

Yorke Peninsula Council





Community Wastewater Management System (CWMS)

Asset Management Plan



Scenario 1 Version 1

July 2017

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1. EXECUTIVE SUMMARY

Context

Council owns and maintains 18 Community Wastewater Management Schemes (CWMS) across its district. CWMS enable the extraction, treatment and disposal of wastewater to the highest standards.

The Community Wastewater Management System (CWMS) Service

The CWMS network comprises:

- CWMS Nodes
- CWMS Pipes
- CWMS Pump Stations
- CWMS Wastewater Treatment Plants and Storage

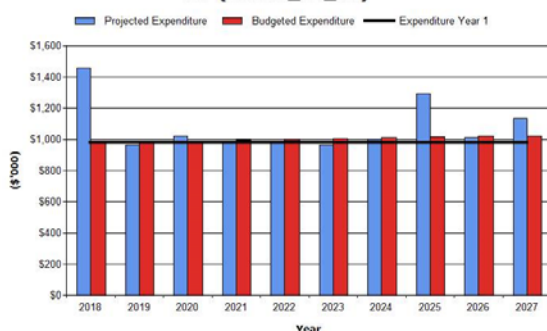
These infrastructure assets have a replacement value of **\$25,406,352**.

What does it Cost?

The projected outlays necessary to provide the services covered by this Asset Management Plan (AMP) includes operations, maintenance, renewal and upgrade of existing assets over the 10 year planning period is **\$10,807,000** or **\$1,081,000** on average per year.

Estimated available funding for this period is **\$10,028,000** or **\$1,003,000** on average per year which is **93%** of the cost to provide the service. This is a funding shortfall of **\$78,000** on average per year. Projected expenditure required to provide services in the AMP compared with planned expenditure currently included in the LTFP are shown in the graph below.

Yorke Peninsula DC - Projected and Budget Expenditure for (CWMS_S1_V1)



What we will do

We plan to provide CWMS services for the following:

- Operation, maintenance, renewal and upgrade of CWMS assets as outlined in Table 2.1 to meet service levels set by Council in annual budgets.

What we cannot do

We do **not** have enough funding to provide all services at the desired service levels or provide new services. Works and services that cannot be provided under present funding levels are:

- Upgrade all CWMS assets when required.

Managing the Risks

There are risks associated with providing the service and not being able to complete all identified activities and projects. We have identified major risks as:

- Failure to maintain the existing CWMS network to a safe and serviceable standard
- Failure to undertake inspections of the existing CWMS network

We will endeavour to manage these risks within available funding by:

- Ensuring sufficient funding to maintain the network at an appropriate level
- Prioritise all works required
- Document all inspections and complaints

Confidence Levels

This AMP is based on the most recent information available at the time of preparing this plan, Council will continue to review and update this plan to increase data confidence levels. Please refer to Table 6.5.1 for the assessment of data used in this AMP.

The Next Steps

The actions resulting from this asset management plan are:

- Complete the Improvement Plan as set out in Table 7.2

Questions you may have

What is this plan about?

This asset management plan covers the infrastructure assets that serve the Yorke Peninsula Council community's CWMS needs. These assets include gravity and rising mains, pump stations and treatment plants.

What is an Asset Management Plan?

Asset management planning is a comprehensive process to ensure delivery of services from infrastructure is provided in a financially sustainable manner.

An asset management plan details information about infrastructure assets including actions required to provide an agreed level of service in the most cost effective manner. The plan defines the services to be provided, how the services are provided and what funds are required to provide the services.

Why is there a funding shortfall?

Most of the Council's CWMS network was constructed by developers and from government grants, often provided and accepted without consideration of ongoing operations, maintenance and replacement needs.

Many of these assets are approaching the later years of their life and require replacement, services from the assets are decreasing and maintenance costs are increasing.

Our present funding levels are insufficient to continue to provide existing services at current levels in the medium term.

What options do we have?

Resolving the funding shortfall involves several steps:

1. Improving asset knowledge so that data accurately records the asset inventory, how assets are performing and when assets are not able to provide the required service levels,
2. Improving our efficiency in operating, maintaining, renewing and replacing existing assets to optimise life cycle costs,
3. Identifying and managing risks associated with providing services from infrastructure,
4. Making trade-offs between service levels and costs to ensure that the community receives the best return from infrastructure,
5. Identifying assets surplus to needs for disposal to make savings in future operations and maintenance costs,

6. Consulting with the community to ensure that CWMS services and costs meet community needs and are affordable,
7. Developing partnership with other bodies, where available to provide services,
8. Seeking additional funding from governments and other bodies to better reflect a 'whole of government' funding approach to infrastructure services.

What happens if we don't manage the shortfall?

It is likely that we will have to reduce service levels in some areas, unless new sources of revenue are found. For CWMS, the service level reduction may compromise the operation of the schemes.



VC pipe that has been affected by ground movement.

What can we do?

We can develop options, costs and priorities for future CWMS services, consult with the community to plan future services to match the community service needs with ability to pay for services and maximise community benefits against costs.

What can you do?

We will be pleased to consider your thoughts on the issues raised in this asset management plan and suggestions on how we may change or reduce its CWMS mix of services to ensure that the appropriate level of service can be provided to the community within available funding.

2. INTRODUCTION

2.1 Background

This asset management plan is to demonstrate responsive management of assets (and services provided from assets), compliance with regulatory requirements, and to communicate funding needed to provide the required levels of service over a 20 year planning period.

The asset management plan follows the format for AMPs recommended in Section 4.2.6 of the International Infrastructure Management Manual¹.

The asset management plan is to be read with the Council's Asset Management Policy and the following associated planning documents:

- Yorke Peninsula Council Strategic Management Plan
- Yorke Peninsula Council Long Term Financial Plan
- Yorke Peninsula Council Annual Business Plan and Budget
- Yorke Peninsula Council CWMS Infrastructure Asset Valuation and Methodology

The infrastructure assets covered by this asset management plan are shown in Table 2.1. These assets are used to provide CWMS services to the community.

Table 2.1: Assets covered by this Plan

| Asset category | Dimension | Replacement Value |
|--------------------------------------|---|---------------------|
| Nodes | House Connections (2644) Maintenance Holes (196) Inspection Points (16) Flushing Points (918) Air Valves (4) Isolation Valves (2) Oblique Junction (24) | \$ 2,581,888 |
| Pipes | Rising Main (31850m) Gravity Main (62750m) House Connection (11328m) | \$15,106,398 |
| Pumping Stations | 39 | \$ 3,252,958 |
| Wastewater Treatment Plant & Storage | 17 | \$ 4,465,108 |
| TOTAL | | \$25,406,352 |

Key stakeholders in the preparation and implementation of this asset management plan are shown in Table 2.1.1.

Table 2.1.1: Key Stakeholders in the AMP

| Key Stakeholder | Role in Asset Management Plan |
|--|---|
| Councillors | <ul style="list-style-type: none"> • Represent needs of community/shareholders, • Allocate resources to meet the Council's objectives in providing services while managing risks, • Ensure Council is financial sustainable. |
| Corporate Management Team | Endorse the development of AMPs and provide resources required to complete this task. Set high level priorities for asset management development in Council and raise the awareness of this function among Council staff and contractors. Support the implementation of actions resulting from this plan and prepared to make changes to a better way of managing assets and delivering services. Support for an asset management driven budget and LTFP. |
| Assets & Infrastructure Services Staff | Manage the infrastructure with resources provided by Council. |

¹ IPWEA, 2011, Sec 4.2.6, *Example of an Asset Management Plan Structure*, pp 4|24 – 27.

2.2 Goals and Objectives of Asset Management

The Council exists to provide services to its community. Some of these services are provided by infrastructure assets. We have acquired infrastructure assets by 'purchase', by contract, construction by our staff and by donation of assets constructed by developers and others to provide CWMS services.

Our goal in managing infrastructure assets is to meet the defined level of service (as amended from time to time) in the most cost effective manner for present and future consumers. The key elements of infrastructure asset management are:

- Providing a defined level of service and monitoring performance,
- Managing the impact of growth through demand management and infrastructure investment,
- Taking a lifecycle approach to developing cost-effective management strategies for the long-term that meet the defined level of service,
- Identifying, assessing and appropriately controlling risks, and
- Having a long-term financial plan which identifies required, affordable expenditure and how it will be financed.²

2.3 Plan Framework

Key elements of the plan are

- Levels of service – specifies the services and levels of service to be provided by the Council,
- Future demand – how this will impact on future service delivery and how this is to be met,
- Life cycle management – how Council will manage its existing and future assets to provide defined levels of service,
- Financial summary – what funds are required to provide the defined services,
- Asset management practices,
- Monitoring – how the plan will be monitored to ensure it is meeting Council's objectives,
- Asset management improvement plan.

2.4 Core and Advanced Asset Management

This asset management plan is prepared as a 'core' asset management plan over a 20 year planning period in accordance with the International Infrastructure Management Manual³. It is prepared to meet legislative and organisational requirements for sustainable service delivery and long term financial planning and reporting. Core asset management is a 'top down' approach where analysis is applied at the 'system' or 'network' level.

Future revisions of this asset management plan will move towards 'advanced' asset management using a 'bottom up' approach for gathering asset information for individual assets to support the optimisation of activities and programs to meet agreed service levels in a financially sustainable manner.

2.5 Community Consultation

This 'core' asset management plan is prepared to facilitate community consultation initially through feedback on public display of draft asset management plans prior to adoption by the Council/Board. Future revisions of the asset management plan will incorporate community consultation on service levels and costs of providing the service. This will assist the Council and the community in matching the level of service needed by the community, service risks and consequences with the community's ability and willingness to pay for the service.

² Based on IPWEA, 2011, IIMM, Sec 1.2 p 1|7.

³ IPWEA, 2011, IIMM.

3. LEVELS OF SERVICE

3.1 Customer Research and Expectations

The Council has not carried out any research on customer expectations. This will be investigated for future updates of the asset management plan.

Table 3.1: Community Satisfaction Survey Levels

| Performance Measure | Satisfaction Level | | | | |
|---|--------------------|------------------|-----------|--------------------|---------------|
| | Very Satisfied | Fairly Satisfied | Satisfied | Somewhat satisfied | Not satisfied |
| To be completed in future updates of this plan. | | | | | |

3.2 Strategic and Corporate Goals

This asset management plan is prepared under the direction of the Council's vision, mission, goals and objectives.

Our vision is:

We will foster opportunities to support and enhance Yorke Peninsula which is valued for its natural beauty, rich agriculture, spectacular coastline and unique blend of seaside and rural lifestyles.

Relevant organisational goals and objectives and how these are addressed in this asset management plan are:

Table 3.2: Organisational Goals and how these are addressed in this Plan

| Goal | Objective | How Goal and Objectives are addressed in AMP |
|--|---|--|
| Community Connected through Infrastructure | Develop and deliver on Asset Management Plans for all asset classes | CWMS AMP developed and adopted by Council |
| Community Connected through Infrastructure | Explore Provision of new infrastructure | New infrastructure provided as per an adopted CWMS AMP |

The Council will exercise its duty of care to ensure public safety in accordance with the infrastructure risk management plan prepared in conjunction with this AMP. Management of infrastructure risks is covered in Section 5.2.

3.3 Legislative Requirements

The Council has to meet many legislative requirements including Australian and State legislation and regulations. These include:

Table 3.3: Legislative Requirements

| Legislation | Requirement |
|--|--|
| Local Government Act | Sets out role, purpose, responsibilities and powers of local governments including the preparation of a LTFP supported by asset management plans for sustainable service delivery. |
| SA Public Health Act and Regulations | Promote and to provide for the protection of the health of the public of South Australia and to reduce the incidence of preventable illness, injury and disability. |
| Environment Protection Act and Regulations | Provides for the protection of the environment. |
| Water Industry Act and Regulations | To facilitate planning in connection with water demand and supply. |
| Work Health and Safety Act and Regulations | To provide for the health, safety and welfare of persons at work. |

| | |
|-----------------------------------|---|
| Office of the Technical Regulator | Monitors compliance with legislation and applicable technical standards in the electricity, gas and water industries. |
|-----------------------------------|---|

The Council will exercise its duty of care to ensure public safety in accordance with the infrastructure risk management plan linked to this AMP. Management of risks is discussed in Section 5.2.

3.4 Community Levels of Service

Service levels are defined in two terms, customer levels of service and technical levels of service.

Community Levels of Service measure how the community receives the service and whether the Council is providing community value.

Community levels of service measures used in the asset management plan are:

| | |
|----------------------|------------------------------------|
| Quality | How good is the service? |
| Function | Does it meet users' needs? |
| Capacity/Utilisation | Is the service over or under used? |

The Council's current and expected community service levels are detailed in Tables 3.4 and 3.5. Table 3.4 shows the agreed expected community levels of service based on resource levels in the current long-term financial plan and community consultation/engagement.

Table 3.4: Community Level of Service

| Service Attribute | Service Objective | Performance Measure Process | Current Performance | Expected position in 10 years based on current LTFP |
|--|---|---|---|---|
| COMMUNITY OUTCOMES | | | | |
| CWMS enables the extraction, treatment and disposal of wastewater in accordance with industry standards. | | | | |
| COMMUNITY LEVELS OF SERVICE | | | | |
| Quality | Provide an efficient method of collection and disposal of community wastewater | Customer Service Requests relating to CWMS maintenance | < 50 per year | < 20 per year |
| | Organisational measure Confidence levels | High | High | High |
| Function | CWMS network is appropriately maintained. Meets relevant legislative requirements. | Customer Service Requests relating to CWMS maintenance. Complies with legislative requirements. | < 50 per year Complies with legislative requirements. | < 20 per year Continuing to comply with legislative requirements. |
| | Organisational measure Confidence levels | High | High | High |
| Capacity/ Utilisation | CWMS network has the capacity to accept current and projected flow rates for each township. | New developments can connect to the CWMS network. | Less than 30 new connections per year in total for all schemes. Each scheme has capacity for new connections. | Less than 30 new connections per year in total for all schemes. Continuing to meet capacity requirements. |
| | Organisational measure Confidence levels | High | High | High |

3.5 Technical Levels of Service

Technical Levels of Service - Supporting the community service levels are operational or technical measures of performance. These technical measures relate to the allocation of resources to service activities that the Council undertakes to best achieve the desired community outcomes and demonstrate effective organisational performance.

Technical service measures are linked to annual budgets covering:

- Operations – the regular activities to provide services such as septic tank desludging, regular condition and defect inspection of the pipe network,
- Maintenance – the activities necessary to retain an asset as near as practicable to an appropriate service condition (eg pipe repairs),
- Renewal – the activities that return the service capability of an asset up to that which it had originally (eg frequency and cost of pipeline replacement and treatment plant component replacement),
- Upgrade – the activities to provide a higher level of service (eg replacing a pipeline with a larger size) or a new service that did not exist previously (eg a new pump station).

Service and asset managers plan, implement and control technical service levels to influence the customer service levels.⁴

Table 3.5 shows the technical level of service expected to be provided under this AMP. The agreed sustainable position in the table documents the position agreed by the Council following community consultation and trade-off of service levels performance, costs and risk within resources available in the long-term financial plan.

⁴ IPWEA, 2011, IIMM, p 2.22

Table 3.5: Technical Levels of Service

| Service Attribute | Service Objective | Activity Measure Process | Current Performance * | Desired for Optimum Lifecycle Cost ** | Agreed Sustainable Position *** |
|------------------------------------|--|---|---|--|--|
| TECHNICAL LEVELS OF SERVICE | | | | | |
| Operations | CWMS network meets user requirements. | Regular condition and defect surveys. Septic Tank Desludging. | Annual condition and defect inspection of 5% of CWMS pipe network. Regular condition and defect inspections of WWTP by staff. Annual septic tank desludging program. | Annual condition and defect inspection of 5% of CWMS pipe network. Regular condition and defect inspections of WWTP by staff. Bi-annual condition and defect inspection of Pumping Stations. | Current Performance |
| | | Budget | Budget – Current | Budget – Current | Budget - Current |
| Maintenance | CWMS network is well maintained. | Regular maintenance program and Customer Service Requests completed in a reasonable time frame. | Planned maintenance is undertaken as and where required. Customer Service Requests are actioned in a time frame determined by their priority. | Maintenance is undertaken as planned and required. | Current Performance |
| | | Budget | Budget – Current | Budget - Current | Budget - Current |
| Renewal | Renewal of CWMS assets as required and at the optimum time frame. | Assets renewed as per current renewal program and budget. | Planned renewal work is undertaken as per current renewal program and budget. | Identified renewal work funded each year as per adopted Capital Renewal Program. | Identified renewal work is currently funded. |
| | | Budget | Budget – Current | Budget - Current | Budget - Current |
| Upgrade/New | Upgrade of CWMS assets are identified through design and new technology. | Assets are upgraded as per current upgrade program and budget. | Planned upgrade work is undertaken as per current upgrade program and budget. | Identified upgrade work funded each year as per adopted Capital Upgrade Program | Identified upgrade work is currently funded. |
| | | Budget | Budget - Current | Budget – Current | Budget - Current |

Note: * Current activities and costs (currently funded).

** Desired activities and costs to sustain current service levels and achieve minimum life cycle costs (not currently funded).

*** Activities and costs communicated and agreed with the community as being sustainable (funded position following trade-offs, managing risks and delivering agreed service levels).

4. FUTURE DEMAND

4.1 Demand Drivers

Drivers affecting demand include population change, changes in demographics, seasonal factors, vehicle ownership rates, consumer preferences and expectations, technological changes, economic factors, agricultural practices, environmental awareness, etc.

4.2 Demand Forecast

The present position and projections for demand drivers that may impact future service delivery and utilisation of assets were identified and are documented in Table 4.3.

4.3 Demand Impact on Assets

The impact of demand drivers that may affect future service delivery and utilisation of assets are shown in Table 4.3.

Table 4.3: Demand Drivers, Projections and Impact on Services

| Demand drivers | Present position | Projection | Impact on services |
|---|--|---|--|
| New Development / Connections | Growth through new houses and small land division connections. | Expected to continue | Impact on existing collection, transfer, treatment and storage infrastructure. |
| Tourism | Increased demand on some coastal township services during peak holiday periods | Expected to continue | Impact on existing collection, transfer, treatment and storage infrastructure. |
| Regulatory changes to CWMS standards and guidelines | Regulatory standards are managed by the Infrastructure Manager | Additional operational and reporting requirements | Not identified |

4.4 Demand Management Plan

Demand for new services will be managed through a combination of managing existing assets, upgrading of existing assets and providing new assets to meet demand and demand management. Demand management practices include non-asset solutions, insuring against risks and managing failures.

Non-asset solutions focus on providing the required service without the need for the Council to own the assets and management actions including reducing demand for the service, reducing the level of service (allowing some assets to deteriorate beyond current service levels) or educating customers to accept appropriate asset failures⁵. Examples of non-asset solutions include providing services from existing infrastructure such as aquatic centres and libraries that may be in another community area or public toilets provided in commercial premises.

Opportunities to date for demand management are shown in Table 4.4. Further opportunities will be developed in future revisions of this asset management plan.

Table 4.4: Demand Management Plan Summary

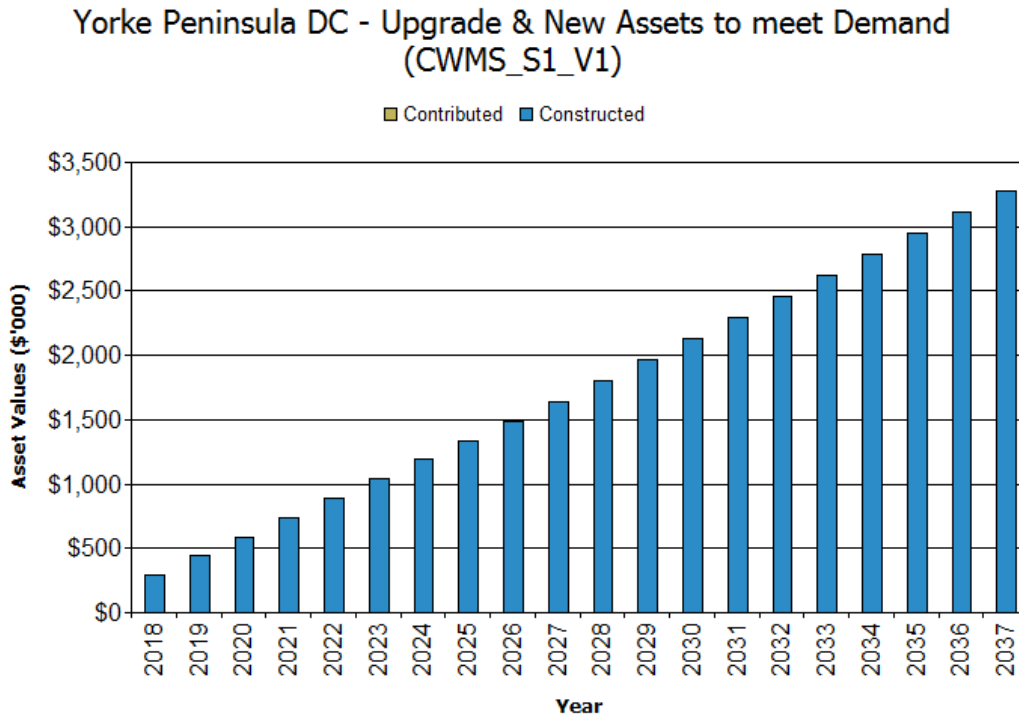
| Demand Driver | Impact on Services | Demand Management Plan |
|---|--------------------|------------------------|
| To be developed in future revisions of this plan. | | |

⁵ IPWEA, 2011, IIMM, Table 3.4.1, p 3|58.

4.5 Asset Programs to meet Demand

The new assets required to meet growth will be acquired free of cost from land developments and constructed/acquired by the Council. New assets constructed/acquired by the Council are discussed in Section 5.5. The cumulative value of new contributed and constructed asset values are summarised in Figure 1.

Figure 1: Upgrade and New Assets to meet Demand



Acquiring these new assets will commit the Council to fund ongoing operations, maintenance and renewal costs for the period that the service provided from the assets is required. These future costs are identified and considered in developing forecasts of future operations, maintenance and renewal costs in Section 5.

5. LIFECYCLE MANAGEMENT PLAN

The lifecycle management plan details how the Council plans to manage and operate the assets at the agreed levels of service (defined in Section 3) while optimising life cycle costs.

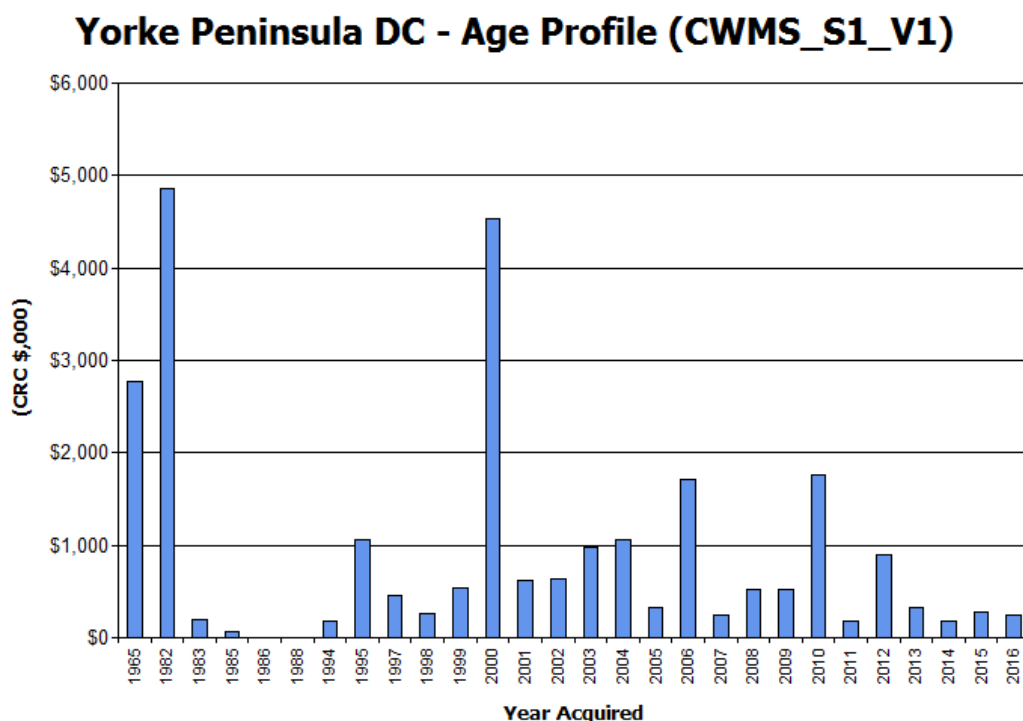
5.1 Background Data

5.1.1 Physical parameters

The assets covered by this asset management plan are shown in Table 2.1.

The age profile of the assets include in this AMP is shown in Figure 2.

Figure 2: Asset Age Profile



Plans showing the CWMS assets are:

- Council's GIS
- Records Management System

5.1.2 Asset capacity and performance

The Council's services are generally provided to meet design standards where these are available.

Locations where deficiencies in service performance are known are detailed in Table 5.1.2.

Table 5.1.2: Known Service Performance Deficiencies

| Location | Service Deficiency |
|--|---|
| Maitland CWMS | VC pipework – many areas affected by ground movement and tree roots. Review CCTV Survey to develop strategy to address issues. |
| Ardrossan, Maitland and Tiddy Widdy Beach CWMS | Inspection Points – many inspection points are not accessible. Review CCTV Survey to identify locations and develop strategy to address issues. |
| Various CWMS | Not meeting water quality standards on a regular basis. Review new technology to improve treatment of wastewater. |

The above service deficiencies were identified from maintenance records and customer service requests..

5.1.3 Asset condition

Condition of CWMS assets is monitored by Council staff but a full condition profile has not yet been developed for the entire CWMS network. Council have commenced an annual condition and defect inspection of the network and this will be used to develop a condition profile in a future reiteration of this plan.

The condition profile of our assets is shown in Figure 3.

Figure 3: Asset Condition Profile

Asset Condition Profile will be added in a future reiteration of this plan.

Condition is measured using a 1 – 5 grading system⁶ as detailed in Table 5.1.3.

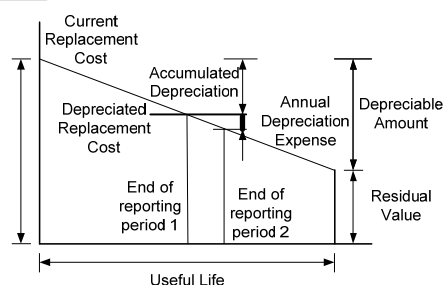
Table 5.1.3: Simple Condition Grading Model

| Condition Grading | Description of Condition |
|-------------------|---|
| 1 | Very Good: only planned maintenance required |
| 2 | Good: minor maintenance required plus planned maintenance |
| 3 | Fair: significant maintenance required |
| 4 | Poor: significant renewal/rehabilitation required |
| 5 | Very Poor: physically unsound and/or beyond rehabilitation |

5.1.4 Asset valuations

The value of assets recorded in the asset register as at **30th June 2016** covered by this asset management plan is shown below. Assets were last revalued at **1st July 2014**. Assets are valued at fair value expressed as Current Replacement Cost (CRC) of an asset minus any accumulated depreciation and impairment losses.

| | |
|---|---------------------|
| Current Replacement Cost | \$25,406,000 |
| Depreciable Amount | \$25,385,000 |
| Depreciated Replacement Cost ⁷ | \$16,524,000 |
| Annual Depreciation Expense | \$478,000 |



Useful lives were reviewed in **August 2015** by Council staff and consultants. Council value their assets at a component level which enables assets to be assigned an average useful life for each component to determine depreciation rates.

The useful life of a CWMS asset is assumed to be the time that an asset is expected to last before total replacement is required. It is likely that during their useful life, some assets will require maintenance.

The useful life of CWMS assets is governed by two factors:

- Structural deterioration – i.e. when a pipe or pit or any asset fails due to age/physical deterioration and renewal is required.
- Suitability – when despite being in physically good condition an asset is no longer suitable for purpose, e.g. when a pipe's capacity is exceeded.

The useful lives that are assigned to different CWMS asset types are based on industry standards.

Major changes from previous valuations are due to CWMS Asset Register being updated and the asset group being further componentised and unit rate and useful lives being reviewed.

⁶ IPWEA, 2011, IIMM, Sec 2.5.4, p 2 | 79.

⁷ Also reported as Written Down Current Replacement Cost (WDCRC).

Various ratios of asset consumption and expenditure have been prepared to help guide and gauge asset management performance and trends over time.

Rate of Annual Asset Consumption **1.9%**
(Depreciation/Depreciable Amount)

Rate of Annual Asset Renewal **0.6%**
(Capital renewal exp/Depreciable amount)

In **2017/18** the Council plans to renew assets at **31.2%** of the rate they are being consumed and will be increasing its asset stock by **1.1%** in the year.

5.1.5 Historical Data

Historical data, such as construction plans, on each of Council's CWMS are located in the Assets and Infrastructure department and Council's records system.

5.2 Infrastructure Risk Management Plan

An assessment of risks⁸ associated with service delivery from infrastructure assets has identified critical risks that will result in loss or reduction in service from infrastructure assets or a 'financial shock' to the Council. The risk assessment process identifies credible risks, the likelihood of the risk event occurring, the consequences should the event occur, develops a risk rating, evaluates the risk and develops a risk treatment plan for non-acceptable risks.

Critical risks, being those assessed as 'Very High' - requiring immediate corrective action and 'High' – requiring prioritised corrective action identified in the Infrastructure Risk Management Plan, together with the estimated residual risk after the selected treatment plan is operational are summarised in Table 5.2. These risks are reported to management and Council/Board.

Table 5.2: Critical Risks and Treatment Plans

| Service or Asset at Risk | What can Happen | Risk Rating (VH, H) | Risk Treatment Plan | Residual Risk * | Treatment Costs |
|--------------------------------|---|---------------------|--|-----------------|------------------------------|
| Pump Failure | Effluent flowing into streets and property. | | Telemetry monitoring of systems. Backup pumps available. Staff on call. | | Current Budget |
| Pipe Blockage / Break | Effluent flowing into streets and property. | | CCTV data collection to identify problem areas. CSR system. | | Current Budget |
| External Party Damage to Pipes | External Party digging through pipes. | | DBYD Member. SF039 Application to Lay Underground Service. | | Current Budget |
| Long Term Power Failure | Power Blackout | | Purchase of portable generators to run Pump Stations and Treatment Plant | | Future Budget Considerations |

Note * The residual risk is the risk remaining after the selected risk treatment plan is operational.

5.3 Routine Operations and Maintenance Plan

Operations include regular activities to provide services such as public health, safety and amenity, eg cleansing, street sweeping, grass mowing and street lighting.

Routine maintenance is the regular on-going work that is necessary to keep assets operating, including instances where portions of the asset fail and need immediate repair to make the asset operational again.

⁸ Critical Risks and Treatments have been identified but not assessed

5.3.1 Operations and Maintenance Plan

Operations activities affect service levels including quality and function through street sweeping and grass mowing frequency, intensity and spacing of street lights and cleaning frequency and opening hours of building and other facilities.

Maintenance includes all actions necessary for retaining an asset as near as practicable to an appropriate service condition including regular ongoing day-to-day work necessary to keep assets operating, eg road patching but excluding rehabilitation or renewal. Maintenance may be classified into reactive, planned and specific maintenance work activities.

Reactive maintenance is unplanned repair work carried out in response to service requests and management/supervisory directions.

Planned maintenance is repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown experience, prioritising, scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

Specific maintenance is replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, replacing air conditioning units, etc. This work falls below the capital/maintenance threshold but may require a specific budget allocation.

Actual past and budgeted maintenance expenditure is shown in Table 5.3.1.

Table 5.3.1: Maintenance Expenditure Trends

| Year | Maintenance Expenditure |
|---------|-------------------------|
| 2014/15 | \$718,000 |
| 2015/16 | \$609,000 |
| 2016/17 | \$712,489 |

Maintenance expenditure levels are considered to be adequate to meet projected service levels, which may be less than or equal to current service levels. Where maintenance expenditure levels are such that will result in a lesser level of service, the service consequences and service risks have been identified and service consequences highlighted in this AMP and service risks considered in the Infrastructure Risk Management Plan.

Assessment and prioritisation of reactive maintenance is undertaken by Council staff using experience and judgement.

5.3.2 Operations and Maintenance Strategies

The Council will operate and maintain assets to provide the defined level of service to approved budgets in the most cost-efficient manner. The operation and maintenance activities include:

- Scheduling operations activities to deliver the defined level of service in the most efficient manner,
- Undertaking maintenance activities through a planned maintenance system to reduce maintenance costs and improve maintenance outcomes. Undertake cost-benefit analysis to determine the most cost-effective split between planned and unplanned maintenance activities (50 – 70% planned desirable as measured by cost),
- Maintain a current infrastructure risk register for assets and present service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council/Board,
- Review current and required skills base and implement workforce training and development to meet required operations and maintenance needs,
- Review asset utilisation to identify underutilised assets and appropriate remedies, and over utilised assets and customer demand management options,

- Maintain a current hierarchy of critical assets and required operations and maintenance activities,
- Develop and regularly review appropriate emergency response capability,
- Review management of operations and maintenance activities to ensure Council is obtaining best value for resources used.

Asset hierarchy

An asset hierarchy provides a framework for structuring data in an information system to assist in collection of data, reporting information and making decisions. The hierarchy includes the asset class and component used for asset planning and financial reporting and service level hierarchy used for service planning and delivery.

The Council's service hierarchy is shown in Table 5.3.2.

Table 5.3.2: Asset Service Hierarchy

| Service Hierarchy | Service Level Objective |
|---|---|
| Nodes | Conveyance of effluent from source to treatment and disposal locations |
| Pipes | Conveyance of effluent from source to treatment and disposal locations |
| Pump Stations | Conveyance of effluent from source to treatment and disposal locations |
| Wastewater Treatment Plants and Storage | Treatment of effluent to a standard suitable for disposal in compliance with regulatory standards |

Critical Assets

Critical assets are those assets which have a high consequence of failure but not necessarily a high likelihood of failure. By identifying critical assets and critical failure modes, Council can target and refine investigative activities, maintenance plans and capital expenditure plans at the appropriate time.

Operations and maintenance activities may be targeted to mitigate critical assets failure and maintain service levels. These activities may include increased inspection frequency, higher maintenance intervention levels, etc. Critical assets failure modes and required operations and maintenance activities are detailed in Table 5.3.2.1.

Table 5.3.2.1: Critical Assets and Service Level Objectives

| Critical Assets | Critical Failure Mode | Operations & Maintenance Activities |
|--|-----------------------|-------------------------------------|
| Not yet identified – to be developed in future reiterations of this plan | | |

Standards and specifications

Maintenance work is carried out in accordance with the following Standards and Specifications.

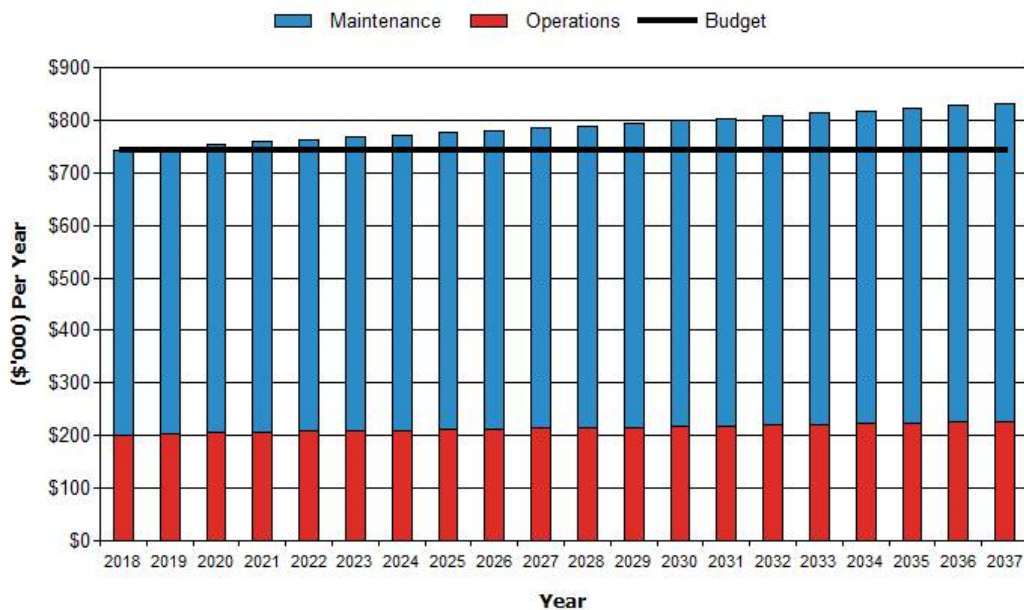
- Guidelines, Design Criteria and Standards for Community Wastewater Management Schemes (Local Government Association of South Australia)
- Sewerage Code of Australia (WSA 02) and any SA Water supplementary documentation
- Sewage Pumping Station Code of Australia (WSA 04).
- AS/NZS 3500: Plumbing and drainage.
- AS/NZS 2031: Water quality - Sampling for microbiological analysis (ISO 19458:2006, MOD).
- AS/NZS ISO 3100: Risk management - Principles and Guidelines.
- The National Construction Code (NCC) Volume 3 Plumbing Code of Australia (PCA) including South Australian Variations and/or Additional Provisions as listed in Appendix A.
- Standard Form: Technical Specification-Construction of Septic Tank Effluent Drainage Schemes (DH, LGA).
- Septic Tank Effluent Drainage Scheme Design Criteria (DH, LGA).
- South Australian Bio-solids Guidelines for the Safe Handling, Reuse or Disposal of Bio-solids (EPA).

5.3.3 Summary of future operations and maintenance expenditures

Future operations and maintenance expenditure is forecast to trend in line with the value of the asset stock as shown in Figure 4. Note that all costs are shown in current **2017/18** dollar values (ie real values).

Figure 4: Projected Operations and Maintenance Expenditure

Yorke Peninsula DC - Projected Operations & Maintenance Expenditure (CWMS_S1_V1)



Deferred maintenance, ie works that are identified for maintenance and unable to be funded are to be included in the risk assessment and analysis in the infrastructure risk management plan.

Maintenance is funded from the operating budget where available. This is further discussed in Section 6.2.

5.4 Renewal/Replacement Plan

Renewal and replacement expenditure is major work which does not increase the asset's design capacity but restores, rehabilitates, replaces or renews an existing asset to its original or lesser required service potential. Work over and above restoring an asset to original service potential is upgrade/expansion or new works expenditure.

5.4.1 Renewal plan

Assets requiring renewal/replacement are identified from one of three methods provided in the 'Expenditure Template'.

- Method 1 uses Asset Register data to project the renewal costs using acquisition year and useful life to determine the renewal year, or
- Method 2 uses capital renewal expenditure projections from external condition modelling systems (such as Pavement Management Systems), or
- Method 3 uses a combination of average *network renewals* plus *defect repairs* in the *Renewal Plan* and *Defect Repair Plan* worksheets on the 'Expenditure template'.

Method 1 was used for this asset management plan.

The useful lives of assets used to develop projected asset renewal expenditures are shown in Table 5.4.1. Asset useful lives were last reviewed on **August 2015**.⁹

Table 5.4.1: Useful Lives of Assets

| Asset (Sub)Category | Useful life |
|---|-----------------|
| Nodes | 20 to 70 years |
| Pipes | 70 years |
| Pumping Stations | 15 to 50 years |
| Wastewater Treatment Plants and Storage | 15 to 100 years |

5.4.2 Renewal and Replacement Strategies

The Council will plan capital renewal and replacement projects to meet level of service objectives and minimise infrastructure service risks by:

- Planning and scheduling renewal projects to deliver the defined level of service in the most efficient manner,
- Undertaking project scoping for all capital renewal and replacement projects to identify:
 - the service delivery 'deficiency', present risk and optimum time for renewal/replacement,
 - the project objectives to rectify the deficiency,
 - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
 - and evaluate the options against evaluation criteria adopted by the Council, and
 - select the best option to be included in capital renewal programs,
- Using 'low cost' renewal methods (cost of renewal is less than replacement) wherever possible,
- Maintain a current infrastructure risk register for assets and service risks associated with providing services from infrastructure assets and reporting Very High and High risks and residual risks after treatment to management and Council/Board,
- Review current and required skills base and implement workforce training and development to meet required construction and renewal needs,
- Maintain a current hierarchy of critical assets and capital renewal treatments and timings required ,
- Review management of capital renewal and replacement activities to ensure Council is obtaining best value for resources used.

Renewal ranking criteria

Asset renewal and replacement is typically undertaken to either:

- Ensure the reliability of the existing infrastructure to deliver the service it was constructed to facilitate (eg replacing a bridge that has a 5 t load limit), or
- To ensure the infrastructure is of sufficient quality to meet the service requirements (eg roughness of a road).¹⁰

It is possible to get some indication of capital renewal and replacement priorities by identifying assets or asset groups that:

- Have a high consequence of failure,
- Have a high utilisation and subsequent impact on users would be greatest,
- The total value represents the greatest net value to the Council,
- Have the highest average age relative to their expected lives,
- Are identified in the AMP as key cost factors,
- Have high operational or maintenance costs, and

⁹ CWMS Infrastructure Asset Valuation & Methodology 1 July 2014

¹⁰ IPWEA, 2011, IIMM, Sec 3.4.4, p 3|60.

- Where replacement with modern equivalent assets would yield material savings.¹¹

The ranking criteria used to determine priority of identified renewal and replacement proposals is detailed in Table 5.4.2.

Table 5.4.2: Renewal and Replacement Priority Ranking Criteria

| Criteria | Weighting |
|-----------------------------|-------------------------------|
| Blockages / Breakages | No weighting criteria adopted |
| Customer Service Requests | No weighting criteria adopted |
| WWTP Water Quality Standard | No weighting criteria adopted |
| Available Budget | No weighting criteria adopted |
| Total | 100% |

Renewal and replacement standards

Renewal work is carried out in accordance with the following Standards and Specifications.

- Guidelines, Design Criteria and Standards for Community Wastewater Management Schemes (Local Government Association of South Australia)
- Sewerage Code of Australia (WSA 02) and any SA Water supplementary documentation
- Sewage Pumping Station Code of Australia (WSA 04).
- AS/NZS 3500: Plumbing and drainage.
- AS/NZS 2031: Water quality - Sampling for microbiological analysis (ISO 19458:2006, MOD).
- AS/NZS ISO 3100: Risk management - Principles and Guidelines.
- The National Construction Code (NCC) Volume 3 Plumbing Code of Australia (PCA) including South Australian Variations and/or Additional Provisions as listed in Appendix A.
- Standard Form: Technical Specification-Construction of Septic Tank Effluent Drainage Schemes (DH, LGA).
- Septic Tank Effluent Drainage Scheme Design Criteria (DH, LGA).
- South Australian Bio-solids Guidelines for the Safe Handling, Reuse or Disposal of Bio-solids (EPA).

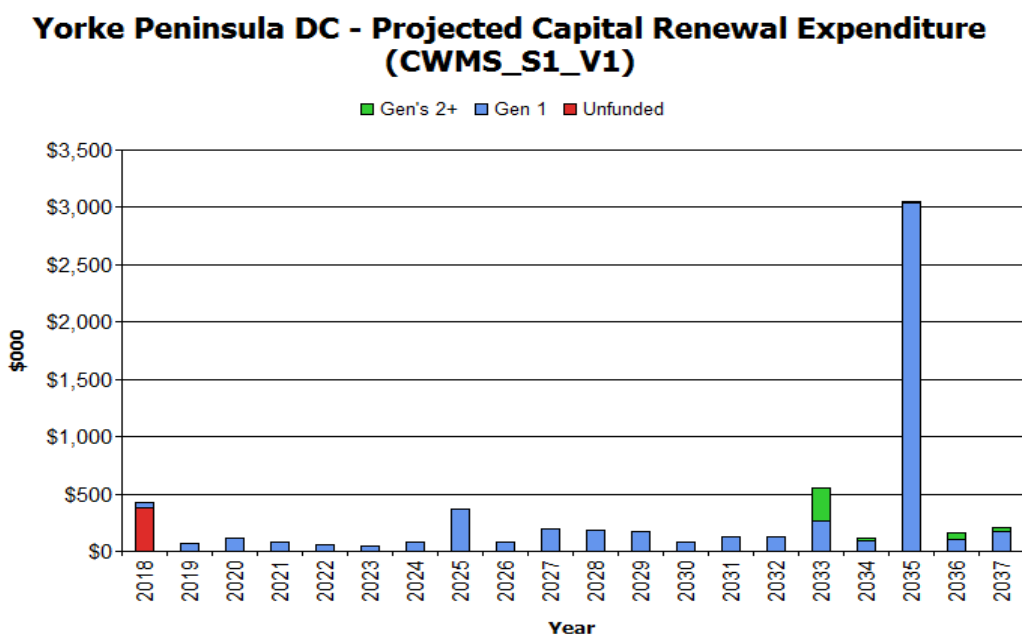
5.4.3 Summary of future renewal and replacement expenditure

Projected future renewal and replacement expenditures are forecast to increase over time as the asset stock increases from growth. The expenditure is summarised in Figure 5. Note that all amounts are shown in real values.

The projected capital renewal and replacement program is shown in Appendix B.

¹¹ Based on IPWEA, 2011, IIMM, Sec 3.4.5, p 3|66.

Figure 5: Projected Capital Renewal and Replacement Expenditure



Deferred renewal and replacement, ie those assets identified for renewal and/or replacement and not scheduled in capital works programs are to be included in the risk analysis process in the risk management plan.

Renewals and replacement expenditure in the Council's capital works program will be accommodated in the LTFP. This is further discussed in Section 6.2.

5.5 Creation/Acquisition/Upgrade Plan

New works are those works that create a new asset that did not previously exist, or works which upgrade or improve an existing asset beyond its existing capacity. They may result from growth, social or environmental needs. Assets may also be acquired at no cost to the Council from land development. These assets from growth are considered in Section 4.4.

5.5.1 Selection criteria

New assets and upgrade/expansion of existing assets are identified from various sources such as councillor/director or community requests, proposals identified by strategic plans or partnerships with other organisations. Candidate proposals are inspected to verify need and to develop a preliminary renewal estimate. Verified proposals are ranked by priority and available funds and scheduled in future works programmes. The priority ranking criteria is detailed below.

Table 5.5.1: New Assets Priority Ranking Criteria

| Criteria | Weighting |
|--------------------------------------|-------------------------------|
| Cost benefit analysis | No weighting criteria adopted |
| Service Deficiency | No weighting criteria adopted |
| Usage | No weighting criteria adopted |
| Customer Service Requests | No weighting criteria adopted |
| Available Budget | No weighting criteria adopted |
| Servicing Land Management Agreements | No weighting criteria adopted |
| Total | 100% |

5.5.2 Capital Investment Strategies

The Council will plan capital upgrade and new projects to meet level of service objectives by:

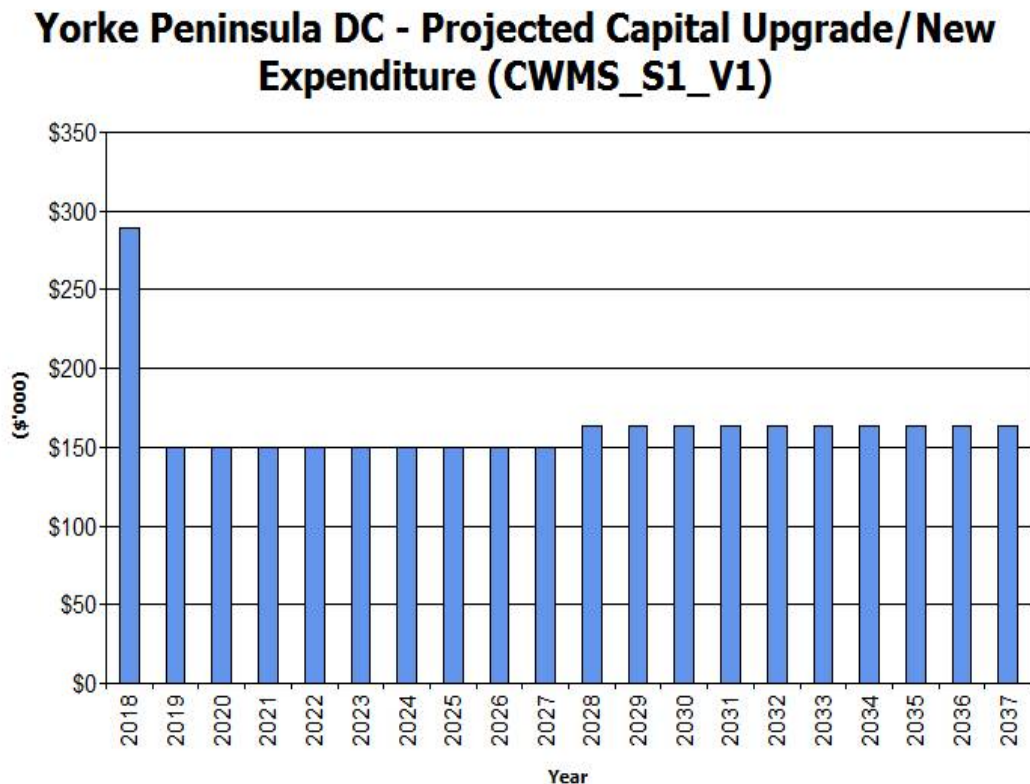
- Planning and scheduling capital upgrade and new projects to deliver the defined level of service in the most efficient manner,
- Undertake project scoping for all capital upgrade/new projects to identify:
 - the service delivery 'deficiency', present risk and required timeline for delivery of the upgrade/new asset,
 - the project objectives to rectify the deficiency including value management for major projects,
 - the range of options, estimated capital and life cycle costs for each options that could address the service deficiency,
 - management of risks associated with alternative options,
 - and evaluate the options against evaluation criteria adopted by Council, and
 - select the best option to be included in capital upgrade/new programs,
- Review current and required skills base and implement training and development to meet required construction and project management needs,
- Review management of capital project management activities to ensure Council is obtaining best value for resources used.

Standards and specifications for new assets and for upgrade/expansion of existing assets are the same as those for renewal shown in Section 5.4.2.

5.5.3 Summary of future upgrade/new assets expenditure

Projected upgrade/new asset expenditures are summarised in Figure 6. The projected upgrade/new capital works program is shown in Appendix C. All amounts are shown in real values.

Figure 6: Projected Capital Upgrade/New Asset Expenditure



Expenditure on new assets and services in the Council's capital works program will be accommodated in the LTFP. This is further discussed in Section 6.2.

5.6 Disposal Plan

Disposal includes any activity associated with disposal of a decommissioned asset including sale, demolition or relocation. Assets identified for possible decommissioning and disposal are shown in Table 5.6, together with estimated annual savings from not having to fund operations and maintenance of the assets. These assets will be further reinvestigated to determine the required levels of service and see what options are available for alternate service delivery, if any. Any revenue gained from asset disposals is accommodated in Council's LTFP.

Where cash flow projections from asset disposals are not available, these will be developed in future revisions of this asset management plan.

Table 5.6: Assets Identified for Disposal

| Asset | Reason for Disposal | Timing | Disposal Expenditure | Operations & Maintenance Annual Savings |
|------------------------|--|---------------------------------------|----------------------|---|
| Point Turton WWTP No 1 | Two WWTP in township. Upgrade WWTP No 2 | Future budget once fully costed | Not costed | Not Costed |

5.7 Service Consequences and Risks

The Council has prioritised decisions made in adopting this AMP to obtain the optimum benefits from its available resources. Decisions were made based on the development of 3 scenarios of AMPs.

Scenario 1 - What we would like to do based on asset register data

Scenario 2 – What we should do with existing budgets and identifying level of service and risk consequences (ie what are the operations and maintenance and capital projects we are unable to do, what is the service and risk consequences associated with this position). This may require several versions of the AMP.

Scenario 3 – What we can do and be financially sustainable with AMPs matching long-term financial plans.

The development of scenario 1 and scenario 2 AMPs provides the tools for discussion with the Council and community on trade-offs between what we would like to do (scenario 1) and what we should be doing with existing budgets (scenario 2) by balancing changes in services and service levels with affordability and acceptance of the service and risk consequences of the trade-off position (scenario 3).

5.7.1 What we cannot do

There are some operations and maintenance activities and capital projects that are unable to be undertaken within the next 10 years. These include:

- Not identified – to be further developed in future reiterations of this plan.

5.7.2 Service consequences

Operations and maintenance activities and capital projects that cannot be undertaken will maintain or create service consequences for users. These include:

- Not identified – to be further developed in future reiterations of this plan.

5.7.3 Risk consequences

The operations and maintenance activities and capital projects that cannot be undertaken may maintain or create risk consequences for the Council. These include:

- Not identified – to be further developed in future reiterations of this plan.

These risks have been included with the Infrastructure Risk Management Plan summarised in Section 5.2 and risk management plans actions and expenditures included within projected expenditures.

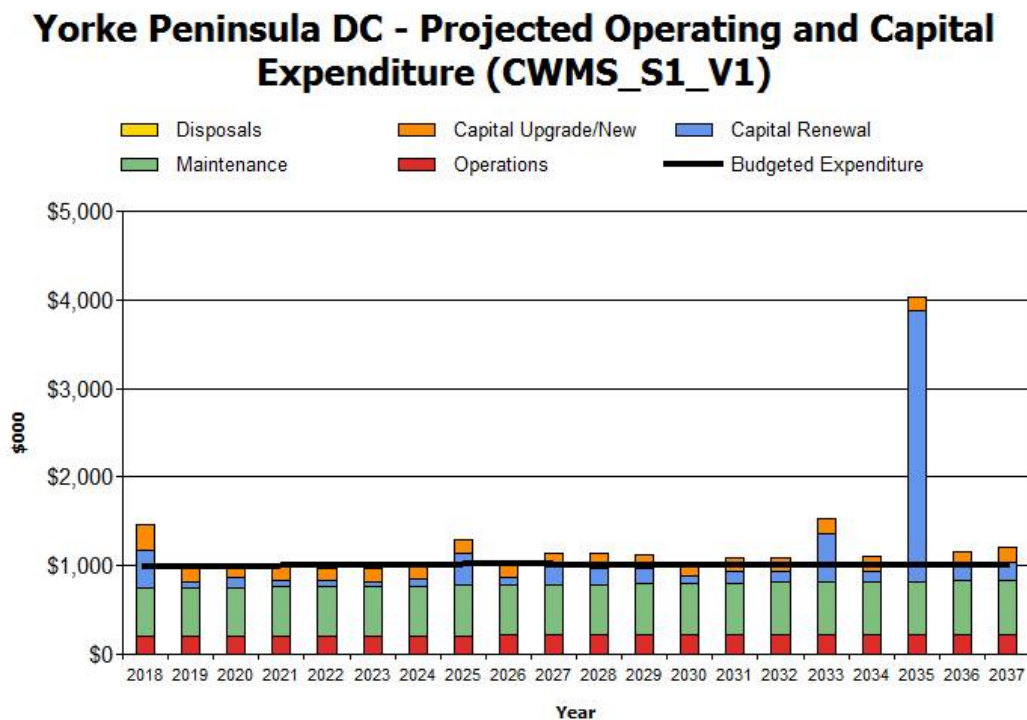
6. FINANCIAL SUMMARY

This section contains the financial requirements resulting from all the information presented in the previous sections of this asset management plan. The financial projections will be improved as further information becomes available on desired levels of service and current and projected future asset performance.

6.1 Financial Statements and Projections

The financial projections are shown in Figure 7 for projected operating (operations and maintenance) and capital expenditure (renewal and upgrade/expansion/new assets). Note that all costs are shown in real values.

Figure 7: Projected Operating and Capital Expenditure



6.1.1 Sustainability of service delivery

There are four key indicators for service delivery sustainability that have been considered in the analysis of the services provided by this asset category, these being the asset renewal funding ratio, long term life cycle costs/expenditures and medium term projected/budgeted expenditures over 5 and 10 years of the planning period.

Asset Renewal Funding Ratio

Asset Renewal Funding Ratio¹² **104%**

The Asset Renewal Funding Ratio is the most important indicator and reveals that over the next 10 years, Council is forecasting that it will have **104%** of the funds required for the optimal renewal and replacement of its assets.

Long term - Life Cycle Cost

Life cycle costs (or whole of life costs) are the average costs that are required to sustain the service levels over the asset life cycle. Life cycle costs include operations and maintenance expenditure and asset consumption (depreciation expense). The life cycle cost for the services covered in this asset management plan is **\$1,242,000** per year (average operations and maintenance expenditure plus depreciation expense projected over 10 years).

Life cycle costs can be compared to life cycle expenditure to give an initial indicator of affordability of projected service levels when considered with age profiles. Life cycle expenditure includes operations, maintenance and capital renewal expenditure. Life cycle expenditure will vary depending on the timing of asset renewals. The life cycle expenditure over the 10 year planning period is **\$903,000** per year (average operations and maintenance plus capital renewal budgeted expenditure in the LTFP over 10 years).

A shortfall between life cycle cost and life cycle expenditure is the life cycle gap. The life cycle gap for services covered by this asset management plan is **\$339,000** per year.

Life cycle expenditure is **73%** of life cycle costs.

The life cycle costs and life cycle expenditure comparison highlights any difference between present outlays and the average cost of providing the service over the long term. If the life cycle expenditure is less than that life cycle cost, it is most likely that outlays will need to be increased or cuts in services made in the future.

Knowing the extent and timing of any required increase in outlays and the service consequences if funding is not available will assist Councils in providing services to their communities in a financially sustainable manner. This is the purpose of the asset management plans and long term financial plan.

Medium term – 10 year financial planning period

This asset management plan identifies the projected operations, maintenance and capital renewal expenditures required to provide an agreed level of service to the community over a 10 year period. This provides input into 10 year financial and funding plans aimed at providing the required services in a sustainable manner.

These projected expenditures may be compared to budgeted expenditures in the 10 year period to identify any funding shortfall. In a core asset management plan, a gap is generally due to increasing asset renewals for ageing assets.

The projected operations, maintenance and capital renewal expenditure required over the 10 year planning period is **\$917,000** on average per year.

Estimated (budget) operations, maintenance and capital renewal funding is **\$903,000** on average per year giving a 10 year funding shortfall of **\$14,000** per year. This indicates that Council expects to have **98%** of the projected expenditures needed to provide the services documented in the asset management plan.

Medium Term – 5 year financial planning period

The projected operations, maintenance and capital renewal expenditure required over the first 5 years of the planning period is **\$903,000** on average per year.

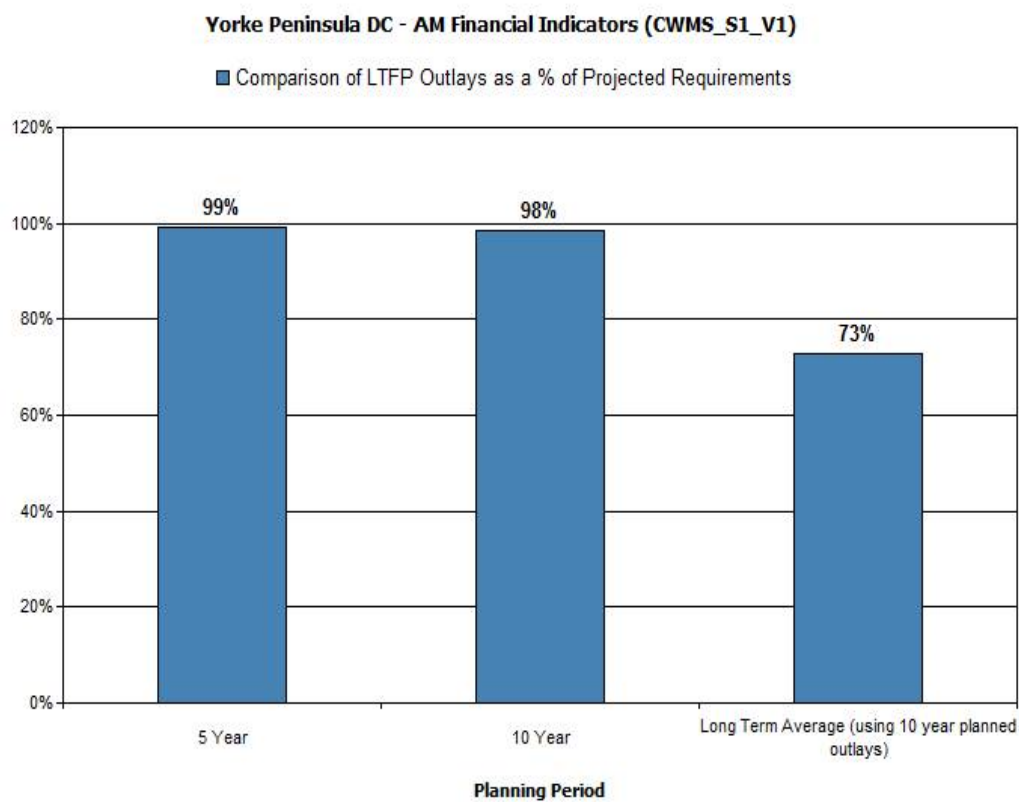
¹² AIFMG, 2012, Version 1.3, Financial Sustainability Indicator 4, Sec 2.6, p 2.16

Estimated (budget) operations, maintenance and capital renewal funding is **\$896,000** on average per year giving a 5 year funding shortfall of **\$7,000**. This indicates that Council expects to have **99%** of projected expenditures required to provide the services shown in this asset management plan.

Asset management financial indicators

Figure 7A shows the asset management financial indicators over the 10 year planning period and for the long term life cycle.

Figure 7A: Asset Management Financial Indicators



Providing services from infrastructure in a sustainable manner requires the matching and managing of service levels, risks, projected expenditures and financing to achieve a financial indicator of approximately 1.0 for the first years of the asset management plan and ideally over the 10 year life of the LTFP.

Figure 8 shows the projected asset renewal and replacement expenditure over the 20 years of the AMP. The projected asset renewal and replacement expenditure is compared to renewal and replacement expenditure in the capital works program, which is accommodated in the LTFP.

Figure 8: Projected and LTFP Budgeted Renewal Expenditure

Yorke Peninsula DC - Projected & LTFP Budgeted Renewal Expenditure (CWMS_S1_V1)

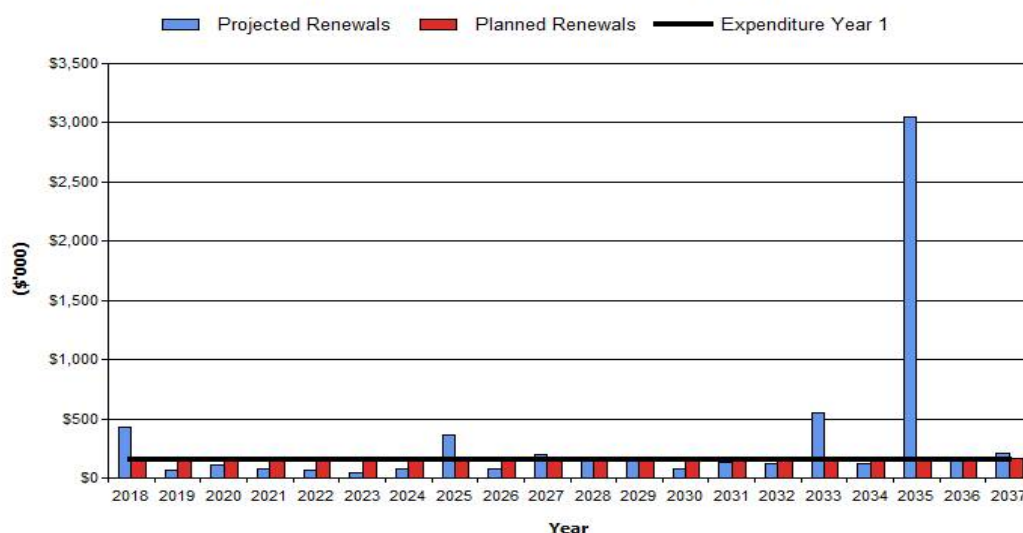


Table 6.1.1 shows the shortfall between projected renewal and replacement expenditures and expenditure accommodated in the LTFP. Budget expenditures accommodated in the LTFP or extrapolated from current budgets are shown in Appendix D.

Table 6.1.1: Projected and LTFP Budgeted Renewals and Financing Shortfall

| Year | Projected Renewals (\$000) | LTFP Renewal Budget (\$000) | Renewal Financing Shortfall (\$000) (-ve Gap, +ve Surplus) | Cumulative Shortfall (\$000) (-ve Gap, +ve Surplus) |
|------|----------------------------|-----------------------------|--|---|
| 2018 | \$428 | \$149 | \$-279 | \$-279 |
| 2019 | \$67 | \$152 | \$85 | \$-194 |
| 2020 | \$115 | \$154 | \$39 | \$-155 |
| 2021 | \$76 | \$157 | \$81 | \$-75 |
| 2022 | \$62 | \$161 | \$99 | \$24 |
| 2023 | \$49 | \$164 | \$115 | \$139 |
| 2024 | \$77 | \$167 | \$90 | \$229 |
| 2025 | \$368 | \$170 | \$-198 | \$31 |
| 2026 | \$81 | \$173 | \$92 | \$123 |
| 2027 | \$201 | \$173 | \$-28 | \$95 |
| 2028 | \$181 | \$162 | \$-19 | \$76 |
| 2029 | \$172 | \$162 | \$-10 | \$66 |
| 2030 | \$79 | \$162 | \$83 | \$149 |
| 2031 | \$128 | \$162 | \$34 | \$183 |
| 2032 | \$122 | \$162 | \$40 | \$223 |
| 2033 | \$554 | \$162 | \$-392 | \$-169 |
| 2034 | \$116 | \$162 | \$46 | \$-123 |
| 2035 | \$3,048 | \$162 | \$-2,886 | \$-3,009 |
| 2036 | \$158 | \$162 | \$4 | \$-3,005 |
| 2037 | \$206 | \$162 | \$-44 | \$-3,049 |

Note: A negative shortfall indicates a financing gap, a positive shortfall indicates a surplus for that year.

Providing services in a sustainable manner will require matching of projected asset renewal and replacement expenditure to meet agreed service levels with **the corresponding** capital works program accommodated in the LTFP.

A gap between **projected asset renewal/replacement expenditure and amounts accommodated in the LTFP** indicates that **further work is required on reviewing service levels in the AMP (including possibly revising the LTFP)** before finalising the asset management plan to manage required service levels and funding **to eliminate any funding gap**.

We will manage the 'gap' by developing this asset management plan to provide guidance on future service levels and resources required to provide these services, and review future services, service levels and costs with the community.

6.1.2 Projected expenditures for long term financial plan

Table 6.1.2 shows the projected expenditures for the 10 year LTFP.

Expenditure projections are in **2017/18** real values.

Table 6.1.2: Projected Expenditures for Long Term Financial Plan (\$000)

| Year | Operations (\$000) | Maintenance (\$000) | Projected Capital Renewal (\$000) | Capital Upgrade/ New (\$000) | Disposals (\$000) |
|------|--------------------|---------------------|-----------------------------------|------------------------------|-------------------|
| 2018 | \$202 | \$539 | \$428 | \$289 | \$0 |
| 2019 | \$204 | \$545 | \$67 | \$150 | \$0 |
| 2020 | \$205 | \$548 | \$115 | \$150 | \$0 |
| 2021 | \$207 | \$551 | \$76 | \$150 | \$0 |
| 2022 | \$208 | \$555 | \$62 | \$150 | \$0 |
| 2023 | \$209 | \$558 | \$49 | \$150 | \$0 |
| 2024 | \$210 | \$561 | \$77 | \$150 | \$0 |
| 2025 | \$211 | \$564 | \$368 | \$150 | \$0 |
| 2026 | \$213 | \$567 | \$81 | \$150 | \$0 |
| 2027 | \$214 | \$571 | \$201 | \$150 | \$0 |
| 2028 | \$215 | \$574 | \$181 | \$164 | \$0 |
| 2029 | \$216 | \$577 | \$172 | \$164 | \$0 |
| 2030 | \$218 | \$581 | \$79 | \$164 | \$0 |
| 2031 | \$219 | \$584 | \$128 | \$164 | \$0 |
| 2032 | \$220 | \$588 | \$122 | \$164 | \$0 |
| 2033 | \$222 | \$591 | \$554 | \$164 | \$0 |
| 2034 | \$223 | \$595 | \$116 | \$164 | \$0 |
| 2035 | \$224 | \$598 | \$3,048 | \$164 | \$0 |
| 2036 | \$225 | \$602 | \$158 | \$164 | \$0 |
| 2037 | \$227 | \$605 | \$206 | \$164 | \$0 |

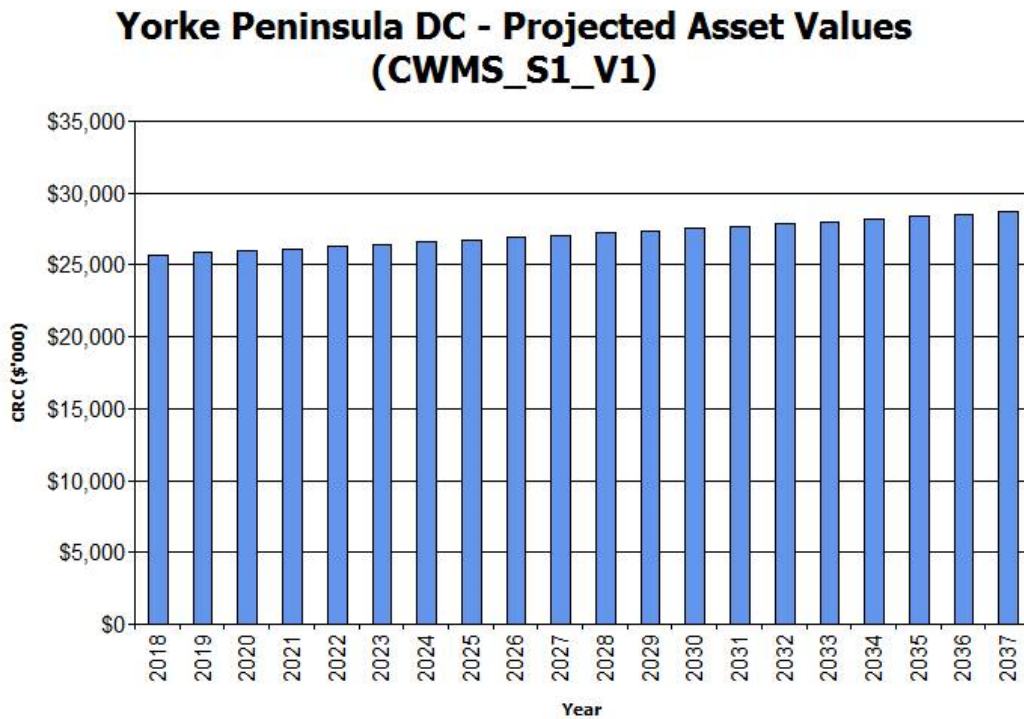
6.2 Funding Strategy

After reviewing service levels, as appropriate to ensure ongoing financial sustainability projected expenditures identified in Section 6.1.2 will be accommodated in the Council's 10 year LTFP.

6.3 Valuation Forecasts

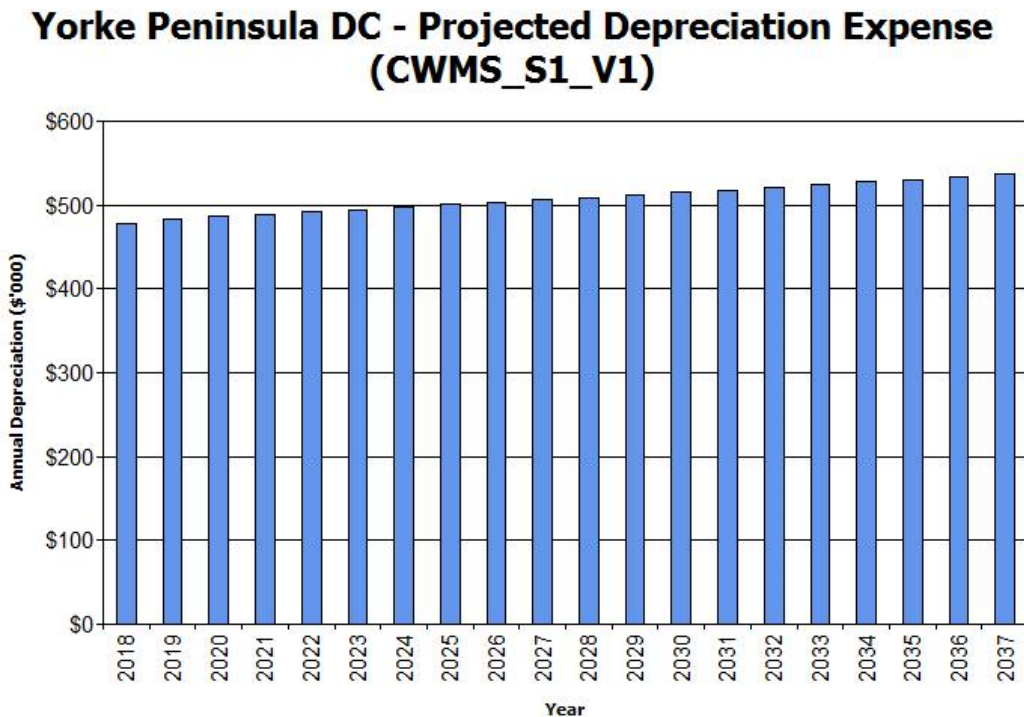
Asset values are forecast to increase as additional assets are added to the asset stock from construction and acquisition by Council and from assets constructed by land developers and others and donated to Council. Figure 9 shows the projected replacement cost asset values over the planning period in real values.

Figure 9: Projected Asset Values



Depreciation expense values are forecast in line with asset values as shown in Figure 10.

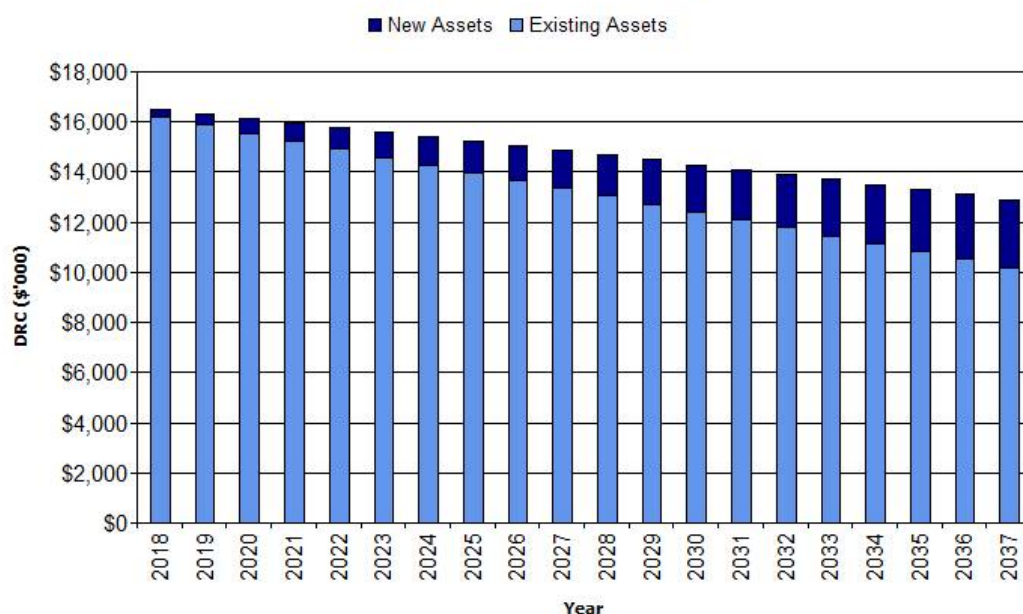
Figure 10: Projected Depreciation Expense



The depreciated replacement cost will vary over the forecast period depending on the rates of addition of new assets, disposal of old assets and consumption and renewal of existing assets. Forecast of the assets' depreciated replacement cost is shown in Figure 11. The depreciated replacement cost of contributed and new assets is shown in the darker colour and in the lighter colour for existing assets.

Figure 11: Projected Depreciated Replacement Cost

Yorke Peninsula DC - Projected Depreciated Replacement Cost (CWMS_S1_V1)



6.4 Key Assumptions made in Financial Forecasts

This section details the key assumptions made in presenting the information contained in this asset management plan and in preparing forecasts of required operating and capital expenditure and asset values, depreciation expense and carrying amount estimates. It is presented to enable readers to gain an understanding of the levels of confidence in the data behind the financial forecasts.

Key assumptions made in this asset management plan and risks that these may change are shown in Table 6.4.

Table 6.4: Key Assumptions made in AMP and Risks of Change

| Key Assumptions | Risks of Change to Assumptions |
|---|--|
| Asset data is complete and reliable | Discovery of assets not recorded in the asset register will increase capital renewal expenditure and depreciation expense projections. |
| Legislative compliance will remain constant | Changes in legislation and regulation may increase operating and maintenance expenditure projections. |
| Average useful lives are based on current knowledge | A review of useful lives has the potential to vary future cost predictions. |

6.5 Forecast Reliability and Confidence

The expenditure and valuations projections in this AMP are based on best available data. Currency and accuracy of data is critical to effective asset and financial management. Data confidence is classified on a 5 level scale¹³ in accordance with Table 6.5.

Table 6.5: Data Confidence Grading System

| Confidence Grade | Description |
|-------------------|--|
| A Highly reliable | Data based on sound records, procedures, investigations and analysis, documented properly and recognised as the best method of assessment. Dataset is complete and estimated to be accurate $\pm 2\%$ |
| B Reliable | Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate $\pm 10\%$ |
| C Uncertain | Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated $\pm 25\%$ |
| D Very Uncertain | Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy $\pm 40\%$ |
| E Unknown | None or very little data held. |

The estimated confidence level for and reliability of data used in this AMP is shown in Table 6.5.1.

Table 6.5.1: Data Confidence Assessment for Data used in AMP

| Data | Confidence Assessment | Comment |
|---|-----------------------|---|
| Demand drivers | E | Not developed |
| Growth projections | E | Not used |
| Operations expenditures | A | Current and previous budget information |
| Maintenance expenditures | A | Current and previous budget information |
| Projected Renewal exps. - Asset values | B | Generated from CONQUEST. Data reviewed and updated for the implementation of CONQUEST and a CWMS valuation. |
| - Asset residual values | B | Generated from CONQUEST. Data reviewed and updated for the implementation of CONQUEST and a CWMS valuation. |
| - Asset useful lives | B | Generated from CONQUEST. Data reviewed and updated for the implementation of CONQUEST and a CWMS valuation. |
| - Condition modelling | E | Not used / developed |
| - Network renewals | B | Generated from CONQUEST. Data reviewed and updated for the implementation of CONQUEST and a CWMS valuation. |
| - Defect repairs | C | Generated from Assets & Infrastructure Services |
| Upgrade/New expenditures | C | Generated from Assets & Infrastructure Services |
| Disposal expenditures | C | Generated from Assets & Infrastructure Services – no costed |

Over all data sources, the data confidence is assessed as **reliable (B)** confidence level for data used in the preparation of this AMP.

¹³ IPWEA, 2011, IIMM, Table 2.4.6, p 2|59.

7. PLAN IMPROVEMENT AND MONITORING

7.1 Improvement Plan

The asset management improvement plan generated from this asset management plan is shown in Table 7.2.

Table 7.2: Improvement Plan

| Task No | Task | Responsibility | Resources Required | Timeline |
|---------|--|---|--------------------------|----------------|
| 1 | Collect condition data on the CWMS pipe network | Infrastructure Manager | Annual Budget Allocation | Ongoing |
| 2 | Define Levels of Service | Director A & I | In house | Ongoing |
| 3 | Develop the Capital Works program in alignment with the Asset Management System | Infrastructure Manager / Asset Manager | In house | 2018/19 Budget |
| 4 | Continual review of Asset Register | Infrastructure Manager / Asset Manager | In house | Ongoing |
| 5 | Continue development of Council's Asset Management System (Conquest) and Geospatial Information System (MapInfo) | Asset Manager | In house | Ongoing |
| 6 | Conduct a risk assessment workshop to further develop the critical risk and treatment plans | Risk Management Officer | In house | Ongoing |
| 7 | Review Future Demand and develop a Demand Management Plan if required. | Asset Manager / Manager Financial Services / Manager Development Services | In house | Ongoing |
| 8 | Develop Priority Ranking Criteria for <i>Renewal and Replacement</i> and <i>New/Upgrade</i> of assets | Infrastructure Manager / Asset Manager | In house | Ongoing |

7.2 Monitoring and Review Procedures

This asset management plan will be reviewed during annual budget planning processes and amended to recognise any material changes in service levels and/or resources available to provide those services as a result of budget decisions.

The AMP will be updated annually to ensure it represents the current service level, asset values, projected operations, maintenance, capital renewal and replacement, capital upgrade/new and asset disposal expenditures and projected expenditure values incorporated into the Council's LTFP.

The AMP has a life of 4 years (Council election cycle) and is due for complete revision and updating within two years of each Council election.

7.3 Performance Measures

The effectiveness of the asset management plan can be measured in the following ways:

- The degree to which the required projected expenditures identified in this asset management plan are incorporated into Council's LTFP,
- The degree to which 1-5 year detailed works programs, budgets, business plans and organisational structures take into account the 'global' works program trends provided by the asset management plan,
- The degree to which the existing and projected service levels and service consequences (what we cannot do), risks and residual risks are incorporated into the Council's Strategic Plan and associated plans,
- **The Asset Renewal Funding Ratio achieving the target of 1.0,**

- The Asset Sustainability Ratio (*Per LGA 'Financial Sustainability' Information Paper No. 9: Financial Indicators - Revised May 2015*) is to achieve capital outlays on renewing/replacing assets at greater than 90% but less than 110% of the level proposed in the AMP.

8. REFERENCES

IPWEA, 2006, 'International Infrastructure Management Manual', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/IIMM

IPWEA, 2008, 'NAMS.PLUS Asset Management', Institute of Public Works Engineering Australasia, Sydney, www.ipwea.org/namsplus.

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Yorke Peninsula Council, 'Strategic Management Plan',

Yorke Peninsula Council, 'Annual Business Plan and Budget',

Yorke Peninsula Council, 'Long Term Financial Plan',

Yorke Peninsula Council, 'CWMS Infrastructure Asset Valuation and Methodology'.

9. APPENDICES

Appendix A Maintenance Response Levels of Service

Appendix B Projected 10 year Capital Renewal and Replacement Works Program

Appendix C Projected 10 year Capital Upgrade/New Works Program

Appendix D Abbreviations

Appendix E Glossary

Appendix A Maintenance Response Levels of Service

To be developed in future revisions of this plan.

DRAFT

Appendix B Projected 10 year Capital Renewal and Replacement Works Program

| Yorke Peninsula Council - Report 6 - Appendix B 10 year Renewal & Replacement Program (CWMS_S1_V1) | | | | | | | | |
|--|------------------------------------|--|-------------------|-------------|------------------|----------------------|-------------------|---------------------|
| Asset ID | Sub Category | Asset Name | From | To | Rem Life (Years) | Planned Renewal Year | Renewal Cost (\$) | Useful Life (Years) |
| 17850 | Air Valve | Air Valve (Yorke-CWMS-N00053) in Yorke Highway | Yorke Highway | Ardrossan | -16 | 2002 | \$3,317 | 20 |
| 17849 | Air Valve | Air Valve (Yorke-CWMS-N00054) in Yorke Highway | Yorke Highway | Ardrossan | -16 | 2002 | \$3,317 | 20 |
| Subtotal | | | | | | | \$6,634 | |
| | | | | | | | | |
| 20274 | PS Aluminium Sump Lid 1.8-2.2m dia | Hogarth Street Pump Station Lid | Hogarth street | Ardrossan | -10 | 2008 | \$951 | 25 |
| Subtotal | | | | | | | \$951 | |
| | | | | | | | | |
| 20886 | RAS Pump 3.0-4.4kW Type | Maitland Wastewater Treatment Plant RAS Pump | | Maitland | -9 | 2009 | \$6,271 | 15 |
| Subtotal | | | | | | | \$6,271 | |
| | | | | | | | | |
| 20920 | Decant Pump 0.6-0.8kW Type | Black Point Wastewater Treatment Plant Decant Tank Bypass Pump | | Black Point | -8 | 2010 | \$2,279 | 15 |
| 20924 | RAS Pump 3.0-4.4kW Type | Black Point Wastewater Treatment Plant RAS Pump | | Black Point | -8 | 2010 | \$6,271 | 15 |
| 20314 | Submersible pump 0.9-1.2kW | Black Point Pump Station 1 Pump 1 | Black Point Drive | Black Point | -8 | 2010 | \$2,529 | 15 |
| 20315 | Submersible pump 1.3-1.9kW | Black Point Pump Station 1 Pump 2 | Black Point Drive | Black Point | -8 | 2010 | \$3,479 | 15 |

| | | | | | | | | |
|----------|-------------------------------|--|-------------------|------------------|----|------|----------|----|
| 20326 | Submersible pump 4.4kW | Black Point Pump Station 2 Pump 1 | Black Point Drive | Black Point | -8 | 2010 | \$5,436 | 15 |
| 20327 | Submersible pump 4.4kW | Black Point Pump Station 2 Pump 2 | Black Point Drive | Black Point | -8 | 2010 | \$5,436 | 15 |
| 20328 | Submersible pump 4.4kW | Black Point Pump Station 2 Pump 3 | Black Point Drive | Black Point | -8 | 2010 | \$5,436 | 15 |
| 20917 | WAS Pump 2.0-2.6kW Type | Black Point Wastewater Treatment Plant WAS Pump | | Black Point | -8 | 2010 | \$4,871 | 15 |
| Subtotal | | | | | | | \$35,734 | |
| | | | | | | | | |
| 20847 | RAS Pump 3.0-4.4kW Type | Ardrossan Wastewater Treatment Plant RAS Pump | | Ardrossan | -6 | 2012 | \$6,271 | 15 |
| 20251 | Submersible pump 15kW | Ardrossan Jetty Carpark Pump Station Pump 1 | Jetty carpark | Ardrossan | -6 | 2012 | \$12,971 | 15 |
| 20252 | Submersible pump 15kW | Ardrossan Jetty Carpark Pump Station Pump 2 | Jetty carpark | Ardrossan | -6 | 2012 | \$12,971 | 15 |
| 20253 | Submersible pump 15kW | Ardrossan Jetty Carpark Pump Station Pump 3 | Jetty carpark | Ardrossan | -6 | 2012 | \$12,971 | 15 |
| Subtotal | | | | | | | \$45,184 | |
| | | | | | | | | |
| 20884 | Aerator 7.5kW Type | Maitland Wastewater Treatment Plant Aerator 1 | | Maitland | -4 | 2014 | \$7,471 | 20 |
| 20885 | Aerator 7.5kW Type | Maitland Wastewater Treatment Plant Aerator 2 | | Maitland | -4 | 2014 | \$7,471 | 20 |
| 21309 | Irrigation Pump 2.2kW Type | Hardwicke Bay Wastewater Treatment Plant Irrigation Pump 1 | | Hardwicke Bay | -4 | 2014 | \$3,529 | 15 |
| 21310 | Irrigation Pump 2.2kW Type | Hardwicke Bay Wastewater Treatment Plant Irrigation Pump 2 | | Hardwicke Bay | -4 | 2014 | \$3,529 | 15 |
| 21189 | Irrigation Pump 2.2kW | Rogues Point Wastewater Treatment | | Rogues | -4 | 2014 | \$3,529 | 15 |

| | Type | Plant Irrigation Pump 1 | | Point | | | | |
|----------|-----------------------------|---|-------------------|--------------|----|------|----------|----|
| 21190 | Irrigation Pump 2.2kW Type | Rogues Point Wastewater Treatment Plant Irrigation Pump 2 | | Rogues Point | -4 | 2014 | \$3,529 | 15 |
| 20892 | WWTP 100mm Gate Valve | Maitland Wastewater Treatment Plant Gate Valve | | Maitland | -4 | 2014 | \$1,276 | 20 |
| 20889 | WWTP 100mm Non-Return Valve | Maitland Wastewater Treatment Plant Non-Return Valves 100mm Cast Iron | | Maitland | -4 | 2014 | \$3,593 | 20 |
| 20887 | WWTP 50mm Non-Return Valve | Maitland Wastewater Treatment Plant Non-Return Valve | | Maitland | -4 | 2014 | \$458 | 20 |
| Subtotal | | | | | | | \$34,383 | |
| | | | | | | | | |
| 20317 | 50mm Check Valve | Black Point Pump Station 1 Check Valve | Black Point Drive | Black Point | -3 | 2015 | \$448 | 20 |
| 20330 | 50mm Check Valve | Black Point Pump Station 2 Check Valve | Black Point Drive | Black Point | -3 | 2015 | \$448 | 20 |
| 20316 | 50mm Gate Valve | Black Point Pump Station 1 Gate Valve | Black Point Drive | Black Point | -3 | 2015 | \$448 | 20 |
| 20329 | 50mm Gate Valve | Black Point Pump Station 2 Gate Valve | Black Point Drive | Black Point | -3 | 2015 | \$448 | 20 |
| 20922 | Aerator 4kW Type | Black Point Wastewater Treatment Plant Aerator 1 | | Black Point | -3 | 2015 | \$5,671 | 20 |
| 20923 | Aerator 4kW Type | Black Point Wastewater Treatment Plant Aerator 2 | | Black Point | -3 | 2015 | \$5,671 | 20 |
| 21042 | Irrigation Pump 11kW Type | Yorke town Wastewater Treatment Plant Irrigation Pump 1 | | Yorke town | -3 | 2015 | \$6,271 | 15 |
| 21043 | Irrigation Pump 11kW Type | Yorke town Wastewater Treatment Plant Irrigation Pump 2 | | Yorke town | -3 | 2015 | \$6,271 | 15 |
| 21001 | Irrigation Pump 2.2kW Type | Stansbury Wastewater Treatment Plant Irrigation Pump 1 | | Stansbury | -3 | 2015 | \$3,529 | 15 |

| | | | | | | | | |
|-------|--------------------------------|---|----------------------|-----------------|----|------|----------|----|
| 21002 | Irrigation Pump 2.2kW Type | Stansbury Wastewater Treatment Plant Irrigation Pump 2 | | Stansbury | -3 | 2015 | \$3,529 | 15 |
| 20966 | Irrigation Pump 4kW Type | Port Vincent Wastewater Treatment Plant Irrigation Pump 1 | | Port Vincent | -3 | 2015 | \$4,736 | 15 |
| 20967 | Irrigation Pump 4kW Type | Port Vincent Wastewater Treatment Plant Irrigation Pump 2 | | Port Vincent | -3 | 2015 | \$4,736 | 15 |
| 20968 | Irrigation Pump 4kW Type | Port Vincent Wastewater Treatment Plant Irrigation Pump 3 | | Port Vincent | -3 | 2015 | \$4,736 | 15 |
| 20320 | PS Advanced Level Control | Black Point Pump Station 1 Level Control | Black Point Drive | Black Point | -3 | 2015 | \$2,196 | 20 |
| 20333 | PS Advanced Level Control | Black Point Pump Station 2 Level Control | Black Point Drive | Black Point | -3 | 2015 | \$2,196 | 20 |
| 20723 | PS Sump 1.4-1.7m dia | Maitland Pump Station 1 Sump | South Terrace | Maitland | -3 | 2015 | \$31,629 | 50 |
| 20698 | PS Sump 1.4-1.7m dia | Maitland Pump Station 2 Sump | Clinton Road | Maitland | -3 | 2015 | \$31,629 | 50 |
| 21031 | RAS Pump 3.0-4.4kW Type | Yorke town Wastewater Treatment Plant RAS Pump | | Yorke town | -3 | 2015 | \$6,271 | 15 |
| 20277 | Submersible pump 0.9- 1.2kW | Hogarth Street Pump Station Pump 1 | Hogarth street | Ardrossan | -3 | 2015 | \$2,529 | 15 |
| 20278 | Submersible pump 0.9- 1.2kW | Hogarth Street Pump Station Pump 2 | Hogarth street | Ardrossan | -3 | 2015 | \$2,529 | 15 |
| 20262 | Submersible pump 1.3- 1.9kW | Ardrossan Jetty Carpark Pump Station Overflow Chamber 1 Pump 1 | Jetty carpark | Ardrossan | -3 | 2015 | \$3,479 | 15 |
| 20522 | Submersible pump 3.0- 4.0kW | Yorke town Pump Station 2 Pump 1 | Minlaton Road | Yorke town | -3 | 2015 | \$5,279 | 15 |
| 20523 | Submersible pump 3.0- 4.0kW | Yorke town Pump Station 2 Pump 2 | Minlaton Road | Yorke town | -3 | 2015 | \$5,279 | 15 |
| 20354 | Submersible pump 6.0- 7.4kW | Port Vincent Caravan Park Pump Station 1 Pump 1 | within caravan pk | Port Vincent | -3 | 2015 | \$7,314 | 15 |
| 20355 | Submersible pump 6.0- | Port Vincent Caravan Park Pump Station 1 | within caravan | Port | -3 | 2015 | \$7,314 | 15 |

| | | | | | | | | |
|----------|----------------------------|---|-------------------|----------------|----|------|-----------|----|
| | 7.4kW | Pump 2 | pk | Vincent | | | | |
| 20356 | Submersible pump 6.0-7.4kW | Port Vincent Caravan Park Pump Station 1 Pump 3 | within caravan pk | Port Vincent | -3 | 2015 | \$7,314 | 15 |
| 20547 | Submersible pump 6.0-7.4kW | Yorke town Pump Station 6 Pump 1 | Memorial Drive | Yorke town | -3 | 2015 | \$7,314 | 15 |
| 20548 | Submersible pump 6.0-7.4kW | Yorke town Pump Station 6 Pump 2 | Memorial Drive | Yorke town | -3 | 2015 | \$7,314 | 15 |
| 20549 | Submersible pump 6.0-7.4kW | Yorke town Pump Station 6 Pump 3 | Memorial Drive | Yorke town | -3 | 2015 | \$7,314 | 15 |
| 21027 | WAS Pump 2.0-2.6kW Type | Yorke town Wastewater Treatment Plant WAS Pump | | Yorke town | -3 | 2015 | \$4,871 | 15 |
| Subtotal | | | | | | | \$188,708 | |
| | | | | | | | | |
| 21092 | Decant Pump 3.1-3.5kW Type | Chinaman Wells Wastewater Treatment Plant Decant Pump 1 | | Chinaman Wells | -2 | 2016 | \$5,279 | 15 |
| 21093 | Decant Pump 3.1-3.5kW Type | Chinaman Wells Wastewater Treatment Plant Decant Pump 2 | | Chinaman Wells | -2 | 2016 | \$5,279 | 15 |
| 21285 | Irrigation Pump 2.2kW Type | Foul Bay Wastewater Treatment Plant Irrigation Pump 1 | | Foul Bay | -2 | 2016 | \$3,529 | 15 |
| 21286 | Irrigation Pump 2.2kW Type | Foul Bay Wastewater Treatment Plant Irrigation Pump 2 | | Foul Bay | -2 | 2016 | \$3,529 | 15 |
| 21156 | Ventilation Fan | Chinaman Wells Wastewater Treatment Plant Ventilation Fan | | Chinaman Wells | -2 | 2016 | \$814 | 15 |
| Subtotal | | | | | | | \$18,428 | |
| | | | | | | | | |
| 20845 | Aerator 7.5kW Type | Ardrossan Wastewater Treatment Plant Aerator 1 | | Ardrossan | -1 | 2017 | \$7,471 | 20 |
| 20846 | Aerator 7.5kW Type | Ardrossan Wastewater Treatment Plant Aerator 2 | | Ardrossan | -1 | 2017 | \$7,471 | 20 |

| | | | | | | | | |
|----------|-------------------------------------|---|--|---------------|----|------|----------|----|
| 21081 | Chlorine Dosing Pump and Meter Type | Port Victoria Wastewater Treatment Plant Chlorine Dosing Pump and Meter 2 | | Port Victoria | -1 | 2017 | \$5,157 | 15 |
| 21237 | Irrigation Pump 2.2kW Type | Point Turton Wastewater Treatment Plant 1 Irrigation Pump 1 | | Point Turton | -1 | 2017 | \$3,529 | 15 |
| 21238 | Irrigation Pump 2.2kW Type | Point Turton Wastewater Treatment Plant 1 Irrigation Pump 2 | | Point Turton | -1 | 2017 | \$3,529 | 15 |
| 21083 | Irrigation Pump 5.5kW Type | Port Victoria Wastewater Treatment Plant Irrigation Pump 1 | | Port Victoria | -1 | 2017 | \$5,486 | 15 |
| 21084 | Irrigation Pump 5.5kW Type | Port Victoria Wastewater Treatment Plant Irrigation Pump 2 | | Port Victoria | -1 | 2017 | \$5,486 | 15 |
| 20851 | WWTP 50mm Gate Valve | Ardrossan Wastewater Treatment Plant Gate Valve | | Ardrossan | -1 | 2017 | \$448 | 20 |
| 20848 | WWTP 50mm Non-Return Valve | Ardrossan Wastewater Treatment Plant Non-Return Valves 50mm Brass | | Ardrossan | -1 | 2017 | \$916 | 20 |
| Subtotal | | | | | | | \$39,490 | |
| | | | | | | | | |
| 21211 | Aerator 2.2kW Type | Sultana Point Wastewater Treatment Plant Aerator 1 | | Sultana Point | 0 | 2018 | \$4,571 | 20 |
| 21268 | Aerator 2.2kW Type | Sultana Point Wastewater Treatment Plant Aerator 2 | | Sultana Point | 0 | 2018 | \$4,571 | 20 |
| 21269 | Aerator 2.2kW Type | Sultana Point Wastewater Treatment Plant Aerator 3 | | Sultana Point | 0 | 2018 | \$4,571 | 20 |
| 21200 | Irrigation Pump 2.2kW Type | Port Julia Wastewater Treatment Plant Irrigation Pump 1 | | Port Julia | 0 | 2018 | \$3,529 | 15 |
| 21201 | Irrigation Pump 2.2kW Type | Port Julia Wastewater Treatment Plant | | Port Julia | 0 | 2018 | \$3,529 | 15 |

| | | | | | | | | |
|----------|----------------------------|--|-----------------|---------------|---|------|----------|----|
| | | Irrigation Pump 2 | | | | | | |
| 20965 | RAS Pump 3.0-4.4kW Type | Port Vincent Wastewater Treatment Plant RAS Pump | | Port Vincent | 0 | 2018 | \$6,271 | 15 |
| 20405 | Submersible pump 1.3-1.9kW | Pt Julia Pump Station 1 Pump 1 | Jetty Road | Port Julia | 0 | 2018 | \$3,479 | 15 |
| 20406 | Submersible pump 1.3-1.9kW | Pt Julia Pump Station 1 Pump 2 | Jetty Road | Port Julia | 0 | 2018 | \$3,479 | 15 |
| 20380 | Submersible pump 6.0-7.4kW | Pt Vincent Marina Pump Station 3 Pump 1 | Marina Drive | Port Vincent | 0 | 2018 | \$7,314 | 15 |
| 20381 | Submersible pump 6.0-7.4kW | Pt Vincent Marina Pump Station 3 Pump 2 | Marina Drive | Port Vincent | 0 | 2018 | \$7,314 | 15 |
| 21275 | WWTP 50mm Gate Valve | Sultana Point Wastewater Treatment Plant Gate Valves | | Sultana Point | 0 | 2018 | \$2,687 | 20 |
| 21274 | WWTP 50mm Non-Return Valve | Sultana Point Wastewater Treatment Plant Non-Return Valves | | Sultana Point | 0 | 2018 | \$916 | 20 |
| Subtotal | | | | | | | \$52,228 | |
| | | | | | | | | |
| 20564 | 50mm Check Valve | Hardwicke Bay Pump Station 1 Check Valve | Cutline Road | Hardwicke Bay | 1 | 2019 | \$448 | 20 |
| 20570 | 50mm Check Valve | Hardwicke Bay Pump Station 2 Check Valve | Southshore Road | Hardwicke Bay | 1 | 2019 | \$448 | 20 |
| 20563 | 50mm Gate Valve | Hardwicke Bay Pump Station 1 Gate Valve | Cutline Road | Hardwicke Bay | 1 | 2019 | \$448 | 20 |
| 20569 | 50mm Gate Valve | Hardwicke Bay Pump Station 2 Gate Valve | Southshore Road | Hardwicke Bay | 1 | 2019 | \$448 | 20 |
| 21245 | Aerator 2.2kW Type | Hardwicke Bay Wastewater Treatment Plant Aerator 1 | | Hardwicke Bay | 1 | 2019 | \$4,571 | 20 |
| 21246 | Aerator 2.2kW Type | Hardwicke Bay Wastewater Treatment Plant Aerator 2 | | Hardwicke Bay | 1 | 2019 | \$4,571 | 20 |
| 21247 | Aerator 2.2kW Type | Hardwicke Bay Wastewater Treatment | | Hardwicke | 1 | 2019 | \$4,571 | 20 |

| | | | | | | | | |
|-------|----------------------------|--|-----------------|---------------|---|------|---------|----|
| | | Plant Aerator 3 | | Bay | | | | |
| 21180 | Aerator 2.2kW Type | Rogues Point Wastewater Treatment Plant Aerator 1 | | Rogues Point | 1 | 2019 | \$4,571 | 20 |
| 21181 | Aerator 2.2kW Type | Rogues Point Wastewater Treatment Plant Aerator 2 | | Rogues Point | 1 | 2019 | \$4,571 | 20 |
| 21182 | Aerator 2.2kW Type | Rogues Point Wastewater Treatment Plant Aerator 3 | | Rogues Point | 1 | 2019 | \$4,571 | 20 |
| 20869 | Electrical Fittings Type | Maitland Wastewater Treatment Plant Building Electrical Fittings | | Maitland | 1 | 2019 | \$678 | 25 |
| 21329 | Irrigation Pump 2.2kW Type | Balgowan Wastewater Treatment Plant Irrigation Pump 1 | | Balgowan | 1 | 2019 | \$3,529 | 15 |
| 21330 | Irrigation Pump 2.2kW Type | Balgowan Wastewater Treatment Plant Irrigation Pump 2 | | Balgowan | 1 | 2019 | \$3,529 | 15 |
| 20573 | PS Advanced Level Control | Hardwicke Bay Pump Station 2 Level Control | Southshore Road | Hardwicke Bay | 1 | 2019 | \$2,196 | 20 |
| 20687 | Submersible pump 1.3-1.9kW | Balgowan Pump Station 1 Pump 1 | Esplanade | Balgowan | 1 | 2019 | \$3,479 | 15 |
| 20688 | Submersible pump 1.3-1.9kW | Balgowan Pump Station 1 Pump 2 | Esplanade | Balgowan | 1 | 2019 | \$3,479 | 15 |
| 20608 | Submersible pump 1.3-1.9kW | Port Victoria Pump Station 2 Pump 1 | Davies Road | Port Victoria | 1 | 2019 | \$3,479 | 15 |
| 20658 | Submersible pump 1.3-1.9kW | Port Victoria Pump Station 2 Pump 2 | Davies Road | Port Victoria | 1 | 2019 | \$3,479 | 15 |
| 20392 | Submersible pump 2.0-2.4kW | Vincent Rise Pump Station 4 Pump 1 | Ventnor Street | Port Vincent | 1 | 2019 | \$4,179 | 15 |
| 20393 | Submersible pump 2.0-2.4kW | Vincent Rise Pump Station 4 Pump 2 | Ventnor Street | Port Vincent | 1 | 2019 | \$4,179 | 15 |
| 21249 | WWTP 50mm Gate Valve | Hardwicke Bay Wastewater Treatment Plant Gate Valves | | Hardwicke Bay | 1 | 2019 | \$1,791 | 20 |
| 21184 | WWTP 50mm Gate Valve | Rogues Point Wastewater Treatment | | Rogues Point | 1 | 2019 | \$1,791 | 20 |

| | | | | | | | | |
|----------|----------------------------|--|-------------------|---------------|---|------|----------|----|
| | | Plant Gate Valves | | | | | | |
| 21248 | WWTP 50mm Non-Return Valve | Hardwicke Bay Wastewater Treatment Plant Non-Return Valves | | Hardwicke Bay | 1 | 2019 | \$916 | 20 |
| 21183 | WWTP 50mm Non-Return Valve | Rogues Point Wastewater Treatment Plant Non-Return Valves | | Rogues Point | 1 | 2019 | \$916 | 20 |
| Subtotal | | | | | | | \$66,832 | |
| | | | | | | | | |
| 20650 | 50mm Check Valve | Bluff Beach Pump Station 1 Check Valve | Edwards Street | Bluff Beach | 2 | 2020 | \$448 | 20 |
| 20582 | 50mm Check Valve | Hardwicke Bay Pump Station 4 Check Valve | Northshore Road | Hardwicke Bay | 2 | 2020 | \$448 | 20 |
| 20280 | 50mm Check Valve | Hogarth Street Pump Station Check Valve | Hogarth street | Ardrossan | 2 | 2020 | \$448 | 20 |
| 20358 | 50mm Check Valve | Port Vincent Caravan Park Pump Station 1 Check Valve | within caravan pk | Port Vincent | 2 | 2020 | \$448 | 20 |
| 20521 | 50mm Check Valve | Yorke town Pump Station 1 Check Valve | Warooka Road | Yorke town | 2 | 2020 | \$448 | 20 |
| 20525 | 50mm Check Valve | Yorke town Pump Station 2 Check Valve | Minlaton Road | Yorke town | 2 | 2020 | \$448 | 20 |
| 20477 | 50mm Check Valve | Yorke town Pump Station 3 Check Valve | David Street | Yorke town | 2 | 2020 | \$448 | 20 |
| 20482 | 50mm Check Valve | Yorke town Pump Station 4 Check Valve | Waterloo Bay Road | Yorke town | 2 | 2020 | \$448 | 20 |
| 20486 | 50mm Check Valve | Yorke town Pump Station 5 Check Valve | Jacobs Street | Yorke town | 2 | 2020 | \$448 | 20 |
| 20649 | 50mm Gate Valve | Bluff Beach Pump Station 1 Gate Valve | Edwards Street | Bluff Beach | 2 | 2020 | \$448 | 20 |
| 20581 | 50mm Gate Valve | Hardwicke Bay Pump Station 4 Gate Valve | Northshore Road | Hardwicke Bay | 2 | 2020 | \$448 | 20 |
| 20279 | 50mm Gate Valve | Hogarth Street Pump Station Gate Valve | Hogarth street | Ardrossan | 2 | 2020 | \$448 | 20 |

| | | | | | | | | |
|-------|--------------------|---|-------------------|--------------|---|------|---------|----|
| 20357 | 50mm Gate Valve | Port Vincent Caravan Park Pump Station 1 Gate Valve | within caravan pk | Port Vincent | 2 | 2020 | \$448 | 20 |
| 20520 | 50mm Gate Valve | Yorke town Pump Station 1 Gate Valve | Warooka Road | Yorke town | 2 | 2020 | \$448 | 20 |
| 20524 | 50mm Gate Valve | Yorke town Pump Station 2 Gate Valve | Minlaton Road | Yorke town | 2 | 2020 | \$448 | 20 |
| 20476 | 50mm Gate Valve | Yorke town Pump Station 3 Gate Valve | David Street | Yorke town | 2 | 2020 | \$448 | 20 |
| 20481 | 50mm Gate Valve | Yorke town Pump Station 4 Gate Valve | Waterloo Bay Road | Yorke town | 2 | 2020 | \$448 | 20 |
| 20485 | 50mm Gate Valve | Yorke town Pump Station 5 Gate Valve | Jacobs Street | Yorke town | 2 | 2020 | \$448 | 20 |
| 20551 | 80mm Check Valve | Yorke town Pump Station 6 Check Valve | Memorial Drive | Yorke town | 2 | 2020 | \$898 | 20 |
| 20550 | 80mm Gate Valve | Yorke town Pump Station 6 Gate Valve | Memorial Drive | Yorke town | 2 | 2020 | \$898 | 20 |
| 21062 | Aerator 2.2kW Type | Bluff Beach Wastewater Treatment Plant Aerator | | Bluff Beach | 2 | 2020 | \$4,571 | 20 |
| 20961 | Aerator 4kW Type | Port Vincent Wastewater Treatment Plant Aerator 1 | | Port Vincent | 2 | 2020 | \$5,671 | 20 |
| 20962 | Aerator 4kW Type | Port Vincent Wastewater Treatment Plant Aerator 2 | | Port Vincent | 2 | 2020 | \$5,671 | 20 |
| 20963 | Aerator 4kW Type | Port Vincent Wastewater Treatment Plant Aerator 3 | | Port Vincent | 2 | 2020 | \$5,671 | 20 |
| 20964 | Aerator 4kW Type | Port Vincent Wastewater Treatment Plant Aerator 4 | | Port Vincent | 2 | 2020 | \$5,671 | 20 |
| 21029 | Aerator 4kW Type | Yorke town Wastewater Treatment Plant Aerator 1 | | Yorke town | 2 | 2020 | \$5,671 | 20 |
| 21030 | Aerator 4kW Type | Yorke town Wastewater Treatment Plant Aerator 2 | | Yorke town | 2 | 2020 | \$5,671 | 20 |
| 20880 | Decant Pump 3.1- | Maitland Wastewater Treatment Plant | | Maitland | 2 | 2020 | \$5,279 | 15 |

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|-------|----------------------------|---|-------------------|---------------|---|------|---------|----|
| | 3.5kW Type | Decant Pump 1 | | | | | | |
| 20881 | Decant Pump 3.1-3.5kW Type | Maitland Wastewater Treatment Plant Decant Pump 2 | | Maitland | 2 | 2020 | \$5,279 | 15 |
| 20910 | Electrical Fittings Type | Black Point Wastewater Treatment Plant Building Electrical Fittings | | Black Point | 2 | 2020 | \$678 | 25 |
| 20579 | PS Advanced Level Control | Hardwicke Bay Pump Station 3 Level Control | Foreshore Road | Hardwicke Bay | 2 | 2020 | \$2,196 | 20 |
| 20585 | PS Advanced Level Control | Hardwicke Bay Pump Station 4 Level Control | Northshore Road | Hardwicke Bay | 2 | 2020 | \$2,196 | 20 |
| 20283 | PS Advanced Level Control | Hogarth Street Pump Station Level Control | Hogarth street | Ardrossan | 2 | 2020 | \$2,196 | 20 |
| 20318 | PS Control Cabinet | Black Point Pump Station 1 Control Cabinet | Black Point Drive | Black Point | 2 | 2020 | \$5,734 | 25 |
| 20331 | PS Control Cabinet | Black Point Pump Station 2 Control Cabinet | Black Point Drive | Black Point | 2 | 2020 | \$5,734 | 25 |
| 20319 | PS Switchboard Meter Box | Black Point Pump Station 1 Switchboard Meter Box | Black Point Drive | Black Point | 2 | 2020 | \$8,325 | 25 |
| 20332 | PS Switchboard Meter Box | Black Point Pump Station 2 Switchboard Meter Box | Black Point Drive | Black Point | 2 | 2020 | \$8,325 | 25 |
| 21044 | WWTP 100mm Flowmeter | Yorke town Wastewater Treatment Plant Irrigation Flowmeter | | Yorke town | 2 | 2020 | \$2,518 | 20 |
| 21034 | WWTP 100mm Solenoid Valve | Yorke town Wastewater Treatment Plant Solenoid Valves 100mm Cast Iron | | Yorke town | 2 | 2020 | \$3,593 | 20 |
| 20959 | WWTP 50mm Gate Valve | Port Vincent Wastewater Treatment Plant Gate Valves 50mm Brass | | Port Vincent | 2 | 2020 | \$2,239 | 20 |
| 21035 | WWTP 50mm Gate Valve | Yorke town Wastewater Treatment Plant Gate Valve | | Yorke town | 2 | 2020 | \$448 | 20 |

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|----------|---|--|---------------------------------|-----------------|---|------|-----------|----|
| 20958 | WWTP 50mm Non-Return Valve | Port Vincent Wastewater Treatment Plant Non-Return Valves 50mm Brass | | Port Vincent | 2 | 2020 | \$2,289 | 20 |
| 21032 | WWTP 50mm Non-Return Valve | Yorke town Wastewater Treatment Plant Non-Return Valve | | Yorke town | 2 | 2020 | \$458 | 20 |
| 21033 | WWTP 50mm Non-Return Valve | Yorke town Wastewater Treatment Plant Non-Return Valve | | Yorke town | 2 | 2020 | \$458 | 20 |
| 21028 | WWTP Basic Level Regulator | Yorke town Wastewater Treatment Plant Level Regulators | | Yorke town | 2 | 2020 | \$4,010 | 20 |
| 21382 | WWTP Tank cover 5.5m dia Corrugated Iron Type | Black Point Wastewater Treatment Plant Decant Tank Cover | | Black Point | 2 | 2020 | \$5,096 | 25 |
| Subtotal | | | | | | | \$115,500 | |
| | | | | | | | | |
| 20714 | 50mm Check Valve | Chinamans Wells Pump Station 2 Check Valve | Chinamans Wells Road - Northern | Chinamans Wells | 3 | 2021 | \$448 | 20 |
| 20713 | 50mm Gate Valve | Chinamans Wells Pump Station 2 Gate Valve | Chinamans Wells Road - Northern | Chinamans Wells | 3 | 2021 | \$448 | 20 |
| 21095 | Aerator 2.2kW Type | Chinaman Wells Wastewater Treatment Plant Aerator | | Chinaman Wells | 3 | 2021 | \$4,571 | 20 |
| 21222 | Aerator 2.2kW Type | Foul Bay Wastewater Treatment Plant Aerator 1 | | Foul Bay | 3 | 2021 | \$4,571 | 20 |
| 21223 | Aerator 2.2kW Type | Foul Bay Wastewater Treatment Plant Aerator 2 | | Foul Bay | 3 | 2021 | \$4,571 | 20 |
| 21224 | Aerator 2.2kW Type | Foul Bay Wastewater Treatment Plant Aerator 3 | | Foul Bay | 3 | 2021 | \$4,571 | 20 |
| 21150 | Rainwater Tank Pressure Pump Type | Chinaman Wells Wastewater Treatment Plant Rainwater Tank | | Chinaman Wells | 3 | 2021 | \$3,529 | 15 |

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|----------|----------------------------|--|-------------------|----------------|---|------|----------|----|
| | | Pressure Pump | | | | | | |
| 20730 | Submersible pump 1.3-1.9kW | Maitland Pump Station 2 Pump 1 | Clinton Road | Maitland | 3 | 2021 | \$3,479 | 15 |
| 20731 | Submersible pump 1.3-1.9kW | Maitland Pump Station 2 Pump 2 | Clinton Road | Maitland | 3 | 2021 | \$3,479 | 15 |
| 20430 | Submersible pump 2.0-2.4kW | Stansbury Pump Station 2 Pump 1 | Oyster Court | Stansbury | 3 | 2021 | \$4,179 | 15 |
| 20431 | Submersible pump 2.0-2.4kW | Stansbury Pump Station 2 Pump 2 | Oyster Court | Stansbury | 3 | 2021 | \$4,179 | 15 |
| 20479 | Submersible pump 3.0-4.0kW | Yorke town Pump Station 4 Pump 1 | Waterloo Bay Road | Yorke town | 3 | 2021 | \$5,279 | 15 |
| 20480 | Submersible pump 3.0-4.0kW | Yorke town Pump Station 4 Pump 2 | Waterloo Bay Road | Yorke town | 3 | 2021 | \$5,279 | 15 |
| 20418 | Submersible pump 6.0-7.4kW | Stansbury Pump Station 1 Pump 1 | Pitt Street | Stansbury | 3 | 2021 | \$7,314 | 15 |
| 20419 | Submersible pump 6.0-7.4kW | Stansbury Pump Station 1 Pump 2 | Pitt Street | Stansbury | 3 | 2021 | \$7,314 | 15 |
| 20839 | WAS Pump 3.0-4.4kW Type | Ardrossan Wastewater Treatment Plant WAS Pump | | Ardrossan | 3 | 2021 | \$6,271 | 15 |
| 21155 | WWTP 50mm Gate Valve | Chinaman Wells Wastewater Treatment Plant Gate Valves 50mm PE | | Chinaman Wells | 3 | 2021 | \$2,687 | 20 |
| 21226 | WWTP 50mm Gate Valve | Foul Bay Wastewater Treatment Plant Gate Valves | | Foul Bay | 3 | 2021 | \$1,791 | 20 |
| 21096 | WWTP 50mm Non-Return Valve | Chinaman Wells Wastewater Treatment Plant Non-Return Valves 50mm Brass | | Chinaman Wells | 3 | 2021 | \$1,373 | 20 |
| 21225 | WWTP 50mm Non-Return Valve | Foul Bay Wastewater Treatment Plant Non-Return Valves | | Foul Bay | 3 | 2021 | \$916 | 20 |
| Subtotal | | | | | | | \$76,244 | |
| | | | | | | | | |
| 21293 | Aerator 2.2kW Type | Point Turton Wastewater Treatment | | Point Turton | 4 | 2022 | \$4,571 | 20 |

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|-------|--|---|-----------------|------------------|---|------|---------|----|
| | | Plant 1 Aerator 1 | | | | | | |
| 21294 | Aerator 2.2kW Type | Point Turton Wastewater Treatment Plant 1 Aerator 2 | | Point Turton | 4 | 2022 | \$4,571 | 20 |
| 21295 | Aerator 2.2kW Type | Point Turton Wastewater Treatment Plant 1 Aerator 3 | | Point Turton | 4 | 2022 | \$4,571 | 20 |
| 21077 | Aerator 4kW Type | Port Victoria Wastewater Treatment Plant Aerator 1 | | Port Victoria | 4 | 2022 | \$5,671 | 20 |
| 21078 | Aerator 4kW Type | Port Victoria Wastewater Treatment Plant Aerator 2 | | Port Victoria | 4 | 2022 | \$5,671 | 20 |
| 20829 | Air Conditioner Type | Ardrossan Wastewater Treatment Plant Air Conditioner | | Ardrossan | 4 | 2022 | \$1,186 | 25 |
| 20973 | Chlorine Dosing Pump and Meter Type | Port Vincent Wastewater Treatment Plant Chlorine Dosing Pump and Meter | | Port Vincent | 4 | 2022 | \$5,157 | 15 |
| 20830 | Electrical Fittings Type | Ardrossan Wastewater Treatment Plant Building Electrical Fittings | | Ardrossan | 4 | 2022 | \$678 | 25 |
| 20248 | PS Aluminium Sump Lid 1.8-2.2m dia | Ardrossan Jetty Carpark Pump Station Lid | Jetty carpark | Ardrossan | 4 | 2022 | \$951 | 25 |
| 20269 | Submersible pump 1.3- 1.9kW | Ardrossan Jetty Carpark Pump Station Overflow Chamber 2 Pump 1 | Jetty carpark | Ardrossan | 4 | 2022 | \$3,479 | 15 |
| 20567 | Submersible pump 1.3- 1.9kW | Hardwicke Bay Pump Station 2 Pump 1 | Southshore Road | Hardwicke Bay | 4 | 2022 | \$3,479 | 15 |
| 20568 | Submersible pump 1.3- 1.9kW | Hardwicke Bay Pump Station 2 Pump 2 | Southshore Road | Hardwicke Bay | 4 | 2022 | \$3,479 | 15 |
| 20641 | Submersible pump 1.3- 1.9kW | Hardwicke Bay Pump Station 5 Pump 1 | Northshore Road | Hardwicke Bay | 4 | 2022 | \$3,479 | 15 |
| 20642 | Submersible pump 1.3- 1.9kW | Hardwicke Bay Pump Station 5 Pump 2 | Northshore Road | Hardwicke Bay | 4 | 2022 | \$3,479 | 15 |
| 20652 | Submersible pump 1.3- | Port Victoria Jetty Pump Station 1 Pump | Jetty Carpark | Port | 4 | 2022 | \$3,479 | 15 |

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|----------|----------------------------|---|---------------|---------------|---|------|----------|----|
| | 1.9kW | 1 | | Victoria | | | | |
| 20653 | Submersible pump 1.3-1.9kW | Port Victoria Jetty Pump Station 1 Pump 2 | Jetty Carpark | Port Victoria | 4 | 2022 | \$3,479 | 15 |
| 21297 | WWTP 50mm Gate Valve | Point Turton Wastewater Treatment Plant 1 Gate Valves | | Point Turton | 4 | 2022 | \$1,791 | 20 |
| 21139 | WWTP 50mm Gate Valve | Port Victoria Wastewater Treatment Plant Gate Valves 50mm PE | | Port Victoria | 4 | 2022 | \$896 | 20 |
| 21296 | WWTP 50mm Non-Return Valve | Point Turton Wastewater Treatment Plant 1 Non-Return Valves | | Point Turton | 4 | 2022 | \$916 | 20 |
| 21080 | WWTP 50mm Non-Return Valve | Port Victoria Wastewater Treatment Plant Non-Return Valves 50mm PE | | Port Victoria | 4 | 2022 | \$916 | 20 |
| 21236 | WWTP Basic Level Regulator | Point Turton Wastewater Treatment Plant 1 Level Regulator | | Point Turton | 4 | 2022 | \$501 | 20 |
| Subtotal | | | | | | | \$62,395 | |
| | | | | | | | | |
| 20408 | 50mm Check Valve | Pt Julia Pump Station 1 Check Valve | Jetty Road | Port Julia | 5 | 2023 | \$448 | 20 |
| 20407 | 50mm Gate Valve | Pt Julia Pump Station 1 Gate Valve | Jetty Road | Port Julia | 5 | 2023 | \$448 | 20 |
| 21195 | Aerator 2.2kW Type | Port Julia Wastewater Treatment Plant Aerator 1 | | Port Julia | 5 | 2023 | \$4,571 | 20 |
| 21196 | Aerator 2.2kW Type | Port Julia Wastewater Treatment Plant Aerator 2 | | Port Julia | 5 | 2023 | \$4,571 | 20 |
| 21266 | Electrical Fittings Type | Sultana Point Wastewater Treatment Plant Building 1 Electrical Fittings | | Sultana Point | 5 | 2023 | \$678 | 25 |
| 20411 | PS Advanced Level Control | Pt Julia Pump Station 1 Level Control | Jetty Road | Port Julia | 5 | 2023 | \$2,196 | 20 |

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|-------|--|---|--------------------|---------------|---|------|---------|----|
| 20341 | Submersible pump 0.9-1.2kW | Black Point Pump Station 3 Pump 1 | Outlook Road | Black Point | 5 | 2023 | \$2,529 | 15 |
| 20342 | Submersible pump 0.9-1.2kW | Black Point Pump Station 3 Pump 2 | Outlook Road | Black Point | 5 | 2023 | \$2,529 | 15 |
| 20543 | Submersible pump 0.9-1.2kW | Yorke town Pump Station 5 Pump 1 | Jacobs Street | Yorke town | 5 | 2023 | \$2,529 | 15 |
| 20544 | Submersible pump 0.9-1.2kW | Yorke town Pump Station 5 Pump 2 | Jacobs Street | Yorke town | 5 | 2023 | \$2,529 | 15 |
| 20635 | Submersible pump 1.3-1.9kW | Hardwicke Bay Pump Station 4 Pump 1 | Northshore Road | Hardwicke Bay | 5 | 2023 | \$3,479 | 15 |
| 20636 | Submersible pump 1.3-1.9kW | Hardwicke Bay Pump Station 4 Pump 2 | Northshore Road | Hardwicke Bay | 5 | 2023 | \$3,479 | 15 |
| 20445 | Submersible pump 1.3-1.9kW | Stansbury Pump Station 3 Pump 1 | Oyster Point Drive | Stansbury | 5 | 2023 | \$3,479 | 15 |
| 20451 | Submersible pump 1.3-1.9kW | Stansbury Pump Station 4 Pump 1 | Oyster Point Drive | Stansbury | 5 | 2023 | \$3,479 | 15 |
| 20955 | WAS Pump 1.2-1.9kW Type | Port Vincent Wastewater Treatment Plant WAS Pump | | Port Vincent | 5 | 2023 | \$4,471 | 15 |
| 21199 | WWTP 50mm Ball Valve | Port Julia Wastewater Treatment Plant Ball Valves | | Port Julia | 5 | 2023 | \$896 | 20 |
| 21203 | WWTP 50mm Flowmeter | Port Julia Wastewater Treatment Plant Irrigation Flowmeter | | Port Julia | 5 | 2023 | \$2,368 | 20 |
| 21198 | WWTP 50mm Gate Valve | Port Julia Wastewater Treatment Plant Gate Valves | | Port Julia | 5 | 2023 | \$896 | 20 |
| 21197 | WWTP 50mm Non-Return Valve | Port Julia Wastewater Treatment Plant Non-Return Valves | | Port Julia | 5 | 2023 | \$916 | 20 |
| 21518 | WWTP Access Hatch 4mm Aluminium Checker Plate Type | Sultana Point Wastewater Treatment Plant Aeration Tank 1 Access Hatch | | Sultana Point | 5 | 2023 | \$1,447 | 25 |
| 21519 | WWTP Access Hatch 4mm Aluminium Checker Plate Type | Sultana Point Wastewater Treatment Plant Aeration Tank 2 Access Hatch | | Sultana Point | 5 | 2023 | \$1,447 | 25 |

| Subtotal | | | | | | | \$49,379 | |
|----------|-------------------------------------|--|----------------|---------------|---|------|----------|----|
| | | | | | | | | |
| 20690 | 50mm Check Valve | Balgowan Pump Station 1 Check Valve | Esplanade | Balgowan | 6 | 2024 | \$448 | 20 |
| 20660 | 50mm Check Valve | Port Victoria Pump Station 2 Check Valve | Davies Road | Port Victoria | 6 | 2024 | \$448 | 20 |
| 20395 | 50mm Check Valve | Vincent Rise Pump Station 4 Check Valve | Ventnor Street | Port Vincent | 6 | 2024 | \$448 | 20 |
| 20689 | 50mm Gate Valve | Balgowan Pump Station 1 Gate Valve | Esplanade | Balgowan | 6 | 2024 | \$448 | 20 |
| 20659 | 50mm Gate Valve | Port Victoria Pump Station 2 Gate Valve | Davies Road | Port Victoria | 6 | 2024 | \$448 | 20 |
| 20394 | 50mm Gate Valve | Vincent Rise Pump Station 4 Gate Valve | Ventnor Street | Port Vincent | 6 | 2024 | \$448 | 20 |
| 21326 | Aerator 2.2kW Type | Balgowan Wastewater Treatment Plant Aerator 1 | | Balgowan | 6 | 2024 | \$4,571 | 20 |
| 21327 | Aerator 2.2kW Type | Balgowan Wastewater Treatment Plant Aerator 2 | | Balgowan | 6 | 2024 | \$4,571 | 20 |
| 21188 | Chlorine Dosing Pump and Meter Type | Rogues Point Wastewater Treatment Plant Chlorine Dosing Pump and Meter | | Rogues Point | 6 | 2024 | \$5,157 | 15 |
| 21244 | Electrical Fittings Type | Hardwicke Bay Wastewater Treatment Plant Building Electrical Fittings | | Hardwicke Bay | 6 | 2024 | \$678 | 25 |
| 21115 | Electrical Fittings Type | Rogues Point Wastewater Treatment Plant Building Electrical Fittings | | Rogues Point | 6 | 2024 | \$678 | 25 |
| 21171 | Irrigation Pump 4kW Type | Point Turton Wastewater Treatment Plant 2 Irrigation Pump 1 | | Point Turton | 6 | 2024 | \$4,736 | 15 |
| 21172 | Irrigation Pump 4kW Type | Point Turton Wastewater Treatment Plant 2 Irrigation Pump 2 | | Point Turton | 6 | 2024 | \$4,736 | 15 |

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|----------|-------------------------------|---|-----------------|---------------|---|------|----------|----|
| 20721 | PS Advanced Level Control | Balgowan Pump Station 1 Level Control | Esplanade | Balgowan | 6 | 2024 | \$2,196 | 20 |
| 20571 | PS Control Cabinet | Hardwicke Bay Pump Station 2 Control Cabinet | Southshore Road | Hardwicke Bay | 6 | 2024 | \$5,734 | 25 |
| 20572 | PS Switchboard Meter Box | Hardwicke Bay Pump Station 2 Switchboard Meter Box | Southshore Road | Hardwicke Bay | 6 | 2024 | \$8,325 | 25 |
| 21109 | RAS Pump 3.0-4.4kW Type | Point Turton Wastewater Treatment Plant 2 RAS Pump | | Point Turton | 6 | 2024 | \$6,271 | 15 |
| 21315 | Variable Frequency Drive Type | Hardwicke Bay Wastewater Treatment Plant VFD drives | | Hardwicke Bay | 6 | 2024 | \$10,314 | 25 |
| 21137 | WAS Pump 1.2-1.9kW Type | Port Victoria Wastewater Treatment Plant WAS Pump | | Port Victoria | 6 | 2024 | \$4,471 | 15 |
| 21168 | WAS Pump 3.0-4.4kW Type | Point Turton Wastewater Treatment Plant 2 WAS Pump | | Point Turton | 6 | 2024 | \$6,271 | 15 |
| 21332 | WWTP 50mm Flowmeter | Balgowan Wastewater Treatment Plant Irrigation Flowmeter | | Balgowan | 6 | 2024 | \$2,368 | 20 |
| 21328 | WWTP 50mm Gate Valve | Balgowan Wastewater Treatment Plant Gate Valves | | Balgowan | 6 | 2024 | \$1,791 | 20 |
| 21324 | WWTP Basic Level Regulator | Balgowan Wastewater Treatment Plant Level Regulators | | Balgowan | 6 | 2024 | \$1,002 | 20 |
| Subtotal | | | | | | | \$76,555 | |
| | | | | | | | | |
| 21178 | Decant Pump 0.9-1.2kW Type | Rogues Point Wastewater Treatment Plant Decant Pump | | Rogues Point | 7 | 2025 | \$2,529 | 15 |
| 21209 | Decant Pump 0.9-1.2kW Type | Sultana Point Wastewater Treatment Plant Decant Pump | | Sultana Point | 7 | 2025 | \$2,529 | 15 |
| 20946 | Electrical Fittings Type | Port Vincent Wastewater Treatment Plant Building Electrical | | Port Vincent | 7 | 2025 | \$678 | 25 |

| | | Fittings | | | | | | |
|-------|-------------------------------|---|----------------------|------------------|---|------|---------|----|
| 21019 | Electrical Fittings Type | Yorke town Wastewater Treatment Plant Building Electrical Fittings | | Yorke town | 7 | 2025 | \$678 | 25 |
| 20577 | PS Control Cabinet | Hardwicke Bay Pump Station 3 Control Cabinet | Foreshore Road | Hardwicke Bay | 7 | 2025 | \$5,734 | 25 |
| 20583 | PS Control Cabinet | Hardwicke Bay Pump Station 4 Control Cabinet | Northshore Road | Hardwicke Bay | 7 | 2025 | \$5,734 | 25 |
| 20281 | PS Control Cabinet | Hogarth Street Pump Station Control Cabinet | Hogarth street | Ardrossan | 7 | 2025 | \$5,734 | 25 |
| 20359 | PS Control Cabinet | Port Vincent Caravan Park Pump Station 1 Control Cabinet | within caravan pk | Port Vincent | 7 | 2025 | \$5,734 | 25 |
| 20462 | PS Control Cabinet | Yorke town Pump Station 1 Control Cabinet | Warooka Road | Yorke town | 7 | 2025 | \$5,734 | 25 |
| 20526 | PS Control Cabinet | Yorke town Pump Station 2 Control Cabinet | Minlaton Road | Yorke town | 7 | 2025 | \$5,734 | 25 |
| 20530 | PS Control Cabinet | Yorke town Pump Station 3 Control Cabinet | David Street | Yorke town | 7 | 2025 | \$5,734 | 25 |
| 20483 | PS Control Cabinet | Yorke town Pump Station 4 Control Cabinet | Waterloo Bay Road | Yorke town | 7 | 2025 | \$5,734 | 25 |
| 20487 | PS Control Cabinet | Yorke town Pump Station 5 Control Cabinet | Jacobs Street | Yorke town | 7 | 2025 | \$5,734 | 25 |
| 20552 | PS Control Cabinet | Yorke town Pump Station 6 Control Cabinet | Memorial Drive | Yorke town | 7 | 2025 | \$5,734 | 25 |
| 20594 | PS Steel Sump Lid 1.1m dia | Bluff Beach Pump Station 1 Lid | Edwards Street | Bluff Beach | 7 | 2025 | \$461 | 25 |
| 20578 | PS Switchboard Meter Box | Hardwicke Bay Pump Station 3 Switchboard Meter Box | Foreshore Road | Hardwicke Bay | 7 | 2025 | \$8,325 | 25 |
| 20584 | PS Switchboard Meter | Hardwicke Bay Pump Station 4 Switchboard | Northshore Road | Hardwicke | 7 | 2025 | \$8,325 | 25 |

| | Box | Meter Box | | Bay | | | | |
|-------|-----------------------------------|---|--------------------|---------------|---|------|---------|----|
| 20282 | PS Switchboard Meter Box | Hogarth Street Pump Station Switchboard Meter Box | Hogarth street | Ardrossan | 7 | 2025 | \$8,325 | 25 |
| 20360 | PS Switchboard Meter Box | Port Vincent Caravan Park Pump Station 1 Switchboard Meter Box | within caravan pk | Port Vincent | 7 | 2025 | \$8,325 | 25 |
| 20463 | PS Switchboard Meter Box | Yorketown Pump Station 1 Switchboard Meter Box | Warooka Road | Yorketown | 7 | 2025 | \$8,325 | 25 |
| 20527 | PS Switchboard Meter Box | Yorketown Pump Station 2 Switchboard Meter Box | Minlaton Road | Yorketown | 7 | 2025 | \$8,325 | 25 |
| 20531 | PS Switchboard Meter Box | Yorketown Pump Station 3 Switchboard Meter Box | David Street | Yorketown | 7 | 2025 | \$8,325 | 25 |
| 20484 | PS Switchboard Meter Box | Yorketown Pump Station 4 Switchboard Meter Box | Waterloo Bay Road | Yorketown | 7 | 2025 | \$8,325 | 25 |
| 20488 | PS Switchboard Meter Box | Yorketown Pump Station 5 Switchboard Meter Box | Jacobs Street | Yorketown | 7 | 2025 | \$8,325 | 25 |
| 20493 | PS Switchboard Meter Box | Yorketown Pump Station 6 Switchboard Meter Box | Memorial Drive | Yorketown | 7 | 2025 | \$8,325 | 25 |
| 21053 | Rainwater Tank Pressure Pump Type | Bluff Beach Wastewater Treatment Plant Rainwater Tank Pressure Pump | | Bluff Beach | 7 | 2025 | \$3,529 | 15 |
| 20561 | Submersible pump 1.3-1.9kW | Hardwicke Bay Pump Station 1 Pump 1 | Cutline Road | Hardwicke Bay | 7 | 2025 | \$3,479 | 15 |
| 20562 | Submersible pump 1.3-1.9kW | Hardwicke Bay Pump Station 1 Pump 2 | Cutline Road | Hardwicke Bay | 7 | 2025 | \$3,479 | 15 |
| 20455 | Submersible pump 3.0-4.0kW | Edithburgh Pump Station 1 Pump 1 | Sultana Point Road | Edithburgh | 7 | 2025 | \$5,279 | 15 |
| 20498 | Submersible pump 3.0-4.0kW | Point Turton Pump Station 1 Pump 1 | at WWTP | Point Turton | 7 | 2025 | \$5,279 | 15 |
| 20499 | Submersible pump 3.0-4.0kW | Point Turton Pump Station 1 Pump 2 | at WWTP | Point Turton | 7 | 2025 | \$5,279 | 15 |

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| 20879 | WAS Pump 1.2-1.9kW Type | Maitland Wastewater Treatment Plant WAS Pump | | Maitland | 7 | 2025 | \$4,471 | 15 |
| 20939 | WWTP 100mm Flowmeter | Black Point Wastewater Treatment Plant Incoming Flowmeter | | Black Point | 7 | 2025 | \$2,518 | 20 |
| 20860 | WWTP 150mm Flowmeter | Ardrossan Wastewater Treatment Plant Incoming Flowmeter | | Ardrossan | 7 | 2025 | \$2,718 | 20 |
| 20971 | WWTP 40mm-80mm Filter | Port Vincent Wastewater Treatment Plant Filter 2 | | Port Vincent | 7 | 2025 | \$2,657 | 25 |
| 20890 | WWTP 50mm Ball Valve | Maitland Wastewater Treatment Plant Ball Valves 50mm Stainless Steel | | Maitland | 7 | 2025 | \$1,343 | 20 |
| 20888 | WWTP 50mm Non-Return Valve | Maitland Wastewater Treatment Plant Non-Return Valves 50mm Stainless Steel | | Maitland | 7 | 2025 | \$916 | 20 |
| 20978 | WWTP Alarm System Landline Type | Port Vincent Wastewater Treatment Plant Alarm System | | Port Vincent | 7 | 2025 | \$3,884 | 25 |
| 21050 | WWTP Alarm System Landline Type | Yorke town Wastewater Treatment Plant Alarm System | | Yorke town | 7 | 2025 | \$3,884 | 25 |
| 21602 | WWTP Electrical Cabling | Port Vincent Wastewater Treatment Plant Electrical Cabling | | Port Vincent | 7 | 2025 | \$7,112 | 25 |
| 21606 | WWTP Electrical Cabling | Yorke town Wastewater Treatment Plant Electrical Cabling | | Yorke town | 7 | 2025 | \$7,112 | 25 |
| 20976 | WWTP Medium Switchboard Cabinet Type | Port Vincent Wastewater Treatment Plant Switchboard | | Port Vincent | 7 | 2025 | \$27,024 | 25 |
| 21047 | WWTP Medium Switchboard Cabinet Type | Yorke town Wastewater Treatment Plant Irrigation Switchboard | | Yorke town | 7 | 2025 | \$27,024 | 25 |
| 21046 | WWTP Medium Switchboard Cabinet Type | Yorke town Wastewater Treatment Plant Switchboard | | Yorke town | 7 | 2025 | \$27,024 | 25 |

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| 20977 | WWTP PLC Controls Type | Port Vincent Wastewater Treatment Plant PLC Controls | | Port Vincent | 7 | 2025 | \$16,396 | 25 |
| 21049 | WWTP PLC Controls Type | Yorke town Wastewater Treatment Plant Irrigation Controls | | Yorke town | 7 | 2025 | \$24,594 | 25 |
| 21048 | WWTP PLC Controls Type | Yorke town Wastewater Treatment Plant PLC Controls | | Yorke town | 7 | 2025 | \$16,396 | 25 |
| 21392 | WWTP Tank cover 7.5m - 8.5m dia Corrugated Iron Type | Port Vincent Wastewater Treatment Plant Decant Tank Cover | | Port Vincent | 7 | 2025 | \$9,522 | 25 |
| 21393 | WWTP Tank cover 7.5m - 8.5m dia Corrugated Iron Type | Port Vincent Wastewater Treatment Plant Sludge Thickening Tank Cover | | Port Vincent | 7 | 2025 | \$9,522 | 25 |
| Subtotal | | | | | | | \$367,901 | |
| | | | | | | | | |
| 20421 | 100mm Check Valve | Stansbury Pump Station 1 Check Valve | Pitt Street | Stansbury | 8 | 2026 | \$1,276 | 20 |
| 20420 | 100mm Gate Valve | Stansbury Pump Station 1 Gate Valve | Pitt Street | Stansbury | 8 | 2026 | \$1,276 | 20 |
| 20733 | 50mm Check Valve | Maitland Pump Station 2 Check Valve | Clinton Road | Maitland | 8 | 2026 | \$448 | 20 |
| 20433 | 50mm Check Valve | Stansbury Pump Station 2 Check Valve | Oyster Court | Stansbury | 8 | 2026 | \$448 | 20 |
| 20732 | 50mm Gate Valve | Maitland Pump Station 2 Gate Valve | Clinton Road | Maitland | 8 | 2026 | \$448 | 20 |
| 20432 | 50mm Gate Valve | Stansbury Pump Station 2 Gate Valve | Oyster Court | Stansbury | 8 | 2026 | \$448 | 20 |
| 20993 | Aerator 4kW Type | Stansbury Wastewater Treatment Plant Aerator 1 | | Stansbury | 8 | 2026 | \$5,671 | 20 |
| 20994 | Aerator 4kW Type | Stansbury Wastewater Treatment Plant Aerator 2 | | Stansbury | 8 | 2026 | \$5,671 | 20 |
| 20995 | Aerator 4kW Type | Stansbury Wastewater Treatment Plant | | Stansbury | 8 | 2026 | \$5,671 | 20 |

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|-------|--------------------------------|--|---------------------------------|-----------------|---|------|---------|----|
| | | Aerator 3 | | | | | | |
| 19724 | Air Valve | Air Valve (Yorke-CWMS-N02625) in Park Terrace (Stansbury) | Park Terrace (Stansbury) | Stansbury | 8 | 2026 | \$3,317 | 20 |
| 20882 | Chlorine Circulation Pump Type | Maitland Wastewater Treatment Plant Chlorine Analyser Circulation Pump | | Maitland | 8 | 2026 | \$4,257 | 15 |
| 20840 | Decant Pump 5.3kW Type | Ardrossan Wastewater Treatment Plant Decant Pump | | Ardrossan | 8 | 2026 | \$6,636 | 15 |
| 21149 | Electrical Fittings Type | Chinaman Wells Wastewater Treatment Plant Building Electrical Fittings | | Chinaman Wells | 8 | 2026 | \$678 | 25 |
| 21280 | Electrical Fittings Type | Foul Bay Wastewater Treatment Plant Building Electrical Fittings | | Foul Bay | 8 | 2026 | \$678 | 25 |
| 21287 | Irrigation Flow Switch Type | Foul Bay Wastewater Treatment Plant Irrigation Pump Flow Switches | | Foul Bay | 8 | 2026 | \$2,314 | 25 |
| 20699 | PS Advanced Level Control | Maitland Pump Station 2 Level Control | Clinton Road | Maitland | 8 | 2026 | \$2,196 | 20 |
| 20424 | PS Advanced Level Control | Stansbury Pump Station 1 Level Control | Pitt Street | Stansbury | 8 | 2026 | \$2,196 | 20 |
| 20671 | PS Steel Sump Lid 1.1m dia | Chinamans Wells Pump Station 1 Lid | Chinamans Wells Road - Southern | Chinamans Wells | 8 | 2026 | \$461 | 25 |
| 20678 | PS Steel Sump Lid 1.1m dia | Chinamans Wells Pump Station 2 Lid | Chinamans Wells Road - Northern | Chinamans Wells | 8 | 2026 | \$461 | 25 |
| 20726 | Submersible pump 1.3-1.9kW | Maitland Pump Station 1 Pump 1 | South Terrace | Maitland | 8 | 2026 | \$3,479 | 15 |
| 20727 | Submersible pump 1.3-1.9kW | Maitland Pump Station 1 Pump 2 | South Terrace | Maitland | 8 | 2026 | \$3,479 | 15 |
| 21039 | Submersible Pump 7.4kW | Yorke town Wastewater Treatment Plant Relift Pump | | Yorke town | 8 | 2026 | \$7,471 | 15 |
| 20899 | WWTP 100mm | Maitland Wastewater Treatment Plant | | Maitland | 8 | 2026 | \$2,518 | 20 |

| | Flowmeter | Irrigation Flowmeter | | | | | | |
|----------|-------------------------------|---|---------------------------------|-----------------|---|------|----------|----|
| 21227 | WWTP 50mm Ball Valve | Foul Bay Wastewater Treatment Plant Ball Valves | | Foul Bay | 8 | 2026 | \$896 | 20 |
| 21250 | WWTP 50mm Ball Valve | Hardwicke Bay Wastewater Treatment Plant Ball Valves | | Hardwicke Bay | 8 | 2026 | \$896 | 20 |
| 21298 | WWTP 50mm Ball Valve | Point Turton Wastewater Treatment Plant 1 Ball Valves | | Point Turton | 8 | 2026 | \$896 | 20 |
| 21185 | WWTP 50mm Ball Valve | Rogues Point Wastewater Treatment Plant Ball Valves | | Rogues Point | 8 | 2026 | \$896 | 20 |
| 21099 | WWTP 50mm Flowmeter | Chinaman Wells Wastewater Treatment Plant Irrigation Flowmeter | | Chinaman Wells | 8 | 2026 | \$2,368 | 20 |
| 20992 | WWTP Advanced Level Regulator | Stansbury Wastewater Treatment Plant Level Regulators | | Stansbury | 8 | 2026 | \$6,589 | 20 |
| 21595 | WWTP Electrical Cabling | Foul Bay Wastewater Treatment Plant Electrical Cabling | | Foul Bay | 8 | 2026 | \$7,112 | 25 |
| Subtotal | | | | | | | \$81,145 | |
| | | | | | | | | |
| 20264 | 50mm Check Valve | Ardrossan Jetty Carpark Pump Station Overflow Chamber 1 Check Valve | Jetty carpark | Ardrossan | 9 | 2027 | \$448 | 20 |
| 20271 | 50mm Check Valve | Ardrossan Jetty Carpark Pump Station Overflow Chamber 2 Check Valve | Jetty carpark | Ardrossan | 9 | 2027 | \$448 | 20 |
| 20707 | 50mm Check Valve | Chinamans Wells Pump Station 1 Check Valve | Chinamans Wells Road - Southern | Chinamans Wells | 9 | 2027 | \$448 | 20 |
| 20588 | 50mm Check Valve | Hardwicke Bay Pump Station 5 Check Valve | Northshore Road | Hardwicke Bay | 9 | 2027 | \$448 | 20 |
| 20655 | 50mm Check Valve | Port Victoria Jetty Pump Station 1 Check | Jetty Carpark | Port Victoria | 9 | 2027 | \$448 | 20 |

| | | Valve | | | | | | |
|-------|-------------------------------------|---|---------------------------------|-----------------|---|------|---------|----|
| 20263 | 50mm Gate Valve | Ardrossan Jetty Carpark Pump Station Overflow Chamber 1 Gate Valve | Jetty carpark | Ardrossan | 9 | 2027 | \$448 | 20 |
| 20270 | 50mm Gate Valve | Ardrossan Jetty Carpark Pump Station Overflow Chamber 2 Gate Valve | Jetty carpark | Ardrossan | 9 | 2027 | \$448 | 20 |
| 20677 | 50mm Gate Valve | Chinamans Wells Pump Station 1 Gate Valve | Chinamans Wells Road - Southern | Chinamans Wells | 9 | 2027 | \$448 | 20 |
| 20643 | 50mm Gate Valve | Hardwicke Bay Pump Station 5 Gate Valve | Northshore Road | Hardwicke Bay | 9 | 2027 | \$448 | 20 |
| 20654 | 50mm Gate Valve | Port Victoria Jetty Pump Station 1 Gate Valve | Jetty Carpark | Port Victoria | 9 | 2027 | \$448 | 20 |
| 20863 | Air Compressor Medium Type | Ardrossan Wastewater Treatment Plant Air Compressor | | Ardrossan | 9 | 2027 | \$1,136 | 15 |
| 20857 | Chlorine Dosing Pump and Meter Type | Ardrossan Wastewater Treatment Plant Chlorine Dosing Pump and Meter 1 | | Ardrossan | 9 | 2027 | \$5,157 | 15 |
| 20858 | Chlorine Dosing Pump and Meter Type | Ardrossan Wastewater Treatment Plant Chlorine Dosing Pump and Meter 2 | | Ardrossan | 9 | 2027 | \$5,157 | 15 |
| 20896 | Chlorine Dosing Pump and Meter Type | Maitland Wastewater Treatment Plant Chlorine Dosing Pump and Meter 1 | | Maitland | 9 | 2027 | \$5,157 | 15 |
| 20897 | Chlorine Dosing Pump and Meter Type | Maitland Wastewater Treatment Plant Chlorine Dosing Pump and Meter 2 | | Maitland | 9 | 2027 | \$5,157 | 15 |
| 21307 | Decant Pump 0.9-1.2kW Type | Hardwicke Bay Wastewater Treatment Plant Decant Pump | | Hardwicke Bay | 9 | 2027 | \$2,529 | 15 |
| 20991 | Decant Pump 0.9-1.2kW Type | Stansbury Wastewater Treatment Plant Decant Tank Bypass | | Stansbury | 9 | 2027 | \$2,529 | 15 |

| | | Pump | | | | | | |
|-------|-----------------------------|---|-----------------|---------------|---|------|----------|----|
| 20841 | Decant Pump 22kW Type | Ardrossan Wastewater Treatment Plant Emergency Bypass Decant Pump 1 | | Ardrossan | 9 | 2027 | \$16,721 | 15 |
| 20842 | Decant Pump 22kW Type | Ardrossan Wastewater Treatment Plant Emergency Bypass Decant Pump 2 | | Ardrossan | 9 | 2027 | \$16,721 | 15 |
| 20918 | Decant Pump 3.1-3.5kW Type | Black Point Wastewater Treatment Plant Decant Pump 1 | | Black Point | 9 | 2027 | \$5,279 | 15 |
| 20919 | Decant Pump 3.1-3.5kW Type | Black Point Wastewater Treatment Plant Decant Pump 2 | | Black Point | 9 | 2027 | \$5,279 | 15 |
| 21292 | Electrical Fittings Type | Point Turton Wastewater Treatment Plant 1 Building Electrical Fittings | | Point Turton | 9 | 2027 | \$678 | 25 |
| 21130 | Electrical Fittings Type | Port Victoria Wastewater Treatment Plant Building Electrical Fittings | | Port Victoria | 9 | 2027 | \$678 | 25 |
| 21239 | Irrigation Flow Switch Type | Point Turton Wastewater Treatment Plant 1 Irrigation Pump Flow Switches | | Point Turton | 9 | 2027 | \$2,314 | 25 |
| 20591 | PS Advanced Level Control | Hardwicke Bay Pump Station 5 Level Control | Northshore Road | Hardwicke Bay | 9 | 2027 | \$2,196 | 20 |
| 20602 | PS Basic Level Control | Port Victoria Jetty Pump Station 1 Level Control | Jetty Carpark | Port Victoria | 9 | 2027 | \$501 | 20 |
| 20656 | PS Control Cabinet | Port Victoria Jetty Pump Station 1 Control Cabinet | Jetty Carpark | Port Victoria | 9 | 2027 | \$5,734 | 25 |
| 20657 | PS Switchboard Meter Box | Port Victoria Jetty Pump Station 1 Switchboard Meter Box | Jetty Carpark | Port Victoria | 9 | 2027 | \$8,325 | 25 |
| 20629 | Submersible pump 1.3-1.9kW | Hardwicke Bay Pump Station 3 Pump 1 | Foreshore Road | Hardwicke Bay | 9 | 2027 | \$3,479 | 15 |

| | | | | | | | | |
|-------|----------------------------|--|---------------------------------|-----------------|---|------|---------|----|
| 20574 | Submersible pump 1.3-1.9kW | Hardwicke Bay Pump Station 3 Pump 2 | Foreshore Road | Hardwicke Bay | 9 | 2027 | \$3,479 | 15 |
| 20613 | Submersible pump 1.3-1.9kW | Port Victoria Pump Station 3 Pump 1 | Songvaar Road | Port Victoria | 9 | 2027 | \$3,479 | 15 |
| 20614 | Submersible pump 1.3-1.9kW | Port Victoria Pump Station 3 Pump 2 | Songvaar Road | Port Victoria | 9 | 2027 | \$3,479 | 15 |
| 20675 | Submersible pump 2.0-2.4kW | Chinamans Wells Pump Station 1 Pump 1 | Chinamans Wells Road - Southern | Chinamans Wells | 9 | 2027 | \$4,179 | 15 |
| 20676 | Submersible pump 2.0-2.4kW | Chinamans Wells Pump Station 1 Pump 2 | Chinamans Wells Road - Southern | Chinamans Wells | 9 | 2027 | \$4,179 | 15 |
| 20682 | Submersible pump 2.0-2.4kW | Chinamans Wells Pump Station 2 Pump 1 | Chinamans Wells Road - Northern | Chinamans Wells | 9 | 2027 | \$4,179 | 15 |
| 20683 | Submersible pump 2.0-2.4kW | Chinamans Wells Pump Station 2 Pump 2 | Chinamans Wells Road - Northern | Chinamans Wells | 9 | 2027 | \$4,179 | 15 |
| 20518 | Submersible pump 3.0-4.0kW | Yorke town Pump Station 1 Pump 1 | Warooka Road | Yorke town | 9 | 2027 | \$5,279 | 15 |
| 20519 | Submersible pump 3.0-4.0kW | Yorke town Pump Station 1 Pump 2 | Warooka Road | Yorke town | 9 | 2027 | \$5,279 | 15 |
| 20855 | Tank Mixer Type | Ardrossan Wastewater Treatment Plant Buffer Tank Mixer | | Ardrossan | 9 | 2027 | \$4,571 | 15 |
| 21124 | Ventilation Fan | Bluff Beach Wastewater Treatment Plant Ventilation Fan | | Bluff Beach | 9 | 2027 | \$814 | 15 |
| 21058 | WAS Pump 1.2-1.9kW Type | Bluff Beach Wastewater Treatment Plant WAS Pump | | Bluff Beach | 9 | 2027 | \$4,471 | 15 |
| 20975 | WWTP 100mm Flowmeter | Port Vincent Wastewater Treatment Plant Incoming Flowmeter | | Port Vincent | 9 | 2027 | \$2,518 | 20 |
| 21045 | WWTP 100mm Flowmeter | Yorke town Wastewater Treatment Plant Incoming Flowmeter | | Yorke town | 9 | 2027 | \$2,518 | 20 |
| 21240 | WWTP 50mm | Point Turton Wastewater Treatment | | Point | 9 | 2027 | \$2,368 | 20 |

| | | | | | | | | |
|---------------|--|--|--|---------------|---|------|-------------|----|
| | Flowmeter | Plant 1 Irrigation Flowmeter | | Turton | | | | |
| 21242 | WWTP Alarm System Landline Type | Point Turton Wastewater Treatment Plant 1 Alarm System | | Point Turton | 9 | 2027 | \$3,884 | 25 |
| 21598 | WWTP Electrical Cabling | Point Turton Wastewater Treatment Plant 1 Electrical Cabling | | Point Turton | 9 | 2027 | \$7,112 | 25 |
| 21147 | WWTP PLC Controls Type | Port Victoria Wastewater Treatment Plant Irrigation Controls | | Port Victoria | 9 | 2027 | \$8,198 | 25 |
| 21241 | WWTP Small Switchboard Cabinet Type | Point Turton Wastewater Treatment Plant 1 Switchboard | | Point Turton | 9 | 2027 | \$18,024 | 25 |
| 21435 | WWTP Tank cover 7.5m - 8.5m dia Corrugated Iron Type | Port Victoria Wastewater Treatment Plant Decant Tank Cover | | Port Victoria | 9 | 2027 | \$9,522 | 25 |
| Subtotal | | | | | | | \$200,907 | |
| | | | | | | | | |
| Program Total | | | | | | | \$1,524,868 | |

Appendix C Projected Upgrade/Exp/New 10 year Capital Works Program

Projected Upgrade/New Expenditure figures in this plan are based on previous budgets, staff assumptions and estimates.

Appendix D Abbreviations

| | |
|--------------|---|
| AAAC | Average annual asset consumption |
| AM | Asset management |
| AMP | Asset management plan |
| ARI | Average recurrence interval |
| ASC | Annual service cost |
| BOD | Biochemical (biological) oxygen demand |
| CRC | Current replacement cost |
| CWMS | Community wastewater management systems |
| DA | Depreciable amount |
| DRC | Depreciated replacement cost |
| EF | Earthworks/formation |
| IRMP | Infrastructure risk management plan |
| LCC | Life Cycle cost |
| LCE | Life cycle expenditure |
| LTFP | Long term financial plan |
| MMS | Maintenance management system |
| PCI | Pavement condition index |
| RV | Residual value |
| SoA | State of the Assets |
| SS | Suspended solids |
| VC | Vitrified clay pipe |
| vph | Vehicles per hour |
| WDCRC | Written down current replacement cost |

Appendix E Glossary

Annual service cost (ASC)

- 1) Reporting actual cost
The annual (accrual) cost of providing a service including operations, maintenance, depreciation, finance/opportunity and disposal costs less revenue.
- 2) For investment analysis and budgeting
An estimate of the cost that would be tendered, per annum, if tenders were called for the supply of a service to a performance specification for a fixed term. The Annual Service Cost includes operations, maintenance, depreciation, finance/opportunity and disposal costs, less revenue.

Asset

A resource controlled by an entity as a result of past events and from which future economic benefits are expected to flow to the entity. Infrastructure assets are a sub-class of property, plant and equipment which are non-current assets with a life greater than 12 months and enable services to be provided.

Asset category

Sub-group of assets within a class hierarchy for financial reporting and management purposes.

Asset class

A group of assets having a similar nature or function in the operations of an entity, and which, for purposes of disclosure, is shown as a single item without supplementary disclosure.

Asset condition assessment

The process of continuous or periodic inspection, assessment, measurement and interpretation of the resultant data to indicate the condition of a specific asset so as to determine the need for some preventative or remedial action.

Asset hierarchy

A framework for segmenting an asset base into appropriate classifications. The asset hierarchy can be based on asset function or asset type or a combination of the two.

Asset management (AM)

The combination of management, financial, economic, engineering and other practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner.

Asset renewal funding ratio

The ratio of the net present value of asset renewal funding accommodated over a 10 year period in a long term financial plan relative to the net present value of projected capital renewal expenditures identified in an asset management plan for the same period [AIFMG Financial Sustainability Indicator No 8].

Average annual asset consumption (AAAC)*

The amount of an organisation's asset base consumed during a reporting period (generally a year). This may be calculated by dividing the depreciable amount by the useful life (or total future economic benefits/service potential) and totalled for each and every asset OR by dividing the carrying amount (depreciated replacement cost) by the remaining useful life (or remaining future economic benefits/service potential) and totalled for each and every asset in an asset category or class.

Borrowings

A borrowing or loan is a contractual obligation of the borrowing entity to deliver cash or another financial asset to the lending entity over a specified period of time or at a specified point in time, to cover both the initial capital provided and the cost of the interest incurred for providing this capital. A borrowing or loan provides the means for the borrowing entity to finance outlays (typically physical assets) when it has insufficient funds of its own to do so, and for the lending entity to make a financial return, normally in the form of interest revenue, on the funding provided.

Capital expenditure

Relatively large (material) expenditure, which has benefits, expected to last for more than 12 months. Capital expenditure includes renewal, expansion and upgrade. Where capital projects involve a combination of renewal, expansion and/or upgrade expenditures, the total project cost needs to be allocated accordingly.

Capital expenditure - expansion

Expenditure that extends the capacity of an existing asset to provide benefits, at the same standard as is currently enjoyed by existing beneficiaries, to a new group of users. It is discretionary expenditure, which increases future operations and maintenance costs, because it increases the organisation's asset base, but may be associated with additional revenue from the new user group, eg. extending a drainage or road network, the provision of an oval or park in a new suburb for new residents.

Capital expenditure - new

Expenditure which creates a new asset providing a new service/output that did not exist beforehand. As it increases service potential it may impact revenue and will increase future operations and maintenance expenditure.

Capital expenditure - renewal

Expenditure on an existing asset or on replacing an existing asset, which returns the service capability of the asset up to that which it had originally. It is periodically required expenditure, relatively large (material) in value compared with the value of the components or sub-components of the asset being renewed. As it reinstates existing service potential, it generally has no impact on revenue, but may reduce future operations and maintenance expenditure if completed at the optimum time, eg. resurfacing or resheeting a material part of a road network, replacing a material section of a drainage network with pipes of the same capacity, resurfacing an oval.

Capital expenditure - upgrade

Expenditure, which enhances an existing asset to provide a higher level of service or expenditure that will increase the life of the asset beyond that which it had originally. Upgrade expenditure is discretionary and often does not result in additional revenue unless direct user charges apply. It will increase operations and maintenance expenditure in the future because of the increase in the organisation's asset base, eg. widening the sealed area of an existing road, replacing drainage pipes with pipes of a greater capacity, enlarging a grandstand at a sporting facility.

Capital funding

Funding to pay for capital expenditure.

Capital grants

Monies received generally tied to the specific projects for which they are granted, which are often upgrade and/or expansion or new investment proposals.

Capital investment expenditure

See capital expenditure definition

Capitalisation threshold

The value of expenditure on non-current assets above which the expenditure is recognised as capital expenditure and below which the expenditure is charged as an expense in the year of acquisition.

Carrying amount

The amount at which an asset is recognised after deducting any accumulated depreciation / amortisation and accumulated impairment losses thereon.

Class of assets

See asset class definition

Component

Specific parts of an asset having independent physical or functional identity and having specific attributes such as different life expectancy, maintenance regimes, risk or criticality.

Core asset management

Asset management which relies primarily on the use of an asset register, maintenance management systems, job resource management, inventory control, condition assessment, simple risk assessment and defined levels of service, in order to establish alternative treatment options and long-term cashflow predictions. Priorities are usually established on the basis of financial return gained by carrying out the work (rather than detailed risk analysis and optimised decision-making).

Cost of an asset

The amount of cash or cash equivalents paid or the fair value of the consideration given to acquire an asset at the time of its acquisition or construction, including any costs necessary to place the asset into service. This includes one-off design and project management costs.

Critical assets

Assets for which the financial, business or service level consequences of failure are sufficiently severe to justify proactive inspection and rehabilitation. Critical assets have a lower threshold for action than non-critical assets.

Current replacement cost (CRC)

The cost the entity would incur to acquire the asset on the reporting date. The cost is measured by reference to the lowest cost at which the gross future economic benefits could be obtained in the normal course of business or the minimum it would cost, to replace the existing asset with a technologically modern equivalent new asset (not a second hand one) with the same economic benefits (gross service potential) allowing for any differences in the quantity and quality of output and in operating costs.

Deferred maintenance

The shortfall in rehabilitation work undertaken relative to that required to maintain the service potential of an asset.

Depreciable amount

The cost of an asset, or other amount substituted for its cost, less its residual value.

Depreciated replacement cost (DRC)

The current replacement cost (CRC) of an asset less, where applicable, accumulated depreciation calculated on the basis of such cost to reflect the already consumed or expired future economic benefits of the asset.

Depreciation / amortisation

The systematic allocation of the depreciable amount (service potential) of an asset over its useful life.

Economic life

See useful life definition.

Expenditure

The spending of money on goods and services. Expenditure includes recurrent and capital outlays.

Expenses

Decreases in economic benefits during the accounting period in the form of outflows or depletions of assets or increases in liabilities that result in decreases in equity, other than those relating to distributions to equity participants.

Fair value

The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties, in an arms length transaction.

Financing gap

A financing gap exists whenever an entity has insufficient capacity to finance asset renewal and other expenditure necessary to be able to appropriately maintain the range and level of services its existing asset stock was originally designed and intended to deliver. The service capability of the existing asset stock should be determined assuming no additional operating revenue, productivity improvements, or net financial liabilities above levels currently planned or projected. A current financing gap means service levels have already or are currently falling. A projected financing gap if not addressed will result in a future diminution of existing service levels.

Heritage asset

An asset with historic, artistic, scientific, technological, geographical or environmental qualities that is held and maintained principally for its contribution to knowledge and culture and this purpose is central to the objectives of the entity holding it.

Impairment Loss

The amount by which the carrying amount of an asset exceeds its recoverable amount.

Infrastructure assets

Physical assets that contribute to meeting the needs of organisations or the need for access to major economic and social facilities and services, eg. roads, drainage, footpaths and cycleways. These are typically large, interconnected networks or portfolios of composite assets. The components of these assets may be separately maintained, renewed or replaced individually so that the required level and standard of service from the network of assets is continuously sustained. Generally the components and hence the assets have long lives. They are fixed in place and are often have no separate market value.

Investment property

Property held to earn rentals or for capital appreciation or both, rather than for:

- (a) use in the production or supply of goods or services or for administrative purposes; or
- (b) sale in the ordinary course of business.

Key performance indicator

A qualitative or quantitative measure of a service or activity used to compare actual performance against a standard or other target. Performance indicators commonly relate to statutory limits, safety, responsiveness, cost, comfort, asset performance, reliability, efficiency, environmental protection and customer satisfaction.

Level of service

The defined service quality for a particular service/activity against which service performance may be measured. Service levels usually relate to quality, quantity, reliability, responsiveness, environmental impact, acceptability and cost.

Life Cycle Cost *

1. **Total LCC** The total cost of an asset throughout its life including planning, design, construction, acquisition, operation, maintenance, rehabilitation and disposal costs.
2. **Average LCC** The life cycle cost (LCC) is average cost to provide the service over the longest asset life cycle. It comprises average operations, maintenance expenditure plus asset consumption expense, represented by depreciation expense projected over 10 years. The Life Cycle Cost does not indicate the funds required to provide the service in a particular year.

Life Cycle Expenditure

The Life Cycle Expenditure (LCE) is the average operations, maintenance and capital renewal expenditure accommodated in the long term financial plan over 10 years. Life Cycle Expenditure may be compared to average Life Cycle Cost to give an initial indicator of affordability of projected service levels when considered with asset age profiles.

Loans / borrowings

See borrowings.

Maintenance

All actions necessary for retaining an asset as near as practicable to an appropriate service condition, including regular ongoing day-to-day work necessary to keep assets operating, eg road patching but excluding rehabilitation or renewal. It is operating expenditure required to ensure that the asset reaches its expected useful life.

- **Planned maintenance**

Repair work that is identified and managed through a maintenance management system (MMS). MMS activities include inspection, assessing the condition against failure/breakdown criteria/experience, prioritising scheduling, actioning the work and reporting what was done to develop a maintenance history and improve maintenance and service delivery performance.

- **Reactive maintenance**

Unplanned repair work that is carried out in response to service requests and management/supervisory directions.

- **Specific maintenance**

Maintenance work to repair components or replace sub-components that needs to be identified as a specific maintenance item in the maintenance budget.

- **Unplanned maintenance**

Corrective work required in the short-term to restore an asset to working condition so it can continue to deliver the required service or to maintain its level of security and integrity.

Maintenance expenditure *

Recurrent expenditure, which is periodically or regularly required as part of the anticipated schedule of works required to ensure that the asset achieves its useful life and provides the required level of service. It is expenditure, which was anticipated in determining the asset's useful life.

Materiality

The notion of materiality guides the margin of error acceptable, the degree of precision required and the extent of the disclosure required when preparing general purpose financial reports. Information is material if its omission, misstatement or non-disclosure has the potential, individually or collectively, to influence the economic decisions of users taken on the basis of the financial report or affect the discharge of accountability by the management or governing body of the entity.

Modern equivalent asset

Assets that replicate what is in existence with the most cost-effective asset performing the same level of service. It is the most cost efficient, currently available asset which will provide the same stream of services as the existing asset is capable of producing. It allows for technology changes and, improvements and efficiencies in production and installation techniques

Net present value (NPV)

The value to the organisation of the cash flows associated with an asset, liability, activity or event calculated using a discount rate to reflect the time value of money. It is the net amount of discounted total cash inflows after deducting the value of the discounted total cash outflows arising from eg the continued use and subsequent disposal of the asset after deducting the value of the discounted total cash outflows.

Non-revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are not expected to generate any savings or revenue to the Council, eg. parks and playgrounds, footpaths, roads and bridges, libraries, etc.

Operations

Regular activities to provide services such as public health, safety and amenity, eg street sweeping, grass mowing and street lighting.

Operating expenditure

Recurrent expenditure, which is continuously required to provide a service. In common use the term typically includes, eg power, fuel, staff, plant equipment, on-costs and overheads but excludes maintenance and depreciation. Maintenance and depreciation is on the other hand included in operating expenses.

Operating expense

The gross outflow of economic benefits, being cash and non cash items, during the period arising in the course of ordinary activities of an entity when those outflows result in decreases in equity, other than decreases relating to distributions to equity participants.

Operating expenses

Recurrent expenses continuously required to provide a service, including power, fuel, staff, plant equipment, maintenance, depreciation, on-costs and overheads.

Operations, maintenance and renewal financing ratio

Ratio of estimated budget to projected expenditure for operations, maintenance and renewal of assets over a defined time (eg 5, 10 and 15 years).

Operations, maintenance and renewal gap

Difference between budgeted expenditures in a long term financial plan (or estimated future budgets in absence of a long term financial plan) and projected expenditures for operations, maintenance and renewal of assets to achieve/maintain specified service levels, totalled over a defined time (e.g. 5, 10 and 15 years).

Pavement management system (PMS)

A systematic process for measuring and predicting the condition of road pavements and wearing surfaces over time and recommending corrective actions.

PMS Score

A measure of condition of a road segment determined from a Pavement Management System.

Rate of annual asset consumption *

The ratio of annual asset consumption relative to the depreciable amount of the assets. It measures the amount of the consumable parts of assets that are consumed in a period (depreciation) expressed as a percentage of the depreciable amount.

Rate of annual asset renewal *

The ratio of asset renewal and replacement expenditure relative to depreciable amount for a period. It measures whether assets are being replaced at the rate they are wearing out with capital renewal expenditure expressed as a percentage of depreciable amount (capital renewal expenditure/DA).

Rate of annual asset upgrade/new *

A measure of the rate at which assets are being upgraded and expanded per annum with capital upgrade/new expenditure expressed as a percentage of depreciable amount (capital upgrade/expansion expenditure/DA).

Recoverable amount

The higher of an asset's fair value, less costs to sell and its value in use.

Recurrent expenditure

Relatively small (immaterial) expenditure or that which has benefits expected to last less than 12 months. Recurrent expenditure includes operations and maintenance expenditure.

Recurrent funding

Funding to pay for recurrent expenditure.

Rehabilitation

See capital renewal expenditure definition above.

Remaining useful life

The time remaining until an asset ceases to provide the required service level or economic usefulness. Age plus remaining useful life is useful life.

Renewal

See capital renewal expenditure definition above.

Residual value

The estimated amount that an entity would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

Revenue generating investments

Investments for the provision of goods and services to sustain or improve services to the community that are expected to generate some savings or revenue to offset operating costs, eg public halls and theatres, childcare centres, sporting and recreation facilities, tourist information centres, etc.

Risk management

The application of a formal process to the range of possible values relating to key factors associated with a risk in order to determine the resultant ranges of outcomes and their probability of occurrence.

Section or segment

A self-contained part or piece of an infrastructure asset.

Service potential

The total future service capacity of an asset. It is normally determined by reference to the operating capacity and economic life of an asset. A measure of service potential is used in the not-for-profit sector/public sector to value assets, particularly those not producing a cash flow.

Service potential remaining

A measure of the future economic benefits remaining in assets. It may be expressed in dollar values (Fair Value) or as a percentage of total anticipated future economic benefits. It is also a measure of the percentage of the asset's potential to provide services that is still available for use in providing services (Depreciated Replacement Cost/Depreciable Amount).

Source: IPWEA, 2009, Glossary

Additional and modified glossary items shown *

Specific Maintenance

Replacement of higher value components/sub-components of assets that is undertaken on a regular cycle including repainting, replacement of air conditioning equipment, etc. This work generally falls below the capital/ maintenance threshold and needs to be identified in a specific maintenance budget allocation.

Strategic Longer-Term Plan

A plan covering the term of office of councillors (4 years minimum) reflecting the needs of the community for the foreseeable future. It brings together the detailed requirements in the Council's longer-term plans such as the asset management plan and the long-term financial plan. The plan is prepared in consultation with the community and details where the Council is at that point in time, where it wants to go, how it is going to get there, mechanisms for monitoring the achievement of the outcomes and how the plan will be resourced.

Sub-component

Smaller individual parts that make up a component part.

Useful life

Either:

- (a) the period over which an asset is expected to be available for use by an entity, or
- (b) the number of production or similar units expected to be obtained from the asset by the entity.

It is estimated or expected time between placing the asset into service and removing it from service, or the estimated period of time over which the future economic benefits embodied in a depreciable asset, are expected to be consumed by the Council.

Value in Use

The present value of future cash flows expected to be derived from an asset or cash generating unit. It is deemed to be depreciated replacement cost (DRC) for those assets whose future economic benefits are not primarily dependent on the asset's ability to generate net cash inflows, where the entity would, if deprived of the asset, replace its remaining future economic benefits.