ASSET MANAGEMENT PLAN

ALL ASSETS

REVIEW OF PLAN 21 March 2014

Reviewed and Adopted by Council at its meeting of 21 March 2014 **AFTER PUBLIC CONSULTATION**, Resolution Number 8873.

TABLE OF CONTENTS

1. Introduction 4
1.1. Key Objectives of the AM Plan 4
1.2. Scope of the Asset Management Plan 5
1.3. Purpose of the Plan 6
1.4. Strategic Management Plans of Council 6
1.5. Asset Management Plan Framework 6
1.6. Key Stakeholders 8
1.7. Council's Approach to delivering the Asset Management Framework 9
1.7.1. Council's Vision 9
1.7.2. Council's Purpose: 9
2. Service Delivery Strategy 10
2.1. Corporate Drivers for Assets 10
2.1.1. Council's Goals: 10
2.2. Legislative Drivers for Assets 11
2.3. Community Drivers for Assets 12
2.3.1. Demographic Forecast 12
2.3.2. Tourism Impacts 12
2.3.3. Community Surveys/Consultation 12
3. Service Levels 13
3.1. Standards relating to Legislative Requirements 13
3.1.1. Legislative Driver for Service Delivery 13
3.1.2. Constraints to Service Delivery 14
3.2. Standards relating to Community Expectations 15
3.2.1. Community Expectations 15
3.3. Standards to deliver Corporate Goals 16
3.3.1. Heritage Conservation Standards 16
3.3.2. Legal Compliance Standards 17
3.3.3. Cost Effectiveness Standard 17
3.3.4. Condition Standards 18
3.3.5. Capacity Standards 18
3.4. Asset Management Tactics 19
3.5. Risk Management 20
4. Asset Strategy 21
4.1. Capital Investment Strategy 21
4.1.1. Asset Replacements and Renewals 21

4.1.3. New Assets - Corporate Initiatives 24
4.1.4. New Assets - Community Initiatives 24
4.2. Maintenance Strategy 25
4.2.1. Asset Risk Analysis for maintenance 25
4.2.2. Routine Maintenance 26
5. Appendix 1 – 10 YEAR FINANCIAL SUMMARY 29
6. Appendix 2 – ASSET CRITICALITY ANALYSIS 30
7. Appendix 3 – ASSET SUMMARY 31
8. Appendix 4 – LAND AND BUILDING CAPITAL INVESTMENT 10 YEAR PROGRAM 32
9. Appendix 5 – RURAL ROADS 10 YEAR PROGRAM 33
10. Appendix 6 – TOWN ROADS (INCLUDING STORMWATER, KERBING AND FOOTPATHS) 10 YEAR PROGRAM 37
11. Appendix 7a - CWMS CAPITAL MAINTENANCE 10 YEAR PROGRAM 42
13. Appendix 8 – MAJOR PLANT AND EQUIPMENT 10 YEAR PROGRAM 43
14. Appendix 9A – ROUTINE MAINTENANCE 10 YEAR PROGRAM 44
19. Appendix 12 – RISK ASSESSMENT MATRIX 47
20. Appendix 13 – LIST OF TABLES 48
21. Appendix 14 – LIST OF FIGURES 48

1. INTRODUCTION

The Kingston District Council has committed to the introduction of a Strategic Asset Management Framework that is consistent with the approach outlined in the IPWEA National Infrastructure Manual, and as promoted by the Local Government's Asset Management advisory group. This framework provides for the integration of all elements of the asset management system, and ensures a consistent approach to planning, operations, maintenance, and disposal of assets and at all stages of their lifecycle. This framework is described in Figure 1 below:

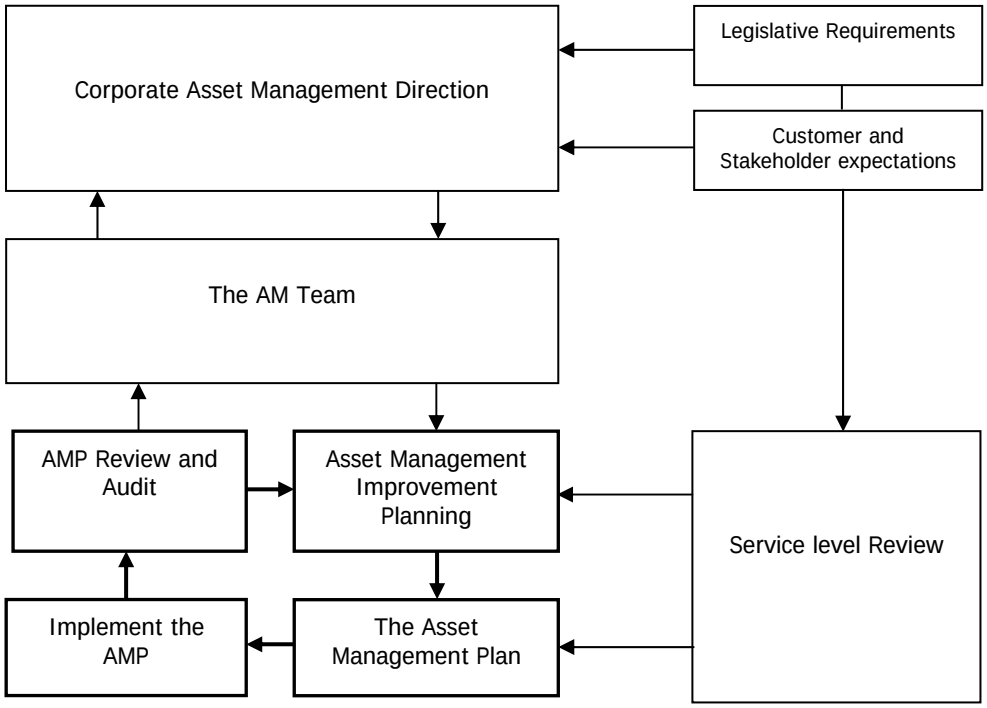

Figure 1: Asset Management Framework (Source International Infrastructure Manual)

The framework above, as described in the Infrastructure manual, focuses on:

- definition of the corporate need (the Corporate Direction)
- gaining commitment at all levels to improve asset management
- establishing clear corporate AM goals and objectives
- allocating appropriate resources

1.1. Key Objectives of the AM Plan

The Key Objectives of this AM Plan are to:

- Apply the Asset Management Framework to the Council's asset portfolio.
- Effectively manage the Council's financial investment in building assets.

- Ensure community requirements and expectations are translated into services through the application of appropriate service levels.
- Demonstrate and facilitate the implementation of whole of life strategies to the asset portfolio.
- Effectively manage the risks associated with the portfolio.
- Use a set of specific goals and objectives to guide the development and implementation of strategies for management of Council's assets.

1.2. Scope of the Asset Management Plan

The Asset Management Plan covers all assets (there are no exclusions), and includes land, buildings and infrastructure, as per the Asset Register. The asset hierarchy is outlined below.

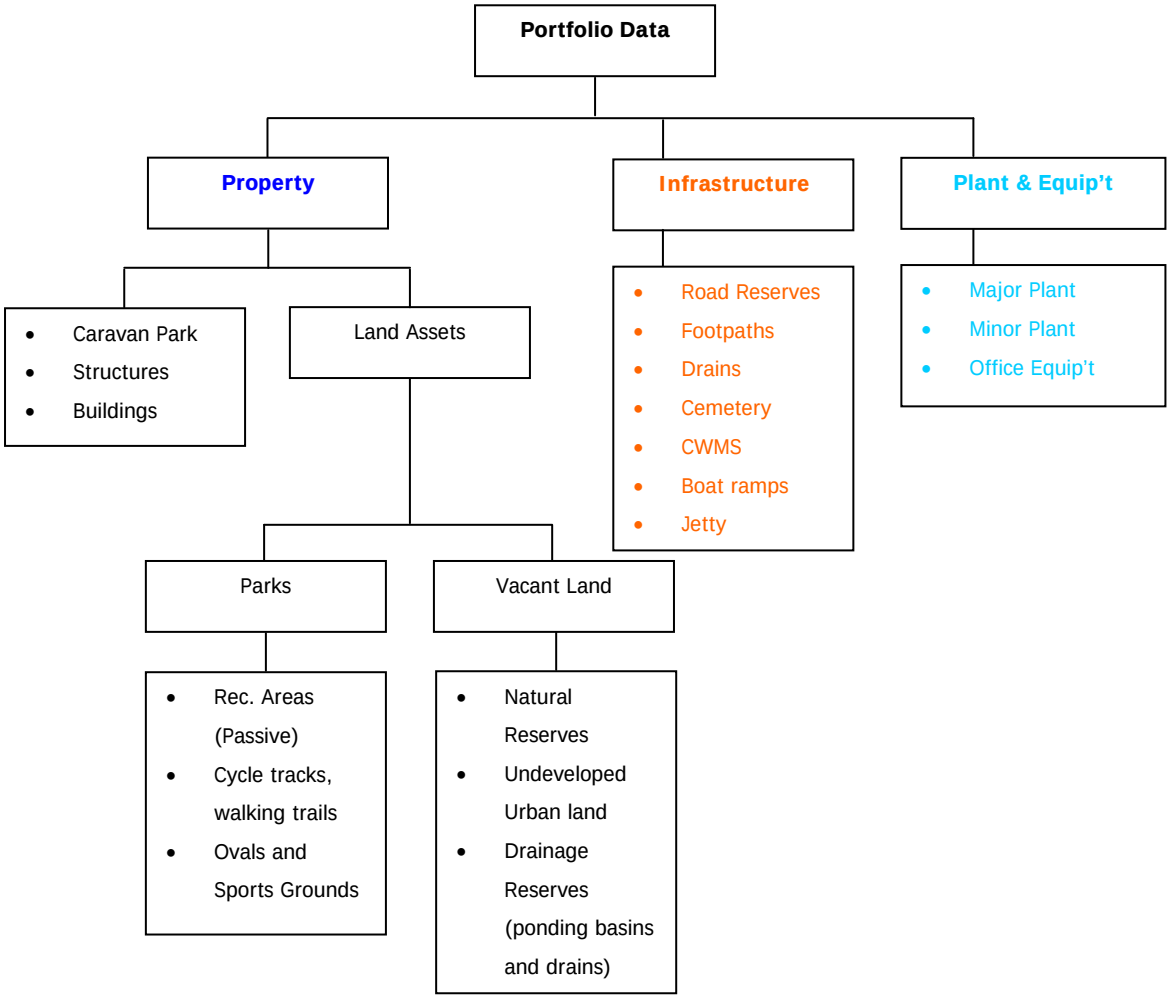

Figure 2: Asset Framework

The assets are summarised thus:

Asset Group	Description
Property	Buildings, Structures, Caravan Park
Land	Parks, Vacant Land
Infrastructure	CWMS, road reserves, footpaths, bike paths, cemetery, jetty, boat ramps
Plant and Equipment	Major Plant, Minor Plant, Office Equipment

See Appendix 3- Asset Summary for details of the portfolio.

1.3. Purpose of the Plan

The overall purpose of the asset management plan is to ensure:

- Long-term sustainable management of Council assets;
- An integrated approach to management of all other elements of the asset portfolio;
- Minimisation of any adverse environmental impacts caused by asset users; and
- Assets are maintained so as to deliver a level of service commensurate with community expectations and Council needs.

It is also the purpose of this Asset Management Plan to demonstrate responsive management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding required to provide the required levels of service. The AMP is therefore to be read with the following associated Kingston District Council planning documents:

- Kingston DC Asset Register 2012-13
- KDC Annual Business Plan 2013-14
- KDC Budget 2013-14
- KDC Strategic Management Plan 2012 -2016
- Long Term Financial Management Plan 2012 to 2022
- Kingston DC 'Asset Management Framework'
- Kingston DC 'Development Plan'

1.4. Strategic Management Plans of Council

The Asset Management Plan forms one of Council's Strategic Management Plans pursuant to Section 122(8) of the Local Government Act 1999.

1.5. Asset Management Plan Framework

The key elements of the Asset Management Planning Framework are as follows:

The Service Levels - This element of the Plan specifies the services levels to be provided by Council in each of the key result areas.

Future Demand issues - Outlines how future demand will impact on future service delivery and how this is to be met.

Asset Strategy – Translates the corporate objectives and service strategies into asset strategies for capital, maintenance and operations.

Risk Management Issues – Ensures risk-centric issues are managed within the guidelines described in AS/NZS4360 – Risk Management.

The Financial Summary -Describes what funds are required to provide the required services.

Performance Measurement - how the outcomes of the plan will be monitored to ensure that the plan is meeting Council's objectives.

Operational Management – the daily operational elements of the asset management system, including cleaning, security and waste management.

The figure below outlines the approach taken in developing and implementing the plan within the Kingston District Council.

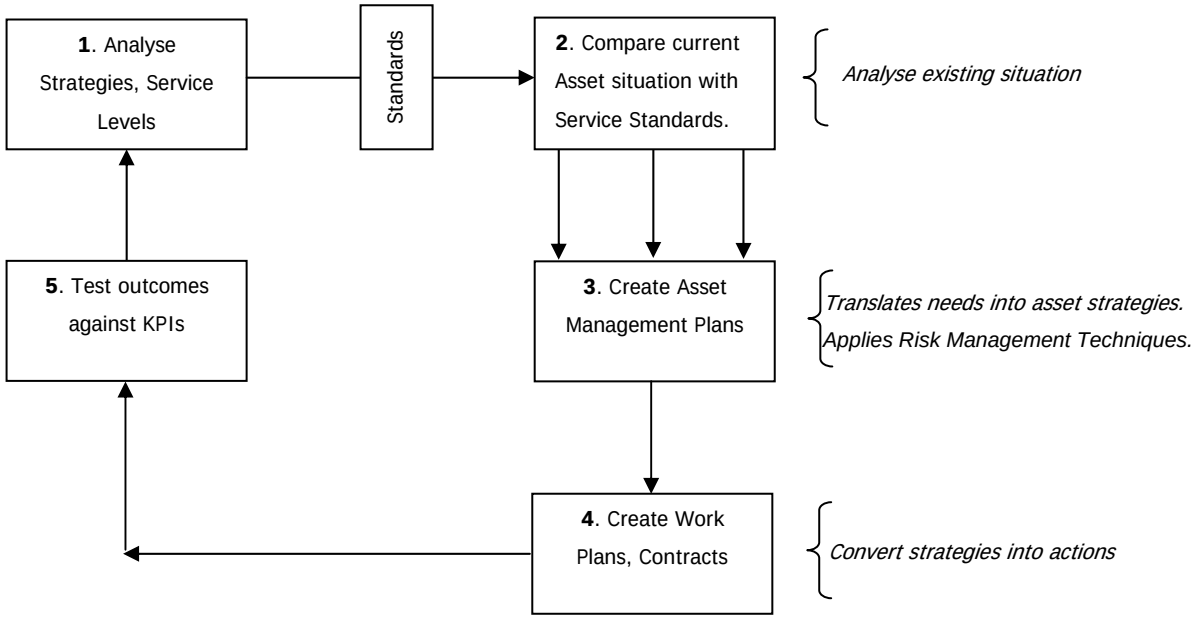

Figure 3: Asset Management Planning Process

1.6. Key Stakeholders

Key stakeholders in the preparation and implementation of this Asset Management Plan are:

Elected Members	Approval of the framework and plan
CEO	Strategic management of framework and plan implementation
Administration Division	Allocation of required funds for the implementation of this asset management plan
Works and Engineering Division	Application of the funds to meet standards set, within budget constraints.

The Kingston District Council Organisational Structure

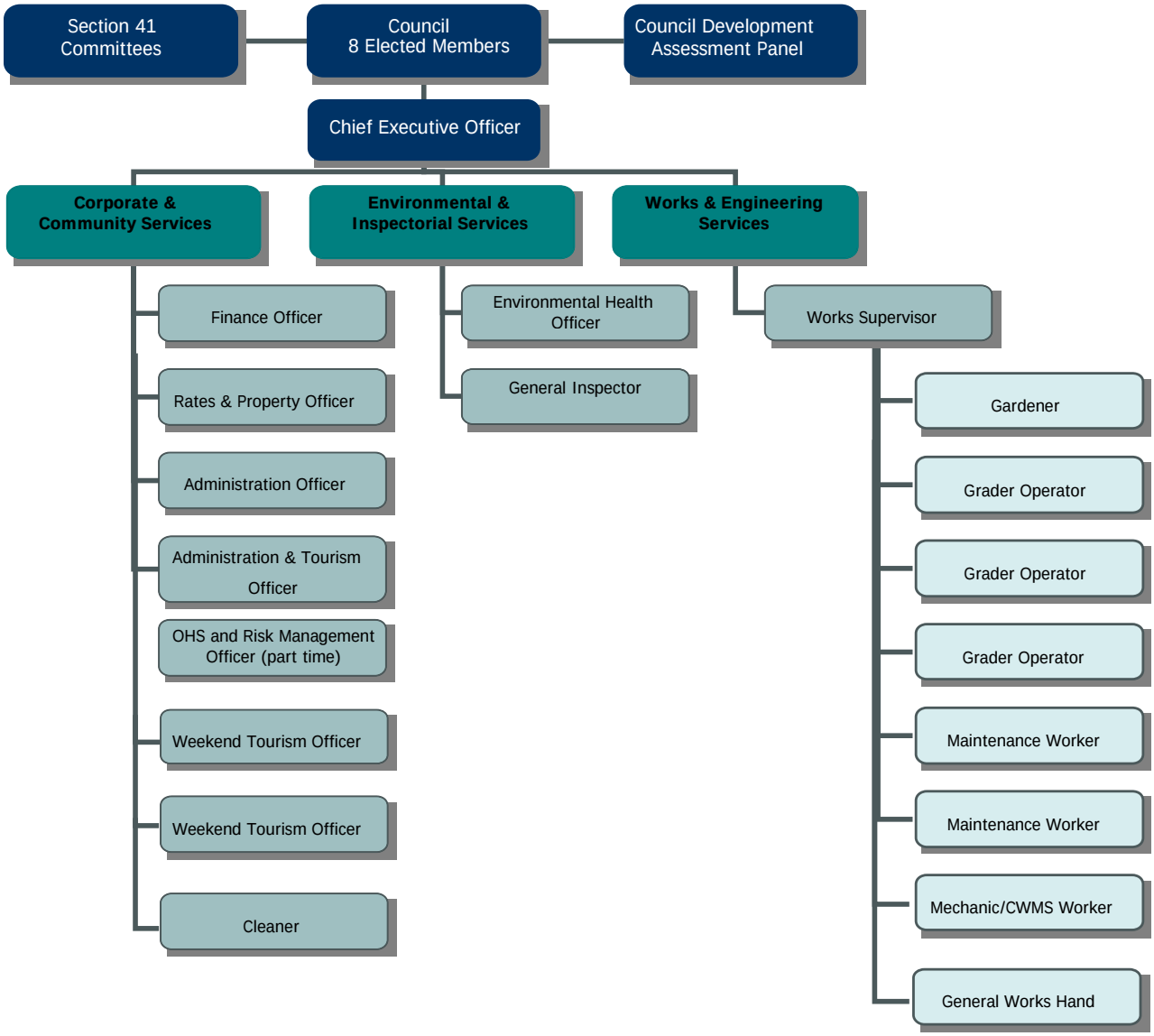

Figure 4: Organisational Structure

1.7. Council's Approach to delivering the Asset Management Framework

The Council exists to provide services to its community, most of which are delivered through assets. Councils approach to managing these assets is to apply a number of techniques that will ensure the assets are functional, appropriate, available, safe and cost effective. These techniques are:

- Providing a defined level of service and monitoring performance,
- Adopting a whole-of-life approach to asset management,
- Developing cost-effective management strategies for the long term,
- Managing risk associated with asset failure,
- Ensuring a sustainable use of physical resources,
- Providing continuous improvement in asset management practices.[1]

This Asset Management Plan is prepared under the direction of Council's senior management team and incorporates the corporate vision and its associated strategies.

1.7.1. Council's Vision[2]

The Vision for the Kingston District Council is as follows:

The Kingston District Council will strive to improve the quality of life in the community, enhance and develop the character of our District as a vibrant coastal community that is an attractive destination with excellent business opportunities.

1.7.2. Council's Purpose[3]:

The Purpose of Council has been determined as being:

The Kingston District Council exists to provide services and support to the community it represents, to advocate and manage in support of its vision and look forward whilst understanding the community's historic base.

[1] International Infrastructure Manual 2006 Sec 1.1.3, p 1.3

[2] KDC Strategic Management Plan 2012-2016

[3] KDC Strategic Management Plan 2012-2016

2. SERVICE DELIVERY STRATEGY

The Service Delivery Strategy converts the Corporate, Legislative and Community 'drivers' into asset strategies. It considers issues of demand, and tests this against the standards for asset location, capacity, functionality, cost effectiveness and compliance.

Note that 'drivers' are those Acts, corporate objectives or community expectations that demand the provision of assets, such as roads, playgrounds, community buildings, waste management facilities, recreational and open space areas and so on. These drivers should not be confused with the legislation that sets standards for performance, most of which constrain the size, location and functionality of the asset to be provided.

2.1. Corporate Drivers for Assets

The corporate drivers are found in the Development Plan, the long term Financial Management Plan and the Business Plan. They include a number of goals and objectives, each of which is supported by underlying strategies to deliver these goals. Not all goals have strong asset implications, however the nature of Council indicates that there is a strong nexus between most services and the asset portfolio.

2.1.1. Council's Goals[4]:

Infrastructure Development

During the period of this plan investment in capital renewal, asset repair and maintenance and upgraded infrastructure will be at the forefront of Council's budget and planning commitments thereby maintaining and improving Council's real asset base.
Asset implication: Spending will be focussed on road infrastructure, recreation and sport, community service, buildings, airport, footpaths and bicycle and walking tracks, waste management, common wastewater management systems, street lighting and public conveniences.

Identity of the District

To support and develop the Kingston Districts' identity and develop an environment that grows our tourism economic opportunities.
Asset Implication: Operational imperatives for rubbish/waste management (tidy towns initiatives), improved management of public facilities, maintenance of the jetty and beach, and management of the Cape Jaffa Anchorage.

[4] KDC Strategic Management Plan 2012-2016

Industry, Business and Town Development

Create an environment that promotes industry and business development through investment in key infrastructure, high quality advice and timely decision making.

Asset Implication: Capital investment in infrastructure.

Customer and Community Outcomes

Provide responsive, timely and appropriate customer services to Council stakeholders, customers and all those who seek Council assistance.

Support community organisations to help provide services and opportunities in the district and plan for future events and growth in the district.

Asset Implication: Continued investment in recreational facilities such as parks and gardens as well as corporate knowledge and skills.

Environment and Heritage

Support heritage and environmental planning during the period of this plan.

Asset Implication: Commitment to identify the potential impacts of sea level change, continued investment in ways of reducing the use of power and water resources, or for seeking offsets. Commitment to the closure of the existing landfill and implementation of waste transfer station to increase waste recycling.

Contemporary Governance

Ensure reasonable access to decision makers and information and provide opportunity for community input to governance and ensure administrative activities and decision making and where resources allow, achieve best practice.

Financial stability and sustainability is reflected in reaching or bettering targets set for accepted key performance indicators as reported in the Annual Financial Accounts:

Asset Implication: Appropriate budgets for all aspects of asset management.

Community Advocacy and Health Services

To support the community and advocate for improved State and Federal policy outcomes that support our district, its industry and commerce, community support, health and environmental outcomes. To support environmental health and immunisation services in the community.

Asset Implication: Adaptable buildings able to deliver environmental health services where appropriate.

2.2. Legislative Drivers for Assets

There is no Act of Parliament that demands the provision of assets, therefore there are no legislative drivers for the Council assets at Kingston district.

2.3. Community Drivers for Assets

The community drivers for assets are those events in the community that demand an increase or improvement in services or asset provision from Council. In the Kingston district, these are generally derived from demographic growth rates, community surveys and consultation, the impact of tourism and economic growth generally.

2.3.1. Demographic Forecast

The demand forecast for the next 5 – 10 years in the Kingston district is expected to moderately impact on the asset portfolio. The resident population in 2009 of approximately 2,469 persons has increased by approximately 6.1% since 2006 (reference 2009 ABS figures). There is no indication that the population will remain static and therefore the demand on infrastructure and services is also expected to increase proportionately. Council also faces an ageing population base and this too will drive some future service requirements.

2.3.2. Tourism Impacts

The asset infrastructure at Kingston SE is significantly impacted by tourism and particularly during the summer season from December to Easter each year. A study[5] undertaken in 2006 identified that 51,601 tourist staying 123,641 nights converge each year, impacting heavily on the capability of all elements of the portfolio, especially sewerage, Council owned buildings and roads. Although this is heavy, the existing capacity of the town would indicate that it is not expected to increase significantly in the next 10 years.

2.3.3. Community Surveys/Consultation

The Kingston District Council undertook consultation with the initial and updated Asset Management Plan and will continue with consultation on the plan to determine any additional asset needs or priority changes. Typically the community consultation will uncover the community need for assets such as new playgrounds, roads, public amenities, access trails and other similar community assets.

[5] Syneca Consulting, Impact of Tourism on Councils of the Limestone Coast

3. SERVICE LEVELS

Service Levels provide the basis of the life cycle management strategies and capital works programs identified within the Asset Management Plan. They encapsulate the Organisation's strategic goals and are based on statutory requirements, customer expectations and corporate goals. Service Levels will be refined over time to match the expectations of customers. This will require a clear understanding of customer needs, expectations, preferences and their willingness (or not) to pay for any increase in the levels of service.

3.1. Standards relating to Legislative Requirements

Council has many responsibilities, and as a consequence has to deal with a large number of asset-related legislative issues. These responsibilities include (not exclusive):

- Management of basic infrastructure, including roads, footpaths, gardens, public space and street lighting.
- Street Cleaning and rubbish collection.
- Building safety assessments.
- Management of the Cemetery.

The asset management and development issues associated with these asset groups involve Australian and State Legislation and State Regulations. Most of these Acts and Regulations can be used to determine benchmark standards for service delivery, however they actually 'constrain' Council activities. That is, they do not drive the need for asset provision, but rather restrict activities associated with development and maintenance of the assets.

Whilst ensuring compliance with these constraints, there is at the same time a need for standards and benchmarks to be established, so that performance can be measured against them.

3.1.1. Legislative Driver for Service Delivery

The Legislative Driver for service delivery is the SA Local Government Act 1999, which outlines the requirements for Councils to deliver infrastructure, facilities and services to the community, and ensures that certain performances are met for this infrastructure. (See Sections 6 and 7 of the Local Government Act). This Act does not demand that Councils must own the assets, but that where the provision of facilities is the means by which services are delivered, facilities may be owned, leased or delivered by some other mechanism.

3.1.2. Constraints to Service Delivery

The Legislative 'Constraints' to service delivery are those pieces of legislation that limit the ability of Council to act in a way that is detrimental to the community in general, the environment or any other corporate bodies, and include the following:

Reference	Details / Impact
AAS27 Accounting Guidelines	Defines the rules to be applied when accounting for assets within the Local Government environment.
Building Code of Australia	Describes the construction standards to be applied to all new buildings built after 1993.
Council By-laws.	Laws enforceable by Council that constrain the behaviour of tenants and general public when using public buildings.
Dangerous Substances Act 1979	An Act to regulate the keeping, handling, transporting, conveyance, use and disposal, and the quality, of dangerous substances.
Development Act 1993.	An Act to provide for planning and to regulate development in the State; to regulate the use and management of land and buildings, and the design and construction of buildings; to make provision for the maintenance and conservation of land and buildings.
Disability Discrimination Act 1993 (Commonwealth).	This Act describes the requirements for property owners of pre-existing buildings to make provision for disabled persons.
Environment Protection Act 1993.	An Act to provide for the protection of the environment; to establish the EPA and define its functions and powers.
Fences Act 1975	An Act to provide for the erection, replacement, repair and maintenance of fences.
Food Act 2001	An Act to provide for the safety and suitability of food.
Graffiti Control Act 2001	An Act to introduce measures for the minimisation of graffiti; to punish people responsible for graffiti; to provide for its removal.
Heritage Places Act 1993	An Act to make provision for the identification, recording and conservation of places and objects of non-Aboriginal heritage significance; to establish the South Australian Heritage Council.
Landlord and Tenant Act 1936	An Act to regulate the relationship of landlord and tenant under certain commercial tenancy agreements.
Local Government Act 1999.	An Act to provide for local government in SA.
Work Health & Safety Act 2012	An Act to provide for the health, safety and welfare of workers.
Private Parking Areas Act 1986	An Act to regulate, restrict or prohibit the use by the public of private access roads, private walkways, and private parking areas; to make special provision for the enforcement of provisions relating to private parking areas.
Public and Environmental Health Act 1987	Prescribes the duties of a local council to promote proper standards of public and environmental health and to prevent any infestation or spread of vermin, rodents or other pests within its area.
Zero Waste SA Act 2004	An Act to establish a statutory corporation, 'Zero Waste SA', with the function of reforming waste management in the State.

Table 1: Legislative Constraints

3.2. Standards relating to Community Expectations

In seeking to understand the community's expectations for facilities, Council will generally engage with the community at a number of levels. This could include the undertaking of a periodic survey of ratepayers and will include annual consultation with ratepayers in relation to budgetary settings both in the short term and long term, annual business plans and asset management plans. Additionally consultation is undertaken during the term of a Council on the review of the Strategic Plan. These engagements provoke investigations for amended capital works program, improved maintenance practices or changes to operational procedures. It is reasonable to expect that the Community's expectations for management and operations of assets will be in keeping with the accepted industry approach, which should be based around the application of appropriate Australian Standards, as well as the Council's own service delivery guidelines.

3.2.1. Community Expectations

In general, the community has an expectation that the facilities will be:

- Provided when and where required.
- Replaced when needed.
- Operated so as to ensure safety, security.
- Constructed according to the standards.
- Maintained appropriately.
- Disposed appropriately.

Standard	Instrument	Measures
Provision	Community surveys Demographic analysis Service needs	Appropriate application of outcome results for the provision of new or improved facilities.
Construction	Building Code of Australia Development Act Council Standards Budgets	Proper application of: • Development Plans. • Australian Standards. • Disability Discrimination Act. • Design and Construction Standards.
Replacement/Upgrade	Community survey Complaint and Request Information Legal requirements	Appropriate application of Community's periodic survey results / consultation for the planned replacement /upgrade of existing facilities.
Maintenance	Australian Standards Council's own Maintenance Strategies Plans and Guidelines	Demonstrated best-practice approach to maintenance, applying appropriate Australian Standards and using Council's Maintenance Plans and Guidelines.
Operations	Council's Operational Guidelines	Proper use of Operational Guidelines in maintaining, environmentally managing, cleaning, securing and removing waste from the site.

Standard	Instrument	Measures
Disposal	AAS27 Accounting Guidelines Council's Accounting guidelines Acquisition and disposal policies	Proper use of Council's Accounting Guidelines and disposal policy.

Table 2: Community Expectations – Standards

3.3. Standards to deliver Corporate Goals

The Kingston District Council has established its own standards of performance for its assets, however more work needs to be done to refine and improve these standards so that they are effective, and best suit the needs of the local community. The standards are based on the relevant Australian Standards, local conditions and internal needs, as well as those set by the Community.

In establishing these standards and benchmarks, the Council has settled on a number of *Core Values* which are used as the base-line for performance measurement. These are as follows:

3.3.1. Heritage Conservation Standards

The Kingston District Council has established a goal to protect the district of Kingston's heritage buildings and sites. In order to achieve this goal it will apply the following Service Standard.

Service Standards for Heritage Conservation

Specific legislative safeguards have been created in SA to guide the identification, registration, conservation and development of areas of heritage significance. The legislation includes the *Heritage Places Act 1993*, and the *Development Act 1993*. The *Development Act 1993* protects places and areas of both State and local significance.

As a consequence to these requirements, Council will manage its heritage listed assets taking account of the following:

- The best way of retaining or recovering the cultural significance of the place, making provisions for its security, maintenance and future use.
- All relevant material which contributes to an understanding of the significance of the place and to the development and implementation of the proposed policies.
- Clear guidelines for the conservation and development of the building which consider the requirements of the owner while respecting the integrity and significance of the building.

All aspects of the plan should be developed according to the Australia ICOMOS Charter for the Conservation of Places of Cultural Significance (The Burra Charter).

3.3.2. Legal Compliance Standards

Assets must comply with the Standards and Codes of Practice that existed at the time of construction (unless major developments have taken place since that time, or unless a risk assessment has determined a need for improvements). It is intended that the following service levels will be set as benchmarks for any new or improved buildings and for the existing portfolio.

Standard	Legal Standard Descriptions
A - excellent	All legal responsibilities must be met at all times.
B - high	All legal responsibilities must be met at all times.
C - normal	All health, safety and the environment issues met at all times. Other responsibilities should be achieved to the maximum extent feasible.
D - low	Legal responsibilities with respect to health, safety and the environment should be met where possible.
E – very low	Only essential responsibilities for safety and the environment are met.

Table 3: Legal Compliance Standards

3.3.3. Cost Effectiveness Standard

Cost effectiveness standards deal with the level of costs associated with management and operation of the asset, compared to benchmarks set for similar structures in a similar operating environment. It is intended that the following cost effectiveness standards will be set as benchmarks for the existing portfolio.

Standard	Cost Effectiveness Standard Description
A - Extreme	Long-term economic criteria are essential in this category. Apply the highest level of maintenance to increase long-term replacement cycle and minimise operational costs.
B - High	The aim is to maximise medium to mid to long-term economic performance. Lower level of priority for long-term cost effectiveness.
C - Normal	The primary aim is to optimise medium term economic outcomes. Some trade-off with maintenance planning may reduce life-spans and increase operating costs.
D - Low	Limitation of short-term maintenance costs is the primary objective. Low level of maintenance priority will shorten life-cycle and reduce replacement cycle.
E – Very Low	The limitation of maintenance costs in the short-term is the primary objective. Short life is not an issue.

Table 4: Cost Effectiveness Standard

3.3.4. Condition Standards

The condition standard combines the level of *presentation* with the *functionality* of the asset/facility, and is a factor of the assessment of both these issues. This approach is intended to encourage assessors to think of assets in terms of the outputs that they deliver, rather than as entities in their own right.

CONDITION			
Level	**Definition**	**Visible Standard**	**Functional Standard**
A - Excellent	Reflects the highest outcome possible for an asset at all times.	As new or highest quality of visual appearance reasonably achievable.	All elements must function as intended at all times, with no down time during periods of intended use.
B - High	Reflects the high level of importance of the facility to the organisation.	Minor signs of visible deterioration for short periods of time when viewed closely.	All elements must function as intended during periods of intended use, with a low probability of failure.
C - Normal	A default standard that reflects on operational needs.	Some minor signs of visible deterioration are acceptable when viewed from normal distance.	All required elements should function as intended during periods of intended use. Minor failures, excluding those which bring threat to safety or security, can be tolerated.
D - Low	Reflects a lesser priority on appearance, yet still meets OHSW needs.	More significant signs of visible deterioration are acceptable when viewed from a normal distance. Failure of the surface finish may impact on related surfaces.	All required elements should function as intended during periods of intended use. Minor failures will be tolerated except for security.
E - Very Low	Mothball standard for a facility that is no longer used or is about to be disposed in the short term.	Visual standard is not important.	No requirement to retain any functional performance except to avoid degradation of asset value.

Table 5: Visual and Functional Standards

3.3.5. Capacity Standards

Capacity standards are based on supply and demand issues associated with the design standards and the requirements of the users. They are sometimes determined by internal Council policy, however they may also be constrained by the construction standard (e.g. a road), the legal requirement such as outlined by the BCA and a license to operate (e.g. a liquor license).

These are yet to be determined.

3.4. Asset Management Tactics

The Asset Management Tactics to be adopted in order to achieve the levels of service are as follows:

Capital Investment Program

The capital works program is based on an analysis of the level of demand, as well as the outcomes of condition appraisals and maintenance plans. Where assets are deemed to be under capacity, in the wrong place, not cost effective, lacking functionality, not maintainable or in poor condition, an injection of capital funds may be required in order to improve their capability in these areas.

Asset Renewals or Replacement Program

Asset renewals and/or replacements are generally managed on a like-for-like basis, with normal capability and capacity being replaced. The program is generally funded from the capital and infrastructure budget.

Maintenance Program

Maintenance programs are normally focused on legislative requirements, design specifications (manufacturer's recommendations) or community expectations. The maintenance requirements include Routine, Breakdown and Major Cyclic activities. Maintenance is funded from the annual maintenance budget.

Routine maintenance is work that is identified and managed through a Maintenance Plan. The plan will include inspection, assessing the condition against failure/breakdown standards, prioritising, scheduling, actioning and reporting in order to develop a maintenance history and subsequently improve maintenance and service delivery performance.

Breakdown maintenance is defined as unplanned repair work which is carried out in response to service requests. The work is prioritised according to criticality ratings, usually around safety, security and welfare requirements.

Major Cyclic Maintenance involves the major refurbishment of higher value components/sub-components of assets, and is undertaken on a regular cycle. It includes road refurbishments, major drainage renewals, major paint programs, room refurbishments, lighting upgrades and major plant maintenance.

Operations Program

Asset operations are based around starting and stopping the asset, and include cleaning, security and waste management. This is funded from the recurrent operations budget.

3.5. Risk Management

Kingston District Council recognises that risk is inherent in many of the activities and functions it performs and acknowledges that risk management is an integral part of sound asset management practices.

Council is working towards the adoption of a formal risk management plan, the objectives of which are to:

- Provide a systematic approach to the early identification and management of all operational and organisational risks, utilising a consistent risk assessment criteria;
- Utilise accurate and concise risk information to facilitate sound decision making;
- Adopt risk treatment strategies that are cost effective and efficient in reducing risk to an acceptable level, and
- Regular monitoring and review of identified risks to ensure that risk exposure remains within an acceptable level.

Council's Risk Management framework is based on the process outlined in the Australian Standard, AS/NZS ISO 3100:2009, as illustrated in the figure below:

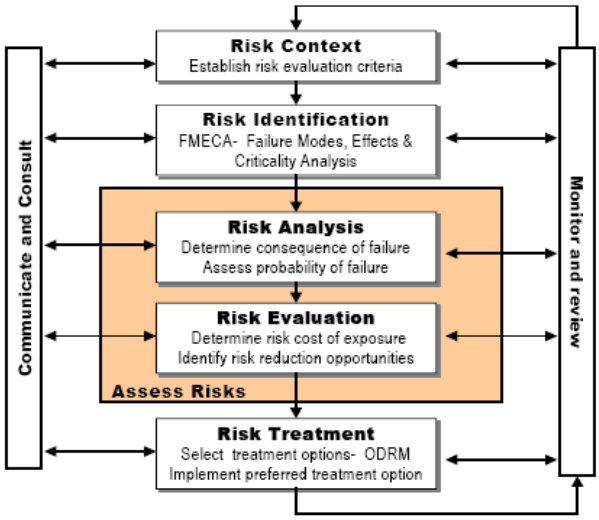

Figure 5: Risk Management Framework

Council's processes for managing risk will be integrated with all aspects of the business including governance, strategic planning, operational planning, asset management, management and reporting. Through the adoption of a Risk Management Plan and development of a Risk Register, Council will strive to instil risk management principles into the organisations culture, values and decision making processes in order to minimise the negative impact of risk on the organisation and that Council's ability to realise potential opportunities is maximised.

4. ASSET STRATEGY

The Asset Strategy converts the Service Delivery Strategy into actions in the key result areas of Capital Investment, maintenance management and disposal. It is informed by data from the condition assessments, capacity studies, recreation plans, open space plans, specific project plans and other such documents.

4.1. Capital Investment Strategy

The Capital Investment Strategy drives the creation of the Capital Works Plan. Generally, this strategy involves the creation of new assets, or the improvement of existing assets so as to add value, increase useful life, improve service outcomes or change use. The Capital Investment Strategy for the Kingston District Council is informed by the Development Plan, asset condition and functional assessments, as well as the corporate and community demands and initiatives.

Whilst acknowledging work undertaken to date, Council continues to move towards more comprehensive 10-year capital investment plan, based on the strategic issues outlined above.

The following issues have been identified within these documents to create the capital investment strategy:

4.1.1. Asset Replacements and Renewals

Council undertakes regular condition and functional assessment of its assets and has subsequently produced the following asset replacement/renewal programs. Details are contained in the engineering survey reports. As indicated in the financial summary, Appendix 3, the average remaining useful life of the asset portfolio is approximately 78% i.e. approximately 22% of the asset service potential has been consumed. This indicates that there will be a modest investment in asset renewal in the medium term, and this has been indicated in the replacement budgets below with forecasts over the investment horizon for the useful life of the asset portfolio to remain at or approximately at 60%.

Roads and Footpaths Replacement and Renewal

Council applies the 'normal' standard for road condition, capacity, cost effectiveness and compliance for improvements to the roads and footpaths and should a higher standard be adopted additional funding will be required. This is part of a long term rolling roads program as follows. These initiatives are summarised in the 5-year plan

below (a full 10 year projection is shown in Appendix 5 – Rural Roads Program and Appendix 6 – Town Roads Program):

Description	2013/14	2014/15	2015/16	2016/17	2017/18
Town roads program	551,250	484,100	514,585	541,035	529,220
Rural road construction and re-sheet program	682,224	681,088	769,225	797,890	602,410
TOTAL	**1,233,474**	**1,165,188**	**1,283,810**	**1,338,925**	**1,131,630**

Table 6: Roads Program – 5 Year Capital Works

Prices already escalated by estimated CPI.

Notes to the base line cost estimates for roads (indexed):

- Sealing and construction $75,000 per kilometre for 6m seal for rural roads - unit rate of $12.50 per square metre with estimated useful life of 60 years.
- Sealing and construction $450,000 per kilometre for 12m seal for town roads – unit rate of $45 per square metre with estimated useful life of 60 years.
- Reseal unit rate of $4.00 per square metre with estimated useful life of 15 years for town roads.
- Reseal unit rate of $3.50 per square metre with estimated useful life of 15 years for rural roads.
- Re-sheet $15,500 per kilometre for road width with average estimated useful life of 18 years (as per depreciation schedules).

Land and Buildings Replacement and Renewal

The replacement or renewal of building assets is based on condition, functionality, capacity and locational assessments should a higher standard be adopted additional funding will be required. These have resulted in the establishment of the following projects, budgeted over 5 years (a longer term outlook is provided in Appendix 4 – Other Infrastructure (incl Land and Buildings Budget):

Description	2013/14	2014/15	2015/16	2016/17	2017/18
Administration Office	6,000				
Depot Sealing	40,000				
General Upgrade to Leased buildings	0	5,000	5,000	5,000	5,000
General Upgrade to recreational facilities	0	5,000	5,000	5,000	5,000
Council and Community Infrastructure Improvements (General)	0	0	0	0	0
Cape Jaffa Toilet Upgrade	0	0	0	0	10,000
Apex Park Toilet Upgrade	0	25,000	0	0	0
Lions Park Toilet Upgrade	60,000	0	0	0	0
District Hall External Toilets Upgrade	0	0	0	0	0
Thredgold Beach Toilets Upgrades	0	0	0	12,500	0
Caravan Park Improvements	18,250	18,250	18,250	18,250	18,250
Foreshore leveling grassed area					15,000
Total	**124,250**	**53,250**	**28,250**	**40,750**	**53,250**
Escalation Rate	1.000	1.030	1.061	1.093	1.126
Adjusted Total for AMP and LTFMP	**124,250**	**54,848**	**29,973**	**44,540**	**59,960**

Table 7: Land and Buildings Initiatives for 5 Years

Plant and Machinery Replacement and Renewal

The plant and machinery budget is based on a 'normal' standard of service, and are assessed using ongoing condition assessments, as well as economic analysis for cost effectiveness and should a higher standard be adopted additional funding will be required. Capital replacement and renewal program initiatives are summarised in the 5-year plan below (a full 10 year projection is shown in Appendix 8 – Plant and Machinery Data):

Description (To Be Replaced)	2013/14	2014/15	2015/16	2016/17	2017/18
Cat 12H Grader (2)				350,000	
Combination Roller (2)	42,000				
Loader		180,000			
Watertanker (1)			55,000		
Elevating Platform	12,120				
Works, Officer & Red Cross Vehicles	60,000	60,000	60,000	60,000	60,000
Small/Sundry Plant and Equipment	15,000	15,000	15,000	15,000	15,000
Computer Equipment	8,900	15,000	35,000	5,000	15,000

Total	**138,020**	**270,000**	**165,000**	**430,000**	**90,000**
Escalation Rate	1.000	1.030	1.061	1.093	1.126
Adjusted Total for AMP and LTFMP	**138,020**	**278,100**	**175,065**	**469,990**	**101,340**

Table 8: Plant and Machinery – 5 Year Investment Program

Amounts represent the net cost to Council taking account of trade-ins and or disposal proceeds.

Community Waste Management System (CWMS) Replacement and Renewal

The CWMS attracts a level of maintenance commensurate with its criticality. There is a 10 year capital maintenance program on critical assets being the ponds and underground infrastructure, a 10 year capital maintenance program for the ponds and a 15 year replacement program on pumps.

These initiatives are summarised in the 5-year plan below (a full 10 year projection is shown in Appendix 7 – CWMS Data):

Description	2013/14	2014/15	2015/16	2016/17	2017/18
Pump Replacement Program	15,600	15,600	15,600	15,600	15,600
CWMS ponds capital maintenance	0	0	0	80,000	0
Septic Desludging Program	50,000	10,000	45,000	60,000	50,000
TOTAL	**65,600**	**25,600**	**60,600**	**155,600**	**65,600**
Escalation Rate	1.000	1.030	1.061	1.093	1.126
Adjusted Total for AMP and LTFMP	**65,600**	**26,368**	**64,297**	**170,071**	**73,866**

Table 9: CWMS Initiatives – Capital Maintenance Works 5 Year Plan

Prices already escalated by relevant indexation factor expected for CWMS infrastructure costs.

4.1.3. New Assets - Corporate Initiatives

Corporate capital initiatives are derived from those issues that are driven by internal Council business, rather than from external influences such as developers or the state and/or commonwealth governments. Presently there are no direct corporate initiative strategies inherent in the forward program.

4.1.4. New Assets - Community Initiatives

Community capital initiatives are derived from those issues that are driven by the needs of the Community, and are identified during community forums, surveys and direct petitioning.

These initiatives are summarised in the 5-year plan below (a full 10 year projection is shown in Appendix 4 – Other Infrastructure Assets Data):

Description	2013/14	2014/15	2015/16	2016/17	2017/18
Bicycle and Walking Track	0	25,000	25,000	25,000	0
District Hall Curtain & Lighting	0	11,000	0	0	0
District Hall External Toilet	120,000	0	0	0	0
Cape Jaffa Anchorage Recreational Facilities	60,000	0	0	0	0
Cape Jaffa Anchorage Playground		20,000			
New Reserve adjacent Cemetery (road & storm water pond)					25,000
Maria Creek Bicycle/Walking Tack Lighting	10,000	10,000	10,000	10,000	0
Historic Signage	11,000	0	0	0	0
Total	**201,000**	**66,000**	**35,000**	**35,000**	**25,000**
Escalation Rate	1.000	1.030	1.061	1.093	1.126
Adjusted Total for AMP and LTFMP	**201,000**	**67,980**	**37,135**	**38,255**	**28,150**

Table 10: Community Initiatives – New Capital Works 5 yr plan

4.2. Maintenance Strategy

The maintenance strategy involves regular inspection and review of all assets, including the buildings, parks and gardens, jetty, boat ramps and roads especially to determine the inherent risks in each portfolio. It normally includes a mixture of routine maintenance, breakdown maintenance and major cyclic maintenance. The level of risk of the asset will determine the priority in which it is maintained, and the maintenance standard applied. Where an asset has a low level of risk, its failure or unavailability will most likely have minimal impact on those areas of most concern to Council. In most cases this means that the level of maintenance can be minimised.

Council has applied the 'normal' standard for cost effectiveness, condition, compliance and capacity. Any increase in this standard will require an increase in funding.

4.2.1. Asset Risk Analysis for maintenance

The level of risk is determined using the Risk Assessment Matrix (AS4360 – Risk Assessment). Assets are assessed to determine the impact that they will have on a number of key outcomes, and this is impact (or risk) is further assessed to determine the likelihood and consequences of failure associated with that issue. If highly critical assets are deemed to be likely to fail, and the consequences of that failure are significant, action will be taken to intervene.

In terms of their actual risk level, assets are ranked thus:

Risk Scale	Description
High	Highly risk, will have an extreme impact on performance of accessibility, health and safety, and business continuity. It may cause very high financial losses and have very high political risks.
Significant	Significant risk– may have a significant impact on accessibility and business continuity. It may cause significant financial losses, and pose significant political risk.
Moderate	Moderate risk – may have a moderate impact on business continuity, cause moderate financial losses and create minor political risk.
Low	Low risk – may have a low impact on business continuity, and cause little if any financial exposure. No political risks.

Table 11: Risk Scale

The risk assessment technique should take into consideration the inherent and actual risk, i.e. having identified an inherent risk, and having subsequently applied some level of treatment (elimination, management) the actual risk after that treatment is determined. Using this technique, the 'actual' risk ranking of assets is as follows:

Asset	Issue		Risk
CWMS (STEDS)	• Health and Safety • Political Risk	• Business continuity	High
Public toilets	• Health and Safety • Public Business continuity (tourism)	• Political Risk	High
Roads (key access areas)	• Safety • Accessibility	• Business Continuity	High
Footpaths (key access areas)	• Safety • Accessibility	• Business Continuity	High
Boat ramps	• Business continuity	• Public Safety	Moderate
Cemetery	• Accessibility		Moderate
Parks and Gardens	• Safety • Accessibility	• Political Risk	Moderate
Buildings - general	• Business Continuity		Low
Minor Plant	• Business Continuity		Low
Stormwater	• Business Continuity	• Public Safety	Low
Office equipment	• Business Continuity		Low

Table 12: Asset Criticality Analysis

The asset risk analysis based on this level of risk is attached as Appendix 2 – Criticality Analysis.

4.2.2. Routine Maintenance

A Routine Maintenance Plan should contain an annual maintenance schedule, with frequencies of service based on asset criticality and level of risk. It should also

contain a set of maintenance tasks to be carried out in accordance with the requirements of appropriate Australian Standards, codes of practice, manufacturer's recommendations and local conditions.

The level of asset criticality and associated risk analysis should drive the standard of routine maintenance for each asset group, and this should be reflected in the Routine Maintenance Plan. The Council has adopted a 'normal' standard for its asset performance, and any increase in this will need to be reflected in the budgets.

The full level of detail for routine maintenance schedules is still under development, however the table below provides estimated expenditure on routine maintenance by asset class, summarised for the next 5-years (a full 10 year projection is shown in Appendix 1 – 10 year financial summary):

Asset Class	2013/14	2014/15	2015/16	2016/17	2017/18
Office Equipment and Systems	0	0	0	0	0
Buildings	94,770	97,613	100,541	103,558	106,664
Waste Management	10,000	10,300	10,609	10,927	11,255
CWMS	130,000	146,698	140,061	98,787	142,737
Land	18,000	18,540	19,096	19,669	20,259
Cemetery	7,500	7,725	7,957	8,195	8,441
Infrastructure	657,800	677,534	697,860	718,796	740,360
Plant and Machinery	132,000	135,960	140,039	144,240	148,567
Parks, Gardens and Recreational	309,714	319,005	328,576	338,433	348,586
TOTAL	1,359,784	1,413,376	1,444,739	1,442,605	1,526,869

Table 13: Routine Maintenance Summary

Appendix 9A provides additional information and a 10 year plan for routine maintenance. Council are currently adding additional detail to the maintenance plans and developing maintenance schedules.

All costs have been indexed by estimated CPI.

Common Wastewater Management System (CWMS)

The integrity and reliability of the CWMS system is dependent upon regular replacement of critical components, supported by a routine maintenance plan. It is clear that the level of maintenance to the CWMS system is very much driven by demand, and it will be continue to be influenced by the amount of growth in the town. There is an on-going program of pump upgrade and Council works to a rigorous maintenance plan to protect existing assets of the system. Prudently,

Council also sets aside funding of at least $18,000pa for future asset replacement and capital maintenance. The long term funding provisions for future asset replacement are detailed at Appendix 7B.

Infrastructure Inspections and Maintenance Regime

Council undertakes regular inspection of:

- all playground equipment and minor infrastructure on open space assets;
- public conveniences;
- recreational boat launching and retrieval assets at Kingston and Cape Jaffa;
- beach access ramps;
- Kingston jetty;
- cemetery;
- parks and gardens and recreational open space; and
- irrigation systems,

and initiates maintenance requirements from these inspections.

Plant and Equipment

All major plant and equipment receive servicing as per maintenance schedules for all vehicles, earth moving equipment and other items.

Road Maintenance

Significant funding is allocated for routine road maintenance including signage, regular grading, stormwater assets and kerbing.

5. APPENDIX 1 – 10 YEAR FINANCIAL SUMMARY

All financial summary detail incorporate estimated growth and or CPI increases applicable to the relevant expense line and may include rounding.

The Asset Management Budget includes capital and recurrent (maintenance and operations) costs.

Description	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
CAPITAL INVESTMENT										
New and Upgraded Assets										
Town Roads	105,000	103,000	106,100	122,962	49,263	67,222	0	0	0	0
Land and Buildings	201,000	30,900	10,610	10,930	28,150	28,975	29,850	0	0	0
P & E	0	0	0	0	0	0	0	0	0	0
CWMS	0	0	0	0	0	0	0	0	0	0
Sub Total – New and Upgraded Assets	*306,000*	*133,900*	*116,710*	*133,892*	*77,413*	*96,197*	*29,850*	*0*	*0*	*0*
Replacements and Renewals										
Town Roads	446,250	339,900	408,485	418,073	479,957	456,067	578,493	576,870	582,820	600,300
Rural Roads	682,224	681,088	769,225	797,890	602,410	666,425	668,640	664,200	637,301	850,860
Land and Buildings	124,250	91,928	56,498	71,865	59,960	96,487	75,521	34,748	35,793	493,616
P&E	138,020	278,100	175,065	469,990	101,340	92,720	131,340	166,050	557,480	234,900
CWMS	65,600	26,368	64,297	170,071	73,866	29,670	72,356	185,238	83,115	137,808
Sub Total – Replacement and Renewals	*1,456,344*	*1,417,384*	*1,473,570*	*1,927,889*	*1,317,533*	*1,341,369*	*1,526,350*	*1,627,106*	*1,896,509*	*2,317,484*
Capital	**1,762,344**	**1,551,284**	**1,590,280**	**2,061,781**	**1,394,946**	**1,437,566**	**1,556,200**	**1,627,106**	**1,896,509**	**2,317,484**
RECURRENT										
Total Maintenance	1,359,784	1,406,166	1,437,313	1,434,956	1,518,991	1,582,652	1,617,708	1,615,056	1,709,350	1,780,500
Grand Total	**3,122,128**	**2,957,450**	**3,027,593**	**3,496,737**	**2,913,937**	**3,020,218**	**3,173,908**	**3,242,162**	**3,605,859**	**4,097,984**

6. APPENDIX 2 – ASSET CRITICALITY ANALYSIS

Asset Group	Description	Criticality	Likelihood of failure	Consequence	Actual Risk (after management)
CWMS	Pump Station	High	Moderate	Major	High
CWMS	Oxidation Lagoons	High	Unlikely	Major	Significant
CWMS	Pipe Work	High	Unlikely	Major	Significant
Roads (key access roads)	General	High	Unlikely	Major	Significant
Buildings & Structures	Toilet Blocks	High	Moderate	Moderate	Significant
Roads (general)	General	High	Unlikely	Moderate	Moderate
Buildings & Structures	Playground and Parks and Gardens	Moderate	Moderate	Moderate	Moderate
Footpaths	Pavements	Moderate	Moderate	Moderate	Moderate
Buildings & Structures	Boat Ramp	Moderate	Unlikely	Moderate	Moderate
Stormwater drains	Stormwater Drains	Low	Moderate	Minor	Moderate
CWMS	Sprinklers	Low	Unlikely	Insignificant	Low
Office Equipment	General	Low	Unlikely	Insignificant	Low
Minor Plant	General	Low	Unlikely	Minor	Low
Buildings & Structures	General	Low	Unlikely	Minor	Low

Table 14: Asset Risk Analysis

7. APPENDIX 3 – ASSET SUMMARY

Asset Group	Asset Book Fair Value 30/6/2013	Dep'n Charge	Carry Amount 30/6/2013	Remaining Life (% of total)
Buildings & Other Structures	21,084,000	436,000	14,657,000	69.5%
Infrastructure	33,927,000	808,000	29,028,000	85.56%
Plant & Equipment	3,090,000	184,000	1,862,000	60.26%
Minor P&E	-	7,000	48,000	
Office Equipment	-	32,000	33,000	
Furniture & Fittings	134,000	33,000	104,000	77.6%
CWMS	6,853,000	117,000	5,580,000	81.42%
TOTAL	**65,088,000**	**1,617,000**	**51,312,000**	**78.83%**

Table 15: Asset Summary

Note: Land is excluded from this summary as it is a non-depreciable asset; table is based on 2012/13 audited financials.

8. APPENDIX 4 – LAND AND BUILDING CAPITAL INVESTMENT 10 YEAR PROGRAM

Description	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Medical Centre						20,000				
Administration Offices	6,000						20,000			
Depot	40,000									
General Upgrade to Leased buildings		5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
General Upgrade to Rec Facilities		5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Bicycle and Walking Track		25,000	25,000	25,000						
District Hall Curtain & Lighting		11,000								
Cape Jaffa Toilet Upgrade					10,000					
Pinks Beach Toilet Upgrade						10,000				
Thredgold Beach Toilet Upgrade				12,500						
Wyomi Toilet Upgrade						10,000				
Apex Park Toilet Upgrade		25,000								
Lions Park Toilet Upgrade	60,000									
District Hall External Toilet Upgrade	120,000									
Caravan Park Improvements	18,250	18,250	18,250	18,250	18,250	18,250	18,250	18,250	18,250	18,250
Maria Creek Bike Track Lighting	10,000	10,000	10,000	10,000						
Cape Jaffa Anchorage Rec. Facilities	60,000									
Cape Jaffa Anchorage Playground		20,000								
Foreshore Leveling Grassed Area					15,000	15,000	15,000			
New Reserve (road/pond)					25,000	25,000	25,000			
Lions Park Infrastructure										350,000
Historic Signage	11,000									
Total	**325,250**	**119,250**	**63,250**	**75,750**	**78,250**	**108,250**	**88,250**	**28,250**	**28,250**	**378,250**
Escalation Rate	1.000	1.030	1.061	1.093	1.126	1.159	1.194	1.230	1.267	1.305
Adjusted Total for AMP and LTFMP	**325,250**	**122,828**	**67,108**	**82,795**	**88,110**	**125,462**	**105,371**	**34,748**	**35,793**	**493,616**

Table 16: Land and Buildings Capital Investment – 0-10 years

9. APPENDIX 5 – RURAL ROADS 10 YEAR PROGRAM

Road	Surface Type	Length (kms)	Width (m)	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Toops Road	Open	0.9	5.6										
Toops Road	Sealed	0.5	7.0										
2nd Long Beach	Open	1.1	5.7		20,000								
Woolumboo Road (was Alaman Road)	Open	14.0	8.9										
Ashmore Road	Open	1.0	5.0										
Bald Hill	Open	20.9	6.6	79335									
Ballater	Open	15.0	6.7	58,335	56,250	55,000	70,000						
Balnur	Open	3.0	5.0										
Beaumaris	Open	11.0	5.3										90,000
Beggs	Open	3.7	4.9						55,000				
Bells	Open	8.0	6.5									60,000	60,000
Bin Bin	Open	6.4	5.2										
Blackford Reedy Creek (Bunker Hill Rd)	Open	16.2	5.9							35,000	70,000	70,000	53,000
Bowaka Road	Open	13.0	7.1			100,000	100,000	50,000					
Brockhoffs Road	Open	0.7	6.5				15,000						
Burgoynes Road	Open	0.5	6.0										
Burns	Open	3.6	6.9										75,000
Butchers Lane	Open	5.4	8.0							40,000	40,000		
Cape Jaffa Road	Sealed	14.0	6.4					175,000	175,000				
Carrachers	Open	5.0	4.8										
Cossacks Waterhole	Open	7.8	6.4		60,000	60,000							
Dalkeith Road	Open	1.2	6.0				20,000						
Dawkins	Open	1.8	4.4							30,000			

Road	Surface Type	Length (kms)	Width (m)	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Drabsch Hndrd Line Rd	Open	6.3	6.0			60,000	35,000						
Vogelsang Lane (was Edwards Lane)	Open	6.8	7.6	55,855	50,000								
Edwards Road (South)(was Browns Road)	Open	4.0	5.0										
Edwards Road (North)	Open	4.4	6.0				50,000						
Eight Mile Lane	Open	8.4	6.4										
Ellery Road	Open	6.2	5.0		40,000	40,000							
Fields	Open	7.3	6.4/5.7										40,000
Gibbs Road	Open	1.5	5.0			35,000							
Goetzs	Open	3.0	4.5										
Granites	Open	1.0	6.2										
Geues Road	Open	0.5	4.0				10,000						
Henry Creek (West)	Open	4.0	7.1										
Henry Creek (East)	Open	13.0	7.1						65,000	65,000	65,000		
Hirst Fire Track	Open	9.0	4.0										
Holmes	Open	8.7	6.4				65,000	65,000					
John Flints Lane	Open	3.4	4.7			50,000							
Keith Cantara	Open	18.0	7.5										
Limestone Coast	Sealed	11.2	7.0				160,000						154,000
Litigation Lane	Open	4.0	5.0										
Mail Bridge	Open	9.0	5.3						45,000	45,000	45,000		
Mandina	Open	1.7	4.0										
Marwoods	Open	5.2	5.4						40,000	40,000			
Minnamurra	Open	8.0	5.8										
Minnicrowe Road	Sealed	21.0	6.0					165,000	165,000	165,000			

Road	Surface Type	Length (kms)	Width (m)	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Mount Scott	Open	6.3	6.4		50,000								
Murrabina	Open	2.8	4.0										
Murragamba Road	Open	1.0	3.0										
Murra Up Road	Open	3.4	6.0							50,000			
Nyroca	Open	12.0	8.7									70,000	70,000
Ocean Road	Open	1.4	4.0										
Old Coorong	Open	42.1	6.2									80,000	80,000
Old Coorong	Sealed	2.5	6.2										
Orphan Block	Open	1.0	5.0										
James Road (was Papinaeu Road)	Open	8.0	6.0							60,000	60,000		
Peepinoo Lane	Open	2.0	3.0										
Petherick	Open	26.0	7.7	34,417	100,000								
Pidgeon Box	Open	1.0	5.0										
Redmans	Open	2.8	6.4										
Robertsons	Open	11.1	7.7										
Rothalls	Sealed	1.9	7.0									53,000	
Rubbish Dump	Open	0.5	5.0										
Toops Road North	Open	1.0	3.0				15,000						
Safari	Open	3.4	5.4			60,000							
Saleyards Road	Open	1.2	7.0										
Salt Well	Sealed	19.7	6.0	134,753	120,000								
Starlings	Open	8.0	5.4/4.3										
Swedes Flat	Open	5.0	7.4			50,000	70,000						
Thomas Road	Open	5.0	4.6			40,000	35,000						
Taratap Blackford	Open	18.8	7.2										

Road	Surface Type	Length (kms)	Width (m)	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
(Tapfields Rd)													
Taratap Henry Creek (Tapfields Rd)	Open	16.8	7.2	140,588	30,000								
Taratap Range	Sealed	8.7	6.0								150,000	60,000	
Taunta Hutt	Open	3.0	6.6			45,000							
Telegraph	Open	2.2	6.8										
Vandepeers Road	Open	7.0	4.0										
Vercoe's	Open	7.1	7.0				55,000	50,000					
Water Valley	Open	6.2	6.0										
West Range	Open	10.9	6.4								80,000	80,000	
Williams	Open	7.4	4.4/6.1	68,106	70,000								
Woolmit Road	Open	5.8	6.0	79,335	35,000	50,000							
Baxters Hill Road (was Woolmit Track)	Open	5.0	4.0			50,000							
Rural Road Upgrade Reserve													
Road Other (Contingency)				31,500	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000
Totals		**588.3**		**682,224**	**661,250**	**725,000**	**730,000**	**535,000**	**575,000**	**560,000**	**540,000**	**503,000**	**652,000**
Escalation Rate				1.000	1.030	1.061	1.093	1.126	1.159	1.194	1.230	1.267	1.305
Adjusted Total for AMP and LTFMP				**682,224**	**681,088**	**769,225**	**797,890**	**602,410**	**666,425**	**668,640**	**664,200**	**675,990**	**850,860**

Table 17: Rural Roads, 0-10 year data

10. APPENDIX 6 – TOWN ROADS (INCLUDING STORMWATER, KERBING AND FOOTPATHS) 10 YEAR PROGRAM

Road	Surface Type	Length (kms)	Width (m/ave)	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Acraman St	Sealed	0.381	9.55										7,500
Adam Road	Sealed	0.245	10.60										
Agnes Street	Sealed	1.174	13.80										
Airport Road	Sealed	0.700	5.00										
Annie St	Open	0.205	6.00							35,000			
Archibald St	Open	0.220	6.00							40,000			
Arthur Street	Sealed	0.150	5.20										
Banister Drive	Sealed	0.300	5.80										
Barber St	Sealed	0.189	7.10						4,500				
Barrowman Drive	Sealed	0.159	8.00										
Bay Street	Open	0.150	6.00					25,000					
Bellevue Drive	Sealed	1.100	6.00										
Bonney St	Sealed	0.480	6.00										
Britton St	Sealed	0.191	4.80						2,000				
Bullocky Town Road	Sealed	1.200	7.00									40,000	
Cameron St	Sealed	0.569	6.40										
Charles St	Sealed	0.408	12.26					60,000				17,000	
Clarke St	Sealed / Open	0.280	6.40										
Cooke Street Ext	Open	2.470	6.00				250,000						
Cooke Street	Sealed	1.300	8.70										
Coopers Lane	Sealed	0.143	6.00										3,500
Coulthard Street	Sealed	0.178	6.40										
David Ave	Sealed	0.092	6.00									2,000	
Dow Ave	Sealed	0.093	5.80										

Road	Surface Type	Length (kms)	Width (m/ave)	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Dowdy St	Sealed	0.489	6.20										
Duncan St	Sealed	0.583	6.10		400,000								
Eighth Ave	Formed	0.080											
Eleventh St (Rosetown)	Sealed	0.240	6.00										
First Street									60,000				
Fergusson St	Sealed	1.009	6.84	420,000									
Fifth St	Open	0.162	6.00										
Catherine Gibson Way	Open	0.150	6.00										
Fifteenth Ave	Sealed	0.122	5.50										
Fourteenth Ave	Sealed	0.088	4.90										
Fourth Ave	Formed	0.054											
Fourth St (Rosetown)	Open	0.150							30,000				
Golflinks Road	Sealed	1.000	6.00										
Goode Ave	Sealed	0.120	4.20										
Gough St	Sealed	0.416	12.90								19,000		
Green Ave	Sealed	0.200											7,500
Gurney Ave	Sealed	0.090	6.10										
Hanson Street	Sealed	0.205	15.10								11,000		
Helen St	Formed	0.050											
Holland Street	Sealed	0.681	12.35								30,000		
Huntingdale Ave	Sealed	0.128	6.00										
Hutchings Court	Sealed	0.300								8,500			
Isa St	Formed	0.084											
Isabella St	Open	0.115	5.60										
Jaffa St	Sealed	0.238	6.00									7,000	
James St	Sealed	0.906	8.68								38,000		

Road	Surface Type	Length (kms)	Width (m/ave)	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Janet St	Sealed	0.667	13.00										
Jarman Tce	Sealed	0.227	6.00					90,000					
John St	Formed	0.051											
Johnston Ave	Sealed	0.120	7.10						90,000				
Joseph St	Sealed	0.281	6.20										
Joy St	Formed	0.052											
King Drive	Sealed	1.200	6.30							22,000			
Kerry Crt	Sealed	0.091	8.00									2,500	
Lacepede Ave	Sealed	0.165	6.00									5,000	
Little James Street	Sealed	0.162	7.00			50,000							
MacDonnell St	Sealed	0.514	6.10							15,000			
Main Street	Open	0.088	6.00										
Marine Parade	Sealed	6.592	6.00										
Marine Parade (Lions Park/Jetty Carpark)	Sealed	N/a	N/a										
Matheson St	Sealed	0.260	7.90										6,000
McFarlane St	Sealed	1.037	12.00										43,500
Nash Ave	Sealed	0.600	6.00							10,000			
Ninth Ave	Open	0.150											
Ninth St (Rosetown)	Open	0.800	6.00										
North Street	Open	0.238	6.00							50,000			
Old School Court	Sealed	0.049	7.00										
Otter Drive	Sealed	0.102	6.40										
Patterson Lane	Sealed	0.264	5.00							5,000			
Peter Ave	Sealed	0.095	6.00									3,000	
Pinks Beach Rd	Sealed	1.900	6.50									65,000	

Road	Surface Type	Length (kms)	Width (m/ave)	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Promenade St	Sealed	0.127	7.20	57,750									
Railway St	Formed	0.075											
Railway Tce	Sealed	0.550	7.00										
Randall Lane	Sealed	0.046	12.50							2,500			
Redman Crescent	Sealed	0.097	7.00										7,500
Robert Ave	Sealed	0.092	6.00									3,000	
Scown Ave	Sealed	0.109	6.00										
Seaview Drive	Sealed	0.600	5.90										
Shore St	Open	0.163	6.00						45,000				
Simone Place	Sealed	0.270	8.00									7,500	
Sixteenth Ave	Sealed	0.242	5.90										
Sixth Ave	Formed	0.054											
Smiths Lane	Open	4.400	5.00			400,000	200,000						
South Tce	Sealed	0.268	8.25										10,000
Stanley Ave	Sealed	0.091	6.00										3,000
Station St	Formed	0.075											
Stief St	Sealed	0.181	6.00										5,500
Stocker Ave	Sealed	0.090	6.00										3,000
Strickland St	Sealed	0.398	13.00							18,000			
Tenth Ave	Sealed	0.078	5.80										
Third St (Rosetown)	Sealed / Open	0.820	6.00							35,000			
Thirteenth St	Sealed	0.092	4.90										
Thredgolds Ave	Sealed	0.103	6.20	42,000									
Todd Street	Sealed	0.195	6.00										
Trevor Drive	Sealed	0.233	8.00									6,500	

Road	Surface Type	Length (kms)	Width (m/ave)	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Twelth Ave	Sealed	0.088	5.90										
Venn Tce	Sealed	0.245	7.80										6,000
Water Street	Sealed	0.141	6.00									3,000	
Watson St	Sealed	0.244	4.80							4,000			
Wilhelmina St	Sealed	0.415	6.42							90,000			
Wrights Road	Open	0.400	4.00							4,000			
Wyomi Terrace	Sealed	0.193	6.00										
Young St	Sealed	0.761	13.90									25,000	
One and All Drive	Hotmix	0.433	7.20										
Brock Point	Hotmix	0.091	6.00										
Boat View Place	Hotmix	0.146	6.00										
Seagate Way	Hotmix	0.612	6.96										
Legoe Street	Hotmix	0.124	6.00										
Harbour View	Hotmix	0.212	8.20										
Fisherman's Wharf	Hotmix	0.120	8.20										
Bicycle Tracks	Hotmix										130,000	65,000	65,000
Airport Runway	Hotmix									50,000			
Footpath Upgrade Program	Upgrade			31,500	30,000	35,000	45,000	45,000					
Town Roads Construction (Unallocated)								250,000	220,000	95,500	241,000	208,500	292,000
Town Roads Reseal Program (Unallocated)													
Totals		**49.347**		**551,250**	**430,000**	**485,000**	**495,000**	**470,000**	**451,500**	**484,500**	**469,000**	**460,000**	**460,000**
Escalation Rate				1.000	1.030	1.061	1.093	1.126	1.159	1.194	1.230	1.267	1.305
Adjusted Total for AMP and LTFMP				**551,250**	**442,900**	**514,585**	**541,035**	**529,220**	**523,289**	**578,493**	**576,870**	**582,820**	**600,300**

Table 18: Town Roads, 0-10 year data

11. APPENDIX 7A - CWMS CAPITAL MAINTENANCE 10 YEAR PROGRAM

Description	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
CWMS ponds capital maintenance				80,000						80,000
Pump Replacement Program	15,600	15,600	15,600	15,600	15,600	15,600	15,600	15,600	15,600	15,600
Underground capital maintenance								75,000		
Septic Tank Desludging Program	50,000	10,000	45,000	60,000	50,000	10,000	45,000	60,000	50,000	10,000
Total	**65,600**	**25,600**	**60,600**	**155,600**	**65,600**	**25,600**	**60,600**	**150,600**	**65,600**	**105,600**
Escalation Rate	1.000	1.030	1.061	1.093	1.126	1.159	1.194	1.230	1.267	1.305
Adjusted Total for AMP and LTFMP	**65,600**	**26,368**	**64,297**	**170,071**	**73,866**	**29,670**	**72,356**	**185,238**	**83,115**	**137,808**

Table 19: CWMS 0-10 year plan

12. APPENDIX 8 – MAJOR PLANT AND EQUIPMENT 10 YEAR PROGRAM

Description	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Tandem Tipper (1st Truck)										
Tandem Tipper (2nd Truck)										
Canter Tipper										
Cat 12H Grader (Plant 1)										
Cat 12H Grader (Plant 2)				350,000						
Cat 12H Grader (Plant 3)									350,000	
Small Grader										
Combination Roller (Plant 1)										70,000
Combination Roller (Plant 2)	42,000									
Combi Roller										
Tractor										
Loader		180,000								
Dredge										
Mower										
Rockbuster										
Watertanker (Plant 1)			55,000							
Watertanker (Plant 2)								55,000		
Elevating Platform	12,120									
Works and Officer Vehicles	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000
Sundry Plant Replacement	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Computer Hardware / Software Replacement	8,900	15,000	35,000	5,000	15,000	5,000	35,000	5,000	15,000	35,000
Total	**138,020**	**270,000**	**165,000**	**430,000**	**90,000**	**80,000**	**110,000**	**135,000**	**440,000**	**180,000**
Escalation Rate	1.000	1.030	1.061	1.093	1.126	1.159	1.194	1.230	1.267	1.305
Adjusted Total for AMP and LTFMP	**138,020**	**278,100**	**175,065**	**469,990**	**101,340**	**92,720**	**131,340**	**166,050**	**557,480**	**234,900**

13. APPENDIX 9A – ROUTINE MAINTENANCE 10 YEAR PROGRAM

Description	Asset Type	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
Office Building	Building	3,870	3,986	4,106	4,229	4,356	4,486	4,621	4,760	4,902	5,049
Office Furniture and Equipment	Building	14,000	14,420	14,853	15,298	15,757	16,230	16,717	17,218	17,735	18,267
Dog Pound Maintenance	Building	500	515	530	546	563	580	597	615	633	652
Transfer S941tation Maintenance	Waste Management	10,000	10,300	10,609	10,927	11,255	11,593	11,941	12,299	12,668	13,048
CWMS General	CWMS	80,000	82,400	84,872	87,418	90,041	92,742	95,524	98,390	101,342	104,382
CWMS Desludging	CWMS	50,000	64,298	55,189	11,369	52,696	72,368	62,116	12,796	59,022	80,662
Coastal Management	Land	18,000	18,540	19,096	19,669	20,259	20,867	21,493	22,138	22,802	23,486
Truck Wash	Infrastructure	7,000	7,210	7,426	7,649	7,879	8,115	8,358	8,609	8,867	9,133
Cemetery General	Cemetery	7,500	7,725	7,957	8,195	8,441	8,695	8,955	9,224	9,501	9,786
Old School Building	Building	1,000	1,030	1,061	1,093	1,126	1,159	1,194	1,230	1,267	1,305
Description	**Asset Type**	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**	**2021/22**	**2022/23**
Road Maintenance - Sealed	Infrastructure	81,000	83,430	85,933	88,511	91,166	93,901	96,718	99,620	102,608	105,687
Road Maintenance - Unsealed (General)	Infrastructure	433,000	445,990	459,370	473,151	487,345	501,966	517,025	532,535	548,511	564,967
Road Maintenance - Unsealed (Tyning)	Infrastructure	46,000	47,380	48,801	50,265	51,773	53,327	54,926	56,574	58,271	60,020
Kerb & Water Table Maintenance	Infrastructure	9,000	9,270	9,548	9,835	10,130	10,433	10,746	11,069	11,401	11,743
Storm Water Drainage	Infrastructure	28,000	28,840	29,705	30,596	31,514	32,460	33,433	34,436	35,470	36,534
Footways/Bike Tracks	Infrastructure	7,800	8,034	8,275	8,523	8,779	9,042	9,314	9,593	9,881	10,177
Traffic Signs Maintenance	Infrastructure	24,000	24,720	25,462	26,225	27,012	27,823	28,657	29,517	30,402	31,315
Road Maintenance Traffic Control	Infrastructure	10,000	10,300	10,609	10,927	11,255	11,593	11,951	12,299	12,668	13,048
Update Road Signs OHS&W	Infrastructure										
Driveway Maintenance	Infrastructure	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800	3,914
Aerodrome General	Infrastructure	9,000	9,270	9,548	9,835	10,130	10,433	10,746	11,069	11,401	11,743

Plant and Machinery (Goods and Services)	Plant and Machinery	60,000	61,800	63,654	65,564	67,531	69,556	71,643	73,792	76,006	78,286
Plant and Machinery (Labour)	Plant and Machinery	46,000	47,380	48,801	50,265	51,773	53,327	54,926	56,574	58,271	60,020
Depot Buildings	Building	20,000	20,600	21,218	21,855	22,510	23,185	23,881	24,597	25,358	26,095

Description	**Asset Type**	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**	**2021/22**	**2022/23**
Minor Plant and Equipment	Plant and Machinery	26,000	26,780	27,583	28,411	29,263	30,141	31,045	31,977	32,936	33,924
Vandalism	Building	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800	3,914
Medical Centre	Building	1,400	1,442	1,485	1,530	1,576	1,623	1,672	1,722	1,773	`1,827
Senior Citizens Building	Building	3,000	3,090	3,183	3,278	3,377	3,478	3,582	3,690	3,800	3,914
Hall	Building	8,000	8,240	8,487	8,742	9,004	9,274	9,552	9,839	10,134	10,438
Parks and Gardens General	Parks, Gardens and Recreational	205,000	211,150	217,485	224,009	230,729	237,651	244,781	252,124	259,688	267,479
Water Systems Repair General	Parks, Gardens and Recreational	8,000	8,240	8,487	8,742	9,004	9,274	9,552	9,839	10,134	10,438
Maria Creek and Surrounds	Parks, Gardens and Recreational	4,055	4,177	4,302	4,431	4,564	4,701	4,842	4,987	5,137	5,291
Cape Jaffa Anchorage Parks and Gardens Maintenance	Parks, Gardens and Recreational	9,000	9,270	9,548	9,835	10,130	10,433	10,746	11,069	11,401	11,743
Description	**Asset Type**	**2013/14**	**2014/15**	**2015/16**	**2016/17**	**2017/18**	**2018/19**	**2019/20**	**2020/21**	**2021/22**	**2022/23**
General Painting and Maintenance	Parks, Gardens and Recreational	5,000	5,150	5,305	5,464	5,628	5,796	5,970	6,149	6,334	6,524

Foreshore Water Systems Repairs	Parks, Gardens and Recreational	1,000	1,030	1,061	1,093	1,126	1,159	1.194	1,230	1,267	1,305
Beach Access	Parks, Gardens and Recreational	5,500	5,665	5,835	6,010	6,190	6,376	6,567	6,764	6,967	7,176
Kingston Boat Haven Channel	Parks, Gardens and Recreational	18,074	18,616	19,175	19,750	20,342	20,953	21,581	22,229	22,896	23,582
Jetty	Parks, Gardens and Recreational	12,000	12,360	12,731	13,113	13,506	13,911	14,329	14,758	15,201	15,657
Information Bay	Building	500	515	530	546	563	580	597	615	633	652
Caravan Park	Infrastructure	17,500	18,025	18,566	19,123	19,696	20,287	20,896	21,523	22,168	22,834
Public Conveniences	Building	22,000	22,660	23,340	24,040	24,761	25,504	26,269	27,057	27,869	28,705
Total		**1,359,784**	**1,413,376**	**1,444,739**	**1,442,605**	**1,526,869**	**1,590,767**	**1,626,067**	**1,623,665**	**1,718,217**	**1,789,633**

Table21: Routine Maintenance 0-10 year plan

14. APPENDIX 12 – RISK ASSESSMENT MATRIX

LIKELIHOOD

Level	Descriptor	Description
A	Almost Certain	The event is expected to occur in most circumstances
B	Likely	The event will probably occur in most circumstances
C	Moderate	The event should occur at sometime
D	Unlikely	The event could occur at some time
E	Rare	The event may occur only in exceptional circumstances

CONSEQUENCE

Level	Descriptor	Description
1	Insignificant	No injuries, minimal or no political issues, no loss of business continuity, low financial loss.
2	Minor	Local first aid treatment, minor political issues, minor loss of business continuity, medium financial loss.
3	Moderate	Some medical treatment needed, high-level political damage, high loss of business continuity, high financial loss.
4	Major	Extensive injuries, major political damage, major loss of business continuity, huge financial loss.
5	Catastrophic	Death, huge financial loss. Extreme loss of business continuity, irretrievable political damage.

RISK ANALYSIS MATRIX – LEVEL OF RISK

	CONSEQUENCE				
LIKELIHOOD	**Insignificant 1**	**Minor 2**	**Moderate 3**	**Major 4**	**Catastrophic 5**
A (Almost Certain)	S	S	H	H	H
B (Likely)	M	S	S	H	H
C (Moderate)	L	M	S	H	H
D (Unlikely)	L	L	M	S	H
E (Rare)	L	L	M	S	S

Legend: - H = High Risk, S = Significant risk, M = Moderate Risk, L = Low risk

RISK RANKINGS

High	High Risk, attend to immediately (<1 hour)
Significant	Significant Risk, attend to within 24 hours
Moderate	Moderate Risk, attend to within 1 month
Low	Low Risk, attend to within 3 months, manage

15. APPENDIX 13 – LIST OF TABLES

Table 1: Legislative Constraints 14
Table 2: Community Expectations – Standards 16
Table 3: Legal Compliance Standards 17
Table 4: Cost Effectiveness Standard 17
Table 5: Visual and Functional Standards 18
Table 6: Roads Program – 5 Year Capital Works 22
Table 7: Land and Buildings Initiatives for 5 Years 23
Table 8: Plant and Machinery – 5 Year Investment Program 24
Table 9: CWMS Initiatives – Capital Maintenance Works 5 Year Plan 24
Table 10: Community Initiatives – New Capital Works 5 yr plan 25
Table 11: Risk Scale 26
Table 12: Asset Criticality Analysis 26
Table 13: Routine Maintenance Summary 27
Table 14: Asset Risk Analysis 30
Table 15: Asset Summary 31
Table 16: Land and Buildings Capital Investment – 0-10 years 32
Table 17: Rural Roads, 0-10 year data 36
Table 18: Town Roads, 0-10 year data 41
Table 19: CWMS 0-10 year plan 42
Table 20: Major Plant and Equipment 0-10 year plan 43
Table 21: Routine Maintenance 0-10 year plan 44

16. APPENDIX 14 – LIST OF FIGURES

Figure 1: Asset Management Framework (Source International Infrastructure Manual) 4
Figure 2: Asset Framework 5
Figure 3: Asset Management Planning Process 7
Figure 4: Organisational Structure 8
Figure 5: Risk Management Framework 20