



WEST MUNDIJONG INDUSTRIAL AREA FEASIBILITY STUDY

Research, Design & Delivery of
Sustainable Development

DOCUMENT QUALITY CONTROL

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REVISION TABLE

Rev No.	Purpose	Date
A	Council Comments	07.03.2012
B	Issued for Council endorsement	09.03.2012

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BACKGROUND

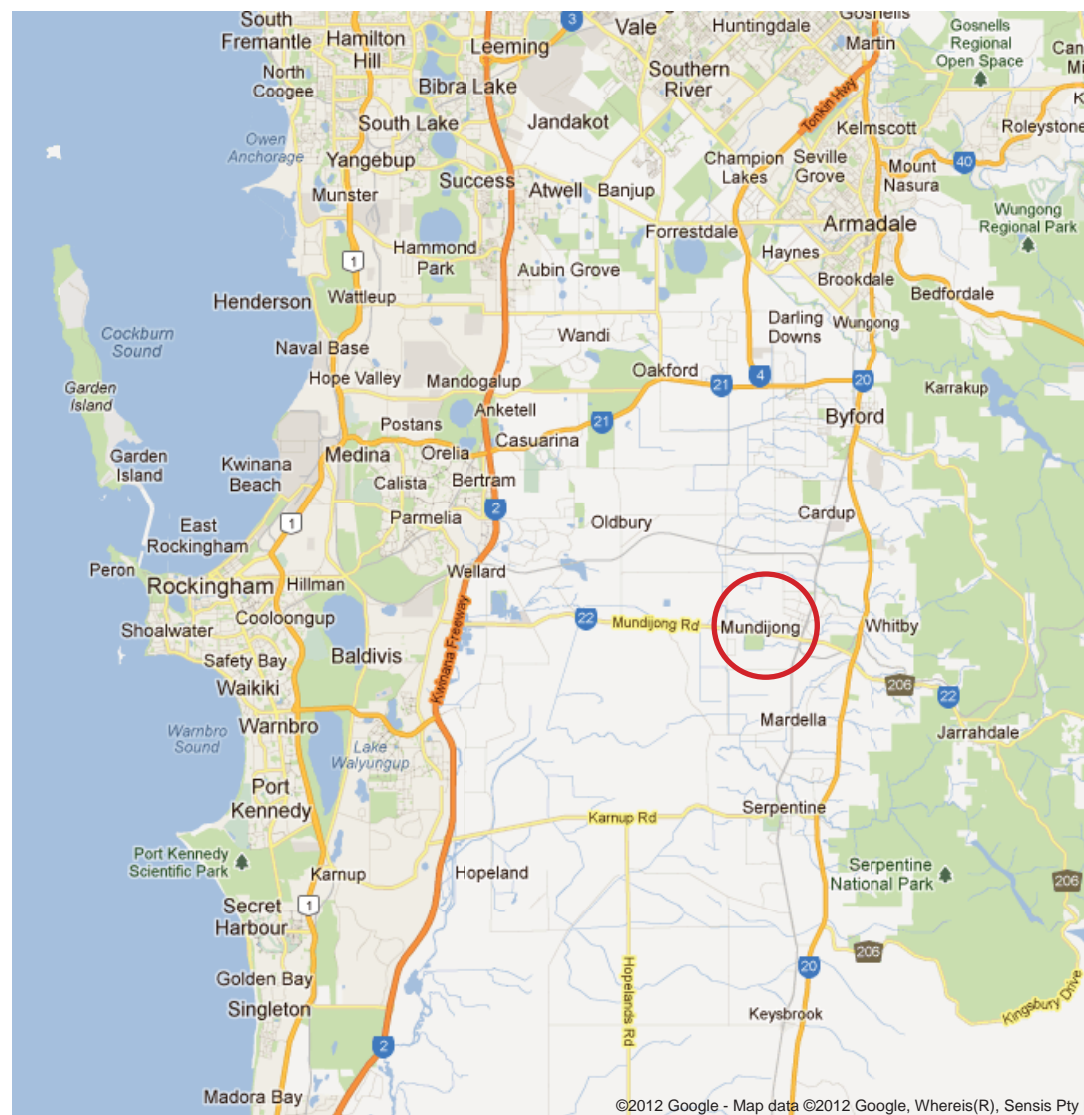
On behalf of the Shire of Serpentine Jarrahdale, TME has been engaged to investigate the potential for industrial development west of the existing Mundijong town site.

The West Mundijong area has recently been identified, subject to further investigation, as a possible industrial area in the following prepared by the State Government:

- *Southern Metropolitan Sub-Regional Structure Plan 2009*
- *Industrial Land Capacity Assessment prepared by AURECON 2008*
- *Industrial Land Strategy 2009*

More localised studies such as the Mundijong-Whitby District Structure Plan and the Shire's Demand Analysis for Employment Generating Land have reinforced the potential for a future industrial area near Mundijong.

Various peak planning documents envisage substantial population growth within the Shire over the medium to long term. The Shire is committed to providing sustainable employment opportunities for existing and future residents.

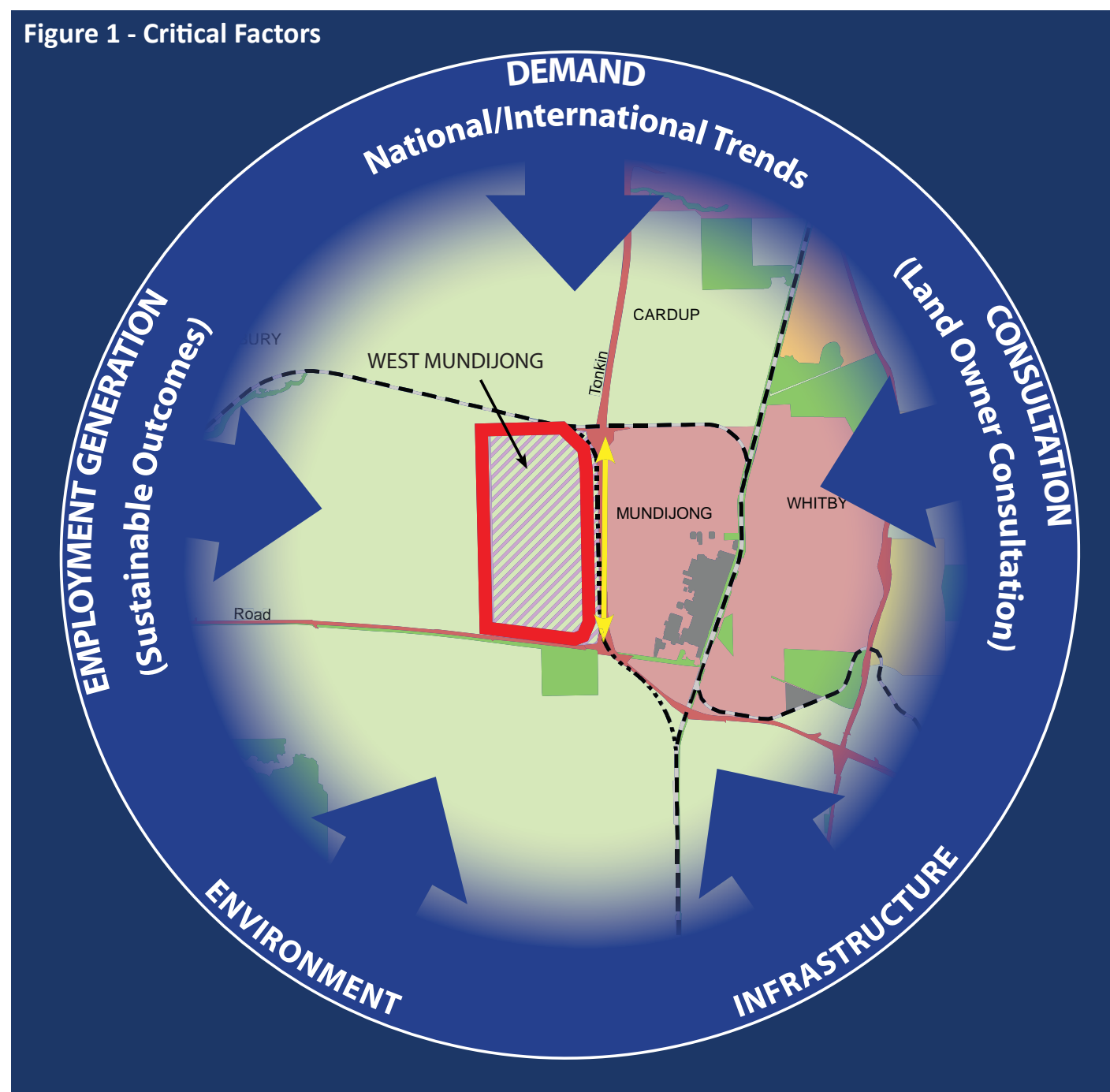


PURPOSE

The desktop feasibility study will outline:

- a) Investigation area
- b) Statutory and strategic context
- c) Sub regional and district context
- d) Consultation outcomes
- e) Desktop assessment of the following site specific factors:
 - Environment
 - Hydrology
 - Servicing
 - Infrastructure
- f) Likely demand for industrial development including consideration of current trends
- g) Appropriateness of West Mundijong for Industrial Development
- h) Preferable industrial land use scenarios for West Mundijong
- i) Review of other industrial estates
- j) Town Planning and Environmental Approvals
- k) Servicing
- l) Attraction Strategies
- m) Conclusion

Figure 1 - Critical Factors



THE INVESTIGATION AREA

The investigation area for West Mundijong has been established by the *Draft Southern Metropolitan Sub-Regional Structure Plan 2009* (SMSRSP) prepared by the Western Australian Planning Commission. The area is defined by Mundijong Road (south), Tonkin Highway Road reserve (east), Bishop Road (north) and Kargotich Road (west).

The area totals some 474.34 hectares.

The same area has also been identified in the following documents:

- a) *Industrial Land Capacity Assessment* (2009)
- b) *Industrial Lands Needs Study* (2008)
- c) *Mundijong Whitby District Structure Plan*

Refer *Figure 2 - Investigation Area*

A key requirement of the study is to review the appropriateness of the study area in response to the following considerations:

- a) Demand
- b) Existing reports and strategies
- c) Land owner consultation
- d) Agency consultation
- e) Consideration of opportunities and constraints

As explained in various sections of this report:

- a) The investigation area is likely to be sufficient to accommodate projected demand for industrial land by 2030, including the requirements for an intermodal facility
- b) It is fortuitous that the area benefits from a high level of strategic support from both state and local planning strategies and plans
- c) Generally there is land owner support for industrial development, including owners within the Pure Steel Lane area

- d) There are relatively few environmental constraints, largely on account of the fact that the land has been substantially cleared for farming
- e) There is a high probability that issues related to drainage and fill requirements can be addressed through more detailed assessment

Finding/Recommendation:

- a) In the event that additional area is required, the land east of Kargotich Road may be suitable for expansion. Consideration of this area would be dependant upon the actual take up of land within the investigation area.
- b) Triangle area to the north to be included as a logical expansion.



STATUTORY TOWN PLANNING CONTEXT

Metropolitan Region Scheme

The land is currently zoned 'Rural' in the Metropolitan Region Scheme.

With respect to adjoining and nearby land the following should be noted:

- a) Mundijong Road, adjoining the southern boundary, is a designated 'other regional road'
- b) The portion of Mundijong Road is also designated 'bush forever area'
- c) Land adjoining the eastern boundary is designated 'primary regional road' in lieu of the southern extension of the Tonkin Highway
- d) The primary regional road reserve allows for future intersection treatment to Mundijong Road and grade separation of the freight rail line

Refer Figure 3 - Metropolitan Region Scheme Zoning

Shire of Serpentine Jarrahdale Town Planning Scheme No. 2

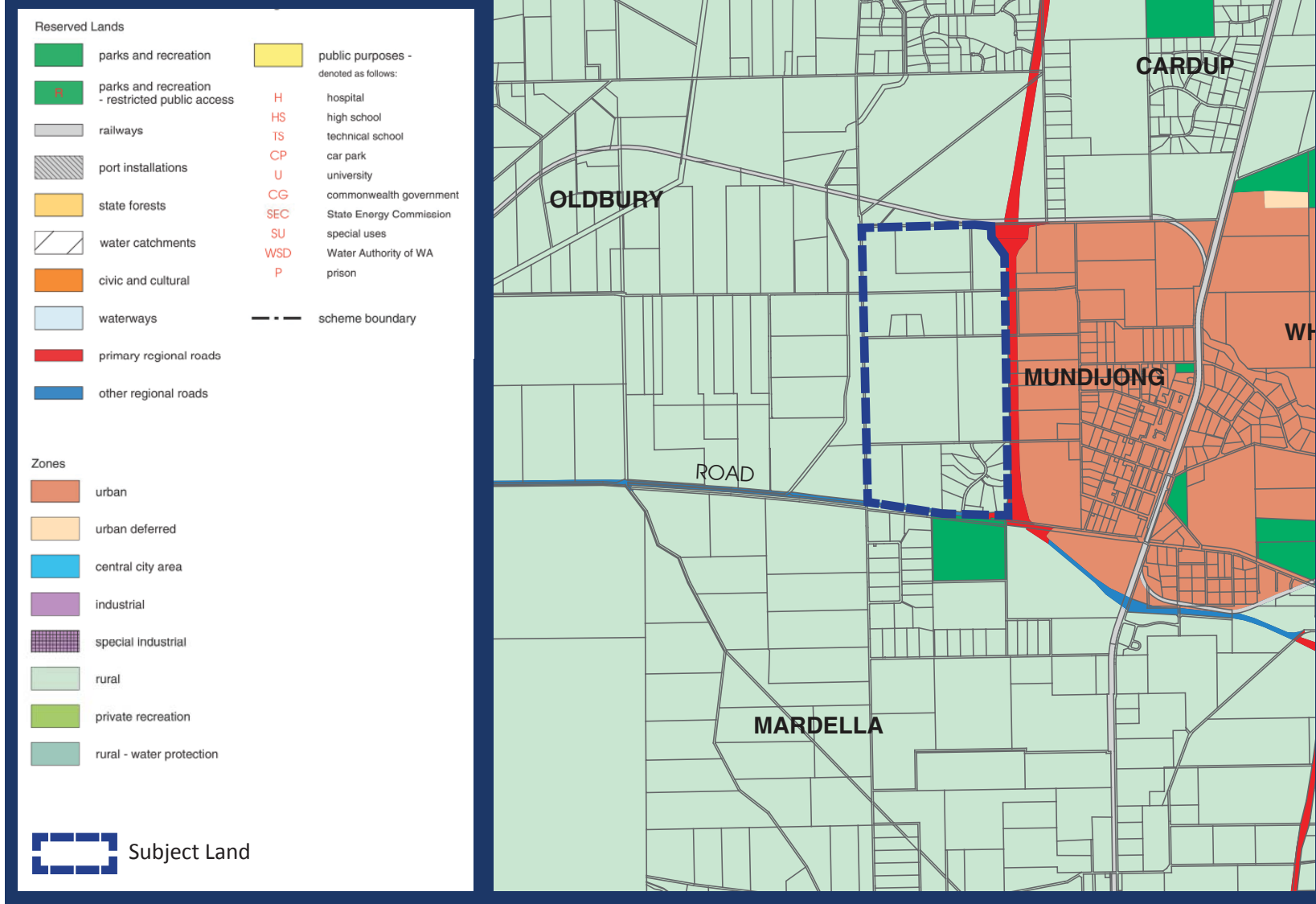
The land is included within the following zones:

- a) 'Farmlet' zone
- b) 'Rural' zone

There are two main areas zoned 'Farmlet' within the investigation area. One is located in the south east and associated with Pure Steel Lane. The area has been subdivided into 4 hectare allotments and accordingly developed for a range of rural lifestyle pursuits.

The other area adjoins Kargotich Road. Currently no subdivision approval has been issued for this area, although a subdivision guideline plan did accompany the relevant amendment to include the land within the 'Farmlet' zone.

Figure 3 - Metropolitan Region Scheme Zoning



In addition the Scheme identifies an 'area of natural beauty' (No. 33) which bisects the land east west. The following description is provided in Appendix 13:

33. MANJEDAL BROOK
From its source East of Nettleton Road along its length to Kargotich Road.

In relation to areas of natural beauty Clause 7.12.2 of the Scheme states:

A person shall not without the approval of Council at or on a place described in Appendix 13 carry out any development including, but without limiting the generality of the foregoing:

(a) the erection, demolition or alteration of any building or structure (not including farm fencing, wells, bore or troughs and minor drainage works ancillary to the general rural pursuits in the locality);

(b) clearing of land or removal of trees; or

(c) the erection of advertising signs.

Shire of Serpentine Jarrahdale Rural Strategy

The Rural Strategy includes the land within a 'Farmlet' precinct. The precinct permits the creation of 4 – 40 hectare lots for rural lifestyle purposes.

Rural lifestyle (residential) uses are incompatible with industrial land use.

The Shire is currently completing a review of its Rural Strategy. It is recommended that the investigation area be removed from the Farmlet Precinct.

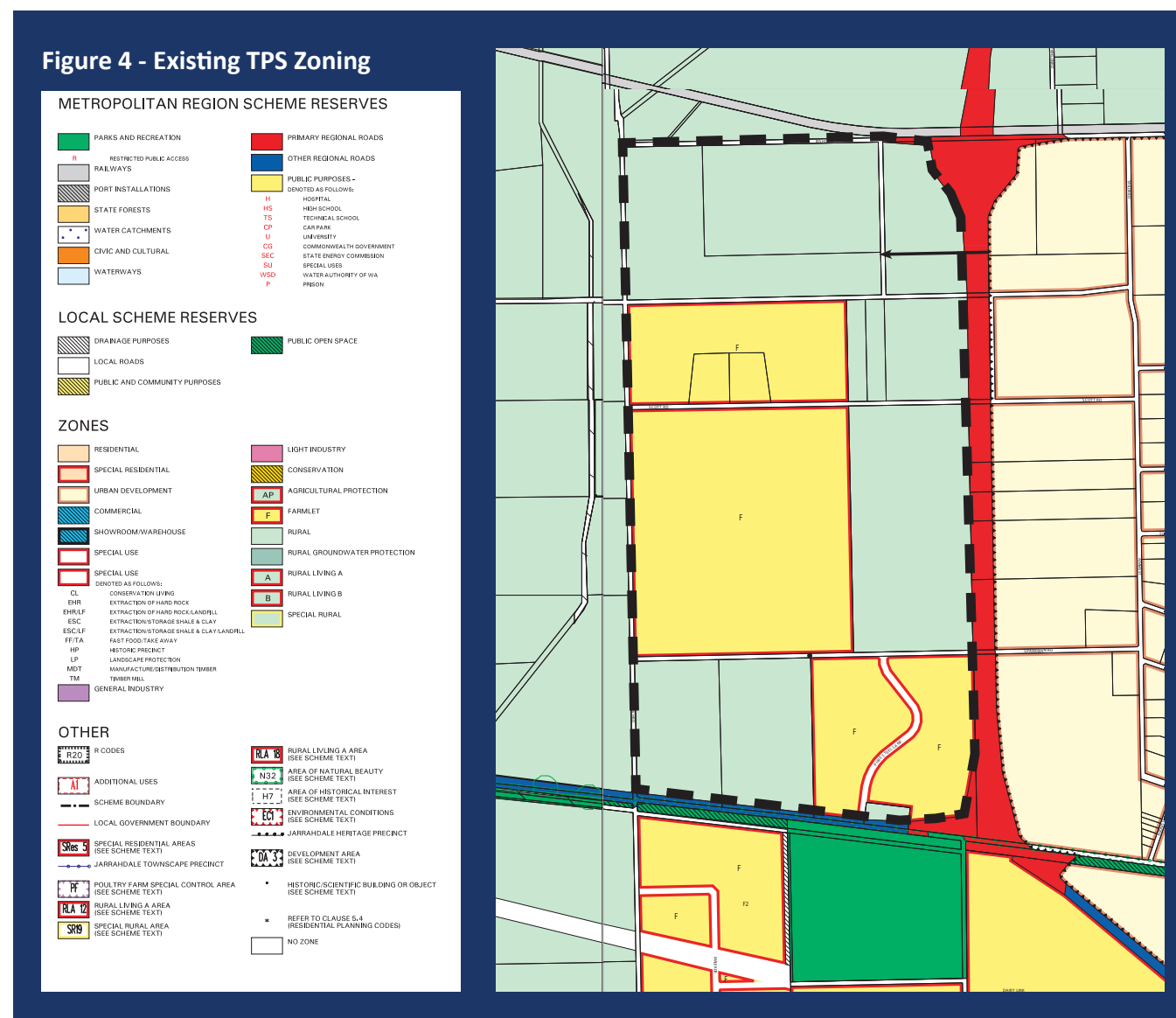
Key Findings & Recommendations

a) The Metropolitan Region Scheme facilitates significant future infrastructure upgrades of critical importance to future industry, including extension of Tonkin Hwy and the upgrading of Mundijong Road

- b) In order to facilitate industrial development, the MRS will require an amendment to include the land in the 'Industry' zone
- c) The two pockets of 'Farmlet' zone area are inconsistent with intended industrial development. In order to enable future industrial development the zoning will need to be replaced by a local scheme industrial zone or structure planning provisions related thereto

- d) Related to c), in reviewing the Rural Strategy it is recommended that the land be removed from the 'Farmlet' precinct
- e) Opportunity, via subsequent structure planning, to incorporate Manjedal Brook as an 'ecological corridor' that also continues to provide a valuable drainage function for the district and future industrial development

Figure 4 - Existing TPS Zoning



STRATEGIC PLANNING CONTEXT

Directions 2031

In August 2010 the Western Australian Planning Commission released *Directions 2031*. The purpose of the document is to guide future development for the Perth and Peel regions. In terms of metropolitan planning *Directions 2031* represents the primary planning document for the metropolitan region including Peel.

The following key points arise from *Directions 2031* which directly relate to West Mundijong:

- a) Identification of West Mundijong as a possible industrial area, although not a 'priority industrial area'
- b) Planned intermodal freight terminal at West Mundijong
- c) Potential additional dwelling yield of 12,500 for Mundijong townsite
- d) Designation of Whitby town site as a 'District Centre'

The following key points arise from *Directions 2031* which indirectly relate to West Mundijong:

- a) A projected growth in population of 30,000 for Serpentine Jarrahdale by 2030
- b) Employment self sufficiency target of 55%. Therefore the need to provide employment generating areas like West Mundijong
- c) Identification of Tonkin Highway and Mundijong Road as 'strategic' roads

Perhaps the most significant recommendation of *Directions 2031* relates to the possible intermodal facility at West Mundijong. It states:

An investigation of the suitability of an intermodal freight terminal at West Mundijong, as a strategically important industrial site, will be required. The potential realignment of the

Kwinana–South West freight rail line that runs along the eastern boundary of the proposed West Mundijong strategic industrial area presents the opportunity to develop an intermodal terminal in this area. The West Mundijong site has the potential to become a strategically important intermodal node given its proximity to the intersection point of the rail system and the primary road network.

Draft Southern Metropolitan Sub-Regional Structure Plan 2009 (SMSRSP)

In 2009, the Western Australian Planning Commission prepared the Southern Metropolitan Sub – Regional Structure Plan.

The following key points arise from SMSRSP which directly relate to the investigation area:

- a) Identification of West Mundijong as an industrial investigation industrial area
- b) Possible re-location of the Kwinana–South West freight rail line to follow alignment of Tonkin Highway extension
- c) Possible extension of Mundijong Road east of Mundijong
- d) Planned population growth of approximately 12,500 dwellings for the Mundijong: Whitby urban area.

The SMSRSP also established a hierarchy of industrial areas within the sub region which are discussed as follows:

- a) Kwinana designated as a strategic heavy industry area
- b) Latitude 32 established as subsidiary to the Kwinana
- c) Potential future general industry areas at East Baldivis and Forrestdale
- d) The Cardup area designated for light industry

Refer Figure 5 - Sub Regional Plan.

Industrial Land Supply Strategy

The draft Industrial Land Strategy was completed by the Western Australian Planning Commission in 2009. The purpose of the ILS is to determine demand for industrial land in the short to medium term and ensure that sufficient industrial land is identified and made available in the Perth and Peel region.

The ILS has identified 37 potential industrial area. 11 of the sites have been identified as 'priority industrial sites (for investigation)'. LandCorp will be responsible for coordinating investigations and ultimately, where feasible, the rezoning of these areas.

The rest of the sites, including West Mundijong, are described as 'possible future industrial sites' with the 'potential for future rezoning'. Despite not being designated a priority industrial site, the ILS states:

West Mundijong ... has the potential to become a strategically important intermodal node, given its proximity to the intersection point of the rail system and the primary road network.

The Department of Planning and LandCorp are currently developing an implementation strategy to progress investigations and ultimately the rezoning of these areas where they are found to be feasible.

LandCorp and the Department of Planning are currently seeking funding to progress the relevant investigations and rezonings.

The ILS implementation strategy represents a vital opportunity for the Shire to access resources to progress further feasibility assessment and ultimately rezoning of the land. The opportunities presented are discussed further on page 23.

It should be noted that within the sub regional East Baldivis and Forrestdale are both identified as 'priority industrial sites (for investigation)'.

Demand Analysis for Employment Generating Land in Serpentine Jarrahdale

The study was completed in 2009 for the Shire of Serpentine Jarrahdale.

Key findings for West Mundijong:

- a) An additional 150 hectares of land will be required by 2021 to meet projected demand for industrial land
- b) The following sectors offer optimum employment and economic potential:
 - Manufacture of building construction materials
 - Food manufacture
 - Transport

Mundijong Whitby District Structure Plan

The Mundijong Whitby District Structure Plan was endorsed in 2011.

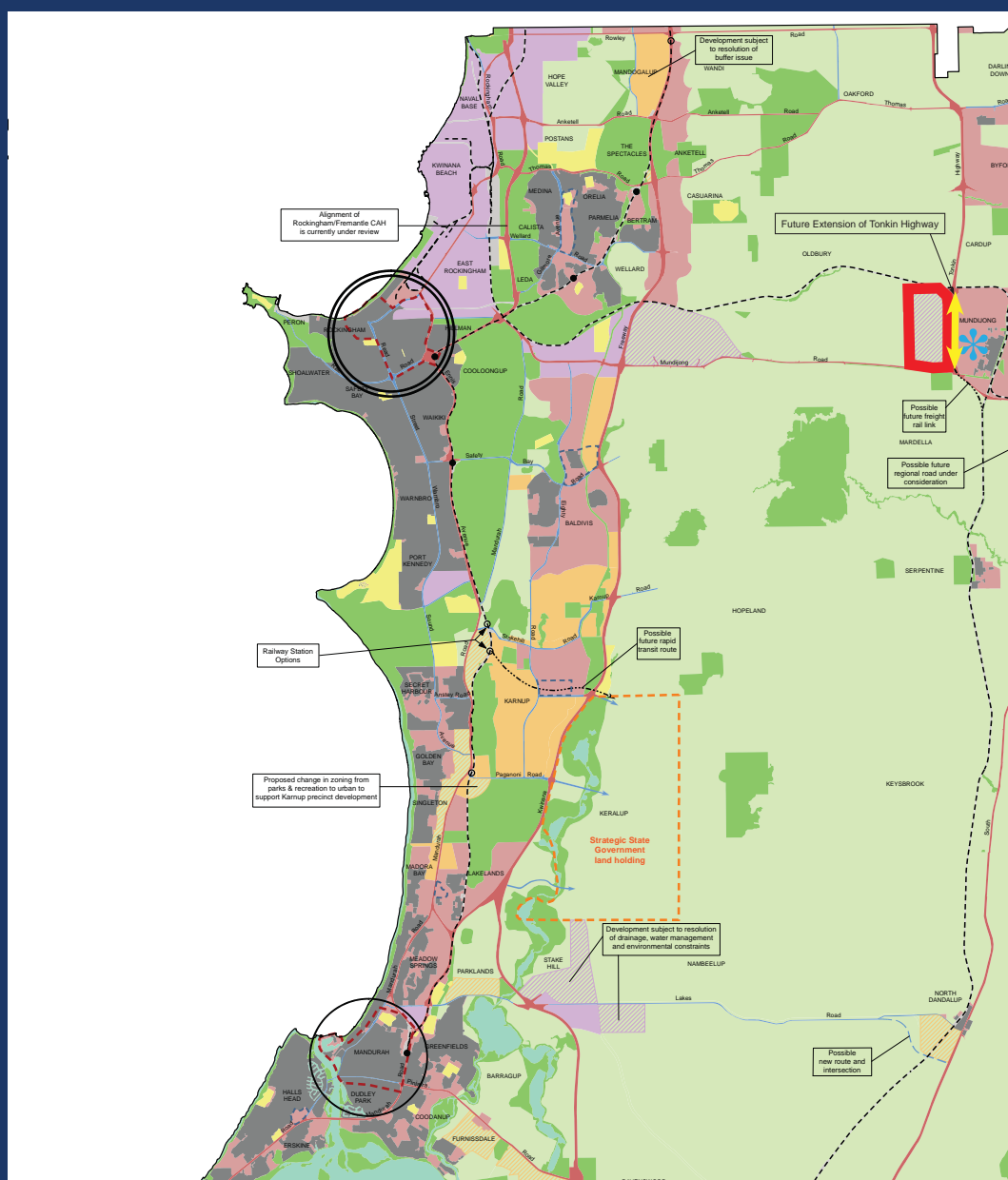
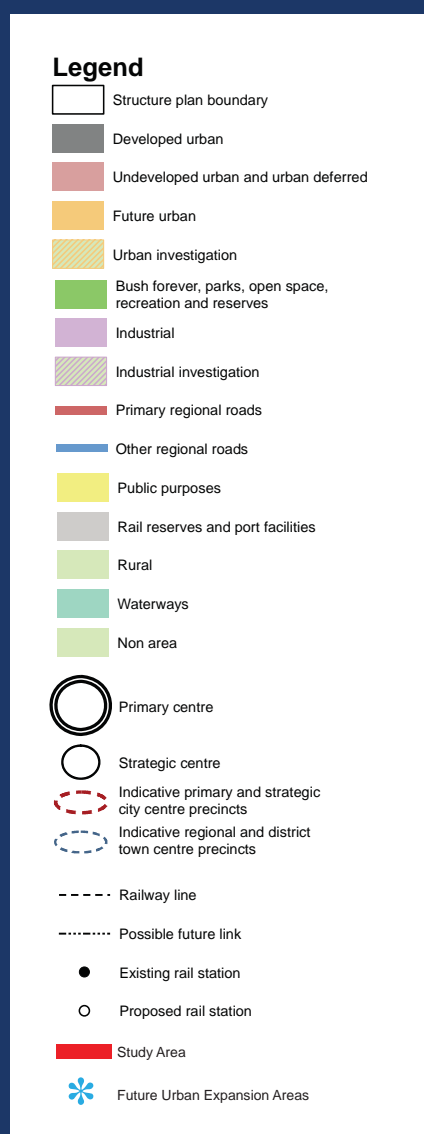
Key implications for West Mundijong:

- a) Identification of West Mundijong as a 'Potential Strategic Industrial Node'
- b) Designation of Manjedal Brook as a 'public viewing area'
- c) Realignment of Kwinana Freight Rail Line to follow alignment of Tonkin Highway extension
- d) Long term future population up-to 40,000 at Mundijong

Key Findings & Recommendations

- a) A high level of strategic support for industrial development at West Mundijong from both state and local planning strategies
- b) Possibility of an intermodal facility at West Mundijong which could be a significant catalyst for industrial development
- c) A projected growth in population of 30,000 for Serpentine Jarrahdale by 2030
- d) Employment self sufficiency target of 55% and therefore the need to plan for and provide employment generating areas such as West Mundijong
- e) Identification of Tonkin Highway and Mundijong Road as 'strategic' roads
- f) Need for the Shire of Serpentine Jarrahdale and the Department of Planning and the Department of Transport to effectively collaborate regarding future planning at West Mundijong

Figure 5 - Sub Regional Plan



CONSULTATION

A key component of the feasibility assessment was consultation with affected land owners, relevant agencies and key Shire staff.

In summary the following outcomes were identified from land owners and residents of Pure Steel Lane:

Land Owners

- Support from 40 % of owners
- Conditional support from 16% of owners
- Objection from 25% of owners
- 19% did not respond

In terms of land area the results can be expressed as follows:

- Support 40%
- Conditional support 39%
- Objection 16%
- Unknown 5%

Comments in support

- Support for proposed inter modal facility
- Support for relocation of freight rail
- Need to consider economic feasibility
- Support for general industrial development
- Concern about abattoir uses
- Potential for low emission re-cycling facility
- Need for employment generating land

Grounds of objection:

- Industrial development contrary to the character and amenity of the area
- Related to above, impact on nearby equestrian facilities
- Industrial development would be too close to Mundijong and result in unacceptable impacts on existing and planned residential development
- Rezoning will force residents out against their will

Pure Steel Lane Residents

- Objection to being excluded from investigation area
- Crime
- Following environmental concerns:
 - Impact on groundwater systems
 - Potential noise, odour & dust emissions
 - Management of industrial and commercial traffic
- Preference for Pure Steel Lane to be retained as a cul-de-sac in order to prevent thoroughfare for heavy vehicles
- Impact on rates?
- Will rezoning force residents out?

Refer Appendix A for more detailed notes and questionnaire results.

Agencies

Appropriateness of Investigation Area

- Acknowledgement that investigation area reflects the Industrial Land Strategy and the Southern Metropolitan Sub Regional Structure Plan
- Some respondents indicated the need for further research to justify the size of the investigation area, particularly if an inter modal facility needs to be accounted for

Potential Risks

- Proximity of planned and existing sensitive uses. Need to model potential noise, odour, dust, light spill and public risk impacts on existing and planned sensitive uses prior to undertaking further planning
- Drainage issues and in particular level changes in response to Tonkin Hwy extension and construction of possible inter-modal facility
- Timing of key infrastructure, particularly intermodal and Tonkin Highway extension
- Influence and or relationship to East Baldivis?
- Economic justification for industrial development is specifically unknown in the West Mundijong locality

Possible Candidate Industries

- Overall support for general industry as opposed to light or heavy industry
- Acknowledgement that there is a shortage of land for general industry in the metropolitan area
- Acknowledgement that certain categories of general industry may have the potential to generate local employment and add value to local products and resources
- Need to understand the sub – region and district context of the site; that is, Kwinana is designated as heavy industry area and Cardup for light industry
- Specifically the following industry types might be suitable subject to further investigation and feasibility:
 - Warehousing and logistics, for example distribution centres that serve state, national and potentially international markets
 - Agribusiness / low emission food manufacture, including some forms of meat and vegetable processing & breweries
 - Agribusiness / grain handling and fertilizer distribution

- Construction and manufacture of building materials and or products, including brickworks, plaster board and lime
- Sale, distribution and servicing of heavy machinery, in particular associated with the mining and resource sector

Best practice examples of industrial estates, with particular reference to innovation and sustainability

- Latitude 32
- Goulburn Valley Freight and Logistics Centre
- Intermodal facility at Kwinana managed by Queensland Rail
- Canning Industrial Area: clustering associated with Swan Brewery

Servicing

- Availability of services, in particular water
- Use of treated wastewater. Depends on the industry and access to water treatment facility
- Need to consider findings of Perth and Peel Regions Freight and Intermodal Plan

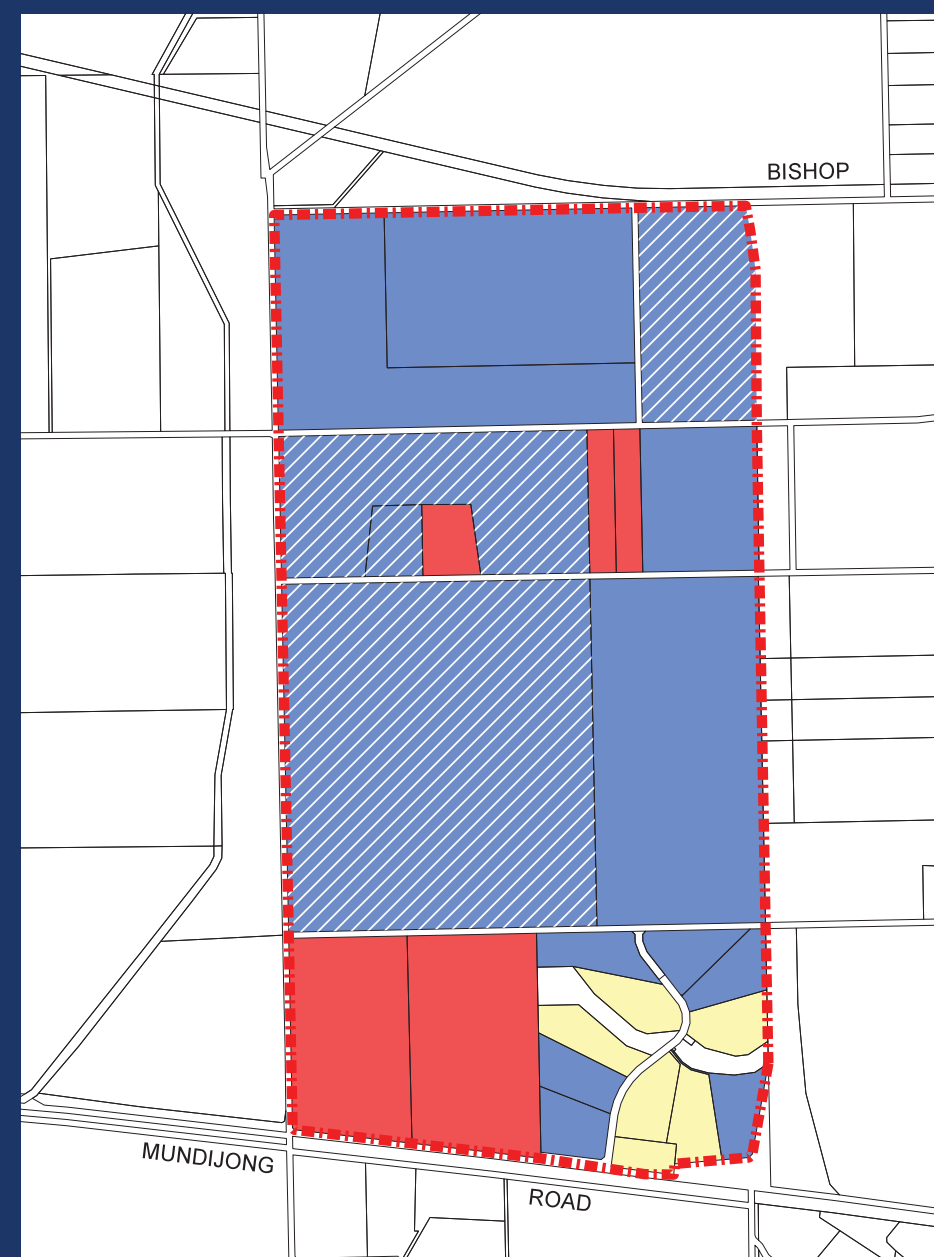
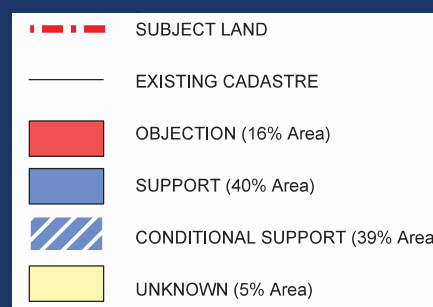
Industry Attraction Strategies & Management Framework

- Subject to further investigation, possibly some agency support for a 'AgriBusiness' style precinct
- In relation to the above point, the Shire should actively engage the relevant agencies in order to garner support
- Unlikely to warrant acquisition and management by a state agency such as LandCorp
- Some potential for the future estate to be promoted and managed by a steering group comprising the Shire, local business groups, landowners and the Peel Development Commission

Key Findings & Recommendations

- There is a majority of support and conditional support from affected land owners for industrial development at West Mundijong
- Consideration of potential noise impacts upon existing and planned sensitive uses is a critical consideration. This issue should be addressed prior to rezoning and structure planning of the area
- Future structure planning should include a staging and land use succession strategy which enables industrial development to occur with retention of some dwellings uses in the short to medium term
- Agency support for future 'general industry' uses

Figure 6 - Consultation



ENVIRONMENT

Overview

Overall the site has been substantially cleared to enable grazing and related farming activity. There is also evidence of smaller holding being used for rural lifestyle pursuits.

Nevertheless, small pockets of remnant vegetation or re-growth are present in isolated parts of the investigation area. It is estimated that such vegetation represents approximately 3% of the total investigation area.

Manjedal Brook traverses the investigation area east west. In response to farming, the Brook has been substantially cleared of vegetation and altered in order to perform a more efficient agricultural drainage function.

Landform

Overall, the investigation area has the appearance of being flat however the following should be noted:

- a) The land falls from east to west by up-to 10 metres over a distance of approximately two kilometres
- b) A sandy peak is located in the middle of the site near the eastern boundary. The peak is approximately 27 metres AHD
- c) The lowest point of the site is approximately 16.5 metres GHD in the south west.

A desk top assessment of the following environmental factors was undertaken:

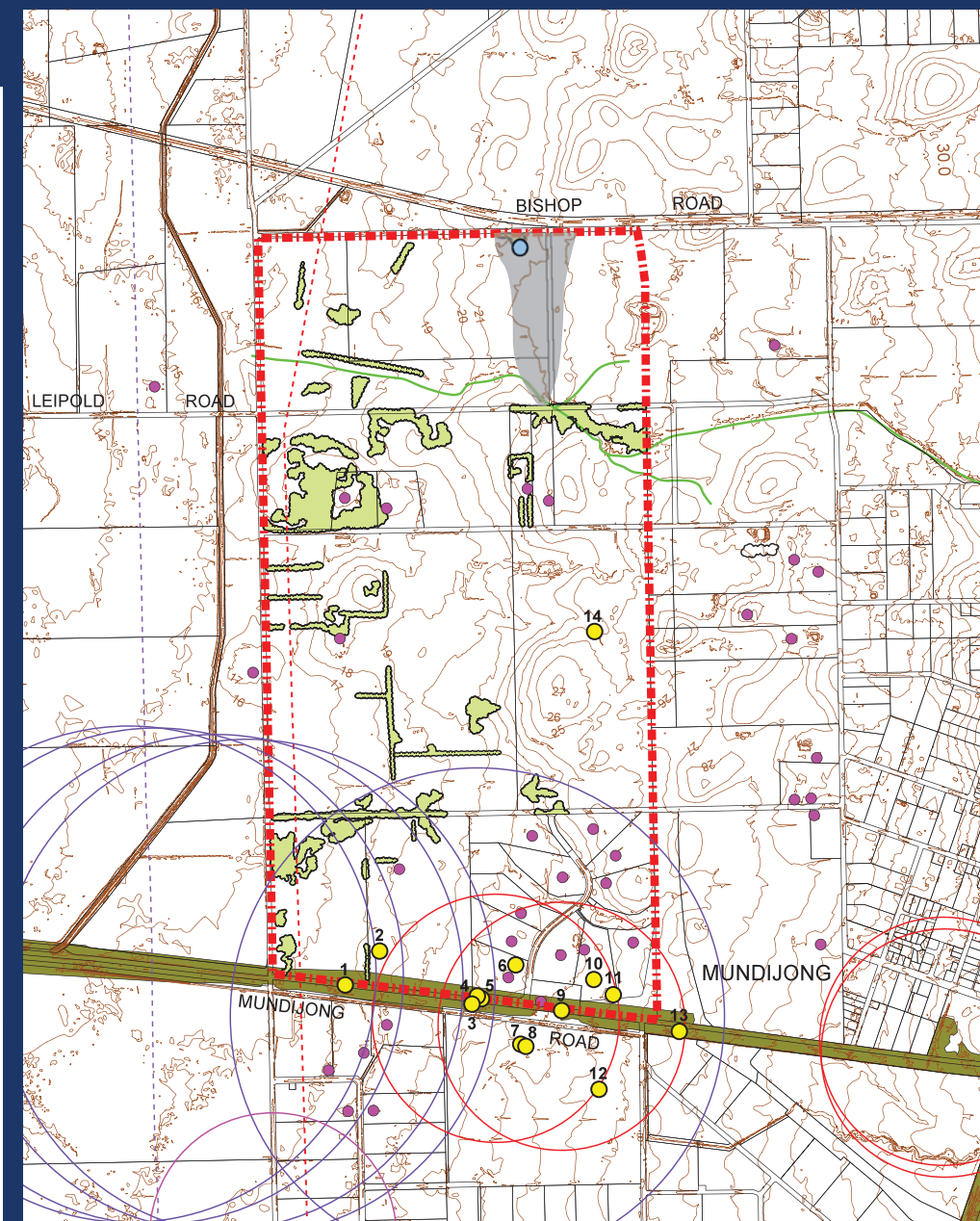
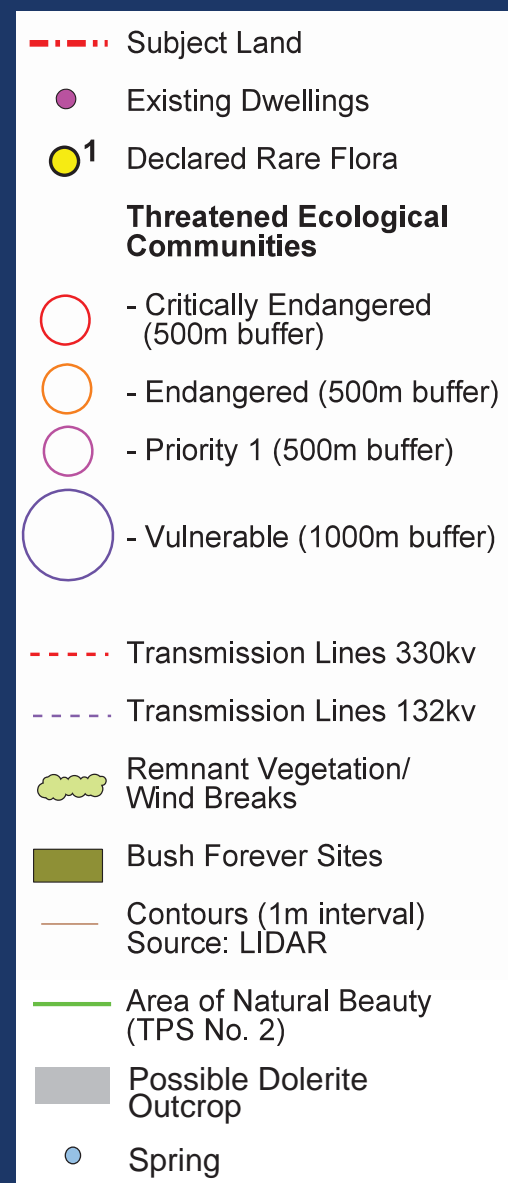
- a) Flora
- b) Fauna
- c) Wetlands
- d) Sensitive uses

Bush Forever

A Bush Forever site (Reference '360') is associated with Mundijong Road adjoining the investigation area to the south.

Refer *Figure 7 - Environmental Plan*.

Figure 7 - Environmental Plan



Flora

In January 2012, a review of the Department of Conservation and Environments 'flora database' was undertaken. The following declared rare flora species were identified:

- a) *Plumed Featherflower*
- b) *Synaphea*
- c) *Jacksonia gracillima*
- d) *Baeckea*
- e) *Tetraria australiensis*

Fourteen declared rare flora sites were identified on or near the investigation area.

The majority of the sites are associated with remnant vegetation within the Mundijong Road reserve adjoining the investigation area and patches of remnant vegetation further south outside the investigation area.

Flora Species Protected under the EPBC Act, 1999

The following species are identified as 'threatened' under the Commonwealth EPBC Act:

- a) *Andersonia gracilis*
- b) *Centrolepis caespitosa*
- c) *Darwinia foetida*
- d) *Drakaea elastica*
- e) *Drakaea micrantha*
- f) *Grevillea curviloba subsp. incurva*
- g) *Lasiopetalum pterocarpum*
- h) *Synaphea sp. Fairbridge Farm*

There will also be a requirement for referral to the Commonwealth Department of Sustainability, Environment, Water, Population and Communities.

The referral may be lodged at the time a submission is made to amend the Metropolitan Region Scheme.

Fauna

In January 2012, a review of the Department of Conservation and Environments 'threatened fauna database' was also undertaken.

The following species described as 'Threatened' (T) are recorded within a 5 kilometre radius of the site:

- a) Forest Red Tailed Black Cockatoo
- b) Baudin's Cockatoo
- c) Carnaby's Cockatoo
- d) Brush Tailed Phascogale
- e) Quokka
- f) Western Quoll

It is likely that the distribution of the above species is associated with remnant vegetation within the Mundijong Road reserve adjoining the investigation area and remnant vegetation further south and outside the study area.

There will be a requirement to undertake a fauna survey in accordance with the Department's requirements in order to determine actual impacts or otherwise of future development. The survey may be completed to accompany a proposal to rezone the land.

The above fauna species are also listed by virtue of the Commonwealth *Environment Protection and Biodiversity Conservation* (EPBC) Act (1999). Accordingly there will also be a requirement for referral to the Commonwealth Department of Sustainability, Environment, Water, Population and Communities.

The referral may be lodged at the time a submission is made to amend the Metropolitan Region Scheme.



Flora identified on site

Sensitive Uses / Land Use Compatibility

The investigation area is adjoined to the east by existing and planned residential uses (refer to *Figure 7*). Furthermore, there is a preponderance of dispersed dwellings located to the south of the area associated with rural lifestyle or hobby farm subdivisions.

The Department of Environment and Conservation’s Guidance Statement No 3 prescribes standard separation distances between industry and sensitive uses such as residential. The Guidance Statement will be instrumental in guiding future structure planning of the land.

It will be unlikely that some categories of industry could locate within 500 metres of existing planned or sensitive uses on account of their emissions which could include noise, dust, odour or public risk. Such uses may include; abattoirs, brickworks, extractive industry, cement manufacturing and heavy fabrication involving steel or other metals.

Nevertheless, low emission industries may locate within this area such as warehousing, logistics, service industry and some categories of light industry.

The following should also be noted:

- a) Irrespective of the potential for industrial development to the west, the extension of Tonkin Highway will require installation of associated noise attenuation measures in response to planned and existing dwellings to the east near the Mundijong town site. Should industrial development proceed, it is expected that the same traffic attenuation measures will also offer the potential to attenuate possible noise emissions from future industry;
- b) There is an opportunity for future structure planning to provide for low emission uses near the eastern and southern boundaries such as:
 - Warehousing
 - Logistics

- Heavy machinery servicing, distribution and sales
 - Some forms of light industry and service industry use
 - Limited showroom development
- c) Based upon the assessment, the uses outlined in b), are likely to be attracted to the potential buffer areas.

Figure 7 identifies existing and planned sensitive uses and a nominal buffer of 500 metres.

Prior to rezoning, there will be a requirement to undertake emission modeling to further clarify the types of industry that would be suitable within the area given the proximity of planned and existing sensitive uses.

Existing Dwellings within Investigation Area

There are also a number of existing dwellings within the investigation area which are concentrated within the Pure Steel Lane locality (Refer *Figure 7*). Should the area be rezoned, dwellings will be afforded ‘non conforming use’ status and are permitted to continue in accordance with TPS2

Subsequent structure planning will need to devise a strategy that permits the staging of industrial development whilst enabling existing dwelling uses to continue where affected land owners desire.

330 Kv Power Lines

Adjoining the eastern side of Kargotich Road are 330 kv power lines.

It is not possible to develop the land immediately beneath the lines. Subject to further structure planning there may be some opportunity to incorporate the lines into an integrated infrastructure corridor.

Key Findings & Recommendations

- a) The land contains very little remnant vegetation on account of clearing for farming

- b) Nevertheless, there will also be a requirement for referral to the Commonwealth Department of Sustainability, Environment, Water, Population and Communities on account of flora and fauna on or near the site
- c) Mundijong Road, adjoining the southern boundary, is a designated Bush Forever site
- d) Detailed noise modelling should be undertaken prior to rezoning which clarifies the range of industries which may locate near the eastern and southern boundaries on account of existing and planned sensitive uses
- e) Due regard to land use in buffer areas.



WETLANDS AND HYDROLOGY

Wetlands

The majority of the investigation area is designated 'multiple use' wetland according to the Department of Environment's Geomorphic Wetland data base (refer to *Figure 8*).

A small portion of the original Manjedal Brook is identified as a 'Conservation Category Wetland' (CCW). The area is located near the eastern boundary immediately south of Leipold Road (Refer *Figure 8 - Wetlands and Hydrology*).

The portion of Manjedal Brook traversing the site is also designated an 'area of natural beauty' in the local scheme.

Subject to future assessment and consultation, there may be a significant opportunity to retain and indeed enhance Manjedal Brook as an ecological corridor within future development.

Groundwater

The Department of Water is currently preparing a hydrological survey for the district, including the subject land. The data will include average groundwater level contours for the area. The information is scheduled to be available in April 2012

Notwithstanding, it is clear that groundwater is close to or at the surface after extended periods of rainfall such as late winter and early spring.

In order to provide adequate separation between groundwater and the level of future development it is highly likely that the site will require significant fill and a subsoil system to control groundwater rise.

Drainage

There are currently three drainage gullies which traverse the investigation area east / west including Manjedal Brook (Refer *Figure 8*)

The channels probably represent natural drainage lines which have been heavily altered in response to farming of the land.

It is likely that these features will need to be altered in response to industrial development. Equally, there may be an opportunity to retain and indeed enhance these features as ecological corridors within future development.

Flood

(Awaiting info from DoW)








Key Findings & Recommendations

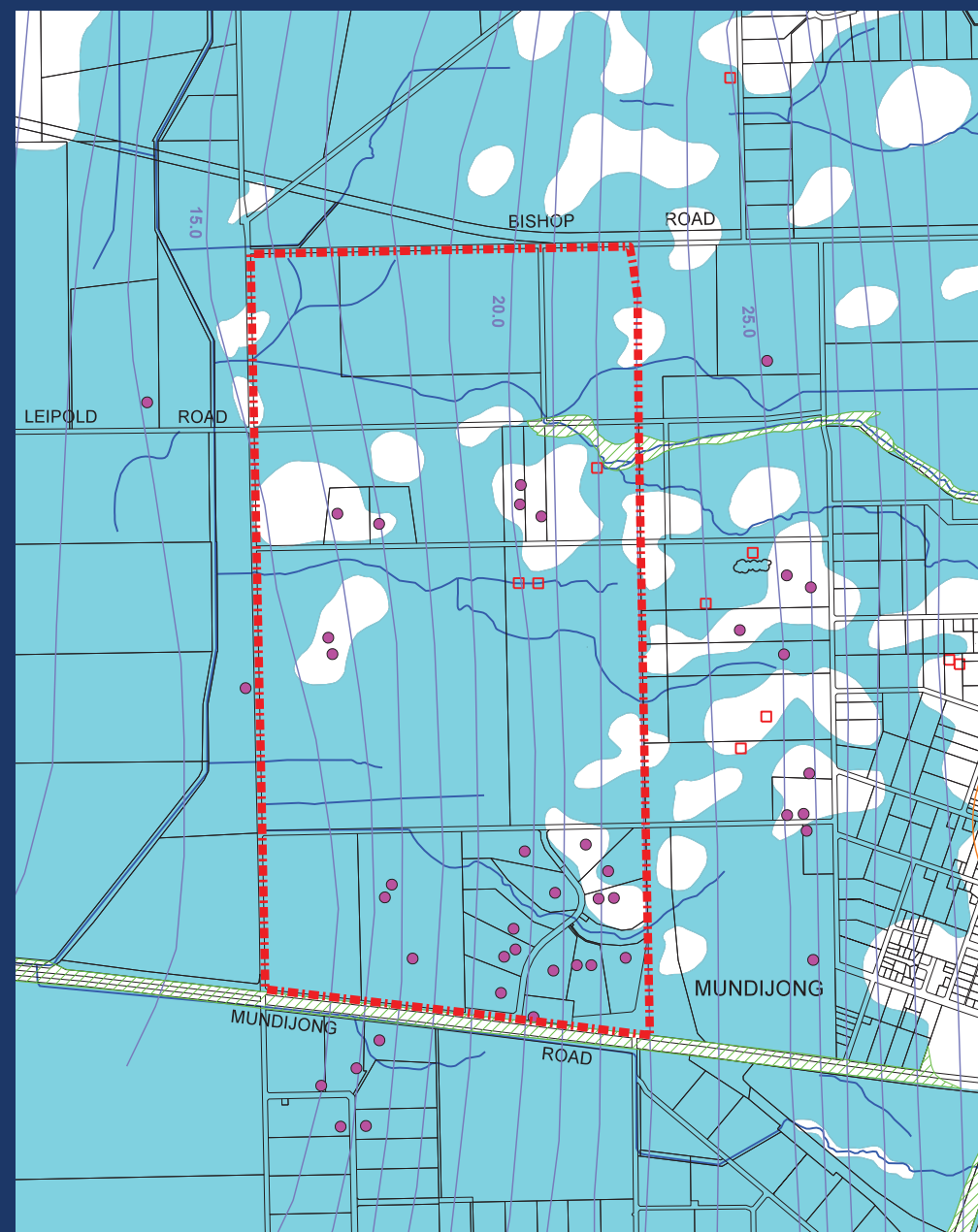
- a) Opportunity to retain and indeed enhance existing drainage features as ecological corridors within future development
- b) Development of the land for industry will necessitate the importation of considerable fill. There is a need to:
 - Understand the economic feasibility of introducing such a large amount of fill to the site; and
 - Impact upon existing drainage patterns.

It is recommended that prior to rezoning a preliminary fill and drainage assessment is undertaken to demonstrate the feasibility of dealing with these issues



Figure 8 -
Wetlands and Hydrology

-  Subject Land
-  Water Features
-  Drainage Lines
-  Multiple Use Wetlands
-  Conservation Wetlands
-  1m Groundwater Contours
-  Existing Dwellings



DEMAND FOR INDUSTRIAL LAND

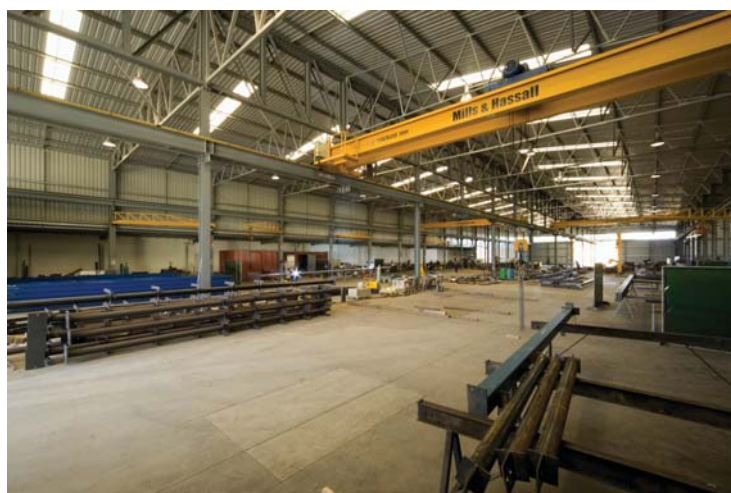
Trends in Industrial Development

Syme Marmion & Co and Economic Research Associates were appointed by Landcorp and the Department for Planning and Infrastructure to prepare an Industrial Land Needs Study (ILNS) in 2009. A key requirement of the study was to assess global trends with respect to industrial development and how they impact upon Western Australia.

In relation to global and national trends, per-se, the following key points were made of relevance to the metropolitan area:

Warehousing, logistics, transportation and storage:

Over recent decades there has been a major shift in the nature of industrial land in Australia away from smaller lots dominated by manufacturing, towards larger, lower cost sites in major growth and transport corridors dominated by warehousing and distribution. The same trends in supply chain and logistics management taking place around the world can be found in Australia, including the importance of ICT deployment and the role of 3PL service firms. Warehouse construction across Australia has risen sharply in the past 6 to 12 years with a similar trend found across most capital cities.



Manufacturing:

Large scale manufacturing industry is predicted to continue to decline in Australia.

Conversely manufacturing is predicted to grow in Asia and the Middle East. For example some predictions suggest that by 2020 much of the world's petrochemical and plastics manufacturing will take place in the Middle East.

Nevertheless, manufacturing concerned with domestic and commercial construction is likely to continue to be a key sub sector in Western Australia to supply the strong housing and construction sector.



Mining and Resources:

The mining and resources boom that has seen significant investment in Western Australia over recent years was driven in part by the demand for mineral ores from China and the rising prices for minerals and energy caused by a lack of supply due to insufficient investment in the 1990s.

Future investment in the WA mining sector will be contingent on the demand from China and while this may continue to be strong over the medium term, the prices for such metals may not be as high as has been experienced in recent years.

Agribusiness and Food:

International trade in agricultural produce and food now ranks alongside manufacturing, minerals and energy as one of the most significant global industries. It is also one of the most important export industries for Australia and a potentially important user of industrial land.

Rising demand for food within the increasingly affluent populations of China and India will drive international trade



in world food supply because these nations will not be able to supply their domestic consumption with local production. Around 75% of demand for food between now and 2030 is anticipated to come from developing economies.

Value adding to the food chain via processing is also likely to become an important opportunity, particularly for Western Australia. The ability to plug into the global food supply chain, particularly in servicing the needs of markets such as China and India, augurs well for industrial land use. This would be allocated to the processing and storage of food and agricultural produce.

Renewable Energy and Recycling

The need to address climate change is expected to have a transformative effect on all types of business. One area that is likely to become important over coming decades is the introduction of clean technologies. The concept of clean technologies is an umbrella term for a range of technologies, goods and services that aim to minimize or eliminate the

environmental impact of economic activity and form the basis of corporate responses to global climate change.

Investment into renewable energy sources is increasing rapidly across the globe and is set to further increase as more countries set carbon emission targets, introduce carbon trading schemes and set targets for the production of renewable energy. In Australia, the bio-fuels industry is still in an early stage of development. Both ethanol and bio-diesel are produced with Federal Government targets set at around 350 million litres by 2010.



Likely Demand

It is beyond the scope of this feasibility assessment to determine demand for industrial land at West Mundijong.

Nevertheless, several recent studies provide a guide as to likely demand scenarios within the broader locality. The following documents are relevant:

- a) Industrial Land Capacity Assessment (2009) predicted a shortfall of 616 hectares for the entire Metro South - West Region (which includes south east sector) by 2030
- b) Industrial Lands Needs Study (2008) predicted a total demand of 222 to 378 hectares for the whole Metropolitan South Eastern Sector by 2030. This includes all categories of industry

- c) Demand Analysis for Employment Generating Land in the Shire of Serpentine – Jarrahdale (2009) estimated an additional 150 hectares required for industrial purposes within the Shire by 2030

More specifically, the specialist reports associated with the ILNS suggest that there is demand for land to accommodate general industry. The report states:

- a) The main area of growth is in the General industrial land use sector
- b) This growth has accelerated in recent years. In the period 1988 to 2001, the area occupied by general industry grew by an average of 80 hectares per year but in the period 1997 – 2001 this has increased to an average of 167 hectares extra per year
- c) Light industry land use complex occupancy has only grown modestly and this growth has been slower in the short term.



Key Findings & Recommendations

- a) The Shire of Serpentine Jarrahdale is committed to the principles of sustainability. Opportunities for recycling uses are greatly enhanced by primary transport infrastructure and population centers line that envisaged at Mundijong
- b) Continuing growth in the resource sector will require support industry, such as
 - Administration, sale and servicing of heavy machinery and vehicles associated with mining
 - Pre-fabrication and fabrication of material and products associated with the mining sector
- c) Located near key agricultural precincts, the West Mundijong area is strategically placed for food manufacturing business. In particular, there might be linkages with local poultry farming enterprises in this regard.
- d) Warehousing and logistics is an 'ascendant' industry group. Future planning should accommodate this group, particularly given proximity to planned transport infrastructure including a possible intermodal facility. Furthermore access to planned strategic transport infrastructure enables ease of access to national and international markets
- e) Emphasis upon the provision of general industry uses as opposed to light industry and heavy industry
- f) Given that West Mundijong totals 474.34 hectares it is likely that that it is of sufficient area to meet predicted land area requirements by 2030
- g) Need for future structure planning to provide general industry

INFRASTRUCTURE

Intermodal Facility and Realignment of Kwinana Freight Rail

As outlined above, the West Mundijong area has been identified as a potential intermodal facility site. Associated with this initiative is the realignment the Kwinana Freight Rail to adjoin the southern extension of Tonkin Highway (Refer Figure 9).

The Department of Transport is currently investigating the potential of the land for a facility, including supporting freight rail infrastructure.

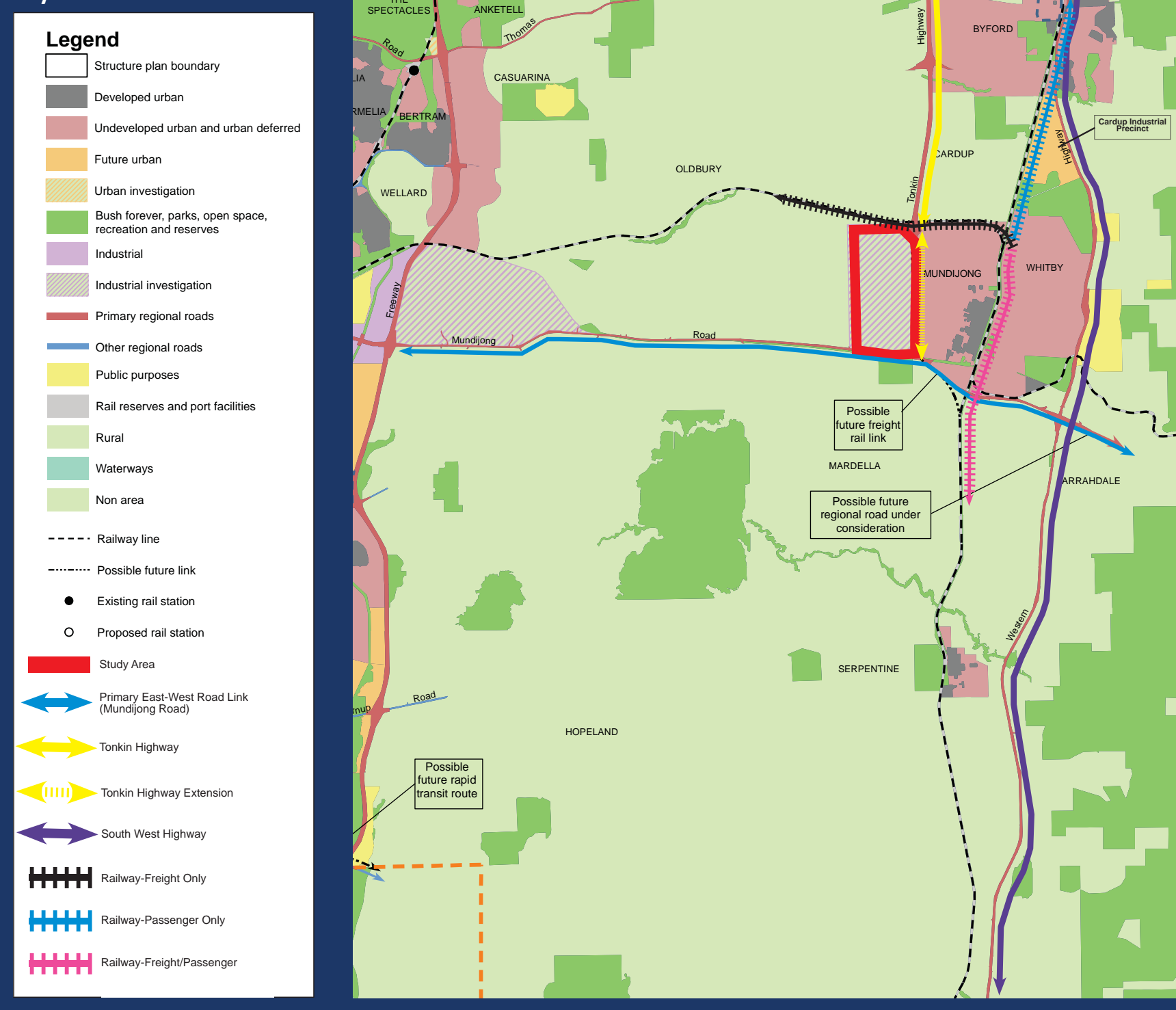
Whilst it is our view that West Mundijong has the potential for industrial development, irrespective of the proposed intermodal facility the following should be acknowledged:

- Based upon experience elsewhere in Australia the facility will act as a significant catalyst or 'attractor' of development related to warehousing, storage and logistics
- Subject to further negotiation there might be opportunities for the Department and other agencies to collaborate in relation to further feasibility assessment and rezoning
- Intermodal facilities involving freight rail are vital to facilitating more sustainable modes of transport
- Future structure planning will be required to set aside sufficient area for the facility including associated support infrastructure and services

In relation to Point c), review of other intermodal estates would suggest a maximum of 150 hectares should be set aside in total including allowance for associated handling and stockpiling of containers.

The feasibility of the intermodal facility will be further explored in the forthcoming Perth and Peel Regions Freight and Intermodal Plan to be prepared by the Department of Transport. It is expected that the Department will advise shortly as to the program for completion of the Plan.

Figure 9 - Key Infrastructure Initiatives



Possible Intermodal Facility

Southern Extension of Tonkin Highway

The Metropolitan Region Scheme provides for the southern extension of Tonkin Hwy.

The extension is vital to connecting the area to key destination points within the metropolitan area and importantly destinations in the north west via the Great Northern Highway.

Representatives of Main Roads Western Australia have advised that there are no plans to extend the highway in the next ten years. The program may be reviewed in response to the rate of development of planned residential areas nearby.

It may also be the case that rezoning of West Mundijong will provide a further imperative for the extension of the highway.

Mundijong Road

As outlined above Mundijong Road is designated an 'other regional road' in the Metropolitan Region Scheme.

The designation allows for upgrading to the status of a sub regional road. Mundijong directly connects the investigation area to Kwinana Freeway to the west and Kwinana beyond.

The South Metropolitan Region Sub Regional Structure Plan also makes provision for the extension of Mundijong Road east of Mundijong town.

Key Findings & Recommendations

- a) The feasibility and timing of the intermodal facility and the realignment of the Kwinana Freight line will be determined by the proposed Perth and Peel Regions Freight and Intermodal Plan .It will be vital that:
 - The Shire of Serpentine Jarrahdale liaise with the Department of Transport to ensure that the Perth and Peel Regions Freight and Intermodal Plan is coordinated with investigations at West Mundijong
 - Opportunities for cost sharing are fully explored with respect to the development of the Plan and investigations at West Mundijong

- The Shire has an opportunity to comment on the development of the Plan as it relates to possible industrial development at West Mundijong
- b) Depending on the recommendations of the Plan, subsequent structure planning must make provision for an intermodal facility and associated re-alignment of the freight rail
 - c) It is imperative that Tonkin Highway be extended to access the land. The Shire must identify key decision making stakeholders to petition. Progression of rezoning will be an important catalyst for liaison with stakeholders

APPROPRIATENESS OF WEST MUNDIJONG FOR INDUSTRIAL DEVELOPMENT

Consistent with international best practice, the *Industrial Land Needs Study* recommended a set of criteria for the assessment of land intended for industrial development.

According to the *Industrial Land Needs Study*, industrial estates should exhibit the following criteria:

- a) Contiguous to other industrial activities
- b) Well located in relation to supply chains and service providers
- c) Potential for on-site expansion of existing industrial businesses
- d) Well located in relation to skilled labour pools
- e) Well located to take advantage of existing or proposed infrastructure or other economic development
- f) Well located in relation to freight connections and other important road and/or rail networks
- g) Potential for the provision of, small industrial businesses serving the local area
- h) Provides sufficient space for adequate parking and turning space for industrial vehicles
- i) Potential for 24-hour operations
- j) Minimal or no adjoining land use constraints
- k) Minimal or no environmental, geotechnical or drainage constraints (or potential may exist to compensate off-site)
- l) Unconstrained vehicle access and exit can be commercially developed with infrastructure and site preparation for future industrial activities.

The investigation area is assessed as follows:

Contiguous to other industrial activities

The investigation area is not contiguous with other existing industrial activities.

Nevertheless, it is likely that future structure planning can provide for future subsidiary service industry and light industry uses within the Pure Steel Lane area and other areas where it would be compatible

Well located in relation to supply chains and service providers

The area meets the criteria for the following reasons:

- a) The area is located near an existing town which is planned to grow significantly and become a district centre
- b) Existing and planned transport networks will ensure ease of access to supply chains and service providers
- c) The possibility of a intermodal facility will optimise access to national and international markets and supply chains

Potential for on-site expansion of existing industrial businesses

The area meets the criteria for the following reasons:

- a) The area west of Kargotich Road exhibits a similar opportunities and constraints profile to the investigation area
- b) Long term owners may support industrial development of the area
- c) The area east of Kargotich is contiguous with the investigation area, thereby enabling opportunities for co-location and agglomeration

Well located in relation to skilled labour pools

The area meets the criteria for the following reasons:

- a) Some access to skilled labour in surroundings towns
- b) Access to skilled labour within the district, namely Byford

Well located to take advantage of existing or proposed infrastructure or other economic development

As discussed elsewhere the location of the area is fortuitous given:

- a) Adjoins proposed southern extension to Tonkin Hwy
- b) Possible intermodal facility
- c) Mundijong Road
- d) Potential realignment of Kwinana freight rail line to follow extension of Tonkin Hwy

Well located in relation to freight connections and other important road and/or rail networks

West Mundijong meets these requirements for the following reasons:

- a) Adjoins proposed southern extension to Tonkin Hwy
- b) Possible intermodal facility
- c) Mundijong Road
- d) Potential freight rail line re-alignment

Potential for the provision of, small industrial businesses serving the local area

Should development proceed, it is highly likely that the Pure Steel Lane area will be suitable for the development of light and service industry.

The redevelopment of this area for such uses, will serve to complement the balance of the estate, and be well placed to serve existing and future residents of the area.

Provides sufficient space for adequate parking and turning space for industrial vehicles

Future structure planning can ensure that lots sizes are adequate to meet parking, access and turn around requirements.

Potential for 24-hour operations

Subject to addressing noise issues, the area has the potential to be developed as a 24 hour facility

Minimal or no adjoining land use constraints

The investigation area is adjoined to the east by existing and planned residential uses. Furthermore, there is a preponderance of dispersed dwellings located to the south of the area associated with rural lifestyle or hobby farm subdivisions.

Prior to rezoning, there will be a requirement to undertake emission modeling to further clarify the types of industry that would be suitable within the area given the proximity of planned and existing sensitive uses.

Nevertheless, the following should be noted:

- a) Irrespective of the potential for industrial development to the west, the extension of Tonkin Highway will require installation of associated noise attenuation measures relative to planned and existing dwellings to the east within Mundijong. Should industrial development proceed, it is expected that the same traffic attenuation measures will also attenuate possible noise emissions from future industry;

- b) There is an opportunity for future structure planning to provide for internal buffers along the eastern and southern boundaries. These areas could support low emission uses such as:

- Warehousing
- Logistics
- Heavy machinery servicing, distribution and sales
- Some forms of light industry and service industry use

- c) Based upon the assessment, the uses outlined in b), are likely to be attracted to the area.

Minimal or no environmental, geotechnical or drainage constraints (or potential may exist to compensate off-site)

The foregoing discussion would suggest that there are minimal environmental constraints to the development of the land. Nevertheless, the following issues would need to be resolved prior to pursuing rezoning:

- a) Potential noise impacts upon adjoining sensitive uses (existing and proposed)
- b) Feasibility of drainage and fill

Unconstrained vehicle access and exit can be commercially developed with infrastructure and site preparation for future industrial activities.

The investigation area already benefits from access to Mundijong Road to the south and Kargotich Road to the west.

The Kwinana freight rail line runs along the northern boundary of the land.

Again it is reiterated that the land benefits from the following planned transport initiatives:

- a) Adjoins proposed southern extension to Tonkin Hwy
- b) Possible intermodal facility
- c) Potential re-alignment of Kwinana freight rail line to follow extension of Tonkin Hwy

Key Findings & Recommendations

Subject to addressing noise, drainage and fill issues, the location of West Mundijong for industrial development meets the above model criteria for the location of industrial areas.

SERVICING

Water Supply

The Water Corporation has advised that potable water may be accessed from Mundijong town site. There may be limited capacity for some industrial processing.

It is fortuitous that the Serpentine trunk main is located approximately 1 kilometre to the west of the investigation area (Refer *Figure 10*). Subject to approvals from the Water Corporation, the trunk main may be accessed to provide process water requirements.

Alternative Water Supply

Subject to further investigation there is the potential to harvest storm water for processing. This approach has been successfully developed at Penfield, South Australia.

Wastewater

Currently Mundijong is not connected to deep sewerage.

Wastewater from Mundijong is planned to be conveyed to the Woodman Point wastewater treatment plant (City of Cockburn) via Byford.

The Water Corporation is proposing to install a 1 meter diameter trunk main within the Mundijong Road reserve. The main will ultimately convey wastewater from Mundijong to the proposed East Rockingham wastewater treatment plant scheduled for completion in 2015

Wastewater Recycling

The Water Corporation is not proposing to construct a wastewater treatment facility at Mundjoing, or for that matter anywhere in the locality. Therefore, it is not feasible to consider the use of recycled wastewater in this locality.

The Corporation has also stated:

- a) Relative to other industry, industry at West Mundijong is unlikely to generate significant demand for processing water. On this basis it is unlikely that a business case could be developed and supported for installation of infrastructure to enable re-use of treated wastewater at Mundijong
- b) Subject to further feasibility, grey water harvesting and recycling by individual industries may still be feasible

Power

The land is traversed 330 kv lines. Western Power has advised that a 'step down' facility will need to be installed to enable reticulated supply for future industry.

Gas

There is no existing gas distribution / reticulation infrastructure in the Mundijong area and WA Gas network has no current infrastructure planning for this area.








An existing high pressure gas main is located within Soldiers Road to the north Byford.

It is proposed to extend the main further south down Soldiers Road. Lateral gas mains would be required off this trunk to serve the industrial estate.

Key Findings & Recommendations

- a) The area benefits from proximity to the Serpentine Trunk main. Subject to Water Corporation approval, there is capacity to the requirements of future industry
- b) Consistent with good practice elsewhere there is the potential to explore harvesting of storm water for re-use
- c) There is currently no deep sewerage infrastructure available at Mundijong. Depending upon demand, there may be a requirement to investigate interim wastewater disposal measures pending provision of infrastructure.

Figure 10 - Servicing Plan

	Subject Land
Power	
	330Kv Transmission Line
	132Kv Transmission Line
Gas	
	Proposed Gas Main
Water	
	Serpentine Trunk Main
Sewer	
	Future Rising Main to East Rockingham WWTW
	Future Gravity Sewer

Location of services are indicative only and subject to detailed design and survey

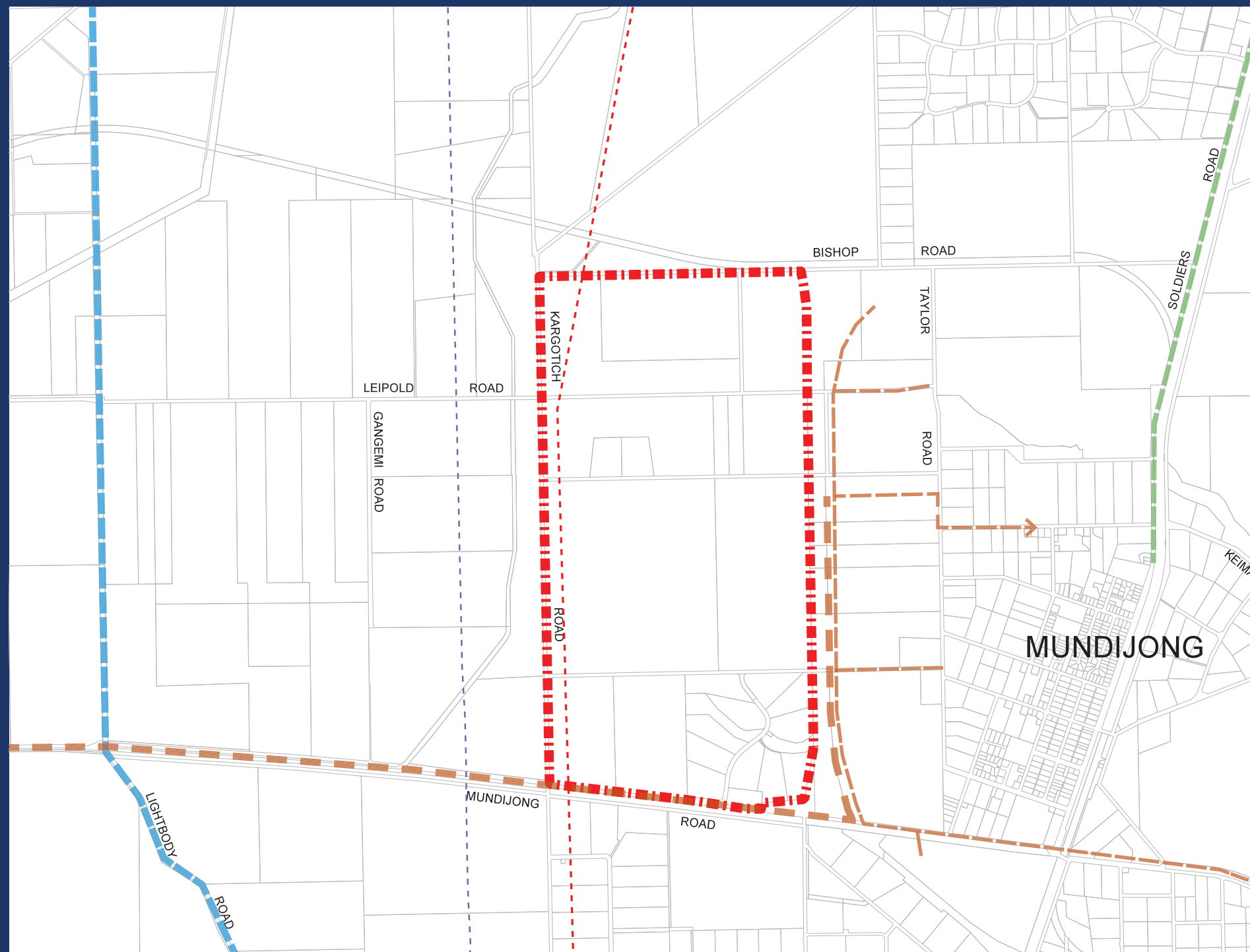
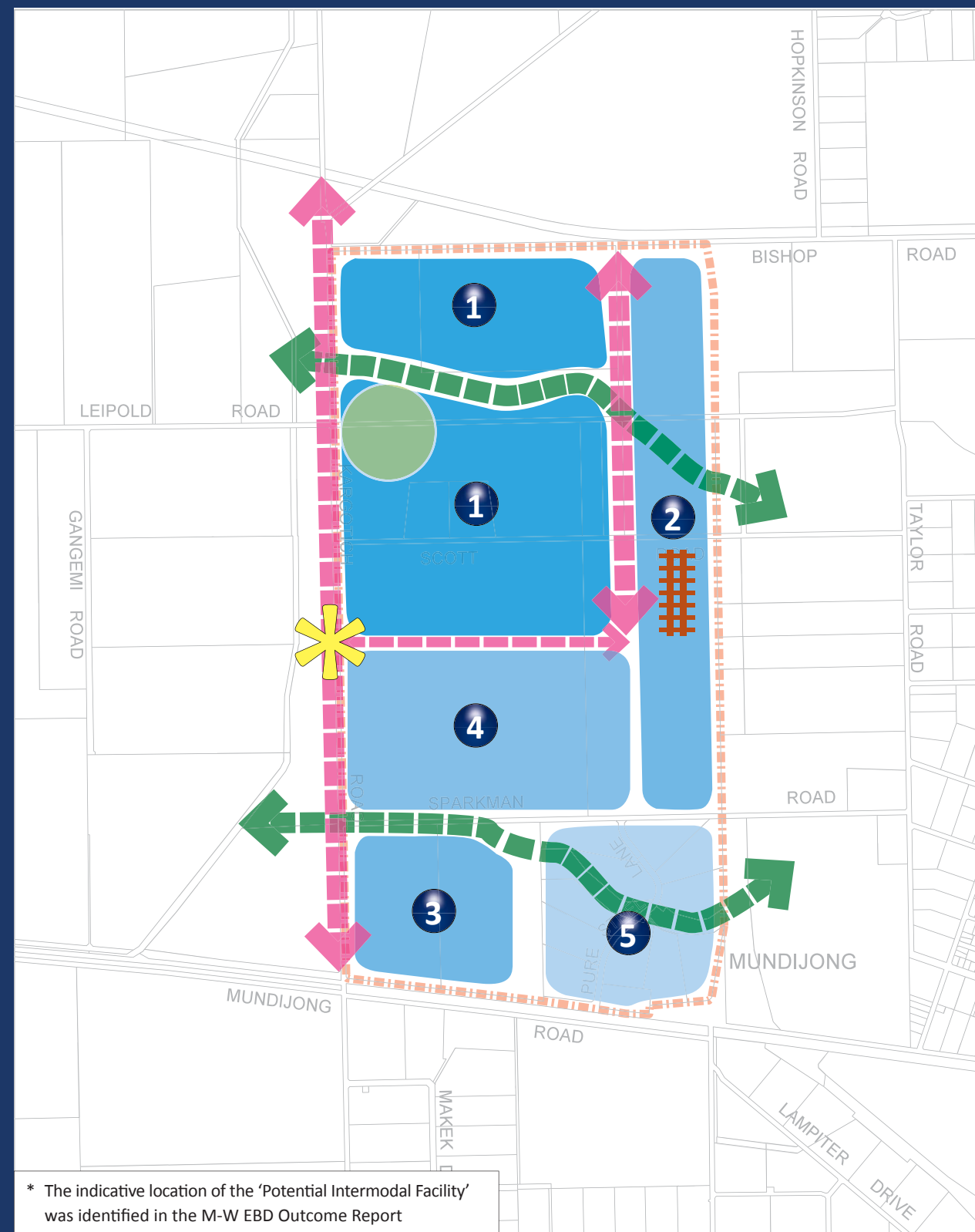


Figure 11 - Schematic Plan

Possible Land Use (indicative Only)

- 1 Recycling, Brickworks, Plasterboard, Lime Production
- 2 Warehouse, Logistics, Low Emission Industry
- 3 Transport, Heavy Machinery, Sales, Distribution
- 4 Agri-business, Food Processing, Depot
- 5 Service Industry, Light Industry, Limited Showroom
- ✱ Possible Primary Intersection
- Potential Intermodal Facility (location subject to further investigation by DoT)
- ↔ Possible Integrated Infrastructure Corridor
 - Water
 - Power
 - Gas
 - Third Pipe
 - Road
 - Rail (Dept of Transport)
- ↔ Primary Access Road
- ↔ Possible Ecological Corridor
 - Living Stream
 - Revegetation
 - Passive Recreation
- Stormwater Harvesting and Distribution Education, Research and Training
- Subject Land



* The indicative location of the 'Potential Intermodal Facility' was identified in the M-W EBD Outcome Report

PATHWAY TO PLANNING AND ENVIRONMENT APPROVALS

In terms of achieving planning and environment approvals over the land the following is critical:

Environmental Referrals under the Commonwealth EPBC Act, 1999

Referrals under the EPBC Act will be required on account of listed flora and fauna.

The referrals will need to be supported by the appropriate surveys.

In this instance it is likely that any issues can be readily resolved, particularly given the nature of the site which has been substantially cleared in response to farming. Given this fact it is recommended that the referrals occur concurrently with the submission to amend the Metropolitan Region Scheme.

Metropolitan Region Scheme

In order to develop the land for industry the Metropolitan Region Scheme will need to be amended to include the land in the 'Industry' zone.

The submission to amend the MRS will need to be accompanied by:

- a) Consultation Report
- b) District Structure Plan and accompanying report, which broadly details:
 - Land use precincts, including integration with a possible intermodal facility and associated realignment of Kwinana freight rail
 - Key transport and infrastructure corridors
 - Conservation and or ecological areas
 - Drainage
 - Integration with surrounding areas
 - Staging

- c) District Water Management Strategy
 - Drainage / ecological corridors
 - Sustainability initiatives
 - Fill
- d) Traffic report
- e) Environmental assessment report
- f) Ethnographic survey
- g) Geotechnical survey
- h) Servicing report

The Planning & Development Act 2005 now allows for concurrent MRS and local scheme amendments. It is recommended that the MRS amendment also provide for an amendment to the local scheme to include the land within Appendix 15 'Development Areas' of TPS2.

Local Structure Plan

Concurrent with the MRS it is proposed to include the land within a 'Development Area'. The purpose of development areas is to facilitate more detailed planning via the requirement to prepare a local structure plan as a prelude to subdivision approval.

Funding and Implementation

Metropolitan Region Scheme

The process of achieving the necessary approvals will be a costly exercise which is probably beyond the means of individual owners and the Shire of Serpentine Jarrahdale.

Also, the following factors need to be considered with respect to considering responsibility for funding and implementation:

- a) As a possible industrial estate, West Mundijong is of regional significance as evidenced by its identification in *Directions 2031* and the *Industrial Land Strategy*. The regional significance of the site strongly suggests that state agencies should contribute to further feasibility and planning

- b) The Department of Transport and the Department of Planning are currently undertaking related projects that have the capacity to contribute to resolving issues at West Mundijong. It is vital that these agencies liaise with the Shire to ensure coordination with West Mundijong
- c) The investigation area comprises multiple private owners and there will be a need to ensure that the process of completing the MRS amendment and associated District Structure Plan is completed in an impartial and transparent manner

At the time of preparing this report discussions were underway with the Department of Planning to secure possible funding to commence rezoning of the land.

Structure Planning

Once the process of amending the MRS is completed, land owners would be able to prepare local structure plans for their respective holdings.

Land owners will be able to proceed in confidence given that the land will be included within the 'Industry' zone of the MRS. As explained above the MRS amendment will include a District Structure Plan which resolve major issues related to the environment, access, servicing and land use.

The requirements to be addressed at the structure planning stage are addressed in Table 1.

Key Findings & Recommendations

It is recommended that the Shire:

- a) Facilitate the MRS amendment through to gazettal
- b) Continue to explore the potential of securing funding from State authorities and land owners
- c) Meet with land owners to establish capacity and willingness to contribute to the exercise
- d) In relation to points b) and c) it is recommended that staff report back to Council as soon as practicable

TABLE 1 -SCHEDULE OF PLANNING REQUIREMENTS

Information Required/ Tasks To Be Completed	MRS Amendment	TPS Amendment (1)	Local Structure Plan (1)	Detailed Area Plan(s)/Design Guidelines	Subdivision/Development
Structure Planning					
District Structure Plan	*				
Local Structure Plan			*		
Engineering and Servicing					
Engineering and Servicing Report	*				-
Geotechnical Investigation	*		*	-	*
Traffic Management					
Transport Issues Paper	*	-	-	-	-
Traffic, Vehicular Access and Parking Strategy	-		*	-	-
Traffic, Vehicular Access and Parking Plan	-	-		*	*
Water Management					
Preliminary drainage and fill feasibility report	*				
District Water Management Strategy	*				
Establish monitoring regime	*				
Local Water Management Strategy			*		
Local Water Management Plan					*
Environment					
Environmental Assessment Report	*				
Referrals	*				
Composite noise modelling	*				
Acid Sulfate Soil Investigations			*		
Flora and Vegetation Survey	*				
Fauna Survey	*				
Wetland Buffer Management Plan			*		
Landscaping and Vegetation Retention Management Strategy			*		
Landscaping and Vegetation Retention Management Plan					*
Sensitive use interface management strategy	*		*		
Sensitive use interface management plan				*	*
Sustainability					
Sustainability Strategy			*		*
Miscellaneous					
Lot Development Design Explanatory Report				*	
Fire Management Strategy			*		
Fire Management Plan					*
Governance					
Estate Governance Framework			*		
Economic Development Strategy			*		
Community Access and Facilities Strategy			*		

(1) In most instances, a Town Planning Scheme Amendment would be progressed in parallel with a Local Structure Plan.

CANDIDATE INDUSTRIES

A key requirement of the brief is to determine likely candidate industries that may choose to locate at West Mundijong.

Broadly it was necessary to review the following industry sectors as defined by the Australian Bureau of Statistics:

- a) Manufacturing
- b) Light industry
- c) General industry
- d) Electricity, gas and water supply
- e) Construction
- f) Transport and logistics

The industry categories were assessed according to the following criteria:

- a) Serviceability
- b) Transport linkages
- c) Potential environmental issues
- d) Compatibility with adjoining uses
- e) Economic potential
- f) Employment potential

A matrix was prepared which assessed the above categories against the criteria established above (Appendix A)

Based on the assessment the following candidate industries substantially meet the above criteria:

Agribusiness / Food Manufacture

- Meat and meat product manufacturing
- Fruit and vegetable processing
- Beverage manufacture
- Flour and Cereal Food Manufacture
- Bio - fuels

It should be noted that some forms of meat processing have the potential to generate odour and other emissions. Nevertheless, the site is considered sufficiently large to accommodate such uses and provide sufficient separation to adjoining sensitive uses.

Agribusiness and food manufacture is rated highly on account of proximity to agriculture and in particular poultry farming. There is substantial potential for such industry to add value to local products and create employment.

Light Industry

- Manufacture of consumer oriented e.g. household fitting, goods and clothing
- Manufacturing which uses partially processed materials to make products

Light industry is unlikely to provide the same level of employment and economic potential as the other classes of industry reviewed.

Nevertheless light industry is expected to have fewer emissions and could be suited as a 'buffer' land use along the eastern and southern boundaries of the area.

General Industry

- Brick making
- Cement, lime, plaster and concrete product manufacturing
- Basic non – ferrous metal product manufacture
- Basic ferrous manufacture

With significant residential development planned in the locality, there may be significant potential for industry concerned with the production building products including bricks, plaster and other products.

Wholesale Trade

- Heavy machinery equipment sales and servicing
- Farm produce wholesaling

- Mineral, metal & chemical wholesaling
- Building supply wholesaling
- Motor vehicle
- Household goods wholesaling
- Food and drink wholesaling

Proximity to planned transport networks highlight the potential of wholesale trade at West Mundijong.

Transport and Logistics

- Transport and courier depot and services
- Distribution centre
- Packaging, parts and services
- Disposal, recycling
- Material management

It would be expected that transport and logistics uses would locate in the area in association with an intermodal facility.

Possible Development Scenario

Attached at *Figure 10* is a possible development scenario for West Mundijong which addresses some of the opportunities and constraints identified in this report.

The plan is for illustrative purposes only.

The development of the land is subject to further feasibility assessment, land owner consultation and structure planning.

Key Recommendations

- a) In town planning terms the suitable candidate industries would broadly be considered to be 'General' industry
- b) Heavy industry is not suitable largely on account of potential emissions and impacts on nearby existing and planned sensitive uses
- c) Further more detailed planning will be instrumental in clarifying specific industry types
- d) It will be the responsibility of proponents to determine the actual feasibility of specific proposals

GOVERNANCE

Strong governance involvement within the initial stages of a land development project is essential for the successful delivery of an industrial estate. Cohesion and agreement between relevant government agencies is required and a need for alignment on the long term financial and economic benefits of the development.

Upon rezoning it will be imperative that a management structure instigated to oversee the commencement of development at West Mundijong. The structure should be in the form of steering committee which is responsible for:

- a) Brokering cooperation and liaison between agencies
- b) Championing service provision
- c) Development of industry attraction strategies
- d) Community liaison
- e) Sourcing funding opportunities for servicing

Membership could include:

- a) Elected members
- b) Peel Development Commission
- c) Industry leaders
- d) Community representatives
- e) Land owners

INDUSTRY ATTRACTION

It is recommended that the Shire of Serpentine Jarrahdale collaborate with the Peel Development Commission to establish and implement a marketing strategy for the Estate.

Based on local and eastern states examples, an attraction strategy could include:

Preparation of Marketing Prospectus and Information Document

- a) Develop an information document and complementary audio visual presentation to be taken to the market addressing:
 - The background to the Estate
 - The policies and support programs from the State and Commonwealth Government
 - Shire's vision and objectives for West Mundijong
 - The opportunity and proposed development process
 - The expression of interest submission and evaluation process
- b) Identify the target market for the promotional program, incorporating a "road show" of presentations, including:
 - Potential operators
 - Potential site developers
 - Potential precinct tenants
 - Potential precinct service users
 - Regional development organizations
 - Community representatives

CONCLUSIONS

The report demonstrates that industrial development is feasible at West Mundijong. The following points are instrumental in reaching this conclusion:

- a) The area is identified in a range of peak planning documents, including Directions 2031 & the Southern Metropolitan Sub-Regional Structure Plan 2009
- b) The site is the focus of several key infrastructure initiatives
 - Possible intermodal facility
 - Extension of Tonkin Highway
 - Realignment of the Kwinana Freight rail to adjoin the Tonkin Highway
- c) The land is relatively unconstrained by environmental issues, although there is a need for further research to clarify potential noise impacts, fill and drainage issues
- d) The majority of land owners within the investigation area support or conditionally support industrial development
- e) Research indicates some demand for industrial land in the locality
- f) According to internationally accepted location criteria the site is appropriate for industrial development subject to clarifying potential noise impacts, fill and drainage issues

It is recommended that the Shire of Serpentine Jarrahdale facilitate progression a Metropolitan Region Scheme amendment to include the land within the Industry zone as detailed in the relevant sections of this report.

To this end it is recommended that the Shire:

- a) Continue to explore funding opportunities from state agencies, in particular the Department of Transport and the Department of Planning
- b) Enter into discussions with land owners to establish a their capacity and willingness to contribute to the MRS

amendment process

- c) Prior to rezoning, coordinate completion of noise modeling, drainage and fill feasibility studies which clarify how these issues can be resolved in subsequent stages of planning.
- d) Shire of Serpentine Jarrahdale retain an oversight/management role between landowners and state agencies.

APPENDIX 1

Industry Sector	Sub Sector Australian & New Zealand Standard Industrial Classification Divisions	Location criteria and characteristics	Primary Assessment Criteria					
			Serviceability	Transport Linkages	Potential Environmental Issues	Compatibility with adjoining uses	Economic Potential <small>As per criteria developed by Collie Pty Ltd</small>	Employment Potential
MANUFACTURING								
Food Related	<ul style="list-style-type: none"> Meat and meat product manufacturing Fruit and vegetable processing Beverage manufacture Flour and Cereal Food Manufacture 	<ul style="list-style-type: none"> Interstate, interregional arterial roads, rail freight Water, sewer, electricity, other energy (food and metal processing are heavy water users and may require associated recycling facilities) Large, skilled workforce catchment Moderate to large, relatively flat sites – any processing is land intensive Need for large amounts of on site storage Likely to need buffer and protection from sensitive neighbouring uses such as residential, commercial and business uses Depending on processes, meat product manufacture can require buffers or separation distances in excess of 1000 metres 	Low	Medium / High	Medium	Medium	High	High
			Wastewater currently unavailable	Good road access	Odour & Possible liquid contaminants (meat processing)	Incompatible with sensitive uses. Requires separation of 500 – 1000 metres	Strong linkages to local primary and agricultural industries	
			Need to connect to Serpentine trunk main	Outstanding planned access to major roads and potential rail and intermodal	Need to consider industry within this category with low emission profiles or emissions that can be managed		Capacity to add value	
Fabrication (light industry)	<ul style="list-style-type: none"> Manufacture of consumer oriented e.g. household fitting, goods and clothing Manufacturing which uses partially processed materials to make products 	<ul style="list-style-type: none"> Highly accessible, visible frontage, transport/activity corridors/some residential locations Local and district catchments Very close to centres of population and trade Does not require major buffers or separation zones Micro/small to medium scale sites Local employment catchment 	Medium	High	Low	High	Medium	Medium
General Industry	<ul style="list-style-type: none"> Cement, lime, plaster and concrete product manufacturing Basic non – ferrous metal product manufacture Basic ferrous manufacture 	<ul style="list-style-type: none"> Local, district and sub-regional catchments Very close to centres of population and trade Can require buffers in excess of 250 metres Medium scale sites Local employment catchment 	Low	Medium / High	Medium	Medium	High	High
			Wastewater currently unavailable	Outstanding planned access to major roads and potential rail and intermodal	Primarily noise, some dust	Incompatible with sensitive uses. Requires separation of 500 – 1000 metres	Strong linkages to local primary industries and emerging home sector	
							Capacity to add value	
Heavy Industry (ferrous & non ferrous)	<ul style="list-style-type: none"> Mineral resource processing Iron and steel manufacturing Non metallic mineral product manufacturing Industrial machinery and equipment manufacturing 	<ul style="list-style-type: none"> Interstate, interregional arterial roads, preferably High Wide Load corridors, rail freight Direct port access and or frontage in the case of iron ore processing Substantial water, sewer, electricity, other energy Skilled workforce catchment Large to very flat sites in excess of 200 hectares Large buffer, protection from other sensitive uses including other industries May be difficult to reserve land for such uses May create dust, noise, smell and emissions/ discharges May include some hazardous uses such as haulage/ transportation of waste materials 	Insufficient services available to meet demand	Low	High	Low	High	High
				No direct port access				

Industry Sector	Sub Sector <small>Australian & New Zealand Standard Industrial Classification Divisions</small>	Location criteria and characteristics	Primary Assessment Criteria					
			Serviceability	Transport Linkages	Potential Environmental Issues	Compatibility with adjoining uses	Economic Potential <small>As per criteria developed by Collie Pty Ltd</small>	Employment Potential
Construction								
	<ul style="list-style-type: none"> Construction & trade services Building structure services Installation trade services 	<ul style="list-style-type: none"> Local, district and sub-regional catchments Very close to centres of population and trade Can require buffers in excess of 250 metres Medium scale sites Local employment catchment 	High	High	Low	High	Medium	High
Wholesale Trade								
	<ul style="list-style-type: none"> Farm produce wholesaling Mineral, metal & chemical wholesaling Building supply wholesaling Motor vehicle Household goods wholesaling Food and drink wholesaling 	<ul style="list-style-type: none"> Freeways, rail freight routes Transport corridors Proximity to strategic and regional centres Close to, equidistant between centres of population and trade Areas where there is minimal impact on neighbouring uses but do not require major buffers or separation zones Large sites, very large lots, can be multi storey Large hard stand areas and parking sites Local employment catchment Linked to logistics and transport industries. Trend towards dedicated distribution parks (see logistics below) 	High	High	Low	High	Medium	Medium
Transport & Logistics								
	<ul style="list-style-type: none"> Transport and courier depot and services Distribution centre Packaging, parts and services Disposal, recycling Material management 	<ul style="list-style-type: none"> Airport Sea port Interstate, interregional arterial roads, rail freight Very large sites (up to 200Ha in Europe), very large lots (possibly 9,000m2 minimum) Large hard stand areas and parking sites Links to warehousing sites All utilities including ICT networks Trend towards automated goods handling and smart buildings 	High	High	Medium Careful consideration of potential noise from transport infrastructure needs to be considered	High	Medium	Medium

WEST MUNDIJONG INDUSTRIAL AREA FEASIBILITY STUDY

DESKTOP ASSESSMENT OF INDUSTRIAL DEVELOPMENT SCENARIOS



APPENDIX 2



DOCUMENT QUALITY CONTROL

WEST MUNDIJONG INDUSTRIAL AREA FEASIBILITY STUDY CONSULTATION OUTCOMES REPORT

AUTHOR
Kris Kennedy

DATE
03.02.2012

CHECKED BY
Gary Barbour

DATE
03.02.2012

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REVISION TABLE

No.	Purpose	Date
A	Client Feedback	07 - 03 - 2012



Research, Design & Delivery of
Sustainable Development

TME Town Planning Management Engineering Pty Ltd

PO BOX 4000, VICTORIA PARK, WA 6979

PH: (08) 9368 2615



11399
February 2012



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APPENDICES

Appendix A - Land Owner Interviews and Questionnaires

Appendix B - Agency Interviews

BACKGROUND

The Shire of Serpentine Jarrahdale is committed to a very high standard of consultation with residents and other stakeholders in the development of planning initiatives.

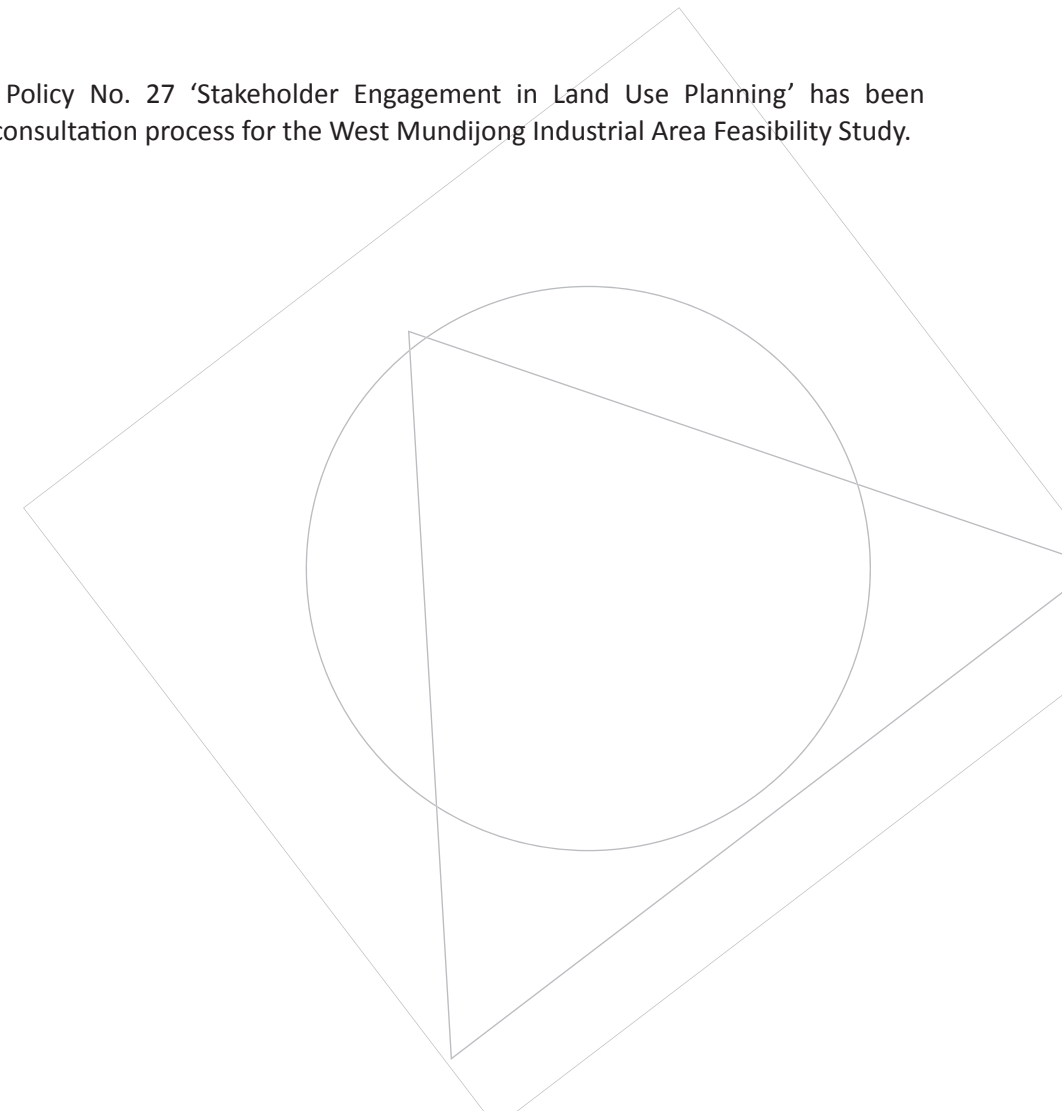
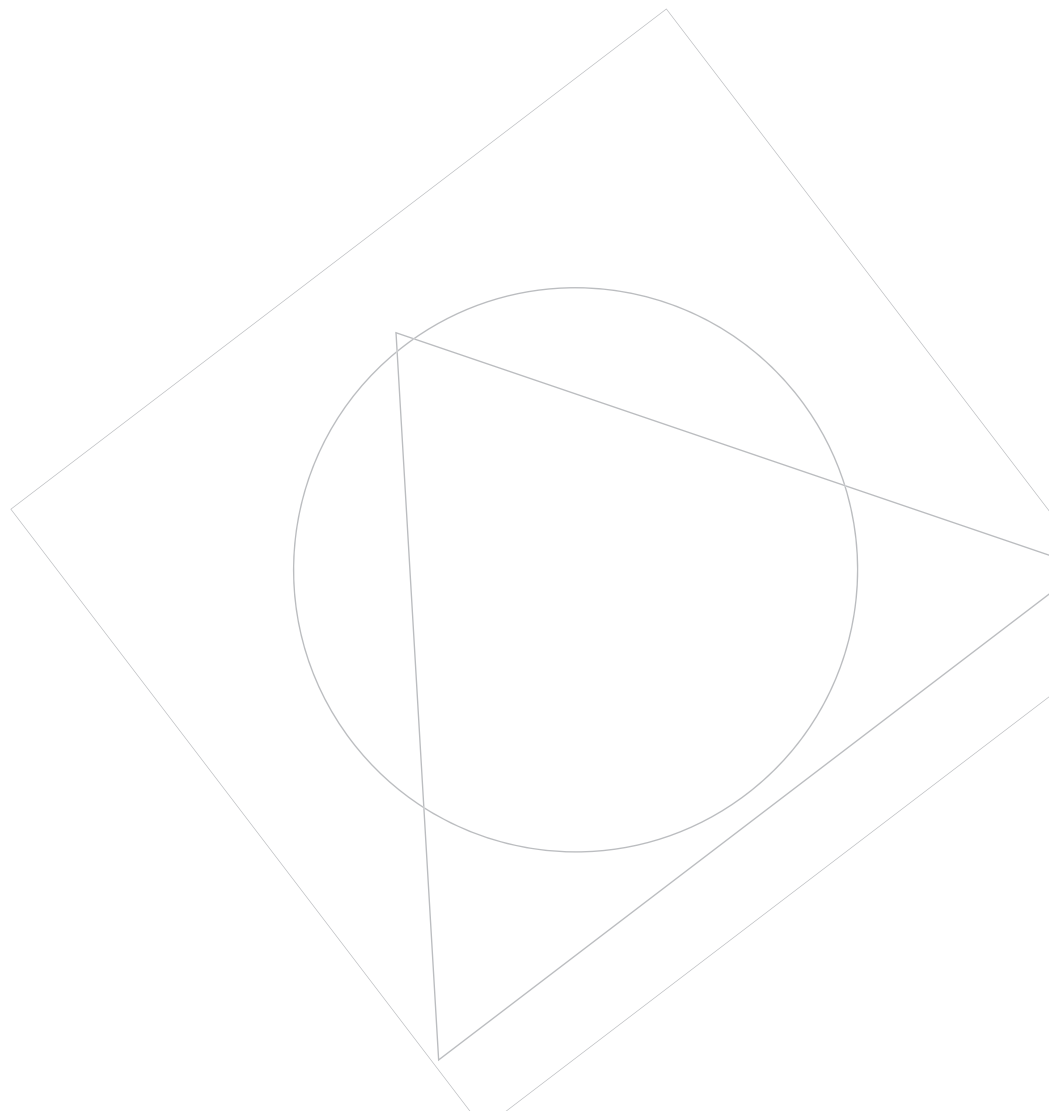
Accordingly, consultation has formed a significant component of the industrial feasibility assessment for West Mundijong. Broadly the objectives of the consultation process have been:

- To inform land owners of the purpose of the feasibility assessment
- To identify land owner intentions with specific reference to industrial development
- To liaise with a range of government agencies in order understand particular issues likely to be associated with industrial development at West Mundijong

The following key groups were consulted:

- Landowners
- Pure Steel Lane Residents
- Government agencies

The Shire's Local Planning Policy No. 27 'Stakeholder Engagement in Land Use Planning' has been instrumental in guiding the consultation process for the West Mundijong Industrial Area Feasibility Study.





METHODOLOGY

Landowners

The assessment area comprises of 25 land parcels and in addition three reserves vested in the Shire of Serpentine Jarrahdale.

All land owners within the preliminary study area were notified in writing and invited to a one on one meeting. The purpose of the landowner interviews were:

- Explain background to feasibility assessment
- To establish support or objection to possible industrial development
- If support, likely industry types envisaged
- If objection, reasons why industrial development would not be supported
- General comments

In order to target discussion and optimise the value of the meeting, a standard background information report was circulated to all owners prior to the meeting.

In the event that owners were unable or unwilling to attend a meeting, a standard questionnaire was also circulated to all owners.

Pure Steel Lane Residents

An information forum was held for all land owners within Pure Steel Lane. The purpose of the forum was to both outline the proposed feasibility assessment and importantly record the view points of attendees.

Again, background material was circulated to prior to the meeting, with additional information available at the session.

For those unable to attend, a standard questionnaire was also posted to all residents.

During the whole consultation period Shire staff and TME personnel were available to respond to queries regarding the feasibility study.

Agencies

A core requirement of the feasibility study brief is to consult with agencies. The following agencies concerned with industrial development were interviewed:

- LandCorp
- Department of State Development
- Department of Planning
- Department of Transport
- Shire of Serpentine Jarrahdale

In addition, it was agreed to interview representatives from the Kwinana Industrial Council (KIC), a peak body representing industrial operators at the Kwinana Industrial Area.

Representatives were interviewed on a one on one basis. Specifically the following standard themes were explored during the interview process:

- Appropriateness of Investigation Area
- Potential Risks
- Possible Candidate Industries
- Best practice examples of industrial estates, with particular reference to innovation and sustainability
- Servicing
- Industry Attraction Strategies
- Management Framework
- General Issues

Again, in order to target discussion and optimise the value of meeting, a standard background information report was circulated to all personnel.



SUMMARY OF CONSULTATION OUTCOMES

In summary the following outcomes were identified from land owners and residents of Pure Steel Lane:

Land Owners

- Support from 40 % of owners
- Conditional support from 16% of owners
- Objection from 25% of owners
- 19% did not respond

In terms of land area the results can be expressed as follows:

- Support 40%
- Conditional support 39%
- Objection 16%
- Unknown 5%

Comments in support

- Support for proposed inter modal facility
- Support for relocation of freight rail
- Need to consider economic feasibility
- Support for general industrial development
- Concern about abattoir uses
- Potential for low emission re-cycling facility
- Need for employment generating land

Grounds of objection:

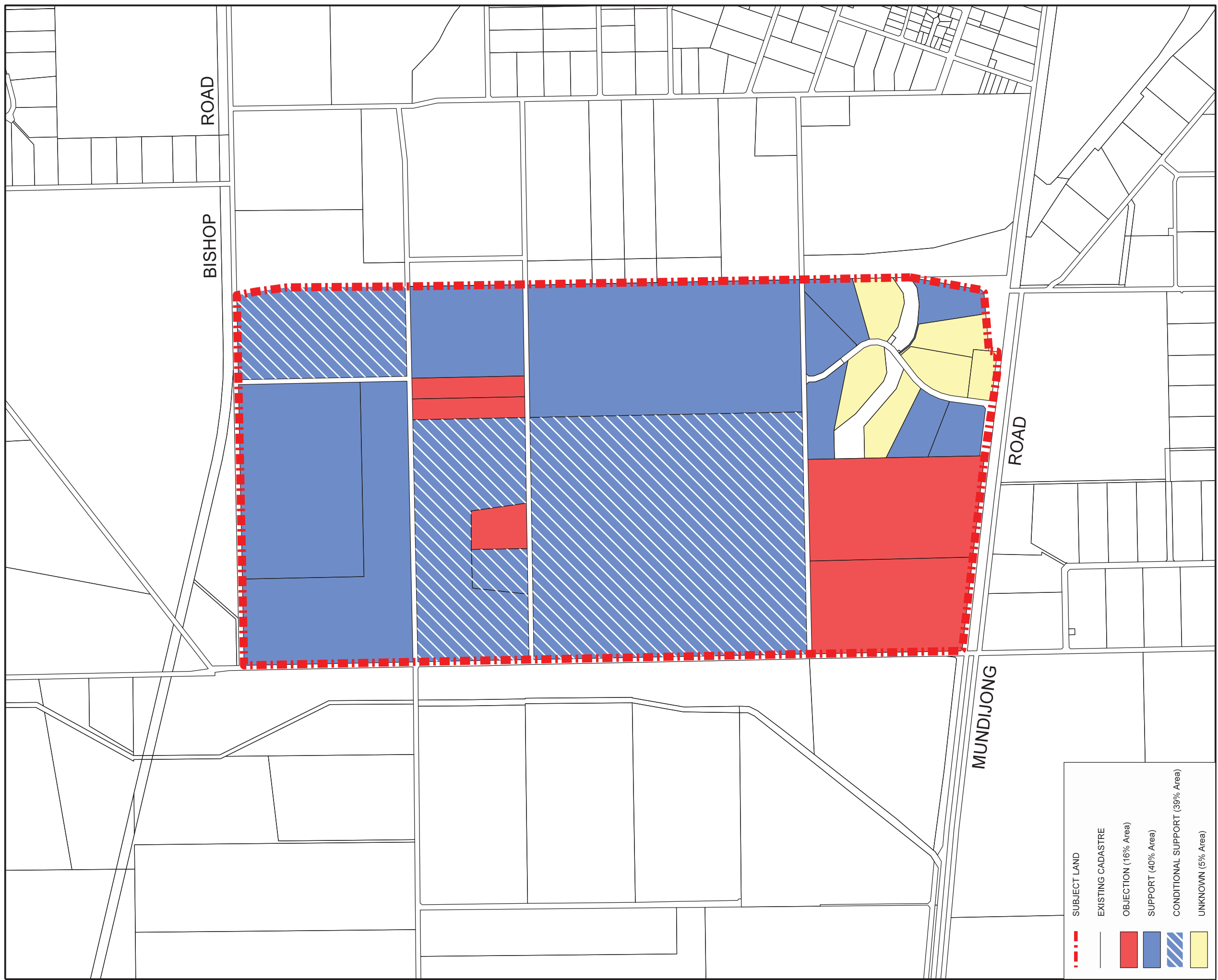
- Industrial development contrary to the character and amenity of the area
- Related to above, impact on nearby equestrian facilities
- Industrial development would be too close to Mundijong and result in unacceptable impacts on existing and planned residential development
- Rezoning will force residents out against their will

Pure Steel Lane Residents

- Objection to being excluded from investigation area
- Crime
- Following environmental concerns:
 - » Impact on groundwater systems
 - » Potential noise, odour & dust emissions
 - » Management of industrial and commercial traffic
- Preference for Pure Steel Lane to be retained as a cul-de-sac in order to prevent thoroughfare for heavy vehicles
- Impact on rates?
- Will rezoning force residents out?

Refer attached consultation plan.

Refer *Appendix A* for more detailed notes and questionnaire results.



SUBJECT LAND

- EXISTING CADASTRE
- OBJECTION (16% Area)
- SUPPORT (40% Area)
- CONDITIONAL SUPPORT (39% Area)
- UNKNOWN (5% Area)

**Landowner Consultation
West Mundijong
Shire of Serpentine Jarrahdale**



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REVISION	DESCRIPTION	DRAFTER	DATE
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Agencies

Appropriateness of Investigation Area

- Acknowledgement that investigation area reflects the Industrial Land Strategy and the Southern Metropolitan Sub Regional Structure Plan
- Some respondents indicated the need for further research to justify the size of the investigation area, particularly if an inter modal facility needs to be accounted for

Potential Risks

- Proximity of planned and existing sensitive uses. Need to model potential noise, odour, dust, light spill and public risk impacts on existing and planned sensitive uses prior to undertaking further planning
- Drainage issues and in particular level changes in response to Tonkin Hwy extension and construction of possible inter-modal facility
- Timing of key infrastructure, particularly intermodal and Tonkin Highway extension
- Influence and or relationship to East Baldivis?
- Economic justification for industrial development is specifically unknown in the West Mundijong locality

Possible Candidate Industries

- Overall support for general industry as opposed to light or heavy industry
- Acknowledgement that there is a shortage of land for general industry in the metropolitan area
- Acknowledgement that certain categories of general industry may have the potential to generate local employment and add value to local products and resources
- Need to understand the sub – region and district context of the site; that is, Kwinana is designated as heavy industry area and Cardup for light industry
- Specifically the following industry types might be suitable subject to further investigation and feasibility:
 - » Warehousing and logistics, for example distribution centres that serve state, national and potentially international markets
 - » Agribusiness / low emission food manufacture, including some forms of meat and vegetable processing & breweries
 - » Agribusiness / grain handling and fertilizer distribution
 - » Construction and manufacture of building materials and or products, including brickworks, plaster board and lime
 - » Sale, distribution and servicing of heavy machinery, in particular associated with the mining and resource sector

Best practice examples of industrial estates, with particular reference to innovation and sustainability

- Latitude 32
- Goulburn Valley Freight and Logistics Centre
- Kwinana intermodal facility

Servicing

- Availability of services, in particular water
- Use of treated wastewater. Depends on nature of the industry and access to water treatment facility
- Need to consider findings of Perth and Peel Regions Freight and Intermodal Plan

Industry Attraction Strategies & Management Framework

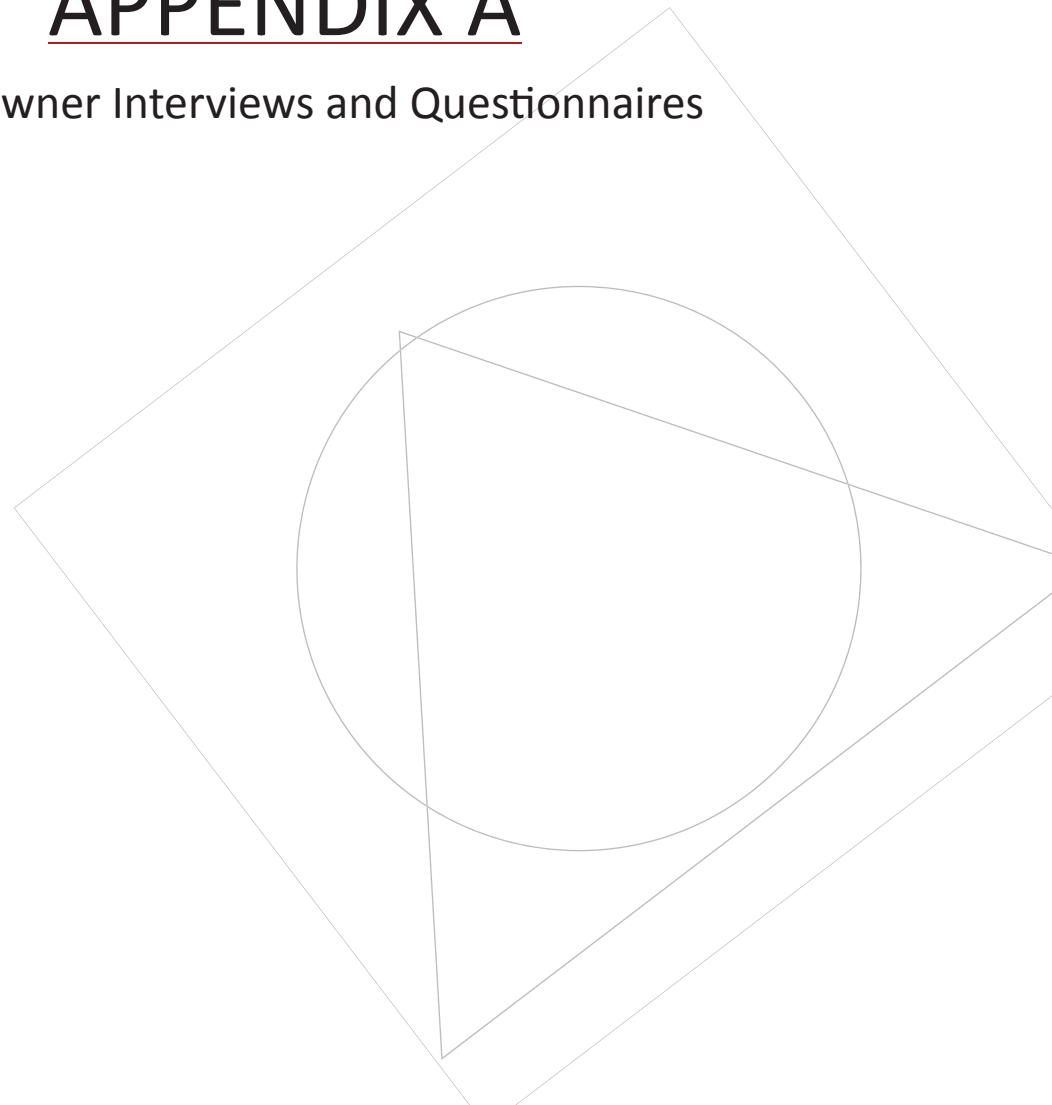
- Subject to further investigation, possibly some agency support for a 'Agri – Business' style precinct
- In relation to the above point, the Shire should actively engage the relevant agencies in order to garner support
- Unlikely to warrant acquisition and management by a state agency such as LandCorp
- Some potential for the future estate to be promoted and managed by a steering group comprising the Shire, local business groups, landowners and the Peel Development Commission

Refer *Appendix B* for more detailed notes and questionnaire results.



APPENDIX A

Land Owner Interviews and Questionnaires



Lot 435 Leipold Road & Bishop Road (Peet Nominees)

Date: 23rd January 2012

Number	QUESTION	Yes	No	Undecided
1.	Would you support future industrial development of your land?	Conditional		
2.	If the answer to question 1 is 'yes', what types of industry do you believe should be further investigated:			
	Food related: Eg Fruit and vegetable processing, Beverage manufacture or Flour and Cereal Food Manufacture	*		
	Light Industry: Eg Manufacture of consumer oriented household fitting and processes which use partially processed materials to make products	*		
	General Industry: Eg Cement, lime, plaster and concrete product manufacturing; steel fabrication	*		
	Warehousing and Logistics: Transport and courier depot and services, Distribution centre, Packaging, parts and services or Material management	*		
3.	Wholesale Trade: Eg farm machinery, building supply wholesaling	*		
	Recycling / resource recovery: Recycling of inert waste, ie plastics, glass and rubber	*		
3.	If the answer to question 1 is 'no', for what reasons do you not support industrial development: Not relevant			
4.	General Comments <ul style="list-style-type: none"> • May support a hybrid zoning that has some potential to support limited residential development similar to what has occurred in Darling Views (1 acre lots) • Need to have a greater understanding of potential industries permitted within a future estate in particular adjoining the eastern boundary, near Tonkin Highway extension • Timing of Tonkin Highway extension and integration with highway • Importance of the need to understand economic feasibility (cost of developing land) • Timing of intermodal facility and likely land uptake • Potential for an industrial zone to sterilize the land if the uptake of industrial development is slow • Proximity to planned and existing sensitive uses and need to consider potential impacts 			



Lot 402 & Lot 404 Scott Road (Diane Sparkman)

Date: 24th January 2012

Number	QUESTION	Yes	No	Undecided
1.	Would you support future industrial development of your land?	*		
2.	If the answer to question 1 is 'yes', what types of industry do you believe should be further investigated:	*		
	Food related: Eg Fruit and vegetable processing, Beverage manufacture or Flour and Cereal Food Manufacture	*		
	Light Industry: Eg Manufacture of consumer oriented household fitting and processes which use partially processed materials to make products	*		
	General Industry: Eg Cement, lime, plaster and concrete product manufacturing; steel fabrication	*		
	Warehousing and Logistics: Transport and courier depot and services, Distribution centre, Packaging, parts and services or Material management	*		
	Wholesale Trade: Eg farm machinery, building supply wholesaling	*		
3.	If the answer to question 1 is 'no', for what reasons do you not support industrial development: Not relevant			
	General Comments			
4.	<ul style="list-style-type: none"> Support for proposed inter modal facility Support for relocation of freight rail Certainty of freight rail re-location? Support for general industrial development Concern about abattoir uses Special rural v industrial land values 			

Lot 11 & 12 Mundijong Road (K & D Bailey)

Date: 24th January 2012

Number	QUESTION	Yes	No	Undecided
1.	Would you support future industrial development of your land?		*	
2.	If the answer to question 1 is 'yes', what types of industry do you believe should be further investigated:			
	Food related: Eg Fruit and vegetable processing, Beverage manufacture or Flour and Cereal Food Manufacture			
	Light Industry: Eg Manufacture of consumer oriented household fitting and processes which use partially processed materials to make products			
	General Industry: Eg Cement, lime, plaster and concrete product manufacturing; steel fabrication			
	Warehousing and Logistics: Transport and courier depot and services, Distribution centre, Packaging, parts and services or Material management			
	Wholesale Trade: Eg farm machinery, building supply wholesaling			
3.	If the answer to question 1 is 'no', for what reasons do you not support industrial development:			
	<ul style="list-style-type: none"> Industrial development contrary to the character and amenity of the area Related to above, impact on nearby equestrian facilities Industrial development would be too close to Mundijong and result in unacceptable impacts on existing and planned residential development Rezoning will force residents out against their will Need to update environment opportunities and constraints plan to accurately reflect location of remnant vegetation and existing dwellings 			
4.	General Comments			
	<ul style="list-style-type: none"> Wishes to be excluded from industrial investigation area Proposed industrial development is too close to Mundijong 			



Lot 7 Scott Road (Alex & Heather Anderson)

Date: 24th January 2012

Number	QUESTION	Yes	No	Undecided
1.	Would you support future industrial development of your land?		*	
2.	If the answer to question 1 is 'yes', what types of industry do you believe should be further investigated:			
	Food related: Eg Fruit and vegetable processing, Beverage manufacture or Flour and Cereal Food Manufacture			
	Light Industry: Eg Manufacture of consumer oriented household fitting and processes which use partially processed materials to make products			
	General Industry: Eg Cement, lime, plaster and concrete product manufacturing; steel fabrication			
	Warehousing and Logistics: Transport and courier depot and services, Distribution centre, Packaging, parts and services or Material management			
	Wholesale Trade: Eg farm machinery, building supply wholesaling			
3.	Recycling / resource recovery: Recycling of inert waste, ie plastics, glass and rubber			
	If the answer to question 1 is 'no', for what reasons do you not support industrial development: <ul style="list-style-type: none"> Industrial development contrary to the character and amenity of the area Related to above, impact on nearby equestrian facilities Industrial development would be too close to Mundijong and result in unacceptable impacts on existing and planned residential development Rezoning will force residents out against their will 			
4.	General Comments <ul style="list-style-type: none"> General objection to the proposal Concerns about rates Hydrology too difficult to manage Concerns about rates 			

Lot 9 Scott Road (Tom & Louise Davis)

Date: 25th January 2012

Number	QUESTION	Yes	No	Undecided
1.	Would you support future industrial development of your land?		*	
2.	If the answer to question 1 is 'yes', what types of industry do you believe should be further investigated:			
	Food related: Eg Fruit and vegetable processing, Beverage manufacture or Flour and Cereal Food Manufacture			
	Light Industry: Eg Manufacture of consumer oriented household fitting and processes which use partially processed materials to make products			
	General Industry: Eg Cement, lime, plaster and concrete product manufacturing; steel fabrication			
	Warehousing and Logistics: Transport and courier depot and services, Distribution centre, Packaging, parts and services or Material management			
	Wholesale Trade: Eg farm machinery, building supply wholesaling			
3.	Recycling / resource recovery: Recycling of inert waste, ie plastics, glass and rubber			
	If the answer to question 1 is 'no', for what reasons do you not support industrial development: <ul style="list-style-type: none"> Industrial development contrary to the character and amenity of the area Related to above, impact on nearby equestrian facilities Industrial development would be too close to Mundijong and result in unacceptable impacts on existing and planned residential development Rezoning will force residents out against their will Concern that industrial development will negatively impact upon groundwater in the area 			
4.	General Comments			



Lot 525 Bishop Road & Lot 1680 Kargotich Road (Lisa Brazier representing Wellstrand Pty Ltd)

Date: 25th January 2012

Number	QUESTION	Yes	No	Undecided
1.	Would you support future industrial development of your land?	*		
2.	If the answer to question 1 is 'yes', what types of industry do you believe should be further investigated:	*		
	Food related: Eg Fruit and vegetable processing, Beverage manufacture or Flour and Cereal Food Manufacture	*		
	Light Industry: Eg Manufacture of consumer oriented household fitting and processes which use partially processed materials to make products	*		
	General Industry: Eg Cement, lime, plaster and concrete product manufacturing; steel fabrication	*		
	Warehousing and Logistics: Transport and courier depot and services, Distribution centre, Packaging, parts and services or Material management	*		
	Wholesale Trade: Eg farm machinery, building supply wholesaling	*		
	Recycling / resource recovery: Recycling of inert waste, ie plastics, glass and rubber	*		
3.	If the answer to question 1 is 'no', for what reasons do you not support industrial development: Not relevant			
4.	General Comments <ul style="list-style-type: none"> • Support for proposed inter modal facility • Support for relocation of freight rail • Support for general industrial development • Concern about abattoir uses • Potential for low emission re-cycling facility • Need to update up-date environment opportunities and constraints plan to accurately reflect location of spring and dolomite feature 			

Lot 2 Kargotich Road & Lot 6 Scott Road (Mundijong Nominees Pty Ltd)

Date: 25th January 2012

Number	QUESTION	Yes	No	Undecided
1.	Would you support future industrial development of your land?	Conditional		
2.	If the answer to question 1 is 'yes', what types of industry do you believe should be further investigated:	*		
	Food related: Eg Fruit and vegetable processing, Beverage manufacture or Flour and Cereal Food Manufacture	*		
	Light Industry: Eg Manufacture of consumer oriented household fitting and processes which use partially processed materials to make products	*		
	General Industry: Eg Cement, lime, plaster and concrete product manufacturing; steel fabrication	*		
	Warehousing and Logistics: Transport and courier depot and services, Distribution centre, Packaging, parts and services or Material management	*		
	Wholesale Trade: Eg farm machinery, building supply wholesaling	*		
	Recycling / resource recovery: Recycling of inert waste, ie plastics, glass and rubber	*		
3.	If the answer to question 1 is 'no', for what reasons do you not support industrial development: Not relevant			
4.	General Comments <ul style="list-style-type: none"> • Significant expense recently committed to rezoning land to 'Farmlet Zone' • Conditional support for industrial development subject to being allowed to undertake limited subdivision as per current subdivision guide plan 			



Pure Steel Lane Information Session

Minutes

25 January 2012

General consensus is not in favour of proposed industrial precinct.

Not in favour at all of an inter modal facility.

Assume that the zoning of Industrial will lead to a fall in property values for Pure Steel Lane.

Questions asked why Pure Steel Lane was excluded from the subject area, many residents in favour of being included in the subject area as believe this will assist with value of their land.

Two strong speakers for being included in the subject area.

One landowner annoyed that Pure Steel Lane was left out of the Mundijong Whitby DSP area and could once again miss out by not being included in the industrial area.

Question raised: Why was Pure Steel Lane allowed to be developed?

Question raised and of great concern to all attendees: If we are rezoned "Industrial" and we wish to sell our property and can't what impact does this have on our rates. Residents were advised this question would be taken on notice and a response to be issued to all residents of Pure Steel Lane. – ACTION PV & KK

Much concern about the financial impact of rezoning to industrial. What impact will this have on our rates if we choose not to sell?

Clarification sought that after rezoning you are still able to carry out lawful land uses eg continue to keep horses.

Concerns raised about an increased level of crime, noise, graffiti, dust, ground water pollution, and general emissions that would come with an industrial zone.

Concerns raised about having to place fill in the subject are and the subsequent impact of the excess water on Pure Steel Lane.

Concern increased traffic flow along Mundijong Rd and possibly through Pure Steel Lane.

Concern raised: Don't want an access road through our estate to the industrial area.

Question raised: What certainty is there that this Industrial area will occur.

Question raised: Is there another area marked for industrial – response was given that a site in north east Baldvis had also been identified.

Question raised: What is happening with Cardup industrial park - response provided that the MRS amendment has gone through.

Residents were advised that when the Feasibility Assessment report is released that officers will ensure you are aware of it and have access to it.

Question raised: Can we make our opinions known in writing at this stage. Response provided that comments in writing are welcome and will be considered as part of the Feasibility Assessment.

One resident advised: We want whatever is best for us in the long term but we are concerned the impact rates would have on us.



APPENDIX B

AGENCY INTERVIEWS

LANDCORP

Date of Meeting: 11th January 2012

Present: Derwent Southern (LandCorp), Peter Varelis (SoSI) & Kris Kennedy (TME)

MINUTES

Appropriateness of Investigation Area

- Investigation area should exclude Pure Steal Lane: recently introduced sensitive uses, significant investment in homes and associated lifestyle pursuits & coordination of multiple owners

Potential Risks

- Proximity of existing and planned sensitive uses (noise & odour)
- Palusplain
- Lack of services
- Will industrial development hamper the expansion of West Mundijong as a result of potential emissions from industry
- Potential for some uses to sterilize the potential of others. For example, food manufacture and processing can be sensitive to the emissions of neighbouring industry.

Possible Candidate Industries

- Overall emphasis on general industry sector with low emissions
- Agri-business precinct, subject to low emissions
- Specific examples:
 - » Grain handling
 - » Emphasis on food processing (low emissions)
 - » Building and construction industry
 - » Grain rail extension in the long term

Best practice examples of industrial estates, with particular reference to innovation and sustainability

- Latitude 32

Servicing

- Water supply and power
- Tonkin Highway

Industry Attraction Strategies

- Potential of Shire to garner political support
- Currently may be some support for food production / agricultural research uses

Management Framework

- Potential for LandCorp to investigate a coordinating role
- Unlikely that LandCorp would acquire and manage

General Issues

- Need to consider findings of Perth and Peel Regions Freight and Intermodal Plan
- Preference for '48 gauge' rail line in order to optimise freight potential of intermodal facility
- Possibly strong agency support for agricultural or food precinct

Department of Transport

Date of Meeting: 13th December 2011 & 11th January 2012

Present: Patrick Dick (Dept of Transport), Don Challis (Dept of Transport), Peter Varelis (SoSJ) & Kris Kennedy (TME)

MINUTES

Appropriateness of area

- Possibly too small if provision is made for an inter-modal facility
- Generally need to 'err on the side of caution' with respect to size - have logic behind boundary
- Need to review other examples to ascertain sufficiency of area
- Probably include Pure Steel Lane area and take out if a significant level of objection from affected land owners

Suitable Industries

- Need to understand sub-regional context:
 - » Kwinana designated heavy industry area
 - » Latitude 32: proposed intermodal facility
 - » Cardup
- General Industry Sector (shortage of general industry land in metropolitan area)
- Food production / manufacture 'Agri-Business'
- Ultimate industry type could be heavily influenced by initial 'anchor tenant'
- Preference for low emission uses near eastern and southern boundary in order to limit impacts upon existing and planned sensitive uses
- Keep uses diversified

Potential Risks

- Lack of availability of services
- Timing of intermodal facility?
- What is the identity of the estate: is it dependent upon intermodal or not?
- Limited demand in the short to medium term
- Drainage, in particular factoring levels for Tonkin Hwy extension and construction of intermodal facility
- Potential noise impacts upon existing and planned residential uses



Best practice examples of industrial estates, with particular reference to innovation and sustainability

- Goulburn Valley Freight and Logistics Centre
- Latitude 33
- Intermodal facility at Kwinana managed by Queensland Rail
- Canning Industrial Area: clustering associated with Swan Brewery

Servicing

- Currently level of servicing inadequate to support industrial development

Industry Attraction Strategies

- Don't solely focus on intermodal, allow other uses if it does not occur

Management Framework

- Unlikely to warrant State intervention
- Need to await outcomes of Industrial Land Supply implementation strategy currently being prepared by Department of Planning
- Recommend meeting with Department of Planning to ascertain their program re implementation strategy

General

- Need for future structure planning to be cognisant of the forthcoming Perth and Peel Regions Freight and Intermodal Plan
- Possibility that infrastructure components of future intermodal facility will need to be reserved in Metropolitan Region Scheme

Department of Planning

Date of Meeting: 17th January 2012

Present: Jorine Bothma, Craig Shepherd, Simon Lindscombe, Peter Varelis (SoSJ) & Kris Kennedy (TME)

MINUTES

Appropriateness of area

- Confirmation that area is consistent with Southern Metropolitan Sub Regional Structure Plan
- Area, as shown above, will probably be identified in Industrial Land Strategy Implementation Report

Suitable Industries

- General Industry Sector (shortage of general industry land in metropolitan area)
- Processing of locally occurring raw materials, including clay for bricks
- Nexus with current brick making operations in vicinity of Mundijong
- Food production / manufacture ('agri-business precinct')
- Preference for low impact uses near eastern and southern boundary in order to limit impacts upon existing and planned sensitive uses

Potential Risks

- Lack of availability of services
- Timing of intermodal facility and Tonkin Highway
- Potential noise impacts on nearby existing and planned sensitive uses
- The Water Corp pipe line corridor running down the eastern side of the Tonkin Highway will increase the buffers.

Best practice examples of industrial estates, with particular reference to innovation and sustainability

- Awareness of examples of intermodal estates in the eastern states
- Latitude 32
- Intermodal facility at Kwinana managed by Queensland Rail

Servicing

- Extension of water main along Tonkin Hwy
- Various servicing studies associated with key planning initiatives in sub region anticipated in near in near future
- Findings of forthcoming Perth and Peel Regions Freight and Intermodal Plan will be important



Industry Attraction Strategies

- Potential of Peel Development Commission play some role in marketing Estate

Management Framework

- Unlikely to warrant State intervention

General

- Recommend discussion with industrial planning branch at LandCorp
- Industrial Land Strategy Implementation Report is likely to predict development at West Mundijong in 6 – 10 years
- Industrial Land Strategy Implementation Report identifies 29 industrial sites in Metropolitan area. 11 sites are ranked as priority. West Mundijong is ranked number 12. Priority sites may be given assistance with implementation. Possibly some potential review priority ranking to include West Mundijong
- Further negotiation required to determine potential of Dept to assist with future planning requirements. This is likely to become clearer upon release of Industrial Land Strategy Implementation Report
- Need to consider Perth and Peel Regions Freight and Intermodal Plan

Department of State Development

6 January 2012

Present: Tom Grigson (DSD), Peter Varelis (SoSJ) & Kris Kennedy (TME)

MINUTES

Appropriateness of area

- Possibly too small if provision is made for an inter-modal facility
- Need to review other examples to ascertain sufficiency of area
- Generally need to err on the side of caution with respect to size

Suitable Industries

- General Industry Sector (shortage of general industry land in metropolitan area)
- Need to understand sub-regional context:
 - » Kwinana designated heavy industry area
 - » Latitude 32: proposed intermodal facility
 - » James Point deep water port proposal near Kwinana
 - » Expansion of Port at Kwinana resulting in potential displacement of general industry land identified in Latitude 32 and resultant demand for such land at West Mundijong
- Food production / manufacture agri-business

Potential Risks

- Potential noise impacts on nearby existing and planned sensitive uses. Need to undertake modeling to determine potential impacts and refine likely candidate industries in response thereto if required
- Shortage of general industrial land in metropolitan area
- Expansion of Kwinana Port will increase demand logistics and handling areas and facilities

Best practice examples of industrial estates, with particular reference to innovation and sustainability

- Awareness of examples of intermodal estates in the eastern states
- Latitude 32
- Intermodal facility at Kwinana managed by Queensland Rail

Industry Attraction Strategies

No comment

Management Framework

- Unlikely to warrant State Intervention
- Need to await outcomes of Industrial Strategy implementation plan currently being prepared by Department of Planning
- Recommend meeting with Department of Planning to ascertain their implementation program for Industrial Land Strategy

Kwinana Industrial Council

10 January 2012

Present: Chris Oughton, Peter Varelis (SoSJ) & Kris Kennedy (TME)

MINUTES**Appropriateness of area**

- General acceptance of size of area

Suitable Industries

- General Industry Sector (shortage of general industry land in metropolitan area)
- Agri-business: grain handling and distribution, fertilizer handling
- Food processing
- National and State distribution centres
- Latitude 32: proposed intermodal facility / displacement of general industry area
- Expansion of Port at Kwinana (James Point)

Potential Risks

- Specific attention required with respect to intermodal facility and potential noise impacts: whilst transport infrastructure is technically exempt under regulations, potential impacts can be high and need to be considered in the planning phase
- Availability of services, in particular water ('water security')
- Some industries reluctant to embrace water re-use and recycling initiatives

Best practice examples of industrial estates, with particular reference to innovation and sustainability

- Kwinana industrial area is a good example of where some component industries have successfully embraced the principles of industrial ecology, namely via: sharing of energy and mutual recycling of waste

Servicing

- Availability of services, in particular water ('water security')
- Promotion of industry clustering to promote sharing of resources, including waste (eg heat recovery)

Industry Attraction Strategies

- Shire to consider purchase of the land?



Management Framework

- Unlikely to require state intervention
- Bodies like Kwinana Industrial Council KIC only work where there is a clearly defined common purpose that requires collaboration to address

General

- Importance of planning for onsite waste disposal and or processing
- Opportunity for waste water treatment plant near West Mundijong with potential to treat wastewater for beneficial re-use
- Opportunities to implement industrial ecology principles dependent upon nature of actual industries and their capacity to share inputs and outputs
- Important to adopt an approach to structure planning which facilitates clustering of industry

Workshop Serpentine Jarrahdale Staff

16 January 2012

Present: Karen Cornish (SoSJ), Mark Angeloni (SoSJ), Robert Willis (SoSJ), Peter Varelis (SoSJ) & Kris Kennedy (TME)

MINUTES

- Justification of site area? Important to provide logic
- Range of opinion expressed regarding the appropriateness (or otherwise) of including Pure Steel Lane properties within investigation area
- The Shire has done Composite zoning on 1 acre lots in Darling Views, this type of development may constitute a suitable 'buffer use'
- Need for flora and fauna surveys and probably referral to Commonwealth agencies
- Need for a comprehensive drainage strategy to address:
 - » Existing drainage lines that traverse site east – west
 - » Fill requirements
 - » Storm water detention and retention
 - » 'Damming effect' from fill and impact on other areas
 - » Potential 1: 100 year flood scenarios
- Potential noise impacts on nearby existing and planned sensitive uses. Need to undertake modeling to determine potential impacts and refine likely candidate industries in response thereto if required
- Need for comprehensive noise modeling to precede further planning
- Capacity to widen Mundijong Road, particularly east of Kargotich given environmental constraints
- Expansion of Kwinana Port will increase demand logistics and handling areas and facilities
- Mundijong Rd is proposed as a dual carriage way
- Influence and or relationship to East Baldivis?
- Need to carefully consider impact of future intermodal facility
- Need to integrate development with existing power lines, in particular the 330 kv service adjoining Kargotich Road
- Need to carefully consider the land requirements for an intermodal facility