



Town Planning Management Engineering

McIntosh Road Industrial Area

Business Case



town planning
management
engineering
environmental

12219
March 2013

Research, Design & Delivery of Sustainable Development

DOCUMENT QUALITY CONTROL

AUTHOR
Stuart Thompson

COPYRIGHT
THIS DOCUMENT IS AND SHALL REMAIN THE PROPERTY OF TME TOWN PLANNING MANAGEMENT ENGINEERING PTY LTD THE DOCUMENT MAY ONLY BE USED FOR THE PURPOSE FOR WHICH IT WAS COMMISSIONED AND IN ACCORDANCE WITH THE TERMS OF ENGAGEMENT FOR THE COMMISSION. UNAUTHORISED USE OF THIS DOCUMENT IN ANY FORM WHATSOEVER IS PROHIBITED.

REVISION TABLE

No.	Purpose	Date
A	For Client Review	February 2013
B	Final Draft for Client Review	18 March 2013
C	For Client Review	25 March 2013
D	Final Report for Submission	26 March 2013

TME Town Planning Management Engineering Pty Ltd

**PO Box 733
Bunbury WA 6230**

Ph: (08) 9791 4411



CONTENTS

GLOSSARY OF TERMS	2
1.0 EXECUTIVE SUMMARY	3
2.0 PROJECT SCOPE AND EVALUATION	4
2.1 Project Outcome	4
2.2 Project Description	4
2.3 Background	4
2.3.1 General	4
2.3.2 Consideration of Alternative Sites	5
2.3.3 McIntosh Road Site.....	5
2.4 Policy and Strategic Framework.....	9
2.4.1 State and Regional Context.....	9
2.4.2 Local Context	9
2.4.3 Response to Policy Themes	10
2.5 Key Deliverables	10
2.6 Stakeholder Identification.....	10
2.7 Critical Assumptions.....	11
2.7.1 Identifying Suitable Land	11
2.7.2 Achieving a Suitable Level of Servicing.....	11
2.7.3 Securing Land Tenure.....	12
2.7.4 Native Title and Heritage	12
2.7.5 Planning and Environmental Approvals.....	12
2.7.6 Community Consultation	13
2.7.7 Understanding Lot Demand.....	13
2.8 Economic and Financial Analyses.....	13
2.8.1 Identification of Costs and Benefits.....	13
2.8.2 Net Present Value and Internal Rate of Return	15
2.8.3 Sensitivity Testing	16
2.8.4 Social Equity and Intangibles	16
2.8.5 Cost Benefit Conclusions	18
2.9 Assessment of Options	19
2.10 Preferred Option	19
2.10.1 Site Characteristics	19
2.10.2 Subdivision	20
2.10.3 Landowner Support.....	20
2.10.4 Approval and Staging.....	20

2.11	Funding Strategy	23
2.11.1	Project Budget	23
2.11.2	Royalties for Regions Funding Amount.....	23
2.12	Project Timeframe and Key Milestones	25
2.12.1	Performance Measures	25
2.12.2	Delivery Responsibility.....	25
2.13	Risk Analysis.....	26
3.0	IMPLEMENTATION STRATEGY.....	28
3.1	Communication Plan.....	28
3.2	Procurement Strategy.....	28
3.3	Marketing and Sales Strategy.....	29
3.4	Governance.....	30
3.5	Supporting Documents	30
4.0	RECOMMENDATION OF PREFERRED OPTION	31
4.1	Preferred Option	31
4.2	Sign-off.....	31

FIGURES

FIGURE 1	LOCATION PLAN	6
FIGURE 2	INDUSTRIAL SITES INVESTIGATED	7
FIGURE 3	SITE DETAILS	8
FIGURE 4	COSTS & BENEFITS	14
FIGURE 5	NET PRESENT VALUE	17
FIGURE 6	SENSITIVITY TESTING	18
FIGURE 7	SUBDIVISION CONCEPT	21
FIGURE 8	GANTT CHART	22
FIGURE 9	FUNDING STRATEGY.....	23
FIGURE 10	CASH FLOW	24
FIGURE 11	COMMUNICATION STRATEGY OUTLINE	28
FIGURE 12	PROCUREMENT STRATEGY	29

APPENDICES

APPENDIX 1 - EXTRACT FROM THE SHIRE OF DENMARK LOCAL PLANNING STRATEGY
APPENDIX 2 - AGRICULTURAL COLLEGE BOARD LETTER OF SUPPORT
APPENDIX 3 - ADJOINING LANDOWNER SUPPORT
APPENDIX 4 - MARKETING RESEARCH
APPENDIX 5 - STATIC ANALYSIS
APPENDIX 6 - ANTICIPATED CONDITIONS OF SUBDIVISION APPROVAL
APPENDIX 7 - ENGINEERING COST ESTIMATES



Government of **Western Australia**
Department of **Regional Development and Lands**



ROYALTIES
FOR REGIONS

BUSINESS CASE PROPOSAL

FOR

McIntosh Road Industrial Area

Shire of Denmark

Royalties for Regions Project Funding

\$2,000,000

GLOSSARY OF TERMS

In the context of this document:

Agency means a Western Australian State Government agency.

Applicant means the organisation or Agency preparing a business case proposal requesting Royalties for Regions funding for a priority project.

Business case proposal means the information prepared by the Applicant in support of the project.

Deliverables means the expected productivity benefits, outputs and outcomes from the project.

Department means the Department of Regional Development and Lands.

Innovation is the implementation of a new or significantly improved product (good or service) process, new marketing method or a new organisational method in business practices, workplace origination or external relations¹.

Leveraged Funding is the additional cash funding obtained for the Project from other sources.

Option means a feasible, alternative delivery mechanism to the project which was considered by the applicant when preparing the business case proposal.

Organisation means an incorporated entity that is not an Agency. An organisation may be a not for profit entity or government trading organisation.

Output means the end product of the project. For example, an infrastructure asset or services delivered.

Project means the works or services proposed in the business case.

Project Outcome means the achievement that is expected as a result of undertaking the Project.

Royalties for Regions means the Western Australian State Government's Royalties for Regions program.

Stakeholder means a party with an interest in or who is affected by the project.

¹ Organisation for Economic Cooperation and Development and Development Statistical Office of the European Communities(2005 Third Edition) Oslo Manual Guidelines for collecting and interpreting innovation data, 3rd edition, OECD and European Commission, Paris

1.0 EXECUTIVE SUMMARY

The Council of the Shire of Denmark wishes to provide improved opportunities for industrial development in Denmark without compromising the quality of life valued so highly by the local community. The project is focused on creating a 42.572ha, 60 Lot industrial area at the intersection of McIntosh Road and Great Southern Highway and pursuing a 1st stage of subdivision consisting of 15 lots on 12.560ha of land to be purchased from the Denmark Agricultural College site.

This Business Case for the project seeks a \$2.0M Royalties for Regions Action Agenda Grant to implement the McIntosh Road industrial area project in the Shire of Denmark. The project has a total value of \$5,924,400.

The existing industrial area in the Denmark townsite is currently at capacity and Council is currently issuing interim land use permits for industrial uses on ad hoc sites. The Council has for some years been seeking identification and development of an alternative industrial area. McIntosh Road site provides the most viable option.

The site is consistent with State and regional policy objectives identified at a State Planning Strategy, Draft Great Southern Planning and Infrastructure framework and the Shire of Denmark Local Planning Strategy. . Support for the project has been gained from adjoining landowners and the Board of the Denmark Agricultural College.

A Cost Benefit Analysis has been undertaken which concludes that:

- There are no fatal flaws in the project;
- A significant net present value of \$16.416M clearly justifies the project; and,
- Sensitivity testing shows a positive net present value on the basis of a 5.8% discount rate, average lot price of \$159,333 and 5 lots a year being sold.

Key milestones in the project based on funding being available in July 2013 are as follows:

- Funding secured July 2013
- Planning and environmental approvals in place Sept 2014
- Construction approvals and tender April 2015
- Construction complete and titles issued Sept 2015
- Lot sales Sept 2015 to 2017
- First businesses operating 2016

The project funding strategy is as follows:

Project Finance

Project Generated Income	\$2,389,995	
RfR Funding	\$2,000,000	
Council Funding	\$2,000,000	\$6,389,995

Project Cost

Project Costs Including Interest	\$5,924,400	
Contingency @ 7%	\$414,708	\$6,339,108

Balance

\$50,887

A Risk Analysis undertaken has determined that there are no fatal flaws in the project. The greatest risk identified is achieving the sale of 5 lots per year for the first 3 years. This target is considered realistic given the current demand, the opportunity for Council to require relocation of businesses operating under temporary permits and the modest price being requested for the lots.

2.0 PROJECT SCOPE AND EVALUATION

2.1 Project Outcome

The Council of the Shire of Denmark wishes to provide improved opportunities for industrial development in Denmark without compromising the quality of life valued so highly by the local community.

The project is focused on creating a 42.572ha, 60 lot Industrial area at the intersection of McIntosh Road and Great Southern Highway and pursuing a first stage of subdivision consisting of 15 lots on 12.560ha of land to be purchased from the Denmark Agricultural College site.

2.2 Project Description

This Business Case and Cost Benefit Analysis has been prepared to support an application by Shire of Denmark, with assistance of the Great Southern Development Commission, to secure Royalties for Region program investment funding for the regionally significant Denmark Industrial Area project on McIntosh Road.

The Shire is seeking \$2,000,000 from the Royalties for Region program to supplement the \$2,000,000 being invested in the project by Council. The project will overcome a shortage of industrial land in the Shire; help resolve existing land use and amenity issues; and, facilitate investment and employment opportunities.

The Shire of Denmark is situated on the south coast of Western Australia, has an area of 1860sq kms and is situated 419kms south-south east of Perth and 53 kms west of Albany and is depicted in *Figure 1 - Location Plan*. The major service centre for the Shire is the town of Denmark situated on the western bank of the Wilson Inlet.

The townsite services the rural hinterland and a tourist industry focused on substantive natural features and recognition that the Shire of Denmark is a leader in environmental planning and management, achieving a balance between economic development, community cohesion and environmental objectives.

2.3 Background

2.3.1 General

The Shire of Denmark is experiencing modest, consistent growth with a population increasing from 4,513 to 5,194 people in the years 2006 to 2011. This represents a 3% annual growth which the Western Australian Planning Commission predicts will continue. The Australian Bureau of Statistics does not provide detailed figures for the Denmark Townsite.

The existing industrial area services both the Townsite and Shire and consists of 11.8770ha of zoned Industrial land. 9.3480ha of this land is subdivided into 29 lots all of which are developed and used for industrial purposes.

The industrial area is fundamentally constrained by:

- 2.5290ha of undeveloped zoned industrial land being constrained by high quality remnant vegetation;
- the loss of residential amenity along routes that access the industrial area; and,
- the potential for light, noise, and dust from industrial uses to reduce the amenity of adjoining residential areas.

Identifying an alternative industrial area suited to more intensive industrial uses will allow Council to:

- attract new industrial uses;
- limit the range of uses in the existing industrial area to be more compatible with surrounding residential uses;
- reduce pressure to expand the existing industrial area; and,
- encourage existing home based industrial uses to relocate to a more suitable location.

2.3.2 Consideration of Alternative Sites

The Shire of Denmark's search for a viable new industrial area has been ongoing since 1989 when the Department of Land Administration undertook a site selection study. Council subsequently commenced rezoning of the preferred 16 ha site on Kernutts Road and 8ha south of Zimmerman Street, depicted in *Figure 2 – Industrial Sites Investigated*. Ultimately servicing head works costs and FESA requirements made the sites unviable, and the rezoning was rejected by the Minister for Planning on the ground that the extent of clearing required to facilitate the development was unacceptable.

2.3.3 McIntosh Road Site

During the preparation of its Local Planning Strategy Council identified a new location on McIntosh Road, which appears to be suitable for industrial development. This site is depicted in *Figure 2 – Industrial Sites Investigated*.

The site is characterised by:

- A location remote from urban activities;
- Relatively flat terrain;
- Proximity to the Denmark Airport;
- Good access to South Coast Highway and the regional road network;
- The prospect of both Crown and private land being available for development;
- Ample opportunity for expansion;
- The need to rationalise road access because of the steep gradient of McIntosh Road from South Coast Highway to the site;
- Support from adjoining private land owners; and,
- Opportunities for complementary uses as a buffer to South Coast Highway.

Figure 3 - Site Details provides land use and land tenure details of the McIntosh Road site being promoted for industrial development by Council. The proposed industrial site consists of 42.572ha of land encompassing the 30.012ha lot 2 McIntosh Road and a 12.56ha portion of Reserve 26565 vested in the Minister of Education for the purpose of Agricultural College which is to be purchased by the Shire of Denmark.

The business case being formulated by Council, and this Cost Benefit Analysis, focuses on a first stage of development creating 15 industrial lots on the 12.56ha portion of Reserve 26565 proposed to be purchased by the Shire.

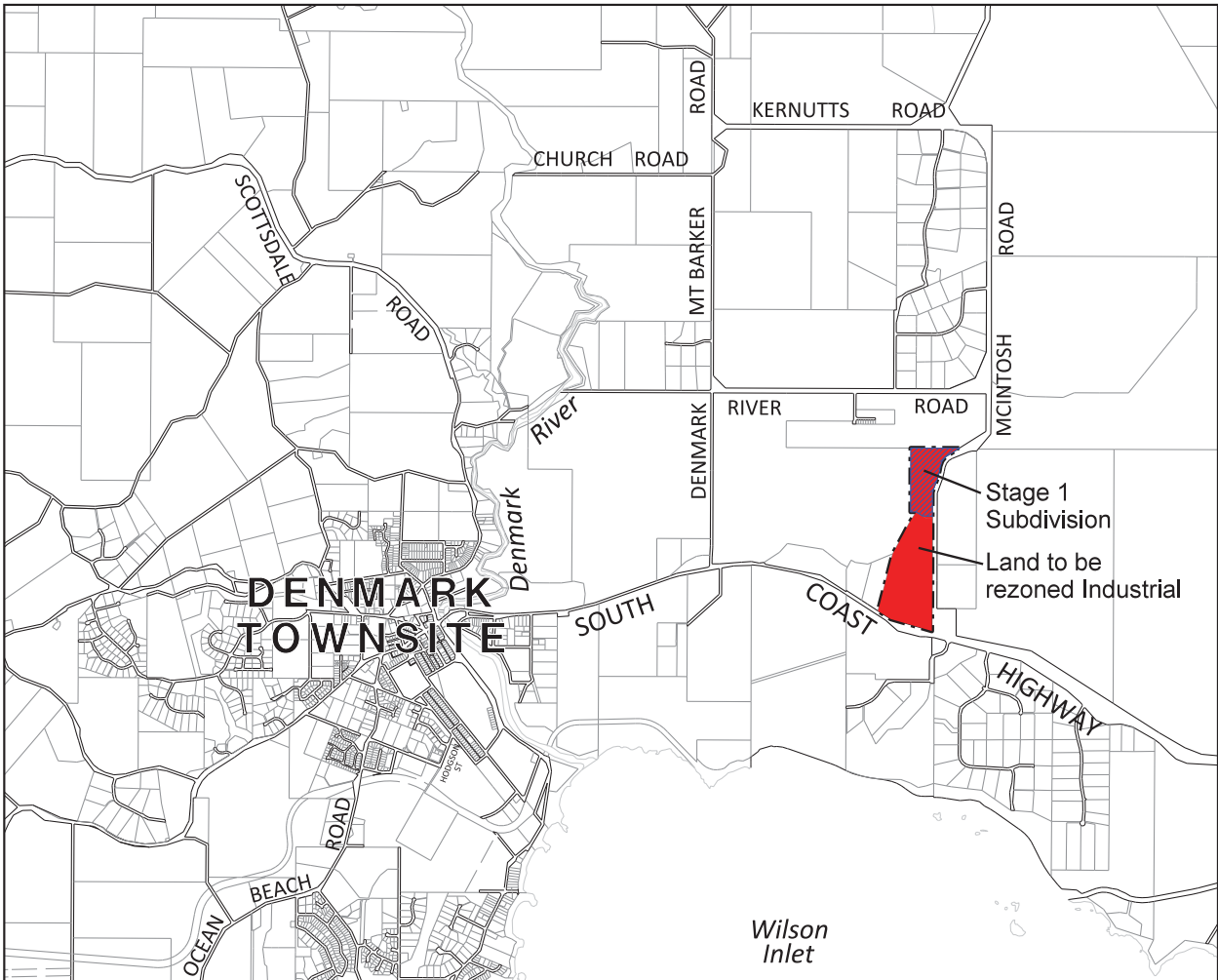
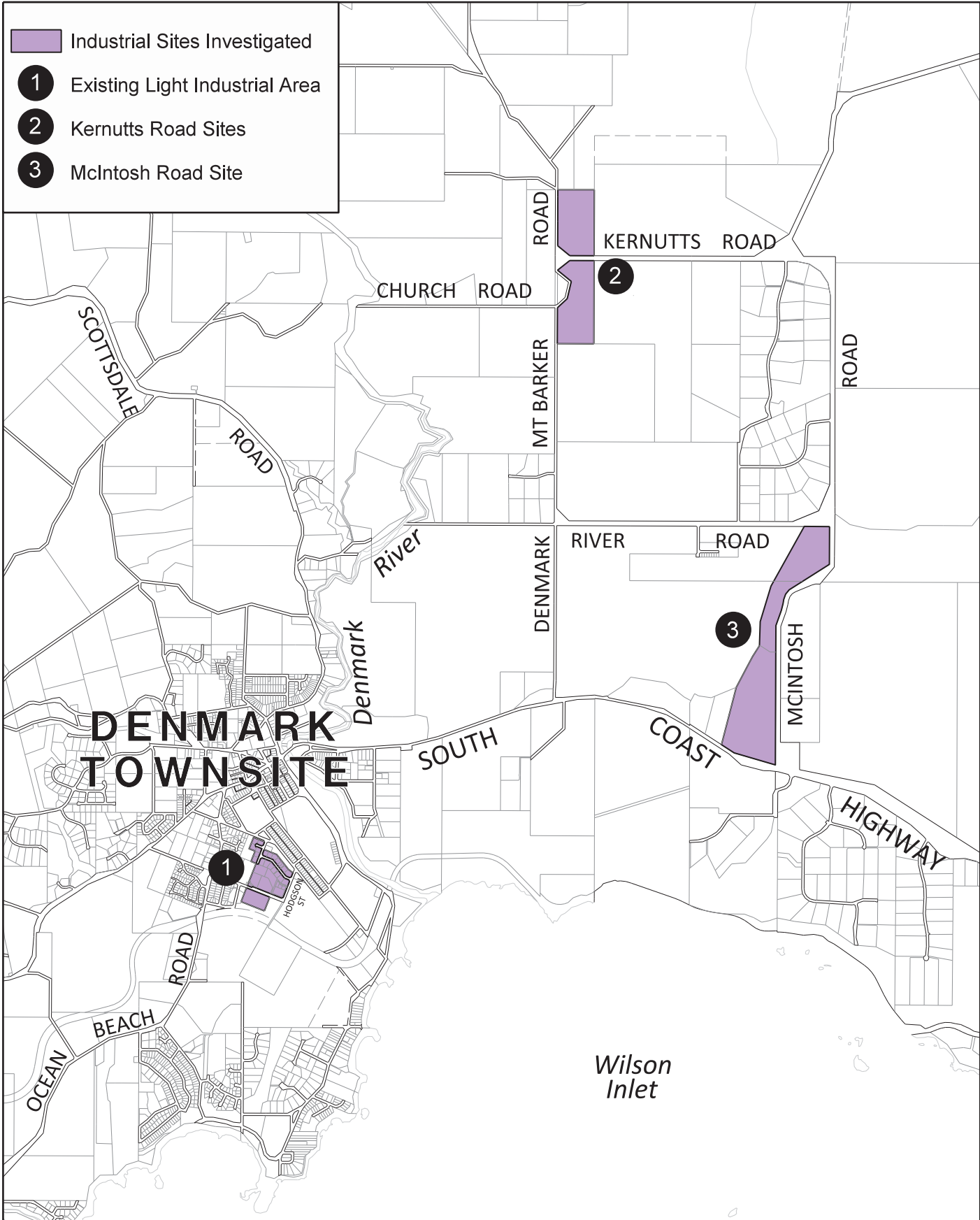
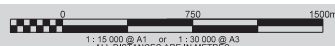


Figure 1 - Location Plan



- Industrial Sites Investigated
- 1 Existing Light Industrial Area
- 2 Kernutts Road Sites
- 3 McIntosh Road Site

DENMARK TOWNSITE



COPYRIGHT:
THIS DOCUMENT IS AND SHALL REMAIN THE PROPERTY OF
THE TOWN PLANNING MANAGEMENT ENGINEERING PTY LTD.
THIS DOCUMENT MAY ONLY BE USED FOR THE PURPOSES FOR
WHICH IT WAS SUBMITTED AND IN ACCORDANCE WITH
THE TERMS OF ENGAGEMENT FOR THE COMMISSION. WITH
UNAUTHORISED USE OF THIS DOCUMENT IN ANY FORM
WHATSOEVER IS PROHIBITED.

INDUSTRIAL SITES INVESTIGATED



REVISION	DESCRIPTION	DRAFTER	DATE
J			
I			
H			
G			
F			
E			
D			
C			
B			
A			

ORIGINAL PLANNER:	ST
ORIGINAL DRAFTER:	KS
CREATED DATE:	22.01.2013
AERIAL DATA:	
CADASTRAL DATA:	MGA
TOPOGRAPHIC DATA:	



12219P-MP-02

THIS PLAN HAS BEEN PREPARED FOR PLANNING PURPOSES.
AREAS, CONTOURS AND DIMENSIONS SHOWN ARE SUBJECT TO SURVEY.

TME Town Planning Management Engineering Pty Ltd (08) 9791 4411 www.tme.net.au

Figure 2 - Industrial Sites Investigated

2.4 Policy and Strategic Framework

2.4.1 State and Regional Context

State and Regional context for the McIntosh Road Industrial Area is provided by the Draft State Planning Strategy and the Draft Great Southern Planning and Infrastructure Framework.

The Draft State Planning Strategy seeks to develop a strategic approach to the sustainable supply of land for future development. Key aspirations of the State Planning Strategy which are in part fulfilled by the McIntosh Road light industrial project include:

- Well serviced regional towns that have built-in capacity to cater for forecast growth and future expansion;
- Affordable and well located land that is accessible and well serviced;
- Government leads by example in the delivery of affordable land;
- Development ready land is readily available to the market; and,
- Project ready industrial land and associated infrastructure is secured.

At a regional level the Draft Great Southern Planning and Infrastructure Framework report identifies the increasing costs of infrastructure including head works, fuel and power and environmental constraints as affecting the actual development and delivery of industrial land.

Regional priorities developed in the infrastructure framework which would be in part fulfilled by the establishment of the McIntosh Road light industrial area include:

Invest in infrastructure and facilitate growth of existing settlements in accordance with the settlement hierarchy.

Ensure there is adequate land supply in Albany and sub-regional centres to accommodate forecast population growth and commercial and industrial land uses.

Provide services and amenities in Albany and sub-regional centres that would encourage youth to remain in the region for educational and employment purposes.

2.4.2 Local Context

Local context for economic development and identification and development of a new industrial area is provided by the Shire of Denmark Local Planning Strategy 2011 which has been endorsed by Council and adopted by resolution of the Western Australian Planning Commission on the 22nd May 2012. The economic development vision espoused under the strategy identifies the most prominent goal as fostering:

“... an increased entrepreneurial culture that consciously plans business and development initiatives within sustainability values, thereby managing a balance of local and externally funded initiatives”.

Council states in the Strategy that it sees its role not so much as organising economic development but facilitating economic opportunity.

Furthermore specific objectives, within the Local Planning Strategy state that Council wishes:

“To identify a new industrial area that will provide sufficient and adequately serviced land available for a range of industrial activities to broaden the employment opportunities close to the Denmark townsite”.

“To phase in mixed business type development within the existing light industrial area (LIA)”.

These objectives are further explored in the strategy and implementation initiatives of the strategy which are presented in full in *Appendix 1 – Extract from the Shire of Denmark Local Planning Strategy*.

2.4.3 Response to Policy Themes

The McIntosh Road light industrial area will, as a new estate, generate benefits associated with several of the key themes which underpin Royalties for Regions initiatives.

Economic development will be facilitated by:

- Ensuring regional infrastructure meets the needs of specialised manufacturing industry;
- Attract additional investment to facilitate sub regional sector growth including agricultural processing and mineral services industries; and,
- Support the development of a culture of collaboration between individual enterprises to assist in tendering for larger contracts.

Regional educational will be facilitated by:

- Providing an environment to develop and retain highly skilled workforce; and,
- Land purchase funds being directed by the Denmark Agricultural College Board towards purchase of a new milking machine.

2.5 Key Deliverables

The project is focused on creating a 42.572ha, 60 lot Industrial area at the intersection of McIntosh Road and Great Southern Highway and pursuing a first stage of subdivision consisting of 15 lots on 12.560ha of land to be purchased from the Denmark Agricultural College site.

2.6 Stakeholder Identification

The Stakeholders in the project have been identified as follows:

The Denmark Agricultural College has provided in principle support to the acquisition of its land and acceptance that an industrial area will be developed adjacent to the college farm. Evidence of this support is provided in *Appendix 2 – Agricultural College Board Letter of Support*.

Adjoining private landowner support has been gained from adjoining private owners evidence of this is provided in *Appendix 3 – Adjoining Landowner Support*.

Wider Community Consultation for the proposed McIntosh Road industrial area has been identified in the WAPC endorsed Shire of Denmark Local Planning Strategy. The strategy was advertised for public comment and community support for the initiative gained.

Servicing Agencies have been approached in respect to the availability of services and the extent of head works upgrading required. Consultation has occurred in respect to power, water and road access. Design solutions for the provision of each of these services have been prepared and support gained at an in principle level. Cost estimates are included in the Static Analysis and Cost Benefit Analysis.

Industrial Operators within the existing light industrial area and operating under temporary permits are aware of Council initiatives in respect to the McIntosh Road industrial area and of their obligation to move to the new industrial area if required by Council.

2.7 Critical Assumptions

2.7.1 Identifying Suitable Land

The McIntosh Road site is deemed to be a suitable location for an industrial area on the basis that it is within 3.5 kms of the Denmark townsite, can be serviced with power and water, has good access to the regional road network and is unlikely to generate unacceptable land use conflicts. The site is relatively flat and the land area available provides flexibility in the size of lots created in order to meet market demand. The site is cleared but may be marginally constrained by fire management buffers to adjoining vegetated areas.

The site also allows for water, power, telecommunications and road head-works supporting the first stage of 15 industrial lots to be utilised by adjoining lot 2, allowing expansion of the industrial area by a private developer or alternatively allowing Council to purchase the land and proceed with its subdivision.

Lot 2, which is privately owned by RJ and KM Hithersay, has on its southern boundary an aspect to Great Southern Highway which would benefit from a larger lot, mixed use land use allowing home based businesses on 2 ha lots ensuring the quality of the landscape at the eastern entrance to Denmark is maintained.

2.7.2 Achieving a Suitable Level of Servicing

It is proposed that servicing of the site be limited to roads, power, telecommunications and water. Access to the district road network can be provided from McIntosh Road to South Coast Highway and via River Road to the Denmark/Mount Barker Road.

Some limitations on vehicles utilising McIntosh Road access to South Coast Highway will be required due to the steepness of the current incline. This limitation will require some vehicles to utilise River Road and the Denmark/Mount Barker Road if they wish to access South Coast Highway.

Preliminary investigations have occurred into opportunities to modify the vertical incline on McIntosh Road and identify alternative alignments which may resolve this issue. Further work on this is required at the engineering design stage however in the interim there are practical solutions and it is not considered a fatal flaw. The engineering feasibility has priced one of these options within external headworks costs. Upgrading of the McIntosh Road/South Coast Highway intersection will be required.

Water supply will be provided by extension of a 250mm main which currently terminates on South Coast Highway 700 metres west of McIntosh Road.

Power to the site will be made available. Discussions with Western Power suggest that minimal external upgrades will be required although a definitive statement of what is required and the cost implications has not been able to be obtained. A provisional allocation of \$93,500 has been set aside.

Desktop investigations utilising the Department of Agriculture's Agg Maps suggest that soils on the site are a mix of duplex sandy gravels with pale deep sands, grey deep sandy/gravelly duplexes and shallow gravels which are generally moderately free draining with a medium nutrient absorption capability. They are considered suitable for utilisation of onsite effluent disposal techniques although further investigations will be required as part of the planning approvals process.

Deep sewerage will not be made available to the site and therefore some limitations on the types of industries may be necessary.

2.7.3 Securing Land Tenure

The first stage of development consists of 12.56ha of Reserve 26565 currently vested in the Minister of Education for the purpose of Agricultural College. The Shire of Denmark has reached agreement with the Agricultural College Board in respect to in principle acquisition of the stage 1 land and has made an offer for a purchase price in the order of \$550,000 plus any transfer costs. Confirmation of this agreement is provided in *Appendix 2 - Agricultural College Board Letter of Support*.

The proposed McIntosh Road Industrial Area encompasses Lot 2 which is privately owned and situated west of McIntosh Road between Stage 1 and South Coast Highway.

Council has secured in principal support from the owner of Lot 2 to the proposed rezoning and development of stage 1. *Appendix 3 - Adjoining Landowner Support* confirms this position.

It is noted that the head works contributions for the Stage 1 subdivision will also facilitate subdivision of lot 2. There is no statutory process in place which allows portion of these head works to be recouped from the owner of lot 2 or any subsequent subdivider unless the lots created directly front a road which is upgraded or contains the upgraded services.

Council will need to pursue a private agreement with the owner of lot 2, or any subsequent sub-divider, to recoup a proportional contribution of the head works at such time as subdivision progresses.

2.7.4 Native Title and Heritage

Advice from the Department of Regional Development and Lands suggests that Native Title over Reserve 26565 is likely to have been extinguished by a management order in favour of the Minister of Education and subsequent utilisation of the reserve for the purpose of Agricultural College.

This matter will be addressed formally as part of the alienation process.

Aboriginal Heritage considerations will need to be considered as part of the formal town planning scheme amendment process to rezone the land industrial. There are no registered Aboriginal Heritage sites which affect the subject land.

2.7.5 Planning and Environmental Approvals

A strategic context for developing the McIntosh Road Industrial Area is provided by the Shire of Denmark Local Planning Strategy. With this strategic context in place the rezoning and subdivision approval required to facilitate the development can progress within an established framework.

There are a range of approvals required to facilitate the development to a point where construction of subdivision works can commence. These include:

- Rezoning of the subject land to 'Industrial' under the Shire of Denmark Town Planning Scheme No. 3;
- Flora and Fauna Assessments to demonstrate there are no declared species on the site;
- Aboriginal Heritage Assessment to ensure there are no heritage sites;
- Preparing a Land Capability Assessment demonstrating that the site is suitable for onsite effluent disposal;
- Undertaking ground water monitoring to assist with preparation of the Land Capability Assessment and Water Management Plans; and,
- Preparing a Local Water Management Strategy to accompany the Town Planning Scheme Amendment and an Urban Water Management Plan to accompany the subdivision. There is a prospect that these two plans may be able to be combined.

Preparation of the above plans has been programmed into the project and costs allocated. While these tasks are yet to be undertaken none are considered to be potential fatal flaws in the project.

2.7.6 Community Consultation

The prospect of an industrial area on McIntosh Road has been promoted within the Shire of Denmark Local Planning Strategy. This document has been advertised for public comment in a manner which meets statutory obligations and no negative comments were received.

Further community consultation will occur as part of the site rezoning allowing for a more detailed assessment of proposals and community concerns to be assessed within a statutory framework.

There is widespread community support for the down grading of the existing Denmark Industrial Area to a mixed business precinct primarily on the basis that heavy traffic on access routes is likely to be reduced and the prospect of uses such as the concrete batching plant potentially relocating. Evidence for this community support can be found in the Shire of Denmark Local Planning Strategy which canvassed this proposal during its formulation and now makes clear recommendations to this effect.

2.7.7 Understanding Lot Demand

A local real estate agent has been engaged to assist an understanding of the demand for lots in the McIntosh Road Industrial area. Detail of this research is provided in *Appendix 4 – Marketing Research*. In summary the research establishes that:

- A range of lot sizes from 1500m² to 1 ha is likely to be required to meet demand;
- The level of servicing required to meet demand is road, power, telecommunications and water supply;
- The absence of deep sewerage is not seen to be a constraint;
- It is estimated that 3 lots per year will be sold to new businesses;
- It is estimated that 2 lots per year will be sold to businesses relocating from the existing industrial area;
- The average price of lots sold is likely to be in the order of \$159,333; and,
- Applying a square metre rate for the value of industrial lots created is inappropriate in the local market.

The appetite for relocation of industrial uses from the existing industrial area and other locations in the Shire to McIntosh Road cannot be confirmed with any degree of certainty. However Council advises that there are 4 transport/construction businesses that are operating under conditional Development Approvals that can be required to relocate and a further 4 business that Council will encourage to relocate.

This leads to the conclusion that it is reasonable to plan for 2 businesses each year for three years to relocate to McIntosh Road.

2.8 Economic and Financial Analyses

2.8.1 Identification of Costs and Benefits

Figure 4 – Costs and Benefits lists the costs and benefits that have been identified in respect to the project.

It will be noted that the costs and benefits relate not only to the McIntosh Road site but to the benefits which will accrue to the existing industrial area and the Shire's additional capacity to accommodate industrial expansion, businesses and employment.

Costs and Benefits

	Item	Methodology	Outcome
Costs	Ongoing maintenance responsibility for vegetated area	Determine ultimate manager of land and obtain estimate of ongoing costs.	Council estimate of \$1,000 per year for firebreaks.
	Stage 1 Land Purchase Costs	Request Council for Information.	\$550,000 purchase plus survey and on-costs of \$46,000
	Stage 1 Subdivision Costs	Engineering and feasibility assessment based on predicted subdivision approval.	Total Costs of approximately \$3,064,992
	Headworks upgrade costs (water, power, roads)	Engineering investigations.	Total value of head works \$2,120,052 across 60 lots is \$35,334/lot
	Planning and Approvals costs	Quotes and estimates from appropriate consultants.	Various quotes obtained
	Loss of productive agricultural land	Incorporated in capital cost of land purchase.	Incorporated in capital cost of land purchase.
	Amenity loss to lots adjoining new industrial area	Estimate of loss of capital value for Lot 42 Great Southern Highway Willoughby Park Boston Brewery. Other properties have negligible effect.	Marketing agent advises loss of value is negligible.
Benefits	Land purchase available to Agricultural College	Utilise value of transaction less on-costs	\$550,000 available to college toward a milking machine
	Utilisation of Fit for Purpose water supply	To be determined by further discussions with Water Corporation	Unlikely to be in place within a 10 year time frame and has therefore not been factored into Cost Benefit analysis.
	Future Headworks capacity	Proportional value of headworks investment attributable to future stages	Total cost of \$2,120,052 over 60 lots is \$35,334 per lot.
	Value of Stage 1 lots	Estimates by estate agents	Total of \$2,390,000 over three years. \$796,666 per year income
	Additional industrial capacity	All additional industrial capacity is attributable to McIntosh Road as there is no excess capacity at present. Value is based on number of new businesses and calculation of additional turnover. Information provided by Council.	Estimated at 3 businesses per year averaging 5 employees at an annual salary of \$75,000 (Ave weekly earnings Denmark). Apply cumulatively up to 15 new businesses.
	Overcoming a shortfall in industrial land supply	Incorporated in additional industrial capacity	Incorporated in additional industrial capacity
	Reduced road maintenance on existing haulage routes	Estimates by Council Staff	Council estimates \$10,000 per year
	Fulfilling Strategic Industrial Sites Objectives	Incorporated in additional industrial capacity	Incorporated in additional industrial capacity
	Improved amenity adjoining existing LIA and retention of remnant vegetation	Estimates of additional land values of lots adjoining the existing LIA by estate agents	Estimated @ \$1,500 per lot over 3 years. \$500/lot/year for 43 lots
	Improved amenity on haulage routes to existing LIA	Estimates of additional land values of lots fronting haulage routes by estate agents	Estimated at \$2,000 per lot over 3 years. \$666/lot/year for 49 Lots involved
	Additional employment opportunities	Incorporated in additional industrial capacity	Incorporated in additional industrial capacity

Figure 4 - Costs and Benefits

Methodology

The methodology and outcomes used to quantify the costs and benefits are also outlined in *Figure 4 – Costs and Benefits*. The methodology used varies from engaging with local sales and marketing agents, obtaining quotes from professional consultants, engaging in detailed discussions with the Shire of Denmark, preparation of engineering design and cost estimates for inclusion in a static analysis of the development and acknowledging the current market values and community aspirations reflected in existing statutory documentation.

It should also be noted that some aspects of the project can appear as both costs and benefits. For example the land purchase price for portion of Reserve 26565 is a cost to the project but also a benefit to the local community as the funds are proposed to be utilised locally by the Agricultural College to help fund a new milking machine.

Static Analysis

A Static Analysis has been used as the basis for determining the feasibility of the project and a significant input to the Cost Benefit Analysis. A static analysis presents a point in time model of the cash flows which have been anticipated for the subdivision. *Appendix 5 – Static Analysis* contains details of the analysis.

It should be noted that the static analysis does not include an interest component for development costs or other holding costs as agreed with the client.

For the purposes of establishing the works required to develop the subject land as an industrial estate, TME has utilised the subdivision concept sketch and anticipated the conditions of subdivision which would be issued by the Western Australian Planning Commission. The anticipated conditions are contained in *Appendix 6 – Anticipated Conditions of Subdivision Approval*. Preliminary engineering design and costings have been prepared to support the Static Analysis; these are presented in *Appendix 7 - Engineering Cost Estimates*.

Sale prices of lots have been based upon advice from a local real estate agent and formulated on the basis of achieving 5 lot sales each year.

Applying a Common Measure

The outcomes from investigations have all been quantified as a financial value in order that they can be incorporated into a calculation of Net Present Value and the Internal Rate of Return.

2.8.2 Net Present Value and Internal Rate of Return

Net Present Value

Figure 5 – Net Present Value consolidates the information collected on costs and benefits and calculates a net present value and internal rate of return.

In order to calculate the net present value each year's total costs are subtracted from total benefits in that year to yield net benefit for each year. The stream of net benefits is then discounted to take account of the fact that further into the future each dollar's worth of net benefit should be weighted less when determining the project's bottom line.

A discount rate needs to be established for the project based on the concept of the Social Opportunity Cost of Capital. While the Government Bond Rate is a starting point for setting a discount rate, it does not represent the opportunity cost of forgoing other projects to fund a particular project. It is also inappropriate to use the Commercial Bill Rate as this would imply that a Government backed project has the same level of risk as a private sector investment. A discount rate somewhere between these two rates is therefore appropriate.

It is appropriate however that we recognise the current 10 year Bond rate is at historical lows and is unlikely to stay at this rate for the life of the project.

• 10 year Government Bond Rate (February 2013)	3.5%
• Variation in 10 year Government Bond Rate past 5 years.	2.8% to 7.8%
• Suggested base rate adopted for project.	5.3%
• Commercial Bill Margin (Westpac February 2013, 90 day rest)	0.7%
• Margin adopted for project	0.5%
• Discount rate adopted for project (Social Opportunity Cost)	5.8%

Cost benefit analysis theory suggests that a project is acceptable if the net present value is equal to or greater than zero. In essence the higher a net present value of a project the higher its' ranking should be compared to other projects.

The Cost Benefit Analysis shows the project having a net present value of \$16.415m which is a significant positive value suggesting that the project should proceed and is likely to be weighted highly when compared to other government initiatives being considered.

The high net present value is largely generated by the additional industrial capacity which will be generated in the form of additional, sustained employment. It is appropriate that this level of benefit be applied to the project given that there are no other sites suitable for industrial development and the existing industrial site is at capacity. Giving effect to a situation that no further industrial development can occur in Denmark unless the project proceeds.

Internal Rate of return

The Internal Rate of Return is a measure of the level of interest that could be absorbed by a project to have a Net Present Value of \$0. It is a measure of the efficiency of a project. The higher the Internal Rate of Return the more desirable a project is. The project shows an internal rate of return of 66%.

2.8.3 Sensitivity Testing

It has been determined that two of the most significant variables in the project are the discount rate which should apply and the lot price which can be achieved to secure the desired 5 lots per year sold. *Figure 6 – Sensitivity Testing* plots variations in these variables.

The discount rate of 5.8% is low when considered in a historical context however an increased rate of up to 8% would still generate a net present value of \$13.79 Million dollars.

Similarly, a significant reduction in the average lot price, even up to 20% would still generate a significant net present value of \$16.03m.

Sensitivity testing has also been undertaken for the number of businesses establishing in the new industrial area, as distinct from lots sold. This testing shows that anything more than one business employing 5 people establishing in the McIntosh Road industrial area by 2016 will result in a positive net present value thereby justifying the project.

2.8.4 Social Equity and Intangibles

There is no significant social equity or intangibles that have an effect on the project.

Net Present Value

	Year									
	1	2	3	4	5	6	7	8	9	10
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Benefits										
Lot Sales										
No of Stage 1 Lots Sold			5	5	5					
Revenue average/lot \$159,333			\$796,665	\$796,665	\$796,665					
Amenity Improvements										
Reduced road maintenance on existing haulage routes				\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Improved amenity on haulage routes to existing industrial area.			\$32,634	\$32,634	\$32,634					
Improved amenity adjoining existing industrial area			\$21,500	\$21,500	\$21,500					
Economic Opportunity										
Social Opportunity of Land Purchase to Agricultural School		\$550,000								
Value of headworks capacity for future stages @ 5 lots/year						\$176,670	\$176,670	\$176,670	\$176,670	\$176,670
Additional industrial capacity (Stage 1 only)				\$1,125,000	\$2,250,000	\$3,375,000	\$4,500,000	\$5,625,000	\$5,625,000	\$5,625,000
Total Benefit	\$0	\$550,000	\$850,799	\$1,985,799	\$3,110,799	\$3,561,670	\$4,686,670	\$5,811,670	\$5,811,670	\$5,811,670
Costs										
Maintenance of additional Vegetation in existing industrial area	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Phase 1 - Planning and Environmental Approvals										
Lead consultant Project Planning	\$20,000	\$10,000								
Town Planning	\$20,000	\$7,078								
Environmental and Fire	\$30,000	\$17,000								
Land Purchase and on-costs		\$596,000								
Phase 2 - Construction Approvals and Tender										
Project Manager		\$10,000								
Geotechnical Investigations		\$15,000								
Environmental and Fire		\$22,500								
Engineering		\$48,370								
Survey		\$12,500								
Phase 3 - Construction to Titles										
Project Manager			\$54,000							
Engineering			\$66,930							
Civil Construction Contract			\$2,411,280							
External Headworks Contributions and Works			\$2,120,052							
Landscaping			\$60,000							
Shire Fees			\$36,586							
Western Power Fees			\$2,573							
Water Corporation			\$65,475							
Survey			\$17,500							
Phase 4 - Marketing and Sales										
Sales Commissions			\$71,700							
Marketing			\$37,000							
Settlement			\$12,500							
Legal Fees			\$2,000							
Holding Costs				\$10,000	\$5,000					
Total Cost	\$71,000	\$739,448	\$4,958,596	\$11,000	\$6,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Net Benefit	-\$71,000	-\$189,448	-\$4,107,797	\$1,974,799	\$3,104,799	\$3,560,670	\$4,685,670	\$5,810,670	\$5,810,670	\$5,810,670
Discount Rate	5.8%		Net Present Value		\$16,415,674		Internal Rate of Return		66%	

Figure 5 - Net Present Value

Sensitivity Testing

		Discount Rate							
		4.50%	5%	5.80%	6%	6.50%	7%	8%	
		Net Present Value in Millions							
Ave. Lot Price	20%	\$191,200	\$18.622	\$17.895	16.797	\$16.534	\$15.897	\$15.287	\$14.143
	15%	\$183,233	\$18.522	\$17.797	16.702	\$16.440	\$15.804	\$15.196	\$14.055
	10%	\$175,267	\$18.421	\$17.699	16.607	\$16.345	\$15.712	\$15.105	\$13.967
	5%	\$167,300	\$18.322	\$17.601	16.511	\$16.251	\$15.619	\$15.013	\$13.879
		\$159,333	18.221	17.502	16.416	\$16.156	\$15.526	\$14.922	\$13.791
	-5%	\$151,367	\$18.121	\$17.404	\$16.320	\$16.061	\$15.433	\$14.831	\$13.703
	-10%	\$143,400	\$18.021	\$17.305	\$16.225	\$15.966	\$15.540	\$14.740	\$13.615
	-15%	\$135,433	\$17.921	\$17.207	\$16.129	\$15.871	\$15.247	\$14.648	\$13.527
	-20%	\$127,467	\$17.820	\$17.109	\$16.034	\$15.777	\$15.154	\$14.557	\$13.439

Figure 6 - Sensitivity Testing

2.8.5 Cost Benefit Conclusions

A Cost Benefit Analysis of a 15 lot first stage of subdivision on the proposed McIntosh Road industrial area has been undertaken in accordance with the methodology recommended in *Handbook of Cost Benefit Analysis - Financial Management Reference Manual No. 6* issued by the Federal Department of Finance and Administration.

The Cost Benefit Analysis has concluded that:

- There are no fatal flaws to the project with the exception of the Shire of Denmark securing State government funding for the project;
- A Cost Benefit Analysis has been prepared and demonstrates a net present value of \$16.416 Million dollars for the project which is considered significant and clearly justifies the project in the context of desirable community outcomes;
- Sensitivity testing suggests a positive net present value will be achieved for the project with:
 - a discount rate of 5.8%;
 - an average of lot price of \$159,333;
 - 5 lots a year being sold; and,
 - anything more than one business establishing in the light industrial area.

Council is in a position to require 4 transport/construction businesses to relocate to the McIntosh Road industrial area upon subdivision being complete.

From a cost benefit perspective there is sound reason for government to fund stage 1 of the McIntosh Road industrial area.

2.9 Assessment of Options

A range of alternatives to the development of the McIntosh Road industrial area has been explored by Council over 10 years. Each of these alternatives has fundamental flaws which preclude them as viable options.

The existing light industrial area is at capacity and incorporates uses which are inconsistent with its location within an urban environment. While there is undeveloped land zoned for industrial expansion, the quality of remnant vegetation on this land prevents this occurring. In addition the community has clearly stated through the Shire of Denmark Local Planning Strategy that it wishes to see the area downgraded from an industrial area to a mixed business precinct.

Council has investigated the prospect of alternative industrial sites however these opportunities are limited by access to water, power and the district road network. Two sites explored in detail by Council on Kernutts Road progressed to the rezoning but were rejected by the Hon Minister for Planning due to the extent of clearing required.

The opportunity to provide more flexibility in the Town Planning Scheme and provide for a greater range of home based businesses is unlikely to have any discernible impact on the demand for additional light industrial lots within Denmark.

The prospect of directing industrial businesses to other towns in the region including Mount Barker, Albany and Walpole has been determined to be inappropriate and inconsistent with the economic objectives of the Draft State Planning Strategy, Draft Great Southern Planning and Infrastructure Framework and the Shire of Denmark Local Planning Strategy.

The McIntosh Road site is consequently the only industrial site option currently available to Council after 10 years of investigations.

2.10 Preferred Option

2.10.1 Site Characteristics

During the preparation of its Local Planning Strategy Council identified a new location on McIntosh Road, which appears to be suitable for industrial development. This site is depicted in *Figure 2 – Industrial Sites Investigated*.

The site is characterised by:

- A location remote from urban activities;
- Relatively flat terrain;
- Proximity to the Denmark Airport;
- Good access to South Coast Highway and the regional road network;
- The prospect of both Crown and private land being available for development;
- Ample opportunity for expansion;
- The need to rationalise road access because of the steep gradient of McIntosh Road from South Coast Highway to the site;
- Support from adjoining private land owners; and,
- Opportunities for complementary uses as a buffer to South Coast Highway.

Figure 3 - Site Details provides land use and land tenure details of the McIntosh Road site being promoted for industrial development by Council. The proposed industrial site consists of 42.572 ha of land encompassing the 30.012ha lot 2 McIntosh Road and a 12.56ha portion of Reserve 26565 vested in the Minister of Education for the purpose of Agricultural College which is to be purchased by the Shire of Denmark.

The business case being formulated by Council, and this Cost Benefit Analysis, focuses on a first stage of development creating 15 industrial lots on the 12.56ha portion of Reserve 26565 proposed to be purchased by the Shire.

2.10.2 Subdivision

Figure 7 – Subdivision Concept provides a notional subdivision concept which will assist in undertaking a feasibility assessment, cost benefit analysis and funding application to Government. The design has been prepared for all of the proposed industrial area but the feasibility study has only been prepared for the first stage consisting of 15 lots in the 12.56ha portion of Reserve 26565 proposed to be purchased by the Shire.

The notional design provides for a wide variation of lot sizes to facilitate a range of industrial uses. The site will be serviced by roads, power and reticulated water but will be limited to uses which are consistent with the use of onsite effluent disposal. There is also a long term (approximately 10 years) opportunity to tap into the planned Water Corporation treated waste water main which will run along McIntosh Road and link to a disposal tree farm situated north of the site.

2.10.3 Landowner Support

Correspondence indicating support for the proposal from the Minister for Education in whom Reserve 26565 is vested and RJ and KM Hithersay who own lot 2 McIntosh Road is provided in *Appendix 2- Agricultural College Board Letter of Support* and *Appendix 3 - Adjoining Landowner Support*.

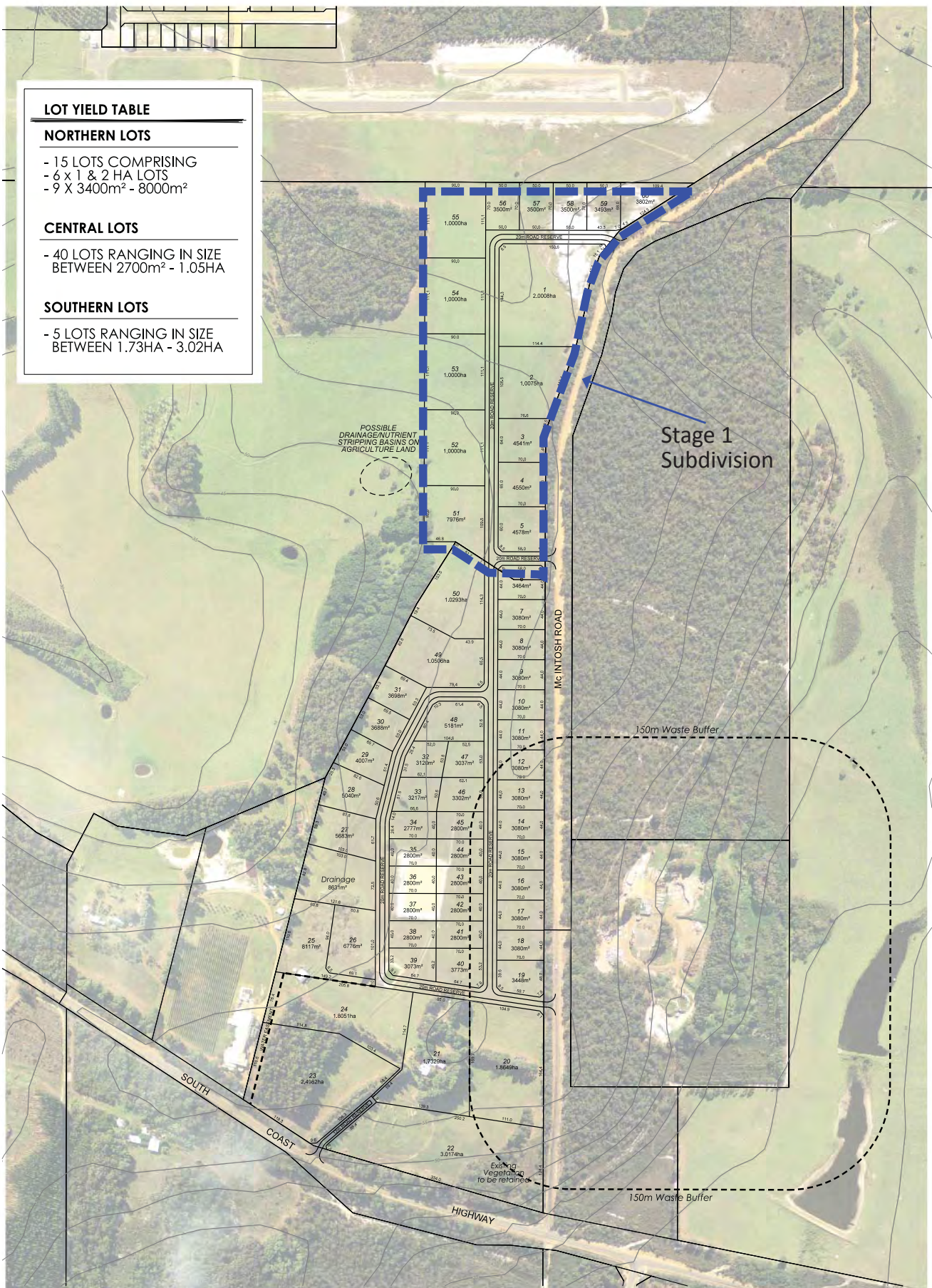
2.10.4 Approval and Staging

Figure 8 – Gantt Chart has been prepared outlining the major tasks which are required to be completed to deliver the project, and the timeframe over which they will be undertaken.

The project is based on a first stage of development consisting of 15 lots all situated within the land to be excised from Reserve 26565 as depicted in *Figure 7 – Subdivision Concept*. Future stages of subdivision involving freehold land may be undertaken by the private sector or Council may purchase this land to facilitate development if deemed appropriate.

Key milestones based on funding being available in July 2013 are:

- | | |
|-------------------------------------------------|-------------------|
| • Funding secured | July 2013 |
| • Planning and environmental approvals in place | Sept 2014 |
| • Construction approvals and tender | April 2015 |
| • Construction complete and titles issued | Sept 2015 |
| • Lot sales | Sept 2015 to 2017 |
| • First businesses operating | 2016 |



LOT YIELD TABLE

NORTHERN LOTS

- 15 LOTS COMPRISING
- 6 x 1 & 2 HA LOTS
- 9 X 3400m² - 8000m²

CENTRAL LOTS

- 40 LOTS RANGING IN SIZE
- BETWEEN 2700m² - 1.05HA

SOUTHERN LOTS

- 5 LOTS RANGING IN SIZE
- BETWEEN 1.73HA - 3.02HA

DENMARK INDUSTRIAL AREA
OPTION 1 - LARGE SOUTHERN LOTS

△ N SAM WILLIAMS | TOWN PLANNER
ph: 0418 116216 | email: samwilliams@westnet.com.au
scale - 1:5000 @ A3 | date - 22 MARCH 2012
plan no. 12-0033W-001



Figure 7 - Subdivision Concept

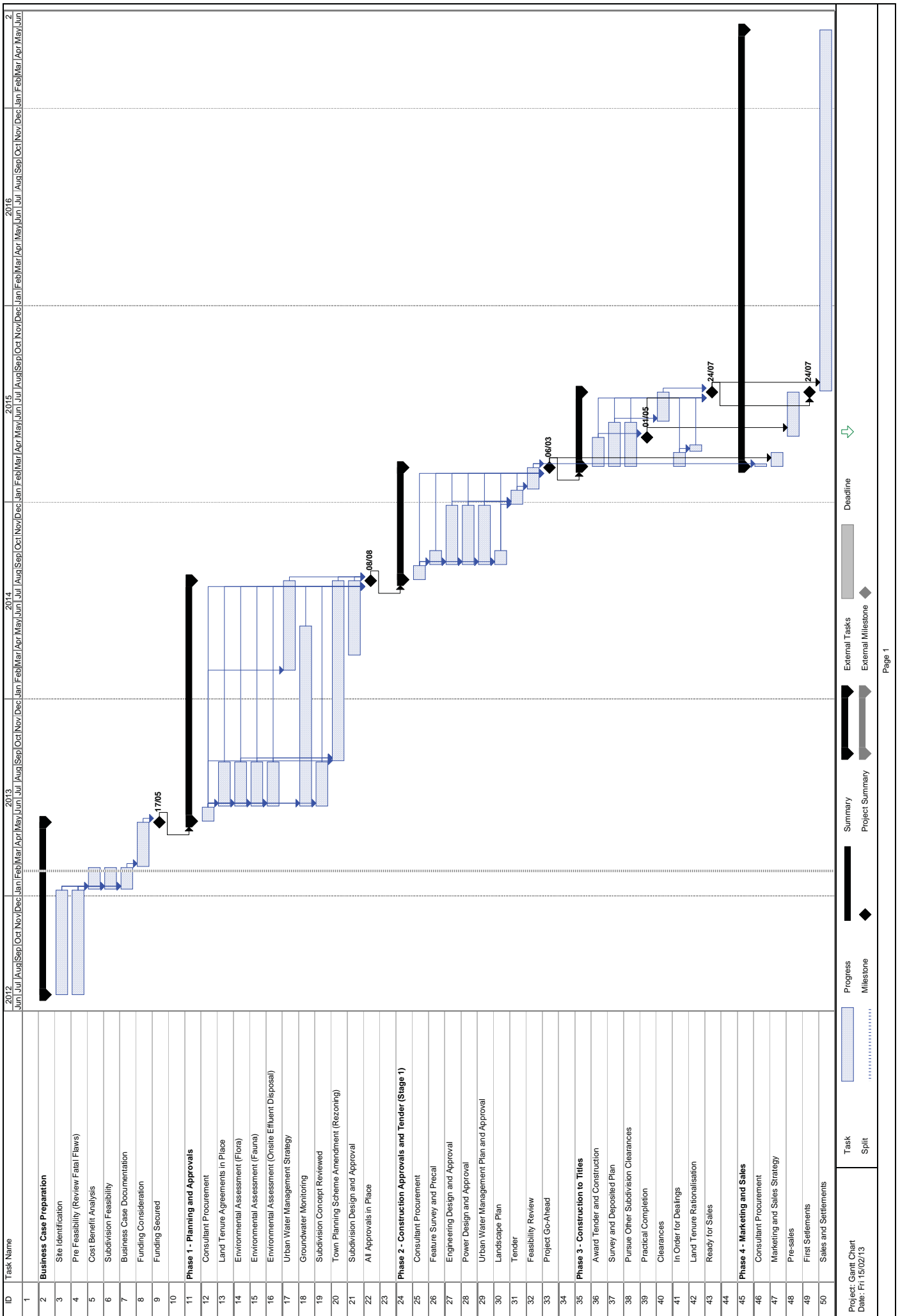


Figure 8 - Gantt Chart

2.11 Funding Strategy

2.11.1 Project Budget

The nature of industrial development requires a location that minimises the potential for land use conflicts and is therefore often remote from the urban servicing front. In addition the demand for industrial lots in regional locations can be limited. The combination of these factors tends to make green-fields industrial subdivision in regional areas unattractive to the private sector and therefore a candidate for government intervention.

With these thought is mind Council has determined to prepare and promote a Business Case for Government assistance for further investigations, statutory approvals and development of the McIntosh Road industrial site.

The project funding strategy is shown below in *Figure 9 - Funding Strategy*.

Funding Strategy

Project Finance		
Project Generated Income	\$2,389,995	
RfR Funding	\$2,000,000	
Council Funding	\$2,000,000	
		\$6,389,995
Project Costs		
Project Costs Including Interest	\$5,924,400	
Contingency @ 7%	\$414,708	
		\$6,339,108
Balance		\$50,887

Figure 9 - Funding Strategy

Figure 10 - Cash Flow identifies the extent of funding required to facilitate the McIntosh Road Industrial Area Stage 1 project.

It will be noted that the cash flow provides for an initial injection of funds of \$1.8M by Council and Royalties for Regions funding. The funding strategy also provides for a contingency of 7% on top of this initial injection of funds.

If the project timing anticipated can be achieved and sales targets are met, then a maximum debt exposure of \$2,261,901 could occur during the 3rd year of the project which should be partly offset if presales are in place reducing debt to \$1,465,236 by the end of the 3rd year.

2.11.2 Royalties for Regions Funding Amount

Royalties for Regions funding of \$2,000,000 is being sought.

Cash Flow

	Year				
	1	2	3	4	5
	2013/14	2014/15	2015/16	2016/17	2017/18
Income					
Lot Sales					
No of Stage 1 Lots Sold			5	5	5
Revenue average/lot \$159,333			\$796,665	\$796,665	\$796,665
Other Contributions					
Royalties for Regions Program Investment Funding	\$1,800,000				
Council Budget Allocation	\$1,800,000				
Total Benefit	\$3,600,000	\$0	\$796,665	\$796,665	\$796,665
Costs					
Phase 1 - Planning and Environmental Approvals					
Lead consultant Project Planning	\$20,000	\$10,000			
Town Planning	\$20,000	\$7,078			
Environmental and Fire	\$30,000	\$17,000			
Land Purchase and on-costs		\$596,000			
Phase 2 - Construction Approvals and Tender					
Project Manager		\$10,000			
Geotechnical Investigations		\$15,000			
Environmental and Fire		\$22,500			
Engineering		\$48,370			
Survey		\$12,500			
Phase 3 - Construction to Titles					
Project Manager			\$54,000		
Engineering			\$66,930		
Civil Construction Contract			\$2,411,280		
External Headworks Contributions and Works			\$2,120,052		
Landscaping			\$60,000		
Shire Fees			\$36,586		
Western Power Fees			\$2,573		
Water Corporation			\$65,475		
Survey			\$17,500		
Phase 4 - Marketing and Sales					
Sales Commissions			\$71,700		
Marketing			\$37,000		
Settlement			\$12,500		
Legal Fees			\$2,000		
Holding Costs - Rates and Charges				\$10,000	\$5,000
Total Cost	\$70,000	\$738,448	\$4,957,596	\$10,000	\$5,000
Cash Flow					
Net Cash Flow	\$3,530,000	-\$738,448	-\$4,160,931	\$786,665	\$791,665
Cumulative Cash Flow Before Interest	\$3,530,000	\$2,791,552	-\$1,369,379	-\$678,571	\$65,595
Interest @ 7% on negative balances			-\$95,857	-\$47,500	
Cumulative Cash Flow	\$3,530,000	\$2,791,552	-\$1,465,236	-\$726,070	\$65,595
Summary of Funding					
Total Project Costs Including Interest	\$5,924,400				
Contingency @ 7%	\$414,708				
Total Project Generated Income	\$2,389,995				
R for R Funding	\$2,000,000				
Council Funding	\$2,000,000				
Balance	\$50,887				

Figure 10 - Cash Flow

2.12 Project Timeframe and Key Milestones

2.12.1 Performance Measures

The nature of the project allows specific performance measures to be established and easily monitored throughout the approval process, construction, sales and businesses' establishment phases. The performance measures chosen are those which best measure the progress of the project against key objectives.

Adherence to Gantt Chart

A Gantt Chart has been produced and is shown in *Figure 8 - Gantt Chart*. This provides a detailed breakdown of the various tasks and the timeframes expected to fulfil them. There is a possibility that the Gantt Chart will slip depending on when and if funding can be secured.

Milestones

The key milestones in the project are:

- | | |
|-------------------------------------------------|-------------------|
| • Funding Secured | July 2013 |
| • Planning and environmental approvals in place | Sept 2014 |
| • Construction approvals and tender | April 2015 |
| • Construction complete and titles issued | Sept 2015 |
| • Lot sales | Sept 2015 to 2017 |
| • First businesses operating | 2016 |

Cost v Budget

The Detailed Static Analysis of the project breaks down the various project costs into elements which can easily be measured against tender outcomes and actual costs incurred.

Lot Sales Targets

Lot sales targets have been identified in terms of number of lots to be sold and prices to be achieved. 5 lots a year are to be sold for 3 years starting in the 3rd year of the project with each lot averaging a lot price of \$159,333.

Businesses Established

The Cost Benefit Analysis is based on 3 new businesses establishing in the Denmark townsite, either at the McIntosh Road industrial site or the existing industrial area and that each of these businesses' employ 5 people.

Monitoring of Performance Measures

It will be incumbent on the Shire of Denmark to monitor the performance measures on an annual basis

2.12.2 Delivery Responsibility

The Council of the Shire of Denmark will be responsible for delivery of the Business Plan. As a Local Government it will be required to prepare a Business Plan under Section 3.59 Commercial Enterprises by Local Governments of the Local Government Act as the McIntosh Road industrial area project would be considered a major trading undertaking. The provisions of the Local Government Act require financial analysis, impacts on the local community, and the capacity of the local government to manage the undertaking to be investigated and documented for public scrutiny.

Council may choose to engage the services of a project manager to implement the business plan, or portions of the business plan. The extent of tasks that may be allocated to a project manager will be determined by Council after considering its resource capacity at the time the project proceeds.

Financial management of the project will be the responsibility of the Council of the Shire of Denmark with such auditing carried out as may be necessary under the terms of any funding agreement with the State government.

Land acquisition of the portion of Reserve 26565 will be pursued in fee simple as soon as State government funding assistance is secured and the subject land can be alienated from the Crown.

2.13 Risk Analysis

A number of potential issues have been identified in the project and investigated to a point where they are no longer considered fatal to the project.

Land Tenure

In principle agreement has been reached with the Board of the Denmark Agricultural College in respect to purchasing portion of Reserve 26565.

Suitability of the Site for Onsite Effluent Disposal

In the absence of deep sewerage the site needs to accommodate onsite effluent disposal. A full geotechnical investigation of soil types will occur as part of the planning process however, preliminary investigations have demonstrated that soils on the site are well drained and have a nutrient absorbing capacity.

Land Use Capability and Planning Approvals

Statutory planning approvals will be required in the form of a Town Planning Scheme Amendment and subdivision approval issued by the Minister for Planning and the Western Australian Planning Commission. Initial investigations suggest that while these approvals may be conditional there are no matters or land use compatibility issues which will ultimately prevent the approvals being issued.

Road Access to the Site

The Great Southern Highway intersection sight lines and McIntosh Road incline need to be investigated further as part of detailed engineering design however, preliminary investigations suggest that a safe intersection with Great Southern Highway can be created and an alignment can be found which reduces the vertical incline of McIntosh Road to a point where it is suitable for heavy vehicles.

Servicing Availability

Investigations have confirmed that power, water, telecommunications and road access can be provided to service the proposed industrial lots. These external head works costs are substantial however there are no technical reasons why the services cannot be provided to the site.

Limited Demand for Lots

The limited demand for industrial lots is acknowledged in Denmark however the absence of alternative industrial sites, Council initiatives to relocate some existing industrial uses into the new industrial area and a pricing policy which meets the existing market should result in 5 lots a year being sold in each of the first 3 years.

Funding the Project

The economics of developing industrial land in regional areas is generally beyond the scope of the private sector. In the case of Denmark the State Government has the opportunity to support the development of 15 light industrial blocks that will be a catalyst for additional industrial and economic growth in the community and sub-region. The Cost Benefit Analysis clearly shows that the wider community benefits are significant and the project warrants serious consideration. Obtaining government funding to support the project remains the one fatal flaw in the project.



3.0 IMPLEMENTATION STRATEGY

3.1 Communication Plan

A Detailed Communications Strategy will be prepared by Council or the project manager upon funding being secured and the project commencing. *Figure 11 - Communications Strategy Outline* lists the key stakeholders in the project and identifies the extent of communication required during each phase of the project.

Communications Strategy Outline

Stakeholder	Phase			
	Approvals	Design and Tender	Construction	Sales and Business Establishment
Shire of Denmark	*	*	*	*
Agricultural College	*			
Minister for Education	*			
Community of Denmark	*	*	*	*
Businesses that will be forced to relocate	*		*	*
Businesses that will be encouraged to relocate	*		*	*
Prospective new businesses	*		*	*
Residential lot owners and residents around existing light industrial area	*			
Minister for Regional Development and Lands	*			
Great Southern Development Commission	*	*	*	*
Government servicing agencies (Water, Roads, power, telecommunications)	*	*	*	
Prospective consultants and contractors for the project	*	*	*	

Figure 11 - Communications Strategy Outline

3.2 Procurement Strategy

The Procurement Strategy for the project is based on the principles of:

- Value for money; and,
- Buy Local.

Figure 12 - Procurement Strategy outlines the major services required to deliver the project by phase, how these services are to be provided and the method of procurement in each case.

Procurement will be in a manner consistent with the Local Government Act and Council policy.

Council will undertake such tasks as it has the resources to do so in-house. A decision in respect to undertaking work in-house will be made based on the resources available to Council at the time the services are required.

Where possible, Council will pursue a buy local policy with the selected tender process focusing on consultants and contractors in the district which have a proven record of delivering similar projects.

Procurement Strategy

Services Required	Provided By	Procurement Methodology
Phase 1 - Planning and Environmental Approvals		
Lead Consultant	Council Staff	Council to provide In-House
Project Manager	Council Staff/Consultant	Selected Tender
Town Planning	Consultant	Selected Tender
Environmental, Fire, engineering and water consultants	Consultant	Selected Tender
Valuer	Consultant	Selected Tender
Legal	Consultant	Selected Tender
Phase 2 - Construction Approvals and Tender		
Project Manager	Council Staff/Consultant	Selected Tender
Geotechnical Investigation	Consultant	Selected Tender
Environmental, Fire, engineering and water consultants	Consultant	Selected Tender
Engineering	Consultant	Selected Tender
Survey	Consultant	Selected Tender
Phase 3 - Construction to Titles		
Project Manager	Council Staff/Consultant	Selected Tender
Engineering	Consultant	Selected Tender
Civil Construction Contract	Contractor	Selected Tender
Landscaping	Council Staff	Council to provide In-House
Survey	Consultant	Selected Tender
Phase 4 - Marketing and Sales		
Sales	Consultant	Selected Tender
Marketing	Consultant	Selected Tender
Settlement Agent	Consultant	Selected Tender
Legal	Consultant	Selected Tender

Figure 12 - Procurement Strategy

3.3 Marketing and Sales Strategy

A Marketing and Sales Strategy will be developed by Council, the project manager and appointed marketing and sales consultants.

The Marketing and Sales Strategy will address the following matters:

- Establishing suitable lot sizes to meet market requirements;
- Establishing a lot price which achieves the sales rate identified in the Business Plan;
- A program of pre-sales for lots;
- Addresses the issue of lot sales being subject to development of a site progressing within a nominated timeframe;
- Facilitates the timely relocation of established businesses to the McIntosh Road industrial area;
- Promotes the project to a wider market encouraging new businesses to locate in Denmark; and,
- Acknowledges that the project also encourages new service commercial businesses to locate within the existing light industrial area.

3.4 Governance

The Council of the Shire of Denmark will be responsible for delivery of the Business Plan. As a Local Government it will be required to prepare a Business Plan under *Section 3.59 Commercial Enterprises by Local Governments* of the Local Government Act as the McIntosh Road industrial area project would be considered a major trading undertaking. The provisions of the Local Government Act require financial analysis, impacts on the local community, and the capacity of the local government to manage the undertaking to be investigated and documented for public scrutiny.

Council may choose to engage the services of a project manager to implement the business plan, or portions of the business plan. The extent of tasks that may be allocated to a project manager will be determined by Council after considering its resource capacity at the time the project proceeds.

Financial management of the project will be the responsibility of the Council of the Shire of Denmark with such auditing carried out as may be necessary under the terms of any funding agreement with the State government.

Land acquisition of the portion of Reserve 26565 will be pursued in fee simple as soon as State government funding assistance is secured and the subject land can be alienated from the Crown.

Ultimate responsibility for delivery of the project will rest with the Council of the Shire of Denmark. A program of reporting key performance indicators at agreed milestones will be established at the commencement of the project; recognising any conditions of State government funding.

3.5 Supporting Documents

- Appendix 1 - Extract from the shire of denmark local planning strategy
- Appendix 2 - Agricultural college board letter of support
- Appendix 3 - Adjoining landowner support
- Appendix 4 - Marketing research
- Appendix 5 - Static analysis
- Appendix 6 - Anticipated conditions of subdivision approval
- Appendix 7 - Engineering cost estimates
- Appendix 8 – Cost Benefit Analysis

4.0 RECOMMENDATION OF PREFERRED OPTION

4.1 Preferred Option

The recommended option is for the Council of the Shire of Denmark to provide improved opportunities for industrial development in Denmark without compromising the quality of life valued so highly by the local community by creating a 42.572ha, 60 Lot industrial area at the intersection of McIntosh Road and Great Southern Highway and pursuing a 1st stage of subdivision consisting of 15 lots on 12.560ha of land to be purchased from the Denmark Agricultural College site.

This option is determined by Council to be the most appropriate on the basis that:

- There is currently no industrial land available for development in Denmark;
- The project overcomes a ten year exercise to identify and develop a new industrial area;
- The project helps overcome operational and land use issues with the existing light industrial area;
- Cost benefit analysis clearly demonstrates a substantive community benefit generated by the project; and,
- The project fulfils State, regional and district policy objectives.

4.2 Sign-off

Signed

Chief Executive Officer

Date

Signed

Shire President

Date

APPENDIX 1

EXTRACT FROM THE SHIRE OF DENMARK LOCAL PLANNING STRATEGY



Extract from the Shire of Denmark Local Planning Strategy

2.0 Vision

Economic Development

The role of Council is to help foster the economic development of the Shire while promoting and maintaining the concerns for the environment and the local community. It is not the role of the Council to organise economic development, but it can facilitate and advise on the desirability of development. Economic development needs to be consistent with the values of the community and recognising the historical context when considering potential development. The most prominent goal is to foster an increased entrepreneurial culture that consciously plans business and development initiatives within sustainability values, thereby managing a balance of local and externally funded initiatives. While innovation is important, existing industries such as farming, viticulture, fishing and tourism need to be seen as important ventures that are at the basis of the economic life of the community.

4.3 Future Industry

Objective

- To identify a new industrial area that will provide sufficient and adequately serviced land available for a range of industrial activities to broaden the employment opportunities close to the Denmark townsite.
- To phase in mixed business type development within the existing Light Industrial Area (LIA).

Strategies

- a. Identify a new industrial park located on McIntosh Road within the Education Department's (Agriculture College) landholding and a portion of privately owned land to facilitate future industrial development. Council needs to continue negotiations with the State Government (State Land Services on behalf of Education Department), the Board of the Denmark Agricultural College and the private land owner in order to facilitate transfer of the State land to ownership of the Shire of Denmark.
- b. The Shire needs to either, enter into dialogue with LandCorp to secure it as a potential partner to undertake the subdivision and development works to prepare industrial lots for sale or consider the options of entering into a Joint Venture with a private developer, undertaking the project management itself, or selling the industrial park *en globo* to a private developer. The Shire will need to put in place appropriate measures and/or investigate employment of appropriate staff in regard to implementation of the last three options.
- c. Industrial uses should be phased out of the existing LIA to remove any land use conflicts. Existing industrial uses should be encouraged to relocate to the new industrial park once lots are available. Investigation needs to be undertaken to consider what form of 'mixed business' zoning/land use is to replace the existing LIA. Given the current built infrastructure, the form of mixed business development that should be considered is that of a showroom and service/light industrial nature. Caretaker's dwelling may then be able to be considered as the land use conflicts associated with not allowing caretaker's dwellings within the existing LIA are removed.

Implementation

1. Council zone the future industrial park identified in the Local Planning Strategy to "Industrial". The rezoning is to contain broad design criteria (i.e. lot sizes) to inform the Local Structure Plan process and it to review the use class table to allow for a variety of industries including the possibility of supporting a mixed use of residences and workshops where visible from the South Coast Highway to retain the appearance of rural land and graduating to industrial uses where not visible from the highway.
2. Council continue negotiations with the State and Board of the Denmark Agricultural College to transfer ownership of the State owned land identified as the new industrial park to the Shire.
3. Council enter into discussions with the Water Corporation and Western Power to agree to a timing program for the extension of adequate services to the industrial park.
4. Council promote partnerships in the subdivision and development of the new industrial park.
5. Council undertake a detailed assessment of the long term planning options for the existing LIA to facilitate a mixed use development, including appropriate zoning and development provisions that would need to be introduced into the Town Planning Scheme to facilitate the development outcomes.
6. Council investigate the possibility of acquiring the existing vacant crown land presently zoned industrial to the south of Zimmerman Street for the purposes of including it in the future proposed 'Mixed Business Area' and rezoning accordingly for this purpose.
7. Council investigate the logistics and possibility of relocating the existing Shire Depot operations from the existing Denmark LIA to the proposed new Industrial Park which will also free up land for the 'Mixed Business Area'.
8. Council encourage the relocation of the Main Roads Depot operations from the existing Denmark LIA to the proposed new Industrial Park which will also free up land for the 'Mixed Business Area'.

APPENDIX 2
AGRICULTURAL COLLEGE BOARD
LETTER OF SUPPORT





Agricultural Advisory Committee

23 March 2010

Mr Dale Stewart
Chief Executive Officer
Shire of Denmark
South Coast Hwy
Denmark 6333
WA

Dear Mr Stewart

Re: Industrial Land

Shire of Denmark	
ICR104635	
21 APR 2010	
Hx0.1	
DATE	CPH
FILE REF	
COUNCILLORS	
CEO	✓
DIR of FINANCE	
DIR of PLANNING	✓
DIR of INFRASTRUCTURE	
DIR of COMMUNITY	
OTHER	

In response to your letter dated the 18th March the College Agricultural Advisory Committee agrees to allow council to proceed with rezoning of the agreed piece of land, based on the following understandings:

- That valuation will be based on existing zoning;
- That existing usage rights of the farm will not be impacted upon;
- That all costs incurred with the rezoning will be met by council;
- That the land will be revalued immediately prior to settlement or in the case of money advanced prior to settlement, at that time (as discussed with yourselves at our Advisory Meeting).

This committee has concerns in relation to the stated timeframe and would appreciate it if council could assist with expediting this process to enable the construction of the new dairy as soon as possible.

The committee also requests that council consider starting earthworks as soon as we have firm commitment to purchase and within the 2010/2011 financial year.

Yours faithfully

Philip Marshall
Chairperson
WA College of Agriculture: Denmark
Agricultural Advisory Committee

CC Minister for Education, Dr Elizabeth Constable
Minister for Agriculture and Food, Mr Terry Redman
Director of Agricultural Education, Geoff Moyle

APPENDIX 3

ADJOINING LANDOWNER SUPPORT





South Coast Highway, Denmark, Western Australia 6333

Tel (08) 9848 0300 Fax (08) 9848 1985

Shire of Denmark ICR10103530	
22 OCT 2010 PLN.9	
DATE	LPH
FILE REF	
COUNCILLORS	
CEO	✓
DIR of FINANCE	
DIR of PLANNING	✓
DIR of INFRASTRUCTURE	✓
DIR of COMMUNITY	
OTHER	

Our Ref: PLN9 SW/KR
Enquiries: Sam Williams

20th September 2010

Roger and Katrina Hithersay
652 South Coast Highway
Denmark WA 6333

Dear Mr. and Mrs. Hithersay

Re: Rezoning Lot 652 South Coast Highway, Denmark from Rural to Industrial

I refer to the meeting held at the Shire of Denmark on the 6 May 2010, which was attended by Katrina Hithersay, Ross Thornton, Sam Williams and myself, regarding the possibility of rezoning a portion of your landholding from 'Rural' to 'Industrial' under the Shire of Denmark's Town Planning Scheme No.3.

As a way of background, I confirm the meeting was initiated from correspondence sent from this office on the 15 April 2009 whereby Council was seeking your support for the rezoning or the sale of the northern portion (approximately 8 hectares, with the final area to be determined) of your land for light industrial uses to complement Council's proposed light industrial area north of your landholding.

In confirming the outcome of this meeting I understood the following:

1. You were supportive of the principle of rezoning the northern portion of your land holding to facilitate light industrial uses on the proviso Council would be supportive of the subdivision of the front portion of your property.
2. We agreed with the principle of subdividing the front portion of your land holding, but discussed that with the current rural zoning the Western Australian Planning Commission (the authority that controls land subdivision) would be unlikely to be supportive.

All communications to:

Chief Executive Officer, PO Box 183, Denmark WA 6333
Email: denmarkshire@wa.gov.au
www.denmark.wa.gov.au

3. *It was suggested the front portion could be rezoned to 'Rural Residential' to allow for 1ha-4ha subdivision, but was determined this rezoning would be unlikely to be supported.*
4. *It was finally agreed that the best way to facilitate the subdivision of the balance, or front portion of your property, would be to rezone your entire property to 'Industrial', which would enable the subdivision into say 5 'superlots', or development into smaller industrial lots if you deem necessary.*

To progress with the above actions the process to enable the rezoning and development of your property would be as follows:

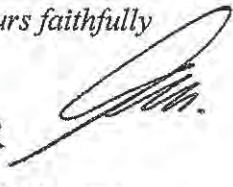
1. *An item will be put forward to Council requesting support for the initiation of an Amendment to Town Planning Scheme No.3 to rezone your land and the Agricultural College to Industrial. Note; this will require a conceptual subdivision development plan, a geotechnical report and water management plan over your site, with the cost for the preparation of this being borne entirely by Council.*
2. *Following the necessary State Government and Minister for Planning approvals the site will be rezoned to Industrial, which will enable the preparation the lodgement of a subdivision application over your land. The preparation of the subdivision application will enable the subdivision of your land to permit the agreed northern portion to be either sold to Council or another party, or developed by yourself and the balance of the southern portion of your land to be subdivided into 'superlots'.*

Should you agree with your land being included in a rezoning Scheme Amendment from 'Rural' to 'Industrial' under the Shire of Denmark's Town Planning Scheme No.3, please sign in the location identified below and return a copy back to this office. By signing this you will be authorising Council to act on your behalf in the submission of a Scheme Amendment to rezone your land at no expense to yourself. This correspondence is simply seeking your preliminary support and is in no ways a legal binding obligation or commitment, other than to initiate a rezoning.

On a side note, I advise that Council has resolved to investigate a 'tip site' on Council's proposed Industrial land to the north of your landholding abutting the aerodrome and I understand you have concerns regarding this. I can advise at this stage Council are only investigating this opportunity and any further progression on this matter will be subject to extensive land investigations and community comment and indeed a separate Scheme Amendment process if it is determined compatible with the nearby uses of winery, light industry, aerodrome and Special Rural.

I look forward to your response to this correspondence. In the meantime, should you require further information or advice on this matter please contact the undersigned or Sam Williams on telephone (08) 9848 0300 or email enquiries@denmark.wa.gov.au.


Yours faithfully

PP. 

Dale Stewart
Chief Executive Officer

'We, Roger and Katrina Hithersay, hereby agree to the Shire of Denmark initiating an Amendment to their Town Planning Scheme No.3. to rezone our landholding from 'Rural' to 'Industrial'


Roger J Hithersay Date 16.10.10


Katrina M Hithersay Date 16.10.2010

APPENDIX 4

MARKETING RESEARCH



From: [Kim Barrow](#)
To: [Stuart Thompson](#)
Subject: McIntosh Road Industrial Area
Date: Wednesday, 13 February 2013 1:10:26 PM
Attachments: [Document \(15\).pdf](#)

Hi Stuart

In answer to your request I submit the following opinions based on my best guess.

I believe that a rate per square metre for the first 15 lots would be around \$30.00 for the 8 smaller lots giving a price per lot around \$150,000.

The 7 larger lots around I believe would be around \$170,000 per lot.

I would hope that at these prices the 15 lots would sell over the 3 year time frame.

I believe the take up of 60 lots over the 9 years is ambitious. Possibly a 15 year time frame would be more realistic.

The impact on Willoughby Park/Boston Brewery would, in my opinion, be minimal with the more industrial uses being to the North and East of their operation.

The improvement to the amenity of the land surrounding the present Light Industrial Area should result in an improvement in value of the residential properties.

I would suggest an improvement of \$1,500 per lot over a 3 year period could be achieved.

Similarly the lots on the haulage route would improve by \$2,000 per lot over the 3 year period. Please note the roads marked to the West of Ocean Beach Road on the plan are not haulage routes. The Structure Plan for that area have not been completed however I understand the Council does not wish to make them feeder roads to Ocean Beach Road.

In closing I hope this is enough information to build the case. The main uses seem to be a Shire Depot, Concrete Batching Plant and some Eathmoving and Transport operations. Hopefully the new Industrial Area will attract some new industries to the Town.

If you have any further questions please don't hesitate to call

Regards

Kim Barrow
Ray White Denmark

APPENDIX 5

STATIC ANALYSIS



Static Analysis McIntosh Road Industrial Area Denmark

Date 30 January 2013
Stage 1
Lot Yield 15

Item	Estimate	Original Budget GST	Total	Notes
EXPENSES				
Phase 1 - Planning and Environmental Approvals				
Lead Consultant				
Business Case Preparation	\$20,000.00	\$2,000.00	\$22,000.00	Quote
Project Coordination (Strategic Planning, Procurement and Delivery)	\$10,000.00	\$1,000.00	\$11,000.00	Quote
Town Planning				
Town Planning Scheme Amendment (Rezoning)	\$10,000.00	\$1,000.00	\$11,000.00	Quote
Subdivision concept review	\$10,000.00	\$1,000.00	\$11,000.00	Quote
Subdivision Design Stage 1	\$5,000.00	\$500.00	\$5,500.00	Quote
Subdivision Application Fees Stage 1	\$2,078.00	\$207.80	\$2,285.80	Estimate
Environmental and Fire				
Vegetation Assessment (inc Spring Survey)	\$0.00	\$0.00	\$0.00	Not Required
Fauna Survey	\$0.00	\$0.00	\$0.00	Not Required
Local Water Management Strategy	\$20,000.00	\$2,000.00	\$22,000.00	Quote
Groundwater Monitoring	\$15,000.00	\$1,500.00	\$16,500.00	Quote
Suitability for Onsite Effluent Disposal Report	\$11,000.00	\$1,000.00	\$11,000.00	Provisional Sum
Fire Impact Assessment	\$2,000.00	\$200.00	\$2,200.00	Quote
Land Acquisition and On-Costs				
Land Value	\$550,000.00	\$55,000.00	\$605,000.00	Provisional Sum
Stamp Duty	\$0.00	\$0.00	\$0.00	Not Required
Superlot Subdivision Application	\$5,000.00	\$500.00	\$5,500.00	Provisional Sum
Superlot Subdivision Costs	\$20,000.00	\$2,000.00	\$22,000.00	Provisional Sum
Rates and taxes until subdivision	\$0.00	\$0.00	\$0.00	No allowance made
Contingency	\$21,000.00	\$2,100.00	\$23,100.00	Contingency
Phase 2 - Construction Approvals and Tender				
Project Manager				
Project Management (Strategic Planning, Procurement and Delivery)	\$10,000.00	\$1,000.00	\$11,000.00	Quote
Geotechnical Investigation				
Site Geotech for roads and construction	\$15,000.00	\$1,500.00	\$16,500.00	Quote
Environmental and Fire				
Urban Water Management Plan	\$10,000.00	\$1,000.00	\$11,000.00	Quote
Fire Management Plan	\$5,500.00	\$550.00	\$6,050.00	Quote
Drainage Strategy Stage 1	\$7,000.00	\$700.00	\$7,700.00	Quote
Engineering				
Design Fees and Tender	\$44,620.00	\$4,462.00	\$49,082.00	Quote
Acid Sulphate Soils Management Plan	\$0.00	\$0.00	\$0.00	Not Required
Power Design Fees	\$3,750.00	\$375.00	\$4,125.00	Quote
Survey				
Feature Survey	\$6,000.00	\$600.00	\$6,600.00	Quote
Precal	\$3,500.00	\$350.00	\$3,850.00	Quote
Contingency	\$3,000.00	\$300.00	\$3,300.00	Quote
Phase 3 - Construction to Titles				
Project Manager				
Project Management (Strategic Planning, Procurement and Delivery)	\$50,000.00	\$5,000.00	\$55,000.00	Quote
Advice to Purchasers	\$2,000.00	\$200.00	\$2,200.00	Provisional Sum
70A Notifications	\$2,000.00	\$200.00	\$2,200.00	Provisional Sum
Engineering				
Supervision Fees	\$66,930.00	\$6,693.00	\$73,623.00	Quote
Civil Construction Contract				
Preliminaries	\$150,000.00	\$15,000.00	\$165,000.00	Based on Quantities and Rates
Site works	\$91,998.00	\$9,199.80	\$101,197.80	Based on Quantities and Rates
Retaining walls	\$0.00	\$0.00	\$0.00	Based on Quantities and Rates
Agricultural fencing to rear and sides of superlot	\$7,840.00	\$784.00	\$8,624.00	Based on Quantities and Rates
Stormwater Drainage	\$398,340.00	\$39,834.00	\$438,174.00	Based on Quantities and Rates
Roadworks	\$372,198.00	\$37,219.80	\$409,417.80	Based on Quantities and Rates
Water Supply	\$56,774.00	\$5,677.40	\$62,451.40	Based on Quantities and Rates
Acid Sulphate Soil and Dewatering	\$0.00	\$0.00	\$0.00	Not Required
Power Supply/ Lighting/Telstra/NBN	\$932,250.00	\$93,225.00	\$1,025,475.00	Based on Quantities and Rates
Contingency @ 20%	\$401,880.00	\$40,188.00	\$442,068.00	Contingency
External Headworks Contributions and Works				
Water Supply Mains Extension	\$392,107.00	\$39,210.70	\$431,317.70	Based on Quantities and Rates
McIntoch Road Upgrading south to Great Southern Hwy	\$737,392.00	\$73,739.20	\$811,131.20	
McIntoch Road Upgrading north to East River Intersection	\$654,375.00	\$65,437.50	\$719,812.50	Based on Quantities and Rates
Great Southern Highway Intersection Upgrade	\$251,178.00	\$25,117.80	\$276,295.80	Based on Quantities and Rates
Power Supply Upgrading	\$85,000.00	\$8,500.00	\$93,500.00	Provisional Sum
Landscaping (\$4,000 per lot)				
	\$60,000.00	\$6,000.00	\$66,000.00	Provisional Sum

**Static Analysis
McIntosh Road Industrial Area
Denmark**

Date 30 January 2013
Stage 1
Lot Yield 15

Item	Estimate	Original Budget GST	Total	Notes
Shire Fees				
Shire Clearances @ \$69/lot	\$1,035.00	\$103.50	\$1,138.50	Based on existing current fees
Road/POS Contribution	\$0.00	\$0.00	\$0.00	Not required
Council Supervision @1.5% roads, drains & earthworks	\$13,461.00	\$1,346.10	\$14,807.10	Calculation
Maintenance Bond (2.5%)	\$22,090.00	\$2,209.00	\$24,299.00	Calculation
Other Community Contributions	\$0.00	\$0.00	\$0.00	Not Required
Western Power Fees				
Fees and Charges	\$2,573.00	\$257.30	\$2,830.30	Based on existing current fees
Water Corporation				
Water Headworks	\$60,225.00	\$0.00	\$60,225.00	Based on existing current fees
Sewer Headworks	\$0.00	\$0.00	\$0.00	Not required
Connection Fee	\$1,500.00	\$0.00	\$1,500.00	Based on existing current fees
Planning Fee	\$3,750.00	\$0.00	\$3,750.00	Based on existing current fees
Section 76 agreement	\$0.00	\$0.00	\$0.00	Not Required
Survey				
Pegging	\$12,500.00	\$1,250.00	\$13,750.00	Careful Estimate
Clearances	\$2,500.00	\$250.00	\$2,750.00	Careful Estimate
Fees	\$2,500.00	\$250.00	\$2,750.00	Based on existing current fees
Phase 4 - Marketing and Sales				
Sales				
Commission @ 3% of Sales	\$71,700.00	\$7,170.00	\$78,870.00	Careful Estimate
Marketing				
Brochure preparation and printing	\$2,000.00	\$200.00	\$2,200.00	Provisional Sum
Advertising (\$2,000/lot)	\$30,000.00	\$3,000.00	\$33,000.00	Provisional Sum
Signage	\$5,000.00	\$500.00	\$5,500.00	Provisional Sum
Settlement Agent				
Settlements @ \$700/lot	\$10,500.00	\$1,050.00	\$11,550.00	Careful Estimate
Application For Titles	\$2,000.00	\$200.00	\$2,200.00	Careful Estimate
Legal Fees				
Restrictive Covenant/ Notifications	\$2,000.00	\$200.00	\$2,200.00	Provisional Sum
Holding Costs (12 Months)				
Rates, Taxes (10 lots for 1 years, 5 lots for 1 years)	\$15,000.00	\$0.00	\$15,000.00	GST Exempt
Land Tax	\$0.00	\$0.00	\$0.00	No Land Tax Payable
Interest	\$0.00	\$0.00	\$0.00	No allowance made
Total Development Costs	\$5,781,044	\$570,057	\$6,351,101	Calculation
INCOME				
Gross Income			\$2,390,000	
Less GST on Sales		\$217,273	\$2,172,727	
Less Development Costs		\$6,351,101	-\$4,178,374	
Plus GST on Development Costs		\$570,057	-\$3,608,317	
Plus Return of Maintenance Bond		\$24,299	-\$3,584,018	
INCOME less EXPENCES			-\$3,584,018	

Revisions	Date	DISCLAIMER
Draft for Client Review	15-Feb-13	The information provided in this estimate expresses the results of preliminary investigations only. Detail design has not been undertaken in preparation of this estimate. It is provided to the reader as background material and to provide general assessment on possible project costs. No information in this estimate should be regarded as final or conclusive and the reader should not use this report as the basis for budgeting or investment decisions without obtaining independent analysis or detailed studies from the authors. The reader must acknowledge the underlying premise on which the information has been prepared may change significantly as a result of changes in State or Local Government or Departmental Policy, changing advice of officers in the bodies consulted, unforeseen geotechnical problems and latent conditions during the construction phase of the project, changes in market demands and variations in the wider Australian or world economies.

Static Analysis

Date 30 January 2013

McIntosh Road Industrial Area

Stage 1

Denmark

Lot Yield 15

	Average Lot	Overall
Gross Income	\$159,333	\$2,390,000
10% GST (1/11*Income)	\$14,485	\$217,273
Net Income	\$144,848	\$2,172,727

Lot No	No. of Lots	Base Lot Price	Escalation %	New Lot Price
	15		0.00%	\$2,390,000
1	1	\$150,000	\$0	\$150,000
2	1	\$150,000	\$0	\$150,000
3	1	\$150,000	\$0	\$150,000
4	1	\$150,000	\$0	\$150,000
5	1	\$150,000	\$0	\$150,000
6	1	\$170,000	\$0	\$170,000
7	1	\$170,000	\$0	\$170,000
8	1	\$170,000	\$0	\$170,000
9	1	\$170,000	\$0	\$170,000
10	1	\$170,000	\$0	\$170,000
11	1	\$150,000	\$0	\$150,000
12	1	\$150,000	\$0	\$150,000
13	1	\$150,000	\$0	\$150,000
14	1	\$170,000	\$0	\$170,000
15	1	\$170,000	\$0	\$170,000

APPENDIX 6

ANTICIPATED CONDITIONS OF SUBDIVISION APPROVAL



Anticipated Conditions of Subdivision Approval

The following draft subdivision conditions are anticipated to be applied to subdivision of the McIntosh Road Industrial Area and have been used as a basis for determining subdivision requirements and development costs:

Amenity Conditions	
1	<p>A notification, pursuant to Section 165 of the <i>Planning and Development Act 2005</i> is to be placed on the certificates of title of the proposed lot(s) advising of the existence of a hazard or other factor. Notice of this notification is to be included on the diagram or plan of survey (deposited plan). The notification is to state as follows:</p> <p><i>“This lot is situated in the vicinity of (insert Airport), and is currently affected, or may in the future, be affected by aircraft noise. Noise exposure levels are likely to increase in the future as a result of increases in numbers of aircraft using the airport, changes in aircraft type or other operational changes. Further information about aircraft noise, including development restrictions and noise insulation requirements for noise-affected properties, are available on request from the relevant local government offices.”</i> (Western Australian Planning Commission)</p>
Buildings and Use Conditions	
2	Uniform fencing being constructed along the boundaries of all of the proposed lots abutting Denmark Agricultural School. (Local Government)
Drainage and Site Works Conditions	
3	<p>Engineering drawings and specifications are to be submitted, approved, and works undertaken in accordance with the approved engineering drawings, specifications and approved plan of subdivision, for grading and/or stabilisation of the site to ensure that:</p> <ul style="list-style-type: none"> a) Lots can accommodate their intended use; and, b) Finished ground levels at the boundaries of the lot(s) the subject of this approval match or otherwise coordinate with the existing and/or proposed finished ground levels of the land abutting. (Local Government)
4	Prior to the commencement of subdivisional works, an urban water management plan is to be prepared and approved, in consultation with the Department of Water, consistent with any approved Local Water Management Strategy/Drainage and Water Management Plan. (Local Government)
5	Engineering drawings and specifications are to be submitted and approved, and works undertaken in accordance with the approved engineering drawings and specifications and approved plan of subdivision, for the filling and/or draining of the land, including ensuring that stormwater is contained on-site, or appropriately treated and connected to the local drainage system. Engineering drawings and specifications are to be in accordance with an approved Urban Water Management Plan (UWMP) for the site, or where no UWMP exists, to the satisfaction of the Western Australian Planning Commission. (Local Government)
Electricity and Gas Pipeline Conditions	
6	Arrangements being made to the satisfaction of the Western Australian Planning Commission and to the specification of Western Power for the provision of an underground electricity supply to the lot (s) shown on the approved plan of subdivision. (Western Power)
7	The transfer of land for the purpose of electricity supply infrastructure to be shown on the diagram or plan of survey (deposited plan) as a reserve and vested in the Crown under Section 152 of the <i>Planning and Development Act 2005</i> , such land to be ceded free of cost and without payment of compensation. (Western Power)

Fire and Emergency Conditions	
8	The landowner/applicant is to prepare, have approved by the Fire and Emergency Services Authority, and implement a detailed plan demonstrating the location and capacity of fire emergency infrastructure to the satisfaction of the Western Australian Planning Commission. (Fire and Emergency Services Authority, Local Government)
9	A fire management plan being prepared, approved and relevant provisions implemented during subdivisional works, in accordance with the WAPC's <i>Guideline Planning for Bushfire Protection Edition 1, May 2010 (in particular Appendix 3)</i> to the specifications of the local government and the Fire and Emergency Services Authority. (Fire and Emergency Services Authority, Local Government)
10	A notification, pursuant to section 70A of the <i>Transfer of Land Act 1893</i> is to be placed on the certificate(s) of title of the proposed lot(s). Notice of this notification is to be included on the diagram or plan of survey (deposited plan). The notification is to state as follows: "The lot(s) is/are subject to a fire management plan." (Local Government)
Transport, Road and Access Conditions	
11	Engineering drawings and specifications are to be submitted, approved, and subdivisional works undertaken in accordance with the approved plan of subdivision, engineering drawings and specifications, to ensure that those lots not fronting an existing road are provided with frontage to a constructed road(s) connected by a constructed road(s) to the local road system and such road(s) are constructed and drained at the landowner/applicant's cost. As an alternative, and subject to the agreement of the Local Government the Western Australian Planning Commission (WAPC) is prepared to accept the landowner/applicant paying to the local government the cost of such road works as estimated by the local government and the local government providing formal assurance to the WAPC confirming that the works will be completed within a reasonable period as agreed by the WAPC. (Local Government)
12	Satisfactory arrangements being made with the local government for the full cost of upgrading and/or construction of McIntosh Road from Great Southern Highway to River Road to a standard acceptable to Council (Local Government)
13	All local streets within the subdivision being truncated in accordance with the Western Australian Planning Commission's <i>DC 4.1 Industrial Subdivision</i> . (Local Government)
14	Suitable arrangements being made with the local government for the provision of vehicular crossover(s) to service the lot(s) shown on the approved plan of subdivision. (Local Government)
Water and Sewer Conditions	
15	Arrangements being made with the Water Corporation so that provision of a suitable water supply service will be available to the lots shown on the approved plan of subdivision. (Water Corporation)
16	A notification, pursuant to Section 70A of the <i>Transfer of Land Act 1893</i> is to be placed on the certificate(s) of title of the proposed lot(s). Notice of this notification is to be included on the diagram or plan of survey (deposited plan). The notification is to state as follows: "A mains sewer service is not available to the lot/s." (Local Government)

APPENDIX 7

ENGINEERING COST ESTIMATES



Denmark Industrial Area

Engineering Notes and Qualifications

A GENERAL NOTES

- Site appears to reasonable sands and porosity (Dept Agriculture description – to be confirmed by way of geotech).
- Extent of rock unknown and items inserted are purely guesswork.

B SERVICE QUALIFICATIONS

1.0 STAGE 1

1.1 Siteworks

- No fill to lots provided

1.2 Fencing

- Stock fence to Stage 1 perimeter only (excludes road frontage)

1.3 Drainage

- Bioretention gardens allowed for (equivalent to 6% impervious surface)
- Pipe diameters are estimated only (no calculations undertaken)
- Internal swale drains to sides of lots will ensure no runoff enters adjoining lot
- Rear swale collects runoff and ensures no uncontrolled inundation to adjacent property
- Assumes all approvals will be obtained for drainage basin in adjacent property.

1.4 Roads

- Internal roads kerbed, asphalted and 300 thick gravel base
- No allowance for DUPs.
- No allowance for crossovers to lots
- Assume no requirement for strategic fire breaks (lots will be mostly cleared)

1.5 Water

- 150dia mains, hydrants at 100m centres

1.6 Acid Sulphate

- Low risk area – no allowance made for ASS

1.7 Power

- \$55,000 per lot for materials
- Trenching included in water section (common trench)

1.8 Supervision Fees

- Includes Stage 1 works only (i.e. no external roads or drainage)

2.0 EXTERNAL HEADWORKS – STAGE 1

2.1 Roads

- East River Road is to be realigned to a 90 degree intersection (as stated in the Business Plan).
- No widening of existing East River Road included.
- Construction of 1,530m of McIntosh and East River Roads with works terminating at the southern boundary of Stage 1.
- Assumes all necessary clearing permits will be achieved.
- No overhead power relocation included (O/H visible on Google Earth – pole locations unknown).

2.2 Water

- Watermain alignment is not allowed within the MRWA reserve as South Coast Highway is a controlled access road. It is assumed (as per upstream pipework) that this main is to be laid within adjacent property. Assumed all approvals (tenure and clearing) are obtained. Reinstatement of stock fencing allowed in estimate.
- A lump sum is allowed for extra depth excavation in the location of the McIntosh realignment to cater for the road and verge being in significant cut. Extent of road unknown.
- Assume the 700m of 250mm diameter main and pressure reducing valve (as noted in the Business Plan as conveyance and pressure infrastructure) are not included as the Shire is going to challenge this cost.
- Water headworks can be apportioned to all lots even though the upgrade is to be constructed for Stage 1.

2.3 Power

- Awaiting reinforcement works estimate from W Power. Amount inserted has no basis in terms of works required and purely inserted as per a similar project in Hyden.

3.0 EXTERNAL HEADWORKS – STAGES 2 and 3

3.1 Roads

- Only a very basic assessment of a potential realignment of McIntosh at the steep section from South Coast Highway has been undertaken. This proposed alignment needs further detailed analysis to prove up sight distance, acceptable radii etc. No allowance made for barriers – assumes majority of road realignment is in cut.
- No lighting allowed for intersection on South Coast Highway, improvements consist of widening for turning pockets only.



Town Planning Management Engineering

PROPOSED SUBDIVISION: DENMARK McINTOSH RD INDUSTRIAL

PRELIMINARY COST ESTIMATE

JOB NUMBER: 12219E

South West
rates

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>UNIT</u>	<u>ESTIMATED QTY</u>	<u>ESTIMATED RATE</u>	<u>ESTIMATED TOTAL</u>
SITWORKS					
CLEARING					
	Clearing, Grubbing and Mulch On Site	m ²	15000	\$ 1.20	\$ 18,000.00
DEMOLITION					
	Remove Fences and Dispose	m	600	\$ 2.00	\$ 1,200.00
EARTHWORKS					
	Strip and Stockpile Topsoil	m ²	15000	\$ 0.38	\$ 5,700.00
	Cut / Fill Sand	m ³	3000	\$ 4.50	\$ 13,500.00
	Cut / Fill Clay	m ³	500	\$ 6.00	\$ 3,000.00
	Remove Unsuitable Material Off Site and Replace with Clean Compacted Sand Fill	Prov. m ³	417	\$ 24.00	\$ 10,008.00
	Remove and Dispose Coffee Rock Off Site	Prov. m ³	250	\$ 70.00	\$ 17,500.00
	Respread Topsoil to Verges	m ²	7400	\$ 0.50	\$ 3,700.00
DUST CONTROL SITE CLASSIFICATION 4					
	Prepare Dust Management Plan	Item	1	\$ 1,800.00	\$ 1,800.00
	Implement DMP	Sum	1	\$ 15,000.00	\$ 15,000.00
	Soil Stabilisation Hydromulch	m ²	7400	\$ 0.35	\$ 2,590.00
SUBTOTAL SITWORKS					\$ 91,998.00
FENCING					
SUPPLY AND INSTALL COMPLETE FENCES					
	Stock fence to perimeter of Stage 1	m	1120	\$ 7.00	\$ 7,840.00
SUBTOTAL FENCING					\$ 7,840.00

STORMWATER DRAINAGE**PIPEWORK EXCAVATE/SUPPLY/LAY**

300 Dia Class 2

375 Dia Class 2

450 Dia Class 2

525 Dia Class 2

750 Dia Class 2

EXCAVATION IN OTHER MATERIALS

Remove and Dispose Coffee Rock and Backfill with Sand

PROPERTY CONNECTIONS

900 Dia Lot connection pit

225 Dia SWP

SUBSOIL DRAINAGE

150 PVC Subsoil Drain in Drainage Trench

PITS 1050 DIA TO SUIT PIPES UP TO 450 DIA

Single Side Entry Pits

PITS 1500 DIA (OR BRICK AND 1050 DIA) TO SUIT PIPES 750 TO 1050 DIA

Grated Pit

SCOUR PROTECTION

Loose Rock Pitching

Grouted Rock Drain

Ungouted Rock Drain

OUTLETS

525 Dia Outlet

750 Dia Outlet

DRAINAGE BASIN / WETLAND

Earthworks

BIORETENTION SWALES

Bioretention Swale- roadside garden including soil and kerb, excluding plants

OTHER

Graded Drains

Table Drains

m	390	\$	165.00	\$	64,350.00
m	270	\$	175.00	\$	47,250.00
m	0	\$	185.00	\$	-
m	110	\$	230.00	\$	25,300.00
m	30	\$	350.00	\$	10,500.00
Pm	150	\$	160.00	\$	24,000.00

No.	10	\$	1,000.00	\$	10,000.00
m	150	\$	84.00	\$	12,600.00

m	700	\$	70.00	\$	49,000.00
---	-----	----	-------	----	-----------

No.	18	\$	1,950.00	\$	35,100.00
-----	----	----	----------	----	-----------

No.	1	\$	4,000.00	\$	4,000.00
-----	---	----	----------	----	----------

m ²	200	\$	40.00	\$	8,000.00
m	100	\$	82.00	\$	8,200.00
m	60	\$	69.00	\$	4,140.00

No.	2	\$	2,300.00	\$	4,600.00
No.	1	\$	3,500.00	\$	3,500.00

Item	1	\$	8,000.00	\$	8,000.00
------	---	----	----------	----	----------

m2	400	\$	150.00	\$	60,000.00
----	-----	----	--------	----	-----------

m	420	\$	30.00	\$	12,600.00
m	720	\$	10.00	\$	7,200.00

SUB TOTAL STORMWATER DRAINAGE**\$ 398,340.00****INTERNAL ROADWORKS - STAGE 1**

Subgrade Preparation

PAVEMENT TYPES / FINISHES

300 Thk Gravel Base

300 Thk Sand to Subgrade Including Removal and Disposal of Unsuitable Material

SEAL TYPES

Primer Seal / First Coat Seal

25mm AC10 Black

40mm Intersection Mix

KERB TYPES

Mountable Kerb

Semi Mountable Kerb

extra over keyed kerbing

SIGNAGE

Street Sign Post - Decorative

Street Sign Plate - Decorative

Chevron Boards

Advance Warning Sign

LINEMARKING - PAINT AND BEAD

White Lining Give Way

RAISED PAVMENT MARKERS

Raised Pavement Markers

OTHER

Grade Verges / Backfill to Kerbs

Temporary Gravel Turnaround

m ²	7600	\$	3.00	\$	22,800.00
----------------	------	----	------	----	-----------

m ²	7600	\$	21.00	\$	159,600.00
Prov. m²	500	\$	10.50	\$	5,250.00

m ²	7180	\$	4.13	\$	29,653.40
m ²	6200	\$	14.00	\$	86,800.00
m ²	1500	\$	20.00	\$	30,000.00

m	1300	\$	18.00	\$	23,400.00
m	250	\$	15.60	\$	3,900.00
m	250	\$	6.50	\$	1,625.00

No.	3	\$	300.00	\$	900.00
No.	3	\$	230.00	\$	690.00
No.	3	\$	480.00	\$	1,440.00
No.	6	\$	190.00	\$	1,140.00

m	20	\$	25.00	\$	500.00
---	----	----	-------	----	--------

No.	10	\$	30.00	\$	300.00
-----	----	----	-------	----	--------

m	1500	\$	2.00	\$	3,000.00
No.	1	\$	1,200.00	\$	1,200.00

SUBTOTAL ROADWORKS**\$ 372,198.40**

EXTERNAL ROADWORKS (Stage 1 - East River/McIntosh Road int and 1,530m McIntosh Road)

Clearing
Subgrade Preparation
Cut / Fill Clay

m ²	23200	\$	1.20	\$	27,840.00
m ²	15660	\$	3.00	\$	46,980.00
m ³	1800	\$	6.00	\$	10,800.00

PAVEMENT TYPES / FINISHES

300 Thk Gravel Base
300 Thk Sand to Subgrade Including Removal and Disposal of Unsuitable Material

m ²	15660	\$	21.00	\$	328,860.00
Prov. m²	3060	\$	10.50	\$	32,130.00

SEAL TYPES

Primer Seal / First Coat Seal
Second Coat Seal - 12 months later
40mm Intersection Mix

m ²	14100	\$	4.50	\$	63,450.00
m ²	13350	\$	5.00	\$	66,750.00
m ²	750	\$	20.00	\$	15,000.00

KERB TYPES

Semi Mountable Kerb
extra over keyed kerbing

m	200	\$	15.60	\$	3,120.00
m	200	\$	6.50	\$	1,300.00

SIGNAGE

Street Sign Post - Decorative
Street Sign Plate - Decorative
Chevron Boards
Advance Warning Sign

No.	1	\$	300.00	\$	300.00
No.	1	\$	230.00	\$	230.00
No.	1	\$	480.00	\$	480.00
No.	4	\$	190.00	\$	760.00

DRAINAGE

525 Dia Class 2
Headwalls
Loose Rock Pitching
UngROUTED Rock Drain

m	45	\$	230.00	\$	10,350.00
No.	6	\$	2,300.00	\$	13,800.00
m ²	70	\$	40.00	\$	2,800.00
m	80	\$	69.00	\$	5,520.00

LINEMARKING - PAINT AND BEAD

Lane Line
Edge Line
White Lining Give Way
Turn Arrows

m	1530	\$	4.00	\$	6,120.00
m	3060	\$	1.00	\$	3,060.00
m	25	\$	25.00	\$	625.00
No.	6	\$	150.00	\$	900.00

RAISED PAVMENT MARKERS

Raised Pavement Markers

No.	10	\$	30.00	\$	300.00
-----	----	----	-------	----	--------

OTHER

Grade Verges / Backfill to Kerbs connection to existing pavement
Guide Posts
Traffic Management Plan and Implimentation

m	200	\$	2.00	\$	400.00
No.	1	\$	500.00	\$	500.00
No.	64	\$	50.00	\$	3,200.00
Item	1	\$	8,800.00	\$	8,800.00

SUBTOTAL EXTERNAL ROADWORKS - STAGE 1

\$ 654,375.00

EXTERNAL ROADWORKS (McIntosh Road/South Coast Highway int and 1,200m McIntosh Road)

Clearing
Cut / Fill Clay
Cut to spoil Clay
Subgrade Preparation

m ²	23200	\$	1.20	\$	27,840.00
m ³	3600	\$	8.00	\$	28,800.00
m ³	6450	\$	10.00	\$	64,500.00
m ²	12300	\$	3.00	\$	36,900.00

PAVEMENT TYPES / FINISHES

300 Thk Gravel Base
300 Thk Sand to Subgrade Including Removal and Disposal of Unsuitable Material

m ²	12300	\$	21.00	\$	258,300.00
Prov. m²	500	\$	10.50	\$	5,250.00

SEAL TYPES

Primer Seal / First Coat Seal
Second Coat Seal - 12 months later

m ²	11200	\$	4.50	\$	50,400.00
m ²	11200	\$	5.00	\$	56,000.00

SIGNAGE

Street Sign Post - Decorative
Street Sign Plate - Decorative
Chevron Boards
Advance Warning Sign

No.	1	\$	300.00	\$	300.00
No.	1	\$	230.00	\$	230.00
No.	1	\$	480.00	\$	480.00
No.	4	\$	190.00	\$	760.00

DRAINAGE

525 Dia Class 2
Headwalls
Loose Rock Pitching
UngROUTED Rock Drain

m	60	\$	230.00	\$	13,800.00
No.	8	\$	2,300.00	\$	18,400.00
m ²	100	\$	40.00	\$	4,000.00
m	900	\$	69.00	\$	62,100.00

LINEMARKING - PAINT AND BEAD

Lane Line
Edge Line
White Lining Give Way
Turn Arrows

m	1200	\$	4.00	\$	4,800.00
m	2400	\$	1.00	\$	2,400.00
m	25	\$	25.00	\$	625.00
No.	5	\$	150.00	\$	750.00

RAISED PAVMENT MARKERS

Raised Pavement Markers

No.	10	\$	30.00	\$	300.00
-----	----	----	-------	----	--------

OTHER

Intersection with MRWA South Coast Highway
Lower and stabilise services in verge at new entries to site
Guide Posts
Traffic Management Plan and Implimentation
Preliminaries
Design and Superintendence

Sum	1	\$	180,000.00	\$	180,000.00
P.Item	1	\$	20,000.00	\$	20,000.00
No.	50	\$	50.00	\$	2,500.00
Item	1	\$	8,800.00	\$	8,800.00
Item	1	\$	80,000.00	\$	80,000.00
Item	1	\$	60,335.00	\$	60,335.00

SUBTOTAL EXTERNAL ROADWORKS - STAGE 1

\$ 988,570.00

WATER SUPPLY - STAGE 1**EXCAVATION OF COMMON SERVICE TRENCH IN ALL CLASSES OF MATERIAL**

2.4m wide for all services (power, water, gas & telstra)

PIPEWORK - SUPPLY, LAY, JOINT, TEST

150 Dia UPVC

HYDRANTS INCLUDING TEES, THRUST BLOCKS, RISERS, BOXES AND MARKERS

Hydrant for 150 Dia

VALVES INCLUDING BOXES, FITTINGS, THRUST BLOCKS, EXTENSIONS AND MARKERS

Sluice Gate Valve for 150 Dia

Bend 150

CAST IRON TEES INCLUDING TAPERS AND THRUST BLOCKS

Tee 150 X 150

TEMPORARY BLANK ENDS AND FLUSHING POINT COMPLETE

150 dia

m	745	\$	20.00	\$	14,900.00
m	745	\$	45.00	\$	33,525.00
No.	5	\$	1,300.00	\$	6,500.00
No.	1	\$	684.00	\$	684.00
No.	2	\$	220.00	\$	440.00
No.	1	\$	275.00	\$	275.00
No.	1	\$	450.00	\$	450.00

SUBTOTAL WATER SUPPLY - STAGE 1**\$ 56,774.00****EXTERNAL WATER SUPPLY - DN200 CONNECTING LINK****EXCAVATION OF COMMON SERVICE TRENCH IN ALL CLASSES OF MATERIAL**

Trenching

Extra depth trenching for future McIntosh 8% grade realignment

PIPEWORK - SUPPLY, LAY, JOINT, TEST

150 Dia UPVC

200 Dia UPVC

HYDRANTS INCLUDING TEES, THRUST BLOCKS, RISERS, BOXES AND MARKERS

Hydrant for 200 Dia

VALVES INCLUDING BOXES, FITTINGS, THRUST BLOCKS, EXTENSIONS AND MARKERS

Sluice Gate Valve for 150 Dia

Sluice Gate Valve for 200 Dia

CAST IRON BENDS INCLUDING THRUST BLOCKS

Bend 200

CAST IRON TEES INCLUDING TAPERS AND THRUST BLOCKS

Tee 200 X 150

Tee 200 X 200

OTHER

Marker Posts

Clearing along Route

Reinstatement of fencing

Design and superintendence fee

m	3216	\$	20.00	\$	64,320.00
Sum	1	\$	15,000.00	\$	15,000.00
m	16	\$	45.00	\$	720.00
m	3200	\$	70.00	\$	224,000.00
No.	10	\$	1,500.00	\$	15,000.00
No.	3	\$	684.00	\$	2,052.00
No.	4	\$	2,000.00	\$	8,000.00
No.	13	\$	800.00	\$	10,400.00
No.	3	\$	552.00	\$	1,656.00
No.	1	\$	547.00	\$	547.00
No.	15	\$	20.00	\$	300.00
m	3200	\$	3.00	\$	9,600.00
m	3216	\$	7.00	\$	22,512.00
Sum	1	\$	18,000.00	\$	18,000.00

SUBTOTAL EXTERNAL WATER SUPPLY**\$ 392,107.00****POWER SUPPLY / LIGHTING****GENERAL**

Preliminaries and Setout

Locate and Protect Existing Services

Cable Laying Supervision (Category A accredited)

EXCAVATE TRENCH AND BACKFILL

Sand Backfill (Required in Clay or Rock Areas) Including Disposal of Surplus Spoil

INSTALLATION OF CABLES

Cable laying including Transport, Danger Tape

SUPPLY AND INSTALL ALL REQUIRED MATERIALS

PROVISIONAL MATERIALS ONLY ALLOWANCE - industrial lots

OTHER- SUPPLY AND INSTAL

Liaise with Western Power including testing, jointing and energisation

AS CONSTRUCTEDS AND TESTING

Survey of as constructed data

Preparation of As Constructed Drawings to Western Power requirements and presentation to Principals surveyor

Testing of cables and circuits

DIRECTIONAL DRILLING

150 DIA

100 DIA

50 DIA

SUBTOTAL POWER SUPPLY / LIGHTING

Item	1	\$	5,000.00	\$	5,000.00
Item	1	\$	500.00	\$	500.00
Item	1	\$	2,000.00	\$	2,000.00
Pm	750	\$	20.00	\$	15,000.00
m	750	\$	10.00	\$	7,500.00
Prov Lots	15	\$	55,000.00	\$	825,000.00
Item	1	\$	14,000.00	\$	14,000.00
Item	1	\$	3,500.00	\$	3,500.00
Item	1	\$	1,500.00	\$	1,500.00
Item	1	\$	10,000.00	\$	10,000.00
m	0	\$	104.00	\$	-
m	0	\$	89.00	\$	-
m	0	\$	59.00	\$	-

\$ 884,000.00

EXTERNAL POWER SUPPLY - STAGE 1

GENERAL

Reinforcement works - Stage 1

SUBTOTAL EXTERNAL POWER SUPPLY - STAGE 1

Item	1	\$ 85,000.00	\$ 85,000.00
			\$ 85,000.00

TELSTRA / NBN

TELSTRA / NBN

Supply and Instal Telstra/ NBN Pits and Pipes

NBN AS Cons

Additional trenching and backfill where not common trench with power

Lots	15	\$ 2,500.00	\$ 37,500.00
Lots	15	\$ 50.00	\$ 750.00
Prov. m	500	\$ 20.00	\$ 10,000.00

SUBTOTAL TELSTRA/NBN

\$ 48,250.00

COUNCIL FEES AND CONTRIBUTIONS

COUNCIL FEES

Supervision Fees

%Rds and Dge (and of 15% of earthworks)	1	1.5%	\$ 11,765.07
-----------------------------------------	---	------	--------------

SUBTOTAL COUNCIL FEES AND CONTRIBUTIONS

\$ 11,765.07

WATER HEADWORKS (INCL GST)

WCWA Lots 1 July 2012 to 30 June 2013

Lots	15	\$ 4,015.00	\$ 60,225.00
------	----	-------------	--------------

SUBTOTAL WATER HEADWORKS

\$ 60,225.00

WESTERN POWER CHARGES (INCL GST)

Western Power DIP

Western Power DCR \$363 plus \$38.50 per lot

Western Power QA \$1055/stage plus \$5.5 per lot/resi (\$0.79/lot comm/ind)

Item	1	\$ 495.00	\$ 495.00
Lots	15	\$ 940.50	\$ 940.50
Lots	15	\$ 1,137.50	\$ 1,137.50

SUBTOTAL WESTERN POWER OPTION B AND SYSTEM CHARGE

\$ 2,573.00

CONSULTANTS - STAGE 1

Civil Design / Contract Administration

Superintendence Fees

Geotechnical and Preliminary Acid Sulphate Investigation

Effluent Disposal Suitability

Drainage Management Plan

Power design fees

URBAN WATER MANAGEMENT PLAN AND STRATEGIES

Local Water Management Strategy

Urban Water Management Plan

GROUNDWATER MONITORING

Groundwater Monitoring

GST

Item	1	2.00%	\$ 40,239.47
		3.00%	\$ 60,359.20
Item	0		\$ -
Item	0		\$ -
Item	1	\$ 7,000.00	\$ 7,000.00
Item	15	\$ 250.00	\$ 3,750.00
Item	0		\$ -
Item	0		\$ -
Item	0		\$ -
Item	0.1	\$ 111,348.67	\$ 11,134.87

SUB TOTAL CONSULTANTS (incl GST)

\$ 122,483.54



PROPOSED SUBDIVISION: DENMARK McINTOSH RD INDUSTRIAL

PRELIMINARY COST ESTIMATE
JOB NUMBER: 12219E

SUMMARY

TOTAL NUMBER OF LOTS - STAGE 1

15

STAGE 1 - SUMMARY

PRELIMINARIES

SITWORKS

FENCING

STORMWATER DRAINAGE

ROADWORKS

WATER SUPPLY

POWER SUPPLY / LIGHTING

TELSTRA/NBN

SUBTOTAL (EXCL GST)

	ESTIMATED TOTAL	ESTIMATED COST PER LOT
\$ 150,000.00	\$ 10,000.00	
\$ 91,998.00	\$ 6,133.20	
\$ 7,840.00	\$ 522.67	
\$ 398,340.00	\$ 26,556.00	
\$ 372,198.40	\$ 24,813.23	
\$ 56,774.00	\$ 3,784.93	
\$ 884,000.00	\$ 58,933.33	
\$ 48,250.00	\$ 3,216.67	
\$ 2,009,400.40	\$ 133,960.03	

CONTINGENCY 20%

\$ 401,880.08	\$ 26,792.01
---------------	--------------

TOTAL CONSTRUCTION CONTRACT (EXCL GST)

\$ 2,411,280.48	\$ 160,752.03
------------------------	----------------------

ADD GST ALLOWANCE 10%

\$ 241,128.05	\$ 16,075.20
---------------	--------------

TOTAL CONSTRUCTION CONTRACT (INCL GST)

\$ 2,652,408.53	\$ 176,827.24
------------------------	----------------------

STAGE 1 FEES AND CHARGES

COUNCIL FEES AND CONTRIBUTIONS (INCL GST)

WATER HEADWORKS (INCL GST)

WESTERN POWER CHARGES (INCL GST)

CONSULTANTS (INCL GST)

\$ 11,765.07	\$ 784.34
\$ 60,225.00	\$ 4,015.00
\$ 2,573.00	\$ 171.53
\$ 122,483.54	\$ 8,165.57

TOTAL STAGE 1 (INCLUDING GST)

\$ 2,849,455.14	\$ 189,963.68
------------------------	----------------------

EXTERNAL WORKS/ HEADWORKS - SUMMARY

EXTERNAL ROADWORKS (Stage 1 - East River/McIntosh Road int and 1,530m McIntosh Road)

EXTERNAL ROADWORKS (McIntosh Road/South Coast Highway int and 1,200m McIntosh Road)

EXTERNAL WATER SUPPLY - DN200 CONNECTING LINK

EXTERNAL POWER SUPPLY - STAGE 1

EXTERNAL POWER SUPPLY - STAGES 2 and 3

SUBTOTAL (EXCL GST)

\$ 654,375.00	\$ 43,625.00
\$ 988,570.00	\$ 21,968.22
\$ 392,107.00	\$ 6,535.12
\$ 85,000.00	\$ 5,666.67
\$ 2,120,052.00	

CONTINGENCY 20%

\$ 424,010.40

TOTAL CONSTRUCTION CONTRACT (EXCL GST)

\$ 2,544,062.40

ADD GST ALLOWANCE 10%

\$ 254,406.24

TOTAL CONSTRUCTION CONTRACT (INCL GST)

\$ 2,798,468.64

EXTERNAL WORKS FEES AND CHARGES

CONSULTANTS (INCL GST)

\$ 127,203.12

TOTAL EXTERNAL WORKS (INCLUDING GST)

\$ 2,925,671.76

NOTE : Excludes landscaping, fire breaks, entrance statements, marketing, project management, sales, planning, survey and scheme fees. Assumes works proceed in favourable weather conditions.
Excludes any costs associated with Acid Sulphate Solis and associated remediation costs if required.

This estimate is to be read with the accompanying engineering notes and qualifications

DISCLAIMER

The information provided in this estimate expresses the results of preliminary investigations only. Detail design has not been undertaken in preparation of this estimate. It is provided to the reader as background material and to provide general assessment on possible project costs. No information in this estimate should be regarded as final or conclusive and the reader should not use this report as the basis for budgeting or investment decisions without obtaining independent analysis or detailed studies from the authors. The reader must acknowledge the underlying premise on which the information has been prepared may change significantly as a result of changes in State or Local Government or Departmental Policy, changing advice of officers in the bodies consulted, unforeseen geotechnical problems and latent conditions during the construction phase of the project, changes in market demands and variations in the wider Australian or world economies.

A handwritten signature in black ink, consisting of a large, stylized 'E' followed by a vertical line and a horizontal stroke at the bottom.

SIGNATURE OF DESIGNATED OFFICER OF TME
