

# 9: Cemeteries



THIS PAGE IS INTENTIONALLY BLANK



# CONTENTS

9	Cemeteries .....	9-1
9.1	Service Description.....	9-1
9.1.1	Rationale for Council's Involvement .....	9-1
9.1.2	Strategic Direction .....	9-1
9.2	Levels of Service .....	9-3
9.2.1	Customers and Stakeholders .....	9-3
9.2.2	Contribution to Community Outcomes .....	9-3
9.2.3	Service Drivers .....	9-3
9.2.4	Customer Expectations and Consultation .....	9-5
9.2.5	Customer Satisfaction Ratings .....	9-7
9.2.6	Asset Performance .....	9-10
9.2.7	Level of Service Issues and Gaps .....	9-11
9.2.8	Changes in Levels of Service .....	9-12
9.3	Growth and Demand .....	9-13
9.3.1	Demand Influences and Impacts .....	9-13
9.3.2	Asset Capacity.....	9-15
9.3.3	Forecast Cemetery Requirements.....	9-16
9.3.4	Demand Management .....	9-21
9.3.5	Meeting Demand through Asset Growth .....	9-21
9.4	Managing Assets .....	9-23
9.4.1	Asset Description.....	9-23
9.4.2	Asset Condition.....	9-26
9.4.3	Operations and Maintenance .....	9-28
9.4.4	Asset Renewal.....	9-34
9.4.5	New Asset Requirements .....	9-35
9.4.6	Disposal Plan.....	9-37
9.4.7	Sustainable Management.....	9-37
9.4.8	Risk Management.....	9-38
9.5	Financial Programmes Summary .....	9-39
9.5.1	Historical Financial Performance.....	9-39
9.5.2	Operations and Capital .....	9-39
9.5.3	Funding.....	9-40
Annex 9A	.....	9-42
Annex 9B	.....	9-44
Annex 9C	.....	9-46
Annex 9D	.....	9-49
Annex 9E	.....	9-51

THIS PAGE IS INTENTIONALLY BLANK

## 9 Cemeteries

### 9.1 Service Description

The Cemeteries Service encompasses the planning, provision, maintenance, development, operation and administration of public cemeteries and associated facilities that service the burial and remembrance needs of the various communities within the District.

A total of 19 cemeteries are managed and owned by Council to service the District's needs and these are distributed to cater for the township, village and rural communities. In addition to Council operated cemeteries there are a number of others within the District that are privately owned and generally managed through church establishments.

The Council maintains the cemeteries to appropriate standards and develops the sites with suitable assets and landscape treatment to create a pleasant and peaceful environment for visitors. The Council provides for interments and Sexton Duties at the cemeteries through a contract arrangement (Contract No. 1202).

Cemetery administration services are undertaken by the Council and this includes maintenance of burial and plot purchase records which are kept in both electronic and hard copy form. Customer information services are also provided in terms of plot locations, genealogical searches and general cemetery enquiries. The Council's web site provides information on Council cemeteries and the services available.

#### 9.1.1 Rationale for Council's Involvement

The Council considers the provision of cemeteries to be a core service required to satisfy the burial and remembrance needs of the District's population. Delivery of this service contributes to achievement of community outcomes related to the promotion of a healthy community. The Council has adopted the role of primary service provider as, although there are some private cemeteries managed through churches, these do not make a significant contribution. Council has a statutory responsibility to provide for the current and future burial needs of the district's residents as prescribed in Section 4 of the Burial and Cremation Act 1964.

Planning for cemeteries is required to meet both short term and long term requirements and to realise Council's strategic direction. As the District's population grows and changes the Council will need to plan and provide for future cemetery requirements.

Cemeteries serve a number of functions that contribute to the social, cultural and environmental wellbeing of the community. These include the following:

- Provide for the burial needs of the District including both full burial and ashes interments
- Provide places for celebrating and remembering the lives of friends and family
- Cater for a diversity of cultural and ethnic requirements
- Create visual amenity (such as gardens, tree plantings, and green open space)
- Provide passive areas of open space for quiet contemplation, walking and sitting
- Contribute to the rural landscape character of the district
- Provide opportunities to explore and research social and genealogical history
- Provide physical records of the district's social history
- Enable preservation of historic sites and features.

#### 9.1.2 Strategic Direction

The Council provides a network of cemeteries to meet the burial and remembrance needs of district communities. The Council is required under the Burial and Cremation Act to provide this service for both current and future residents. The following strategic issues have been identified in relation to cemeteries.

Council's strategic direction in relation to the activity is to ensure there is sufficient provision of cemeteries to meet community requirements. This is in terms of:

- Capacity for future burial requirements;

- Distribution to ensure communities have access to a cemetery;
- A range of burial options are provided for;
- Cemeteries are maintained and developed to the standard expected by the community

There is no dedicated cemetery for Rolleston at the present time and the desire for this facility has been expressed via a number of planning exercises. This plan does not foresee the need for a cemetery in Rolleston at this point in time as it is adequately serviced by Springston, Shands Road and Weedons cemeteries that are located in close proximity to the township. This matter will be reviewed in the future as Rolleston grows to gauge demand and, if needed, there is space at the Large Scale Park site to accommodate this proposal.

Key drivers that guide the strategic direction for cemetery provision and development are noted as follows:

**Cemeteries Capacity** – The death rate is projected to increase from around 2023 which will impact on cemetery capacity but, overall, there is sufficient space to accommodate this situation. It is expected that space for full burials will be exhausted at Springston Cemetery and Prebbleton Cemetery during the 10 year planning period. Council owned land adjacent to Springston Cemetery is planned for development as an extension to meet future demand. It is anticipated that demand for Prebbleton Cemetery will be absorbed by the nearby Shands Road Cemetery which has significant capacity available (50 years plus). Burial space in the developed part of Ellesmere Public cemetery will also be consumed in the near future which requires development of a further burial area.

**Burial Trends** – There is a gradual move toward a greater proportion of ashes burials although the ratio is still significantly in favour of full burials in Selwyn District. It is expected that, as the towns grow and become more urban in nature, the preference for ash burial will increase. Council will need to develop cemeteries in the future to cater for this demand.

**Changing Customer Needs** – It is evident that there are changing needs in terms of burial choices, memorial types and provision of ornamentation and other remembrance requirements. This is partly attributable to the changing ethnic composition of the community. It is important that Council responds to this need in the way it designs, develops and manages cemeteries in the future.

**Cemetery Facilities** – Currently none of the district's cemeteries provide toilet facilities for visitors. Council needs to be mindful of providing a level of service commensurate with the customer expectations particularly for cemeteries with a high level of use and there may be a need to provide improved facilities at the higher use cemeteries in the future. At this point Council has decided not to invest in provision of toilet facilities but will continue to monitor demand.

## 9.2 Levels of Service

This section defines the levels of service (LOS) for Cemeteries that are required to meet customer expectations. It also sets out the performance targets identified for each LOS to enable achievement to be measured.

### 9.2.1 Customers and Stakeholders

Customers and stakeholders with an interest in the cemeteries service include the following:

- Selwyn District residents
- Families of those buried in Council cemeteries
- Funeral Directors
- Returned Services Association
- Veterans Affairs New Zealand
- Churches and Religious groups
- Cultural and ethnic groups
- Heritage New Zealand
- Environment Canterbury
- Department of Conservation
- New Zealand Society of Genealogists
- Local Historical Societies
- Local Iwi/Ngai Tahu
- Township Advisory Committees

### 9.2.2 Contribution to Community Outcomes

The following table sets out the community outcomes that are relevant to the cemetery service and describes how the service contributes to outcomes.

Community Outcome	How Cemeteries Contribute
A living environment where the rural theme of Selwyn is maintained	Cemeteries contribute to the overall green-space of the District and complement the rural character and surrounding environment
A Healthy Community Selwyn people have access to appropriate health, social and community services	Residents have a place for burial and to remember the lives of friends and family
An ability to experience cultural activities	Residents have a place to remember the lives of past members of the District's communities Heritage aspects of cemeteries are preserved

Table 9-1: Cemeteries Contribution to Community Outcomes

### 9.2.3 Service Drivers

The key service drivers for cemeteries primarily relate to meeting customer expectations and compliance with statutory requirements. Service objectives specific to cemeteries include the following:

- Ensure there is sufficient cemetery space to accommodate the current and future burial and remembrance needs of the District and its communities.
- Provide a network of cemeteries across the district that enable access to communities within reasonable travelling distances.
- Ensure cemeteries provide attractive landscaped areas that contribute to the District's green space.
- Protect the health and safety of the community.
- Provide for the sustainable management of cemetery assets and facilities.
- Ensure the environment is protected and that any adverse impacts on the environment resulting from the management and maintenance of cemeteries is minimised.
- Provide for burials in Council cemeteries in a respectful, efficient and accurate manner.
- Ensure the communities' investment in cemetery infrastructural assets is protected.
- Ensure the usefulness and availability of cemeteries is maintained.

- Ensure the operation and maintenance of cemeteries complies with all legal requirements, New Zealand Standards, Selwyn District Council Policies and Bylaws.
- Ensure the heritage values of cemeteries are protected.

### Legislation, Standards and Policies

Specific legislation, standards and planning documents that apply to the cemeteries service are described in the tables below. This also explains the implications for levels of service.

Legislation/Standard	LOS Implications
Burial and Cremation Act 1964	<ul style="list-style-type: none"> <li>• A duty on local authorities to establish and maintain a suitable cemetery for the burial of persons dying within its district</li> <li>• Requirement to set aside burial grounds for religious denominations and defence force personnel</li> <li>• Establishment of bylaws to regulate burial practices and to control the erection of monuments.</li> </ul>
Heritage New Zealand Pouhere Taonga Act 2014	<ul style="list-style-type: none"> <li>• Protection of “archaeological sites” (sites or structures associated with human activity prior to 1900)</li> </ul>
Health Act 1956	<ul style="list-style-type: none"> <li>• Local authority to provide cemeteries and other sanitary services for the benefit of its district</li> <li>• ensuring identified health risks are managed to within acceptable levels</li> </ul>
Civil Defence Emergency Management Act 2002	<ul style="list-style-type: none"> <li>• Provision of space for emergency disposal of the dead</li> </ul>
Selwyn District Council District Plan (RMA)	<ul style="list-style-type: none"> <li>• Rules related to heritage features (trees, buildings, structure or sites)</li> </ul>
Natural Resources Regional Plan (RMA)	<ul style="list-style-type: none"> <li>• Rules on protecting ground water from contamination with new cemeteries or extensions (Rule WQL48)</li> </ul>
Local Government Act 2002	<ul style="list-style-type: none"> <li>• Requirement to prepare Sanitary Services Assessment for Cemeteries covering protection of public health and identify future capacity needs</li> </ul>
<i>New Zealand Standard NZS 4242:1995 'Headstones and cemetery monuments'</i>	<ul style="list-style-type: none"> <li>• Sets standards for construction and securing of cemetery monuments</li> </ul>

Table 9-2: Cemeteries Legislation & Standards

Plan/Policies	LOS Implications
Sanitary Services Assessment for Cemeteries 2005 & Update in 2018	<ul style="list-style-type: none"> <li>• Describes and comments on adequacy of current levels of service</li> <li>• Basic assessment of capacity of current cemetery provision</li> </ul>
Cemetery Bylaw 2011 (currently being reviewed)	<ul style="list-style-type: none"> <li>• Sets out procedures, practices and regulations for managing Council cemeteries</li> </ul>
Selwyn District Council Policy Manual	<ul style="list-style-type: none"> <li>• Guidelines for taking over church cemeteries (C102)</li> <li>• Restriction on further burials in Bishops Corner and Killinchy Cemeteries (C103 &amp; C106)</li> <li>• Provision of integrated record system (C109)</li> <li>• Closure of denominational beams and future provision of public beams only (C105)</li> <li>• Limitations on pre-sale of burial plots (C107)</li> <li>• Preference for double depth burial (C104)</li> <li>• Guidelines for restoration of headstones and surrounds (C110)</li> <li>• Restriction on hours of interment (C111)</li> </ul>

Table 9-3: Cemeteries Plans & Policies



## 9.2.4 Customer Expectations and Consultation

In general terms Council's knowledge of customer expectations is based on:

- Public enquiries and complaints received via Service Request System
- Feedback from elected members, general public, community boards and township committee
- Consultation via the LTP/Annual Plan process
- Feedback from the maintenance contractor
- Feedback from funeral directors
- Consultation on the Water & Sanitary Services Assessment
- Consultation on the Cemetery Bylaw review in 2017
- Satisfaction levels indicated in customer surveys (Annual Residents Survey)
- Surveys and focus groups (2008, 2013 and April 2017) specifically targeting cemeteries

### Focus Group Workshop 2017

In order to more accurately determine expectations, a focus group exercise for community committee members was undertaken in April 2017. Feedback from the group informed on current levels of service; areas of deficiency; whether current expenditure was considered high, about right or too low; and improvement suggestions. Feedback was collated on "H Forms" (refer annex 9A) and the service was scored out of 10 (10 being the highest level of satisfaction). This activity scored 8.2, indicating a good level of satisfaction with current service.

A summary of opinion from the focus group was:

- Generally well-maintained but questions about mowing standard.
- Enough scope for expansion.
- Reporting and response processes raised some concerns.

### Water and Sanitary Services Assessment for Cemeteries (2005)

This document contained information on levels of service for cemeteries as well as an indication of the adequacy of the service provided. A review of the information in the Assessment was undertaken in 2018 and suggests that no significant changes have occurred in terms of levels of service, protection of public health and capacity to meet current and future burial requirements. The review notes that:

- Overall there is significant capacity available in cemeteries to meet the burial needs of the current and future populations
- Springston Cemetery is likely to have no space available in just over 10 years but an extension is planned on adjacent land (4 ha)
- Council is required to obtain a consent from ECan under the Canterbury Land and Water Regional Plan for the proposed cemetery extension at Springston which may impose conditions to protect groundwater
- Prebbleton Cemetery will have all burial space exhausted in around 10 years but the nearby Shands Road Cemetery will meet the needs of this community
- There is move towards cremation as a preferred option which is associated with the urbanisation of townships
- Demand for space and facilities for ashes burial is likely to increase
- The population growth coupled with a generally aging population over time will see the death rate for the district increase but the demand on burial space is ameliorated by the increase in preference for cremation
- Council has acquired a large tract of land (100 ha) near Rolleston that could provide for future cemetery needs if required.

Extracts from the Sanitary Services Assessment relevant to Cemetery levels of service are set out below:

Council aims to provide cemeteries that are well landscaped and that provide an aesthetically pleasing and peaceful environment. They currently have a two-tier level of service for high and low use cemeteries. The levels of service are detailed in the table below.

Criteria	Level of Service	
	High Use	Low Use
<b>Availability</b>	Public and multi-denominational *	
<b>Aesthetics</b>	Landscaped and maintained to provide an aesthetically pleasing, peaceful environment with appropriate planting of trees, hedges and gardens	
<b>Seating</b>	Seating provided	No seating provided
<b>Water Supply</b>	Water available from tap in or near cemetery or from irrigation channel	No water available

\* Except Ellesmere Catholic and RSA Cemeteries

Table 9-4: Level of Service Criteria – Cemeteries

**Cemetery Location:** The distribution of cemeteries is fairly uniform across the plains area of Selwyn District, with all townships (with the exception of Castle Hill and Arthurs Pass) within 20km of a cemetery and most within 10km. It has been identified that, on a total population basis, the townships of Rolleston, Darfield and Tai Tapu do not have a dedicated multi-denominational cemetery. Although there is no immediate need for cemeteries for these townships, as they are well served by cemeteries in adjacent townships, they should be considered for development in the future when existing cemetery land has been used.

In the foothills of the Alps there are no cemeteries past the Kowai Pass cemetery at Springfield. This means that the residents of Arthur's Pass, and the surrounding farms and settlements, may have to travel up to 60km to reach the nearest cemetery. Council is not aware of this presenting a particular problem to residents but consideration should be given to locating a new cemetery in this area in the future.

**Availability of Plots:** Of the 29 cemeteries in the district, four are now closed (includes privately owned cemeteries) to all but those with pre-purchased plots or relatives already buried there. Those remaining all have a significant number of plots remaining. Council records regarding the area available for burials within each cemetery are not generally available. Although total plan areas can be calculated, not all of this land is suitable for graves and so the number of available plots and hence the life span of the cemetery could not be calculated. It is also possible that some of the older graves are not marked and therefore further investigation will be required to determine the land that will be available for new grave sites. The Council are currently undertaking a comprehensive survey of all Council owned sites, including a radar survey to determine unmarked graves, in order to analyse the adequacy of their cemeteries in the long-term.

Council also owns land that is designated for cemetery use but which is currently managed as Forestry. It is not expected that this land will be required for in excess of 25 years and therefore this land is held in reserve.

**Cemetery Presentation:** Inspection of all Council and private cemetery facilities found them to be well landscaped and very well maintained. In all cases there was good access and the cemetery was well sign posted.

All Council cemeteries have access to water facilities on site, as per Council's desired level of service. Council progressively undertakes installations of new park furniture at Council owned cemeteries, to meet required levels of service and address any deficiency in current provision.

### Rolleston Structure Plan (2009)

The Rolleston Structure plan was developed in 2009 as a response to Rolleston's accelerated and sustained growth (as indicated in the Greater Christchurch Urban Development Strategy). The document provides guidance for a planned and sustainable growth model to meet community aspirations for the future.

In consulting on the Rolleston Structure Plan a number of submitters raised the need for a cemetery to service Rolleston as it grows. The Rolleston Structure Plan responded to this request by indicating that a

cemetery could be provided in the medium to long term subject to an appropriate site being found. The suggestion being that this could be accommodated in the proposed “District Park” should this be acquired.

### Cemetery Bylaw Review 2017

Public consultation in accordance with the Local Government Act Special Consultative Procedure was undertaken in reviewing the Cemetery Bylaw in 2017. Although there were few submissions received matters raised included:

- The cost and process for burial warrants
- The type of materials permissible for memorial headstones
- Restricting headstone installation to monumental masons is too limiting
- Authority for grave filling by relatives should be less complicated

### 9.2.5 Customer Satisfaction Ratings

The Council undertakes an annual satisfaction survey covering a number of service areas including cemeteries. This provides a reasonable view of the level of satisfaction with cemetery maintenance by the district community. The results since 2012 are shown in Table 9-1 below.

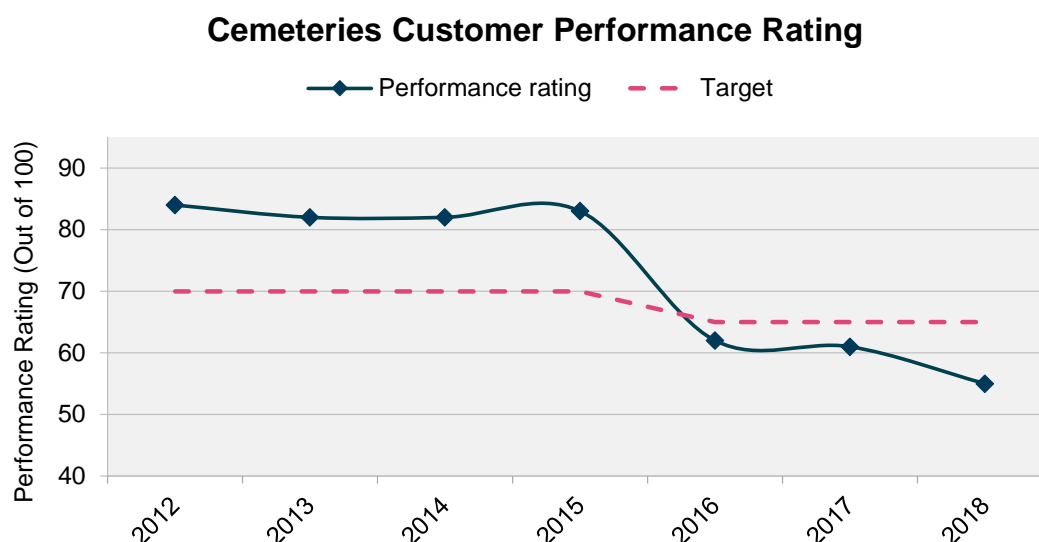


Figure 9-1: : Cemeteries Historical Satisfaction Ratings

This shows that, overall, there has been a reasonable level of satisfaction with cemeteries, although there has been a decline in the last survey undertaken (2018). The dip in both performance and the target from 2016 reflects the change in approach to defining the level of satisfaction in the Residents Survey whereby only “very good” and “good” responses are counted towards the satisfaction score. Previously the “neutral” responses were apportioned towards the overall satisfaction rating. In more recent surveys the satisfaction score of “users” of the service (as opposed to general respondents) was recorded and shows a much higher satisfaction rating of 71% (2017) and 60% (2018).

### Present and Future Levels of Service

The Council provides a network of cemeteries to meet the needs of the district and these are distributed to enable reasonable access for the majority of townships and rural communities. Cemeteries that service the District’s four wards are shown in the table below.

Ellesmere Ward	Malvern Ward	Springs Ward	Selwyn Central Ward
Bishops Corner	Greendale	Lincoln	Dunsandel
Brookside	Kimberley	Prebbleton	Lincoln
Dunsandel	Kirwee	Shands Road	Prebbleton
Ellesmere	Kowai Pass	Springston	Shands Road
Ellesmere Catholic	Lake Coleridge	Weedons Wesleyan	Springston
Killinchy	South Malvern		Weedons Wesleyan
	Waddington		

*Table 9-5: Cemeteries Distribution*

A relatively simple approach to the facilities and environments provided at cemeteries has historically been taken. The level of satisfaction for cemetery services revealed in customer surveys is evidence of a strong level of community support for this approach. Therefore it is not intended to markedly change or increase levels of service for the future but to aim for modest incremental improvements. The primary focus will be on maintaining the present levels of service and to address identified gaps and issues.

The following table sets out the service standards applicable to each cemetery. The service categories are defined in Table 9-6 below.

Cemetery	Service level	Cemetery	Service level
Bishops Corner	Closed	Kowai Pass	High
Brookside	Low	Lake Coleridge	Low
Dunsandel	High	Lincoln	High
Ellesmere	High	Prebbleton	High
Ellesmere Catholic	High	Shands Road	High
Greendale	High	South Malvern	High
Hororata	Low	Springston	High
Killinchy	Closed	Waddington	High
Kimberley	High	Weedons Wesleyan	High
Kirwee	High		

*Table 9-6: Cemeteries Service Categories*



Community Outcomes	Objectives/ rationale	Core Value	Current LOS	Planned LOS Yrs 1-3	Indicative LOS Yrs 4-10	Performance Measures	Current Performance	Target Performance			Indicative Performance Yrs 4-10
								Yr 1	Yr 2	Yr 3	
<b>A healthy community</b>  <b>An ability to experience cultural activities</b>  <b>A living environment where the rural theme of Selwyn is maintained</b>	<b>The Council has a statutory responsibility to provide for the burial needs of the district's residents</b>	Primary									
		Quality	The quality of cemetery facilities & maintenance standards reflects the level of use	The quality of cemetery facilities & maintenance standards meets residents' service expectations	The quality of cemetery facilities & maintenance standards meets residents' service expectations	The proportion of residents ration the performance of cemeteries in the Annual Resident Survey as good or very good	61	>65	>65	>65	≥70
		Customer									
	<b>A network of cemeteries is provided to meet the district's burial &amp; remembrance needs</b>	Accessibility	District residents' have access to a Council cemetery within a reasonable travelling distance.	District residents' continue to have access to a Council cemetery within a reasonable travelling distance.	District residents' continue to have access to a Council cemetery within a reasonable travelling distance.	A cemetery is located within easy driving distance (10 km) of district townships	88.5%	>85%	>85%	>85%	>85%
		Service Reliability	Cemetery operations are carried out in a respectful, accurate & efficient manner	Cemetery operations continue to be carried out in a respectful, accurate & efficient manner	Cemetery operations continue to be carried out in a respectful, accurate & efficient manner	Number of complaints received per annum related to cemetery service	10	≤10	≤10	≤10	≤5
		Information Management	New Measure	Preparations are made to enable Cemetery Records available to be viewed online by the public	Cemetery Records are available to be viewed online by the public	Online access is available	New Measure	Progress	Progress	Available	Available
	<b>Cemeteries provide a contribution to the landscape character &amp; heritage values of the district</b>	Technical									
		Sustainability	The standard of maintenance is sufficient to meet safety expectations, retain serviceability and preserve landscape quality	The standard of maintenance is sufficient to meet safety expectations, retain serviceability and preserve landscape quality	The standard of maintenance is sufficient to meet safety expectations, retain serviceability and preserve landscape quality	% compliance with maintenance specifications for cemeteries.	92%	≥90%	≥90%	≥90%	≥95%
		Quality	Burial/memorial options are available at a limited number of cemeteries	An expanded choice of cemetery sites & burial/memorial options is available	An expanded choice of cemetery sites & burial/memorial options is available	Numbers of cemeteries that provide for both full burial and ash interment	15	15	16	17	17
		Quality	New Measure	The quality of cemetery facilities is consistent with the grade standards & customer expectations.	The quality of cemetery facilities is consistent with the grade standards & customer expectations.	% compliance with cemetery grade standards Source: annual audit	New Measure	>75%	>75%	>75%	>90%

Table 9-7: Cemeteries Present & Future LOS

## Cemeteries Service Performance Standards

The following table sets out more detailed information on the intended levels of service defined for cemeteries. This is used as a general guideline for the performance standards to be provided in the future but each individual site will be developed to reflect specific community requirements.

LOS Value	High use cemeteries	Low use cemeteries	Closed cemeteries
<b>Quality</b>	Seating, rubbish receptacles, water supply provided, toilet facilities available	Rubbish receptacle provided, no water supply or seating	Rubbish receptacle provided, no water supply or seating
<b>Landscape quality</b>	Boundary shelter planting, ornamental trees/shrubs, garden areas	Boundary shelter planting, ornamental trees/shrubs	Boundary shelter planting, ornamental trees/shrubs
	*Grade 1 cut grave area & Grade 2-4 cut in remainder of cemetery	Grade 1 cut grave area & Grade 2-4 cut in remainder of cemetery	Grade 1 cut grave area & Grade 2-4 cut in remainder of cemetery
<b>Accessibility</b>	Formed drive, may have formed car park	No formed access	No formed access
<b>Availability</b>	Public and interdenominational in all cemeteries except at the RSA cemetery areas and in the Ellesmere Catholic Cemetery. RSA cemetery areas are for Return Servicemen only and the Ellesmere Catholic Cemetery is for people of the Catholic faith only Maximum of three plots may be pre-purchased		Only available for burial by descendants of those already buried in these cemeteries
<b>Information</b>	Entrance sign, layout sign, may have plot markers installed	Entrance sign	Entrance sign
<b>Safety &amp; Security</b>	Design meets CPTED principles		
	All unattended graves shall be fitted with a cover that will prevent persons falling into the site		
	All operation carried out in accordance with Health & Safety at Work Act		
	Safety inspections undertaken as part of maintenance rounds		
<b>Distribution</b>	Cemetery generally provided to service larger townships or in close proximity ( $\leq 10$ km)		
<b>Burial choice</b>	Concrete beam for headstone location Separate ash beam provided	Concrete beam for headstone location Ash beam optional	No beams provided
<b>Standards &amp; Legal Compliance</b>	Compliance with District Plan, Burial & Cremation Act, Health Act & Heritage NZ Pouhere Taonga Act requirements		
<b>Service reliability</b>	The grave excavation shall be completed a minimum of two hours prior to the time that the interment is programmed and on the date of the interment		
	Grave depths shall be no less than 1.4 metres for single depth and 1.8 metres for double depth		
<b>Health &amp; Hygiene</b>	Rubbish bins serviced weekly	Rubbish bins serviced monthly	

\*Grades for mowing are set out in Section 8.4.4

Table 9-8: Cemeteries Service Standards

### 9.2.6 Asset Performance

Specific performance related to levels of service targets set in the 2015 version of the Activity Management Plan is disclosed in the following table.

Target LOS	Performance Measures	Target 2014/15	Actual 2014/15	Target 2015/16	Actual 2015/16	Target 2016/17	Actual 2016/17
The quality of cemetery facilities & maintenance standards meets residents' service expectations	The performance rating (out of 100) for cemeteries in the Annual Resident Survey	>70	83	>70	62	>70	61

Target LOS	Performance Measures	Target 2014/15	Actual 2014/15	Target 2015/16	Actual 2015/16	Target 2016/17	Actual 2016/17
District residents' continue to have access to a Council cemetery within a reasonable travelling distance.	A cemetery is located within easy driving distance (10 km) of district townships	85%	88.5%	85%	88.5%	85%	88.5%
Cemetery operations continue to be carried out in a respectful, accurate & efficient manner	Number of complaints received per annum related to cemetery service	<10	6	<10	9	<10	10
The standard of maintenance is sufficient to meet safety expectations, retain serviceability and preserve landscape quality	% compliance with maintenance specifications for cemeteries	90%	Not measured	90%	Not measured	90%	Not measured
An expanded choice of cemetery sites & burial/memorial options is available	Numbers of cemeteries that provide areas for both full burial and ash interment	13	13	13	14	13	15

Table 9-9: Cemeteries LOS Historical Performance

Information shown in the above table indicates variable performance against target measures over the previous three years. The performance target related to performance out of 100 in the Annual Residents has been below target in the last two years this has resulted from the change in approach to defining satisfaction levels in the survey whereby "very good" and "good" ratings are counted towards overall satisfaction compared with the previous method of apportioning neutral responses. In response to this situation the target has been adjusted to reflect the reality of ratings for this service.

As an alternative to full burials, ash plots are now provided at 15 of the 19 cemeteries managed by SDC. It is expected that ash beams will be installed at the two remaining operational cemeteries to meet demand over the planning period.

No formal auditing of Contract 1202 which covers maintenance of cemeteries has been carried out over the last three years therefore the contract maintenance performance results could not be measured. In March 2018 a baseline independent Contract Performance Audit was carried out across the district on 35 sites including cemetery sites and assets. The average % compliance with maintenance contract specifications was 95%.

### 9.2.7 Level of Service Issues and Gaps

A number of levels of service issues are evident from the survey, focus group and other customer feedback initiatives that have been undertaken. These are generally of a minor nature but indicate that there are some gaps in terms of current performance compared with customer expectations. The issues identified and Council's response to resolving issues or addressing gaps is described in the following table.

LOS Issues/Gaps	SDC Response	Programme/Timing
Water supplies unavailable or inadequate in some cemeteries	<ul style="list-style-type: none"> <li>Install or upgrade water supply systems in cemeteries where use is increasing</li> </ul>	Water supplies at Kirwee & Ellesmere Public Cemeteries have been improved Brookside Cemetery supply to be upgraded in 2019/20
Lower level of grass maintenance in "low" use cemeteries	<ul style="list-style-type: none"> <li>Maintain current mowing regimes</li> <li>Review if cemetery use increases substantially</li> </ul>	Reassess as part of Reserves Maintenance Contract review in 2019/20
Car park provision and access inadequate at some sites	<ul style="list-style-type: none"> <li>Improve access and parking at high use cemeteries</li> <li>Ensure grass on road frontages is mown to enable parking</li> </ul>	Road extensions planned at Ellesmere Public and Shands Rd in 2017/18. Access and car park extension planned at Shands Rd in 2020/21 Additional car park at Springston Cemetery as part of extension in 2018/19
Signage and markers required to identify plots	<ul style="list-style-type: none"> <li>Programme to improve marker &amp; signage system</li> </ul>	Budget provided in 2017/18 and 2018/19
No toilets provided in cemeteries	<ul style="list-style-type: none"> <li>Maintain current LOS but provide on-site information on nearest public toilets</li> <li>Monitor demand at high use cemeteries</li> </ul>	Not currently programmed but to be reviewed against customer demand
Community preference for different types of layout, design, memorial and burial options	<ul style="list-style-type: none"> <li>Review designs as part of beam installation programme to accommodate customer preferences (e.g. opportunity for planting)</li> <li>Continue programme to install ash beams in cemeteries</li> <li>Formalise memorial planting/garden opportunities</li> </ul>	Ash beam installation programme to continue from 2018  Memorial Garden has been installed at Springston Cemetery
No identifiable cemetery to service Rolleston	<ul style="list-style-type: none"> <li>Sufficient capacity in nearby cemeteries &amp; proposed extensions (Springston, Weedons, Shands Rd)</li> <li>Improve customer information on cemetery availability</li> <li>Consider provision of a cemetery within the "District Park" identified in the Rolleston Structure Plan</li> </ul>	Springston cemetery to be extended in 2017-19 Develop improved web site information on Council cemeteries
More sustainable burial practices available e.g. natural burials	<ul style="list-style-type: none"> <li>Investigate as part of future planning for cemetery extensions or new sites</li> </ul>	Investigation in 2019
No on-line customer access to cemetery records	<ul style="list-style-type: none"> <li>Enablement of on-line customer access is planned and is dependent on an initial data audit and cleansing process</li> </ul>	IT currently investigating new information management system for cemeteries
Seating provision is inadequate in some cemeteries	<ul style="list-style-type: none"> <li>Continue with seat installation programme</li> </ul>	Further seats planned at Shands Rd & Ellesmere Public Cemeteries from 2018/19
Heritage value of cemeteries is not proactively promoted	<ul style="list-style-type: none"> <li>Investigate provision of on-site heritage interpretation or information pamphlet</li> </ul>	To be considered by Communications personnel from 2018

Table 9-10: Cemeteries LOS Issues/Gaps

## 9.2.8 Changes in Levels of Service

There are no significant changes to levels of service planned except for some minor improvements signalled in the table on level of service issues/gaps above. This includes:

- Accommodation of a greater range of burial/memorial options to meet customer preferences
- On-line access to cemetery records for genealogy and other purposes
- Investigation of a natural burials area
- Provision of heritage information for cemeteries



## 9.3 Growth and Demand

This section covers the growth and demand implications for the provision of cemetery services in the district. This includes an assessment of the demand influences and how these will impact on the future provision of cemeteries as well as requirements for additional areas and infrastructure to maintain the level of service.

### 9.3.1 Demand Influences and Impacts

The key factors influencing demand for cemetery services are:

- Population growth
- Population demographics
- Burial trends
- Death rates
- External factors
- Pandemics or disasters

#### Population Growth

Selwyn District's population is predicted to continually increase over the planning period with concentration in growth especially occurring in the areas allocated growth through the Land Use Recovery Plan (LURP). The areas of predicted high growth as forecast in the Council's growth projections are Lincoln, Rolleston, West Melton, Darfield, Leeston and Prebbleton. There are also likely to be some parts of the district that will experience flat growth or lower growth. (Refer to section 4 for further information on growth projections)

With the influx of people coming into the district there will be a corresponding increase in demand for cemetery service over time.

#### Changes in Demographics

Changes in the age structure of the population are occurring, with the most important trend being the general ageing of the population, represented by an increasing number and share in the older age groups. The population aged 65 years and over is likely to grow fastest in the future. Similarly the population in the older working ages (40–64 years) is also likely to increase in the short-term. Conversely, the number of children (0–14 years) and the younger working age population (15–39 years) are expected to remain stable or decline.

It is, however, likely that the populations in the higher growth areas such as Rolleston will continue to have a generally younger population than the remainder of the district.

With the predicted demographic change to a higher proportion of the district population in the older age groups there will be increasing demand for cemetery services and burial space.

#### Burial Trends

In 2010/11 approximately 77% of Selwyn residents chose plot burial and a further 23% chose to inter ashes at a District cemetery. The 2016/17 ratio is now 58% full burial to 42% ash interment which indicates a trend towards ash burials as a preference. Over the period there have been fluctuations in preference but overall, the trend is towards an increase in the proportion of ash burials. This is likely to be associated with the increased urbanisation of the district where there is a higher preference for cremation compared with predominantly rural communities where there is more of an inclination for burial. The trend is shown in the following graph:

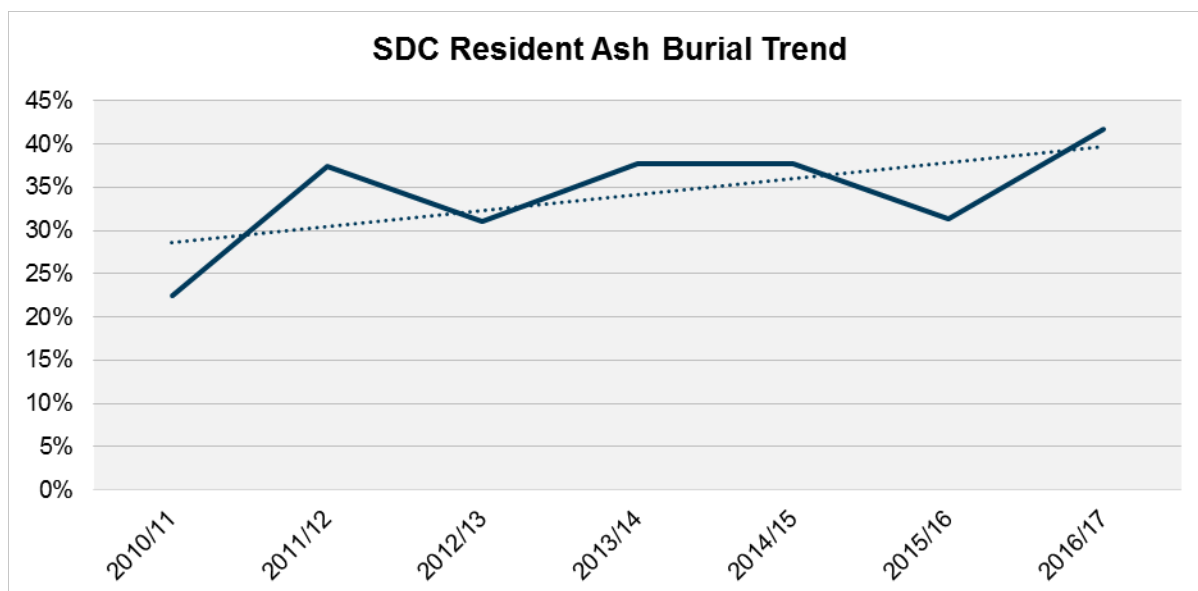


Figure 9-2 Ash Burial Trend

There has been a demand expressed for the provision of “natural burials” and this has been implemented in a number of localities nationally. The Council has investigated the possibility of a natural burial site in the land next to Shands Road Cemetery but this site has proven to be unsuitable because of soil conditions and resource consent requirements. Council will continue to monitor the demand for this service and may consider an alternative site in the future.

### Death Rates

The death rate is expected to climb as the general population in the district ages. The death rate projections from Statistics NZ indicate that there will be an increase in deaths of from 2017 to 2027 by 44% and by over 120% over the next 25 years. This will have a marked impact on demand for space at district cemeteries but may be lessened by the trend towards cremation.

### External Factors

There are a number of non-residents who choose to be buried in the District (around 15-20 people each year). This is generally people who have had an association with one of the communities or may have other family members buried in the District. In the case of the Shands Road Cemetery this attracts people who have lived in the southern part of Christchurch City particularly from the Hornby area. Christchurch City Council may consider the development of a cemetery to service the south-west part of the city which could alleviate out of district use of Shands Road Cemetery.

### Pandemics or Disasters

A significant ‘one off’ demand factor related to cemetery provision is the occurrence of a major natural disaster or a pandemic. This would require a large number of burials to be dealt with in a short time frame.

Given that the current cemetery capacity for all cemeteries in the District for both developed and undeveloped areas is around 37,500 plots this scenario is unlikely to create a capacity issue. Modelling of a potential flu epidemic in the Canterbury District completed in 2005 showed that this type of event could result in around 400 deaths.

### 9.3.2 Asset Capacity

#### Cemetery Utilisation

Asset capacity for cemeteries generally relates to the provision of sufficient burial space to meet the current and future needs of the district. This aspect of cemetery management has been largely covered in the following Growth and Demand Section. This shows that there is more than adequate capacity within the existing cemetery network to meet the district's projected burial needs over the planning horizon. A summary of the current level of utilisation compared with available burial capacity is presented in the table below.

Cemetery	New Plot Burials 2014/15	New Plot Burials 2015/16	New Plot Burials 2016/17	Pre-sales for 2014/15 to 2016/17	Ave. Total Plot Uptake per Year	Total Available Plots (Developed Areas)	Ratio of Plot Uptake to Plots Available
Bishops Corner	0	0	0	0	0	336	0.00%
Brookside	0	1	1	3	1	134	0.50%
Dunsandel	1	0	2	5	1	776	0.13%
Ellesmere	6	13	10	26	10	882	1.10%
Ellesmere Catholic	4	1	3	6	3	420	0.64%
Greendale	4	2	3	4	3	246	1.22%
Hororata (St Johns)	1	0	2	5	1	494	0.20%
Killinchy	0	0	0	0	0	126	0.00%
Kimberley	4	4	4	10	4	198	2.02%
Kirwee	0	3	3	7	2	386	0.52%
Kowai Pass	0	2	2	3	1	910	0.15%
Lake Coleridge	0	1	0	1	0	125	0.27%
Lincoln	12	23	15	39	17	1581	1.05%
Prebbleton	5	4	5	10	5	89	5.22%
Shands Road	29	25	30	80	28	3994	0.70%
South Malvern	0	3	2	3	2	424	0.39%
Springston	12	18	6	22	12	237	5.05%
Waddington	4	5	1	13	3	500	0.67%
Weedons Wesleyan	2	5	3	12	3	162	2.06%
<b>Total</b>	<b>84</b>	<b>110</b>	<b>92</b>	<b>249</b>	<b>96</b>	<b>12020</b>	<b>0.79%</b>

Table 9-11: Cemeteries Current Utilisation

The above table does not include ash burials. Currently there are around 70 ash burials per year in Council cemeteries. These mainly occur in Shands Road, Ellesmere, Lincoln, Springston and Prebbleton cemeteries with a portion interred into existing grave plots and others in dedicated ash beams. There is potential for extensive capacity for ash burial to be provided in existing cemeteries and the intention is to construct additional beams to accommodate demand for this facility. The approach will be to carry this out in a way that optimises use of space.

#### Car Parking Capacity

Funerals generate peak demand for car park provision in cemeteries and the rural nature of most SDC cemeteries means that this is not a significant issue. However as use increases overtime there will be a need to review car parking provision in some cemeteries to ensure it is adequate.

### 9.3.3 Forecast Cemetery Requirements

The demand for cemetery space is ongoing and influenced by the factors identified above. There is sufficient capacity in the District's cemeteries to meet demand in the foreseeable future. It is important that supporting infrastructure such as paths, fencing, car parks and concrete beams are provided ahead of use.

Many of the District cemeteries have areas identified for future development once available space in developed parts of these cemeteries has been used.

The methodology used to determine cemetery burial and ash plot requirements for the next 10 years is:

- Calculate current capacity for each cemetery both developed and undeveloped
- Analyse burial records for the past three years to determine burial statistics for each cemetery including use of burial and ash plots, ratio of second interments and burials from those not resident in the District
- Compare records to Statistics NZ death records for the district
- Calculate a projection of deaths for the district based on population projections and standard death rates
- Project number of ash and traditional burials and allocate to cemeteries based on catchments
- Determine impact on capacity and use to project development requirements

### Cemetery Capacity

The current capacity of Council owned and managed cemeteries in the District is set out in Table 9-12.

The following assumptions have been made in determining available capacity:

Assume 65% of total area available for burials in undeveloped sites

Assume 15 plots per 100m<sup>2</sup> of space available

Cemeteries	Area (ha)	Area Occupied (m2)	Burial area available (m2)	Estimated New Plots (Developed Area)	Estimated New Plots (Undeveloped Area)	Total New plots
<b>SDC Administered</b>						
Bishops Corner	0.4047	450	2243	336	0	336
Brookside	0.4047	1,484	896	134	0	134
Dunsandel	4.8613	1,356	5172	776	3,900	4,676
Ellesmere	10.1788	14,481	5877	882	4,485	5,367
Ellesmere Catholic	0.8093	3,068	2799	420	0	420
Greendale	2.0234	2,632	1643	246	1,170	1,416
Hororata (St Johns)	1.2141	1,148	3294	494	0	494
Killinchy	0.2334	500	839	126	0	126
Kimberley	4.0469	1,815	1318	198	3,120	3,318
Kirwee	4.0469	1,074	2571	386	3,257	3,642
Kowai Pass	1.8063	2,943	6064	910	0	910
Lake Coleridge	1.6712	61	833	125	1,463	1,587
Lincoln	2.9416	5,404	10542	1,581	0	1,581
Prebbleton	0.4401	2,383	596	89	0	89
Shands Road	6.0703	9,397	26625	3,994	1,658	5,651
South Malvern	2.1965	3,043	2827	424	1,326	1,750
Springston	2.0234	9,926	1583	237	3,344	3,582
Waddington	4.0468	3,401	3336	500	1,755	2,255
Weedons	0.4553	1,281	1080	162	0	162
<b>Total</b>	<b>49.9</b>	<b>65,847</b>	<b>80,136</b>	<b>12,020</b>	<b>25,477</b>	<b>37,497</b>

Table 9-12: Available Capacity SDC Cemeteries



### Burial Trends – Resident Burials

The actual number of deaths for Selwyn District (from Statistics NZ data) was compared to the number of people using SDC cemeteries. Out of district use was also analysed. The results for the period 2007/08 to 2016/17 are shown in Figure 9-3.

In order to determine future requirements, an average of the previous three years data has been used. This shows that on average most of SDC residents are buried in a cemetery within the District after their death. This may be in either a church or Council cemetery. On average over the last three years there has been 63% plot burials, 37% ash burials.

There may be a small number of residents' not using SDC cemeteries and these are likely to be buried out of the District or people who have elected to have their ashes scattered. The majority of those buried outside the District are likely to be cremations.

### Burial Trends – Out of District Burials

On average over the last three years 25 out of district burials of non-residents using the SDC cemeteries each year. The ratio of plot burial to ashes is around 60:40.

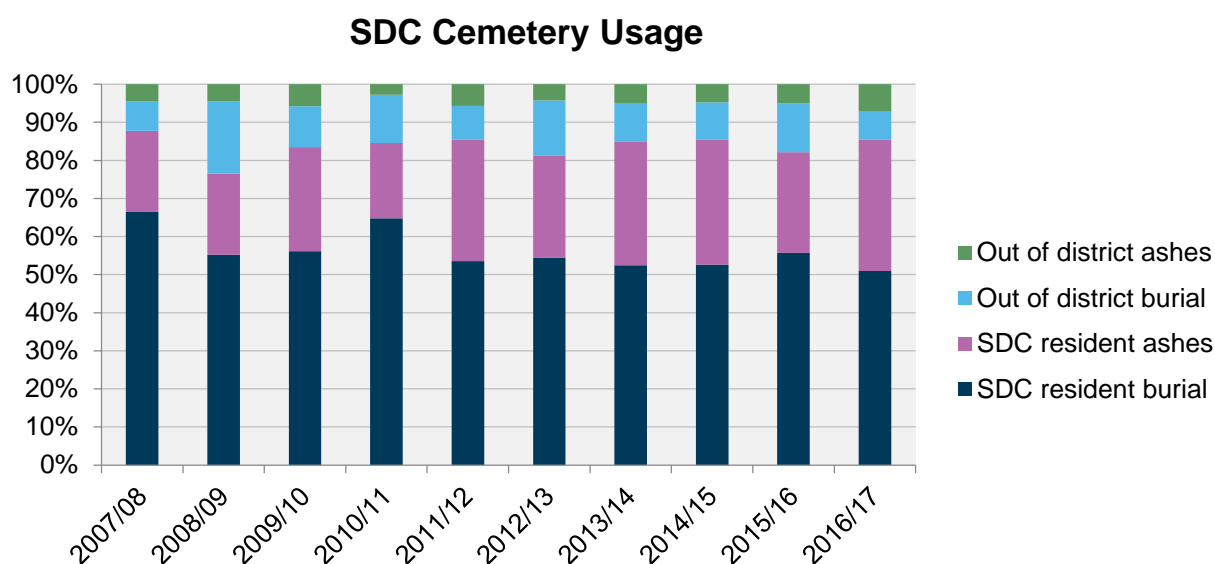


Figure 9-3 Selwyn District Burial Trends

### Projected Deaths

In order to project the total number of deaths in the Selwyn District for each year for the period 2018 to 2028 the Statistics New Zealand projected deaths component of the Sub-national population projections 2013 base-2043 update, released February 2017 was used as the basis for determining projected deaths in Selwyn District over the plan period.

## Selwyn District Death Projections

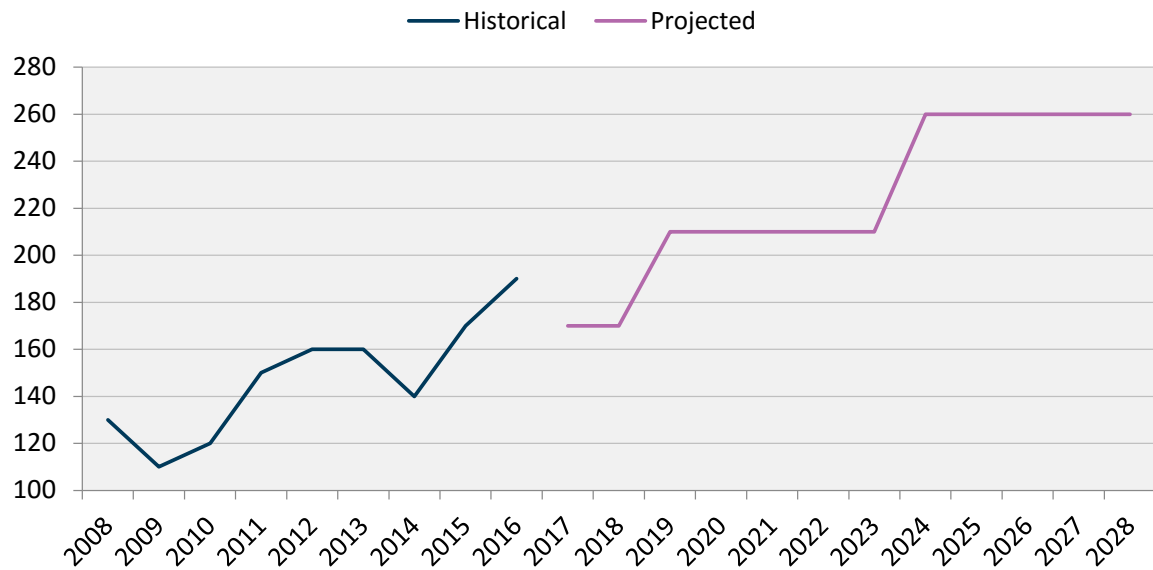


Figure 9-4 Predicted Deaths 2008-2028

### Future Demand

Based on the projected annual number of deaths for Selwyn District residents and the number of out of district burials the future annual plot requirements have been calculated. The number of second interments in existing plots has also been taken into account.

Year	Predicted Deaths	Plot Burials	Ash Burials	Total
2018	170	107	63	170
2019	210	132	78	210
2020	210	132	78	210
2021	210	132	78	210
2022	210	132	78	210
2023	210	132	78	210
2024	260	164	96	260
2025	260	164	96	260
2026	260	164	96	260
2027	260	164	96	260

Table 9-13: Burial Requirements 2018-2027

This information together with historical use trends has been used to estimate the future burial requirements for each of the SDC cemeteries for the period 2018 to 2027. In addition to this an allowance has been made for the effect of plot pre-sales based on projected uptake.

Cemetery	Available Developed Area	Projected Plot Burials	Projected Pre-sale Plots	Remaining Capacity (Plots)	Remaining Capacity (Years)
Bishops Corner	336	0	0	336	Closed
Brookside	134	10	3	121	>40
Dunsandel	776	10	6	761	>100
Ellesmere	882	126	38	718	>30
Ellesmere Catholic	420	34	7	379	>40
Greendale	246	34	13	199	>30
Hororata (St Johns)	494	10	6	479	>80
Killinchy	126	0	0	126	Closed
Kimberley	198	53	13	132	>20
Kirwee	386	20	9	357	>50
Kowai Pass	910	10	3	897	>100
Lake Coleridge	125	1	1	123	>40
Lincoln	1,581	213	51	1,317	>30
Prebbleton	89	63	14	12	>10
Shands Road	3,994	352	103	3,539	>40
South Malvern	424	20	7	397	>50
Springston	237	146	32	59	>10
Waddington	500	34	14	452	>40
Weedons	162	34	17	111	>20
Total	12,020	1,170	337	10,514	

Table 9-14: SDC Cemetery Burial Plot Capacity Assessment, 2018-2027

It should be noted that the projections in Table 9-14 assume that some usage of church cemeteries will continue. Bishops Corner and Killinchy Cemeteries are essentially closed therefore no additional burials have been forecast for these cemeteries. However it is likely that there will be some second interments in these cemeteries during the forecast period.

The overall requirement for ash plots has been determined and is summarised in Table 9-15.

Cemetery	Total	Cemetery	Total	Cemetery	Total
Bishops Corner	0	Killinchy	0	Shands Road	107
Brookside	9	Kimberley	43	South Malvern	10
Dunsandel	4	Kirwee	14	Springston	53
Ellesmere	63	Kowai Pass	20	Waddington	10
Ellesmere Catholic	0	Lake Coleridge	10	Weedons Wesleyan	34
Greendale	10	Lincoln	83		
Hororata (St Johns)	10	Prebbleton	10	<b>SDC Cemeteries Total</b>	<b>490</b>

Table 9-15: SDC Cemetery Ashes Plot Forecast Requirement 2018-2027

No capacity calculation has been prepared for ash plots as there is almost unlimited capacity. Ashes can typically be interred in a variety of ways ranging from burial in rose gardens, in dedicated ash beams or into a memorial wall. However the Council will continue to install ash beams in cemeteries where there is demand for ash burials.

### Overall Capacity

The future demand assessment shows that there are no overall capacity issues within the next 10 years for SDC cemeteries. Forecast demand can be accommodated within the existing developed areas. There are however several cemeteries where the developed portion is approaching capacity and some additional planning and development of new areas is required during the plan period. The cemeteries which are approaching capacity are Prebbleton and Springston (approximately 10 to 12 years capacity available).

There is also a need to develop additional space at Ellesmere Cemetery within the existing cemetery area to provide for burials. This requires ground levelling, headstone beam installation and landscape treatment.

The demand assessment and impact on capacity has taken account of population increases related to individual cemetery catchments. Demand for capacity is expected to be higher in those cemeteries that service the high growth areas and this includes Shands Road (Rolleston), Prebbleton, Lincoln and Springston Cemeteries.

Springston caters for significant demand therefore planning and development of an additional area will be required during the Plan period. There is an additional 3.4ha (3,344 plots) available in an adjoining Reserve identified for development as a cemetery, including construction of associated infrastructure such as roads, parking and landscaping. A resource consent is required and this is currently being progressed. Test pits have been dug and monitoring bores put in place on the proposed extension site to confirm suitability of soil profile and ground water depths. The first stage of the planned extension will be around one hectare in area and will provide for an additional 1,470 plots.

The Prebbleton cemetery has no additional space for expansion therefore it is likely that burials would move predominantly to Shands Rd Cemetery with some additional demand on Lincoln. There is sufficient developed area at Shands Rd to cater for this additional demand.

It is anticipated that Shands Rd Cemetery will continue to experience demand for “out of district” burials from nearby Christchurch City but this can be adequately managed within the available capacity. There is also potential for expansion of this cemetery into Council owned land to the east, subject to soil conditions being suitable.

Kimberley Cemetery was extended in 2009 with an additional area of 3,000 m<sup>2</sup> now available.

The Water and Sanitary Service Assessment noted that Rolleston, Darfield and Tai Tapu do not have a dedicated multi-denominational cemetery. Generally these localities are catered for by rural cemeteries that are situated relatively close to the population centres.

There has been some community demand expressed for a cemetery to service Rolleston particularly as it is the highest growth centre in the district. It is not planned to provide a cemetery in Rolleston at this point in time as the extension to the nearby Springston Cemetery should meet predicted future demand. This matter will be reviewed in the future as Rolleston grows to gauge demand. A future site could be located in the proposed “District Park” identified in the Rolleston Structure Plan (2009). Alternatively, it may be possible to partly meet demand by providing a memorial garden or columbarium for ashes burial that would not require a large tract of land.

There is additional undeveloped space available at the following cemeteries:

- Dunsandel
- Ellesmere
- Greendale
- Kimberley
- Kirwee
- Lake Coleridge
- Shands Road
- South Malvern
- Springston Waddington

The capacity available from this undeveloped cemetery land has been calculated to give a clearer understanding of overall cemetery capacity for the district. This takes into account the expected additional demand for cemetery space based on an increasing death rate (260 deaths in 2027 compared with 480 in 2043 – Source Statistics NZ) which is a result of both an increasing and aging district population. The impact of the additional cemetery capacity available for development is shown in the table below.



Cemetery	Estimated New Plots from Undeveloped Area	Estimated Yrs Cemetery Life is Extended By	Estimated Cemetery Life (Yrs)	Extension Land Available
Dunsandel	3,900	150	>250	Extra 4 ha undeveloped
Ellesmere	4,485	30	>60	Extra 4.6 ha undeveloped
Greendale	1,170	30	>60	Extra 1.3 ha undeveloped
Kimberley	3,120	50	>70	Extra 3.2 ha undeveloped
Kirwee	3,257	80	>130	Extra 3.34 ha undeveloped
Lake Coleridge	1,463	80	>120	Extra 1.5 ha undeveloped
Shands Road	1,658	5	>45	Extra 1.7 ha available from adjoining land
South Malvern	1,326	35	>90	Extra 1.36 ha undeveloped
Springston	3,344	40	>50	Extra 3.4 ha available from adjoining reserve
Waddington	1,755	30	>70	Extra 1.8 ha undeveloped
<b>Total</b>	<b>25,477</b>			

Table 9-16: Future Capacity in Undeveloped Cemetery Space

### 9.3.4 Demand Management

The Council needs to consider how it intends to manage the demand for cemetery services and facilities through other mechanisms rather than asset related solutions. In particular the Council must consider how it can operate this activity in a manner that promotes sustainable management of assets.

The primary demand management issue relating to cemeteries is the speed at which land reserved for burial purposes is exhausted. In situations where no demand management measures are in place there is potential for large tracts of cemetery space to be reserved and unused for burial purposes (primarily through the pre-sale of burial plots) leading to increased maintenance costs and accelerating requirements for new areas and associated infrastructure.

The current demand management measure the Council uses in response to this issue is via the Selwyn District Council Cemetery Bylaw whereby pre-sale of plots is permitted but if un-used within 80 years they are to be returned to Council.

This approach is appropriate given the current level of demand for pre-sale and the amount of burial space available. However if the situation changes in the future the Council could consider the following measures to promote more sustainable land use practice:

- Limitation on the number of burial plots that can be purchased (could be specific to a cemetery)
- Apply a pricing scale that deters the purchase of multiple plots
- Further limit the right of burial to a reduced period e.g. 30 years

Such measures could be initiated through future reviews of the Cemetery Bylaw or as part of policy development. This would include consideration of the views and preferences of the community and Bylaw reviews are subject to the Special Consultative Procedure under the LGA 2002.

In addition the Council also manages demand for cemetery use from people who are not residents in the district by imposing an "Out of District Fee". This fee is applied, in part, to deter use from outside the district.

A further demand management issue relates to the allocation of cemetery space for specific religious groups as required under Section 11 of the Burial and Cremations Act 1964. Although there are presently no specific issues in regard to this requirement, as the ethnicity of the District changes over time, there may be requests for new areas to be set aside.

### 9.3.5 Meeting Demand through Asset Growth

The demand for cemeteries to cater for the burial requirements of the community will continue, with the rate of use predicted to steadily increase as the population grows and ages. It will be necessary to continue to

provide the supporting infrastructure for cemetery operations including gardens, lawns, trees, furniture, paths, car parks, fences, drainage and concrete beams.

Analysis of existing capacity and the expected rate of use indicate that no additional areas of land will need to be purchased to meet requirements over the planning horizon. However it will be necessary to develop an extension to Springston Cemetery on the adjacent Council owned land to continue to meet demand in that area especially as this cemetery may receive demand from both Rolleston and Lincoln catchments. Development of an extension will require the installation of an access road, landscape treatment and beams.

Development of additional space at Ellesmere Cemetery is planned as there is now limited availability of space within the existing developed area.

There may be demand to address a perceived deficiency in cemetery provision in Rolleston in the longer term. Council will continue to monitor this situation but the capacity available at other nearby cemeteries does not suggest this is an urgent issue at this point in time.

In other cemeteries there will be a need to continue to provide sufficient concrete beams to keep pace with burial requirements. This may require development of additional areas including re-sowing and levelling work. The rate of installation will need to be undertaken at a level commensurate with expected burial plot demand. Similarly ash plots will need to be installed to meet demand.

Ash plots are now provided at 15 SDC managed cemeteries and it is anticipated that additional beams will be installed as required to meet demand over the planning period. In particular, installations are programmed for those cemeteries that service the high growth areas, including Shands Road, Lincoln, Springston Cemeteries, Ellesmere. Ash plots will also be developed in Ellesmere Catholic Cemetery to meet demand for this service. It is expected that around 60 new ash plots will be required per year and, with a trending preference for ash burials over full burials, this is predicted to increase to 80 by 2027.

It is estimated that the Council needs to install on average around 70 lineal metres of full plot concrete beams per year to keep up with burial plot demand.

Further details on actual new asset requirements resulting from growth and demand are set out in Section 9.4.5.

## 9.4 Managing Assets








This section explains how cemetery assets are managed and operational service delivered. It also covers the strategies employed for managing the assets and identifies maintenance, renewal, new asset and disposal programmes.



Overall responsibility for planning, management and oversight of maintenance and operational activities lies with the Property and Commercial Department. Cemetery administration services (records etc.) are provided through the Corporate Services Department.

### 9.4.1 Asset Description

In order to deliver the desired levels of service a range of supporting assets are required. It is intended that cemetery services will be provided for the district into the foreseeable future and it will be necessary to maintain and improve the asset network to continue to support service provision. This section covers a description of the assets that contribute to the delivery of the Cemeteries Service.

A physical description of each of the cemeteries managed by SDC is set out in the following table.

Name	Location	Description	Area (ha)	Date Est.	Photograph
Bishops Corner	Intersection of Cowans and Feredays Roads, Leeston.	Bishops Corner Cemetery is bounded by the trees to the north and hedge to the south. Parking is available on the wide roadside verge. The Cemetery is now closed, but can be used for relatives of those already buried there.	0.4047	1869	
Brookside	Boundary Creek Road, 500m north of Watsons Road intersection.	Brookside Cemetery was transferred to Council in 1978 from the Presbyterian Church. The site is situated at the end of a tree lined access roadway and is landscaped with trees. There is limited parking on the access roadway.	0.4047	1881	
Dunsandel	Corner of Old South and Sheats Roads.	Dunsandel Cemetery is at the end of a tree lined access roadway and is landscaped with trees around the grave area. There is ample parking on the access roadway.	4.8613	1879	
Ellesmere	Feredays Road, 500m west of Pooles Road intersection, 3km south of Leeston.	Ellesmere Cemetery is well landscaped with tree lined roadways and well maintained hedges. The cemetery has an RSA area. There is ample parking on the access roadway. The cemetery has water supply.	10.1788	1873	
Ellesmere Catholic	Southbridge Leeston Road between Bealey and Pooles Roads, 3km south of Leeston.	Ellesmere Catholic Cemetery is well landscaped with a wide concrete path through the centre of the cemetery and hedging around the SW and SE boundaries. There is limited parking on the road near the gate.	0.8093	1874	
Greendale	Greendale Road, 12km south of Darfield.	Greendale Cemetery has basic landscaping comprising of well cared for lawns and a shelter from tall trees. It is easily accessible and parking is available along the Greendale Road frontage.	2.0234	1878	
Hororata (St Johns)	Corner of Downs and Hororata Roads, 2km north of Hororata.	The cemetery is in the church grounds, which are generally well landscaped with particular value in the grounds' trees. No dedicated parking is available.	1.2141	1879	

Name	Location	Description	Area (ha)	Date Est.	Photograph
Killinchy	Leeston Dunsandel Road, 5km west of Leeston.	Access to the cemetery is via a driveway. The site is very simply landscaped with trees around the perimeter. There is limited parking on the roadside. The cemetery is now closed.	0.2334	1876	
Kimberley	Kimberley Road near the Tramway and Auchenflower Roads intersection.	Kimberley Cemetery is landscaped with well-kept lawns and various trees. Water is supplied. Headstones are placed on strip plinths. The cemetery is easily accessed from Kimberley Road. Ample parking is available, on the median strip.	4.0469	1879	
Kirwee	Hoskyns Road, west of Courtenay Road 1km north of Kirwee.	This cemetery has minimal landscaping, with little tree cover, a wire gate and a rudimentary track. Water is available from the nearby water race. Limited parking is available on the road verge outside the cemetery.	4.0469	1879	
Kowai Pass	West Coast Road, Springfield.	The cemetery is screened from the road by a hedge and surrounded by trees. It is easily accessed from the West Coast Road and limited parking is available on the road frontage. Water is available.	1.8063	1876	
Lake Coleridge	End of Kowai Drive, Lake Coleridge.	There is minimal landscaping, but the cemetery's rural setting and low interment rate is conducive to its pleasant atmosphere. Parking is immediately adjacent to the cemetery but is limited with no through road.	1.6712	1918	
Lincoln	Boundary Road, just west of Birchs Road, Lincoln.	The cemetery is set back from the road and nicely landscaped. Water is available. The cemetery is accessible from Boundary Road with a formed roadway. Parking is available along the internal road and on the road frontage.	2.9416	1879	
Prebbleton	Springs Road, between Hamptons and Trents Roads, Prebbleton.	The cemetery formerly belonged to the Presbyterian Church. The landscaping is basic but tidy. There is a water supply. The cemetery is easily accessible from the road, but parking is restricted to the roadside.	0.4401	1912	
Shands Road	Shands Road, 3km west of Prebbleton.	The cemetery is pleasant and well landscaped, featuring an access track around the area. There are both denominational and non-denominational areas, with a detailed sign providing a key. There is ample parking available.	6.0703	1881	
South Malvern	Coaltrack Road, 1km west of Coalgate.	The cemetery is surrounded by trees, has well-kept lawns and is generally well cared for. Trees and several hedgerows provide shade and serenity. There is ample parking available on the road verge. Water supply is provided.	2.1965	1880	
Springston	Weedons Road, 3km east of Springston	The cemetery is well established and landscaped. Access is via a long access driveway. The cemetery has an RSA memorial section. There is ample parking available within the cemetery. Water is supplied.	2.0234	1872	



Name	Location	Description	Area (ha)	Date Est.	Photograph
Waddington	Corner of Old West Coast and Tramway Roads, 1km east of Waddington.	The cemetery has high hedgerows bordering the short access road. Parking is available on the grass strip on the Old West Coast Road. Water is supplied.	4.0468	1882	
Weedons	Corner of Maddisons and Weedons Ross Roads, 3km west of Rolleston.	The cemetery was formerly Weedons Wesleyan Cemetery, taken over by SDC in 1991. The landscaping is basic featuring a shaped driveway and hedgerow borders. Parking is available on the road frontage grass verges	0.4553	1887	

Table 9-17: Description of SDC Cemeteries

### Cemeteries Asset Inventory

Cemetery assets are comprised, in the most part, of landscape features, roadways, fencing, park furniture and other structures such as memorial beams. These assets are provided to enable the cemeteries service to be delivered to the desired standard. The table below sets out the various assets and components that form the cemeteries service. The data presented is current as at December 2017.

Element	Sub Element	No.	Area (M <sup>2</sup> )	No.
Equipment	Rubbish Bin	28		
Equipment	Seat	33		
Hard Surfaces	Cattlestop	1		
Hard Surfaces	Other	27	215	231
Hard Surfaces	Access Road - Asphalt	1	729	
Hard Surfaces	Carpark -Chip Seal	1	1,040	
Hard Surfaces	Carpark - Loose Metal	1	107	
Hard Surfaces	Driveway - Chip Seal	6	8,779	
Hard Surfaces	Driveway - Concrete	1	334	
Horticultural Features	Driveway - Loose Metal	6	1,051	
Horticultural Features	Garden Grade 2	31	6,870	
Horticultural Features	Garden Grade 3	3	952	
Horticultural Features	Grass Grade 1	20	69,370	
Horticultural Features	Grass Grade 2	18	172,523	
Horticultural Features	Grass Grade 3	6	16,773	
Horticultural Features	Grass Grade 4	1	1,826	
Horticultural Features	Hedge	15	1,409	2,239
Horticultural Features	Plantation Aesthetic	10	35,719	
Horticultural Features	Reserve Tree	17		
Horticultural Features	Shelter Belt	1		
Structure	Fence/Wall - Other	5		516
Structure	Fence/Wall - Bollard Post and Chain	12		57
Structure	Fence/Wall - Internal	17	16	282
Structure	Fence/Wall - Private Boundary	20		5,985
Structure	Fence/Wall - Road Boundary	10		920
Structure	Fence/Wall - Rural	3	6	92
Structure	Flagpole - Metal	4		
Structure	Gate	43		103
Structure	Memorial	5		
Structure	Openshelter - Gazebo	2	16	
Structure	Sign/Plaque	47		
Utilities	Outside Tap	23		



Element	Sub Element	No.	Area (M <sup>2</sup> )	No.
Utilities	Water Tank - Plastic	3		

Table 9-18: Cemeteries Asset Inventory

### Cemeteries Asset Valuation

A valuation of assets is undertaken every three years. The valuation information provided is extracted from the Asset Register as at 30 June 2016 plus adjustments for 2016/17

	Asset Replacement Value (\$)	Asset Depreciated Replacement Value (\$)
Cemeteries	38,790	24,267

Table 9-19: Cemeteries Asset Valuation

### 9.4.2 Asset Condition

An independent condition assessment of cemetery assets was carried out in 2017 which followed on from an initial assessment undertaken in 2007 and updated in 2011. The assessment involved field inspection of assets to component level and applying a condition grade based on NAMS criteria. In addition, remaining useful life (RUL) for all asset components was determined based primarily on condition compared with industry standard economic lives. This information provided a snapshot of condition and has been used, in conjunction with risk and economic factors, to identify timing and costs for future renewal and maintenance works.

An overview of cemetery assets condition is presented in the graph below. This shows that, overall, the majority of cemetery assets are in good to very good condition and does not signal any major issues. There are some assets that will require renewal or rehabilitation works during the 10 year planning horizon and a programme has been prepared for this work. The financial programme provides for renewal of seats, refurbishing of signs, resealing of driveways and undertaking repairs or renewal of fences and structures as required.

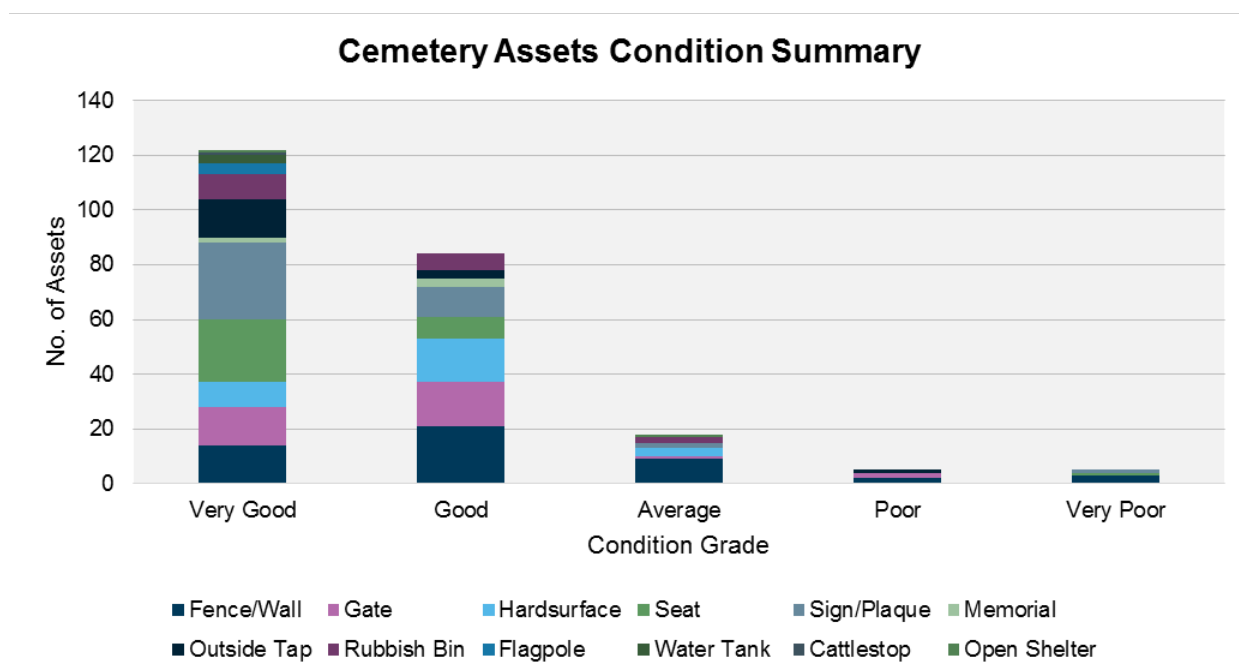


Figure 9-5: Cemeteries Asset Condition Summary

In addition, Council's reserves maintenance contractor is required to report on the condition of assets on a twice yearly basis which is used as the basis for maintenance programmes.



Analysis of service requests received over the last three years and from contractor reports indicates that cemeteries fulfil their functions adequately in terms of the ability to maintain assets and deliver services to an acceptable standard. A few performance issues relating to asset condition or soil characteristics have been identified:

- Running shingle requiring support for grave digging (Prebbleton, parts of Shands Road)
- Pumping of graves due to high water table (Springston, occasionally Ellesmere)
- Failure of water supplies at a number of cemeteries (this has now been addressed at Ellesmere Public Cemetery)
- Stock entering the cemetery where fences have failed
- Unformed access tracks prevent easy access for burials during winter
- The 44 gallon drums provided as rubbish bins rust out and do not secure rubbish effectively (this issue is being addressed in 2017/18 with replacement of bins with stainless 100 bins with covers)

### Tree Condition Assessment

Most of the cemeteries have been established for over 100 years and have been planted over time with trees for shelter and amenity purposes. The size and age of many of these trees has the potential to create issues in terms of public safety and significant maintenance, removal and replacement costs. Therefore a condition assessment was carried out in February 2008 to determine the extent of the issue and to form the basis of a forward maintenance programme.

The survey identified the general health and condition of the trees as well as their likely expected life. In addition to this, remedial works were defined and prioritised based on the risk potential using the International Society of Arboriculture (ISA) hazard rating system. A summary of the survey findings are presented in the two graphs below.

This information shows that around 10% of cemetery trees were in a dead/dying state and will require removal/replacement. There are also a number of trees that require major work to improve their health, safety and longevity.

A prioritised programme has been developed and has been implemented over the ensuing period to progressively address the tree condition issues. It is estimated that the total cost to continue the programme over the 10 year planning period will be around \$256,000.

Future programmes to incrementally replace trees as they reach the end of their lives will need to be planned to maintain the landscape amenity values of the district's cemeteries.

### Cemetery Tree Condition Summary

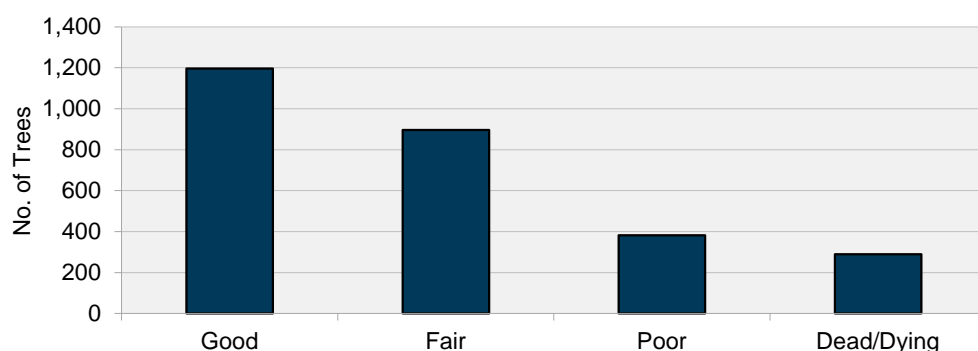


Figure 9-6: Cemetery Tree Condition Summary

### 9.4.3 Operations and Maintenance

#### Operations and Maintenance Approach

Reserve Maintenance & Operations Contract (Contract No. 1202) covers the delivery of cemetery operations and maintenance activities which includes Sexton Duties. Cemeteries work undertaken via this contract is explained in the Table below.

Activity	Works Included	Performance Requirements	Contract
Operations	Sexton Duties: <ul style="list-style-type: none"><li>• Receive and confirm burial arrangements</li><li>• Accept the warrant</li><li>• Prepare site for interment</li><li>• Observe burial</li><li>• Backfill and remove spoil from site</li><li>• Top up soil and re-grass</li></ul>	<ul style="list-style-type: none"><li>• Receipt to be confirmed within 1 hour</li><li>• Sign and return warrant within 48 hours</li><li>• Excavation 2 hours prior to burial time</li><li>• Immediately after burial</li><li>• Top up 24 weeks after burial</li></ul>	Contract No. 1202 – Reserves Maintenance & Operations Term: 5 years from 1 July 2015
Maintenance	Cemetery Maintenance: <ul style="list-style-type: none"><li>• Grass mowing</li><li>• Litter removal and rubbish bin servicing</li><li>• Hedge/tree trimming</li><li>• Garden maintenance</li><li>• Edge trimming/spraying</li><li>• General repairs and damage</li><li>• Inspections including headstone stability</li></ul>	<ul style="list-style-type: none"><li>• Mow to maintain specified heights</li><li>• Bins inspected two weekly (minimum)</li><li>• To maintain existing height &amp; width</li><li>• No weeds 100mm + &gt;20% of area</li><li>• Edge width &lt; 100mm encroachment</li><li>• Damage to be reported immediately</li><li>• Six-monthly inspection &amp; report</li></ul>	

Table 9-20 SDC Cemetery Operations & Maintenance Approach

Contract No. 1202 – Reserves Maintenance & Operations encapsulates a range of “reserve” areas including cemeteries and covers the following work categories:

- Routine maintenance and operations e.g. grass mowing, rubbish removal
- Reactive maintenance e.g. emergency repairs
- Planned maintenance (to extend asset life) e.g. re-surface of gravel driveways
- Scheduled inspections e.g. headstone stability, cemetery water supplies
- Additional works e.g. replacement trees (generally items treated as a “day work”)
- Complaints receipt and action service
- Sexton duties

#### Volunteers

Community volunteers have been used to assist with cemetery maintenance activities from time to time. Council will continue to provide funds to support this work. Community Service Volunteers from the Corrections Department have also been utilised on various projects. On-going input to improvements at Waddington Cemetery is provided by a local community group.

#### Cemetery Administration Service

As part of providing a comprehensive cemeteries service the Council undertakes administration activities including:

- arrangements for burials
- plot sales
- maintenance of burial records

- bylaws provision and management
- customer enquiries
- assistance with genealogical searches

This service is carried out on an “in-house” basis via the Corporate Services Department and is reliant on effective process linkage and communication with the contractor providing sexton and maintenance services.

### **Quality Standards and Audit**

The contract specifications set the standards required to be delivered for the cemeteries service. These take consideration of the following:

- Reliability and accuracy in delivery of grave preparation and burial services
- Recognition of the sensitive nature of work associated with cemeteries
- Public health and safety assurance
- Maintenance standards that meet customer expectations and reflect the level of use of individual cemeteries
- Maintaining assets in a serviceable condition and managing risk of asset failure
- Protecting assets from unnecessary deterioration or damage
- Service continuity assurance
- Response capability to deal with maintenance issues, asset failures and hazard/emergency situations
- Compliance with legislation and relevant standards
- Reporting on maintenance requirements to identify issues and develop planned maintenance and renewal programmes

Under Contract No.1202 (Reserves Maintenance & Operations) the contractor is required to carry out six-monthly inspections of specific assets that will lead to the discovery of all items requiring maintenance and identify any additional work that is required or desirable and would result in an improvement to the asset. The six-monthly inspections also include the following related to cemeteries:

- Water outlets supplied for the use of visitors to the cemetery
- Report on where plant and animal pests are causing problems
- Report any damage to fences and any livestock movement within cemeteries from surrounding farmland
- Inspect suspect headstones within cemeteries visually and manually to determine their stability
- New and replacement programme for trees and shrubs to occur in May, June, July and August.

Contract No. 1202 requires the contractor to operate a Quality System and have a Contract Quality Plan in place to assure work standards are met. Components to be covered in the Quality Assurance System are outlined in the Contract Specifications and include allowance for audit of work to be undertaken both internally and externally. The Contractor (SICON Ltd) has ISO 9001 accreditation.

The Council has contract supervisors who monitor performance standards for the contracts. In addition to this the Contractor (SICON Ltd) is required to undertake self-audits to ensure quality assurance.

Contract performance is monitored and discussed via monthly contractor meetings. Under contract 1202 the Council as Engineer can carry out audits on any aspect of the contract works including contract performance and compliance with requirements and specifications. Since the commencement of Contract No. 1202 no formal audit process had been occurring to measure contract performance. In March 2018 a baseline Independent Contract Performance Audit was carried out on 35 contract sites across the district including cemetery sites and assets. An independent auditor has been engaged to carry out monthly contract performance audits. In addition to this, the Council Contracts Manager has developed an onsite audit tool utilising ArcGIS Survey 123. From April 2018 joint monthly site audits between Sicon and Council will be carried out.

From the March 2018 Cemetery site and asset contract performance audit the total compliance by site averaged 80%. This was a reflection of the mowing schedule running behind, and some areas of garden

maintenance that required addressing. By contract specification area the maintenance compliance averaged 95% which is above the 90% target as shown in the graph below.

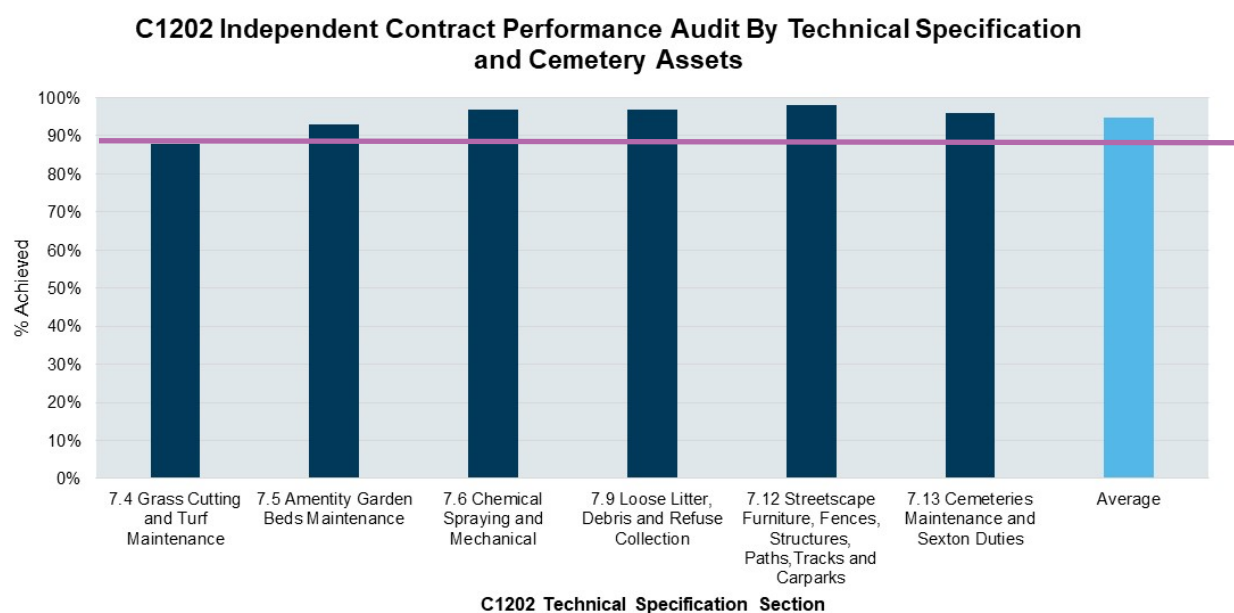


Figure 9-7 C1202 Independent Contract Performance Audit results of Cemetery Sites and Assets

### Maintenance & Management of Undeveloped Cemetery Areas

A number of the Council's cemetery sites have areas available that are currently undeveloped. In order to manage this land in a way that minimises maintenance inputs and provides for a modest return the Council has developed some of these in forestry. This includes Ellesmere Cemetery, Dunsandel Cemetery and land adjacent to Shands Road Cemetery. Forestry management practices related to these sites are covered in the Forestry Section of this Plan.

Other undeveloped portions of cemeteries are leased for grazing and this includes areas at South Malvern Cemetery, Kimberley Cemetery, Kirwee Cemetery and the land adjoining Springston Cemetery.

### Customer Feedback on Cemeteries Maintenance and Operations

In general terms customer feedback on maintenance and operations performance for cemeteries is satisfactory as evidenced in the Residents Survey Results shown previously in Section 9.2.5.

There are relatively few complaints received via the Service Request System in relation to cemeteries maintenance. The following table sets out the numbers of complaints received over the last three years. Many of these were minor issues such as reporting of damage to cemetery assets or graves needing to be topped up.

Year	No. of Cemeteries Maintenance Complaints	No. of Cemeteries Service Complaints	Total
2014/2015	5	1	6
2015/2016	7	2	9
2016/2017	9	1	10

Table 9-21: Cemetery Service Request Summary 2014 - 2017

Representatives from Veterans Affairs carry out an annual survey of maintenance standards in the Returned Service Section of cemeteries and these have indicated a high level of satisfaction with the standards provided.

## 2010-11 Earthquake Damage

A number of cemeteries incurred significant damage to headstones and memorials as a result of the 2010 and 2011 earthquake events. In total some 660 headstones/memorials were damaged. Although these items are not directly owned by Council, a decision was made and additional budget provided to fund reinstatement work. This work was completed between 2012 and 2016.

## Operations and Maintenance Issues Identified

Specific maintenance and operating issues that have been defined and the Council's management response is set out in the following table.

Issue	SDC Response	Timing
Having robust processes and procedures in place that ensure service provision for burials is carried out without incident or error.	<ul style="list-style-type: none"> <li>The contractor has a set of work instructions in place as part of the Quality Assurance System based on contract performance requirements</li> </ul>	In place
Reliability of plot purchase and burial records for efficient and accurate allocation of plots.	<ul style="list-style-type: none"> <li>Plot and burials data stored electronically in NCS recording system.</li> <li>It is intended to develop mapping functionality and link this electronically to the data in NCS</li> </ul>	In place  Development to start in 2018
Keeping cemeteries consistently in a clean and tidy condition to avoid complaints from visitors and relatives.	<ul style="list-style-type: none"> <li>The Service Request System and Snap-send is used to ensure customer issues are captured and passed on to the contractor for action.</li> <li>Reporting requirements via Contract 1202</li> <li>A formal auditing and reporting process is being developed to monitor contract performance</li> </ul>	On going  On going  Currently under-development (2018)
Household rubbish being placed in drums and litter blowing around.	<ul style="list-style-type: none"> <li>New bin type to be installed with covers to stop illegal use and prevent rubbish from blowing out</li> </ul>	Planned for 2018
Maintenance and upkeep of older cemetery areas where headstones and surrounds are deteriorating.	<ul style="list-style-type: none"> <li>Regular inspections of older cemetery areas are carried out and action taken where required to make areas safe</li> </ul>	Ongoing on six-monthly basis
Weed and animal pest issues in some cemeteries.	<ul style="list-style-type: none"> <li>Extend control measures and increase pest control budget</li> </ul>	From 2017/18 & budget for Waddington Cemetery from 2018/19
The age and condition of cemetery trees is creating maintenance and safety issues.	<ul style="list-style-type: none"> <li>A tree survey has been carried out and remedial work programme developed and is being implemented</li> </ul>	On going
Plot owners are placing plants on lawn cemetery grave sites which creates difficulties for maintenance works and burial access to adjoining plots.	<ul style="list-style-type: none"> <li>Enforce bylaws which restrict planting on graves</li> <li>Assess alternative memorial designs that provide for planting.</li> </ul>	As part of Bylaw review in 2018

Table 9-22: SDC Cemetery Operations & Maintenance Issues

## Deferred Maintenance

If work is to be deferred, the impact on the assets and their ability to provide the required levels of service will be considered in the decision making process. All deferred works will be reconsidered and re-prioritised in the following years annual plan programme or, if urgent, undertaken immediately.

The deferral of some items of work will not have a detrimental effect on the levels of service provided by the assets. Repeated deferral however may incur a liability in future years. There is evidence of deferred maintenance with cemetery assets. In particular this relates to some cyclical maintenance work specified in the contract not being undertaken and has been picked up as part of recent condition inspection work. The main assets concerned are park furniture, fences/gates and hard surfaces and the work programme

to remediate is shown in the graph below. A schedule of remedial maintenance works has been passed on to the contractor for action in 2018 and some assets will be included in the renewal programme.

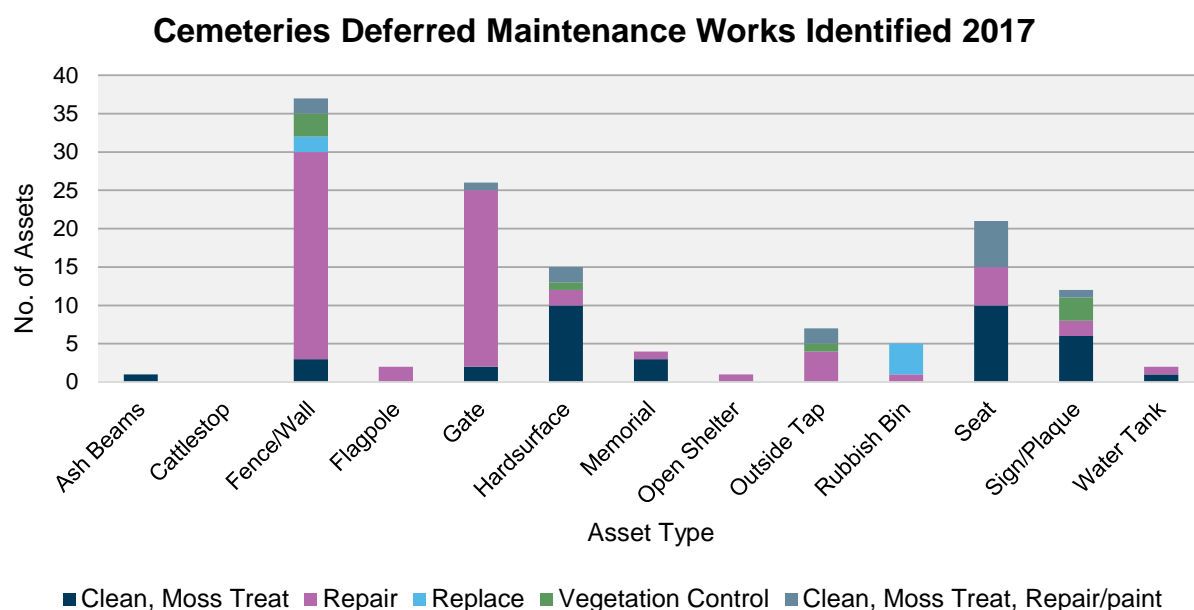


Figure 9-8 Cemetery Deferred Maintenance Works

### Historical Operations and Maintenance Costs

A summary of historical operations and maintenance costs for cemeteries over the previous five years is presented in the graph below. Note that the information represents actual. The significant cost increase noted in 2015/16 is attributable to the programme to fund and implement headstone and memorial repairs following the 2010/11 earthquake events.

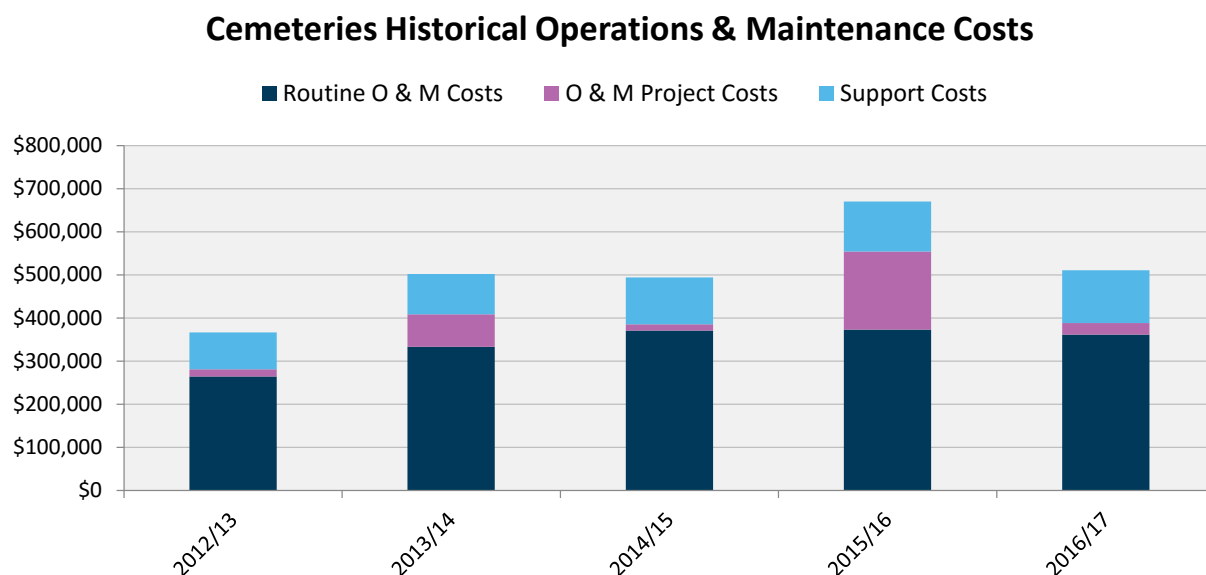


Figure 9-9 Cemetery Historical O & M Costs



## Forecast Operations and Maintenance Programme

Operations and maintenance cost projections are summarised in Table 9-23 below. The costs shown assume no change in the method of service delivery and take no account of inflation. They are based on an analysis of historical costs and estimated costs for maintaining new assets resulting from growth and future capital development programmes.

Detailed cost estimates are prepared for each cemetery site taking into consideration specific asset and operational requirements. The forecast costs also reflect the predicted increase in burials over the planning period and the associated maintenance and servicing costs. This includes operating costs for grave digging which reflects the predicted increase in cemetery usage. A scheduled maintenance programme is indicated that provides for works necessary to extend the life and serviceability of assets and manage them in a sustainable manner.

Maintenance Expenditure	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
<b>Routine Operations &amp; Maintenance</b>										
Overhead Support	137,960	140,900	147,173	151,339	153,722	157,227	162,028	165,845	169,667	174,556
District Wide	26,233	26,233	26,233	26,233	26,233	26,233	26,233	26,233	26,233	26,233
Bishops Corner	5,300	5,300	5,300	5,300	5,300	5,300	5,300	5,300	5,300	5,300
Brookside	6,045	6,192	6,192	6,192	6,192	6,192	6,192	6,192	6,192	6,192
Dunsandel	11,437	11,437	11,437	11,437	11,437	11,437	11,584	11,584	11,584	11,584
Ellesmere	62,387	64,371	64,371	65,971	68,971	68,971	71,102	71,102	71,102	71,102
Ellesmere RSA	2,125	2,125	2,125	2,125	2,125	2,125	2,125	2,125	2,125	2,125
Ellesmere Catholic	10,335	10,335	10,335	10,335	10,335	10,335	11,180	11,180	11,180	11,180
Greendale	9,232	9,232	9,232	9,232	9,232	9,232	10,077	10,077	10,077	10,077
Hororata (St Johns)	9,045	9,045	9,045	9,045	9,045	9,045	9,045	9,045	9,045	9,045
Killinchy	3,847	3,847	3,847	3,847	3,847	3,847	3,847	3,847	3,847	3,847
Kimberley	10,427	11,272	11,272	11,272	11,272	11,272	12,264	12,264	12,264	12,264
Kirwee	8,837	8,837	8,837	8,837	8,837	8,837	8,837	8,837	8,837	8,837
Kowai Pass	13,039	13,186	13,186	13,186	13,186	13,186	13,333	13,333	13,333	13,333
Lake Coleridge	2,100	3,092	3,092	3,092	3,092	3,092	3,092	3,092	3,092	3,092
Lincoln	44,533	47,803	47,803	47,803	47,803	47,803	50,081	50,081	50,081	50,081
Prebbelton	14,366	15,358	15,358	15,358	15,358	15,358	16,350	16,350	16,350	16,350
Shands Road	68,708	72,823	72,823	72,823	72,823	72,823	77,379	77,379	77,379	77,379
South Malvern	9,284	9,431	9,431	9,431	9,431	9,431	9,578	9,578	9,578	9,578
Springston	49,213	51,491	51,491	51,491	51,491	51,491	53,916	53,916	53,916	53,916
Waddington	14,929	15,076	15,076	15,076	15,076	15,076	16,068	16,068	16,068	16,068
Weedons	10,026	10,173	10,173	10,173	10,173	10,173	11,312	11,312	11,312	11,312
<b>Total Routine O &amp; M</b>	<b>529,408</b>	<b>547,559</b>	<b>553,832</b>	<b>559,598</b>	<b>564,981</b>	<b>568,486</b>	<b>590,923</b>	<b>594,740</b>	<b>598,562</b>	<b>603,451</b>
<b>Scheduled Operations &amp; Maintenance</b>										
District Wide	9,000	2,750	8,250	9,000	2,750	8,250	9,000	2,750	8,250	9,000
Planned Maintenance	11,900	9,700	8,200	6,200	3,000	3,300	10,600	4,500	3,400	3,000
Tree Programme	32,000	28,000	20,000	32,000	20,000	20,000	32,000	20,000	20,000	32,000
<b>Total Scheduled O &amp; M</b>	<b>52,900</b>	<b>40,450</b>	<b>36,450</b>	<b>47,200</b>	<b>25,750</b>	<b>31,550</b>	<b>51,600</b>	<b>27,250</b>	<b>31,650</b>	<b>44,000</b>
<b>Total O &amp; M</b>	<b>582,308</b>	<b>588,009</b>	<b>590,282</b>	<b>606,798</b>	<b>590,731</b>	<b>600,036</b>	<b>642,523</b>	<b>621,990</b>	<b>630,212</b>	<b>647,451</b>

Table 9-23: Cemetery Operations & Maintenance Cost Projections

#### 9.4.4 Asset Renewal

##### Identification of Renewals

The identification of renewal works for cemeteries has been largely based on the most recent condition assessment undertaken in 2017. This exercise also identified remaining useful life (RUL) to component level for all cemetery assets. RUL was based on applying standard industry useful lives to asset components and assessing the percentage of life used based on the current condition. In addition to this the following factors were also used to determine renewal requirements and timing:

- Age profile of cemetery assets (where known)
- On-going maintenance requirements and costs (economics)
- Maintaining serviceability
- Continued community need
- Safety risks and asset criticality
- Bundling like works for efficiency

The general tactics applied for determining renewal or rehabilitation requirements for cemetery assets is to utilise “poor” condition as a trigger for action as well as considering the factors listed above. This enables assets to be renewed prior to imminent failure and reduces the likelihood of increasing maintenance costs and safety issues. Where safety is not a significant concern some renewal work will be deferred beyond the identified renewal timing to “smooth” expenditure peaks.

##### Asset Coverage

The majority of cemetery assets are included in capital renewal programmes. These are:

- Hardsurface
- Open Shelter
- Gates
- Flagpole
- Fences/Walls
- Sign/Plaque
- Seats
- Cattlestop
- Water Tank

Trees, gardens, lawn and litter drums renewal is carried out as part of annual maintenance programmes with the renewal/replacement cost expensed at that time. Some refurbishment of signs to extend the life also occurs under planned maintenance programmes.

##### Renewal Forecast

Renewal forecasting based on the approach outlined above for the various asset groups comprising the Cemeteries Service has been carried out for a 30 year horizon and is presented in the following graph:

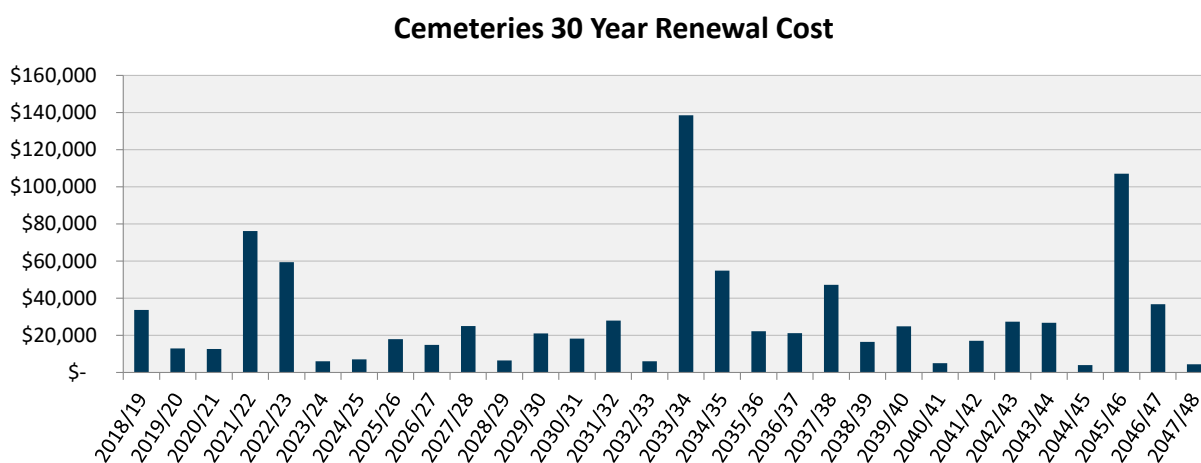


Figure 9-10 Cemeteries 30 Year Renewal Forecast

## Renewal Cost Projections

Future likely renewals requirements for the planning period are scheduled in the table below, which identifies anticipated costs for specific asset components.

Projections indicate that there will be requirements for renewal work as assets reach the end of their useful lives. This particularly relates to fencing replacement work required during the planning period where a number of the boundary fences are in deteriorating condition and will not provide the necessary security to prevent stock from adjacent properties entering the cemetery sites.

Renewals Expenditure	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
Hard Surfaces - Driveway/Car Park	0	0	0	70,500	18,000	0	2,100	12,000	0	11,250
Hard Surfaces - Paths	0	0	2,500	0	16,500	0	0	0	0	0
Gates	2,800	0	0	0	0	1,000	0	0	0	1,800
Structures	0	0	0	0	5,000	0	0	0	0	0
Park Furniture	1,800	0	0	0	0	2,000	0	0	7,200	7,200
Fences/Walls	29,100	12,900	10,200	5,700	20,000	3,000	5,000	6,000	7,700	4,800
<b>Total</b>	<b>33,700</b>	<b>12,900</b>	<b>12,700</b>	<b>76,200</b>	<b>59,500</b>	<b>6,000</b>	<b>7,100</b>	<b>18,000</b>	<b>14,900</b>	<b>25,050</b>

Table 9-24: Cemetery Renewal Cost Projections

## Depreciation

Cemetery assets are depreciated on a straight line basis. Horticultural features (trees, gardens, turf, hedges), and rubbish bins are not depreciated and are renewed through annual maintenance programmes. Cemetery beams are not depreciated as these are effectively sold in perpetuity to plot purchasers and are unlikely to be renewed. The Council's current policy is to not fund depreciation for cemetery assets.

Forecast depreciation requirements for cemetery sites over the next 10 years are identified in Figure 9-11 below, based on the current valuation and projected new capital and renewal programmes.

### Cemeteries 10 Year Depreciation Forecast

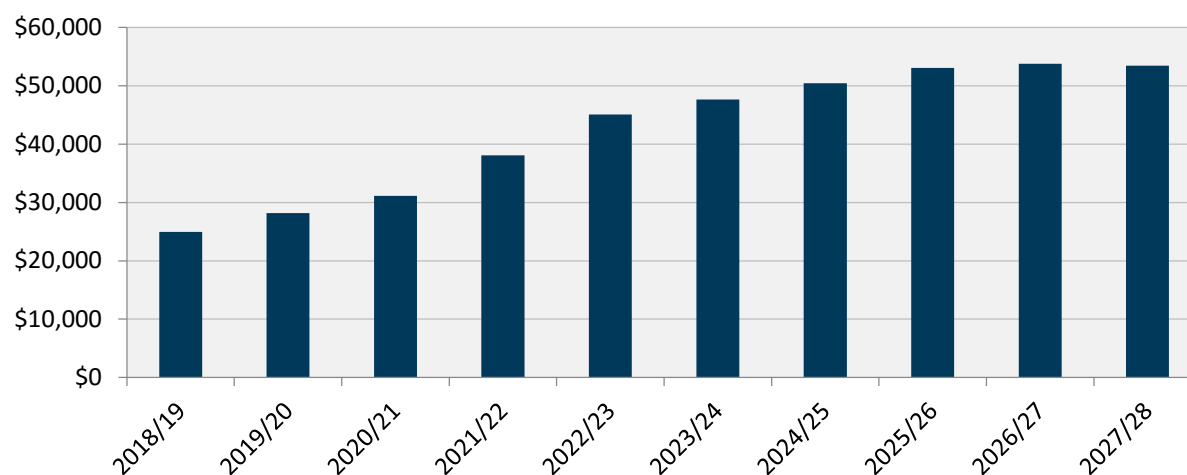


Figure 9-11 Cemeteries 10 Year Depreciation Forecast

### 9.4.5 New Asset Requirements

Along with the requirement to continue to provide burial space to meet the District's needs there is a necessity to develop the infrastructure to support cemetery operations and provide a suitable level of amenity for visitors.

New capital assets for cemeteries may be required in response to the following:

- Addressing performance gaps in the current levels of service
- Providing for the development of additional areas to meet demand
- Meeting increases in levels of service
- Providing new technologies or innovations to improve efficiency/sustainability

It is anticipated that, overall, a similar level of service will continue to be provided into the future for SDC cemeteries and this will be reflected in designs and infrastructure provision. Key new capital requirements relating to cemetery assets are set out in Table 9-25 below:

New Assets Driver	SDC New Assets Requirements	Estimated Quantity	Timing
Addressing LOS performance Gaps	Water supply improvements	1 site	2019/20
	Roadway/traffic improvements	2 projects	2020 & 2023
	Signage and markers	15 sites	From 2017
Increased LOS	Memorial beam installation	Ave. 70 lineal m/yr	From 2018
	Ash plot beams	Ave. 3-4 per year	From 2018
	Seating installation	5 seats	From 2018
Growth and Demand	Develop extension to Springston Cemetery with infrastructure and landscape treatment	Around 1 ha – creates 1,470 plots	2017/18 -2018/19
	Develop additional space at Ellesmere Cemetery for burials	Around 2,500 m <sup>2</sup>	2020/21-2021/22

Table 9-25: Cemetery New Assets Requirements

### Prioritisation and Timing

The timing of new capital works is dependent on the uptake of cemetery plots and the consequent need to provide continuous availability of burial space with the appropriate level of amenity. The programme for the installation of memorial and ash beams has been determined by the predicted annual usage of plots and the need to maintain a positive balance of available plots.

Prioritisation of new capital items has involved consideration of the following criteria:

- Customer preferences identified through LOS Focus groups and other feedback mechanisms
- Level of usage of individual cemeteries
- Demand information
- Technical assessments
- Issues identified in planning documents (e.g. Sanitary Services Assessment for Cemeteries)
- Risk factors

### Selection and Design

Service, functionality, price, availability, reliability, aesthetics, safety, sustainability and maintenance requirements are assessed when consideration is given to creating or acquiring new assets. SDC design standards are required to be followed with all new capital development work. These will generally follow the standards described in the Engineering Code of Practice where applicable. Design for the planned extension at Springston Cemetery has been undertaken by a qualified Landscape Architect.

### Forecast New Capital Assets Costs

A number of new capital works are planned over the 10 year planning period. These capital projects will allow Council to continue to provide cemetery services to the desired service level standards and to meet the needs of additional capacity requirements that are forecast to occur. These projects are listed in Table 9-26 below.

New Capital Projects	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
<b>New Capital Growth</b>	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Develop Extension at Springston Cemetery	194,041	101,700	0	0	0	0	0	0	0	0	0
Develop Extra Space at Ellesmere Public	0	0	0	10,500	70,000	0	0	0	0	0	0
<b>Total - Growth</b>	<b>194,041</b>	<b>101,700</b>	<b>0</b>	<b>10,500</b>	<b>70,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>New Capital Improved LOS</b>	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Full Beam Installation	15,500	15,500	11,000	13,000	15,000	10,500	11,000	11,000	11,000	14,500	11,000
Ash Beam Installation	4,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	6,000	8,000
Natural Burials Area - Shands Road	60,000	0	0	0	0	0	0	0	0	0	0
Seating Installation - Shands Road	0	1,800	0	0	1,800	0	0	0	1,800	0	0
Seating Installation - Ellesmere Public	0	0	0	1,800	0	0	0	1,900	0	0	0
Water Supply Installation - Brookside	0	0	21,750	0	0	0	0	0	0	0	0
Signage & Markers Improvements	28,209	12,000	0	0	2,500	0	0	2,500	0	0	2,500
Internal Road Extension - Ellesmere	29,700	0	0	0	0	0	0	0	0	0	0
Internal Road Extension - Shands Road	15,000	0	0	100,000	0	0	0	0	0	0	0
Pull Off Lane - Shands Road	0	0	0	0	0	0	25,000	0	0	0	0
Toilet Facility - Ellesmere Public	0	0	0	0	0	0	0	0	0	0	0
Toilet Facility - Lincoln	0	0	0	0	0	0	0	0	0	0	0
Toilet Facility - Shands Road	0	0	0	0	0	0	0	0	0	0	0
Toilet Facility - Springston	0	0	0	0	0	0	0	0	0	0	0
<b>Total - LOS Improvement</b>	<b>152,409</b>	<b>37,300</b>	<b>40,750</b>	<b>122,800</b>	<b>27,300</b>	<b>18,500</b>	<b>44,000</b>	<b>23,400</b>	<b>20,800</b>	<b>20,500</b>	<b>21,500</b>
<b>Total</b>	<b>346,450</b>	<b>139,000</b>	<b>40,750</b>	<b>133,300</b>	<b>97,300</b>	<b>18,500</b>	<b>44,000</b>	<b>23,400</b>	<b>20,800</b>	<b>20,500</b>	<b>21,500</b>

Table 9-26: Cemetery New Assets – Forecast Costs

#### 9.4.6 Disposal Plan

There are very few cemetery assets identified for disposal with the exception being items that may be removed as part of the renewal programme.

No specific items are identified for disposal during the 10 year planning period.

#### Forecast Income/Expenditure Arising from Asset Disposal

Any costs associated with asset disposals are minor and are met through the operational budget. This generally involves the removal and disposal of items such as old fencing or furniture that is no longer serviceable. Planned income from disposals (if any) is likely to be minimal as, the type of assets being disposed, have limited marketable value.

#### 9.4.7 Sustainable Management

As described in Chapter 17, Council has made a decision to integrate more sustainable management approaches in to the way it works, manages assets and delivers services. Although the principles of sustainability have not yet been formally implemented with the cemeteries service it is intended to incrementally introduce sustainable practice where this can be readily achieved as well as incorporating sustainability into decision-making processes.

Approaches to be implemented in relation to cemeteries include the following:

Wellbeing	Sustainable Approach
Environmental	Maintenance practices that consider sustainability such as reduced reliance on methods using machinery.
Environmental	Use and selection of materials and products where sustainability is given significant weight in decision-making.
Environmental	Planting and landscape designs that provide more sustainable solutions in terms of species selection for environmental compatibility, plant survival and reduced watering requirements.
Environmental	Use of grass species that are slower growing, resilient and don't require irrigation.
Environmental	Investigate potential for "natural burials" that incorporate native plant restoration opportunities.
Social	Develop designs that provide a range of memorial options and respond to the social and grieving needs of families.

Wellbeing	Sustainable Approach
Social	Ensure there is sufficient capacity to meet the needs of future generations as well as current residents' needs and that the level of provision is equitable between generations.
Economic	Develop layouts, designs and practices that provide for more efficient use of cemetery space and reduce uptake of land.
Economic	Provide for management controls that reduce the speed at which cemetery land is used e.g. limitation on pre-purchase of plots.
Cultural	Ensuring heritage features are preserved to provide on-going representation of the social and cultural history of the district.
Cultural	Ensure that cemetery services and facilities respond to the changing cultural and ethnic needs of the community.

*Table 9-27: Cemeteries Sustainable Management*

The maintenance contractor, SICON Ltd, has attained ISO 14001 (Environmental Management Systems) accreditation. This means that they have in place operating procedures and policies that take consideration of environmental impacts. This demonstrates a clear commitment to improving environmental performance and contributing to a “clean, green image”.

#### **9.4.8 Risk Management**

A risk assessment has been undertaken for cemeteries and this process has identified a number of key risks. Mitigation and action measures to address risks have also been determined. Risk has been considered in the development and prioritisation of forward capital programmes. Risk mitigation measures have been built into maintenance practices and inspections as required.

Cemetery assets have been assessed in terms of criticality (assets which have a high consequence of failure) and there are no specific assets within this service area that would be categorised as critical.

Refer to the Section 6: Risk Management for additional information on how risk is managed and significant risks related to this service area. Risk mitigation measures are incorporated into forward programmes as appropriate. A comprehensive risk assessment is attached to this plan in Annex 9E.



## 9.5 Financial Programmes Summary

This section provides a summary of financial forecasts for the cemeteries service over the 10 year planning horizon. Additional detail on financial forecasts and projects is contained in Annexes 9A and 9B.

### 9.5.1 Historical Financial Performance

The following graph shows the financial performance for this activity over the last three years. Observations noted are:

- Actual income is generally close to budget targets and dependent on actual burials and plot sales
- Opex close to budget in 2015/16 and 2016/17. Under budget in 2014/15 due to non-completion of project work (headstone repairs from EQ)
- Capex consistently under budget - Springston Cemetery extension delayed by consents, natural burials area development deferred

### Cemeteries - Budget vs Actual \$

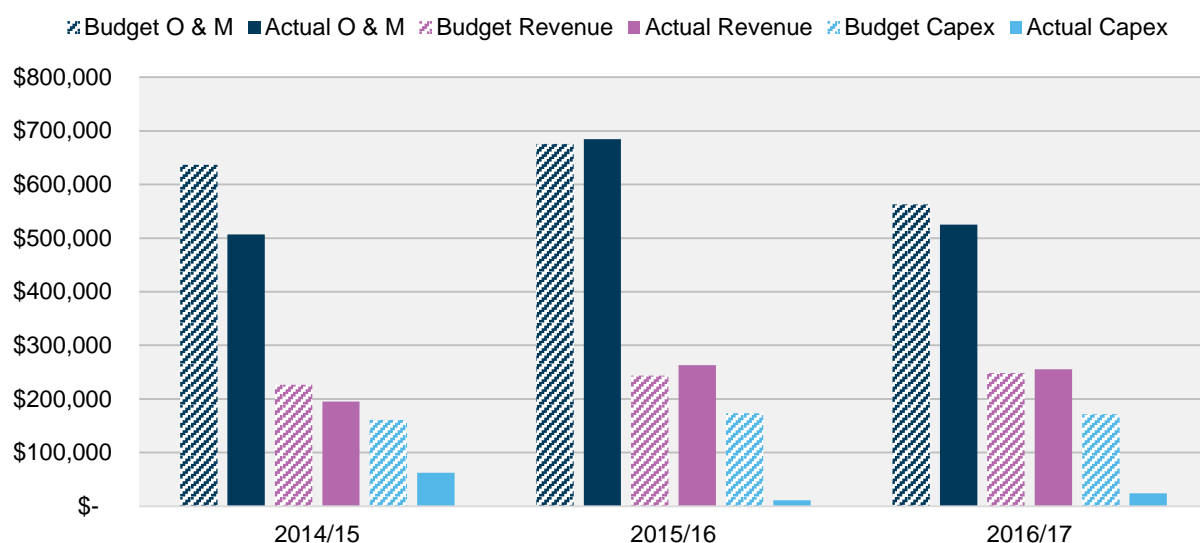


Figure 9-12: Cemeteries Historical Financial Performance

### 9.5.2 Operations and Capital

Financial Summary	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
<b>Operating</b>											
Total Operating Revenue	316,216	246,895	283,900	283,900	283,900	283,900	283,900	325,399	325,874	325,874	325,874
Total Opex	601,578	582,308	588,009	590,282	606,798	590,731	600,036	642,523	621,990	630,212	647,451
Depreciation	15,000	24,957	28,196	31,162	38,099	45,104	47,660	50,438	53,100	53,792	53,454
Operating Surplus/Deficit	300,362	360,370	332,305	337,544	360,997	351,935	363,796	367,562	349,216	358,130	375,031
<b>Capital</b>											
Capital Renewals	15,884	33,700	12,900	12,700	76,200	59,500	6,000	7,100	18,000	14,900	25,050
New Capital - Improved LOS	152,409	37,300	40,750	122,800	27,300	18,500	44,000	23,400	20,800	20,500	21,500
New Capital - Growth	194,041	101,700	0	10,500	70,000	0	0	0	0	0	0
Total Capex	362,334	172,700	53,650	146,000	173,500	78,000	50,000	30,500	38,800	35,400	46,550

Table 9-28: Cemeteries Financial Summary

The graph below sets out the summary forecast for total expenditure (operations and capital) and the estimated operating revenue for the 10 year planning period and shows the current year's budget (2017/18). This indicates that operational expenditure requirements will gradually rise commensurate with the forecast usage and the extra cost of looking after the extended cemetery areas.

Revenue will also gradually rise reflecting the projects increase in burials and plot purchase. It has been re-set at a lower level for 2018/19 compared with the current (2017/18) revenue budget. This is based on a reduced number of burials than previously anticipated and the trend towards ash interments which are less expensive.

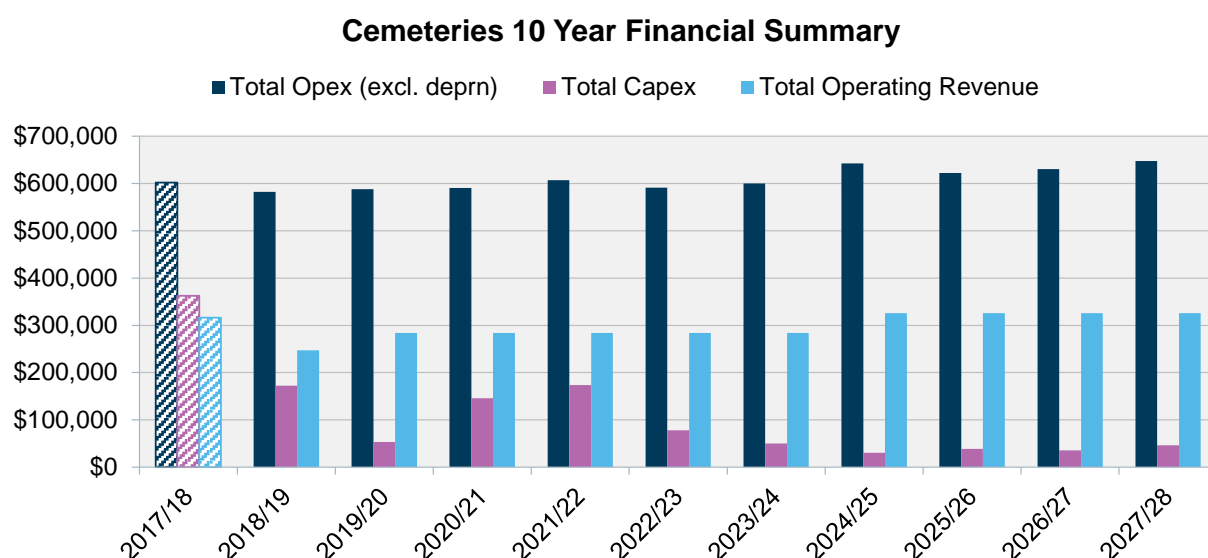


Figure 9-13 Cemeteries 10 Year Expenditure Summary

### Cemeteries Key Financial Projects/Programmes

Location / Cemetery	Project Description	Timing	\$	Comment
Springston	Cemetery Extension	2018	102k	Development of a further 1ha area
Ellesmere Public	Cemetery Extension	2020 - 2021	80.5k	Develop additional burial area within the cemetery site
Shands Rd	Access / Roading Improvements	2020 & 2023	125k	To improve access, circulation and safety

Table 9-29 Cemeteries Key Financial Projects/Programmes

### 9.5.3 Funding

The general approach to funding the cemeteries activity is set out below:

**Operating Expenses (excluding depreciation)** – 40-59% funded from user charges, 40-59% from general rates.

**Capital Expenses** - 40-59% funded from user charges, 40-59% from general rates.

Users benefit from this function by having access to a burial plot indefinitely. Accordingly 40-59% of the costs are funded from plot fees and interment charges. The balance of the cost is funded from the general rates reflecting the amenity benefit that a cemetery provides from the provision of open space. Benefits of

this function are on-going. A small grant is received on an annual basis from Veterans Affairs as a contribution to the cost of maintaining Returned Services Sections.

The forecast funding split is shown in the graph below. The average proportion of revenue funding for this activity over the 10 year planning period is 43%.

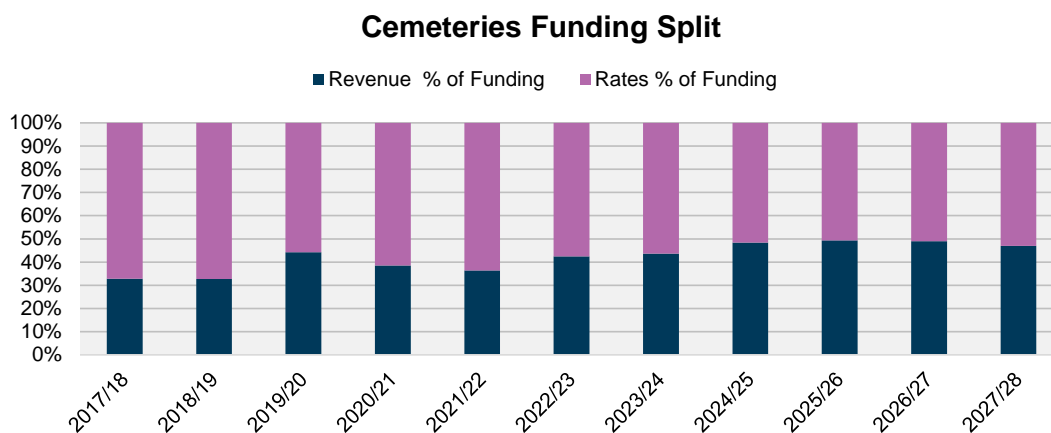


Figure 9-14: Cemeteries Funding Split

## Annex 9A

### Focus Group “H Form” – Cemeteries

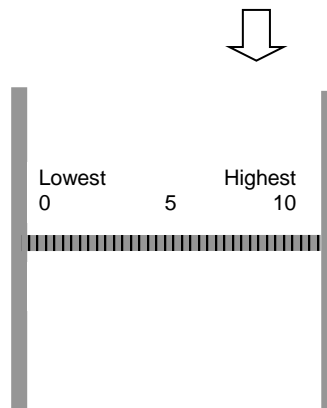
**POSITIVES**  
(why you score service high)

**AVERAGE SATISFACTION SCORE**  
(how do you rate this service on a scale of 1-10)

**NEGATIVES**  
(why you score service low)

Lowest: 5    Average: **8.18**    Highest: 10

- Look good when I see them
- Generally tidy
- Well looked after
- Regularly mown (Prebbleton)
- Large open space, quiet, easy access (Ellesmere)
- Tidy and spacious (Springston and Lincoln)
- Waddington Cemetery well maintained
- Information available in digital format on web search



- Lawn mowing
- Boundary untidy (Shands Road)
- Issues reported 2x with no response from Council
- Poor standard on mowing when graves sink down (Ellesmere)
- Cutting wet grass leaves clumps
- Only water is by tank at Weedons Cemetery

Feedback on costs:

- ☐ I would support increased spending on this service to achieve a higher service level **1**
- ☐ I think the expenditure is about right **10**
- ☐ I think the service levels could be reduced to save on costs **0**
- ☐ No comment

Suggestions for Improvement (*Group Discussion*)

- Mowing more regularly at Greendale/Lincoln
- More structured way to report issues – Council acknowledgement of report received. Concern that the complaints issued are not being followed up (x3)
- Smaller cemeteries to be tidied up

## Annex 9B

### Cemeteries 10 Year Financial Forecast



Cemeteries 10 Year Financial Forecast												
	Budget	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	
	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	10 Yr Total
<b>Operating Revenue</b>												
Fees & Charges	316,216	246,895	283,900	283,900	283,900	283,900	283,900	325,399	325,874	325,874	325,874	2,969,416
<b>Total Operating Revenue</b>	<b>316,216</b>	<b>246,895</b>	<b>283,900</b>	<b>283,900</b>	<b>283,900</b>	<b>283,900</b>	<b>283,900</b>	<b>325,399</b>	<b>325,874</b>	<b>325,874</b>	<b>325,874</b>	<b>2,969,416</b>
<b>Opex</b>												
<b>Staff Costs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Other Operating Expenditure</b>												
Routine Maintenance & Operations	381,054	365,215	380,426	380,426	382,026	385,026	385,026	402,662	402,662	402,662	402,662	3,888,793
District Wide Operating Costs	26,877	26,233	26,233	26,233	26,233	26,233	26,233	26,233	26,233	26,233	26,233	262,330
<b>Total Other Operating Expenditure</b>	<b>407,931</b>	<b>391,448</b>	<b>406,659</b>	<b>406,659</b>	<b>408,259</b>	<b>411,259</b>	<b>411,259</b>	<b>428,895</b>	<b>428,895</b>	<b>428,895</b>	<b>428,895</b>	<b>4,151,123</b>
<b>Support Costs</b>	<b>130,835</b>	<b>137,960</b>	<b>140,900</b>	<b>147,173</b>	<b>151,339</b>	<b>153,722</b>	<b>157,227</b>	<b>162,028</b>	<b>165,845</b>	<b>169,667</b>	<b>174,556</b>	<b>1,560,417</b>
<b>Operating Projects</b>												
Scheduled Maintenance Projects	57,454	46,650	40,450	30,950	40,950	25,750	26,050	45,350	27,250	26,150	37,750	347,300
Asset Management Projects	5,358	6,250	0	5,500	6,250	0	5,500	6,250	0	5,500	6,250	41,500
<b>Total Operating Projects</b>	<b>62,812</b>	<b>52,900</b>	<b>40,450</b>	<b>36,450</b>	<b>47,200</b>	<b>25,750</b>	<b>31,550</b>	<b>51,600</b>	<b>27,250</b>	<b>31,650</b>	<b>44,000</b>	<b>388,800</b>
<b>Total Opex</b>	<b>601,578</b>	<b>582,308</b>	<b>588,009</b>	<b>590,282</b>	<b>606,798</b>	<b>590,731</b>	<b>600,036</b>	<b>642,523</b>	<b>621,990</b>	<b>630,212</b>	<b>647,451</b>	<b>6,100,340</b>
<b>Operating Surplus/Deficit (excl. deprn)</b>	<b>285,362</b>	<b>335,413</b>	<b>304,109</b>	<b>306,382</b>	<b>322,898</b>	<b>306,831</b>	<b>316,136</b>	<b>317,124</b>	<b>296,116</b>	<b>304,338</b>	<b>321,577</b>	<b>3,130,924</b>
<b>Depreciation</b>												
Depreciation	15,000	24,957	28,196	31,162	38,099	45,104	47,660	50,438	53,100	53,792	53,454	425,962
<b>Operating Surplus/Deficit (incl. deprn)</b>	<b>300,362</b>	<b>360,370</b>	<b>332,305</b>	<b>337,544</b>	<b>360,997</b>	<b>351,935</b>	<b>363,796</b>	<b>367,562</b>	<b>349,216</b>	<b>358,130</b>	<b>375,031</b>	<b>3,556,886</b>
<b>Capex</b>												
Capital Renewals	15,884	33,700	12,900	12,700	76,200	59,500	6,000	7,100	18,000	14,900	25,050	266,050
New Capital - Improved LOS	152,409	37,300	40,750	122,800	27,300	18,500	44,000	23,400	20,800	20,500	21,500	376,850
New Capital - Growth	194,041	101,700	0	10,500	70,000	0	0	0	0	0	0	182,200
<b>Total Capex</b>	<b>362,334</b>	<b>172,700</b>	<b>53,650</b>	<b>146,000</b>	<b>173,500</b>	<b>78,000</b>	<b>50,000</b>	<b>30,500</b>	<b>38,800</b>	<b>35,400</b>	<b>46,550</b>	<b>825,100</b>
<b>Capital Revenue</b>												
Development Contributions	0	0	0	0	0	0	0	0	0	0	0	0
Vested Assets	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Capital Revenue</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Growth Opex</b>	<b>0</b>	<b>6,644</b>	<b>0</b>	<b>0</b>	<b>1,600</b>	<b>3,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>11,244</b>

# Annex 9C

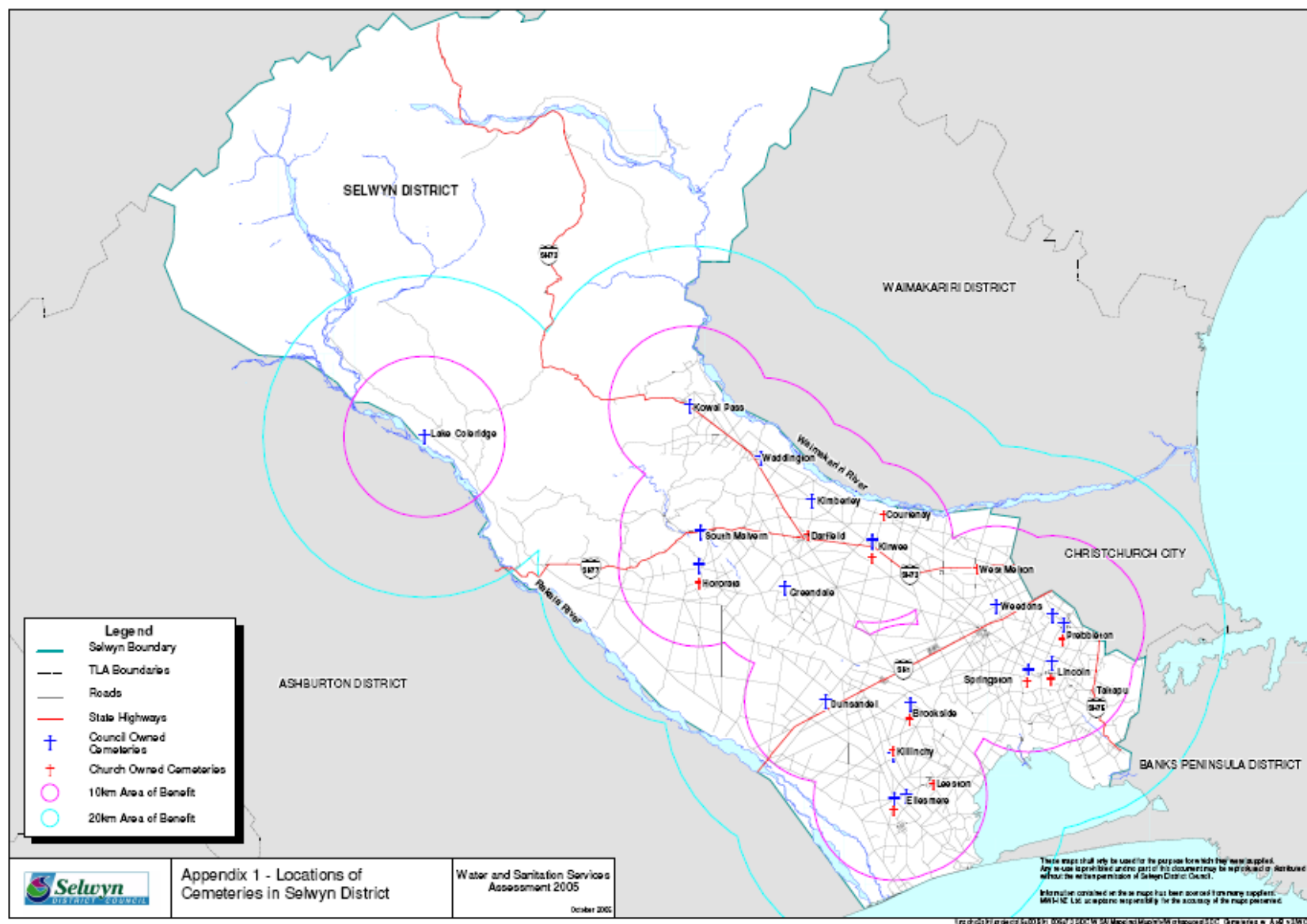
## Cemeteries Projects

Cemeteries Project Summary												
Site	Project Description	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
<b>Planned Maintenance Programmes</b>												
District Wide	Asset Management	5,358	6,250	0	5,500	6,250	0	5,500	6,250	0	5,500	6,250
District Wide	Tree Programme	31,834	32,000	28,000	20,000	32,000	20,000	20,000	32,000	20,000	20,000	32,000
District Wide	Fencing Maintenance	2,627	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750	2,750
District Wide	Fence Painting	0	0	0	2,800	0	0	0	0	0	0	0
District Wide	Gravel Car Park Maintenance	0	0	800	1,500	400	0	0	800	1,500	400	0
District Wide	Rubbish Bin Renewal	4,830	0	1,200	0	0	0	0	0	0	0	0
District Wide	Sign Refurbishment	0	900	0	900	0	0	300	2,100	0	0	0
Sheffield/Waddington	Landscape Planting	15431	0	0	3000	0	0	3000	0	0	3000	0
Sheffield/Waddington	Weed Control	0	3000	3000	0	3000	3000	0	3000	3000	0	3000
Brookside	Landscape Development	0	8000	0	0	0	0	0	0	0	0	0
Dunsandel	Sustainable Planting	2732	0	0	0	2800	0	0	0	0	0	0
Shands Road	Sustainable Planting	0	0	4700	0	0	0	0	4700	0	0	0
<b>Total Operational Projects</b>		<b>62,812</b>	<b>52,900</b>	<b>40,450</b>	<b>36,450</b>	<b>47,200</b>	<b>25,750</b>	<b>31,550</b>	<b>51,600</b>	<b>27,250</b>	<b>31,650</b>	<b>44,000</b>
<b>Renewal Projects</b>												
District Wide	Fencing Renewal	0	29,100	12,900	10,200	5,700	20,000	3,000	5,000	6,000	7,700	4,800
District Wide	Park Furniture Replacement	5,272	1,800	0	0	0	0	2,000	0	0	7,200	7,200
Springston	Gazebo	0	0	0	0	0	5,000	0	0	0	0	0
Ellesmere Public	Asphalt Reseals	0	0	0	0	0	0	0	0	12,000	0	0
Lincoln	Asphalt Reseals	0	0	0	0	0	18,000	0	0	0	0	0
Shands Road	Asphalt Reseals	0	0	0	0	52,500	0	0	0	0	0	11,250
Springston	Asphalt Reseals	0	0	0	0	18,000	0	0	0	0	0	0
Weedons	Asphalt Reseals	0	0	0	0	0	0	0	2,100	0	0	0
Brookside	Path Reconstruction	9,246	0	0	2,500	0	0	0	0	0	0	0
Ellesmere Catholic	Path Reconstruction	0	0	0	0	0	16,500	0	0	0	0	0
Prebbelton	Irrigation Controller	1,366	0	0	0	0	0	0	0	0	0	0
Dunsandel	Gates Renewal	0	0	0	0	0	0	0	0	0	0	1,800
Ellesmere Catholic	Gates Renewal	0	2,800	0	0	0	0	0	0	0	0	0
Prebbelton	Gates Renewal	0	0	0	0	0	0	1,000	0	0	0	0
<b>Total Renewal Projects</b>		<b>15,884</b>	<b>33,700</b>	<b>12,900</b>	<b>12,700</b>	<b>76,200</b>	<b>59,500</b>	<b>6,000</b>	<b>7,100</b>	<b>18,000</b>	<b>14,900</b>	<b>25,050</b>

Cemeteries Project Summary												
Site	Project Description	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28
<b>New Capital - Improved LOS</b>												
District Wide	Full Beam Installation	15,500	15,500	11,000	13,000	15,000	10,500	11,000	11,000	11,000	14,500	11,000
District Wide	Ash beam Installation	4,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	6,000	8,000
District Wide	Signage & Markers	28,209	12,000	0	0	2,500	0	0	2,500	0	0	2,500
Shands Road	Natural Burials Area	60,000	0	0	0	0	0	0	0	0	0	0
Shands Road	Seating Installation	0	1,800	0	0	1,800	0	0	0	1,800	0	0
Ellesmere Public	Seating Installation	0	0	0	1,800	0	0	0	1,900	0	0	0
Brookside	Water Supply	0	0	21,750	0	0	0	0	0	0	0	0
Ellesmere Public	Roadway Extension	29,700	0	0	0	0	0	0	0	0	0	0
Ellesmere Public	Toilet Facility	0	0	0	0	0	0	0	0	0	0	0
Shands Road	Roadway Extension	15,000	0	0	100,000	0	0	0	0	0	0	0
Shands Road	Pull Off Lane	0	0	0	0	0	0	25,000	0	0	0	0
<b>Total New Capital - Improved LOS</b>		<b>152,409</b>	<b>37,300</b>	<b>40,750</b>	<b>122,800</b>	<b>27,300</b>	<b>18,500</b>	<b>44,000</b>	<b>23,400</b>	<b>20,800</b>	<b>20,500</b>	<b>21,500</b>
<b>New Capital - Growth</b>												
Springston	Extension Development	194,041	101,700	0	0	0	0	0	0	0	0	0
Ellesmere Public	Additional Burial Space	0	0	0	10,500	70,000	0	0	0	0	0	0
<b>Total New Capital - Growth</b>		<b>194,041</b>	<b>101,700</b>	<b>0</b>	<b>10,500</b>	<b>70,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Annex 9D

### Cemeteries Map (Operating Cemeteries)





## **Annex 9E**

### **Risk Assessment for Cemeteries**

# Risk Identification and Assessment For Cemeteries

Jan-18

Asset Category	Risk	Core Value	Area of Impact							Risk Rating			Current Controls	Future Control Action	
			Reputation	Health & Safety	Environmental	Legal	Loss of Service	Financial Cost	Loss of Income	Max. Consequence	Likelihood	Rating			SDC Grade
Assets	Damage to cemetery facilities from vandalism	Asset Protection	1	1	1	1	3	1	1	3	1	3	VL	Reactive repairs; work with police to identify perpetrators; use CPTED guidelines; install assets with robust and durable design/materials; graffiti removed within 48 hours of reporting	Continue current controls
	Theft of cemetery assets	Asset Protection	1	1	1	1	3	1	1	3	1	3	VL	Replace assets; report to police; insurance; ensure assets are secured and cannot be easily removed	Continue current controls
	Facilities damage or loss from natural disaster or extreme weather event	Asset Protection	1	1	1	1	4	1	1	4	1	4	L	Insurance	Continue current controls
	The cemeteries have insufficient capacity to meet demand	Quality	4	1	1	1	1	1	1	4	1	4	L	Capacity projections are undertaken as part of AMP review on a three yearly basis	Continue current controls
	Cemeteries have insufficient capacity to cater for a major disaster or pandemic	Accessibility	4	4	1	1	1	1	1	4	1	4	L	Capacity projections are undertaken as part of AMP review on a three yearly basis	Continue current controls
	The quality of cemetery provided does not meet the service expectations of users	Quality	3	1	1	1	1	1	2	3	2	6	L	Analyse service request data to identify issues and develop remedial programmes on a priority basis; seek feedback on LoS on a three yearly cycle	Continue current controls
	Cemeteries fail to provide for the needs of different cultural, ethnic, and religious groups	Accessibility	3	1	1	1	1	1	1	3	2	6	L	Some denominational areas are available; RSA sections provided	Continue current controls Monitor & review requirements for special areas to be set aside
	Failure of cemetery assets from poor condition	Asset Protection	3	1	2	1	3	1	1	3	2	6	L	Reactive repairs when failures occur; Optimised maintenance & renewal programme as part of AM Plan	Continue current controls
	Failure of cemetery assets from poor design/construction	Asset Protection	3	1	2	1	3	1	1	3	1	3	VL	SDC design and construction standards via ECOP; Construction monitoring	Continue current controls
	Burials cannot take place because of high water tables	Reliability	4	1	4	1	5	5	2	5	2	10	M	Pump water prior to burial	Current controls. Future planning will need to consider sites that will not be adversely affected by high ground water tables
Failure of cemetery assets from poor maintenance	Asset Protection	3	1	2	3	3	2	1	3	3	9	M	Reactive repairs; inspections & reporting required under Contract 1202; condition data captured and assessed and remedial actions forwarded to the contractor; Monthly contract meetings with Maintenance Contractor (SICON)	Continue current controls and put in place regular performance auditing, identify failure modes and develop optimised maintenance and renewal programmes as part of AM Plan improvement	
Health & Safety	Injury to facility user/visitor from headstone toppling	Safety & Security	1	5	1	1	1	1	1	5	3	15	H	6 monthly inspections with any issues "made safe" via maintenance contract; Headstones re-fixed by monumental mason following EQ events; Bylaw requires permit & installation by registered monumental mason and to meet NZ standards.	Continue current controls. Ensure all new headstones comply with NZS 4242:1995 Headstones and cemetery monuments via permit system
	Accident or injury to volunteers undertaking work on cemeteries	Safety & Security	1	4	1	1	1	1	1	4	2	8	M	Provide guidance document for volunteer groups setting out H & S responsibilities; Prepare site specific H & S management plan; Training provided by SDC Health & safety Manager	Continue current controls
	Injury to a contractor working on the site (e.g. grave collapse)	Safety & Security	1	5	1	1	1	1	1	5	2	10	M	Approved maintenance contractors to be used that are "SiteWise" accredited; Site Specific Health & Safety Plans required for project work; Health and safety audits and reporting as part of contract 1202. Use burial frames to shore grave sides during excavation	Continue current controls
	Injury to facility user/visitor (grave subsidence, uncovered grave etc.)	Safety & Security	1	4	1	1	1	1	1	4	1	4	L	Regular inspections via contract with repairs carried out as required; contract requires top up at 4 week intervals and final levelling at 24 weeks after the interment; all unattended open plots must have covers	Continue current controls
	Potential injury to cemetery user/visitor from tree or branch falling	Safety & Security	4	5	1	5	1	1	1	5	3	15	H	Tree inspection & maintenance programme via contract 1202 is required; Must have qualifications to Level 4 Arboriculture; Most trees have had formal arborist inspection and document of health and tree management requirements; Hazardous trees removed or have work carried out to make safe	Continue current controls and complete tree assessment work and implement remedial action programme
	Health risk to users from poor drinking water quality	Health and Hygiene	1	3	1	1	1	1	1	3	2	6	L	No controls in place	Undertake water quality testing and identify non-potable water with appropriate signage.
	Environmental contamination from cemetery maintenance activities (herbicides & pesticides etc.)	Environmental Protection	1	1	3	1	1	1	1	3	1	3	VL	Maintenance undertaken by contractors with GROWSAFE certification and ISO 14001 accreditation	Continue current controls
	Potential contamination of groundwater from burials	Environmental Protection	1	4	4	1	1	1	1	4	1	4	L	No formal controls in place; Deep rooted trees around boundaries	Continue current controls; Obtain Resource Consents for cemetery extensions or new cemeteries; Monitor separation between groundwater and burials

Asset Category	Risk	Core Value	Area of Impact							Risk Rating				Current Controls	Future Control Action
			Reputation	Health & Safety	Environmental	Legal	Loss of Service	Financial Cost	Loss of Income	Max. Consequence	Likelihood	Rating	SDC Grade		
Legal Compliance	Failure to provide the correct sexton services (burial time, grave size etc.)	Legal Compliance	3	3	1	1	1	1	1	3	2	6	L	Managed via maintenance contract with QA systems in place (ISO 9001 certified)	Continue current controls
	The required resource consents have not been obtained or conditions have not been met	Legal Compliance	1	1	1	4	1	1	1	4	1	4	L	Advice from ECAN and schedule established of all known consents and conditions	Check consents & ensure process in place and set up processes to monitor condition requirements
	Unknown location of unmarked graves	Legal Compliance	3	1	1	1	1	1	1	3	3	9	M	Programme to locate unmarked graves with infrared sensors and isolate graves has been undertaken	Continue current controls & use detection equipment for any expansion of burials into new ground
	Prosecution of Council under the Health & Safety at Work Act as a result of injury/death to a volunteer or contractor working on a cemetery site.	Legal Compliance	1	1	1	5	1	1	1	5	1	5	L	Approved maintenance contractors to be used that are "SiteWise" accredited; Site Specific Health & Safety Plans required for project work; Health and safety audits and reporting as part of contract 1202; Accident reporting and investigation via Council's Vault system	Continue current controls.
	Loss of cemetery records	Legal Compliance	3	1	1	3	3	1	1	3	2	6	L	Electronic records and back up in NCS system. Hardcopy back up	Continue current controls & investigate new recording system using GIS
	Accuracy of cemetery records	Reliability	3	1	1	3	3	1	1	3	3	9	M	No controls in place	Establish QA system for records of burial plot sales data
	Loss or degradation of heritage/cultural values through work carried out in cemeteries	Heritage Protection	3	1	1	1	1	1	1	3	2	6	L	Process to identify heritage listing/ values prior to work commencing; Protocol in place under the Heritage NZ Pouhere Taonga Act and District Plan; Consents required for work on listed buildings/structures.	Continue current controls Prepare conservation plans if necessary.
Financial	The cost of burial and plot purchase is too high for customers	Affordability	1	1	1	1	1	1	2	2	1	2	VL	Fees commensurate with similar district council charges	Continue current controls & review fees against cost of service and benchmark
	Revenue return in insufficient to cover sexton costs	Affordability	1	1	1	1	1	3		3	2	6	L	Adjust fees to reflect changes in contract rates on an annual basis via Annual Plan or Long Term Plan	Continue current controls