial Land Use Strategy has discussed this designation as a spatial and conceptual direction. This item can only be answered in more detail with the drafting of the City Plan, and again with the drafting of the City Plan, the document will be placed on public display. When placed on public display the submitter can establish if his concerns have been adequately addressed, or alternatively, seek further clarification on the issue.

Submission 13

Name: **Transpacific Industries Pty Ltd**

Issue: **Kawana/Park Avenue**

? We have fully complied with Council's requirements for the site and we are approved & licensed by the EPA.

? Propose submitters activities be defined as 'Low Impact Industry'; or

? Maintain the zoning of land as General Industry.

Response: Existing industries are allowed to remain on the site indefinitely if they established on site in accordance with the Planning Scheme provisions relevant at the time. Industries can mitigate impacts on their host community through elements such as buffers, building design, noise attenuation measures, redirecting lighting etc, thus, industry has an opportunity to be defined as a low impact industry if appropriate measures and management of impacts are adhered to on site. Consequently, industries previously defined as a General Industry, such as a spray painter or panel beater, can be defined as a low impact industry. That is, if measures such as a spray booth and enclosed shed for panel beating is appropriately located on site, minimising impacts to adjoining properties, the activity may be defined as a low impact industry.

Citywide Industrial Land Use Strategy (Cont.)

Submission 14

Name: **C.J. Huntly**

Issue: **Kawana/Park Avenue**

- ? Our activities generate impacts.
- ? Our adjoining land use activities all create impacts.
- ? Across the road is medium impact.
- ? Business would be disadvantaged by low impact zoning.

Response: Impacts can be measured by the impacts acceptable to the host community, if the host community is an industrial estate, the tolerance level of those impacts is higher than that of a residential host community. In this instance, if the land uses immediately adjoining the site have a high tolerance level of impacts, than the term low impact industry has an alternative measure or scale than low impact industries adjoining residential development. However, it is important that industrial development take ownership of their surrounding environment and have consideration to abutting land use activities, and aim to reduce impacts leaving the site, containing impacts within the boundaries of their property.

Submission 15

Name: **J.E. Stowe**

Issue: **Lakes Creek**

- ? The word 'Noxious' has to be deleted from the existing zoning as it would develop major problems in the area.
- ? Much thought has gone into the proposal, it is a bold move with vision in the right direction.

Response: Agreed and noted.

Submission 16

Name: **Johan Louw, Queensland Transport**

Issue: **Transport**

- ? Referral of transport issues resulting from strategy to the CapIRTP is supported.
- ? The CapIRTP will consider issues such as:
 - access to proposed industrial precincts for freight & employees
 - access for modes of transport such as bicycles/walking
 - impact on public transportation services
 - heavy vehicle routes (b-doubles, dangerous & hazardous goods)

Response: Noted.

Citywide Industrial Land Use Strategy (Cont.)

- Issue: Airport
- ? The proposed Airport Precinct should consider industries that relate directly to air transport.
 - ? Around airports particular attention should be paid to:
 - permanent or temporary physical obstructions of operational airspace
 - discharge plumes from stacks or vents
 - transient intrusions of operational airspace
 - propensity to attract wildlife, particularly flying birds & bats
 - air pilot distractive lighting or reflections
 - generation & emission of significant amounts of airborne particulate
 - large uses or works that may influence wind shear effects near runway ends
 - ? Around aviation facilities, such as navigation, communication or surveillance installations, particular attention should be paid to:
 - generation or emissions of electrical, electromagnetic or signal transmissions
 - structures containing large metallic or reflective surfaces
 - extractive industry operations resulting in significant ground vibrations

Response: Noted.

Submission 17

Name: **P.J. Coldwell, Coldwell Drilling**

Issue: Stanley Street

- ? After investing money in CQ area our freehold premises could become worthless real estate without any prospect of making profit.
- ? Who will compensate ?

Response: these industrial premises can continue its existing industrial activities for an unlimited period of time. If this premises is placed on the market, it can be sold to a party/person wishing to undertake the same activities that are currently undertaken on site.

Issue: River Precinct Activities – Stanley Street

- ? Is the scheme for Information & Technology Centres realistic economics ?

Response: This precinct has identified an 'option' is available to cluster Information Technology activities along Quay Street. It is important to note it is an option which is aiming to keep abreast of changing market trends and business opportunity. If this land is not taken up for Information Technology business it has not been at the expense of another business venture as the precinct also aims to encourage river related activities.

Citywide Industrial Land Use Strategy (Cont.)

Submission 18

Name: **Andrew Llewellyn, Manager Strategic Planning, Works Department**

Issue: **B-Double Routes**
? B-Double routes is currently being addressed by Director Works Services RCC.

Response: Noted.

Issue: **Parkhurst Precinct**
? In changing the existing Boundary Road intersection with the Bruce Highway to the proposed intersection at Yeppoon Road & Bruce Hwy it appears an upgrade at Boundary Rd is a more viable option (economically).

Response: Noted. Main Roads supports the relocation and given it is an intersection with a State Controlled road, would be responsible for some, if not all, the cost.

Issue: **Parkhurst Precinct**
? In relation to constructing a controlled intersection at Wade and Alexandra Streets an alternative option available is to construct the controlled intersection at the Johnson & Alexandra St intersection. This option maybe more favourable (only marginally) as Johnson St is currently constructed to a higher standard.

Response: The strategy has identified Wade Street as a result of the overall transport routes for the area which this includes a proposed new road between Wade Street and Boundary Road. However, if the proposed new road between these locations is not a feasible option, consideration will be given to constructing a controlled intersection at Johnson and Alexandra Streets.

Issue: **Birkbeck Drive**
? Birkbeck Drive should not be closed. It should be modified to achieve a more desirable level of safety & operation.

Response: At present no industrial development fronts Birkbeck Drive, thus the potential conflict of road users at this intersection is not fully realised. However, should land fronting Birkbeck Drive be developed in the near future for industrial activity the need may arise to close the intersection if its not upgraded. Consequently, consideration will be given to modifying the intersection to provide safe vehicle movements as the alternative.

Citywide Industrial Land Use Strategy (Cont.)

- Issue: Kawana/Park Avenue
- ? Farm Street heavy vehicle route is not considered suitable for heavy vehicles due to adjacent schools.
 - ? Richardson Rd may be more appropriate for heavy vehicles than Farm St.
- Response: It is important to reduce the potential conflict between different vehicle users around the school precinct on Farm Street. Consequently, an available option is to restrict the hours of heavy vehicle movements along Farm Street. In addition, when hours are restricted along Farm Street, the alternative route is Richardson Road. The result may be the use of Richardson Road during the day (houses generally unoccupied), and the use of Farm Street at night (school not occupied).
-
- Issue: Railway Overpass
- ? Railway overpass at Alexandra St would most likely be unfeasible due to the high cost of infrastructure.
- Response: Noted, the strategy has been amended to reflect this change, please refer to page 28 of the amended document, which illustrates this item.
-
- Issue: Kawana / Park Avenue Precinct
- ? A suitable heavy vehicle access route to Dooley St needs to be identified.
- Response: Dooley Street is already a heavy vehicle access route and no changes are proposed by the Strategy.
-
- Issue: Stanley Street Precinct
- ? Stanley St is not suitable as a heavy vehicle access due to the nature of the intersection with the highway.
 - ? For this intersection to be suitable, would require traffic signals - this should be referred to Main Roads.
- Response: Main Roads have also indicated Stanley Street is not the most suitable alternative for a heavy vehicle route, rather Derby Street is more appropriate. This change has been reflected in the strategy.

Citywide Industrial Land Use Strategy (Cont.)

Submission 19

Name: **Carl Stanke – Stanke Electrics Pty Ltd**

Issue: **Parkhurst**

? Queries regarding industrial buffer green space, which are as follows:

- How wide are the proposed buffer strips?
- Who will bear the cost of planting?
- Who will maintain them & be responsible for them?
- Who will own this land?
- Why is it that the buffer zone is proposed along Limestone Crk, when:
 - * there is industry on both sides of the creek;
 - * the residential area is only at one end of Limestone Crk.

Response: The response to the questions is as follows:

- (1) Determined on a site by site basis – City Plan is considering 30 m from the centreline of the creek.
- (2) Depends on the trigger for planting.
- (3) The owner of the land.
- (4) Depends – could be private or public.
- (5) The purpose of this area is to restore a riparian corridor and not buffering Green Space shown on the plans.

Submission 20

Name: **Ken Hay**

Issue: **Stanley Street**

- ? If my property loses valuation as a result of the strategy I reserve the right to seek compensation.
- ? Not opposed to strategy provided valuation & investment are preserved.

Response: The industrial premises can continue its existing industrial activities for an unlimited period of time. If the premises are placed on the market, it can be sold to a party/person wishing to undertake the same activities that are currently undertaken on site.

Issue: **Consultation**

? Draft strategy has discriminated against small stakeholders.

Response: Letters detailing the document was on public display, locations of this display, website address for viewing the document and details of the three (3) public meetings were sent to over 750 land holders in all six identified industrial precincts. On this basis, small stakeholders were given the opportunity to comment on the findings and recommendations of the draft Strategy, before adoption of the document.

Citywide Industrial Land Use Strategy (Cont.)

Submission 21

Name: **Chris White, Pacific Lime**

Issue: **Parkhurst**

? The emissions from Pacific Lime do not exhibit characteristics of concern to adjacent residents, typical emission levels are 10% of the allowable licence limits.

Response: Noted.

Issue: **Special Industry – Parkhurst Precinct**

? On page 35 of the strategy, amendments should be made to reflect the existing large earth barriers & extensive planting along most of the Bruce Hwy frontage.

Response: Agreed, please refer to page 40 of the amended document which reflects the desired amendments.

Issue: **Incompatible Land Use Activities**

? The following are examples of specific problems arising from the proximity of residential development:
- continuing traffic hazards because of the lack of proper turn-in facilities off Bruce Hwy.
- pedestrian danger with no footpaths adjacent to the housing area.

Response: These issues arise when two (2) different land use activities with differing expectations and emissions are located within close proximity. However, these are issues for Main Roads to address, given it is a Highway.

Issue: **Residential / Industrial Interface**

? The Council must accept an active & financial role in the future mitigation of the residential/industry interaction & ensure no further such developments take place unless existing industrial use ceases.

? No more residential development should be permitted north of William Palfrey Rd without a much more substantial buffer between it & industrial zones.

Response: Council through this strategy and the new City Plan will need to develop clear policy direction on the existing and future use of land, particularly land for industrial purposes. This strategy and the new City Plan aim to develop clear, efficient and effective environments with a high standard of amenity.

Citywide Industrial Land Use Strategy (Cont.)

- Issue: Infrastructure
? The road access & traffic control in & around the Parkhurst area is inadequate. The Council should take a much more active role in ensuring they & Main Roads together provide what is needed. Council should also lobby QR for improved rail services for Parkhurst, to reduce the road traffic through the City centre to the current rail depot.
- Response: Agreed, the existing road network for the Parkhurst precinct has many heavy vehicles traversing residential areas and schools. It is recognised this is not an ideal situation, thus this strategy has developed a range of alternative routes, also promoting use of the existing North Coast railway line, and referring various road issues to CapIRTP for further investigation.
- Issue: Encouraging new industry
? Council should recognise Queensland industry is likely to be driven by mining, mineral processing & downstream activities. We should be supporting value adding for these activities.
- Response: Noted and agreed.

Submission 22

- Name: **Regional Transport Planning Advisor**
- Issue: Airport
? Airport compatible development is encouraged & airport & defence activities are appropriate.
? ANEH contours should be ANEF contours.
- Response: Agreed and noted.
- Issue: Stanley Street
? Section 4.1.7 page 19 refers to "relocation of Hazardous Industry land use" from lower East St & Stanley St precinct, will have an impact on State Transport corridors.
- Response: Disagree. The changes to land use will not impact the Bruce Highway which is the only State Transport Corridor used by the area.
- Issue: Lakes Creek
? Section 4.2.3 page 45-50 should also acknowledge the "Quarry/Rail Corridor" noise interface issues.
- Response: Disagree. The CSR Quarry/Rail Corridor interface are sufficiently located away from Lakes Creek so that noise is not an issue.
- Issue: Port Curtis
? This precinct is well serviced by the Rail corridor & should also consider the "Land Use" between it & the old Bruce Hwy, leading to Hastings Deering.

ROCKHAMPTON CITYWIDE INDUSTRIAL
LAND USE STRATEGY
XXVIII

Planning and Development Committee

ILS 1/2/1 & ILS 1/4

Citywide Industrial Land Use Strategy (Cont.)

Response: For the purposes of this strategy it is not considered appropriate to alter the boundaries of this precinct, however, for the purposes of the new City Plan, this area will be incorporated in to the Planning Area for Port Curtis.

Issue: Airport
? This precinct should also consider "intermodal issues" for servicing Shoalwater Bay military training area.

Response: Defence uses are already highlighted in the airport area.

Issue: River Crossing
? Section 4.2.4.3 page 54 should also make reference of the next river crossing in that it will also be investigated in CapIRTP.

Response: Noted, the relevant amendment has been made to the document.

Issue: Glenmore Area
? What consideration has "old" Glenmore area been given in relation to servicing "Light/Horticultural - Industries" given its proximity to the Fitzroy River - water catchment area.

Response: No synergies or interrelationship have been identified in the strategy.

Submission 23

Name: **Pike Mirils McKnoulty**

Issue: Parkhurst
? Support the "Industrial Buffer Green Space" to preserve a buffer between industrial activities & potential future encroaching residential uses.

Response: Noted.

Issue: Existing Land Use Rights
? We would be extremely concerned if the development potential & existing land use rights were impacted if the translation of this strategy into the new City Plan proposed an alteration to the existing zoning & use rights of existing businesses.

Response: The new City Plan will be supported by the findings and recommendations of this Strategy. Existing land use rights will not be altered with the adoption of this Strategy, in addition the new City Plan will also not alter existing land use rights.

Citywide Industrial Land Use Strategy (Cont.)

Submission 24

Name: **CMG**

Issue: **Lakes Creek**

? Meatworks

- CMG notes the Industry Buffer Green Space designation west of the meatworks. This designation for the entire site area may restrict future CMG expansions in that direction. CMG would prefer the area be Special Industry, but would have no objection to an Industry Buffer Green Space along the western & northern boundaries, similar to the buffer along Vesty Street.

- CMG carpark does not have a designation, it should be Special Industry.

- It is suggested the designation of the areas east of the works (behind the cattle yards) where the Special Industry designation meets the Non Urban designation be amended to reflect the existing cattle yard & paddock fence.

Response: The relevant mapping has been amended to indicate the alteration to the Industry Buffer Green Space and Special Industry designation west of the CMG meatworks. However, no mapping alteration has been made to the carparking area. In addition, the proposed mapping changes to the existing Holding Yards and Non Urban designation has not been made, as the information was to reflect aerial photos to be submitted to Council from CMG, to date no aerial photos have been submitted despite numerous requests to illustrate the proposed boundary designation change.

Submission 25

Name: **Alan Rolandsen, Queensland Transport**

Issue: **Rail**

? QT supports the co-location of industrial uses to the rail corridor.

Response: Noted.

Issue: **Kawana / Park Avenue Precinct**

? In some cases industrial land is proposed to be deleted & reverted to a residential or more noise sensitive uses. QT requests the strategy acknowledge the need to establish measures that ensure ongoing viability of rail operations (no reverse amenity impacts) through the establishment of codes that prescribe suitable noise abatement means for the new development.

Citywide Industrial Land Use Strategy (Cont.)

Response: The new City Plan will provide more specific detail on the issue, taking into consideration the use of measures to ensure a satisfactory residential amenity. The measure may include elements such as landscaped buffer, noise attenuation through double glazed windows, setbacks, orientations and the like.

Issue: Overall Recommendation
? QT notes & supports the referral of the traffic problem areas at Parkhurst, Kawana, Stanley Street & Airport to QT for consideration in CapIRTP.
? QT supports the development of special purpose industry adjacent the rail corridor.

Response: Noted.

Issue: 3.5 Initiatives and Incentives (page 12)
? "Initiatives may include Council paying for the 'up-front' costs on behalf of a new industrial development investor, such as roadways & infrastructure ..." How is the word infrastructure defined?

Response: Various other Council's within Central Queensland have defined infrastructure as elements such as kerb and channel works, pedestrian footpaths, along with the provision of water and sewerage infrastructure works. At this stage this issue has only been raised as a possible avenue for providing initiatives and incentives, and the finer detail on the type of infrastructure has not been identified. It is important to note the type of infrastructure may alter for different precincts throughout the City, all depending on the level of initiatives or incentives wishing to be achieved. However, given the Council's current financial constraints it is thought unlikely this option will be pursued.

Issue: 4.1.5 Port Curtis
? "Area is predominantly rural-residential in character, & lends itself to future industrial development. Also complements the adjacent centre of Gracemere in the south of the City."
? Despite being bounded by railway lines & having significant rail frontages, no mention is made of any potential role for rail transportation in the area.

Response: The area is set aside as an investigation area for future industrial development, all being dependent on the alleviation of flooding issues in the area. Thus, after investigation in to the possibility of alleviating flooding concerns in the area, more research would be put into developing the land for industrial pursuits, including the possibility of using the area as a rail transportation point.

Citywide Industrial Land Use Strategy (Cont.)

Issue: 4.1.7 An Overview

- ? The word "alternative" seems inappropriate. The Gracemere-Stanwell corridor should provide for "heavier impact" industries unsuited to the Parkhurst precinct.

Response: Agreed and noted with changes made to the document. These can be seen on page 22 of the amended document.

Issue: Parkhurst and Kawana / Park Avenue Precincts

- ? 4.2.1 Roads - Parkhurst
 - Consideration has been given to building an overhead crossing of the railway on the Alexandra-Farm St, this matter may be tabled as part of the CIRTP process.
- ? 4.2.1 Noise - Parkhurst
 - QT supports paragraphs 4 & 5 which discuss noise amelioration measures for residential uses, & proposes the avoidance of the introduction of new residential development. Rail uses are the same as industrial uses & need to have suitable measures in place to allow them to operate.
- ? 4.2.2 Richardson Rd/Thomasson St
 - With regard to the projection of the rail infrastructure network, it is desirable that any noise sensitive uses adjacent the rail corridor undertake reasonable measures to ensure an acceptable acoustic environment.
 - QT recommends "Impact of Transportation Systems on Urban Amenity" recently adopted by Redland as an example.

Response: Noted.

Issue: 4.2.3 Lakes Creek

- ? If residential or similar uses are established in the 3 transition areas the issue of rail noise should be addressed.

Response: Residential uses in these locations will all need to take noise into consideration with the necessary measures to reduce the impact.

Issue: 4.2.5 Port Curtis

- ? 4.2.5.1 reference to Rockhampton to Longreach railway should be changed to the Central Railway line.

Response: Noted and amended.

Issue: 7.3.5.3 Port Alma

- ? This section should be replaced by a more appropriate summary of Port Alma, as recommended by QT.

Response: The amendments are contained on page 120 of the amended document. These amendments are those directed to Council by the Rockhampton Port Authority itself.

Citywide Industrial Land Use Strategy (Cont.)

Submission 26

- Name:** Jon Womersley, Environmental Protection Agency (EPA)
- Issue:** Lakes Creek
- ? Support is given to the intent of providing reasonable separation of Industrial areas from adjacent sensitive land uses in order to minimise potential conflict, especially in Lakes Crk.
- Response:** Noted, however changes to the Strategy in regards to Vestey Street may not be consistent with the EPA's support.
- Issue:** Lakes Creek
- ? Further consideration needs to be given to the type of 'complementary' land uses.
- Response:** These are likely to be residential dwelling houses.
- Issue:** Lakes Creek
- ? The proposal for marine infrastructure along the Fitzroy River (Transition 3) must consider the principles & policies of the State Coastal Management Plan.
- Response:** As part of the drafting of the new City Plan, Council will be having regard to the objectives and principles in the State Coastal Management Plan as it has the force and effect of a State Planning Policy.
- Issue:** Flooding
- ? Recommend against locating further industrial development in flood prone areas unless there is significant need for such development in the particular location & flooding problems can be effectively addressed through development conditions.
- ? Port Curtis may not be appropriate for such industrial development.
- Response:** Port Curtis is an 'investigation' area only for industrial purposes. The area of concern is flooding and only upon investigation into the feasibility and mitigation of flooding will industrial activity be considered.

Submission 27

- Name:** Wayne Wright
- Issue:** Stanley Street
- ? Concern expressed over the rezoning of a Residential 'A' property to that of an industrial zone, will Council compensate the lose of value from a residential property to an industrial property.
- Response:** Existing land use rights remain with a property, thus, the property can continue to be used as a residential property and sold as a residential dwelling. This parcel of land is already in an area where

Citywide Industrial Land Use Strategy (Cont.)

there are a number of industrial properties, thus already altering the amenity of the area. Legally, no compensation would be payable if no development rights have been removed.

Submission 28

Name: **Peter Black, Rockhampton Port Authority**

Issue: **Port Alma**

? Section 7.3.5.3 is uncomplimentary in it's comments towards Port Alma, this wording should be amended.

Response: The wording in the document has been altered to reflect the wording recommended by the Rockhampton Port Authority. The new wording is outlined on page 120 of the amended document.

Part 3 – ‘Tracked’ Changes to the Citywide Industrial Land Use Strategy

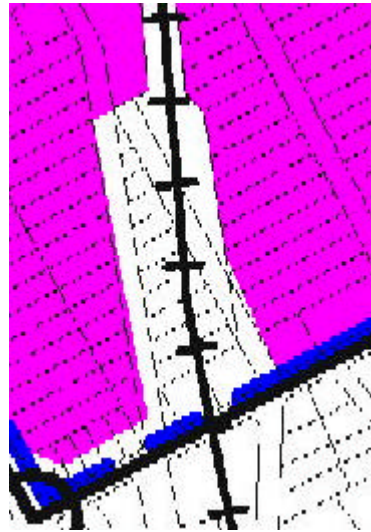
Due to the size of the document, the Citywide Industrial Land Use Strategy is attached as Attachment 2, thus please refer to this attachment to view, read and review all changes made to the draft Citywide Industrial Land Use Strategy that was placed on public display. The changes made to the Strategy are a result of public comment and submission, a result of further investigation, and the need to make the Strategy more concise and user friendly.

Part 4 – Amended Mapping

As a result of the submissions received as well as further investigation and clarification of the maps, a few changes have been made. The following will show the original detail of the map, provide comment on the reasons and detail of the change and then illustrate the new mapping detail.

1. On Figure 3 various parcels of land abutting the North Coast railway line between Quinn and Farm Streets were not identified with a designation. This is illustrated below.

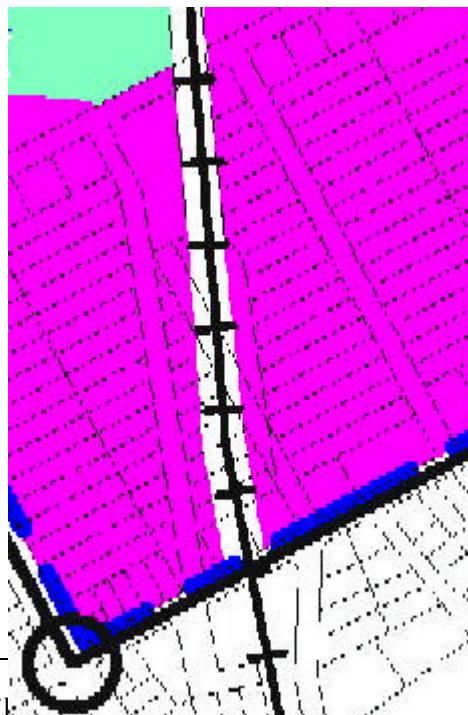
Citywide Industrial Land Use Strategy (Cont.)



This undesignated land is currently owned by the Commissioner for Railways (Queensland Rail) and is zoned Special Purposes. The site is currently vacant.

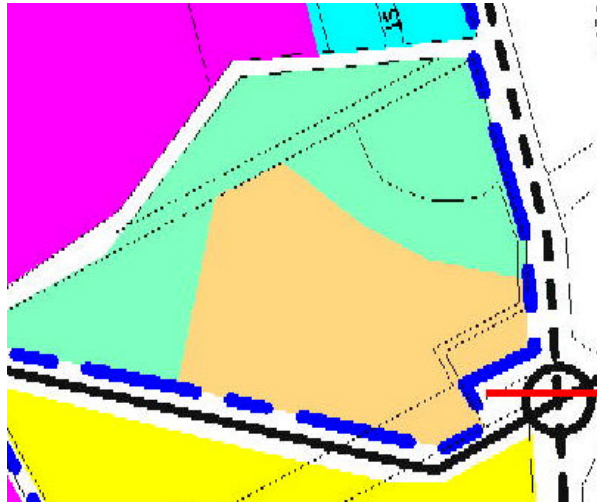
The land surrounding the site is designated in the Citywide Industrial Land Use Strategy as Low Impact Industry. The low impact industrial designation is due to this areas proximity to the perimeter of the precinct and proximity to residential dwellings and areas. It is recommended the undesignated land be designated Low Impact Industry on Figure 3 for the Citywide Industrial Land Use Strategy.

Although the land is owned by the Commissioner for Railways the ownership may change in the future, thus now is the time to identify an appropriate designation to ensure the best possible amenity for the area. Please refer below for amended mapping.



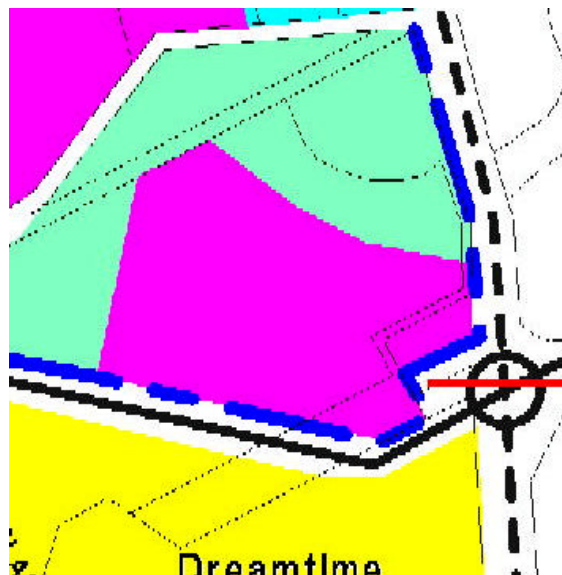
Citywide Industrial Land Use Strategy (Cont.)

2. Land south of Boundary Road, abutting Yaamba Road, is designated as Business/Industry, it is recommended this designation alter to Low Impact Industry.



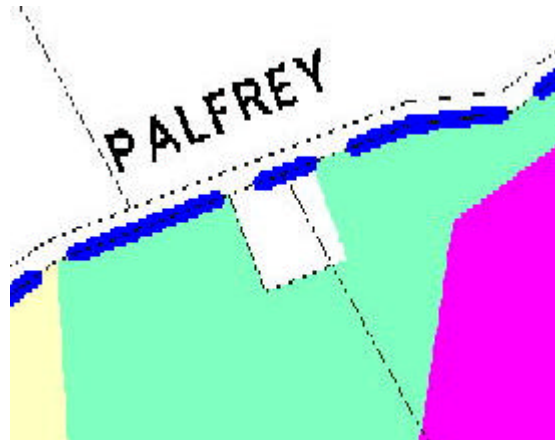
Based on discussions between Council's Planning Services Unit and consultants for the new City Plan, Buckley Vann, it was concluded the designation of Business/Industry was not appropriate. The intent of the Business/Industry designation was to provide sites capable of low impact industry with core business functions. It is felt that these types of uses could locate in other areas and there was no need to create a single area for them.

The map below shows the areas designation as Low Impact Industry.



3. On the northern boundary of the Parkhurst Precinct, a parcel of land fronting William Palfrey Road has not been designated.

Citywide Industrial Land Use Strategy (Cont.)

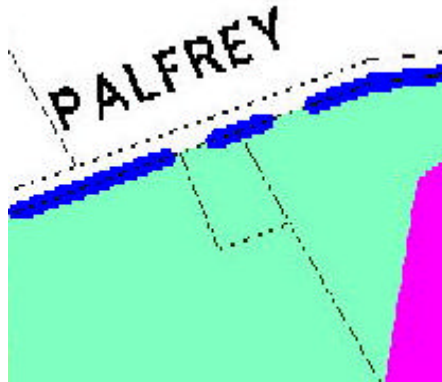


The land is currently owned by Ergon Energy, and is zoned General Industry. The site is improved by a large amount of Ergon Energy infrastructure, such as transformers, lines and other co-located infrastructure.

The land surrounding this site is designated as Industry Buffer Green Space, thus it is recommended this site be designated likewise. Although the site is improved by infrastructure, the activities are minimal in terms of impacts. That is the hours of operation, traffic generated, noise, dust etc. are of such a minute scale the activity can easily be accommodated within the Industry Buffer Green Space designation as a use consistent with this designation.

Citywide Industrial Land Use Strategy (Cont.)

On this basis, the proposed designation of the site is Industry Buffer Green Space.

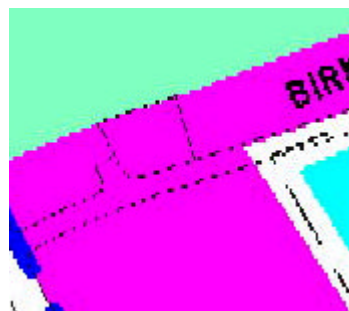


4. Land on Birkbeck Drive has been incorrectly designated as Special Industry.



This land should be designated as Low Impact Industry in accordance with the land immediately surrounding the site. The land owned by the Department of State Development to be designated as Special Industry (referred to in the Strategy document) is the land adjacent to the Dreamtime Centre, which is correctly designated as Special Industry on Figure 3, not the land off Birkbeck Drive.

The mapping below indicates the correct designation for the land off Birkbeck Drive.

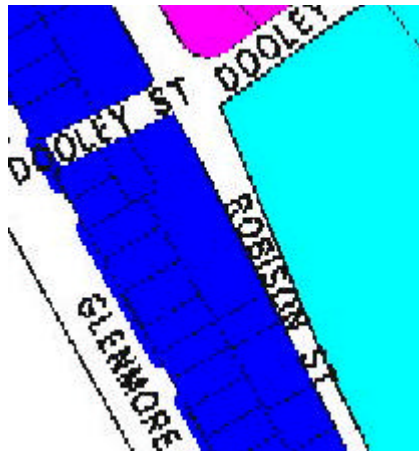


Citywide Industrial Land Use Strategy (Cont.)

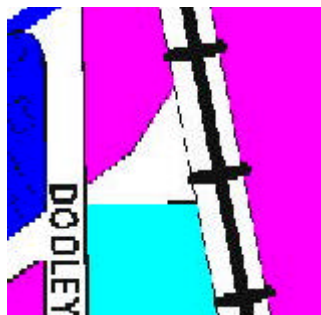
5. A parcel of land on the corner of Dooley Street and Robison Street has not been designated on Figure 4 of the Citywide Industrial Land Use Strategy.



This site is owned by the Queensland Water Resources Commission and is currently zoned Special Purposes. The land immediately abutting the site is designated as Sales and Service Industry. It is recommended this site also be designated as Sales and Service Industry. The figure below shows the amended changes.



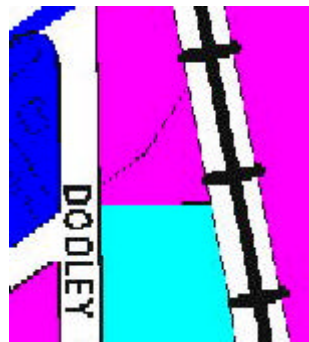
6. Land on Dooley Street, backing onto the North Coast railway line has also been left undesignated in the draft Strategy.



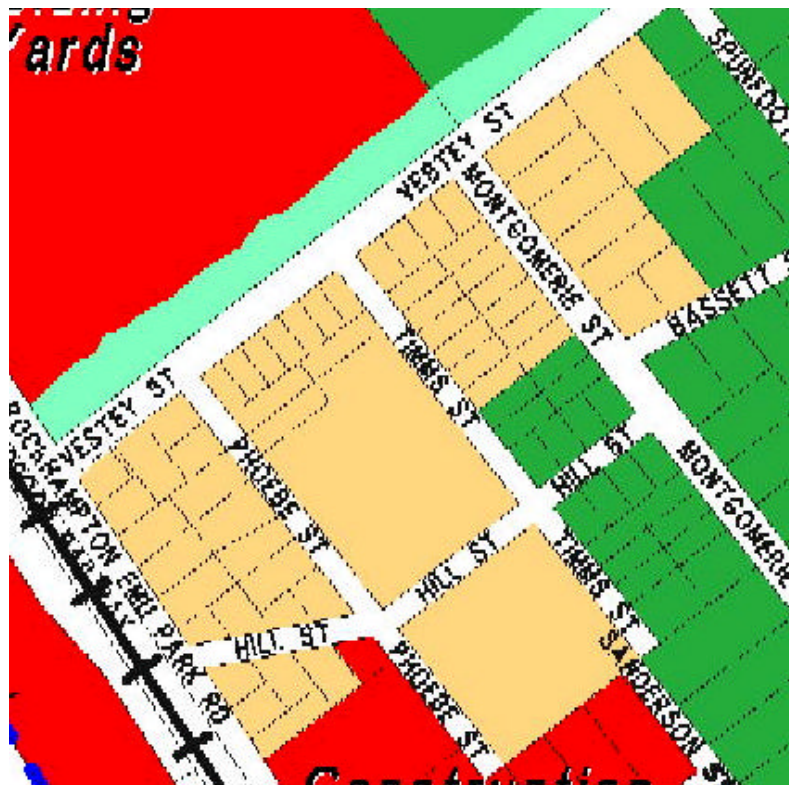
Citywide Industrial Land Use Strategy (Cont.)

This site is owned by Metal Recyclers Pty Ltd and is currently improved by car/scrap metal wreckers. The land immediately adjoining the property is designated as Medium Impact Industry and Low Impact Industry. In this instance it is recommended the land be designated as Low Impact Industry. The access point to this site is relatively narrow, thus it is more appropriate Low Impact Industry locate on the site in comparison to Medium Impact Industry, as Low Impact Industry activities have smaller and less frequent vehicles accessing the site, than a Medium Impact Industry.

On this basis, the recommended designation of Low Impact Industry is illustrated below.

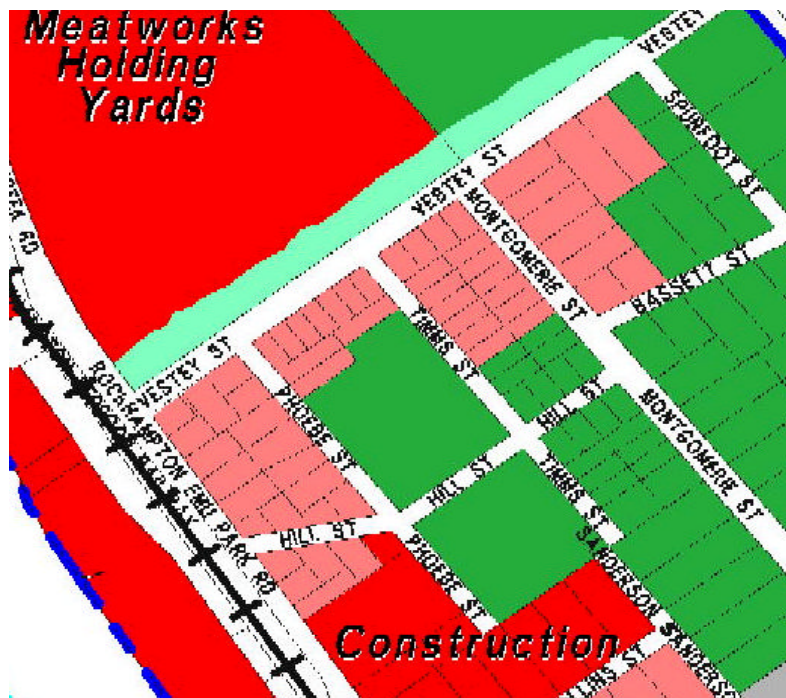


7. The land in Lakes Creek designated as Transition 1 is to alter to Transition 2.



Citywide Industrial Land Use Strategy (Cont.)

In response to Council's resolution and discussion on the future land use direction for the Lakes Creek area, alterations are to be made to Figure 5. Transition 1 and Transition 2 areas within this precinct are to have the same colour designation on the mapping, and designation of words and intent in the strategy. On this basis, the wording in the document has been altered, so the area formerly referred to as Transition 1 – Vestey Street, is now referred to as Transition 2 – Preferred Residential. The image below also reflects this amendment, thus there are now only two Transition areas for the Lakes Creek Precinct.

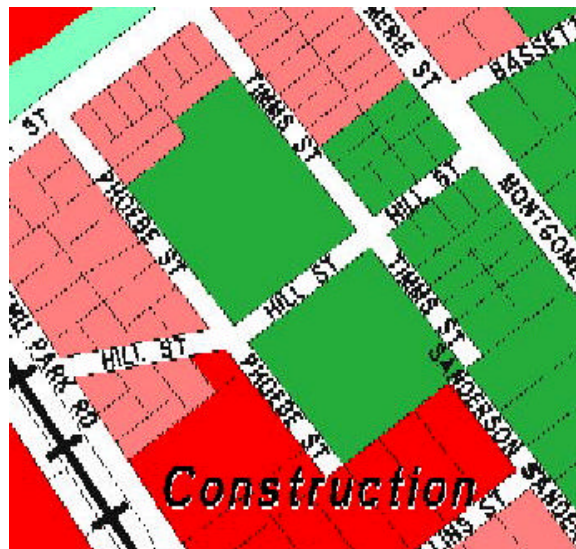


8. Two parcels of land in Transition 1 are to be moved into the Non Urban designation.



Citywide Industrial Land Use Strategy (Cont.)

Two parcels of land owned by The Crown, are not anticipated to be used for any future development. Thus, it is considered appropriate to allocate the sites with a designation that reflects the future direction of the sites and area. Thus, the designation of Non Urban, as indicated on the image below depicts the future direction for these two sites.



9. The land west of CMG is currently designated as Industry Buffer Green Space, however, this does not fully reflect the future intentions of the owners of the site.



In response to CMG's submission, it is proposed that the site be given two (2) designations; with part of the vacant land adjoining their current operations also to be designated as Special Industry. The remainder of the site is to maintain the existing designation of Industry Buffer Green Space. At this stage the exact location of the boundary of the two separate designations was not formalised, consequently, the separate designations have been given equal weight and area.

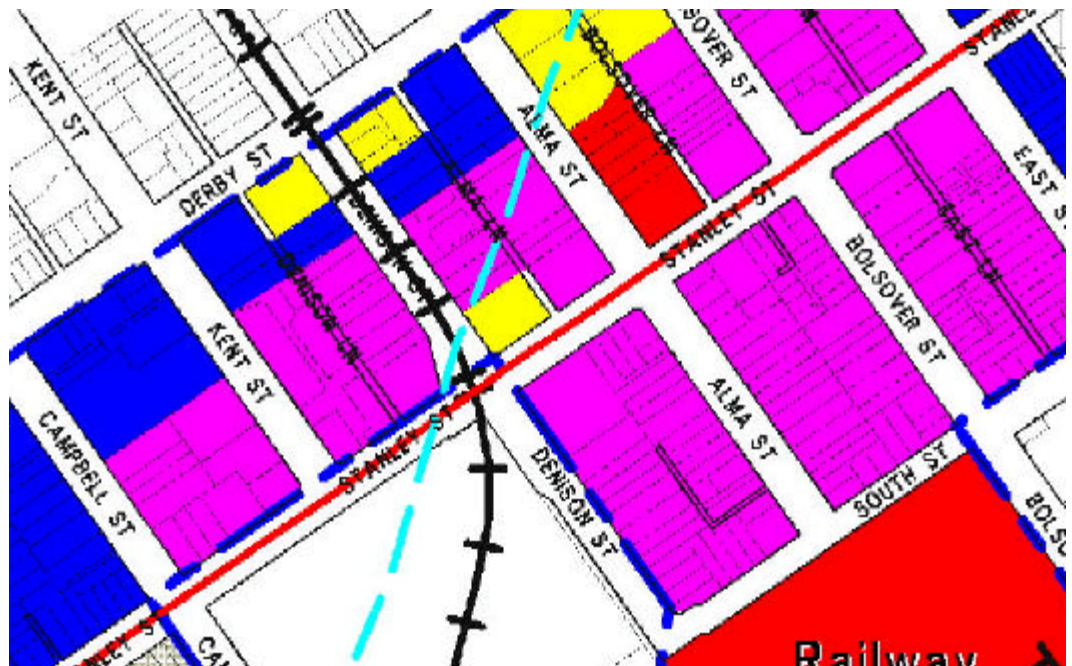
Citywide Industrial Land Use Strategy (Cont.)

The exaction location is open to future negotiation on the location of the two designations, however, the land east of the railway line will continually remain as Industry Buffer Green Space given its closer proximity to existing residential areas.

The image below illustrates the altered designation for land near CMG.



10. The proposed heavy vehicle / b-double haulage route on Figure 6 is proposed to alter from Stanley Street to Derby Street.



Citywide Industrial Land Use Strategy (Cont.)

Council's Works Department have stated Stanley Street is currently not suitable as a heavy vehicle access due to the nature of the intersection with Gladstone Road (National Highway). For this route to be defined as a heavy vehicle route the intersection would require traffic signals. This is a matter for consideration by Main Roads. However, it may be undesirable, as it would create another signalised intersection on the section of the National Highway through Rockhampton, that may increase the prospect of a city bypass.

Main Roads have stated access to and from this precinct should be by Derby Street as this is an existing controlled intersection with the Bruce Highway. Amendment to clause 4.2.4.9 is recommended to reflect the department's view and the advice from Main Roads and Council's Works Department that Stanley Street is unsuitable. The amended mapping is illustrated below.



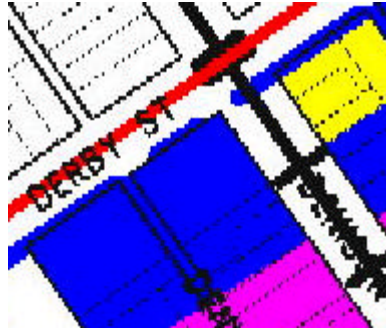
11. Offices and shops currently used by the Salvation Army are designated as Special Purpose, however, the appropriate designation for this site is Sales and Service Industry.



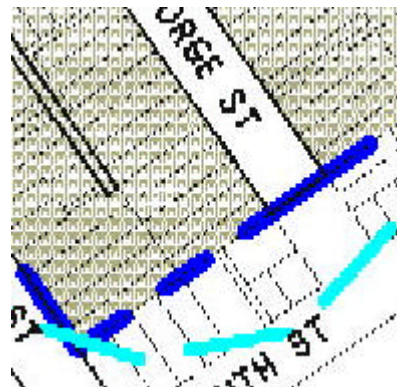
Citywide Industrial Land Use Strategy (Cont.)

The Salvation Army site on the corner of Denison and Derby Streets is currently for sale. The most appropriate designation for this site is Sales and Service Industry, maintaining the areas consistent approach to industrial development.

The map below illustrates the new designation of Sales and Service Industry.



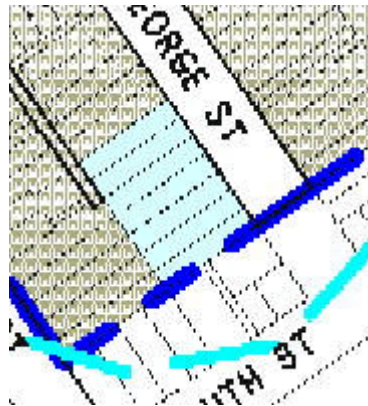
12. Young's transport on George Street is recommended to be given a new designation, being Transport Terminal.



Young's Transport verbally spoke to the Manager of Planning Services, highlighting issues on the proposed designation of their property, being Not Required for Industry Use. Young's Transport abuts Queensland Rail's passenger terminal, creating an area focused on public transport, namely the movement of passengers, via Bus and Rail. In the future planning for this area, the draft City Plan is dividing the City into like or similar 'Areas'. On this basis, Young's Transport will be in the same planning 'Area' as Queensland Rail. Thus, for the purposes of this strategy it is important to note Young's Transport will be designated as a transportation use, namely a Transport Terminal.

Citywide Industrial Land Use Strategy (Cont.)

This recommended designation is identified below.



13. Five (5) Residential 'A' allotments on Lion Creek Road are recommended to be excluded from the Airport Industry (Investigation Area) Precinct.

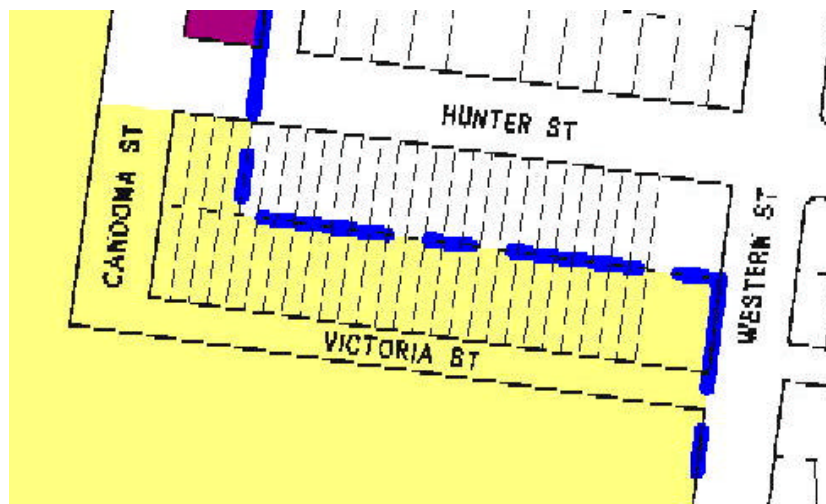


As identified by submissions 2, 4, 5 and 6 the designation of Airport Industry is not likely for the future use of these allotments, albeit subject to investigation. It is recommended these five (5) allotments be excluded from the Citywide Industrial Land Use Survey. The figure below illustrates this exclusion.

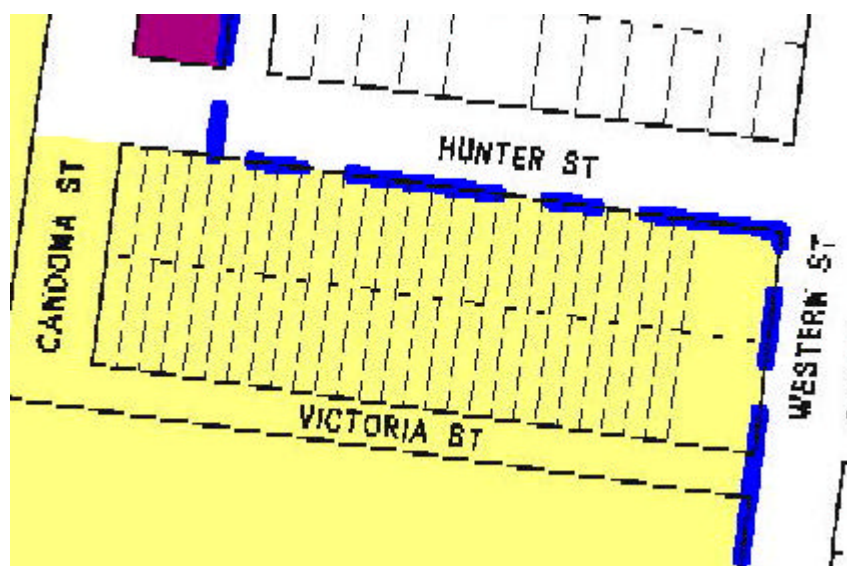


Citywide Industrial Land Use Strategy (Cont.)

14. Only four (4) allotments fronting Hunter Street (near the airport) are included in the Airport Industrial (Investigation Area) Precinct.



Submission 9 in Part 2 raised the issue of extending the boundary of the Airport Precinct to include all the land fronting the southern part of Hunter Street, between Western Street and Canoonah Road. In this section of Hunter Street it is common for land ownerships fronting Hunter Street to extend through to Victoria Street, resulting in large land holdings by one owner, with the land fronting both Hunter and Victoria Streets. However, the draft Citywide Industrial Land Use Strategy precinct boundary runs through the back property boundary of the properties fronting Hunter and Victoria Streets (illustrated above) effectively putting single land holdings in two (2) separate precincts. Thus, for the overall vision of Rockhampton it appears appropriate to not divide land holdings, rather include all in the same precinct. Consequently, it is recommended the land fronting Hunter Street, between Western Street and Canoonah Road, be designated as Airport Industry, as illustrated below.



Citywide Industrial Land Use Strategy (Cont.)

Please also note the designation Airport Commercial has been replaced with the designation Airport Related Business.

Part 5 – Financial Incentives

As a part of reviewing the Draft Citywide Industrial Land Use Strategy, advice was sought on the potential for financial incentives to be created via the rating process. The question was posed if industrial uses exist in locations inconsistent with the City Plan such as residential areas, could the Council charge those properties higher rates than industries located in appropriate areas, such as Parkhurst. This would reflect the higher load these inappropriately located industries have on Council resources in terms of dealing with complaints from neighbours and the like. Such a system would also facilitate in achieving the Council's objectives for different areas in the city – ie creating pleasant residential areas and economically sustainable industrial areas.

The advice confirms that such a system would be possible however is dependent on Council implementing a full roll out of its differential rating powers with a rating category for industrial lands. The Director of Finance has advised that differential rating within the city is something that may be considered by Council in the future. Therefore, a recommendation has been included within the Industrial Strategy that if Council considers using its differential rating powers, that it consider the development of an Industrial category with a policy that allows the remission of rates on those properties that are in the preferred Industrial locations throughout the city.

Conclusion

In summary, the draft Citywide Industrial land Use Strategy has been altered having taken into consideration all submissions received and issues raised. The Strategy has also been altered in areas to make the document concise in its meanings and terminology. The amended Citywide Industrial Land Use Strategy will guide and nurture Rockhampton's industrial growth for the next twenty (20) years.

Katrina Clarke
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Marco Alberti
Manager Planning Services

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CITYWIDE INDUSTRIAL LAND USE STRATEGY

ROCKHAMPTON CITY PLAN

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ROCKHAMPTON CITYWIDE INDUSTRIAL
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I INTRODUCTION:

I.1 BACKGROUND

The Rockhampton City Council is currently undertaking a review of its Planning Scheme, in accordance with the requirements of the Integrated Planning Act, 1997 (IPA). The new Planning Scheme for Rockhampton, which is referred to as City Plan, will be used to facilitate the management of the City's future growth and associated change, in accordance with the IPA concept of achieving "ecological sustainability" by balancing economic development, the environment and the community's wellbeing.

A Statement of Proposals (SOP) was prepared as the first stage of the City Plan. The SOP document set out economic development as a key issue in the future growth of the City and nominated industrial development as one of the more significant elements of this economy. Industry and associated activity contributes more than 16% of the City's employment and is a major generator of wealth.

This Citywide Industrial Land Use Strategy (CWILUS) analyses the future industrial land use requirements for the City, to the year 2020, enabling the Council to limit its attention to the provision of a suitable supporting infrastructure network through its budgetary processes.

The aim of this Strategy is:

'To identify economic strategies to attract industries to Rockhampton, and once recognised, to nominate location and environmental parameters for the establishment/operation of industries within the City'.

It is relevant to mention the role of both the Local and State Government in this strategy. The Rockhampton City Council, in the process of its Planning Scheme review identified the need to undertake a review of industrial land in Rockhampton, given its contribution to the City's economy. Hence, the preparation of this strategy.

In addition to the responsibility that lies with Local Government to have land available for industrial development and to protect non-industrial development, the State Government agency that assists in the promotion and development of industry, the Department of State Development (DSD), also has a role. This role is one of support and program facilitation.

CQ (Central Queensland) A New Millennium (CQANM), the State Government sponsored Regional Planning Organisation, is also developing criteria that will, as one of its principal elements, promote balanced economic activity across the entire Fitzroy region. In addition to the works of the CQANM, this strategy is congruous with the Regional body's initiatives. This is evident in the stakeholder meetings with representatives from CQANM.

Whilst Council and State Government can implement programs and incentives to attract industry to the City and region, it is ultimately private investment that determines industrial investment and activity.

To this end, this strategy discusses the industrial climate in Rockhampton in 2001, and seeks to outline recommendations for industrial development for the next 20 years.

The Department of State Development (DSD), (as the State Government Agency responsible for promoting industrial growth), financially assisted the Rockhampton City Council in the formulation of this strategy. The Department of State Development worked in collaboration with Council to review not only the City's economic environment but also its interaction with the regional environment in which it undertakes a central role.

1.2 STRATEGY OUTPUTS

The outputs of the strategy include:

- ✍ A quantitative needs analysis of the future industrial land requirements for the City of Rockhampton to the year 2020, predicated on capitalising on the identified range of local and regional economic activities and on the creation of jobs to increase employment opportunities for the City's workforce.
- ✍ An analysis of Rockhampton City's capacity to accommodate the identified level of industrial potential.
- ✍ A recommended network of preferred locations for particular industry types to service the identified economic and social needs of the City, subject to the constraints of the natural environmental, realistic community expectations on acceptable levels of amenity and the appropriate requisites to attract investment.
- ✍ An assessment of how Rockhampton can encourage investment in industrial enterprise that will benefit the City's economy and provide employment.

1.3 STRATEGY METHODOLOGY

The strategy set out in the project brief, it was to not only to conduct an inventory of industrial land in Rockhampton, but also to relate this to industrial development in the region. Of special importance is the impact of the possible light metals precinct at Gracemere-Stanwell, west of the City.

A total of fourteen (14) separate stakeholder meetings were held in the preliminary stages of the project. The meetings were attended by representatives from both State Government Agencies and major business.

Four (4) existing industrial precincts have been identified within the City, along with two (2) new areas of opportunity for industrial development. A total of six (6) precincts have been identified in this strategy, as documented in **Section 4.2**. The six (6) precincts are:

- ✍ Parkhurst Precinct;
- ✍ Kawana / Park Avenue Precinct;
- ✍ Lakes Creek Precinct;
- ✍ Stanley Street Precinct;
- ✍ Port Curtis Precinct (investigation area); and
- ✍ Airport Precinct (investigation area).

The recommendations in relation to all precincts are a result of extensive investigations, including field investigations and advice received during stakeholder consultation.

This strategy sets out the following:

- ✍ An evaluation of the City's capacity to attract and service industrial opportunities through the review of existing studies, interviewing relevant stakeholders, and collecting and analysing appropriate data.
- ✍ The selection and scoping of an appropriate industrial service network.
- ✍ An evaluation of the suitability of existing industrial sites, to ascertain opportunities for future development.
- ✍ Recommendations to Council.

2 STRATEGY RECOMMENDATIONS:

OVERALL RECOMMENDATIONS

The strategy recommends that the Rockhampton City Council:



1. Ensures that the amended recommendations are expressed in the new City Plan.
2. Recognises that the economy in which it operates is mutually inclusive of the economy of the Capricorn region and, as it's the major established urban and commercial centre, Rockhampton has the opportunity to act as the linchpin for ongoing economic development.
3. Recognises that the City will absorb a substantial share of the potential economic and social benefits that will arise from the emerging Gracemere-Stanwell Corridor project and should continue to cooperate in the promotion and development of the Corridor.
4. Recognises that there is an opportunity to collaborate with the City of Gladstone in the economic development of the Fitzroy region to the mutual benefit of Rockhampton.
5. Continues to foster its role as service provider for the Central Highlands and Central West sub-regions.
6. Recognises that the future role of industrial development within the City will be mainly consumption based, although opportunity exists to continue to attract a limited amount of medium impact industry to the core areas of the Parkhurst precinct.
7. Retains its position as the value adding centre for the beef industry of Central Queensland, whilst protecting its options for future residential development in the southeast sector of north Rockhampton, areas of the City, and its fringes.
8. Discourages the continued existence of hazardous industry and noxious or offensive industry in the City.
9. Recognises that the industrial development clustered around Stanley Street will reduce under succession over time, in favour of land uses more appropriate to the City centre fringe, and as a consequence makes arrangements to investigate an alternative site for consumption based industry servicing the south Rockhampton suburbs of the City.
10. Exploits its regional airports ability to attract aviation and defence related economic investment.

- 11.Supports the transition of land into residential pursuits in specific locations. This is the preferred approach for some land in the vicinity of Alexandra Street, Stanley Street and in the area of Lakes Creek.
- 12.Recognises that industrial opportunities in south Rockhampton are limited by flooding and as a consequence, undertakes studies to identify areas available and suitable for industrial land use, when demand warrants.
- 13.Recognises that there are no further opportunities available to establish new industrial precincts within the City (except for the purpose driven intrusions into the flood fringe areas identified on the south side) and the areas nominated for future investigation at Port Curtis and the Airport.
- 14.Recognises that modern industries require a high standard of operating environments and that, development standards must be kept at a level commensurate with their dictates. This may involve some remedial action in developed areas that do not meet modern standards. Upgrades to industrial environments may include sealed roadways, kerb and channel and a softening of developments to the roadway.
- 15.Refers the traffic problem areas identified in the strategy at Parkhurst, Kawana, Stanley Street, and the Airport, to the Department of Transport who are responsible for the preparation of the Capricornia Integrated Regional Transport Plan.
- 16.Consider the rolling out of its differential rating powers under the *Local Government Act 1993* with the development of an Industrial Land category with the development of a policy that allows for the remission of some or all the (differential) general rate to the owners of those properties located in the preferred Industrial Areas identified in the City Plan. Reference should be made to sections 1031, 1033 and 1035 of the *Local Government Act 1993*.
- 17.Enters into discussions with the State Government in relation to the future management of the Parkhurst estate. Rockhampton City Council should consider taking a lead role in its ongoing development, freeing up the State to concentrate on the Gracemere-Stanwell Corridor whose development will attract and support linkage and service industries, a proportion of which will choose to locate on the northern side of the City.
- 18.Initiates a professional marketing campaign to attract economic development, including industry, to the City, in cooperation with the other sectors of the Capricorn subregion and allied to the broader national and global status of the Fitzroy region, engendered by the massive investments already established in Gladstone (refer to **Section 7.5 – Marketing Campaign** for more details).
- 19.Acknowledges that this strategy confined itself essentially to industry within Rockhampton City, and the specific needs of the City.

Industry demands on the City will vary dependent on the outcomes of the various initiatives, but it should be realised that the City itself has little flexibility to react due to the current and future levels of residential development in a limited land space. These matters are more adequately addressed in the regional planning activities within the CQ A New Millennium process and in other sub-regional inter-local Government forums.

20. Recognises that currently, (as at July 2001) there are some 833 ha of lands designated for industry in the City. In addition, there are some 500 ha available for light and general industry in the Gracemere-Stanwell Corridor. Should Rockhampton City Council adopt the recommendations of this report, there will be some 900 ha of land available for industry within the Beef Capital.
21. Recognises that the City's finite complement of industrial land is sufficient to satisfy demands past the 2020 benchmark of this strategy.

PRECINCT RECOMMENDATIONS

1. The Parkhurst Precinct is to remain as the principal industry generator in the City, with a focus on “low and medium impact industry”, especially along its perimeter, whilst the precinct core is to maintain some capacity for established activities. The precinct is also recognised as providing for “special industry” proposals based on extensive rail frontage. The recommended land use pattern is shown in **Figure 3**.
2. The Kawana / Park Avenue precinct is recommended to be designated as “low impact industry”, in order to mitigate amenity loss to the abutting residential areas. The exception here is in relation to the food related industry off Dooley Street, which is designated as “medium impact industry” and is buffered from local residences by lower impact industry within the estate. A section of this precinct (in the area of Thomasson Street, Richardson Road and Alexandra Street), that infiltrates this residential area, has been recommended to return to residential use. This can only be achieved at the end of the life of industrial activity, as adequate lands for these purposes exist at Parkhurst. A recommended land use pattern is shown in **Figure 4**.
3. The Lakes Creek precinct is recommended to continue to support the operations of the existing meatworks, and other businesses in the area. However, the recommendations are to discourage other industrial activity in this location, as it would further exacerbate the conflict with established residential development in the area. A recommended land use pattern is shown in **Figure 5**.
4. The Stanley Street precinct is recommended to introduce “sales and service industry”, between the City centre and the area of remnant “lower impact industry” development. Low impact industry should remain, but those businesses that adversely affect the local amenity,

should be encouraged to relocate over time. Industrial activity, related to the railways, should be identified in the City Plan, highlighting the sites importance to the locality in relation to elements such as employment, size and infrastructure. In addition, the areas that form the extension of the riverbank recreation precinct should be retained for that purpose. However, the hazardous industries located below flood levels in Lower East Street should be relocated at the earliest convenience. A recommended land use pattern is shown in **Figure 6**.

5. There is a demand in south Rockhampton for consumption based industry. The Stanley Street industrial precinct may gradually lose its appearance as an industrial precinct through commercial development occurring in the area, taking advantages of the locations proximity to the City centre. Few opportunities exist for the expansion of industrial areas within south Rockhampton. The Port Curtis precinct shown in **Figure 7**, offers an alternative site if flooding problems can be contained. The Port Curtis precinct should be recognised as an industrial investigation area in the new planning scheme.

This precinct is designated as a possible industry investigation area in the City Plan, beyond the life of the 2010 City Plan. Such a designation will avoid other development that may prejudice its use for industrial purposes.

6. The current industrial activity at the airport should be recognised in any future planning, highlighting the opportunities for an increase of industrial activity in the area, along with the defence-related operations in adjoining areas. There is potential for the airport related activity to grow into a major complex servicing the Central Queensland region and this should be encouraged by providing a planned environment to ensure orderly, sustainable development. There is also opportunity to develop an airport related business designation, providing direct service to the airport. The success of this venture will depend on the viability of flood mitigation measures. The recommended land use pattern is shown in **Figure 8**.

3 EXECUTIVE SUMMARY:

Rockhampton's role as the focus for economic development across the wider Central Queensland region has eroded over time, with the growth of competing centres arising from the exploitation of new resources. Mackay and Bundaberg are both based on the sugar industry and Gladstone services the coal industry. Therefore, they have developed as service centres for their own local catchments.

The remnant catchment strongly attached to Rockhampton includes the Capricorn, Central Highlands and Central West sub-regions. Within these sub-regions there are areas of option that are available to be captured by vigorous marketing, promotion and provision of appropriate transport access routes.

The City's regionally based catchment produces an extensive range of products, which offer the opportunity for value adding or service provision. These include minerals (principally coal, magnesium and nickel), beef, grains, horticulture and natural resources. Other economic opportunities based on regional attributes include tourism, defence and education.

Rockhampton and Gladstone are the established urban nodes supporting industrial development in the immediate locale, and should be viewed as complementary rather than competitive in their endeavours to service and promote the growth of the Fitzroy region.

The Citywide Industrial Land Use Strategy examines the projected need and land use requirements for industrial development in Rockhampton, by identifying areas/precincts suitable for different types and intensities of industrial development, until the year 2020. Each precinct is examined in terms of its physical and environmental sustainability; cost effectiveness for infrastructure; business efficiency; access to markets; convenience for workforce; and land use compatibility.

A brief summary of the 6 precincts is identified, including their location, is provided, along with the opportunities and constraints in relation to the establishment of industry in Rockhampton.

A number of initiatives / incentives are outlined, to seek to alleviate the constraints identified and take advantage of the opportunities.

Lastly, investment triggers are explored being dependent on the availability of adequately serviced land and the promotion and marketing of such land.

3.1 PROJECTED NEED & LAND USE REQUIREMENTS UNTIL THE YEAR 2020

✍ Rockhampton's requirements for industrial land, calculated from Department of State Development methodology and based on employment demand, will range from about 300 to 400 hectares if

the population reaches 70,000 and 400 to 500 hectares if the population reaches 90,000.

- ✍ Estimates based on the assumption that Rockhampton's population could experience growth impetus associated with expected increased economic investment in the region suggest that the City's population could reach 70,000 by 2010 and 90,000 beyond 2030.
- ✍ There are currently about 800 hectares of land designated for industrial activities in the City's Strategic Plan (1997). If the recommendations of this strategy are adopted, this will increase to about 900 hectares mainly through the addition of an airport industrial precinct. Consequently, Rockhampton has adequate supplies of industrial land for several decades.
- ✍ Rockhampton's future role in the Capricorn subregion (refer **Figure 1**) will be mainly as a dormitory and commercial service provider directly servicing the City and the Fitzroy, Livingstone and Mt Morgan Shires. City industry will concentrate heavily on local consumption based sales and services.

3.2 INDUSTRIAL PRECINCTS

A total of six (6) industrial precincts have been identified in this strategy. Four (4) of these precincts are existing industrial areas, with two (2) new precincts identified for investigation. The six (6) precincts are:

- ✍ Parkhurst Precinct;
- ✍ Kawana / Park Avenue Precinct;
- ✍ Lakes Creek Precinct;
- ✍ Stanley Street Precinct;
- ✍ Port Curtis Precinct (investigation area); and
- ✍ Airport Precinct (investigation area).

It can be confidently assumed that the City's finite complement of industrial land is sufficient to satisfy demands past the 2020 benchmark of this strategy.

3.3 OPPORTUNITIES

- ✍ The Gracemere-Stanwell Corridor development located on the southern fringe of the City (refer **Figure 2**) provides Rockhampton with substantial wealth generation and employment opportunities, while the City will provide the necessary urban support infrastructure for the venture.
- ✍ The light metals precinct located adjacent to Rockhampton has the opportunity to absorb the City's demands for space, for "higher impact industry," in circumstances that are sustainable in terms of both the natural and built environments. Higher impact and/or hazardous industry currently located in the City and in conflict with other land uses should be re-located as soon as conveniently possible to this Corridor. Higher impact industries that cannot relocate due

to the size of their investment are required to maintain or reduce detrimental emissions and operations with respect to their impacts on the community's amenity.

- ✍ The emergence of the Gracemere-Stanwell Corridor provides the opportunity to direct higher impact and hazardous industry away from the built up areas of Rockhampton. It would be expected that future industrial development in Rockhampton will be directed principally towards consumption based local and district services, although existing higher impact facilities having substantial investment will remain. The “clean and green” industries should be encouraged to locate in the City. Industry with special requirements related to a City location that has higher impacts, which can be contained by planning and development innovation and control, may still seek to establish within the established industrial network of Rockhampton City.
- ✍ The natural, native environment has been largely replaced by more than a century of urban related activity, providing the opportunity for industrial development in suitable areas.
- ✍ The development of a large-scale magnesium processor is expected to attract further substantial investment into the area taking advantage of linkages, synergies and economies of scale.
- ✍ Rockhampton has an established industrial network that has catered for the full range of industrial activities in the City, and can continue to do so in the future.
- ✍ The City's location at the juncture of the major regional road and rail routes is favourable for access to markets and primary materials.
- ✍ Major port facilities are available at Gladstone, located approximately one hour south of the City, by road.
- ✍ A niche opportunity to capitalise on economic development, generated by the City's regional scale airport and the defence activities at Shoalwater Bay, exists in close association with the airport and should be vigorously pursued.
- ✍ An adequate workforce is available in the City and associated urban settlements, principally at Yeppoon and Emu Park, on the Capricorn Coast. There are also adequate training and education facilities in the City to react to demands for an appropriate workforce.
- ✍ The strategy has recommended an industrial land network that is generally based on the current pattern of industrial precincts in the City, (as at August 2001). The strategy does, however, recommend changes for areas where industry is not the most appropriate long-term use, resulting in planned industrial centres throughout the City.

3.4 CONSTRAINTS

- ✍ The growth of the regional centre at Emerald is emerging as a potential siphon of regional service functions from Rockhampton.
- ✍ Similarly, the growth of Biloela generated from development at Callide, will act as a regional siphon of services from the larger established centres.
- ✍ The Parkhurst industrial precinct was established in Rockhampton City to fulfil the role of provider for the regionally based, higher impact industrial development occurring in the Fitzroy region. However, the growth of residential development in the City's limited useable land space, has compromised the ability of Parkhurst to continue to fulfil this function.
- ✍ There is ample land set aside in the City for industrial purposes, but operations are constrained by the encroachment of residential development that has occupied the space that would normally be set aside for buffers, thus limiting the level of impact that can be tolerated by future industry wanting to locate in the established precincts.
- ✍ Although the City contains ample land with topographic features suitable for industrial development, the amount of land available is severely constrained by the periodic flooding of the Fitzroy River.
- ✍ The City has the major airport in the region but there are currently limited opportunities for appropriate industry to take advantage of this facility, based on flood prone lands in the area.
- ✍ The protection of the quality of the City's potable water supply at the Barrage and the river outflows to The Great Barrier Reef Marine Park, from pollutants originating in the industrial precincts.
- ✍ The City has a north / south culture that, in some instances, affects the location demand for consumption based industrial services.

3.5 INITIATIVES / INCENTIVES

In the work completed in relation to the draft City Plan, the "Area" planning for industrial land within the City has included the development of incentives and initiatives in order to promote suitable industrial centres for development in the future.

The mechanisms within the City Plan are linked to land use development, and the level of assessment required for industrial development in the City.

Where industrial development is promoted and encouraged, the level of assessment by Council will be self-assessable.

However, where an area may be nominated for industry, but the continued growth or future development of the area for industry is not considered suitable (for the life of the 2002 City Plan), then industrial development will tend to be subject to either Code or Impact Assessment.

Other initiatives can include the Council paying for “up front” costs on behalf of the new investor, for items such as roadways and infrastructure.

3.6 INVESTMENT TRIGGERS

The potential to attract investment to Rockhampton is dependent on two principal factors:

- ✍ The availability of adequately serviced lands to accommodate new investments efficiently, and
- ✍ The undertaking of a promotion and marketing campaign that attracts investment to the desired levels.

The cooperation of all levels of Government, the private sector and the general community will be needed for the City to remain competitive in the modern market place, where most regionally oriented industries have an ever widening choice of locations. **Section 7.5** Marketing Campaign, sets out strategies, which can be employed to encourage industry to establish in a centre.

The recognition that economic issues are spread across the Capricorn region is vital, and the successful attraction of investment will entail a collaborative approach. This is the responsibility of Rockhampton City Council, Fitzroy Shire, Livingstone Shire, Mt Morgan Shire, and also Gladstone City.

4 AN INDUSTRIAL LAND NETWORK FOR ROCKHAMPTON CITY:

This section addresses the allocation of land within Rockhampton City to form a network of industrial use 'precincts' appropriate to the City's needs. There are four (4) existing industrial precincts within the City. The strategy identifies six (6) precincts, which include two (2) investigation areas. The precincts in the strategy are:

- ✍ Parkhurst Precinct;
- ✍ Kawana / Park Avenue Precinct;
- ✍ Lakes Creek Precinct;
- ✍ Stanley Street Precinct;
- ✍ Port Curtis Precinct (investigation area); and
- ✍ Airport Precinct (investigation area).

The City's needs have been established not only by using "population estimates", but by conducting land-use surveys of industrial and non-industrial land.

The six (6) precincts are individually identified, with conclusions and recommendations detailed for each precinct.

The strategy findings have established that there are no candidate sites for expansion of industry in the City, except for small, purpose-driven precincts centred on a specific opportunity. **Sections 6 – 7** set out philosophies for industrial planning, including how to estimate future and current demands for industrial land for the City based on population.

The broad spectrum of industry that has, and will be attracted (over the period to 2020), to Rockhampton, will have a range of specific locations, infrastructure or site requirements. Such requirements may only be available at a limited number of strategic sites, which may be impossible to duplicate elsewhere.

The future network of industrial activities within Rockhampton City will therefore, have to take place within existing industrial precincts, within the life of this strategy.

These strategic sites have essentially been identified and set aside for industrial use although conflicts with other land uses will inevitably arise. Careful consideration must be given in resolving these conflicts to the costs of future generations or denying industry its sites of special significance.

Any overflow of large scale, heavy activities, which cannot be absorbed, or are unsuitable for the City's existing industrial precincts, should be directed to other areas in Central Queensland, if locations are appropriate. This situation is not as critical in Rockhampton as it is open to the opportunities to locate overflow industry in the Gracemere-Stanwell Corridor.

The task is to ensure that the current elements of the industrial network remain viable and operate in an ecologically sustainable manner, whilst making the optimum contribution possible to the economic and employment needs of the community.

4.1 EXISTING INDUSTRIAL LAND NETWORK – A SNAPSHOT OF ROCKHAMPTON

The current pattern of industrial activity in the City has remained static for many decades. It originated close to the older part of the City in south Rockhampton, with subsequent growth areas evolving in north Rockhampton, due to population growth in this area.

As previously stated, the snapshot of Rockhampton's industrial land identifies four (4) existing industrial areas and two (2) areas open for investigation. Of the four (4) existing industrial areas Parkhurst is the precinct which offers the greatest opportunity for industrial development and expansion in Rockhampton. Alternatively, Kawana/Park Avenue is in a land locked situation, similar to other industrial areas in Rockhampton, with residential development in close proximity, sometimes as close as across the roadway. The areas of Stanley Street (Lucius and Wharf Streets) and Lakes Creek have historical zoning's for hazardous, noxious or offensive industries. However, these lands have not largely been taken up for these activities, proving a re-evaluation of these areas, activities and zones is needed.

The Lakes Creek meatworks was established over a century ago on the banks of the Fitzroy River. In its day, this industry had little impact on the small local urban community of Lakes Creek, which was composed of many cottages owned or occupied by meatworkers. However, today, the suburb of Lakes Creek is centred around the meatworks, which severs a much larger catchment, and other noxious or offensive industries (these uses reflect the historic zoning of the area).

The Kawana industrial area developed to service the growing residential development of north Rockhampton. As the logical extension of this complex, the Parkhurst area was opened up post World War 2 and was intended to service a wide range of regional industrial activities, beyond that available at Kawana.

Rockhampton's "Hazardous Industry" zoned land in the Stanley Street precinct has not largely been used for such activity. This historical zoning, from as early as 1971, has shown that there is little need for such zoned land, consequently, a re-evaluation of this precinct is required.

Areas nominated as requiring future re-investigation, specifically the Port Curtis and Airport precincts which have been identified in this strategy and the draft City Plan as areas for investigation. These areas have experienced a minor amount of industry enter the area in recent times, and as a result offer the option for future investigation for industrial land use activities.

There are approximately 1690 properties of industrial zoned land within the City (as at May 2001). The precincts accommodate the following number of properties:

✍ Parkhurst Precinct	400 properties
✍ Kawana / Park Avenue Precinct	186 properties
✍ Lakes Creek Precinct	329 properties
✍ Stanley Street Precinct	512 properties
✍ Port Curtis Precinct (Investigation area)	169 properties
✍ Airport Precinct (Investigation area)	102 properties

These figures are taken from data used in land use studies conducted in March-May 2001.

Of the properties available for new industrial development, many already have existing buildings, which are vacant, these are known as “brown sites¹”.

Residential expansion has gradually crept closer to industrial areas as a result these activities compete for scant land resources in the City, thereby limiting capacity to expand.

4.1.1 PARKHURST

Parkhurst is dominated by industrial related activities, with a scattering of dwelling houses either associated with industry or on rural allotments. This precinct is bisected by the railway and is flanked on the eastern side by the national Highway.

Figure 3a indicates the zoning of the precinct as at August 2001, under the Rockhampton Transitional Planning Scheme. “General Industry” and “Light Industry” dominates the zoning with “Special Facilities” and “Non Urban B” zoning’s also prevalent.

Parkhurst is the only regional scale “Integrated Employment Area²,” in the City.

This “Integrated Employment Area,” caters for high impact industries. Its growth as an industrial centre may appear haphazard, with little direction to development patterns and standards. Consequently, the area requires a holistic approach to attract modern industry.

Apart from Queensland Magnesium (QMAG), many of the industries located at Parkhurst are considered “general-light industry³”. This is

¹“Brown sites” for the purposes of this strategy are sites which have facilities or structures on them, but appear to be abandoned/not in use at the time land use studies were done – March –May 2001. Refer to dictionary at Section 5.0.

² Refer to section 7.2.2.4 of the document for an explanation of this term.

³ The term “general-light industry” refers the definition of this land use activity identified in the Transitional Planning Scheme for Rockhampton City at April 2002. Refer to dictionary at Section 5.0.

not to say that more “medium impact industry⁴” and “high impact industry⁵” will not locate at Parkhurst. The area is intended, in the life of this plan (until 2020), to allow the opportunities for both “medium impact industry” and “low impact industry⁶” facilities to establish where appropriate.

Of the 400 allotments in Parkhurst, some 224 allotments have an existing use, 169 properties remain vacant, and 7 properties are “brown sites”.

The Gracemere-Stanwell Corridor is expected to ease the pressures on this precinct so that industries in this area can operate in harmony with nearby/adjacent residential development. In the event that a light metals precinct at Stanwell does not eventuate, there remains a need to quantify the status of new industries introduced into the Parkhurst area. In addition, the distance of residential development from the Parkhurst industrial area also requires review.

Located close to the regional transport network, this precinct has the potential to mature into an effective modern industrial complex if appropriate measures are taken, along with careful management of future industrial growth.

This precinct is discussed further, with recommendations set out in **Section 4.2.1** of this document. **Figure 3** outlines the proposed land use pattern for this industrial precinct of the City.

4.1.2 KAWANA / PARK AVENUE

This area is well located to service the consumption needs of the district, particularly the area of north Rockhampton. The proximity of this industrial area to residential development dictates that impacts must be kept low and carefully controlled, in the ongoing management of this precinct.

Pockets of residential development separate the areas of Kawana and Park Avenue. **Figure 4a** indicates the zoning for this area also illustrating the residential zones that separate the industrial areas. The dominant zones in this precinct are “General”, “Light” and “Hazardous Industry” and “Special Purposes”. The North Coast railway line traverses both the Kawana and Park Avenue areas in this precinct.

⁴ The term “medium impact industry” is derived from terminology used by the Department of State Development – this does not relate to land use zoning. Refer to dictionary at Section 5.0.

⁵ The term “high impact industry” is derived from terminology used by the Department of State Development – this does not relate to land use zoning. Refer to dictionary at Section 5.0.

⁶ The term “low impact industry” is derived from terminology used by the Department of State Development – this does not relate to land use zoning. Refer to dictionary at Section 5.0.

This precinct is discussed further, with recommendations set out in **Section 4.2.2** of this document. **Figure 4** outlines the proposed land use pattern for this industrial precinct of the City.

4.1.3 LAKES CREEK

This industrial area is currently, zoned “Noxious or Offensive Industry”. **Figure 5a** indicates the zoning of the precinct at August 2001, under the Rockhampton Transitional Planning Scheme.

This area is unique to the City as it has a mix of industry, business, residential and civic (cemetery / crematorium) land uses and includes transport corridors, such as the rail corridor and the Rockhampton - Emu Park Road. In 1997 a Development Control Plan (DCP) was drafted for the Lakes Creek area, whilst, this DCP (as at July 2001) remains in draft form, it has been considered in the recommended strategies for Lakes Creek.

The central core of this precinct is industry, centred around the long-standing Lakes Creek meatworks, which is a valuable contributor to the economic well being of the City. Urban growth over many years, and increasing environmental policy, has required this industry to upgrade measures to mitigate impacts (for example odour from the rendering plant). The industry has been successful in this regard and has reduced odour via bio-filter technologies. Activities also linked to the abattoir include cattle holding paddocks. This area, located opposite the abattoir is not an ideal location for industry, in terms of its potential to conflict with other urban uses in the immediate vicinity.

In the vicinity of Dorly and Totteridge Streets a number of industries have established, such as Endrust, Boral and a boarding kennel. These uses may continue to operate in their current locations, however, support will be provided for their relocation out of the area. It is identified that in the short to medium term these uses will continue in the area, however, given the higher proportion of residential development proposed for the area, industry may identify it as more sustainable to relocate their activities.

In addition to industrial uses, there are some opportunities, in designated areas, for the existing residential uses to be able to expand. This precinct is discussed further and recommendations set out in **Section 4.2.3** of this document. **Figure 5** outlines the proposed land use pattern for this industrial precinct of the City.

4.1.4 STANLEY & LOWER EAST STREET

The area dissected by Stanley Street currently has a “Service Industry” zoning and is located between the City’s Central Business District and the Queensland Rail yards, in south Rockhampton. **Figure 6a** indicates the zoning of the precinct at August 2001, under the Rockhampton Transitional Planning Scheme. The area, which encompasses 12 City

blocks, is characterised with a mix of business and service industry uses, and residential development.

Historically, the location of this precinct serviced the traditional central business centre as a district employment base area. The advent of the adjacent railway complex, in Denison Street, cemented the existence of industrial activity in this location, and employment generation in south Rockhampton.

It is envisaged that this area will change to a more commercial based role and this should be reflected in the ongoing management of the precinct. This forecast is based on the pattern of industrial development that combines retail or wholesale activities on the same site as workshops. Such development would have a retail showroom addressing the street, with larger facilities for manufacturing and repair to the rear. This area is, however, susceptible to Fitzroy River flooding, with individual sites treated on a case-by-case basis for re-development.

The zoning of lands at Lower East Street, (including Wharf Street and the lower section of Quay Street) is currently “Hazardous Industry”. The land in this area is affected by flooding from the Fitzroy River. Considering this, the zoning of the area constitutes a nuisance and a hazard to the City. Planning today for industrial centres would not nominate such lands for these pursuits. Consequently, it is no longer considered acceptable for this type of hazardous industrial zoning to remain in this location. To reflect this the lower East Street locale was nominated as “Urban”, in the 1997 Rockhampton Strategic Plan.

This precinct is discussed further, with recommendations set out in **Section 4.2.4** of this document. **Figure 6** outlines the proposed land use pattern for this industrial precinct of the City.

4.1.5 PORT CURTIS (INVESTIGATION AREA)

A small amount of industry has established in this location. **Figure 7a** indicates the zoning of the precinct at August 2001 under the Rockhampton Transitional Planning Scheme, the majority of this land is zoned “Non-Urban B”. The land that is zoned for industry (being “Light Industry” and “General Industry”, respectively) on the zoning map is for:

- ✍ Clyde Constructions – (located in Jellicoe Street); and
- ✍ NQX freight systems – (located off Goss Street).

This area, which has not previously been recognised for industrial pursuits, has potential as the second service area for the south of the City, and the adjacent centre of Gracemere. This area has been nominated as an “Industrial investigation area”.

This land may meet consumption-based industry demands, however future investigations are required. The development of the area is currently constrained by flooding from the Fitzroy River.

The area is predominantly rural residential in character. The precinct is located within close proximity to:

✍ the proposed light metals precinct at Stanwell,
✍ the juncture of the Capricorn and Bruce Highways, and
✍ the proximity of the City's population,
lends itself as an area for investigation, for future industrial development.
This land for the life of the 2002 City Plan, (until 2010) is envisaged to
remain as currently developed.

This precinct is discussed further, with philosophies set out, in **Section 4.2.5** of this document. **Figure 7** outlines the proposed land use pattern for this industrial precinct of the City.

4.1.6 AIRPORT (INVESTIGATION AREA)

The airport precinct currently encompasses 99 allotments. The area is characterised by the City's Airport facilities, defence force uses (both Australian and Singapore), parklands, vacant un-developed lands, lands zoned General Industry, the Heritage listed St Aubins tearooms, and residential areas.

Figure 8a indicates the current zoning of the precinct. Large portions of the land in this investigation area are owned by Council, and are zoned "Non Urban B" or "Special Purposes". The balance of the land is zoned "Non Urban A", "Special Facilities", "General Industry", "Residential A" and "Public Open Space".

An industry base of airport related industrial activities has the potential to grow and expand in the vicinity of the Rockhampton airport. There is potential to utilise lands adjacent to the airport, (namely in the Canoona Road area), with development addressing ANEF contours and Fitzroy River flooding issues, amongst other matters.

In addition, in 2000-2001 defence industries have expanded in this area. Industries encouraged to develop in this precinct are to be associated with defence related activities.

This precinct is discussed further and philosophies set out in **Section 4.2.6** of this document. **Figure 8** outlines the proposed land use pattern for this industrial precinct of the City.

4.1.7 AN OVERVIEW

The industrial framework of Rockhampton is based on the regional industrial complex maintaining its existence at Parkhurst, with district level services operating at Kawana/Park Avenue precinct in north Rockhampton and the Stanley Street precinct in south Rockhampton. The Parkhurst industrial precinct is the premier industrial area within Rockhampton providing an opportunity of growth and economic prosperity.

The Kawana / Park Avenue precinct continues to service areas north of the City with opportunity to extend further northwards into Parkhurst.

Activity at Lakes Creek is predominantly confined to the meatworks operations, with some expansion or redevelopment opportunities on lands currently occupied by the Lakes Creek Meatworks. There is little enthusiasm for expansion of other industrial development in this location, which may be attributed to the lack of infrastructure, such as water.

The Stanley Street complex will continue to experience succession as commercial sales (related to service industry), expand close to the City centre. Industry in this general location is under threat of gradual succession by other uses, which are more critical to the operations of a City centre. The Queensland Rail amenities / yards, in the vicinity of Stanley Street (for the life of the findings of this report), are permanent facilities, but the “difficult to locate” industry (Hazardous Industry land uses) in lower East Street will come under increasing pressure to relocate to more appropriate locations. The City would benefit from the removal of these industrial activities due to the adverse effects of commercial and heavy industrial vehicles moving through the City’s business centre.

An alternative site for district industry in south Rockhampton exists at Port Curtis, subject to investigations finding the subject land suitable for industrial development. The future use of this area as an industrial precinct depends on investigations into the alleviation of flooding impacts on development in the area. In addition, measures can be implemented to mitigate the impacts of heavy vehicles by altering heavy vehicle routes.

A growing base of industry is developing around the regional airport on the outskirts of the City. An opportunity is presented due to the absence of urban development in the airport area. This increase in industrial development has the potential to expand with the growth of defence related activities in the region, and the active promotion of further value adding activity (for example, defence activities / uses) by the airport management.

There are no other areas identified as having potential for industry (on a major scale) in the City. Industrial development in adjoining centres, and in the region must be considered as fundamental elements of supply of industrial land for the City.

In summary, the establishment of industry as a regionally based development within Rockhampton City lies in the promotion of the Parkhurst precinct. The Gracemere-Stanwell corridor provides for heavier impact industrial activity, which is unsuited to the Parkhurst precinct.

4.2 PROPOSED INDUSTRIAL LAND NETWORK

The strategy has established that there is sufficient land to cater for industry in Rockhampton till the year 2020 and that there are no further

major sites within the City that are suitable for “general industry”⁷ development. Details in this regard are set out in **Section 7.3**.

The current network of industrial precincts within Rockhampton, along with the land available at nearby Gracemere-Stanwell, will cater for the full spectrum of industrial demand.

Each site within the precincts, however, will require modifications in order to compete with other district centres. Modifications and changes to be implemented include, but are not limited to:

- ✍ Modifying lot configurations, to the current structure. Some allotments are located on lands that are not conducive to industrial development.
- ✍ The provision of affordable, serviced sites is dependent on the willingness of property investors to fund the development of industrial estates given the inherent risks. If the private sector is to be involved, this process must be capable of returning a profit on their investment.

The industrial land market is divided into two major sectors:

1. Smaller lots up to about 2000 square meters to accommodate community-servicing industry closely associated with existing urban infrastructure thus involving limited up-front costs. Sales response is usually prompt from the local market place, and
 2. Larger lots for value adding and larger industries are generally segregated from urban development for amenity reasons resulting in heavier investment in providing infrastructure due to location and/or operational levels. Market response is usually much slower and dependent on attracting specific investors often from outside the immediate region.
- ✍ A change to the mode of operation of some activities is also recommended. This is to allow businesses to continue to operate into the future, in a manner that is ecologically sustainable and acceptable to the community demands of a modern City.
 - ✍ Consider mitigating impacts to other nearby non-industrial land uses.

The criteria set out in **Section 7.2** of this strategy will be used to analyse each precinct and define the direction it should follow into the future.

⁷ The term “General Industry” refers to the definition of this land use activity identified the Transtional Planning Scheme for Rockhampton City at April 2002. Refer to dictionary at Section 5.0.

4.2.1 PARKHURST PRECINCT

There is an almost continuous band of land zoned “General Industry” and “Light Industry” in the 1986 Town Plan zoning map, which forms a belt from Park Avenue, through Kawana to Parkhurst.

This is a mature regional Integrated Employment Area that has serviced the industrial needs of Rockhampton for many decades and is the dominant industry facility in the City and the Capricorn region.

Integrated Employment Areas (IEA) are defined as:

“Areas suitable for a wide range of industrial, warehouse, transport, storage and office uses together with limited commercial, retail and recreational uses that are developed to maintain compatibility between uses and to maintain the level of amenity determined as appropriate given the actual mixture of land uses proposed”.

This definition is derived from a Department of State Development paper entitled “*Best Planning Practices for Integrated Employment Areas*”.

On a regional perspective a broad mix of economic activity is needed to enhance economic diversity thus reducing economic vulnerability. The use of the IEA concept is designed to make available the range of serviced industrial land essential to attract investment for the fuller spectrum of economic activities.

The Parkhurst precinct is adopted as that sector of industrial activity between Farm Street in the south and William Palfrey Road along its northern boundary (refer to **Figure 3** for precinct map).

A study to prepare a land use strategy for the sectors north of Farm Street was carried out by consultants Kinhill Cameron McNamara in 1996. This document, co-sponsored by the then State Department of Tourism, Small Business and Industry, has not been proceeded with. The economic environment of the region has altered significantly since that study was undertaken and it was formulated on criteria which have, or will in the short term, change the projected functions of the Parkhurst IEA. It does, however, contain much basic information that is useful in this current analysis.

4.2.1.1 Physical Suitability – Parkhurst precinct

The precinct consists of the flat upper terrace of the Fitzroy flood plain except for a steep ridge of slopes greater than 7% that traverses its north western sector. The steeper sectors cannot be economically developed to support industrial development, but may serve as useful buffers against loss of amenity to abutting land uses.

A large watercourse, Limestone Creek flows south westerly across the central area of the precinct, feeding the major catchment, with a smaller catchment, Splitters Creek, to the south. Both these watercourses

enter the Fitzroy River upstream of the Barrage, the potable water storage for the City.

The site does not flood except for some backup from the major Fitzroy flood event into low lying areas around Splitters Creek or some very minor local flooding from major storm events.

The soils of the precinct will support industrial structures, except for some lower alluvial soils that may require additional footings or foundations that can readily be accommodated in detailed engineering design.

The bulk of the precinct is free of significant physical constraints, such as steep slopes. Those limited areas where impediments occur are designated as Non Industry Use and Industry Buffer Green Space, providing a buffer between land use activities.

4.2.1.2 Environmental Sustainability - Parkhurst precinct

All that remains is remnant riparian vegetation along the banks of Limestone Creek and scattered eucalypt forest regrowth, including the steeper ridges, in the northern sectors.

The question of water quality, particularly the potential for pollutants to enter the City's water storage, should be subject to a detailed analysis that is outside the scope of this strategy. Industry to date has not caused any reported problems, but future proposals for new industry should be closely monitored in this regard. A natural landscape buffer should be enhanced and maintained along the banks of the main drainage conduit, Limestone Creek, serving the dual purpose of conservation and regeneration of the riparian vegetation.

It would appear that there is little value in the natural environment over the greater part of the precinct that would constitute a constraint to industrial development, with the exception of the items mentioned above, being Limestone Creek and steep ridges with slopes greater than 7%.

There are also impacts on the built environment that will be discussed in detail when considering land use compatibility.

4.2.1.3 Cost Effectiveness for Infrastructure – Parkhurst precinct

Infrastructure supporting industrial activity is currently available but the ongoing development of the estate will necessitate some expansion of the current level of service. There are sections of the precinct, which are without the appropriate services to sites, and in this regard land owners / developers will need to make the appropriate contributions to receive services suited to industrial development.

The Parkhurst precinct is well serviced with cost effective infrastructure but significant expenditure will be required to augment the sewerage

trunk mains and the road networks to support its on going expansion through attracting investment.

Water - Parkhurst precinct

There is adequate capacity in the City's water storage system to maintain a water supply to the area if all properties were developed (this is dependent however on the type of industry that locates there).

In relation to water availability, most sites have services available to them. The status of the infrastructure underground servicing the precinct range from mains with a size of 20mm, 40mm and 60mm. Water availability however, must also include fire-fighting capacity of water services.

The adopted minimum requirement from Fitzroy River Water for fire fighting capability is 30 litres / second, although this capacity is not acceptable for all businesses. Some multinational corporations insist on up to five times this capacity for fire fighting purposes. Council is to be cognisant of the fire fighting requirements of multinational companies, identifying that they are higher than our requirements, which may limit the capacity of Parkhurst in attracting these companies.

Currently at Parkhurst there are generally three “pockets” which currently would meet the minimum requirements for fire fighting. These are described as:

- ✍ The land fronting Bush Crescent;
- ✍ The industrial land fronting Farm Street; and
- ✍ The land in Featherstone Street.

In addition there is another area that has the infrastructure readily available to it, and needs hydrants to be placed to each property in order for capacities to be met. This area is:

- ✍ Industrial land fronting the Bruce Highway, immediately north of the Featherstone Street subdivision, to William Palfrey Road.

Capital expenditure on the provision of water associated with new industry should be readily recoverable at development application stage, at a cost affordable to industry.

In addition, high water consuming industries are likely to locate at the Gracemere-Stanwell light metals corridor, south south west of Parkhurst.

Sewerage - Parkhurst precinct

Reticulated sewerage is currently available within the precinct, with treatment at the North Rockhampton treatment works.

Major expansion at the industrial estate, accompanied by further residential development in this sewage catchment area, will necessitate

the upgrading of the trunk main from Parkhurst to the treatment works. This is a multimillion-dollar exercise and Council will need to develop policies to manage this expenditure whilst not impeding industry's capacity to expand in the precinct. Council may develop an Infrastructure Charges Plan to adequately assist in the upgrading of this and many other capital works projects.

E n e r g y - Parkhurst precinct

Energy in the form of electricity supply, gas and liquid fuels are readily available in this precinct.

R o a d s - Parkhurst precinct

The precinct is built around a network of arterial and major collector roads providing access to, from and within the estate. (There were no traffic statistics available to assist in this section of the strategy). It is recognised however, that the existing road hierarchy allows heavy vehicles to penetrate residential areas, and does not restrict movements to major collectors within industrial areas.

In the area north of Limestone Creek, those industries generating commercial and industrial traffic, (for example, semi trailers and b-doubles) should travel the most direct route to the national highway at the eastern boundary of the estate. This configuration would also allow the traffic to disperse regionally, to elsewhere in the City, or other areas in the region. Some of the lower impact traffic could also follow this desired line.

This outlet is via Boundary Road, an internal road well below the construction standards normally accepted elsewhere for these purposes.

Boundary Road intersects the Bruce Highway close to its crossing of Limestone Creek and some 400 metres to the north of the major controlled junction of the Bruce Highway and the Yeppoon Road. This intersection (Boundary Road/Bruce Highway) is not suitable to handle the increased traffic that will be generated in the northern sector of the precinct as industry expands over time.

A significant amount of traffic is drawn to the major internal collector, Alexandra Street, on the western extremity. This traffic makes its way south along Alexandra Street to eventually link up with Moores Creek Road and hence disperses to elsewhere in the City or beyond. It is important to note that this section of Alexandra Street dissects land used for residential purposes, thus heavy vehicles are passing through residential areas, which would increase with further development in the Parkhurst precinct.

Moores Creek Road serves as a portion of the national highway. Some of this traffic connects to the national highway by diverting easterly along Farm Street. Wade Street attracts the majority of the traffic movement from within the estate involving the western outlet.

The internal roads within the estate are substandard and the road pattern is not conducive to efficient traffic flows, especially for large vehicles.

Access from within the estate to William Palfrey Road, abutting the northern boundary of the estate, should be restricted to an emergency evacuation route only.

The industrial sector south of Limestone Creek generates lighter load traffic from consumption serving and distribution type industry with its major movements towards the City and its environs. These current patterns of transport routes are south along Alexandra Street to Farm Street and then by the Hinchliff Street diversion (caused by the lack of a rail crossing at Alexandra Street) eventually to Moores Creek Road. Alternatively, current traffic flows easterly along Farm Street to Yaamba Road. These routes are through built up residential and urban areas and cause undue amenity loss to the residential community that will be discussed in the later section on land use compatibility.

The Farm Street connection appears to have no alternative. Council's Work Services Department has considered building an overhead crossing of the railway on the Alexandra Street – Farm Street alignment, however, due to the high cost of this infrastructure such a realignment is not anticipated to proceed. This matter, along with others may be tabled at the Capricornia Integrated Regional Transport Plan (CIRTP), which is set to continue from August 2001-2003. Thus allowing traffic to flow unobstructed through to Moores Creek Road and avoiding a number of difficult intersections on the current alternate route. This, although focussing on the traffic flow, should also consider the residential amenity in the areas along Alexandra Street.

Should this be adopted, traffic flowing in and out of the City from the Capricorn Coast would be tempted to avail itself of Alexandra Street and use the Boundary Road realignment as an alternative cross City route to the City centre. These matters should also be referred to the Capricornia Integrated Regional Transport Plan. There is a critical need to upgrade the traffic movements within the area and the outlets to the City and regional road networks. In order to achieve this result, the following works are recommended:

- ✍ Change the eastern outlet to the Parkhurst precinct, and change the access from the northern side of Limestone Creek, to the south to coincide with the Yeppoon Road junction. This strategy results in one controlled intersection handling the majority of heavy traffic.
- ✍ Create a major “collector road” through the precinct from the Yeppoon intersection through the northern corner of the Dreamtime complex, across Limestone Creek, meeting Boundary Road east of its crossing with the North Coast railway line. The collector would then travel along Boundary Road to its intersection with McLaughlin Street, then deviating south west, crossing Bush Crescent to Wade Street and onto a junction with Alexandra Street (See **Figure 3**).

- ✍ Create a controlled intersection at Wade and Alexandra Streets.
- ✍ Create a major intersection at the junction of McLaughlin Street and Boundary Road.
- ✍ Close all other outlets to Alexandra Street, especially the dangerous Birkbeck Drive intersection.
- ✍ Re-visit the heavy vehicle haulage / B-Double routes for the City, especially in the industrial area of Parkhurst. Apart from the obvious link / route from the Parkhurst area to Kawana / Park Avenue, there is also concern that the routes pass a “school precinct”. This area, unlike the “vehicle route” pass the Rockhampton High School site (on the south of the City), does not have time restrictions for vehicle movements. Time restrictions should be adhered, or the vehicle route linking Farm Street to Yaamba Road cancelled.
- ✍ Refer the issues to the current Capricornia Integrated Regional Transport Plan (CIRTP) for advice:

It is recognised that this approach to traffic management at Parkhurst would create a major change to the City's traffic flows. The matter requires expert engineering and transport management. Whatever the technical outcome these matters must be addressed if the Parkhurst precinct is to operate effectively as a regional industrial precinct.

The basis of an efficient road transport infrastructure exists for the Parkhurst precinct but substantial works need to be done, both internally and externally, to create an efficient and effective network to support existing industry and attract further investment. The roadworks and drainage network internal to the estate warrants upgrading to standards commensurate with the demands of modern industry.

R a i l - Parkhurst precinct

The North Coast railway line severs the estate from south to north with loading facilities at Farm Street in the south and at QMAG north of Limestone Creek. Railways have substantial land holdings abutting the railway, where intermodal exchange, track laying depots or direct loading facilities could be accommodated in the future, if needed.

4.2.1.4 Business Efficiency - Parkhurst precinct

Parkhurst is an established core of diversified regional and district servicing industry, offering opportunity for new ventures to form linkages and synergies with existing business. The continued growth of industries in the region will extend these opportunities as new industries are attracted into the Rockhampton dominated economy.

The stock of land available for new general industry in Rockhampton is almost exclusively available at Parkhurst.

As the City's population grows there will be an increasing demand for land to support the parallel growth of consumption-based, City servicing industry that needs to be close to its market place, for example, the City centre and its suburbs.

Industrial activities, which are high impact, and require superior access to regional transport networks, less conflict with other established land uses and activities, and linkages and synergies with new industrial ventures may chose to locate in areas other than Parkhurst.

Some regional servicing industry will continue to be attracted to Parkhurst for special reasons such as linkage and synergy with its own established businesses or direct access to the extended frontage to the North Coast railway line.

The pattern of development should recognise that there will be continued, but reduced, demands for some regional scale industry in locations where the opportunity for linkage and synergy with existing business is conveniently available.

Higher impact industries should, however, be discouraged, to avoid unmanageable adverse impacts on the community's amenity. Acceptable medium impact industries should be restricted to the core of the Parkhurst industrial precinct.

Sufficient lands should be set aside to provide for the future demands of district industry, servicing north Rockhampton, where the major part of urban expansion will occur.

A recommended pattern of development is shown in **Figure 3**.

There are some established industries with potential to impact upon community amenity, for example, Queensland Magnesium and Pacific Lime developed at Parkhurst in good faith when it was the only facility available for this type of industry. These special industries are, however, valuable to the local economy and have too much capital investment to warrant relocation and must be managed in the planning process in a manner that ensures their continued sustainable operation.

Ample stocks of land are available to permit choice of lot sizes to service the full range of industrial activity.

In addition to price, as a factor to move to the City, the stability of the population is also a high priority for many small businesses. Data received from independent valuers – Sheehan & Sheehan, and John Logan & Associates indicated that the price of industrial lands in Rockhampton and Gladstone are comparable, whereas the price in Mackay tends to be more expensive. **Section 7.5** discusses incentives and marketing mechanisms, which may be appropriate in the City to attract industries.

Higher standards of development will increase market price for land. The increased level of investment that should accompany the new wave of development emerging in the region will bring new industry that will demand and be prepared to pay for the higher standards.

The Rockhampton City Council has established an industrial estate at Werribee Street, off Alexandra Street, with performance based development criteria for future businesses within the estate. Sales have not been buoyant, but this has been due mainly to the availability of “brown sites⁸” closer to the City market and its restricted exposure to the City's network of private real estate outlets. This estate is a good precedent for the required uplift in development standards and will prosper as demand increases with population growth.

Investors require certainty in the development environment in which new ventures are proposed. This includes confidence in the standard and type of development that they will operate in close association with and protection from other activities that may not be compatible with their own.

To ensure orderly development, at a standard needed to attract investment, the precinct should be subject to a rigorous detailed planning process that clearly specifies the land use intentions for the various precincts set aside for specific levels of industrial activity and defines development patterns and standards.

4.2.1.5 Access to Markets - Parkhurst precinct

The major portion of the City is within ten kilometres of this precinct, giving excellent market access for its consumption-based products.

The North Coast railway line severs the Parkhurst industrial precinct that abuts the national highway on its eastern boundary, giving ready access to transport to interregional and interstate markets. An intermodal exchange facility at the internal railhead would enhance market access.

Restricted port facilities are available close by at Port Alma. The major Port of Gladstone is approximately one hour's travel away, and the Port of Brisbane is approximately 700 kilometres from Rockhampton, giving ready access to the international market place for the precinct's outputs.

The Rockhampton airport is approximately fifteen (15) kilometres from the Parkhurst precinct, providing an alternative but quick access to international markets.

The precinct is well located to access local and external markets for its outputs.

⁸ “Brown sites” for the purposes of this strategy are sites which have facilities or structures on them, but appear to be abandoned/not in use at the time land use studies were done – March –May 2001. Refer to definitions at Section 5.0.

4.2.1.6 Convenient for Workforce - Parkhurst precinct

It is envisaged that the workforce will be sourced from Rockhampton City, the Capricorn Coast, City fringe developments in Livingstone Shire, Gracemere, Bouldercombe and smaller rural settlements in Fitzroy Shire and Mt Morgan.

The City's internal workforce has a maximum journey to work of ten kilometres with the larger proportion within five kilometres. Most travel is by private vehicle although a bus service is available to parts of the estate.

The Capricorn Coast workforce has a forty-kilometre journey to work. Most travel by private vehicle, but there is a bus service along the Yeppoon Road.

Access for Fitzroy Shire based residents is through the City, but is within travelling times that are acceptable in other centres, and regional Queensland.

Adequate skills to service the entrenched industry are available in the current workforce, except for some specialist occupations that must be periodically sourced from outside the region.

The local educational network should monitor the ongoing situation and offer education and training that provides a relevant workforce available to local industry.

The precinct is well located to provide convenient access to an available workforce.

4.2.1.7 Land Use Compatibility - Parkhurst precinct

The Parkhurst industrial precinct is recognised by the community as an important source of employment and wealth generation. The design of residential areas in proximity to industrial areas should be designed so as not to prejudice the ongoing industrial operations.

Most of the concerns arise from the spread of residential development over time into areas that perhaps in “theory” should have been preserved as buffers to protect industry from inconveniencing other urban activities with which it shares the City's space. These cases of reduced “environmental amenity” involve the direct combination of residential and industrial development with little separation distances or buffers.

Figure 3 illustrates the areas recommended to be “Industry Buffer Green Space”.

The location of the Parkhurst industrial precinct adjacent the Bruce Highway creates the need for a high standard of development fronting the national highway. In addition to site design, signage, landscaping, the

nature of new industries and the need for existing industries to meet planning scheme requirements, should be scrutinised.

The factors likely to be of concern to communities' adjacent large industrial areas include:

No i s e - Parkhurst precinct

Amenity loss from noise arises principally from:

- ✍ internal industrial operations, and
- ✍ from traffic movements bringing materials in and products out of the precinct.

Heavy impact noises direct from industry are limited to those operations adjacent to McLaughlin Street north of Limestone Creek (this includes Queensland Magnesium, and other engineering operations in the Parkhurst Estate). Most residential areas are at least one and a half kilometres away except for the residential enclave centred on Carlton Street. The nearest houses in Peppermint Drive are only 500 metres away. Little can be done to alleviate this situation other than tree planting as a limited sound shield along the banks of Limestone Creek in areas not suitable for industrial development. **Figure 3** illustrates the areas recommended to be "Industry Buffer Green Space".

The industry south of Limestone Creek is of much lower impact and does not generate as high levels of noise. Separation distance from housing along Alexandra, Farm and McLaughlin Streets is, however, only twenty metres, which in these locations is the width of the road reserve. Little can be done from a spatial perspective to alleviate this situation.

There is an existing interface between industrial and residential development, and, in the short term, residential land uses in the immediate area, can use building design parameters to mitigate impacts of non-residential uses. It is recommended the City Plan highlight measures available to address this existing interface. These measures include, but are not limited to solid sound barriers, double-glazing of windows, the installation of air-conditioners, and vegetation buffers should be introduced where practicable.

Future urban development, in the vicinity of the Parkhurst precinct, is likely to prejudice not only the opportunity to introduce new industry, but also the continued operation of existing industry, and should therefore be avoided.

T r a f f i c - Parkhurst precinct

Traffic generation along Alexandra, Farm and McLaughlin Streets generates noise and creates safety hazards to both vehicular and pedestrian traffic from abutting residential areas.

There is a need to improve the design of traffic flows to move traffic to and from the precinct, as efficiently and effectively as possible, to

minimise noise and traffic hazards. This problem should be referred to the current Capricornia Integrated Regional Transport Plan.

One of the major outlets from the Parkhurst industrial precinct to the Bruce Highway/Yaamba Road, is Farm Street where the Glenmore High and Primary School complex occupies a corner of the intersection. The main entrance to the school intermingles directly with industrial traffic that travels along Farm Street. These existing access arrangements to the school should be redesigned to provide alternative or improved loading arrangements, preferably off Farm Street.

It is recommended that the Capricornia Integrated Regional Transport Plan should re-visit the heavy vehicle haulage / B-Double routes for the City, especially in the industrial area of Parkhurst. Apart from the obvious link / route from the Parkhurst area to Kawana / Park Avenue, there is also concern that the routes pass a “school precinct”. This area, unlike the “vehicle route” pass the Rockhampton High School site (on the south of the City), does not have time restrictions for vehicle movements. Time restrictions should be adhered to, or the vehicle route linking Farm Street to Yaamba Road cancelled.

The provision of efficient alternative access through the northern segment of the estate as discussed in **Section 4.2.1.3** would assist in drawing a proportion of the traffic away from the residential areas. Similarly, the construction of the rail crossing at Alexandra Street would assist the efficiency of the local traffic network.

Emissions - Parkhurst precinct

On occasion, emissions generated from the operations of the Pacific Lime and QMAG plants, exhibit characteristics that create concern, to adjacent residential properties. These facilities operate within the Environmental Protection Agency guidelines, but the proprietors should be encouraged to ensure that the emissions continue to be minimised, to financially viable, but community acceptable limits.

General Built Environment - Parkhurst precinct

Industrial development has many ancillary adverse effects on residential areas, such as excess lighting and visual degradation that must be addressed in building and operational design standards. Direct intervention by the Environmental Protection Agency, and Council (where appropriate) will be necessary in order to mediate disputes arising from existing circumstances. Mediation is a method of working through impacts associated with site design, however in the new City Plan it is envisaged that there will be measures implemented to treat the cause, not the effect.

Natural Environment - Parkhurst precinct

In order for industrial development to operate in close proximity to residential activities, and in the natural environment of Parkhurst,

parameters need to be set in the new City Plan, which addresses the natural features of the land. For example:

- ✍ Parameters that recognise when the scale of a proposed activity, is not appropriate within the City, and an alternate “greenfield site” needs to be identified. For example the advent of Gracemere-Stanwell Corridor provides the opportunity for Council to avoid further industry that will have adverse impacts on the community, by encouraging hazardous, noxious or offensive industry to locate into the Corridor.
- ✍ Parameters requiring natural buffering to certain land uses for dust control, and the retention where possible of existing mature trees.

4.2.1.8 Conclusions - Parkhurst precinct

- ✍ The role of Parkhurst as a regional Integrated Employment Area is recognised in the regional economy and, will be complimented with proposed new industrial development opportunities within the Gracemere-Stanwell Corridor.
- ✍ The fundamental change in the Parkhurst industrial precinct will be from an all-encompassing role to that of primarily ensuring an ongoing supply of space to accommodate consumption service industry for the City, given the unavailability of viable alternative locations.
- ✍ The relationship between the Parkhurst industrial precinct and other urban activities, especially residential development, limits its capacity to accommodate the hazardous, noxious or offensive industry, without alienating the community that it serves.
- ✍ Green areas and natural buffers have been identified for the Parkhurst industrial precinct. In addition to ridges and creeks, roads are nominated as areas to be treated as buffers to nearby non-industrial land uses.
- ✍ A solution has evolved in the emergence of the Gracemere-Stanwell Corridor development that it will readily absorb industry that is no longer acceptable at Parkhurst.
- ✍ The competitiveness of the estate, to continue to attract investment, will depend on a culture change whereby development and operational standards are upgraded to be commensurate with the needs of modern industry.
- ✍ There is adequate space available for development into the foreseeable future and the precinct should continue to flourish as a focus of Rockhampton's economic development.

4.2.1.9 Recommendations - Parkhurst precinct

- ✍ Rockhampton City Council recognises that the future role of industrial development within the City will be mainly consumption based, although opportunity exists to continue to attract a limited amount of medium impact industry to the core areas of the Parkhurst precinct.
- ✍ Rockhampton City Council recognises that modern industries require a high standard of operating environments. In addition, development standards must be kept at a level commensurate with their dictates. This may involve some remedial action in developed areas that do not meet modern standards.
- ✍ Rockhampton City Council enters into discussion with the State Government in relation to the future management of the Parkhurst estate.

Detailed Local Area and Management Plans should be prepared for the Parkhurst Precinct to direct and manage the future development and growth of Rockhampton's principal industrial area.

The land use pattern shown in **Figure 3** is recommended for the lands zoned General Industry in the 1986 Town Planning Scheme. It is proposed that the Parkhurst industrial precinct is divided into six (6) areas, namely:

1. Low Impact Industry;
2. Medium Impact Industry;
3. Special Industry;
4. Industry Buffer Green Space;
5. Non Industry Use;
6. Special Facility.
- 7.

Low Impact Industry⁹ - Parkhurst precinct

Uses encouraged in this area, are those that do not cause inconvenience or disruption to the amenity and/or livability, beyond the tolerance levels, of its host community. Generally these areas are on the fringe or adjacent non-industrial land uses. The impact of uses in this area could be measured in terms of traffic, risks, hazards, noise, emissions, odours, visual appeal, wastes generated, lighting and effects on the natural environment.

Those lands nominated north of Limestone Creek, (and adjacent Alexandra Street) are on the perimeters of larger impact industrial activity, including lands fronting the Bruce Highway.

⁹ The term "low impact industry" is derived from terminology used by the Department of State Development – this does not relate to land use zoning. Refer to definition at Section 5.0.

It is also recommended that all lands south of Limestone Creek, are to be low impact industry. This is to alleviate the loss of amenity caused by the mix of industry and residences in this area, and to provide space for the northerly expansion of consumption based industry.

Existing industrial uses that are not “low impact” in their nature, should be allowed to remain for the term of the viability of the use. However, the replacement and redevelopment of sites should be restricted to low impact business.

The areas at the north east of the estate, located between Slade and Monier Streets occupied by older industrial activity, should be persuaded to relocate at the appropriate time, to the medium impact areas, if their impacts are found to be unmanageable in terms of the low impact standards. The incentives, which may be given to promote relocation, could be linked to the scale of development, and the need to comply with site design requirements (for example, no dispensations awarded). Incentives are set out in **Section 3.5** with marketing campaigns addressed in **Section 7.5**.

Medium Impact Industry¹⁰ - Parkhurst precinct

Four (4) distinct nodes of “medium-impact industry” have been identified for the Parkhurst industrial area. In these areas industry should only be permitted in locations that have sufficient separation distances, physical buffers or other control mechanisms to prevent unacceptable levels of amenity loss, and adverse impacts on the host community.

The area of Wade Street and Bush Crescent forms the bulk of the “medium-impact industry” activity in the precinct. Land at Featherstone Street adjacent the Bruce Highway is also nominated for future “medium-impact industry”.

The majority of the land at Featherstone Street is already developed with several “brown sites¹¹” in existence. The majority of Bush Crescent remains undeveloped.

It is envisaged that the areas nominated in **Figure 3** will contain the “medium-impact industry” for Parkhurst. Located adjacent the spine of “medium-impact industry”, which is off Boundary Street, parallel to the railway line is an expanse of this type of industry. It is envisaged that the extension of this into the “Special Industry” node, will not be encouraged. This is further set out below.

¹⁰ The term “mediumimpact industry” is derived from terminology used by the Department of State Development – this does not relate to land use zoning. Refer to definition at Section 5.0.

¹¹ “Brown sites” for the purposes of this strategy are sites which have facilities or structures on them, but appear to be abandoned/not in use at the time land use studies were done – March –May 2001. Refer to definition at Section 5.0.

Allowance has been for a central core of this industry level separated from the community by the encompassing lower impact areas. In the event that these areas are not taken up within the life of the 2010 City Plan, the lower impact industries can be permitted to progressively occupy them inwardly from the fringes.

Special Industry - Parkhurst precinct

Industries that have special characteristics in terms of community values, long establishment, or the availability of infrastructure and require consideration outside of the normal criteria are defined as Special Industry and are divided into 4 distinct nodes. These nodes are Queensland Magnesium (QMAG), Pacific Lime, Glenmore State High and Primary Schools, and a small site in McLaughlin Street between the Glenmore State Primary School and Stenlake Park. With Queensland Magnesium and Pacific Lime in existence, there exists a spine linking the two, which has development opportunities.

Queensland Magnesium (QMAG) should be under no threat to relocate, however its performance maintained through regular monitoring to ensure that all precautions have been taken to minimise any potential adverse impacts on the community. This site is likely to be used for this activity beyond the life of the 2010 City Plan. Relocation is not currently an option for the QMAG operations.

Pacific Lime is in a similar position to QMAG, but is located adjacent the Bruce Highway, and opposite the residential community of Parkhurst Gardens. Once again, continued monitoring of performance will ensure that impacts are mitigated. In the event Pacific Lime cease operations on site, it is recommended the site revert to “low impact industry” activities. The Pacific Lime site is large enough to allow for an attractive and profitable “low impact industry” estate in the future. The large earth mound and plant buffer currently provided to Yaamba Road is encouraged to remain after any redevelopment of the site, ensuring a buffer between industrial and residential activities, across Yaamba Road. Within the proposed “Special Industry” precinct, the land which forms a spine from QMAG to Pacific Lime has direct access to the North Coast railway line, offering special opportunities for industry undertakings that can take advantage of this situation. These lands have been included in the “Special Industry” area due to the location adjacent the Railway line facility. Any proposed use in this node should be “medium impact” or less. It is recommended to set this land aside, in a designation that has sufficient flexibility to allow the negotiation of any special needs of a candidate industry, for all or part of this site.

Figure 3 within the strategy indicates land adjacent the Glenmore State Primary School at McLaughlin Street as “Special Industry”, this reflects the status of the use in that it stands alone. In accordance with land use zoning at the time the strategy was compiled, this property is zoned “Light Industry”. However, in considering the location and use of the premises, it is recommended that the land is nominated as “non-industrial”, to reflect the preferred use of the land for the life of the 2010 City Plan for the City.

Upon the use of the ceasing to operate industrial activities it should be converted to parkland or a use associated with the adjoining education facility. Its use as a general industry (the use includes truck smash repairs), is not conducive in the medium to long term sustainability to retaining amenity in nearby residential areas.

Individual agreements should be entered into with each of the special industries, to facilitate their ongoing current activities and to designate the desired use of the sites, in the future, if the current operators cease their activities.

Industry Buffer Green Space - Parkhurst precinct

The ridges at the north of the Parkhurst industrial precinct are too steep for economically viable industrial use. These wooded ridges also contain remnant natural vegetation. In this case the area is an ideal “buffer” to mitigate impacts from the industrial areas at Parkhurst. Nominating this land as “not suitable for industrial use”, will facilitate the possibility of Urban use of the land north of William Palfrey Road. There are 5 other nodes nominated for “Industry Buffer Green Space”.

All of these areas should be maintained in their natural vegetative state, and new planting programs commenced where appropriate. There are up to 30 properties nominated for this future use, and require negotiation with the relevant owners. A program should be developed where the State and Local Government adopt these principles in order to promote growth of the Parkhurst industrial precinct whilst maintaining the amenity of residential and possible residential growth areas in the vicinity of the industrial area.

It is imperative that these “buffer” areas clearly identify that their primary purpose is to buffer the Parkhurst industrial areas, not to buffer non-industrial uses. Activities that would be adversely impacted on by industry, should be protected, by preventing industries to establish within the buffers.

Similarly, the banks and environs of Limestone Creek and Splitters Creek have been included in this designation. This is required to separate residential areas in the vicinity of Peppermint Drive from industrial land uses nearby.

Non Industrial Land - Parkhurst precinct

The land occupying the north-western sector of the estate is severed from existing industrial development, by steep ridges, which due to their slope are not suitable for industry, thus they are recommended as “Industry Buffer Green Space”.

This portion of land has had an industrial zoning in the past. Access to this node is only accessible from the extension to McLaughlin Street, or William Palfrey Road. This land has direct exposure to land to the north, with non-industrial uses viewed, as more appropriate.

It is recommended that this land is not suitable for industrial development, as it is isolated from the remainder of the industrial activity and would be uneconomical to service with infrastructure.

Special Facility - Parkhurst precinct

The Dreamtime Tourist Facility, Motel and Conference Centre is not included within the boundary of the Parkhurst industrial precinct, however, it is indicated on the map and discussed below. This is due to the sites locational relationship to the industrial lands at Parkhurst, and the proximity to the controlled intersection at the Yeppoon Road, and the Bruce Highway.

The remaining three (3) properties that are nominated as “Special Facility” in **Figure 3**, comprise:

- ✍ A water reservoir (off Birkbeck Drive);
- ✍ Rockhampton City Council parks reserve (adjacent the Dreamtime Complex); and
- ✍ Undeveloped land owned by the Department of Business and Industry (also adjacent the Dreamtime Complex).

Adjacent the existing Dreamtime complex, in accordance with **Figure 3**, there is a new access route proposed into the Parkhurst industrial estate off the Bruce Highway. The Department of Business and Industry, and Rockhampton City Council own these lands, which have been included in the “Special Facility” node with the Dreamtime Centre.

Tenure issues and matters relating to strategic vision for lands in this area need to be confirmed with all parties to make the proposal proceed, provided it is feasible and investigations nominate this as the preferred access route. The parties, who need to reach agreement would include, but are not limited to the following:

- ✍ Dreamtime Cultural Centre Pty Ltd;
- ✍ Rockhampton City Council;
- ✍ Department of Main Roads;
- ✍ Department of Emergency Services; and
- ✍ Department of State Development.

4.2.2 KAWANA / PARK AVENUE PRECINCT

This precinct consists of a series of three nodes of “low to medium impact industry” located:

1. In the general area bounded by Farm Street, Richardson Road, Hollingsworth Street, and Alexandra Street. Businesses here include Dobinsons Springs, Brahmans, Rothery’s Bus Depot, fuel depots, and timber yards.
2. In the general area bounded by Richardson Road, Alexandra Street, Thomasson Street and to the immediate west of the North Coast railway line. Businesses in this area include the premises for the JM

Kelly Group, Ansett Wridgeways, Department of Main Roads Depot and Workshop facilities, a former bakery premises for the region, and a gymnasium / fitness premises.

3. In the general area bounded by Park Street, Glenmore Road, Moores Creek Road, and lands immediately flanking Knight Street. Businesses in this area include, a national bakery premise for the region, the Rockhampton City Council depot and workshop premises, Queensland Rail Depot and Workshop premises, numerous service industry activities, and Tubemakers Metal Land.

These three (3) areas are a mix of Light, General, Hazardous Industry and Special Purposes zones (1986 Town Planning Scheme).

4.2.2.1 Physical Suitability – Kawana/Park Avenue Precinct

The area is flat and flood free, occupying portions of the higher terrace of the Fitzroy River flood plain. Geotechnical problems for structures have not been evident.

4.2.2.2 Environmental Sustainability - Kawana/Park Avenue Precinct

This area has been completely built out and the natural environment replaced. There is conflict with the built environment that will be discussed in **Section 4.2.2.7**. Wastes are contained within the City's sewerage system.

4.2.2.3 Cost Effectiveness for Infrastructure - Kawana/Park Avenue Precinct

The industrial enclaves are fully supplied with the necessary infrastructure servicing the suburbs of Kawana and Park Avenue.

R o a d s - Kawana/Park Avenue Precinct

✍ B-double routes – Due to the proximity of industrial developments to residential areas, and the number of heavy vehicle routes in the immediate area travelling through these residential areas there is a conflict of uses and activities. In this regard the approved map of B-double routes with the Department of Main Roads needs to be reviewed. This exercise could be addressed with the Capricornia Integrated Regional Transport Plan.

✍ Farm Street is the major entrance to the Glenmore State High School, Primary School and pre-school, and is also a nominated heavy vehicle route. This special use, along with other uses in the Kawana / Park Avenue area need to be highlighted and a suggested option of reducing the conflict with road users of Farm Street is to impose restricted hours on heavy vehicle routes. Special consideration should be suggested for restricting heavy hours during the daylight hours along Farm Street.

- ✍ It would be advisable to concentrate the eastward movements of heavy vehicle traffic to the national highway. As identified above, one route is via Farm Street, however, to maintain safety and reduce potential conflicts of road users around the school it is proposed to restrict the hours of these movements. On this basis, Richardson Road may form an alternative access point to the national highway in those hours that Farm Street is unavailable. This rationalisation will see Richardson Road used as the access route in day light hours and Farm Street at night, when the school is not in use.
- ✍ Alexandra Street is in the centre of the 2 northern nodes (refer to **Figure 4**), and is nominated as the preferred route for B-double vehicles to service this industrial precinct of the City. In addition to this, there is a need to quantify a suitable heavy route to service the area centred on Dooley Street.
- ✍ Collector roads servicing the area are Farm Street, Richardson Road, Hollingsworth Street and Alexandra Street. With this infrastructure in place, it is important to investigate the compatibility of industrial traffic utilising local roads. The construction of a rail crossing at Alexandra Street would allow southerly traffic to flow directly to Moores Creek Road (via Alexandra Street) and decrease industrial traffic in Richardson Road and Farm Street, through residential areas.

R a i l - Kawana/Park Avenue Precinct

There is a chicane of the traffic at the corner of Farm Street and Alexandra / Hinchliff Streets that is affected by a rail crossing. This situation has led to large amounts of traffic at the “T” intersection of these roads. One of the proposed solutions is to create a controlled traffic intersection.

In addition, the construction of a rail crossing at Alexandra Street would allow southerly traffic to flow directly to Moores Creek Road, along Alexandra Street, and decrease industrial traffic in Richardson Road and Farm Street, travelling past schools through residential areas.

S e w e r a g e - Kawana/Park Avenue Precinct

Sewerage services are available with treatment at the north Rockhampton works.

There is sufficient capacity in the system to cater for the overall development of this precinct itself, but the catchment also includes areas of potential industrial and residential expansion at Parkhurst. Should this development materialise, the current capacity of the system will be exceeded and further development may, at some point, be dependent on the major upgrading referred to in relation to the Parkhurst precinct on page 24.

Water - Kawana/Park Avenue Precinct

In relation to water availability, most sites have services available to them, however, water availability must also consider fire-fighting ability. The adopted minimum requirement from Fitzroy River Water for fire fighting capability is 30 litres / second, although this capacity is not acceptable for all businesses. Some multinational corporations insist on up to five times this capacity for fire fighting purposes. Council is to be cognisant of the fire fighting requirements of multinational companies, identifying that they are higher than our requirements, which may limit the capacity of Kawana/Park Avenue in attracting these companies.

4.2.2.4 Business Efficiency - Kawana/Park Avenue Precinct

The Kawana / Park Avenue precinct is viewed as a mature industrial complex that has been operating within the urban structure for many years. The area of Alexandra Street, Richardson Road and Thomasson Street has historically been zoned "General Industry", thus allowing large scale, medium to high industries to establish. All of these nodes in this precinct are located close to the City.

Some of the properties due to their immediate proximity to non-industrial land uses, may be inhibited in the capacity to operate long hours including proposals to increase the scale of operations, be it size of building or product output. In addition, noise and emissions from a business also impact on residential areas.

4.2.2.5 Access to Markets - Kawana/Park Avenue Precinct

Consumption based and service industry is the principal existing land use activities in the area. There remains an issue of vehicular access to these areas via residential areas, this is discussed in **Section 4.2.2.3**.

4.2.2.6 Convenient for Workforce - Kawana/Park Avenue Precinct

The area is conveniently located for access by its workforce. Generally these nodes are located central to the urban development of Rockhampton City.

4.2.2.7 Land Use Compatibility - Kawana/Park Avenue Precinct

The majority of the perimeters of the 3 individual nodes are directly adjacent residential development or lands set aside for urban growth. An exceptional degree of tolerance has been shown in the past, in the amenity conflict between these two land uses. This may not continue and there will be a need to address remedial and design parameters in an attempt to improve the situation, in a similar fashion as discussed in **Section 4.2.1.7**.

No i s e - Kawana/Park Avenue Precinct

Amenity loss for adjoining residential areas from noise is significant in this area and arises principally from the internal industrial operations and the traffic movements in and out of the precinct. Various noise alleviation techniques are available to address, but not remove, this problem.

Options available for noise alleviation are:

- ✍ Restricting industrial activity in these precincts to low impact activity, and
- ✍ Encouraging those industries that generate noise that cannot be contained to levels acceptable to the local community, to progressively relocate to Parkhurst is the best long term solution to this predicament.

The second option is the best long term solution to the issue of noise from industrial activity.

R o a d s - Kawana/Park Avenue Precinct

The effects of traffic generated by the movement of industrial vehicles and suggested measures to alleviate their impacts on the adjacent urbanised areas are discussed in **Section 4.2.2.3**.

E m i s s i o n s - Kawana/Park Avenue Precinct

The nature of industry in this precinct does not involve the production of emissions to a level unacceptable to the host community.

B u i l t E n v i r o n m e n t - Kawana/Park Avenue Precinct

Industrial development has many subsidiary deleterious effects on residential areas such as excess lighting and visual degradation that must be addressed in building and operational design standards. Direct intervention by Council will be needed to mediate and negotiate disputes arising from existing circumstances.

Mediation is a method of working through impacts associated with site design, however in the new City Plan it is envisaged that there will be measures implemented to rectify by treating the cause, not the effect.

N a t u r a l E n v i r o n m e n t - Kawana/Park Avenue Precinct

The natural environment has essentially been eliminated by urban development in this precinct.

4.2.2.8 C o n c l u s i o n s - Kawana/Park Avenue Precinct

These long established segments of the urban industrial framework are operating effectively, servicing mainly the consumption based community needs of north Rockhampton, and should continue to perform these functions. Every effort should be taken, however, to alleviate the conflict of interest with the abutting residential developments.

4.2.2.9 Recommendations - Kawana/Park Avenue Precinct

A local area development plan and a management plan should be prepared for this precinct. Specific recommendations for each node within the precinct are:

Farm Street / Richardson Road - Kawana/Park Avenue Precinct

This is an area of established consumption based industry operating efficiently within the City's urban structure.

Its location adjacent residential development creates a problem that is difficult to address. The solution will hinge on addressing impacts upon residential development from industrial activity. Industry will be required to take all reasonable steps to alleviate amenity loss, whilst residents who choose to live in the immediate vicinity of the industrial activity need to be aware of a lower standard of amenity. The cost of the provision of physical buffer zones is prohibitive, and difficult given the location of existing infrastructure, such as roads, industrial structures and residential dwellings.

It is recommended that the land in the northern half of the area (west of the railway line) be designated for "low impact industry". The intention of this concept is to minimise land use conflicts in the medium to long term. Existing Industry, which has impacted on the urban residential areas, should be encouraged to relocate to Parkhurst, when practical and/or convenient. In order to implement this strategy as part of the City Plan, Desired Environmental Outcomes (DEO's), need to discourage non-residential uses from developing in / adjacent residential areas of historical industrial zoning's.

As new development occurs in this precinct, potential impacts could be mitigated by carrying out modifications such as erecting solid noise buffers, redirecting lighting, modifying hours of operation improving visual impacts by planting, painting etc.

The area east of the railway line should retain its current land use pattern and be restricted to very low impact service industry, such as sales and service industry.

Richardson Road / Thomasson Street - Kawana/Park Avenue Precinct

This area protrudes into residential areas in that it is bordered on three sides by residential development, resulting in an unsatisfactory land use mix. The general philosophy is to phase out industrial land uses, by developing incentives for the promotion of industrial precincts in other locations throughout the City.

In light of this, it is also recognised that in the short term existing industrial uses will remain, and land uses in the vicinity of these existing premises should note these uses.

This node consists of uses that would be more appropriately located away from established residential areas. The existing mix of sales and light-manufacturing businesses could in the medium term, be effectively absorbed in commercial or service industry areas, in other locations. In order to implement this philosophy, and to maintain a sustainable residential area, the new City Plan needs to address these residential areas and the impacts caused by the continued operation of industries in close proximity.

The current industry designation encourages further industrial development which would only exacerbate the current land use intermix problems. It is recommended that this area be redesignated to a land use that is compatible with urban development. Given the proximity to the railway, such use could be some form of medium density housing specifically designed to contain noise problems. Or alternatively, uses could include day care centres, meeting halls, sports centres and the like, which are generally more compatible with residential living. Buffering against industrial development should be provided along the frontage to Richardson Road, and to the rail line corridor that traverses the site.

Current land uses would remain, however, Council's City Plan should be encouraging the relocation of land uses when convenient.

Park Street / Moores Creek Road - Kawana/Park Avenue Precinct

This precinct pertains to the area between the railway, Park Street and Glenmore Road zoned "general industry" (1986 Town Planning Scheme). This use / zone has resulted in a core of medium impact (food based) industry, in addition to the Council works depot, a small fuel depot and a group of sales related industrial activities.

The core of medium impact industry would be difficult to relocate and should remain. This node should be buffered from surrounding residential land uses by the lower impact uses as shown on **Figure 4**. The storage of flammable liquids (for example petroleum and petroleum products) should be encouraged to relocate away from residential development.

The railway site between the rail line and Knight Street has been used for industrial use by the railway. This facility serves as a north Rockhampton Depot for associated railway activity. With Queensland Rail currently consolidating land uses, it is recommended that when these yards become vacant, that it would be suitable for "low impact" industrial uses. This node forms a link between the industrial activity east of Knight Street and the established industry west of the rail line.

4.2.3 LAKES CREEK PRECINCT

The zoning of land in this precinct is "Noxious or Offensive Industry" and "Future Urban" as identified in the current Town Plan, gazetted

March 1986. The Strategic Plan, gazetted March 1997, identified that a substantial “Noxious or Offensive Industry” zone (bound by Lakes Creek Road and Vestey, Montgomerie and Hartington Streets) in the area had not been taken up for industrial purposes. In addition, the existence of numerous houses and fragmented ownership of land, suggested a limited suitability of the land for “Noxious or Offensive Industry”. Therefore, the Strategic Plan identified for the future that the preferred dominant land use for different parts of the area would be Urban, Future Urban, Industry or Environmental Protection. The Strategic Plan is the document used to guide future development within Rockhampton City. Its intent is to provide a holistic approach to planning for the City on a broad-brush scale. The Strategic Plan however, also has a document that sets out specific objectives that control new development and states “while large areas within the City have been designated for urban expansion, certain land at Lakes Creek is not available for immediate development.”

It is therefore important to note that there are 2 levels of control over this land at present – the zone and the preferred dominant land use designations in the Strategic Plan. The zone regulates today, while the Strategic Plan highlights future intentions. It was the role of the DCP and now the City Plan (which relies on this strategy) to determine how to get there.

A draft Development Control Plan (DCP) for the area of Lakes Creek was then compiled in 1999. The need for a Development Control Plan for the area arose principally in response to an increasing demand for housing development within the locality. The DCP looked at managing the different issues present in the area to achieve a balanced and sustainable outcome for all. The DCP however, was not finalised due to the commencement of the City Plan.

The Lakes Creek industrial precinct, as set out in this document is centred on a portion of lands that were in the draft DCP. In reference to the draft Development Control Plan for Lakes Creek, the draft document has been considered in this strategy and also in the drafting of the new City Plan.

A coherent rural residential character exists in specific parts of the precinct. At the same time however, there is a need to avoid land use conflicts between new housing and existing non-residential activities in the area, especially conflicts that might jeopardise existing major industries, which are an important focus of investment and economic activity in Rockhampton. Infrastructure availability and topographic constraints also affect the area’s suitability for further residential development. Against this background, the main issues for planning in the Lakes Creek industrial precinct are:

- ✍ The protection of existing major industries;
- ✍ The protection of existing residential development;
- ✍ Residential development potential;
- ✍ Physical suitability and infrastructure availability; and

- ✍ Consideration of detailed planning aspects such as residential density and character.

The Lakes Creek meatworks has operated for over a century as one of the City's main economic generators, in a location that was determined by factors in the past, which has changed since those times.

With the growth of the City to the north, urban development has moved closer, inevitably coming into close proximity with “high impact” industries, such as the meatworks at Lakes Creek.

The operation of a meatworks facility can have negative impacts on the residential uses in this general location. At the time the meatworks was established it was separated from the main urban development of the City. This precinct evolved, historically as the need arose to locate “difficult to locate” industries within the City. It was a logical philosophy to cluster these noxious or offensive uses in the same general area. The Lakes Creek meatworks has continued to prosper however, other uses defined as “Noxious or Offensive Industry”, have not remained or been attracted to the area.

4.2.3.1 Physical Suitability – Lakes Creek precinct

The precinct consists of a steep ridge of the lower Berserker foothills, protruding into the upper flood plain terrace along the northern banks of the Fitzroy River.

The soils are a mixture of the bleached duplex soils with rocky outcrops on the ridges with alluvial soils on the river terraces.

The riverbanks and the area immediately beyond Emu Park Road are subject to flooding, extending well into this precinct at the southern end.

Consequently this area has severe physical limitations for use as industry.

4.2.3.2 Environmental Sustainability - Lakes Creek precinct

The majority of this area has been cleared of natural vegetation, with the exception of the steep land at the base of the Berserker Ranges.

The riparian systems along the banks of Lakes Creek and the Fitzroy River have similarly encountered the impact from the industrial activities, particularly those associated with the meatworks operations.

In addition to the creek and river systems in this precinct the area is traversed by gullies, in particular a gully at the edge of the cattle holding paddocks parallel with Vestey Street. These gullies, along with the creek and river systems have encountered impacts associated with the cattle holding yards, this issue requires continual monitoring and addressing.

4.2.3.3 Cost Effectiveness for Infrastructure - Lakes Creek precinct

Water supply was previously an issue in the precinct, largely due to limited water capacity, with industries in the precinct being a large water consumer at the exclusion of other consumers. This issue has recently been rectified, however, it does remain that the precinct is not sewered.

Road access is via Emu Park Road, which is the alternative arterial to Yeppoon Road for access to the Capricorn Coast, and copes adequately with the current level of traffic. The level crossing for bringing stock from the holding paddocks to the processing area causes annoying delays to through traffic and can hinder the timely efficiency of emergency vehicles.

Stock travelling to the meatworks via heavy articulated vehicles travel through the urban areas of the City causing some loss of amenity to the urban community.

Whilst the current infrastructure is adequate for existing industrial development, all services would require upgrades if new development or expansion were to occur.

Rail access also exists and is a growing focus that should be encouraged with the opportunity to transport beef by rail rather than the road network.

4.2.3.4 Business Efficiency - Lakes Creek precinct

The principal business activity in Lakes Creek is the Lakes Creek Meatworks. It is understood that current international trends in the meatworks industry are resulting in increasing kill rates to maintain cost effectiveness and remain competitive in global markets. The meatworks operates on a very restricted site between the Fitzroy River, Rockhampton – Emu Park Road and the Rockhampton – Yeppoon Railway line.

Buildings, due to their age and structural condition, have been replaced with purpose built structures. It is envisaged, from discussions with meatworks representatives that the increase in “kill” will, at the present time, be achieved by extended hours of operation.

Given the history of land uses that have encroached closer to the meatworks on the north-eastern side of Emu Park Road, and from discussions with company executive staff, it is not envisaged that any plant expansion will take place on the eastern side of Emu Park Road. The potential to further lower the associated urban amenity would render any such proposals difficult to achieve, in the face of community objection.

The meatworks are an important contributor to the economy of Rockhampton and should be protected from threats to the efficiency of their operations and comply with laws and regulations.

The presence of the meatworks locks up an area that would be suitable for residential expansion if the meatworks were located elsewhere. The transference of the focus of the quarry operations at Nerimbera, to the south of Lakes Creek, strengthens the pressure for residential expansion in this part of the City framework and its environs.

Rockhampton City Council needs to consider the likelihood of other abattoir activities in the region and ensure that the economic benefits that accrue from such facilities remain in the economy that directly benefits the City.

The meatworks involves a very substantive investment in plant and equipment and any relocation could not be undertaken unless its relocation is financially viable. Within this strategy lands north-north-east of the top paddock have not been included for future industrial land stock. This balance between the community benefits and the financial realities of the situation suggest that the meat works will remain at this location, at least in the short to medium term.

The other existing industries in this precinct could be more effectively catered for in the Parkhurst industrial precinct or elsewhere in the region. The Gracemere-Stanwell Corridor is one area that would suit industries, which require a “greenfield site”.

4.2.3.5 Access to Markets - Lakes Creek precinct

The meatworks services the beef industry of Central Queensland and its regional location in Rockhampton is well placed to access its market place. Most of its end product is moved to markets outside the region through the seaport network.

From a local perspective, however, the need to bring stock in through the City by road transport does have some disadvantages, such as odour, size of vehicles and hours of transportation.

The product is generally not consumed locally with most of the beef product leaving Rockhampton for the national and international market.

4.2.3.6 Convenient for Workforce - Lakes Creek precinct

The precinct is conveniently located for access by the workforce. Due to the growing size of the workforce for the plant, many staff live on the Capricorn Coast and commute to work daily.

4.2.3.7 Land Use Compatibility - Lakes Creek precinct

Concerns over conflict between industry and the community led the Council to prepare a draft Development Control Plan for Lakes Creek .

In order to attain a higher level of land use compatibility, the strategy recommends a number of land use zones that identified core activities and introduce a pattern of transition zones between the industrial and residential land uses. Council has adopted a clear direction for the precinct, which aims to achieve an equal balance between residential land uses and industrial activity, this has previously not been experienced in the precinct. It is also important that industrial uses in the precinct acknowledge and adopt work practices that are mindful of the residential development in the area, while residential development acknowledges the presence of industrial activity. As a result the precinct will not have a clear industrial amenity, or a clear residential amenity, rather an amenity that reflects an equal balance between residential and industrial activities in the precinct.

In July 2001, the local community and the management of the Lakes Creek Meatworks, in partnership together planted a native tree buffer on a frontage of the holding paddocks, to residential activity in Vestey Street. The project also involved a local nursery and Council in designing the mounded buffer and nominating fast growing natives to maximise effectiveness.

4.2.3.8 Conclusions - Lakes Creek precinct

The continued reliance on this precinct to accommodate difficult to locate industry is predicated on the continuing operations of the meatworks. The importance of this facility to the City's economy is such that, although it represents certain environmental conflict, its continued existence must be acknowledged.

Other industry in the area is of little significance and could be readily located to more appropriate industrial locations. The proprietors of such undertakings do have rights of continuance and these should be protected. Further industrial activity should not be encouraged, except that which has impacts so low that it will not prejudice the opportunity for residential development in the future, should circumstances permit.

In light of existing industry in the area, it is important to note existing residential activities, that is dwelling houses and associated sheds, and rights of continuance of these activities, which is also to be protected.

4.2.3.9 Recommendations - Lakes Creek precinct

The general direction of the 1999 draft Lakes Creek Development Control Plan (DCP) should be adhered to with the following amendments:

- ✍ Discourage the continued existence of noxious or offensive industry in this part of the City (excluding the Lakes Creek Meat Works).
- ✍ Retain its position as the value adding centre for the beef industry of Central Queensland whilst protecting the future residential development options in the south east sector of north Rockhampton and its fringes.

Special Industry - Lakes Creek Precinct

The core industries should be referred to in terms of their specific operations and the City Plan must specify the conditions under which each core unit will be permitted to operate.

'Meatworks' should allow the continued operations between the river and the Emu Park Road of meat processing and "allied industry"¹² contingent on complying with environmental controls.

'Meatworks Holding Yards' should allow the continued use of this area for holding stock over limited periods prior to processing in the meatworks. No building, or activity that is not directly attributable to holding yards purposes, should be permitted on the eastern side of the Emu Park Road. Buffers, as recommended in the DCP, have already been planted along Vestey Street, which is to be monitored for maintenance and protection, other buffers are to be developed along Lakes Creek and land between the railway line and Rockhampton – Emu Park Road, adjacent to the historical Lakes Creek Village.

'Construction' outlines the existing asphalt and concrete batching plants that are adjacent to Dorly Street and Emu Park Road. These 'as of right' uses should be encouraged to relocate, through the imposition of regulations which prevent expansion, and the area redesignated as a Transition Node (2) on their demise.

Industrial expansion, as specified in the draft DCP should be removed, as this location is not physically suitable for this purpose and would further exacerbate the existing problems between industry and residences. These areas should be absorbed into the various "Transition nodes" as shown in **Figure 5**.

All other development conditions specified in the draft DCP for core industry should be maintained.

Rural Residential - Lakes Creek Precinct

These areas are dominated with rural residential living and generally are not fragmented by the historical development of land for industry. The designation of Rural Residential does not negate the fact that existing non-residential land uses need to be considered in the use of land for residential activities. It is important that non-residential uses impacts are so low that they do not impact upon the existing residential development in the area, to a level that is unacceptable to the host rural residential community.

¹² An "allied industry" is an industry, which is located on the same or adjacent site to a major activity, and uses the by-products or products produced from the existing industry for another market.

In addition, some of these lands are affected by the Fitzroy River Q100, and will need to consider the code for flood-prone lands, to be set out in the City Plan.

P a r k - Lakes Creek Precinct

The park centred at Totteridge and Synge Streets is central to this locale, and is to be maintained in accordance with the draft Lakes Creek Development Control Plan.

T r a n s i t i o n - Lakes Creek Precinct

The transition designation is nominated for two (2) key areas, namely:

- ✍ Land located off Vestey and Totteridge Streets- called “Preferred Residential”;
- ✍ Land adjacent the Fitzroy River, north and south of the Lakes Creek Meat Works land – called “River”.

Transition Areas are generally located between established industrial areas and residential development, and tend to include a mix of land uses with conflicting values.

Figure 5 nominates the location of the Transition areas, adjacent the industrial nodes within the Lakes Creek industrial precinct.

T r a n s i t i o n 1 [“Preferred Residential”]

This designation is for land opposite the Lakes Creek Meat Works holding paddocks off Vestey Street and land off Dorly Street, centred on Totteridge Street. It is recommended that this node, as per **Figure 5**, be removed from the “Noxious or Offensive Industry” and “Future Urban” land use zones, and that the City Plan consider alternative land uses, which compliment the existing residential development in the node. This should happen without compromising the continuation of existing non-residential land uses located nearby, such as Endrust, Dog Kennels, Junk Yard, Asphalt Batching and Cement Plant, Glenmore Seafoods and the Meatworks.

Some of these properties in this location are affected by the Fitzroy River Q100 and therefore, development of these lands will need to be in accordance with the code for flood-prone land which will form part of the new City Plan. Further industrial activity should not be encouraged except that which has impacts so low that it will not prejudice the amenity of residential development in the immediate location.

It is also important to note that all future residential development and / or redevelopment is to appreciate the existence of non-residential activities in the Lakes Creek precinct. In this regard, new residential development in this area will need to provide measures to mitigate external impacts upon the dwelling from existing non-residential uses,

such as noise attenuation to assist in the reduction of impacts from noise associated with these non-residential land use activities. This will allow these existing non-residential uses to operate in a similar manner to today without fear of complaints from residential premises. Due to existing constraints and incompatible land use activities Council will not support an increase in residential allotments through the element of land subdivision, with the exception of boundary realignments.

Transition 2 ["River"]

This designation is for land off Lakes Creek Road, north and south of the Lakes Creek Meat Works site. There are 22 allotments in this node. It is recommended that this node as per **Figure 5** be removed from the "Noxious or Offensive Industry" land use zone, and that the City Plan consider alternative land uses, which compliment the existing residential development in the node. River related industries, which may include marine style activities, are encouraged in this location as the land offers unique opportunities for the City. The unique opportunity of this node revolves around the lands proximity to the Fitzroy River and river access opportunities. This should happen without compromising the continuation of existing non-residential land uses located nearby.

It is intended the River type activities to develop will be generally light impact and should not cause a nuisance to the nearby residential areas of Koongal, over and above the highway traffic. There is ample opportunity to provide buffers immediately adjacent the railway line, for Transition 3 land to the north of the meatworks, and buffers on land adjoining the highway, for Transition 3 land to the south of the meatworks.

Many of these properties in this location are affected by the Fitzroy River Q100, development of these lands will need to be in accordance with the code for flood-prone lands, which will form part of the new City Plan. In addition, due to the location of the Rockhampton Yeppoon Railway line and Rockhampton – Emu Park Road these allotments are constrained by access limitations.

Buffer, Park & Special Purpose - Lakes Creek Precinct

These designations should be retained as per the character of either an existing use, or the need for special uses in the precinct.

The "buffer" nominated in **Figure 5** is for the holding paddocks operated by the Lakes Creek Meat Works. The area was planted at the time this strategy was drafted, and should continue to remain buffered in the future. This buffer is designed to mitigate any dust issues on site from the loading and unloading of stock, and the movement of stock in the yards. It also acts as a streetscape feature, to relieve the residents of Vestey Street of the state of the holding pens. It should be noted that this planting project was an initiative by the Lakes Creek Meatworks,

who worked with residents and Council to complete the project to the satisfaction of all interested parties.

Although outside the scope of the Lakes Creek precinct the broad acre lands to the north of Lakes Creek State School has previously been subject to an application for residential development and to a subsequent court appeal. The court refused the application on the grounds of adverse amenity to the nearby Lakes Creek meatworks.

Any future consideration of use of this area for urban purposes should take due regard to this decision. If development is permitted, measures must be undertaken to alleviate the impacts identified as creating the adverse amenity to levels that maintain acceptable living standards.

Any such measures, including the provision of buffer zones must be undertaken, where relevant, within the lands subject to the application, and are appropriate to discuss in this strategy based on their proximity to this precinct.

The “park” use is directly related to the Totteridge and Nerimbera sports area, and should be retained, as such, for the residents of this suburb. In addition, a portion of land east of the mouth of Thozet Creek shall also be set aside for park uses, offering public access and opportunity to the Fitzroy River.

The “Special Purpose” area identifies two (2) special purpose activities. These special purpose activities are a preferred site for a proposed water reservoir at the top of the ridge at Thorspur Street (unformed road) and Council’s cemetery on Hartington Street.

It is intended the proposed water reservoir site, located at the top of the ridgeline and sloping from RL 80 to 110, be developed as a gravity feed water reservoir in the future. The subject site is currently under private ownership, thus future plans rely on Council negotiating / purchasing the relevant landowner / owners. This will consolidate water supply to Lakes Creek and part of the adjacent Livingstone Shire, enabling the full development potential of the precinct.

It is intended the cemetery operate as such for an indefinite period in a memorial gardens setting. Although increased traffic is expected from future plans to expand facilities, all additional buildings and activities should be sited and designed so as to have minimal impact on the amenity of adjoining land uses.

Non Urban - Lakes Creek Precinct

This area should be extended as shown in **Figure 5** and development conditions retained as in the draft Development Control Plan (DCP). These non-urban lands are characterised with steep ridges, with the issue of water supply availability, bushfire risk and site access. Considering these issues these areas warrant this non-urban designation.

4.2.4 STANLEY STREET PRECINCT

There are 2 distinct nodes for the Stanley Street precinct. These are the industrial lands flanking Stanley Street, and the Hazardous Industry land to the south east in the vicinity to Lucius and Wharf Streets.

As the City has grown, the character of these areas has changed, with much of the “heavier impact activities” migrating to other locations, such as Parkhurst. The emphasis has altered over time towards more commercial uses rather than the historical industrial activity.

There are, however, residual elements of the original industrial complex that have remained in the area. These are:

- ✍ The facilities associated with the regional maintenance operations of the Queensland Railways.
- ✍ The facilities associated with the intermodal goods exchange operations of the Queensland Railways.
- ✍ Goods distribution depots servicing both the City and the intermodal exchange.
- ✍ The regional value-adding milk processing facility.
- ✍ Smaller general industrial uses servicing south Rockhampton.
- ✍ Difficult to locate industries located at lower East Street.

The overall precinct has evolved into an area where commercial, industrial, and residential activities are haphazardly intermixed and is in need of rationalisation.

The urban sections of the Stanley Street node formed by Campbell, Murray, George, Stanley Streets and across towards South Street, are designated for industrial purposes but have little if any industrial land uses operating at the present time.

This area forms the entrance to the City's main railway station and is above flood level. Uses other than industry are recommended for this area. It is unlikely that these areas will be required for industrial purposes.

The character of the area at Lucius and Wharf Streets, is a mosaic of industry, business, residential uses and vacant land.

The Stanley Street precinct is affected by the Fitzroy River Q100 flood. Development of these lands will need to be in accordance with the code for flood-prone lands, which will form part of the new City Plan. The characteristic of flooding in this area is a combination of “high hazard floodway”, “high hazard flood storage” and “low hazard flood storage”.

The area around Stanley Street is characterised by residential dwellings, railway uses, businesses and industry. The existence of residential development in this precinct is a major factor in the development of land and the establishment of new activities.

Quay Street contains an extensive stretch of buildings that have high local and national heritage value. Combined with the attractive scenery of the City reach of the Fitzroy River, this area forms a valuable element in the City landscape and streetscape, offering the potential for development as a tourist node. The City's riverbank beautification and the boating flotilla that anchors in the reach enhance its charm.

The Quay Street frontage of the Stanley Street industrial precinct forms a physical continuation of the heritage-oriented riverside concept and there are some buildings here and in the residential area beyond that which also have heritage value. There is potential to extend the river-based concept for the full frontage of the urbanised section extending south from the City centre.

4.2.4.1 Physical Suitability – Stanley Street precinct

The 2 nodes within the Stanley Street precinct are predominantly affected by the Fitzroy River Q100 flooding, the flood types are floodway and storage areas.

The alluvial soils support urban development without demonstrated structural problems.

At a time where ecological sustainability is a focus, the continuation of hazardous industry zoning on land affected by flooding is not sound planning. In this respect, flooding is an issue for the physical suitability of the precinct.

4.2.4.2 Environmental Sustainability – Stanley Street precinct

The natural environment has been completely replaced by urban development.

The node at Lucius and Wharf Streets fronts the Fitzroy River and is 1.1 kilometres south south east of the Riverbank precinct in Quay Street.

Any continuation of the City's river walk towards this area of the City needs to consider the existing uses. Should Council decide that the Lucius and Wharf Streets area is not suited for the continuation of Hazardous Industry, then the lead time to remove or phase out old uses, and introduce new areas, would need to consider the Riverbank precinct, heritage buildings and their possible future development.

The City has invested in restoring and beautifying this Riverbank precinct to enhance its landscape and to provide a high standard attraction for tourist and locals. Those sections of the Stanley Street industrial precinct which form the continuation of the Riverbank and heritage

precincts should be managed so as to reinforce this concept with the opportunity to extend the precinct for the full river frontage under urban development.

4.2.4.3 Cost Effectiveness for Infrastructure – Stanley Street precinct

The area is well serviced with the essential urban infrastructure elements.

Road access to the precinct is currently directed north north west through the City. The impact of the scale and number of vehicles travelling through the City centre (namely Bolsover Street), is causing traffic problems and conflict between road users. The Lucius and Wharf Streets node, coupled with the Stanley Street node utilise current heavy vehicle routes, as designated by Queensland Transport. The impact of industry generated traffic on the road network, would be improved if access to the precinct could be directed east west along Derby Street to Gladstone Road. This matter should be referred to the Capricornia Integrated Regional Transport Plan, currently being undertaken by Queensland Transport.

No consideration of alternative rail or road routes arising from the building of new river crossings off the extension of Stanley Street have been considered in this strategy, however, the issue will be investigated by the Capricornia Integrated Regional Transport Plan. The issue of a third river crossing was raised with Queensland Rail, and was not considered a reality in the short to medium term. Any such proposal would, however have major impacts on the character and operation of this precinct.

4.2.4.4 Business Efficiency – Stanley Street precinct

The flood free space available in the Stanley Street node is limited and presents little opportunity for larger enterprises to expand.

Many of the buildings in this precinct are built with floor heights of their operations above the Q100 flood level. There remain however, some premises (in both nodes), which will be inundated by floodwaters in a Q100 event.

Railway Workshops – Stanley Street node

The workshops are a long established (specifically for regional maintenance) facility, servicing the Queensland Rail (QR) system. Located within a wider railway oriented complex, there is ample room for expansion of the workshop within the land owned by QR at this location. The opportunity for the development of other similar facilities is emerging at Gracemere south west of the City.

Activity enters and leaves the complex via the rail system and has little impact on the City's amenity. The service remains on the outskirts of

the urban area of Rockhampton. The rail line that continues through the City however, does have some amenity issues for the City.

Overall, this site is an efficient location for this industry.

I n t e r m o d a l E x c h a n g e – Stanley Street node

This facility is similarly located within the railway complex but the activity flow is not confined to the rail system. The facility here is accessed via Bolsover Street. With semi-trailers and b-double vehicles hauling cargo and shipping containers out of the exchange facility throughout the City and beyond (refer to Heavy vehicle haulage route map attached), a conflict between road users prevails.

Although the facility fronts Bolsover Street to the south south east of the business centre, the traffic travels through the centre, which is an approved heavy vehicle and b-double haulage route. This issue if not suitable to Rockhampton City Council should also be raised in the Capricornia Integrated Regional Transport Plan. Considerable road traffic, which flows through the City centre, is generated by this facility.

The potential for flooding is not ideal for the location of this type of facility.

G o o d s D i s t r i b u t i o n D e p o t s – Stanley Street node

Located conveniently in association with the intermodal exchange, there is little opportunity to expand onto flood free land. Problems arise from heavy vehicle traffic generation and noise. These issues need to be addressed due to the proximity of activities generating heavy vehicle haulage to the City centre. Traffic, scale, frequency, and noise issues are to be considered for any new premises proposed in the Stanley Street node, and the Lucius and Wharf Streets node. The expansion of existing premises will also need to consider these factors. Should uses require to relocate, they may be better suited to those industrial precincts that are further removed from the City's centre, provided access to transport interchanges is readily available.

D a i r y P r o c e s s o r – Stanley Street node

Again, this location has been rendered less efficient by the changing urban framework of Rockhampton. It is considered that continued infrastructure investment precludes the relocation of this facility whilst it is financially viable. Potential adverse impacts on the City's amenity, due to factors such as traffic generation and frequency suggest that its relocation to the outer industrial precincts would be advisable, when and if the opportunity arises.

Heavy vehicles for this facility currently access the site, which fronts Alma Street via Bolsover Lane and Alma Street. Bolsover Lane is not a nominated b-double route, and the use of this Lane as an access way needs to be further investigated, and rectified accordingly.

Smaller Scale Industry – Stanley Street precinct

A number of smaller service and general industries with varying degrees of impact have traditionally located in this precinct. These long-standing establishments are conveniently located next to the City centre for other commercial and business purposes. The “higher impact” operations (for example – uses which generate high amounts of noise, emissions and traffic) should be encouraged to relocate, through the provision of assessment criteria which limit expansion, to the outer industrial precincts at Glenmore Road, Dooley Street, Parkhurst or outside the City. There is an opportunity, however, to retain the lower impact businesses, whilst still minimising impacts on the City centre.

Where there are Service Industry and other general and light industries throughout the City centre area, these need to be (in the short term) relocated to the node around Stanley Street.

Difficult to Locate Industries – Lucius & Wharf Streets node

These activities are uses, which due to their nature and processes involved are only suitable to limited areas of the City. Uses here include the abattoir at Lucius Street, abandoned sites that were used for petroleum depots, and junkyards at Quay Street.

Investigations indicate for this area, that since 1986 until 2000, there have been nine (9) town planning approvals issued, the status of their existence is detailed below.

TPC No.	Date of Approval	Address	Activity Approved	Still in Operation
35	27/1/72	495 Quay Street	Builders Workshop & Yard	Yes
39	8/5/72	459 Quay Street	Depot for earthmoving business including workshop	No – use not constructed – approval lapsed
212	19/7/73	459 Quay Street	Erection of Bulk Store	Use constructed but currently vacant – abandoned
407	30/1/76	415 East Street	Rustproofing of motor vehicles & sand blasting of small items	No visible sign of use commencing
438	8/6/76	495 Quay Street	Erection of Ready-Mix Concrete Plant	No – use not constructed – approval lapsed
590	25/10/77	487 Quay Street	Storing & selling of Softdrinks	No – use not constructed – approval lapsed
933	9/2/81	447 Quay Street	Establishment of Premix Concrete Works	Yes
1539	22/10/85	446 Wharf Street	Indoor Cricket Centre	No – use not constructed – approval lapsed
2132	1/11/89	42 Wharf Street	Renovation of Dwelling House	Yes

The developments that commenced from the approvals given are:

- ✍ Builders Workshop and Yard at 495 Quay Street in 1972;
- ✍ Establishment of Premix Concrete Works at 447 Quay Street in 1981; and
- ✍ Renovation of Dwelling House at 42 Wharf Street in 1989.

In a recent land use survey of the industrial precinct at Wharf Street, the dominating land use is not Hazardous Industry. Other business/commercial activities and dwelling houses dominate the area.

It is intended that the Hazardous Industry activities be relocated in the short term, to rid this flood free area of environmental hazards. Should new businesses show intention to locate to these areas, then the policy to vacate the area of hazardous industry needs to be implemented by the Council.

Industry location, in a flood prone area, brings rise to environmental concerns. They are close to the urban areas where the risks involved, including the transport of hazardous materials through the built up areas, are not commensurate with the standards of public welfare expected in a modern City. These industries are not located efficiently in terms of the City's welfare or development pattern and should be moved to more appropriate locations.

4.2.4.5 Access to Markets – Stanley Street precinct

The railway maintenance area is well located at the juncture of north-south and east-west rail routes, to access its market.

The intermodal exchange is, however, increasingly more remote for much of its market place, especially with the population growth in north Rockhampton.

Although proximity to the City centre and the intermodal exchange has been an advantage for the distribution depots, this is also diminishing with the dispersal of urban activity further away from the City centre.

The rationalisation of the dairy industry has meant that the location of these uses close to a railhead, or close to the City centre, has become increasingly irrelevant to market access for this facility.

General industry gains no significant advantage by being close to the City centre, rather than nearer the spreading residential and commercial areas. This location becomes less relevant to this section of industry as the population continues to disperse.

The location of Hazardous Industry along the Fitzroy River is no longer required due to the spread of the City over the past 100 years and changes in community expectations.

4.2.4.6 Convenient for Workforce – Stanley Street precinct

This central location is a very convenient location for access by the workforce.

4.2.4.7 Land Use Compatibility – Stanley Street precinct

There are a number of factors arising from the industrial activities in the Stanley Street precinct, that adversely affect community amenity and have the potential to give rise to conflict as the City centre regenerates and strengthens.

The principal problem is the generation, frequency and size of traffic through the City centre. The situation could be improved if Derby Street was designated the industrial collector road for the precinct and the road network designed to enforce this concept.

Other factors such as noise, emissions, lighting and visual amenity impact on both the City centre and adjacent residential development activities in this general locality.

Currently there is a degree of acceptance of these impacts, as the activities have been important to the economic wellbeing of the City. This situation may not continue as new economic generators enter the economy bringing new residents from other places, where such activity in strategic locations is not tolerated.

4.2.4.8 Conclusions – Stanley Street precinct

This sector of the older City developed randomly on the fringe of the business centre, hosting a range of land uses that could not be readily absorbed within the centre itself. Affected in part by long term flooding, the area has suffered an identity loss and is ripe for reorganisation to operate as a functioning unit that supports the ongoing improvement of the abutting City centre.

The industry theme is warranted to remain but with a change of emphasis on the type and scale of industry to harmonise with the level of amenity associated with a City centre. This is envisaged to encourage the growth of business components of industries and is where there is a small retail showroom or wholesales at the front of an industry.

Further development will be contingent on a satisfactory resolution of the flooding problems that affect the area.

4.2.4.9 Recommendations – Stanley Street precinct

Detailed Local Area and Management Plans should be prepared for the Stanley Street precinct to direct and manage the future development and growth of this area.

A land use pattern has been prepared for the precinct as shown on **Figure 6**.

It is important that the industrial development clustered around Stanley Street is recognised. It is envisaged that the uses will reduce under succession over time in favour of land uses more appropriate to the City centre fringe. On this basis, arrangements to provide an alternative site for consumption based industry servicing south Rockhampton may need to be identified.

Road access to the Stanley Street precinct is currently directed north north west through the City centre causing traffic problems and conflict. The impact of industry generated traffic on the road network would be improved if access to the precinct is directed east west along Derby Street to Gladstone Road. This matter should be referred to the Capricornia Integrated Regional Transport Plan currently being undertaken by the Department of Transport.

Sales and Service Industry – Stanley Street precinct

It is intended that this area serves as a buffer to the proposed “low impact industry”. This area is intended to encourage showroom sales of industrial products and services.

Modern trends have been for service type industries to provide retail and wholesale services at the production site rather than elsewhere in a commercial area. These mixed commercial/industrial facilities have gained a high degree of customer acceptance and have been gradually invading standard light and service industry precincts throughout the State.

These facilities present a high standard frontage and are designed to attract customers. These areas should not cause amenity loss to other more sensitive urban uses.

By implanting a sales and service industry area, the industrial area can be effectively screened from the more sensitive urban activities. Some of this urban activity already exists in the Stanley Street precinct and it is predicted that this urban presence will continue over time and create pressure to further impact upon the low impact industry zone.

River Precinct Activities – Stanley Street precinct

It is recommended that the Quay Street frontage of the industry precinct be restricted to those uses that support and are in harmony with the river precinct concept.

This area is an option for locating an Information Technology based cluster on the proviso that measures are taken to control the effects of flooding.

Special Industry – Stanley Street precinct

This proposed use covers the Paul's Dairy (Dairy Processor) use, and the workshop and intermodal exchange of Queensland Rail.

These uses, due to the capital investments made at the sites, are unlikely to relocate.

Paul's Dairy products processing plant on the corner of Stanley and Alma Streets should be permitted to continue to operate conditional on the area reverting to lower impact uses when and if the incumbent ceases to operate in its current function.

The Railway Workshops off Bolsover and South Streets should be dealt with as a special industry. It is recommended that Council negotiate with Queensland Rail (QR) and the EPA (Environmental Protection Agency), when needed to enable any adverse impacts that arise from its operations to be managed in the best interests of the local community.

The intermodal exchange facilities off Bolsover and Francis Streets are another long standing industrial transport pursuit and should be treated similarly as the workshops. In addition, the impact of heavy vehicles on the local road network should be referred to the Capricornia Integrated Regional Transport Plan.

Relocatable Industry – Stanley Street precinct

The node located at Lucius and Wharf Streets contains an assortment of Hazardous Industry, some of which have river frontage off Wharf Street on the river bank.

Council should be implementing measures in the City Plan, to have these industries relocated to more appropriate locations, where they will continue to have workable access to City markets.

These industries are not suited to this location as:

- ✍ They are below the flood line and treat and/or store dangerous goods that have the potential to create hazards to the community and/or the natural environment if inundated.
- ✍ They have a long lead out of flooded land making access difficult in the event of flood.
- ✍ They are close to residential areas and thus constitute an unreasonable hazard in case of disaster.
- ✍ Dangerous and/or hazardous materials are transported through the built up areas of the City.

A small abattoir operates off Lucius and Alma Streets. This facility is a noxious industry that would be better located where its impact on

community amenity could be better contained. Council should not encourage expansion of the abattoir in this location.

Proposals are afoot to relocate the sewerage treatment plant from this area to north Rockhampton.

The areas vacated along the riverfront could, after decontamination¹³, be designated as parkland forming the southern end of the river precinct.

Not required for Industry Use – Stanley Street precinct

It is recommended that this node, as per **Figure 6**, be removed from the “Service Industry” zone to a designation, which more accurately reflects the areas residential character.

The node is currently characterised by residential development with two small scale shops fronting Stanley Street, being the corner of Stanley and George Streets and Stanley and Murray Streets, respectively. In addition, there are three (3) commercial / industrial uses present in the area. It is important to note several of these shops and commercial / industrial activities are currently vacant, future land use activities are to consider the intent of this designation.

Part of this area fronting Murray Street represents the entrance to the passenger railway station, this should have a positive appearance to locals and visitors as it may provide visitors with their first visual impression of Rockhampton. Residential development is the land use activity encouraged in this area.

Special Purpose – Stanley Street precinct

These lands are owned largely by government, religious and/or charitable organisations. These special purpose land use activities include activities such as government offices, churches, shops and administration centres at various locations throughout the area.

These special purpose activities do not compromise or negatively impact upon the industrial nature of the Stanley Street precinct. However, these non-industrial activities must establish a realisation that abutting industrial activities may result in a loss of amenity in the locale. These special purpose activities are not encouraged to expand within this area.

¹³ *The decontamination of sites is the responsibility of the landowner, and is regulated and administered by the Environmental Protection Agency. There are 2 registers held by the Department: (1) The Environmental Management Register – this for premises where there is the possibility of contamination – [ie. A service station whereby there is a chance of contamination, even though underground fuel tanks are sealed and no contamination is evident]; and (2) The Contaminated Sites Register – this is where soil tests have proven that a premises is contaminated.*

It is important to protect the viability of this precinct as it is small in area, in comparison to other industrial areas, and it is the only core industrial area located in south Rockhampton. It is anticipated the Stanley Street industrial precinct may experience pressures from other land use activities, such as commercial, thus it is important to preserve an industrial core in south Rockhampton.

Low Impact Industry – Stanley Street precinct

This precinct has been established primarily on the concept of industrial activity being permitted if it is within the tolerance levels of the local community. It is intended that all impacts if any, will be low. Existing activities (as at August 2001), may have larger impacts, and performance based criteria may need to be developed to mitigate impacts in the short to medium term.

To protect the orderly development of an expanding modern City, it is necessary to identify uses that are acceptable in this strategic location, given its close location to the central core of the City.

There is still a role for low impact industry servicing the City centre and south Rockhampton. This role should be carefully managed to minimise its potential to negatively impact upon the local amenity. This can be achieved by the use of screening activities that have operating levels acceptable to both the City and industry.

Non conforming uses should be tolerated for the term of the use until its abandonment. However, every effort should be made for these uses to relocate to more appropriate industry precincts.

As the area that is nominated “low impact industry” forms an essential part of the fabric of the City, some consideration should be given to flood alleviation measures.

Transport Terminal – Stanley Street precinct

This designation covers the Young’s Bus Service terminal on George Street, this land use activity is adjacent land used by Queensland Rail for the purposes of a passenger terminal. Young’s bus service, at this location, shall be allowed to continue to operate based on its synergies of transport with the adjoining Queensland Rail transport activities.

Council’s City Plan shall have regard to the strategic location of Young’s transport and Queensland Rail services when establishing the future land use intent of this area.

4.2.5 PORT CURTIS PRECINCT (INVESTIGATION AREA)

In the event of the establishment of a light metals precinct at Gracemere-Stanwell, to the west of the City, land at Port Curtis has been identified in order to provide industrial land on the south side of the City. This is the first of the investigation areas for the City. The

investigation for development of this node for industrial land is not envisaged to be required in the life of the 2002 City Plan (which is 2010).

The apparent cultural bias of south Rockhampton residents to patronise south side service areas suggests that there is a need for locally oriented industrial facility to service the consumption-based demands of the south side. Currently this is carried out in the Stanley Street precinct. Should industry be gradually edged out of this precinct, into other locations, there will be a demand to locate more industry in the south side of the City, another location is therefore required. **Figure 7** nominates land in Port Curtis for future investigation for industrial activity on the south side.

The range of alternatives, in south Rockhampton, is severely constrained by the extent of flooding. There are no suitable sites available above the Fitzroy River Q100 flood line. There is, however some limited industrial development in the area bounded by the Central Railway line, the north coast railway and Jellicoe Street, that could be investigated as a future “low impact industry” service centre (refer to **Figure 7**).

4.2.5.1 Recommendations – Port Curtis

The investigation of development of this node for industrial land is not envisaged to be required in the life of the 2002 City Plan (which is 2010).

This precinct is designated, as a possible industry investigation area in the City Plan beyond 2010. Such a designation will avoid other development that may prejudice its future use for industrial purposes.

4.2.6 AIRPORT PRECINCT (INVESTIGATION AREA)

This is the second area nominated for industrial development within the strategy that is not already zoned for industrial pursuits. The nomination of the area came about due to the use of land adjacent to airports in other regional centres.

As a result of land use surveys around the area, the land that has been identified is seen as viable for industrial related activities.

Rockhampton has the major airport in the Central Queensland region. Some airport-related industry has established in the area adjacent to the airport infrastructure. This precinct (refer to **Figure 8**) does not specifically include the lands that accommodate the airport runway. It is lands to the east, which are located between the airport and the residential area of West Rockhampton.

The airport management considers that there are further opportunities that can be exploited for industries that relate directly to air transport. Among these are the activities associated with the defence exercises that take place at Shoalwater Bay, north of Rockhampton within Livingstone Shire.

It is envisaged that the development of an industrial corridor at Stanwell will create an extra demand for freight services connected with the supply and transmittal of goods and products.

It would appear prudent to consider these opportunities and to investigate the establishment of an industrial precinct at the airport (refer to **Figure 8**).

The lands (as at August 2001) are zoned "Special Purposes", "General Industry", "Non Urban B", "Non Urban A", "Special Facilities" and "Open Space" (refer to **Figure 8a**).

4.2.6.1 Physical Suitability – Airport Precinct

The area proposed on **Figure 8** is flat land forming part of the middle terrace of the Fitzroy River flood plain. The area is subject to flooding, being part of the fringe floodway area of the flood flows.

The alluvial soils are similar to those that have sustained development over a significant portion of the urban area of south Rockhampton.

The use and suitability of the precinct for airport related industries, requires a flood strategy. The implementation of an alleviation system for flooding is required to make the land suitable for industrial development.

The flood levels over the precinct and the velocity of the waters are key components in the suitability of the land. In addition, the proximity of the land to non-industrial land uses is also important. Access to the precinct is also an issue required to be assessed in establishing the nature of industries suited to the precinct.

4.2.6.2 Environmental Sustainability – Airport Precinct

Most of the natural environment has been removed by previous urban activities. There is some remnant riparian vegetation along the narrow frontage to Lion Creek. It is recommended that suitable buffers remain to the waterway.

4.2.6.3 Cost Effectiveness for Infrastructure – Airport Precinct

The urban infrastructure necessary for this precinct is available in the precinct.

Road access is a constraint when investigating the opportunity to introduce new industrial activity into this sector of the City. Currently, the main entrance to the domestic services of the airport is via North Street then Hunter Street. The industrial and defence activity generally, is serviced via Lion Creek Road and to a lesser extent Wandal Road. All of these accessways are through built up residential, school and local shopping areas causing some loss of amenity and potential for conflict between road users. Wandal Road, is the approved traffic route from

the Bruce Highway to the Australian defence force site on Western Street. This is a State controlled Road, which extends through the City to Ridgeland north-west of the City.

Under the current road hierarchy traffic passes through the built up areas of south Rockhampton to access the airport. With the use of the airport by new business in the area, the current traffic situation will be exacerbated resulting in further amenity loss. An alternative access road to the airport related activities, especially from the area of the Gracemere-Stanwell Corridor and other out of town locations, would alleviate this situation.

Opportunity for an alternate access exists directly from the Capricorn Highway, either across the Yeppen flood plain or skirting further west and/or north to avoid the worst of the flooded areas. It should be recognised that at the times when the Yeppen flood plain is inundated, the airport is also inoperative. This is an issue to be investigated in the short to medium term. This matter should be referred to the Capricornia Integrated Regional Transport Plan currently being undertaken by the Department of Transport.

4.2.6.4 Business Efficiency – Airport Precinct

The business envisaged for this area is that dependent on air transport and the site abutting the airport facilities is the ideal location for business efficiency. Much of the land is in the direct control of the airport authority.

That section of the area recommended for airport related use that is bounded by Canoona Road, Lion Creek Road, Wandal Road and Western Street is owned by the Australian Defence forces and is used as a staging ground for exercises at Shoalwater Bay. It is envisaged that these uses would be designated as airport related industry and that they would continue at the discretion of the defence forces.

The area is ideally situated for airport related activity given its proximity to the current industrial uses taking place at the airport. This area is included in the precinct principally to preclude other activities that may prejudice future use for airport related industry establishing here in the event of the current defence related uses becoming redundant in the future.

There is also a market opportunity to introduce some level of airport related business servicing both the airport commuters and the associated workforce. These could include provision of food, catering, car hire services, and Information Technology (IT) facilities.

The existing St Aubin's property, with its nursery and Devonshire tearooms, is heritage listed and an appropriate facility for small scale accommodation and catering. In addition, conference space and food services could be developed around this facility, using St Aubin's as the central theme. It is important to note all future development and / or

redevelopment of the site is to have regard to flooding and aircraft noise.

4.2.6.5 Access to Markets – Airport Precinct

The airport location permits excellent access to markets for the establishment of airport related industry, based on the travel distances to access industrial estates, such as Parkhurst or Gracemere-Stanwell and also arterial roads. However, current traffic routes to access the airport require further consideration.

4.2.6.6 Convenient for Workforce – Airport Precinct

The airport site is conveniently located for access to its workforce.

4.2.6.7 Land Use Compatibility – Airport Precinct

Some airport related industry might increase noise levels affecting the adjacent residential areas. This factor would need to be investigated further as to the level of noise tolerated in this area from potential airport related activities. If proceeded with, this concept should be subject to a Local Area Plan that specifies the locations for any excessive noise generators and the control measures that must be observed.

The normal operation of the airport itself generates an amenity loss through excessive noise levels. It is anticipated that the local community is generally conditioned to these disturbances.

4.2.6.8 Conclusions – Airport Precinct

Subject to the satisfactory resolution of the flood alleviation problems in the airport locality, enforcement of noise control measures acceptable to the local community and accessing road access routes to this precinct the site is suitable for development as an airport related industrial precinct.

4.2.6.9 Recommendations – Airport Precinct

The existing domestic aviation facility adjacent the precinct, should be exploited to attract aviation and defence related economic investment within the proposed airport industry precinct.

Investigations should be commenced to validate the feasibility of an airport related industry precinct and this action be recognised in the upcoming City Plan.

In the consideration of the area for airport related industries, studies should be undertaken to scope this site to ascertain the feasibility of undertaking a flood alleviation program.

Should the results of these studies be positive, the area should be designated as an airport industry precinct that includes airport related and defences oriented activities to the exclusion of other industry.

Alternate access to the airport for out of town traffic across the flood plain should be referred to the Capricornia Integrated Regional Transport Plan currently being undertaken by the Department of Transport, however, the Queensland Government, Main Roads have expressed they are not in favour of such a proposal.

Local Area and Management Plans should be prepared for the precinct.

4.2.7 BUSINESS / HIGH TECH INDUSTRY

As discussed in **Section 6.2.3**, industry based on Information Technology has emerged as a significant new element in the modern economy. This is an evolving process and definitive location demands have not yet been established. Some of these activities can operate similarly as business or professional services. Others may need larger space and specialised infrastructure and would benefit from clustering, giving the advantages of economies of scale, and offering linkages and synergies within an integrated network.

Demands for this type of facility will arise over time. Given their low impact, the location of such facilities is not bound to traditional industrial precincts, but will establish wherever appropriate infrastructure is available. Each case will of necessity be treated on its merits.

The development of this style of business should be promoted in any industrial location in the City, which can achieve the recommendations set out in this strategy.

4.2.8 SUMMARY

A summary of industrial land uses for Rockhampton is indicated in **Table 3** on the following page. This table has been formulated using lands, which has not before been nominated for industry, land that is currently used for industry and by removing land from the industry zone or designation.

The resultant industrial land network recommended for Rockhampton City is shown in **Figure 9**.

Table 3 : Summary of Industrial Uses.

Precinct	Low Impact Industry (ha)	Medium Impact Industry (ha)	Special Industry (ha)	Sales & Service Industry (ha)	Airport Industry (ha)	Industry Buffers (ha)	Industry Transition (ha)	Commercially Oriented (ha)
Parkhurst	258	90	90	0	0	120	0	0
Kawana/Park Avenue	47	7	0	8	0	0	0	0
Lakes Creek	0	0	43	0	0	4	15	0
Stanley Street	12	0	12	7	0	0	0	2
Port Curtis	45	0	0	0	0	0	0	0
Airport	0	0	0	0	130	0	0	5
Totals	354	97	145	15	130	124	15	7
Total Industrial Land	895 ha							

Definitions for Low and Medium industries are at **Section 5**

5 DICTIONARY:

“Brown sites” for the purposes of this strategy are sites which have facilities or structures on them, but appear to be abandoned/not in use at the time land use studies were done – March –May 2001. These sites are considered available for industry at any time.

“Difficult to locate industry” - This term relates to land uses which are, in most circumstances, difficult to find sites that are suitable, due to the nature and / or impacts of the activities associated with the use.

“Development” is any of the following –

- (a) carrying out building work;
- (b) carrying out plumbing or drainage work;
- (c) carrying out operational work;
- (d) reconfiguring a lot;
- (e) making a material change of use of premises.

The term **“Extractive Industry”** refers to the definition of this land use activity identified in the Transitional Planning Scheme for Rockhampton City at April 2002

Any industry involved in the extraction of sand, gravel, turf, soil, rock, stone or similar substances from land and including, when carried out on the land from which any such substances are extracted or on land adjacent thereto, the treatment of such substances including crushing and screening and the manufacture or products from such substances.

The term **“General Industry”** refers to the definition of this land use activity identified in the Transitional Planning Scheme for Rockhampton City at April 2002

Any industry which is not otherwise particularly defined in Part I of the Transitional Town Planning Scheme gazetted 8 March 1986.

“Greenfield Site” - This is where a stand-alone site is identified separate to other land uses and sufficient land is set aside as a buffer to an industry/activity. Therefore, it is said that an industry may be suited to a greenfield site.

The term **“Hazardous Industry”** refers to the definition of this land use activity identified in the Transitional Planning Scheme for Rockhampton City at April 2002

Any industry which by reason of the processes involved or the method of manufacture or the materials used, produced or stored, involve in the opinion of the Council, more than the normal element of risk from fire, explosion, infection or pollution. The term includes any industry included in but not limited to Appendix II hereto:-

APPENDIX II

Acetylene manufacturing or storage
Acid manufacturing and storage
Ammonia manufacturing or storage
Ammunition manufacturing or storage
Arsenal
Battery smelter
Bottled gas manufacturing or storage
Carbide manufacturing
Chemical works
Disinfectant, pest destroyers and germicide manufacturing
Distillery
Explosives manufacturing
Explosives storage - more than 150 kgs
Fertiliser works
Fireworks manufacturing or storage
Flammable liquid manufacturing or storage
Gas works
Gunpowder manufacturing or storage
Kerosene manufacturing or storage
Oil manufacturing or storage
Oil refinery
Oxygen production
Paint manufacturing
Petroleum and petroleum products, refining and storage
Poison manufacturing
Radioactive waste disposal service
Turpentine manufacturing
Varnish manufacturing

The term “**High Impact Industry**” is derived from terminology used by the Department of State Development – this does not relate to land use zoning.

These are likely to have the highest levels of impacts but may have low to high levels of amenity, depending on the nature of the industry, the extent and type of buffer areas around it and the ongoing management of hazards and risks. These precincts are likely to be separated from most other development areas because of their hazardous nature or may be associated with and/or adjacent to general impact Business and Industry (B&I) developments or business parks.

A *Intent*

The operation of B&I development in these precincts is to minimise the risk exposure on nearby areas and maintain or enhance the ecological characteristics of buffer zones surrounding the B&I development. While these precincts provide for the special transport and traffic requirements of special industries. B&I developments must not exceed the noise limits, illumination levels, and the air quality in any nearby residential areas and/or adversely affect the noise, lighting, and air quality environments of nearby B&I developments. It is expected that B&I

development in these precincts will dispose of wastewater and wastes satisfactorily and contain the potential affects on the natural environment to the designated B&I areas. Where the form of the B&I development does not reflect the processes being performed within the lines, shapes, textures and colours of the B&I development should respond to and reflect the natural features of the site and the locality.

B Desired Characteristics

- ✍ Hazards minimised through the use of inherently safe designs and procedures.
- ✍ Unused buffer zones reformed into green belt areas to enhance local wildlife distribution.
- ✍ Vehicular access/egress direct to the arterial road network.
- ✍ Wastewater disposed to sewers, uncontaminated surface water runoff, solid wastes disposed off-site, prevention of biologically active materials downstream.
- ✍ Odours, dust and air pollutant emissions not to exceed state and national standards or ambient air quality objectives.
- ✍ Illumination on nearby residential properties to be no more than eight lux.
- ✍ The dominant visual lines of B&I development to reflect the surrounding topography and land forms in the locality and not be 'visual intrusions' into the landform.
- ✍ Robust flexible building layouts in integrated complexes, in an ordered streetscape setting.

“Integrated Employment Area” - Areas suitable for a wide range of industrial, warehouse, transport, storage and office uses together with limited commercial, retail and recreational uses that are developed to maintain compatibility between uses and to maintain the level of amenity determined as appropriate given the actual mixture of land uses proposed.

“Integrated Planning Act 1997” - This is the Queensland legislation which regulates development systems and procedures in Local Government.

The term **“Light Industry”** refers to and the definition of this land use activity identified in the Transitional Planning Scheme for Rockhampton City at April 2002.

Any industry included in but not limited to the industries listed in Appendix III hereto, provided that the gross floor area of the building does not exceed one thousand square metres (1000m²) and does not cover more than 50% of the land occupied and meets the following requirements:-

- (a) Is carried on completely inside a building with no outside storage;
- (b) Provides for at least 50% of the area of the land to be landscaped to Council requirements;
- (c) Does not use any high speed abrasive cutting, planing, or similar machines;

- (d) Does not use any electric arc welders;
- (e) Does not provide for the installation of electric motors to an aggregated of greater than 8 000 watts;
- (f) Does not cause the emission of noise or smoke, vapour, steam, soot, ash, dust, or other wastes to a greater degree than allowable for residential areas by the *Noise Abatement Act 1978 - 1984* or the *Clean Air Act 1936 - 1984*;
- (g) Does not operate outside the hours of 7.00 a.m. to 6.00 p.m.;
- (h) Does not cause any interference with the amenity of the area by reason of the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste, water, waste products, grit, oil or otherwise or cause hazards likely in the opinion of the Council, to cause undue disturbance or annoyance to persons or affect property not connected with the industry;
- (i) Does not in the opinion of the Council, impose a load on any public utility undertaking including the disposal of wastes, greater than which is required for the normal development of the locality in which the industry is carried on; and
- (j) does not in the opinion of the Council, by reason of the carriage of goods or materials used or produced, thereby, create traffic upon public roads in the locality in which the industry is carried on which causes congestion or danger to users of such roads or requires roads of a higher standard of construction than those required for the normal development of the locality in which the industry is carried on :-

APPENDIX III

- (a) Any service industry included under the definition of service industry provided it meets the requirements of this clause;
- (b) The industries included in the following list -

Agricultural implements and machinery repairs and servicing
Aluminium works
Artificial flower manufacturing (cardboard)
Artificial Limb Factory
Bag factory and store
Banana ripening room
Battery manufacturing
Bedding manufacturing
Bedstead factory
Belting factory
Biscuit factory
Blind factory
Bonded store

Bookbinding
Boot and shoe factory
Bottle department
Bowser repairing
Box factory
Brake repairing
Bristle and hair goods manufacturing
Broom and brush factory
Building materials factory
Cake ornament making
Cannister works
Canvas goods manufacturing
Cardboard articles factory
Carriage works
Carrier, stabling or garage
Chaff mill
Cleansing material manufacturing
Clothing factory
Coir goods manufacturing
Cold store
Confectionery factory
Cork products works
Corset manufacturing
Cotton goods factory
Cutlery works
Dental goods factory
Dried fruit manufacturing
Electrical advertising works
Electrical appliances factory
Enamelling works
Engineering works (light)
Engraving
Experimental workshop
Farm implement works
Felt goods manufacturing
Felt works
Fence post and paling depot
Fibrous goods factory
Food preserving works
Footwear factory
Fruit and vegetable spray making
Fruit products factory
Fur goods factory
Gasket manufacturing
Glass cutting and silvering works
Glass products factory
Hardware factory
Hat factory
Heating appliance factory
Herb products manufacturing
Hessian manufacturing
Hosiery manufacturing
House removing depot

Ice works
Instrument manufacturing
Iron and steel merchant
Jam factory
Jelly manufacturing
Jute goods factory
Knitting mill
Laundry
Leadlight Works
Leather goods manufacturing
Lumber yard
Machine works
Machinery detailing
Manufacture chemist's works (non hazardous)
Marble and terrazzo works
Mattress factory
Mechanical repairing works
Medical goods manufacturing
Monumental mason's works
Musical instrument making
Napery manufacturing
Net making
Oar making
Oil Manufacturing (non-flammable)
Organ building
Ornament making
Packing works
Paper products manufacturing
Parkerizing and bonderizing works
Pattern making
Peanut products factory
Plaster modelling
Plaster works
Plumbing works
Polish manufacturing
Process engraving
Pure food manufacturing
Radiator works
Radio works
Refrigeration manufacturing
Remover's establishment
Salt lick manufacturing
Scales manufacturing
Shipping service
Shop fitter's works
Small goods factory
Smoker's requisites manufacturing
Spinning and weaving mill
Sporting goods manufacturing
Stationery manufacturing
Stereo making
Stock food factory
Stonemason's works

Stone works
Straw hat manufacturing
String factory
Surgical supplies factory
Tent making
Timber yard (no logs)
Tinsmith's works
Toilet requisite manufacturing
Tool manufacturing
Travelling requisites manufacturing
Umbrella manufacturing
Upholstery works
Vegetable products factory
Washtub manufacturing
Wax products manufacturing
Whiting manufacturing
Wire mattress manufacturing
Wood works
Workshop (light)

The term “**Low Impact Industry**” is derived from terminology used by the Department of State Development – this does not relate to land use zoning.

Low Impact Industry precincts are likely to have medium to low levels of amenity and medium to low levels of impacts. Depending on their level of impact and amenity, they could be expected to also be associated with and/or adjacent to residential areas, business parks, or general impact industrial developments.

A Intent

The operation of Business and Industry (B&I) development in these precincts must minimise the risk exposure on nearby B&I personnel and operations. These precincts provide for B&I development which creates high levels of safety for all road users with an adequate level of access to the B&I facilities. B&I developments must not exceed the noise limits, illumination levels, and the air quality in any adjoining residential areas and/or adversely affect the noise, lighting, and air quality environments of any adjoining B&I developments. It is expected the B&I development in these precincts will dispose of wastewater and wastes satisfactorily and contain the potential affects on the natural environment to the designated B&I areas. B&I development should have an ordered appearance with a high standard of visual amenity which enhances the functional requirements of B&I premises.

B Desired Characteristics

- ✍ Hazards minimised through the use of inherently safe designs and procedures.
- ✍ Transport, traffic and car/truck parking to comply with an overall integrated system.
- ✍ Noisy machinery and activities preferred to be indoors, and to comply with DoE guidelines.

The term “**Medium Impact Industry**” is derived from terminology used by the Department of State Development – this does not relate to land use zoning.

This level of industry are likely to have low levels of amenity and medium to high levels of impacts, and are likely to be associated with and/or adjacent to low impact Business and Industry (B&I) developments, business parks or special industries.

A Intent

The operation of B&I developments in these precincts is to minimise the risk exposure on nearby areas. These precincts provide for B&I development which creates high levels of safety for all road users with an adequate level of access to the B&I facilities. B&I developments must not exceed the noise limits, illumination levels, and the air quality in any nearby residential areas and/or adversely affect the noise, lighting, and air quality environments of adjoining B&I developments. It is expected that B&I development in these precincts will dispose of wastewater and wastes satisfactorily and contain the potential affects on the natural environment to the designated B&I areas. The lines, shapes, textures and colours of the B&I development in these precincts should respond to and reflect the natural features of the site and the locality.

B Desired Characteristics

- ✍ Hazards minimised through the use of inherently safe designs and procedures.
- ✍ Transport, traffic and car/truck parking to comply with an overall integrated system.
- ✍ Odours, dust and air pollutant emissions not to exceed state and national standards or ambient air quality objectives.
- ✍ Inherently noisy processes to be conducted within appropriate buffers.
- ✍ Wastewater disposed to sewers, uncontaminated surface water runoff, solid wastes disposed off-site, prevention of biologically active materials downstream.
- ✍ Illumination on nearby residential properties to be no more than eight lux.
- ✍ The dominant visual lines of B&I development to reflect the surrounding topography and land forms in the locality and not be ‘visual intrusions’ into the land form.

The term “**Noxious or Offensive Industry**” refers to the definition of this land use activity identified in the Transitional Planning Scheme for Rockhampton City at April 2002

Any industry the carrying on of which by reason of the materials or goods used, produced or stored is likely in the opinion of the Council to cause or create dust, fumes, vapours, smells, gases, smoke, or noise, and in any way produce conditions which are or may become offensive to occupiers and users of land adjacent to the land whereon the industry is located. The term includes the industries listed in Appendix IV hereto: -

APPENDIX IV

Abattoir
Acid manufacturing or storage
Acid treatment of metals
Animal by-products factory
Asphalt works
Bacon factory
Base metals factory
Bitumen works
Bone mill
Boiling down works
Brewery
Canning works
Caustic soda manufacturing
Celluloid manufacturing
Cement and lime works
Cement batching works
Cement products works
Condiments factory
Cosmetic manufacturing
Fat extractor's works
Fat melter's works
Fellmongery
Fish processing
Flock works
Garbage and refuse disposer
Glue manufacturing
Hides, skin and tallow store
Matches manufacturing
Meat preserving works
Meatworks
Oil cloth and lino factory
Photographic film manufacturing
Plastic (raw) manufacturing
Poultry dressing-house
Premix concrete works
Processing of natural rubber
Produce factory
Rag and bone dealer's works
Sand and metal crushing and screening plant (except where conducted on the site of an extractive industry or on land adjacent thereto)
Sandblasting
Slaughter house
Smelting works
Soap works
Solder manufacturing
Stock yard and stock saleyard
Tannery
Tar and tar products manufacturing
Woolscours
Zincoxide works

The term “**Service Industry**” refers to and the definition of this land use activity identified in the Transitional Planning Scheme for Rockhampton City at April 2002

Any industry in Appendix V hereto which -

- (a) does not, in the opinion of the Council, impose a load on any public utility undertaking greater than that which is required for the normal development of the locality in which the industry is carried on;
- (b) does not, in the opinion of the Council, by reason of the carriage of goods or materials used or produced thereby, create traffic upon public roads in the locality in which the industry is carried on which causes congestion or danger to users of such roads or requires roads of a higher standard of construction than those required for the normal development of the locality on which the industry is carried on;
- (c) does not, in the opinion of the Council, interfere with the amenity of the locality by generating noise, smoke, fumes, sand, soot, dust, or hazards likely in the opinion of the Council, to cause undue annoyance or discomfort to persons or affect property not connected with the industry, and includes retail selling which may reasonably and conveniently be carried on in connection with any service industry;

APPENDIX V

- (a) Any occupation or profession included within the definition of home occupation which does not comply with the requirements of that definition ;
- (b) Industries included in the following list:-

Advertising works and studio
Art and handicraft manufacturing
Bakery and pastry cook
Bakery works, sales and servicing
Bicycle works, sales and servicing (automotive)
Blue printing
Boot and shoe repairing
Builder's workshop and yard
Cabinet making
Cake factory
Car hire (including drive yourself cars)
Car liner's works
Car washing (mechanical)
Caravan hire
Cleaning contractor's establishment
Clock manufacturing and repairing
Computer bureau

Cycle repairing
Dental laboratory and technicians
Driving instruction depot
Dry cleaning
Duplicating and copying service
Dyer
Electrical generating plant (small) (sales and service)
Electrical or electronic equipment or appliance repair or servicing
Electrical service station (armature winders)
Fertiliser service centre
Fibre glass products manufacture
Film developing and printing works
Furniture removals storage depot
Furniture repair
Garage storing tractors and machinery
Gas appliance workshop
Gunsmith's workshop
Hardware hire depot
Harness manufacturing
Ice cream depot (not manufacturing)
Instrument repair
Joinery works
Laundromat
Lawn mower and chain saws repair works
Leather goods manufacturing
Locksmith's establishment
Mail contractor
Milk bottling and distributions depot
Millinery manufacture
Motor trimmer
Motor vehicle and agricultural machinery repair (other than panel beating and spray painting)
Musical instrument repair shop and tuner
Newspaper publishing
Parcel delivery service depot
Pest exterminator's establishment
Poster and sign writing
Pottery manufacture
Presser
Printer
Produce store
Plumbing workshop
Radiator repair
Radio and television repair and servicing establishment
Refrigeration repair and servicing establishment
Saddlery
Scales repair
Sewing machine repair
Sheep and cattle dip dealer
Shock absorber repair
Speedometer repair
Sports goods repair
Steering service

Stock food distributor
Storage and retailing of road making or similar materials
Storage of building materials
Tailor's workshop
Taxicab depot
Tool sharpening and repair
Towing service
Tractor servicing
Toy manufacturing
Trailer manufacturing
Transport depot
White ant and borer exterminator's premises

“Transition Areas” for the purposes of this strategy are generally located between established industrial areas and residential development, and tend to include a mix of land uses with conflicting values.

6 NEEDS ANALYSIS:

6.1 INTRODUCTION

To identify the demand for land to support the various industrial activities that may be attracted to locate in Rockhampton City up to the year 2020, it is necessary to consider the current economic demand structure and to make predictions as to how this may change in response to future investment.

This structure has two dimensions:

1. The demands exerted by industry wanting, (or having the potential to be attracted), to locate in this area; and
2. The demand for employment to support the social and economic needs of the local community.

Having gained an understanding of the probable nature of future demand, it is then possible to estimate the amounts of land that may be required and to select appropriate locations for the various sectors that together will form the industrial network.

6.2 INDUSTRY DEMANDS

6.2.1 REGIONAL CONTEXT

Rockhampton's growth to become the second largest City in Queensland in the mid 20th century was built on its role as the principal service centre for the natural resource rich Central Queensland Region. With an economy based on the pastoral industry, the vast gold and copper deposits at Mt Morgan and its location near the seaboard at the junction of the major inter regional transport routes, the City acted as the focus of economic activity entering and leaving the Region.

Over the ensuing decades this role has waned under competition from the growth of other centres emerging in association with new economic endeavours/growth in the region. This role change can be understood by analysing the City's functions at the various levels of regional structure that have a direct influence on its economic activities.

The Stanwell and Environs Industrial Development Study developed by Fitzroy Shire Council (GHD) for the Gracemere-Stanwell Corridor states:

"The capacity of the (Rockhampton-Gracemere-Stanwell) area to accommodate new industrial development needs to be considered in the context of the development potential of North and Central Queensland in general. The areas discussed (Mackay, Townsville, Emerald & Gladstone) have similar economic bases and would tend to compete with the Rockhampton sub region for industrial development".

Rockhampton is located within the national region of “Central Queensland” (as defined in the Audit prepared by the Federal Government Regional Economic Development Organisation). In its broadest sense it consists of four major economic zones, Mackay, Fitzroy, Central West and Bundaberg. Economic activity in the City is affected to some degree by activity across this spectrum either as a potential for attracting inputs or creating competitors to draw inputs away.

The area that is, however, more directly related to the economy of the City of Rockhampton, is the “Fitzroy statistical division” (as defined by the Queensland Office of the Government Statistician). This encompasses Rockhampton and Gladstone Cities and the Shires of Fitzroy, Livingstone, Calliope, Duaringa, Mt Morgan, Emerald, Banana, Bauhinia, Peak Downs and Jericho. The products most likely to provide opportunities for value adding in Rockhampton will come from this region. On a broader scale, the State Infrastructure Plan (including the Fitzroy Statistical Division) Central Region extends this area to include the Central West Shires of Aramac, Barcaldine, Diamantina, Ilfracombe, Isisford, Longreach, Tambo and Winton.

More locally, the “Capricorn sub region” is focussed more specifically on Rockhampton City and its immediate sphere of influence. In terms of the range of economic development dealt with in this report, this constitutes the City itself along with the Shires of Livingstone, Fitzroy and Mt Morgan.

The economic framework will be considered in the context of the “Capricorn sub region”.

6.2.1.1 The Central Queensland Region

The Audit prepared by the Federal sponsored Central Queensland Regional Economic Development Organisation (CREDO) defines Central Queensland (CQ) in terms of its national context. The CQ region encompasses the coastal region from Bundaberg to Mackay, along with the associated hinterlands extending west to the border with the Northern Territory. It consists of six major economic zones: Capricorn (which includes Rockhampton), Gladstone, Mackay, Bundaberg, Central Highlands and the Central West.

Historically, Rockhampton was a major service centre for this entire region. Located at the junction of the major regional transport routes, its port facilities were capable of handling the then level of throughput for the entire region.

Over time the region's outputs changed with the exploitation of further resources.

The sugar industry saw the ongoing growth of the major provincial urban centres of Mackay in the north and Bundaberg in the south associated with the value adding functions of sugar mills and the further development of their seaports to tranship processed sugar. This

economic activity resulted in these settlements developing into service centres for their own hinterlands.

The advent of the coal mining industry in Central Queensland had probably more significant impact on Rockhampton's diminishing regional centre role. Gladstone, which has a far superior harbour, became a major port for the export of this resource. Similarly Hay Point, south of Mackay, became the coal handling facility in the north. The growth of these ports further strengthened the roles of alternative service centres within the region.

Rockhampton retained the meatworks with its value adding function supporting the pastoral industry and continued to operate as a major servicing centre for the Queensland Railways, a key regional transport provider. The City's regional role, however, diminished in tandem with the further growth of intermodal transport facilities at the seafront of its three major urban centre competitors, Gladstone, Mackay and Bundaberg.

This dispersal of the service centre role has been inevitable with the more intensive development of the region. It is suggested, however, that the City has not retained as high a share of regional service activity as it may have, due to its lack of vigorous promotion in comparison with that of its competitors.

The City does however retain a major influence over the Capricorn, Central Highlands and Central West economic zones. This has been strengthened by more recent developments including the Stanwell electricity generator, the proposals to mine and refine magnesium and nickel and the expected emergence of major industrial development in the Gracemere-Stanwell Corridor.

Mackay and Bundaberg are now the established regional service centres for their own robust economic zones and there is little opportunity for Rockhampton to recover a share of these markets. The City should, however, be prepared to compete vigorously in those fringe areas where a choice between service centre use is a viable alternative.

Rockhampton will not recover its former role as the dominant service provider to the wider CQ Region and it must look to further economic generators to ensure a vigorous future within its more immediate sphere of influence.

The CREDO audit identifies opportunities available in the CQ Region as:

- ✍ livestock
- ✍ fishing
- ✍ light metals
- ✍ education
- ✍ agriculture
- ✍ horticulture
- ✍ minerals
- ✍ defence

- ✍ wool
- ✍ forestry
- ✍ coal
- ✍ tourism
- ✍ sugar

Rockhampton needs to establish strong linkages with those areas in the region that are most closely associated with these opportunities, especially where it has identified that it can compete in providing regional services.

Rockhampton's seaport is now unable to compete with the more established ports in the region. In terms of value of overseas commodity exports, the percentage of Queensland total for each of the region's ports in 1999 was:

Hay Point	22.8%
Gladstone	20.0%
Mackay	2.6%
Bundaberg	1.2%
Rockhampton	0.1%

Thus the continuing role of the Rockhampton Airport as the major CQ regional air facility is vital to Rockhampton's competitive edge in the regional context.

6.2.1.2 The Fitzroy Region

The regional context that presents the more tangible opportunities to Rockhampton for economic development is the Fitzroy Region as defined by the Queensland Statistician. This encompasses the Cities of Rockhampton and Gladstone and the Shires of Livingstone, Fitzroy, Mt Morgan, Calliope, Banana, Duaringa, Emerald, Peak Downs, Bauhinia and Jericho. The State Infrastructure Plan legitimately includes the Central West in Rockhampton's sphere of influence although not physically part of the Fitzroy Region.

The major economic zones within this region are:

Central Highlands	- Emerald, Duaringa, Jericho, Peak Downs & Bauhinia Shires
Gladstone	- Gladstone City, Calliope & Banana Shires
Capricorn	- Rockhampton City, Livingstone, Fitzroy & Mt Morgan Shires
Central West	- Aramac, Barcaldine, Barcoo, Blackall, Diamantina, Ilfracombe, Isisford, Longreach, Tambo and Winton

Central Highlands Zone

- ✍ The Jericho Shire's economy is largely based on the pastoral industry. Its primary product is beef cattle much of which eventually makes their way into the Rockhampton economy for value adding at the local meatworks. The only current competitor for this trade is a smaller works at Biloela in the Banana Shire. Service linkages exist directly to Rockhampton, but an increasing amount is siphoned off at the growing subregional urban centre at Emerald.
- ✍ Bauhinia Shire's economy is also largely dependent on the cattle industry and to a lesser degree on grain sorghum. A small amount of diversification has occurred in the mining area. Linkages to Rockhampton are similar to those of the Jericho Shire.
- ✍ Peak Down's economy is chiefly dependent on coal mining with a lesser dependence on cattle, sorghum and sunflower. Linkages to Rockhampton are similar to Jericho and Bauhinia except that a large proportion of its primary product in the form of coal by passes Rockhampton on its journey to the Port at Gladstone. This linkage presents a potential loss to Rockhampton in servicing this area especially in providing support to the mining industry.
- ✍ Emerald Shire's economy is dependent on mining, cattle and horticulture. The growth of the population centre at the town of Emerald has provided a continual rise in the wholesale and retail activity. This growth gives Emerald the opportunity to replace at least some of Rockhampton's service functions to the Central Highlands and the Central West. This potential is likely to grow with a possibility of Emerald supplanting some of Rockhampton's current and potential value adding functions servicing both the cattle and horticulture sectors, particularly with the growth of feed lots in the area and ongoing rationalisation of the beef industry supply chains. The advent of the proposed inland railway line would impact on Emerald's competitive advantage with Rockhampton.
- ✍ Daringa Shire's economy is dependent on livestock, agriculture and mining. Linkages to Rockhampton are strong. Should the inland railway eventuate, Daringa Township will grow in significance as a junction providing access to Rockhampton and Gladstone.

Gladstone Zone

- ✍ Gladstone City has developed over the past quarter of a century into a major industrial city. Its industrial base includes the world's largest alumina plant and Australia's largest aluminium smelter, as well as major cement, chemical and oil shale plants, and electricity generation. It is the largest multi-commodity port in Queensland with 30% of the State's export by volume and has Queensland's largest power station. Ten thousand hectares of land centred on Aldoga has been reserved for future economic development.

Located about 100 kilometres to the south it could be regarded as Rockhampton's principal competitor for economic development.

The alternative view, however, is that these two large regional centres have reached the situation that they now form part of the same critical mass operating as the principal nodes of the urban complex servicing the Fitzroy region.

The emerging concept of this area becoming the 'light metals province' of Australia involved in the processing and value-adding to aluminium, magnesium and titanium supports this concept.

- ✍ Calliope Shire services Gladstone by providing dormitory areas to house a growing proportion of its workforce. The rapid expansion of large scale industrial undertakings in and around Gladstone has prompted the State to proclaim a State Development Area (SDA) of some 10,000 hectares to cope with the expected economic growth.
- ✍ This SDA spreads into the Calliope Shire as far north as Mount Larcom, bringing the complex to within 70 kilometres of Rockhampton. Travel time from Rockhampton via an electric train service would be about 40 minutes.
- ✍ Horticulture, beef, fish, timber and dairy production are the principal primary industry outputs.
- ✍ Banana Shire's economy is based on primary production including cotton, wheat, sorghum and lucerne, beef, pork, timber, dairy, fish, coal and other minerals.
- ✍ At Callide, outside Biloela, there is a significant electricity generator. Planning is currently underway to develop an industrial estate capitalising on the provision of cheap power to locations in close proximity to the power plant. This offers further opportunity for a coordinated regional approach based on linkages between economic development zones at the Callide, Stanwell and Gladstone Power Stations. Each node would develop its own synergies and clusters and the entire Fitzroy region would benefit from the economic strength generated from the aggregated system.

Capricorn Zone

This zone is the area of direct influence for Rockhampton and will be discussed in detail later in this section of the report.

Central West Zone

This zone is principally engaged in livestock and wool production. It has strong traditional linkages with Rockhampton, but there is some leakage as transport and communication infrastructure advances have presented the opportunity to access other service centres, particularly to the southeast.

Emerald is developing the capacity to sieve off some of Rockhampton's service functions to this zone.

6.2.1.3 Capricorn Region

The Capricorn region consists of Rockhampton City itself, Livingstone, Fitzroy and Mt Morgan Shires, that is those areas that are subject to direct influence from Rockhampton in their social and economic activities. Although there are a number of political units, the area operates in practice as one economic entity with its own internal linkages and synergies.

Livingstone Shire

This Shire consists of four sectors affecting economic behaviour, these are:

✍ The coastal settlements along the Capricorn Coast concentrated around the Yeppoon-Emu Park Corridor constitute a major dormitory and tourism complex of more than 20,000 persons. This area has little regionally oriented industry, with economic activity in this field restricted to tourism and district services serving local consumption based needs. Many of its residents commute to Rockhampton for work and/or commercial services. Although it is in an independent Local Authority, it functions as a complementary urban area with Rockhampton.

This area has a vigorous growth rate in comparison with Rockhampton, its attraction being quality livability associated with the coastal environment.

✍ The residential settlements contiguous with Rockhampton City's boundaries such as Nerimbera and Glendale which operate directly as outer suburbs of the City.

✍ The Shoalwater Bay Defence Training Centre at the northern end of the Shire is an extensive wilderness area that is used as a national and international military training ground on a regular basis and attracts economic stimulus into the region, especially the City, on a regular basis.

✍ The balance of the Shire with small rural settlements and a significant amount of primary production in beef, agriculture, horticulture and mining.

The value adding opportunities for these products lie in Rockhampton.

It is unlikely that a significant proportion of the industrial activity generated by value adding to products from the Shire would be attracted to the coastal settlements. These areas lack appropriate infrastructure for larger scale industry. It is expected that industry whose activities would adversely impact on the high standard of amenity needed if the

lucrative tourism potential of that area is to be realised would not be encouraged.

Fitzroy Shire

The town of Gracemere, the principal urban centre within this Shire, also operates economically as an outer suburb of Rockhampton. The remainder of the Shire produces a significant amount of livestock and agricultural outputs that are readily available for value adding in Rockhampton.

The greatest potential economic generator is however the Stanwell power station and the initiatives it has taken to attract economic investment associated with its own outputs. Currently the construction of an international scale magnesium processing plant is being negotiated with the Federal, State and Local governments and the market place.

This area is located west of Rockhampton City, centred on the town of Stanwell. The corridor concentrates on the power source already located at Stanwell, and is proposing a light metals precinct that will take advantage of linkages and synergies, economies of scale and the provision of appropriate infrastructure.

Planning studies have been undertaken to allocate approximately 1800 hectares of industrial land (in the form of an Integrated Employment Area) known as the Gracemere-Stanwell Corridor (GSC). A range of industry will be catered for, including:

- ? the energy-hungry industries that the Stanwell Power Station will attract including magnesium processing;
- ? those seeking linkages and synergies that will arise from the light metal production;
- ? other large-scale industry such as value adding to regional products;
- ? industry servicing the larger projects.

The Gracemere-Stanwell Corridor is a planned “greenfield site”, and has developed into a joint State, Federal and Investment project. (As at August 2001 – the Development Control Plan, which outlines the Gracemere-Stanwell Corridor Industrial area had received State sign-off for public advertising).

Initiatives taken by the Stanwell Power group have attracted a large-scale magnesium processor to the economic development corridor established by the State Government and the Fitzroy Shire between Stanwell and Gracemere. This development is expected to attract further substantial investment into the area taking advantage of linkages, synergies and economies of scale.

Should this investment eventuate, the economic environment of the immediate Rockhampton region will experience a major change of perspective.

This development will be accompanied by the installation of a high-standard, industrial infrastructure network.

The need for Rockhampton to provide locations for regional scale industrial development will be significantly reduced.

It should be recognised that this activity is not separate from the City's economy. It is dependent on its support for commercial, cultural, government and other urban services and the wealth created will be retained in the local sub regional economy of which Rockhampton is the centre.

The linkages of the proposed Gracemere-Stanwell light metals precinct, with the industrial precincts within Rockhampton, and the Central Queensland area are stated below.

General Relationship with Industry In Rockhampton

- ✍ The current network of industrial precincts within Rockhampton, along with the land available at nearby Gracemere-Stanwell, will cater for the full spectrum of industrial demand.
- ✍ Any overflow of large scale, heavy activities, which cannot be absorbed, or is outside the scale and intensity envisaged of Industrial precincts within the City, have the opportunity to be catered for in the Gracemere-Stanwell Corridor (GSC).
- ✍ The combined industrial sites at Rockhampton and Gracemere present opportunities that are favourable for business efficiency.
- ✍ There is ample land within Rockhampton to cater for economic development for many decades dependent on the growth rate of the City and recognising the presence of the Gracemere-Stanwell Corridor on its south western fringe.
- ✍ If the larger scale economic development predicated on the magnesium smelter did not eventuate, the proximity of the Gracemere-Stanwell Corridor to Rockhampton would ensure that it would continue to compete strongly as a provider to the local industrial land network. Industry with impacts that are difficult to locate within the City confines will establish at the Gracemere-Stanwell Corridor where community impacts have been minimised by forward planning and access to the City market place is as convenient as its alternatives.
- ✍ The Gracemere-Stanwell Corridor development on the southern western fringes of the City provides Rockhampton with a substantial

wealth generator and employment opportunities while the City will provide the necessary urban support infrastructure for the venture.

- ✍ The Gracemere-Stanwell Corridor can now absorb Rockhampton's demands for space for "higher impact industry" in circumstances that are sustainable with both the natural and built environments. Higher impact and/or hazardous industry currently located in the City in conflict with other land uses should be re located as soon as conveniently possible to the Corridor. Higher impact industries that cannot relocate due to the size of their investment will remain under strict management with respect to their impacts on the community's amenity.
- ✍ It would be expected that future industrial development in Rockhampton will be directed principally towards consumption based local and district services, although existing higher impact facilities having substantial investment will remain. Industry with special requirements related to a City location that has higher impacts that can be contained by planning and development innovation and control may still seek to establish within the established industrial network.
- ✍ An adequate workforce is available in the City and associated urban settlements, principally at the Capricorn Coast. The advent of economic activity at the Gracemere-Stanwell Corridor will place strain on workforce availability. There are adequate training and education facilities in the City to react to demands for an appropriate workforce.
- ✍ It is envisaged that industrial workforce movements would be those travelling from the Coast to Rockhampton seeking work and those moving from the Gracemere-Stanwell Corridor to the City seeking accommodation and recreation.
- ✍ Much of the population growth that should accompany the ongoing development at the Gracemere-Stanwell Corridor will be accommodated within Rockhampton City giving rise to an increased demand for consumption based industry in the City.

General Relationship with the Parkhurst Industrial Precinct

- ✍ The State is forecasted to concentrate on the Gracemere-Stanwell Corridor, whose development will attract/support linkage and service industry, a proportion of which will wish to locate on the northern side of Rockhampton City, at Parkhurst. In light of this, the marketing and promotion of the Parkhurst Industrial area needs to be marketed by the Rockhampton City Council, with some assistance from the Department of State Development.
- ✍ The Parkhurst industrial precinct is to remain as the principal industry generator in the City, with the focus for "medium and light impact industry", especially along its perimeter. The precinct core

maintains some capacity for established activities, while also providing for “special industry” proposals based on extensive rail frontage. Higher impact industries are encouraged to locate in the Gracemere-Stanwell Corridor. The recommended detailed layout for the Parkhurst industrial precinct is shown in **Figure 3**.

- ✍ In considering the location of the Parkhurst precinct and the establishment of industry in this area, it is important to realise not only the compatibility of uses with nearby residential areas, but also the specific role of areas such as the Gracemere-Stanwell Corridor.

The Gracemere-Stanwell Corridor is expected to ease the pressures on this precinct so that industries in this area can operate in harmony with nearby/adjacent residential development.

- ✍ The emergence of an extensive industrial green field site in the Gracemere-Stanwell Corridor in nearby Fitzroy Shire has changed the industrial framework in the region. The encroachment of residential development into the natural buffer zones at Parkhurst/Kawana has limited its capacity to host industry at the higher end of the impact scale. Gracemere can fill this gap. The distance between these two areas is less than twenty kilometres by a major highway, allowing linkages and synergies to be readily available. Sufficient green-field land exists in both estates to provide the full range of site choices across the full gambit of industrial activity.
- ✍ An industrial complex is building up at Gracemere that has ready access to the Rockhampton commercial market, and must be considered as a fundamental element of supply to the industrial land network at Gracemere. The Gracemere-Stanwell Corridor is expected to experience vigorous growth generated by the advent of the magnesium processing plant. Should the magnesium processing plant, or similar, develop at Stanwell, then it is likely that more industry will be attracted to this location, as opposed to the industrial land at Parkhurst.

In summary, the establishment of a business as a regionally based development within Rockhampton City lies in the promotion of the Parkhurst precinct. Parkhurst is considered, on some level, a competitor to the industrial corridor at Stanwell.

- ✍ Considerations such as the emergence of the Gracemere-Stanwell Corridor and the potential to produce the type of effluent that may pollute the City's water storage, render it unlikely that high water consuming industry would be permitted to locate here.
- ✍ The Gracemere-Stanwell Corridor has been specifically designed to provide for regional size and higher impact industries. Much of this industry type will be attracted there in preference to Parkhurst, due to factors such as superior access to regional transport networks, less conflict with other established land uses and activities, and linkages and synergies with new industrial ventures.

- ✍ The North Coast railway line severs the Parkhurst industrial precinct that abuts the national highway on its eastern boundary, giving ready access to transport to interregional and interstate markets. An intermodal exchange facility at the internal railhead would enhance market access, but the establishment of a similar facility at the Gracemere- Stanwell Corridor and the existing facility in the City, may preclude this possibility.
- ✍ The role of Parkhurst as a regional Integrated Employment Area, is recognised in the regional economy and, will be complimented with proposed new industrial development opportunities within the Gracemere-Stanwell Corridor.
- ✍ Although the Gracemere-Stanwell Corridor will be competitive in attracting heavier industry, its isolation will require less expenditure on control measures. There will be however a residual demand from industry that finds some advantage in Parkhurst.
- ✍ The emergence of the Gracemere-Stanwell Corridor has diverted the State Government's attention to facilitating the establishment of the more regional scale industry that is expected to establish there in the same market place as Parkhurst. It may be of mutual advantage to Council and the State Government to rationalise the level and direction of Government investment between Parkhurst and the Gracemere-Stanwell Corridor.

General Relationship with the Central Queensland Region

- ✍ The intersection of the Capricorn and national highways also offers an ideal location for warehousing and storage to facilitate the movement of goods to and from the CQ region. Flooding constrains this facility from locating in Rockhampton City, but opportunities are available nearby either at Egans Hill or Gracemere in the adjoining Fitzroy Shire. Although the City Council has no jurisdiction in this decision, it is of vital interest in attracting economic activity to the City that provides the commercial services for the Capricorn region. As a major stakeholder in the decision on the location of these facilities the Council should actively pursue a place in this decision making process through the various regional forums.
- ✍ Gladstone, the City's major interregional economic competitor, forms a critical mass of economic development with the emerging Gracemere-Stanwell Corridor and the proposed industrial development at Callide. This triangle of opportunity is predicated on lower cost energy from the major power generators at each location and the concept of an Australian light metal province materialising in Central Queensland.
- ✍ Adequate skills to service the entrenched industry are available in the current workforce, except for some specialist occupations that must be periodically sourced from outside the region. This situation may

be affected by the commencement of construction of the magnesium processing plant at Gracemere-Stanwell Corridor.

- ✍ Future industry of a regional scale is also likely to prefer the Gracemere-Stanwell Corridor, taking advantage of linkages, synergies, economies of scale, appropriate infrastructure and the more flexible environment involving little if any conflict with other land uses and the general community.

General Relationship with the Lakes Creek Industrial Precinct

- ✍ The advent of the Gracemere-Stanwell Corridor provides the opportunity for Council to avoid further industry that will have adverse impacts on the community, by encouraging noxious and hazardous industry to locate in the Corridor.
- ✍ The other existing industry in this precinct could be more effectively catered for in the Parkhurst Integrated Employment Area (IEA) or elsewhere in the region. The Gracemere-Stanwell Corridor is one area that would suit industries, which require a “greenfield site”.

General Relationship with the Stanley Street Industrial Precinct

- ✍ The workshops are a long established (specifically for regional maintenance) facility, servicing the Queensland Rail (QR) system. Located within a wider railway oriented complex, there is ample room for expansion of the workshop within the land owned by QR at this location. Competition for the expansion of this facility, may emerge at Gracemere south west of the City.
- ✍ The proposed advent of a new intermodal exchange at Stanwell to service the proposed AMC project, and other industrial uses that establish in the Gracemere-Stanwell Corridor, and the potential for a loading facility at Parkhurst may limit the potential of this facility in Bolsover Street to grow.

The intermodal exchange is, however, increasingly more remote for much of its market place, especially with the population growth in north Rockhampton and the advent of new economic activity in the Gracemere-Stanwell Corridor, however, there is a large amount of infrastructure and capital invested in the premises.

General Relationship with the Airport Industrial Precinct

- ✍ The advent of the Gracemere-Stanwell Corridor will generate traffic using the airport and its ancillaries. Under the current road hierarchy this traffic will pass through the built up areas of south Rockhampton and exacerbate any existing traffic issues resulting in amenity loss. An alternative access road to the airport related activities, especially

from the area of the Gracemere-Stanwell Corridor and other out of town locations, would alleviate this situation.

6.2.1.4 Regional Policy

Economic and industrial development is subject to ongoing consideration. This is apparent through the works done to date (as at July 2001) by the State Government sponsored regional planning group, developing the draft document, CQ A New Millennium.

The guiding principle for Economic Development (as at July 2001) is the “recognition, protection and promotion of the competitive advantages of the region and the encouragement of commercial activities will be in accordance with actions that support the region and its local economies through appropriate business, industry and government initiatives”.

The strategies for “Existing and Emerging Industries” (Policy 5.1) are:

- ✍ “Apply effective strategic planning processes that support economic and industry development.
- ✍ Actively promote synergies between the major industrial development areas and between industries within the region.
- ✍ Actively encourage the use of best practice technology, processes and management techniques.
- ✍ Encourage government at all levels and stakeholders in the region to proactively generate economic development initiatives.
- ✍ Actively promote industry diversification to support economic stability and growth across the region.”

The strategies for “Industrial Land” (Policy 6.6) of the Infrastructure theme are:

- ✍ “Identify, develop and capitalise upon the synergies between the strategic industrial development areas in Gladstone, the Stanwell Corridor, Biloela and Emerald.
- ✍ Ensure the provision of general industrial land meets current and projected requirements associated with population growth.
- ✍ Ensure suitable industrial land is available and marketed for the attraction of industries and businesses seeking a suitable location.
- ✍ Identify, through mapping, areas of potentially conflicting and competing land use, and proactively seek resolution through inclusive, participatory approaches.”

Summary: Needs Analysis – Industry Demands

The strategies outlined above are developed on a regional basis to provide a framework in which growth can be managed. At the local level, the City, as a major shareholder in the process, should, whilst participating in the wider process, undertake a parallel program, within the new City Plan, focussing directly on its own capacity to compete for economic development in the region. The City Plan is a useful tool and mechanism to ensure continued monitoring of these regional strategies.

6.2.2 ROCKHAMPTON CITY CONTEXT

6.2.2.1 Rockhampton City Council

The Rockhampton City Council's Draft Corporate Plan 2001- 2005 states in its discussions on the Economic Development theme that:

'As an economic unit, Rockhampton is not confined to those activities or investments within its City boundaries. The economic unit is clearly regional, with major industrial and residential growth taking place outside the City's boundaries; hence any objective of Council in economic development is cognisant of and integrated with regional development perspective'.

The Regional Cooperation and Industrial Development objectives set out in the Corporate Plan reflect the need to work with neighbouring Councils to secure major industrial developments that will be beneficial to the CQ region.

At a Local Government level, Rockhampton City Council began a review of its 1986 Planning Scheme in 1999/2000. The new document which will be compliant with the Integrated Planning Act 1997 will be called the Rockhampton City Plan.

The Statement of Proposals (SOP) document (September 2000) which forms part of the new Rockhampton City Plan emphasises the principal of ecological sustainability. It notes that among the challenges to be met whilst encouraging and sustaining industrial development is the need to protect the environment and residential amenity. Part of the proposed response to issues of sustainable industrial development is to attract 'clean and green' industry and assist existing industry to improve its environmental standards.

Following on from the SOP, working papers were developed to give a summary of major land use issues throughout the City. These papers were produced for uses such as residential development, Central Business District and commercial centres, Urban Heritage and Industry. Working Paper No 4, "Industrial Development" confirms the role of Gracemere-Stanwell to siphon off heavy impact industry from its traditional base at Parkhurst and the new role for industry in Rockhampton will be mainly for lower impact activity. It also recognised that land for industry is finite.

Another area where information is related to Council's role in the community is in the Stanwell Energy Park Update Paper of May 2001. The City's Mayor acknowledged that the new developments in the Gracemere-Stanwell Corridor (GSC) would create exciting employment opportunities for many locals and that the flow-on effects will be a welcome boost to local business and industry.

6.2.2.2 Planning Scheme Provisions

The Rockhampton City Council Strategic Plan (gazetted March 1997) has the following Objectives for Industry:

“To ensure provision of adequate serviced land for industry

To promote viable industry

To minimise the negative impacts of industrial development on urban areas, particularly on housing

To encourage a high standard of industrial development

To provide for and encourage a wide range of industries within the City

To identify land specifically for a Business Park.”

The Town Planning Scheme (gazetted March 1986 – with amendments to 2000) allows six industrial zones:

Service	Light	General
Noxious/Offensive	Hazardous	Extractive.

A summary of the approximate land areas of these zones (as at 2001), and the category of “Impact” as nominated by Industrial Planners at the Department of State Development is given below:

<i>Zone</i>	<i>Impact</i>	<i>Area</i>	<i>Description</i>
Service & Light	Low	69 ha	Park Avenue Kawana Lower East Street Stanley Street
General	Medium to High	549 ha	Parkhurst Kawana
Noxious & Offensive	High	180 ha	Lakes Creek
Hazardous	High	13 ha	Lower East Street
Extractive	High	22 ha	Yeppoon Road

Rockhampton's economic strategies, identified in Council's current Corporate Plan recognise the importance of ecological sustainable industry to the City's welfare. Its objective is to fulfil a role as a major contributor to regional development by providing the economic focus for the Fitzroy region, acknowledging the parallel role of Gladstone.

Whilst encouraging industry that value adds to regional outputs, limited land space/urban development ratio dictates the City's role is now to accommodate "lower impact industry". "Higher impact industry" is encouraged to locate nearby in the Gracemere-Stanwell Corridor, where Rockhampton will continue to participate in the wealth and employment generated in the region.

The 1997 Strategic Plan nominates a Business Park node in the City's north, with interest being sought in close proximity to the University, and centres of the DPI, EPA, Parks and Wildlife and the CSIRO.

6.2.3 INDUSTRY DEMANDS FOR ROCKHAMPTON

The demand for industry in Rockhampton has followed an evolutionary pattern of opportunities for economic development:

6.2.3.1 Service Centre related

- ✍ Based on its location at the junction of inter-regional transport routes, Rockhampton evolved as the principal service centre for the wider CQ Region. At that time it operated effectively as a sea port for the passage of goods in and out of the region;
- ✍ With the advent of economic and population decentralisation based mainly on the growth of the sugar industry, substantial new centres built up at Mackay and Bundaberg resulting in the irrevocable loss to Rockhampton of part of its service provider catchment;
- ✍ The remnant catchment strongly attached to Rockhampton is the Capricorn, Central Highlands and Central West sub-regions;
- ✍ At the fringes of the catchments are areas of option that are available to be captured by vigorous marketing, promotion and provision of appropriate transport access;
- ✍ Rockhampton City's role in the future economy of its local and regional context will be that of a dormitory and commercial services centre servicing the wider Fitzroy region and its industry will be mainly population servicing consumption based services with some light general industry.

6.2.3.2 Value Adding related

- ✍ The City's regionally based catchment produces an extensive range of products, which offer the opportunity for value adding or service

provisions. These include minerals (principally coal, magnesium and nickel), beef, grains, horticulture and natural resources;

- ✍ Other economic opportunities based on regional attributes include tourism, defence and education;
- ✍ Similar initiatives are being taken to attract investment serviced by the Stanwell power station resulting in the impending establishment of a large-scale magnesium plant and associated investment emanating from linkages and synergies. This development is on the southern fringes of the City.

6.2.3.3 Gladstone related

- ✍ The growth of the coal industry in the region in the latter half of the 20th century demanded a deep-water harbour capable of handling large bulk handling cargo. The harbour at Gladstone was selected over Rockhampton's Port Alma for this purpose. The associated economic activity and population growth further eroded the service catchment directly dependent on Rockhampton;
- ✍ The economic growth in Gladstone that has impacted strongly on the economy of Rockhampton to the extent that it can be viewed as its major competitor, this has originated from the exploitation of the ready availability of low-cost energy as well as the port facilities;
- ✍ The nature and extent of mineral processing of aluminium at Gladstone and magnesium at Stanwell has led to Federal and State recognition of the Fitzroy Region as the light metal province of Australia;
- ✍ Located only 100 kilometres apart, Rockhampton (with its large population and established commercial economic base) and Gladstone (with its smaller population but substantial industrial base) can be viewed as a critical mass operating as the two "principal nodes" of the urban complex servicing the Fitzroy region.

6.2.3.4 Power Stations

- ✍ A significant feature of the area is the existence of three major power stations (Stanwell, Gladstone & Callide) in a one hundred-kilometre radius from the City;
- ✍ Economic activity is being actively canvassed to similarly develop the environs of the Callide power station outside Biloela. This development will form an extension of the Gladstone-Stanwell axis in progressing the development of the Fitzroy region. It will also result in growth in Biloela and strengthen its role as a regional service provider.

6.2.3.5 Emerald related

- ✍ Within Rockhampton's remnant service provider catchment the town of Emerald is continuing to grow and to provide retail, wholesale and service functions. This centre has the potential to also erode some of Rockhampton's current service functions.

6.2.3.6 Magnesium related

- ✍ Within the Capricorn region the most momentous economic development has been the growth of the Gracemere-Stanwell Industrial Corridor. The recent confirmation of the establishment of the very substantial investment in the magnesium processing plant should prove the catalyst to attract wide scale investment in associated and allied economic development;
- ✍ The planning of this industrial precinct permits development across the full gambit of industrial activity. This provides Rockhampton with a major industrial wealth generator, which, in every sense other than Local Government politics, is an integral part of the City's economic, social and economic structure;
- ✍ Future regional value-adding industrial development, especially at the medium to higher impact levels, will inevitably be drawn to this location;
- ✍ The need for a role in these fields has thus been significantly diminished within the political boundaries of Rockhampton City;
- ✍ Established industry of this category, involving heavy investment, which may make it uneconomical to relocate, may choose to remain. Others may relocate over time to Gracemere. Capacity is needed for a limited amount of new industry in these categories that may wish for special reasons to locate within the City.

6.2.3.7 Land demand related

- ✍ Given the restricted land capacity for constraint free urban development, industries that exhibit dangerous risk factors or are likely to have considerable impacts on living amenity and/or the natural environment should be avoided and existing facilities in these categories should be encouraged to relocate over time outside the City;
- ✍ The full range of industrial land types ranging from service to heavy industry can be expected to seek to locate in Rockhampton and its environs. The City will need the assistance of the Gracemere-Stanwell Corridor to service this demand.

6.2.3.8 Airport related

- ✍ Rockhampton has the major airport in the region. This role should be strengthened by encouraging the growth of airport related

industry in and abutting the airport precincts. Opportunities exist in relation to freight services on a state, national and international scale and to facilitating the transshipment of personnel, goods, materials and equipment used in association with the defence related activities at Shoalwater Bay.

6.2.3.9 Information technology related

- ✍ Industry based on Information Technology has emerged as a significant new element in the modern economy. This is an evolving process and definitive location demands have not yet been established. Some of the activities can operate similarly as business or professional services. Others may need larger space and specialised infrastructure and would benefit from clustering giving the advantages of economies of scale and offering linkages and synergies within an integrated network. Provision should be made for such a facility.

6.2.3.10 Employment related

- ✍ Rockhampton, in tandem with Gracemere-Stanwell, provides employment opportunities for the large urban complex centred on the Capricorn Coast and the smaller settlements in the Livingstone Shire, especially those on the City fringe;
- ✍ Rockhampton fulfils a similar role for the smaller centres in the Fitzroy Shire such as Bouldercombe and to the Mt Morgan Shire.

6.3 EMPLOYMENT DEMANDS

The allocations previously noted from the planning scheme identify the supply of land available for industry purposes at approximately 800 hectares. Some measure of demand is needed to determine whether that supply is sufficient for future use, that is prepare a land budget.

Using the methodologies refined from those proposed in the Department of State Development (DSD) working paper: *“Establishing Future Business and Industry Land Requirements and Identifying Strategically Important Sites”*, demand is considered as the driver rather than the supply which is already known. Demand can be measured by estimating employment needs.

An industrial land budget can be estimated from a process involving:

- ? Estimating populations for the target periods
- ? Predicting the employment demands of that population base
- ? Determining the share of that employment required for specific industry sectors
- ? Using predetermined benchmarks for generic industry sectors to calculate densities in terms of employees per unit areas
- ? Estimating the likely overall spatial demands

An alternative method is to use empirical formula derived from State Development Department research on industrial land available in other major centres throughout Queensland. Average rates under the formula are 4.5 hectares per thousand population, with a range 3 to 6 hectares dependent on the dominant industry type in any particular area. These figures correlate with prediction exercises undertaken using the Department of State Development (DSD) methodology.

The difficulty in using the DSD analytic methodology in this strategy is the lack of certainty or policy as to future patterns of residential behaviour of its industrial workforce.

The future population growth of the Capricorn region and its distribution throughout the component political entities is extremely difficult to predict, as is the possible leakage of future workforce between the growth centres.

Given the inherent uncertainties in forecasting, it is proposed to estimate the land demand for industry using the empirical formula addressed to the attainment of future population thresholds.

6.3.1 POPULATION ESTIMATES

The population growth in Rockhampton and its satellite areas will be affected by natural and migratory growth, rate at current historical rates and projected in-migration associated with growth induced by development of major and subsidiary industrial projects in the Gracemere-Stanwell Corridor.

It is emphasised that such predictions are of a very tenuous nature, their purpose here being to estimate if and when the industrial land bank in Rockhampton may be exhausted.

For the purposes of this exercise, current population figures are adopted from the Australian Bureau of Statistics 1999 Report.

It is assumed that the current population rate will increase over the next 10 years as the magnesium smelter construction begins, plant operations commence and other value added and service industry develop. The growth would be likely to stabilise as the initial momentum tapers off. The region should enjoy continued steady growth with the ongoing benefits of the economic development and perhaps contributing to the wider regional workforce at Gladstone and other ongoing development in the wider regional context. The size of the growth rates is assumed from discussions with various stakeholders during the course of the strategy. It is recognised that these assumptions are difficult to substantiate.

Tables 1 & 2 (page 105) following are indicative only and are prepared solely to assist in estimating the scale of industrial land demand possible in Rockhampton.

It is acknowledged that these predictions vary from those set out in the Statement of Proposals for the City Plan. Growth rates adopted here for Rockhampton are considerably higher. The basis for this is the possible impetus that the City may experience as the result of accelerated economic development in the region. It is proposed that this approach is valid in that industrial land, particularly in Rockhampton, is difficult to secure, and if lost, cannot be regained. Should these estimates prove excessive, land not taken up by industry over time can readily be turned to other urban uses.

6.3.2 INDUSTRIAL LAND ESTIMATES

The dispersed nature of the mutually dependent settlements making up the Capricorn region, their different functional roles and the uncertainties in the distribution of the effects of the changes expected to occur as the result of economic stimulus, make it difficult to apply standard Department of State Development (DSD) forecasting methodology. Some estimates of demand are necessary, however, the major element is to identify the scope of providing land for industrial development for the next 20 years.

A modified methodology will be applied to give results that are indicative only and serve to indicate whether Rockhampton is likely to exhaust its finite stock of industrial land by the end of the term of the strategy in 2020.

The situation is further complicated in that there are large stocks of industrial land designated in the nearby Gracemere-Stanwell Corridor that can readily take up any Rockhampton short fall.

Labour force figures are adopted from the Central Queensland Submission to the Annual Vocational Educational and Training Planning Process 2001. These indicate that in this region, approximately 46% of the population is available for the workforce.

Of this workforce:

- ✍ 10.5% of the workforce is employed in the Manufacturing Sector and
- ✍ 4.9% of the workforce is employed in the Transport and Storage sectors

(Source: Queensland Treasury Regional Economic Report – Rockhampton Region: July 2000)

These sectors make up the bulk of the workforce in Integrated Employment Areas. There is however leakage from other sectors such as Construction, Utility Services and Wholesale etc. A nominal estimate of 4% of the workforce is adopted, for use in this strategy, based on previous experience.

Thus about 19.4% of the workforce could be expected to be employed in industrial areas. Employment should strengthen as economic momentum builds in the region and a figure of 20% has been adopted.

In order to plan for land for industrial development, there needs to be a formula adopted. Studies and analyses carried out by the Department of

State Development elsewhere in the State indicate that the rate of industrial land per unit of population in Queensland varies from 3 to 6 ha per 1000 persons. Due to the expected nature of the larger regional scale projects and the more environmentally sensitive nature of modern industrial design, the rate of 6 ha is therefore adopted for this strategy. This translates to 65 ha/1000 industry workers (at the workforce participation rates and industry sector allocations adopted).

The very large mineral processing plants expected in the Gracemere-Stanwell Corridor adjacent Rockhampton City will require land in excess of these estimates. Special allocations (some 1300ha) have been made for these requirements in the relevant Development Control Plan, which is under the planning provisions for Fitzroy Shire Council. This reflects high impact industries, which are able to locate to this 'light metals' precinct.

For the purposes of this assessment it is assumed that there will be an "interchanging of the workforces" between the various sub regional settlements by 2020. This is explained further with:

- ✍ 30 % of Rockhampton's industrial workforce may work in Fitzroy Shire, and
- ✍ 50 % of Livingstone's industrial workforce may work in Rockhampton City.

It is also assumed that Rockhampton is at the "threshold of travel time tolerance from the Capricorn Coast". This commuting comes as cross-city traffic increases with population, which may with time result in a reluctance of coastal workers to travel through Rockhampton to Gracemere.

From the outcomes of Table 2 (page 105) it is estimated that there will be zero nett loss/gain in industrial activity for Rockhampton. The City will require (based on the land mass/population method) approximately 500 hectares of industrial land by 2020.

The role that the Gracemere-Stanwell Corridor will play in the make up of the overall industrial land pattern within Rockhampton will skew the normal relativity between light and heavier impact industry demands. This distribution will be shared across the two centres as they service the one economy. The bias in Rockhampton should be towards lower impact facilities¹⁴.

Extrapolating on the same basis, Rockhampton's demands would increase to 600 hectares by 2030.

¹⁴ *It is emphasised that this is a hypothetical assessment and that the criteria used are open to critical review. The results however give an overall scope of possible demand for industry in the Capricorn region, albeit the distribution may alter depending on the planning and political decisions made by Governments and the choices made by investors seeking to maximise the efficiency of their enterprises. Changes in community needs and in technology may also occur that either decrease or increase the current levels of demand for industrial land.*

The precautionary principle (as outlined in the Regional Vision for Resource Use, Conservation and Management in the Central Queensland Regional Planning and Development Framework) has been adopted in arriving at these estimates.

The outcomes of this analysis are shown in Tables 1 & 2 (page 107) and indicate that Rockhampton's workforce gains and losses could balance. To estimate industrial demands based on Rockhampton's population alone appears a valid option.

Industrial land demands on this basis for population thresholds at the rates of 4.5 or 6 hectares per thousand are:

<i>Population</i>	<i>Industrial Land Demand (ha)</i>	
	4.5ha per 1000	6.0ha per 1000
65 000	290	390
70 000	315	420
75 000	340	450
80 000	360	480
85 000	380	510
90 000	405	540
100 000	450	600

There is currently (as at Planning documents – July 2001) some 833 ha designated for industry in the City. In addition, there are some 500 ha available for light and general industry in the Gracemere-Stanwell Corridor. Should Rockhampton City Council adopt the recommendations of this report (see **Table 3** following **Section 4.2.8**) there will be some 900 ha of land available for industry within the Beef Capital. This figure has been calculated using land, which have not before been nominated for industry, land that is currently used for industry and by removing land from the industry zone or designation.

It can be confidently assumed that the City's finite complement of industrial land is sufficient to satisfy demands past the 2020 benchmark of this strategy.

Table 1 : Indicative Population Growth Estimates

<i>Local Govt</i>	<i>Current Population</i>	<i>Growth Rate</i>	<i>5yrs growth (2005)</i>	<i>Growth Rate</i>	<i>Another 5yrs (2010)</i>	<i>Growth Rate</i>	<i>Another 10yrs (2020)</i>	<i>Growth Rate</i>	<i>Another 10yrs (2030)</i>
Rockhampton	60,000	2%	66,250	2%	73,100	1%	81,000	1%	89,100
Fitzroy	10,000	3%	11,600	3%	13,400	2%	16,000	1%	18,000
Livingstone	25,000	4%	30,400	4%	37,000	2%	45,000	2%	55,000
Mt Morgan	2,500	2%	2,800	3%	3,200	1%	3,500	1%	4,000
TOTALS (000)	98,000		110,000		127,000		146,000		166,000

(Source: Population growth rates used in this table are estimates assumed as attainable with the economic expansion expected in this region).

Table 2 : Estimates of Industrial Demands 2020

<i>Local Authority</i>	<i>Population estimate</i>	<i>Est. Industry Workforce [9% of Population]</i>	<i>Est. land requirements [65ha per 1000 industry workers]</i>	<i>Postulated Inter nodal leakages</i>	<i>Nett est industrial land demand</i>
Rockhampton	81,000	7300	480ha	From Livingstone + 135ha To Fitzroy - 145ha	470ha
Fitzroy	16,000	1400	100ha	From Rockhampton + 145 ha	245ha
Livingstone	45,000	4100	270ha	To Rockhampton - 135ha	135ha
Mt Morgan	3,500	300	20ha		20ha
TOTAL	146,000	13,100	870ha		870ha

7 OPPORTUNITY ANALYSIS:

7.1 INTRODUCTION

Section 6 has identified that currently (July 2001) Rockhampton City Council has 833 ha of land for industrial purposes. Based on the stated linking assumptions, Rockhampton City may require 500 hectares of land, which is able to accommodate future industry (to the year 2020).

This part sets out the parameters on which the hierarchy of facilities (which are recommended to formulate the overall structure of the industrial network in Rockhampton City) are based. It also defines criteria on which individual facility location can be determined. These parameters and criteria are based on working papers published by the Department of State Development.

7.2 INDUSTRY PARAMETERS

7.2.1 INDUSTRY SERVICE FRAMEWORK

Industry is generated servicing the demands created by:

- ? Providing goods and services to local population units;
- ? Value adding to locally generated products;
- ? Value adding to products generated elsewhere in the wider immediate region;
- ? Accommodating investments that service wider markets and locate by choice (attracted by some feature of the local physical or economic environment).

Industry response to these demands is to provide a hierarchy of service units based on district and the broader internal or external regional perspective.

7.2.1.1 District Services

District services satisfy the demands for goods and services of local populations along with some value adding to local products. These are generally of “low-to-low” – “medium impact” industrial activities and require being located in close proximity to the urban units that they serve. Some of these industries can be serviced in lower impact, higher quality, industrial precincts such as specialised Business Parks or in smaller home based occupations.

7.2.1.2 Regional Services

7.2.1.2.1 Value Adding Local & Regional Products

This level of regional services cater for the demands of locally produced or imported resources to be processed or refined, value adding them for trading on local or external markets.

They are generally “medium-to-low” impact activities that prefer to cluster into larger sites to take advantage of synergies, linkages and economies of operational scale. Ready access to product supplies and outlets along major transport routes is required, whilst avoiding undue interference within the urban cells which provide the supporting infrastructure and work forces.

Smaller industry units will associate with the larger operations to supply support services.

7.2.1.2.2 Services that locate by choice

These industries locate in an area by choice to take advantage of some perceived regional, physical or economic advantage, usually in competition with other candidate sites elsewhere.

They are often larger undertakings requiring larger sites and are often looking for linkages with established industries and local support services. Their location demands are similar to sub regional type industries except that they will be much more specific and demanding in their requirements.

7.2.2 INDUSTRY SERVICE FACILITIES

The provision of specific types of facilities to accommodate the location and operational needs of industry can be classified as:

- ? Major Commercial Centres
- ? Local Home Based Occupations
- ? Business Parks
- ? Integrated Employment Areas:
 - * District Oriented
 - * Regionally Oriented
- ? Difficult to Locate Industry Precincts.

7.2.2.1 Major Commercial Centres

Major Commercial Centres will provide capacity for some service oriented Business and Industry activities, especially those associated with the major function of retailing. Relatively small amounts will be involved and cross leakages will occur with certain retail operations being associated with industry specific installations. The provision for

Major Commercial Centres is not included in this strategy brief and will not be further considered here.

7.2.2.2 Local Home Based Occupations¹⁵

Generally, the industry component of any home based occupations are largely “service trade” operations with very low impact on the amenity of their immediate locality. Locations will be determined by performance planning, and will have little effect on the overall demand for industrial land.

7.2.2.3 Business Parks

Business Parks are specialised, high quality industrial facilities created to take advantage of direct linkages to specific features in the urban economic structure. Such facilities attract a specific form of investment. They are usually associated with some aspect of specialised or advanced technology.

The spatial demands of such facilities are limited, having a high standard of lower impact development whilst also being compatible with amenity standards of normal urban living.

The planning for these facilities is carried out in association with the local neighbourhoods of which they will form an integral part. There generally is no need to consider segregation as with industry facilities whose activities are not as compatible with the day to day operations of local living environments.

7.2.2.4 Integrated Employment Areas (IEA's)

IEAs are defined as:

“Areas suitable for a wide range of industrial, warehouse, transport, storage and office uses together with limited commercial, retail and recreational uses that are developed to maintain compatibility between uses and to maintain the level of amenity determined as appropriate given the actual mixture of land uses proposed.”

This definition is derived from a Department of State Development (DSD) paper entitled “Best Planning Practices for Integrated Employment Areas”.

On a regional perspective a broad mix of economic activity is needed to enhance economic diversity thus reducing economic vulnerability.

The use of the IEA concept is designed to make available the range of serviced industrial land essential to attract investment for the fuller spectrum of economic activities.

¹⁵ In terms of this strategy this term is not considering a land use definition.

Encouraging the wider range of complementary business and industry activities to co-locate in IEAs will assist in creating the operational and market climate necessary to allow the economy to cope with changing characteristics and form which result from changing sources of economic growth, market forces and technology.

Other benefits of IEAs include:

- ? Consolidation of development and greater land use flexibility
- ? More efficient provision and use of infrastructure
- ? Increased market flexibility
- ? Ready access to and for the workforce
- ? Limiting off-site impacts
- ? Employee friendly work place environment
- ? Stronger control and mitigation of adverse environmental impacts
- ? Sharing of facilities for mutual benefit
- ? Opportunity for innovative design of plant and infrastructure
- ? Vibrant and safe working environment providing the flexibility to operate effectively during day and night
- ? Concentrated commuter movement patterns facilitating viable public transport services
- ? Increased attractiveness to potential investors.

IEAs fall into two principal categories, District and Regional.

7.2.2.4.1 District level IEA's

The manufacturing, storage and distribution needs generated directly by local urban areas are basically consumer services and have their linkages with local commerce and community activity. They need to be close to the localities that they serve to provide the widest possible range of consumer and business services and to be readily accessible to the workforce.

This level of service is generally "low" to "medium impact" and creates a minimum loss of amenity to its local environment.

Land values close to urban development are governed by location economics and are relatively high, but lot size demand in district IEAs is generally smaller and thus affordable.

District IEAs should be located close to the urban nodes they service and should be restricted to sizes that are manageable in terms of the particular local physical and social environment. They may range between 50 and 200 hectares depending on the size of their urban catchments.

7.2.2.4.2 Regional level IEA's

Manufacturing, as a significant industry sector in a healthy economy, is concerned with value adding and the distribution of the resultant products to the relevant market places, that is producer services. They are market rather than community oriented and prefer to be as close as possible to national and interstate highways to provide ready access for

transshipment of goods inwards to the production lines and outwards to markets.

These activities are on a higher activity scale than consumer services and will have impacts that are beyond tolerance if in direct contact with urban communities. Locations require being sufficiently far away from residential areas to minimise adverse impacts. Access for the workforce is also an essential element so that the location must be within tolerable limits of distance, time and convenience of the dormitory areas of its potential workforce.

Provision is required for a wide range of lot sizes ranging from small lots for service industries to large lots for the more expansive industrial undertakings.

To provide for the scale of operations in these facilities a minimum size of 200 hectares is required, with an optimum size being 300 hectares and upwards.

7.2.2.4.3 Difficult to Locate Industries

Use of products that are hazardous or dangerous is unavoidable in manufacturing processes thus introducing an element of risk that requires careful management.

The manufacture of these substances in larger quantities can be discouraged in any particular region, but small scale manufacture, maybe as by products, is difficult to avoid as well as the transport and storage of such materials used in certain manufacturing operations.

Provision should be made in each region for housing at least one facility for potentially harmful products and/or operations in a location that is sufficiently removed to minimise risks to urban activity and transport routes. Isolation should be such as to reduce risks in case of mishaps, preferably ½ to 1 kilometre from areas that may be adversely affected.

Small-scale facilities can often be accommodated by using “nesting” techniques within IEAs.

7.2.2.5 Summary

There are two primary levels of operation in the provision of land for business and industry.

The first is where industry needs are provided on a smaller scale in close association with community activities, which are not exclusively set aside with industry as the prime purpose. These include industry and business accommodated within major shopping centres, home based industrial type activities and business parks.

The land areas involved are small and the activities are closely integrated with those of the immediate local precinct in which they are located.

The planning for these space allocations is best made in the more detailed development-planning phase. In the case of Business Parks there is a need for the Strategic Planning process to highlight those activities at the locations that provide opportunities for these specialised facilities and the need to provide for them in the more detailed planning processes involved in local area planning.

The second is the provision of significantly large sites to accommodate those activities which are primarily industry focused and are on a scale that will create adverse impacts on the community they service if not adequately planned and appropriately located. These activities occur in Integrated Employment Areas either:

- ✍ at a district level closely associated with the community they service, or
- ✍ on a wider, more regional level at which they are more isolated to contain any adverse impacts and designed to provide commercial advantage through the use of synergies, linkages and economies of scale.

Because of the sensitive criteria and limited opportunities for locating these facilities, it is important to protect them against competing land uses. Where site opportunities are limited as in Rockhampton City, there is merit in extending out traditional planning time frames to “best guess” industry requirements related to the ultimate or probable population-carrying capacity of the strategy area, that is well in excess of traditional planning time frames.

Potential sites should be preserved in appropriate interim uses, as once lost, industrial location opportunities are almost impossible to retrieve. Should the population growth or market opportunities not reach expectations, any unused industry allocations can revert to other uses where there is a more relevant demand. This situation occurs where there are niche opportunities such as the airport precinct.

Rockhampton is, however, fortunate in that the Gracemere-Stanwell Corridor is within the immediate economic and physical catchment of the City providing a reservoir of industrial land capable of servicing any overflow that cannot be catered for within the City.

7.2.3 INDUSTRY LOCATION CRITERIA

It is important to realise that the establishment of a substantial industrial base is dependent not only on the community’s desire to have industry but also on industry’s desire to come to the location. Industrialists must avail themselves of the best location opportunity that is available at the time that their window of investment opportunity presents itself.

Industry will be attracted primarily by physical suitability and market opportunity. It may not, however, pursue its intentions if it does not have a comfortable level of acceptance by the local community or if

efficient planning and development controls will create delays that will affect the viability of their business ventures.

A community that intends to attract industry should determine the potential conflicts that may arise in creating industry opportunities well in advance of its need to attract particular industries.

The introduction of larger industrial complexes will cause concerns to all local communities as they are inevitably associated with a perception of loss of amenity, even though this may actually be experienced only by a few in the immediate locality of the complex.

Thus, it is essential to ensure that the interests of both industry and the community are identified and a compromise between their respective concerns is forged.

It is incumbent on the local government as the relevant public authority to resolve these matters in the interests of its current and future communities.

The criteria necessary to be considered to strike a balance acceptable to both interest groups are:

Physically suitable	? To facilitate construction, contain building costs and lessen the risks from natural disasters
Environmentally sustainable	? To protect the natural environment and the amenity of the built environment
Cost effective infrastructure	? To rationalise the orderly provision of operational utility services and minimise the associated costs to government, community and industry
Efficient for business	? Opportunity for expansion, synergies, linkages and economies of scale ? ? Flexibility in site choices ? ? Affordable land readily available ? ? Appropriate tenure arrangements ? ? Favourable and expeditious local government planning and development climate
Access to markets	? Ready access to sources of materials for production and to

	local markets and export facilities for product outlets
Access for workforce	? Availability of a suitable workforce within acceptable work journey limits
Land Use Compatibility	? Acceptable levels of impacts on the community's living amenity ? Appropriate employment opportunities ? Convenience of work place trips ? Availability of public transport ? Acceptable visual impacts ? Avoidance of conflict over sensitive cultural or heritage factors

7.3 POTENTIAL FOR INDUSTRY IN ROCKHAMPTON CITY

The criteria for industry location was applied across the City domain to determine where opportunities to locate industrial facilities may occur.

7.3.1 PHYSICAL SUITABILITY

7.3.1.1 Topography

The Berserker Range and the flood plain terraces of the Fitzroy River, along with the undulating foothills and low ridges that lie generally dispersed between them, are the dominant features of the City's topography.

The Berserkers are too steep for urban development. The lower foothills and ridges, along with the river terraces, have slopes that can accommodate industrial activity. The extent to which these can be used is limited, however, by other constraints, such as flooding.

7.3.1.2 Hydrology

The City is severed by the Fitzroy River near the outlet of one of the largest river basins along the East Coast of Australia. Its periodic and severe flooding constrains urban development in both the north and south severances, with the more widespread effects on the southern side. The older, higher river terraces are flood free. The lower and middle terraces are subject to flooding at varying levels of severity. The risk ranges from very high in the floodway zones, becoming less in the storage zone and is at a minimum at the flood fringes. The flood depths also affect the severity of the hazards, which become less in all zones

when the water depth is below one metre. Back up flooding also occurs in a number of tributary creeks that flow into the river from the Berserkers to the north bank and across the flood plains to the south bank.

Flooding is the most severe physical constraint that limits opportunities for locating industrial development in the City.

7.3.1.3 Geotechnical

The geology of Rockhampton City consists mainly of volcanic sediments in the mountains and alluvial deposits on and adjacent to the river terraces.

Three broad scale types dominate the soil structure of Rockhampton.

- ✍ Shallow based loam overlaying the volcanic strata on the mountain,
- ✍ Neutral yellow/grey bleached duplex soils that can be subject to erosion on the lower slopes and foothills, and
- ✍ Grey and brown clay soils on the alluvial terraces. Clays that exhibit cracking occur on the lower and middle terraces. The higher terraces support non-cracking clays and bleached duplex soils on which the major portion of the City's urban infrastructure has been built. Cracking clays are not favourable for foundations due to shrinkage and swelling.

7.3.1.4 Impact for Industry

Rockhampton City is a small Queensland local government in terms of land area. Land available for urban purposes is limited further by the physical constraints imposed by the Berserker Range and the regionally induced flooding of the Fitzroy River.

The slope of land suitable for industrial development is seven per cent or less, limiting opportunities for such use in Rockhampton to the river terraces and the low ridges. This area is further constrained by the wide-ranging extent of land subject to flooding, particularly on the southern banks of the river.

Soils in the available areas are general adaptable for the support of industrial structures.

7.3.2 ENVIRONMENTAL SUSTAINABILITY

7.3.2.1 Land

The pattern of land development in the City reflects the previously discussed physical constraints. Much of the available area has been used up for urban purposes leaving few options for the location of new industrial areas.

Land degradation does not appear to be a major problem in the developed urban areas. Some erosion is evident where it has impinged on the foothills in locations such as Lakes Creek, emphasising the need for careful control of development if it occurs in or near these landforms.

Good Quality Agricultural Land (GQAL) that has not already been overtaken by urban development occurs mainly below the flood levels, especially in south Rockhampton. Some remnant GQAL that is above flood occurs between the northern Fitzroy riverbank and Alexandra Street and along the southern banks of Ramsay Creek.

7.3.2.2 Water Quality

All run off from Rockhampton City drains into the Fitzroy River. The barrage provides the water storage for the City's consumption and the quality of water entering the river on the upstream of this facility must be kept at standards that have the minimum effect on its potable qualities.

Water quality down stream of the barrage is important for the general well being of the local natural ecology, use for recreational purposes and to minimise adverse effects on the Great Barrier Reef World Heritage Area into which the Fitzroy ultimately flows.

Danger of water pollution arises principally from the discharges from agricultural, industrial, residential pursuits and new construction.

7.3.2.3 Air

Statistics of air quality over the City have not been available. Inquiry, however, establishes that the principal concerns have centred around the dust related emissions from the magnesite processing plant at Parkhurst, odours emanating at times from the Lakes Creek meatworks, noise from operations in the Parkhurst industrial estate and from the airport. Inquiries made of the Environmental Protection Agency reveal that any adverse effects are monitored and are, subject to additional treatments from time to time, and kept within limits acceptable to the local community.

7.3.2.4 Flora and Fauna

Areas of ecological significance within the City are principally in the Berserker Range, along the fringes of the Fitzroy River and the remnant riparian vegetation associated with its feeder creek system. These areas are not available for industrial use. Where opportunity to locate industrial development exists much of the natural environment has been eliminated by urban development.

This area is commonly referred to as the Berserker Wilderness. The threat of fire to the area, being property, animals, crops and the like is a vital concern to the community of the Berserker Wilderness. The

Berserker Wilderness presents a high scenic amenity to the backdrop of Rockhampton City.

7.3.2.5 Built Environment

Historically, industrial areas in the City have originated in comparative isolation from the living areas. As the City has grown with the passage of time the residential areas have expanded. With the lack of land available for urban use it has been inevitable that these residential uses have moved closer to the industrial enclaves. In a number of incidents they actually abut each other, either directly or separated only by the road network.

Whereas in other communities this often causes strong land use conflicts, there appears to have developed a culture of passive acceptance by the Rockhampton community. An exceptional level of tolerance has developed by residents to the loss of amenity occasioned by the location of the two land uses that are normally considered in planning terms as incompatible.

With future growth that is likely to be more vigorously sourced from outside the region it is debatable whether this culture of tolerance will extend into the future.

7.3.2.6 Impact for Industry

The natural environment is not likely to exert significant constraints on the location of industry in the areas where it is constrained to by other factors.

The need to respect water quality, prevent land degradation, provide opportunity for regeneration and conservation of remnant riparian vegetation will however require substantial management and control on the operations of existing industry and whatever other industry that may eventually establish at these locations.

Precaution should be taken to curtail and/or ameliorate loss of amenity to the built environment and to ensure ecological sustainability on the impact potential on the natural environment.

7.3.3 COST EFFECTIVE INFRASTRUCTURE

7.3.3.1 Water & Sewerage

Reticulated water supply is available to all developed areas within the City via a gravity fed reticulation system delivering supply through a network of reservoirs fed from the Glenmore Water Treatment Plant sourcing its water from the City Barrage. Adequate supply is available to service an extensive increase in population. New industrial facilities will be serviced from this network, upgrading capacities and augmenting systems as consumption demands. Planning for new infrastructure should contain allowance for sequential industrial development.

Rockhampton currently has three sewerage treatment plants. Consideration is being given to rationalising the system by consolidating treatment at one major facility at the current north Rockhampton treatments works. There is adequate capacity in the treatment plant system to cope with a substantial increase in the demands that could be generated by future population growth. There will, however, be a need to upgrade the trunk main system to accommodate both residential and industrial growth when it occurs, particularly from the northern corridor concentrated around Parkhurst.

The standard of treatment at north Rockhampton will adequately cater for the disposal of industrial wastes.

7.3.3.2 Road & Rail

The City is strategically located at the junction of the national coastal highway, the major regional highway servicing the Central Queensland hinterland and the arterial road servicing the tourist centres allied with the Capricorn Coast. Similar patterns exist with the State's railway network. Along with a well-developed internal road hierarchy, this transport framework is well suited to service industry needs.

This activity does, however, create an amenity loss to the City as the movement of goods passes through the residential districts and the City centre. Consideration has been given to a bypass to the west of the City by the national highway. It appears however that there is little possibility of this occurring in the short term due to cost and local resistance.

Should this occur in the longer term, the location of the major industrial complex at Parkhurst/Kawana will not be adversely affected. Access to the Lakes Creek meatworks and the Stanley Street City industrial area would not be improved. The overriding benefit for both the City and industry would be limiting the movements of materials and products through the main City centre and residential areas.

7.3.3.3 Energy Supply

The City is well serviced with energy supply. Ergon Energy supplies electricity from the State Grid and the State Gas Pipeline provides natural gas from the south through the City to the industrial areas at Kawana and Parkhurst.

7.3.3.4 Impact for Industry

The City is well supplied with infrastructure to provide an orderly and financially sustainable program of services to industry on demand. A program of sequential infrastructure improvement and its related costing should be prepared to enable Council and industry to ensure that an adequate level of services is maintained to continue to attract industry to locate in the City.

7.3.4 EFFICIENT FOR BUSINESS

Rockhampton has a mature industrial network that has serviced the City's industrial growth as it has developed over the past one and a half centuries.

The major industrial facility at Kawana/Parkhurst offers greenfield sites in the Council's and the Department of State Development estate and a collection of privately owned undeveloped lots. Brown sites are available for either redevelopment or refurbishment.

The Stanley Street precinct has a store of industrial land that is currently still used for residential purposes although much is subject to flooding.

The Lakes Creek precinct has formed around the meatworks that has been in this location for more than a century. Although a significant amount of land has been set aside for difficult to locate industries, little has been taken up due to a number of factors that render the area not efficient for business.

Although there is ample land available in these areas, there are no other locations available in the City for the establishment of an Integrated Employment Area at any level that would be acceptable to the community.

The emergence of an extensive industrial greenfield site in the Gracemere-Stanwell Corridor in nearby Fitzroy Shire has changed the industrial framework in the region. The encroachment of residential development into the natural buffer zones at Parkhurst/Kawana has limited its capacity to host industry at the higher end of the impact scale, however, Gracemere can fill this gap. The distance between these two areas is less than twenty kilometres by a major highway, allowing linkages and synergies to be readily available. Sufficient greenfield land exists in both estates to provide the full range of site choices across the full gambit of industrial activity.

Land prices in Rockhampton are competitive with other centres in the region.

Local Government is supportive of industrial development and the regional office of the Department of State Development vigorously pursues investment. The new IPA Planning Scheme will enhance the statutory planning and development climate.

The combined industrial sites at Rockhampton and Gracemere present opportunities that are favourable for business efficiency.

7.3.5 ACCESS TO MARKETS

One of Rockhampton's major strengths as a focus for the CQ regional economy is its strategic location in relation to all the various modes of transport that are available for the movement of materials and products

in and out of the region. This network provides effective access to state, national and international markets.

A phenomenon that occurs in many cities, including Rockhampton, that are severed by a major watercourse is an identity barrier that encourages residents to shop or trade on their own side of the physical obstacle.

Originally local serving industry was on the south side of the river with the bulk of the population. With City growth, the bulk of population is now on the north side as is both the bulk of the industries servicing the City's consumption needs with room for expansion.

There is however a cultural reluctance for south side residents and businesses to move across river. This exerts pressure on the inner City fringes as industry tries to squeeze more flood free space for expansion.

7.3.5.1 Roads

The City is situated on the national highway that links the major settlements along the eastern seaboard of Queensland and Australia.

The Capricorn Highway, the major regional arterial servicing the CQ hinterland, joins the national route at the southern sector of the City and the Yeppoon road, the major outlet for the coastal settlements, joins the national route in the northern sector. Opportunity for the establishment of Integrated Employment Area's present themselves at both these intersections.

This has occurred at Parkhurst in the north, but severe flooding constraints have inhibited similar growth in the south. That opportunity has been taken up at the closest alternative site at Gracemere in the Fitzroy Shire.

The intersection of the Capricorn and National highways also offers an ideal location for warehousing and storage to facilitate the movement of goods to and from the CQ region. Flooding constrains this facility from locating in Rockhampton City, but opportunities are available nearby either at Egans Hill or Gracemere in the adjoining Fitzroy Shire. Although the City Council has no jurisdiction in this decision, it is of vital interest in attracting economic activity to the City that provides the commercial services for the Capricorn region. As a major stakeholder in the decision on the location of these facilities the Council should actively pursue a place in this decision making process through the various regional forums.

7.3.5.2 Rail

The City is also a major focus for rail transport being located similarly as roads at the junction of the north-south systems linking the region to state, national and international markets and the western and eastern system providing intra regional links.

A major railway intermodal exchange is located adjacent to the City centre and there are on and off loading facilities at Parkhurst. There will be another intermodal exchange established near the Stanwell Powerhouse in association with the magnesium processing plant.

Should the proposed inland railway link to the southern capitals and on to Darwin eventuate, connection will be available via the existing western link that will intersect the new line near Duaringa.

7.3.5.3 Ports

Port Alma is a small economically viable port that offers a range of port services that compliment the future economic growth of Central Queensland. It has a competitive strength in being able to handle dangerous, hazardous and noxious commodities including both military and industrial explosives in a safe environment.

It provides an essential service for the export and shipment of salt, tallow, meat, scrap metal etc and can provide this service for shipment up to 30 000 tonnes at a very commercially competitive rates due to it's low overheads and operating costs.

While the larger bulk commodity shipments are handled through the Port of Gladstone, it should be noted that Port Alma provides a complimentary service and alternative for the Port of Gladstone.

Port Alma can handle vessels up to 180 metres (length overall) which typically aligns with shipment sizes around 30 000 tonnes. Larger shipments would likely require dredging and perhaps upgraded port infrastructure. Feasibility would depend on the volume and economics of the particular cargo.

Rockhampton City is able to offer future industrial projects the opportunity of access to a strategically located competitive specialised bulk container cargo handling port at Port Alma and a large bulk commodity and container port at Gladstone.

7.3.5.4 Airport

The recently upgraded airport at Rockhampton is the premier air facility in the region. Located close to the City, it is capable of handling international air traffic. The potential to develop airport related industry in association with the current facilities has been canvassed. With the amount of new economic development expected to occur in the region, the opportunity is available to exploit air freight as a significant transporter of goods and products as well as establishing Rockhampton as the regional airport entry and departure point for international and national visitors to the region.

The impact of industrial traffic directly through the adjacent residential areas is a concern that needs to be addressed.

7.3.5.5 Impact for Industry

Rockhampton and its environs have shown, previously in this report, to have ready access to many sources of materials for value adding production. Its strategic location at the hub of a comprehensive transport network ensures investors that their products will have prompt access to state, national and international markets.

7.3.6 ACCESS FOR WORKFORCE

The maximum travel distance for Rockhampton's population to any existing or potential industry location in the City is ten kilometres. Public transport is available via bus services that operate throughout the City.

The City has been the industrial and commercial hub for the Capricorn region. Residents of Livingstone Shire whose place of residence is contiguous with the City (eg Glendale, Nerimbera and The Caves) mostly work in the City. A significant proportion of the participating industrial workforce from areas on the Capricorn Coast also works in Rockhampton. Access is via well-constructed regional or collector roads. The distances travelled can be in excess of 50 kilometres, with people making the choice between travel times and the livability of their chosen area.

The principal workplace source from the Fitzroy Shire is Gracemere. Travel distances are less than twenty kilometres along the major arterial road system.

Bouldercombe in the Fitzroy Shire and the Mt Morgan Shire also provide workers to Rockhampton.

The total available workforce in this immediate region is about 40,000 persons with approximately 16% employed in the manufacturing, transport and storage sectors.

There are however potentially momentous developments in economic ventures appearing that will fundamentally reshape the pattern of industrial development in this region. The advent of the Australian Magnesium Corporation's smelter at Stanwell is expected to be the catalyst for major investment in industrial enterprise in the Gracemere-Stanwell Corridor.

Should this occur, a significant proportion of the new workforce will choose to reside in Rockhampton attracted by the higher quality livability available in the established urban centre. Rockhampton may find its role altered to that of a more dormitory and commercial service centre servicing these new industrial enterprises.

Access for any new workforce living in the City is between 15 and 25 kilometres along major regional arterials. Consideration should be given to providing an appropriate public transport service for the workforce

to commute between the City and the Corridor when and if the demand arises. Both rail and road should be considered.

Some of the new industrial workforce may consider living at the Capricorn Coast. Travel times will be increased especially in the cross City portion of the trip as traffic builds up with population increase.

Rockhampton may be at the threshold of acceptable travel to work time from the Capricorn Coast and the pattern may evolve that Capricorn Coast industrial workers in the main do not patronise the Gracemere-Stanwell Corridor.

Thus industrial workforce movements would be those travelling from the Coast to Rockhampton seeking work and those moving from the Gracemere-Stanwell Corridor to the City seeking accommodation and recreation.

7.3.7 LAND USE COMPATIBILITY

Rockhampton has a long established industrial base and is experienced in interaction with industrial activity. A culture of passive acceptance of amenity loss in residential areas abutting or near industrial activity is evident and reinforced by the lack of comment on these matters in the Issues Report accompanying the Statement of Proposals for the new City Plan.

The Industrial Development Working Paper does, however, indicate that feedback subsequent to the release of the Statement of Proposals raised the issue of adequate buffers separating residential and industrial uses and the problems of heavy vehicle movement through residential areas. A preference for 'clean-green' industry is highlighted, as is the preference that heavy industry should locate in the Gracemere-Stanwell Corridor. A movement for action to be taken to reduce the impacts of existing industry on the local community is becoming apparent as alternative sources of generation of economic wealth for the City are emerging.

The major problems already exist between industrial and residential development. The acceptance by the public of further industrial development will depend to a large degree on alleviating these existing negative impacts.

7.3.8 OPPORTUNITIES FOR INDUSTRY LOCATION WITHIN ROCKHAMPTON CITY

The major factors that influence the location of industry in Rockhampton are:

- ✍ Rockhampton has an established industrial base with the capacity to cater for the full range of industry demands.

- ✍ The physical constraints of topography and flooding limit the availability of land suitable for new locations for industry within the City.
- ✍ The shortage of land available for urban development and activities within the City and the demands of competing land uses severely limit the opportunity to find new areas for industrial development.
- ✍ Residential development has expanded to the point where it has closed in on the industry precincts limiting the level of impact that could be tolerated in new industry that otherwise could be attracted to the area.
- ✍ Water quality in the town supply from the barrage and the outflows to the Barrier Reef Park must be protected from pollutants originating in the industrial precincts.
- ✍ The City's location at the junction of the major transport routes is an advantage for industry although the junction of the major routes is at a location that is unsuitable for industry due to flooding.
- ✍ Although the City does not have its own port facilities of a standard suitable for modern transportation needs, it is located an hours journey along the national highway to one of the major ports on the Australian eastern seaboard.
- ✍ A niche opportunity to capitalise on economic development generated by the City's regional scale airport and the defence activities at Shoalwater Bay exists in close association with the airport and should be vigorously pursued.
- ✍ The settlements in Livingstone Shire, particularly on the Capricorn Coast, provide a workforce that can be utilised at the industrial facilities in Rockhampton.
- ✍ The emergence of a major economic development zone nearby at Gracemere in the Fitzroy Shire eliminates the need for high impact industries that are difficult to locate to be catered for in Rockhampton.
- ✍ Future industry of a regional scale is also likely to prefer the Gracemere-Stanwell Corridor, taking advantage of linkages, synergies, economies of scale, appropriate infrastructure and the more flexible environment involving little if any conflict with other land uses and the general community.
- ✍ Much of the population growth that should accompany the ongoing development at the Gracemere-Stanwell Corridor will be accommodated within Rockhampton City giving rise to an increased demand for consumption based industry in the City.

7.3.9 INVESTMENT OPPORTUNITIES

The attraction of private and public sector investment in industrial enterprise to Rockhampton City depends on two principal factors:

- ✍ The availability of adequately serviced lands to accommodate new investments efficiently, and
- ✍ The undertaking of a promotion and marketing campaign that attracts investment to the desired levels.

7.4 AVAILABILITY OF LAND EFFICIENT FOR BUSINESS

Essential to modern business investment is the ability to react to commercial opportunities when a window of opportunity presents itself.

Whatever the business opportunity is, an essential element is the ability to produce relevant products in time to satisfy the generated demands in competition with other producers.

A basic element in achieving this objective is the availability of a location that permits the planning and production processes to proceed in accordance with the time frames necessary for project management to meet the dictates of market demands.

That is an affordable site with appropriate infrastructure must be available with land use and development constraints predetermined and a helpful and cooperative planning and development regime in place to assist the establishment process.

The provision of affordable, serviced sites is dependent on the willingness of property investors to fund the development of industrial estates given the inherent risks. If the private sector is to be involved, this process must be capable of returning a profit on their investment.

The industrial land market is divided into two major sectors:

1. Smaller lots up to about 2000 square meters to accommodate community-servicing industry closely associated with existing urban infrastructure thus involving limited up-front costs. Sales response is usually prompt from the local market place; and
2. Larger lots for value adding and larger industries generally segregated from urban development for amenity reasons resulting in heavier investment in providing infrastructure due to location and/or operational levels. Market response is usually much slower and dependent on attracting specific investors often from outside the immediate region.

Given the high cost of front-end acquisitions, provision of the necessary headworks and slower market response to the larger industrial sites,

investment in larger scale industrial land is not as attractive to private enterprise given the performance standards demanded of industry in a modern society.

The provision of opportunity for industry investment is not only a function of commercial activity, but also of the social consequences of the inability of a region to provide adequate employment opportunities to its community and to generate wealth to maintain adequate living standards.

Public investment thus often has a role to play in the provision of larger industrial estates. It is better placed to provide the establishment capital to initiate large development projects and to control and/or absorb the risks inherent in that investment, given that its community cost/benefit considerations are wider than merely financial returns. Once the development framework has been provided, private enterprise may have a role to play in developing and marketing individual stages of the overall development as they can then sustain the risks pertaining to the smaller outlay of capital involved in internal costs only.

The state government has charged the Department of State Development with the responsibility for ensuring that adequate opportunities are available to industry to locate in Queensland and has provided funding for that Department to intervene where there is a demonstrated market or planning failure. The Department can, if it is convinced that the necessary preconditions have been met, invest in the establishment of industrial estates. This has occurred at Parkhurst where the Department has substantial land holdings and is marketing industrial lots.

The Department's charter is however directed to broader scale investment that will have regional rather than local impacts.

The local government also has a role to play in this process wherein it assists the process by supporting proposals for industrial projects through its planning and development mechanisms and ensures that a user friendly climate is offered to prospective investors. All avenues of potential community conflict should be resolved through the auspices of the local government as an essential element of the establishment process so that time consuming adversary situations with the community are no longer a factor. Opportunity is available for local government to intervene in the local oriented land market where private enterprise is reluctant to invest. This is particularly applicable to investing in future land stocks to ensure the orderly development of this valuable urban resource.

The emergence of the Gracemere-Stanwell Corridor has diverted the state government's attention to facilitating the establishment of the more regional scale industry that is expected to establish there in the same market place as Parkhurst. It may be of mutual advantage to Council and the state government to rationalise the level and direction of Government investment between Parkhurst and the Gracemere-Stanwell Corridor.

The other areas where Council will be a major stakeholder in securing investment in industry are the Airport and Port Curtis precincts. Both these precincts have considerable potential to contribute to the future economic welfare of the City, but both require investigation, planning and investment to alleviate fringe-flooding constraints.

Lakes Creek, Kawana / Park Avenue and Stanley Street precincts are private enterprise driven and will continue to operate efficiently if given the appropriate levels of planning and development support by the local government.

7.5 MARKETING CAMPAIGN

The ability to attract investors to Rockhampton will be dependent to a large extent on nurturing their expectations through professional promotion and marketing campaigns. Success is related to the extent of marketing exposure that a venture receives.

It is envisaged that investment by private enterprise will be encouraged by Rockhampton City Council. Council should devise a promotion and marketing campaign directed at industry, which gives a business benefits in choosing Rockhampton City over other alternatives, based on its commercial and cultural advantages.

The Local Government's stake in promoting industrial development is broader than financial viability, extending to its concern with community welfare. Industries need to be able to play a role in the community through the provision of employment, and ensuring that local environmental issues are addressed and supported.

The high profiles of local government provide a unique position to attract attention from elsewhere to business opportunity in the City. Marketing and promotion are highly developed specific skills and require competent, experienced practitioners to engender success. This should not be underestimated within Rockhampton.

In a simple test to compare centres with one another, a comparison of the market value of land in each centre can be done. Therefore, independent valuers familiar with the region were contacted, and asked to comment on the recommendations set out in this strategy. The individuals were also asked about land use and development in centres, which would be appropriate for the development of industrial lands in Rockhampton.

Generally, it was stated that the price and value of industrial land in Mackay is above prices in Gladstone and Rockhampton (as at September 2001). It was noted that Gladstone City provides support for new investors, for example, by providing incentives and awarding dispensations to new investors. Therefore, Rockhampton City needs to investigate incentives and policies to attract business in order to match the benchmark at Gladstone and other cities in the state.

A marketing campaign for developing industrial centres requires the adoption of a combination of incentives. Five (5) strategies are discussed below, and include:

1. Initiatives by the role of local Councils;
2. Marketing opportunities by large landowners (eg. Gladstone Port Authority);
3. The role of the new City Plan in promoting industrial precincts;
4. The role of Council's as land developers; and
5. The rolling out of Council's differential rating powers.

Initiatives by the role of Local Councils

Local Councils depend on statutory documents, such as Planning Schemes to properly control development. Subdivision by-laws and headworks policies inform prospective developers about costs associated with the development and use of land for industrial purposes. In many cases, these "additional" costs to the investor may cause developments to locate in other centres.

Some Council's choose to pay for the "up-front cost" for items such as roadworks and infrastructure on behalf of the new investment, which ultimately leads to growth in the rate base. Elected representatives can only make this policy decision. Whatever the decision is, the approach to the provision of such items must be consistent.

The benefits from local governments making "up front" payments for infrastructure contributions are many and include:

1. The development of a new or refurbished business;
2. The expansion of the City's ratebase;
3. Provision of employment in the region;
4. Possibility of new businesses attracting ancillary businesses, and therefore furthering the expansion of the ratebase;
5. Remaining competitive with other regional centres; and
6. The development of areas that may have remained vacant for long periods of time due to the need to do works which were not outstanding in similar industrial areas of the City.

The disbenefits include Council, via the City's ratepayers, carrying the cost for developments to establish in the City. In this regard the policy direction set by the Council needs to consider these long-term issues.

Marketing opportunities by large land owners

An excellent example in Central Queensland, where a large landholder has set the standard for development incentives in the Rockhampton region, is the Gladstone Port Authority.

The authority, in attracting investors and development to their area, enters into a lease agreement on land, whereby a lease period is for a set period (say 5 years). During this period the investor is only required to make payments towards the lease on the land and not a contract of sale on the land. Within this lease period, the developer can concentrate on establishing the business,

not on considering what can be afforded to be built after the price of purchasing land. This enables investors and developers to funnel their money into elements such as landscaping, building design, material and the general design of the site while paying for a lease on industrial land that eventually they can afford to purchase.

On the cessation of the lease period, the lands are sold to the tenant at the price that the lands were valued at when the original lease was signed. The aim is to encourage a business to establish a base, clientele and make a 'name' for themselves in their chosen industrial field. Consequently, this allows for profits to increase and financial security to be partially established to afford the purchase of the land at the end of the lease period.

This allows flexibility for large landowners, who may receive rent for otherwise vacant land, and also encourages growth in industrial centres. This example, if exercised in Rockhampton may be relevant to Council owned industrial land and lands owned by State Government Departments.

The incentive in this example is that investors can be funnelled to areas where development is to be encouraged.

The role of the new Rockhampton City Plan

The City Plan for Rockhampton will set the parameters for industrial development in light of urban design parameters, economic and social factors for industrial development. The levels of assessment under the new City Plan for the City will dictate, to some degree where development occurs. This means that where industry is to be promoted, industrial development will be nominated, wherever possible, as self-assessable development under the Integrated Planning Act 1997.

The role of Councils as land developers

The Rockhampton City Council currently has an industrial development located off Alexandra Street in North Rockhampton. The promotion of this land currently lies with the Council, whereby other industrial land is in the open market controlled by Real Estate Agents. As Real Estate Agents have a well-developed marketing campaign and operate on a commission, for the sale of land, they are often the most publicised points of contact for land sales.

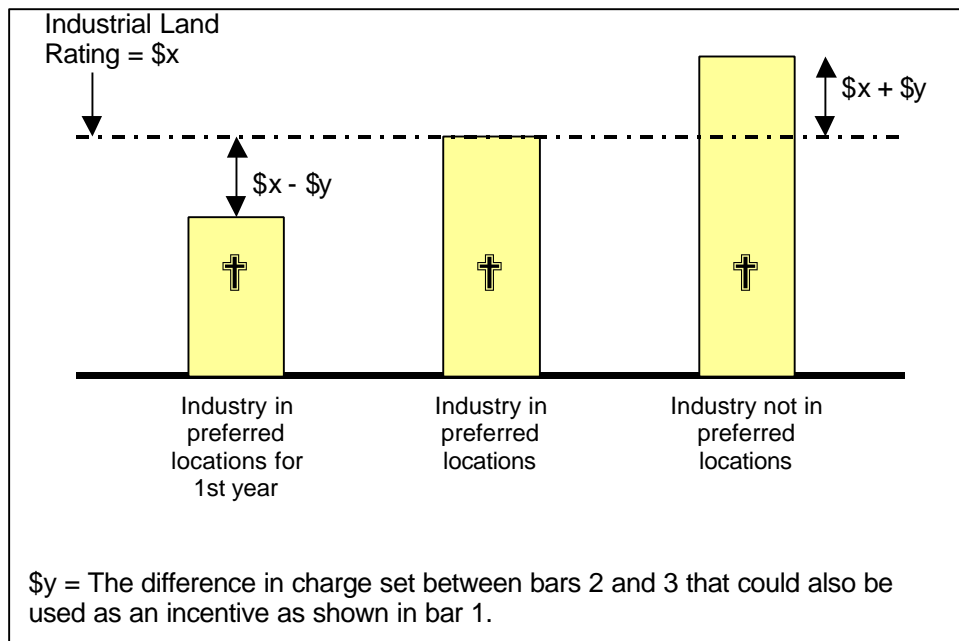
It is recommended that should Council develop land for industrial development, that:

1. The land is sold at the cost of development that is no profit;
2. Incentives such as mentioned above, are implemented to assist small business in setting up, and reducing the number of "backyard" operators in residential areas;
3. Details of land continue to be made available to Real Estate Agents throughout the City or that Council organise sales, signs and promotions.

The rolling out of Council's Differential Rating Powers

As an option of not only attracting industry to Rockhampton but also having existing industry locate in the designated locations throughout the city to create strong and vibrant industrial areas, Rockhampton City Council should consider the rolling out of its differential rating powers under sections 1031, 1033 and 1035 of the Local Government Act 1993. By creating an industrial land category with an associated policy, the Rockhampton City Council could have a system whereby;

- (a) Industries not in the preferred locations in the City are made to pay higher rates as a result of the greater load these uses have on Council's resources in dealing with complaints as well as the higher load these uses have on local infrastructure not intended for industrial uses, eg residential road intersections;
- (b) Industries in the preferred locations in the city are rewarded for being in the right locations within the city that help to create strong and vibrant industrial areas where issues can be managed (eg heavy vehicle haulage routes). There is also no likelihood of complaints being made in respect to industry from non compatible adjoining development, eg residential; and
- (c) Industries locating in the preferred locations for the first time could be provided with a further remission for the first year to assist in the start up of the industry. It could be that the further remission is equivalent to the higher charge that inappropriately located industries pay as shown below;



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