

Maple Ridge Cemetery Master Plan



Prepared for: District of Maple Ridge
Department of Park, Recreation and Culture
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Executive Summary

Two cemeteries in Maple Ridge have served the community for nearly 130 years. The historic Lee Cemetery in Whonnock remains nearly unchanged from its early days as a pioneer cemetery. The Maple Ridge Cemetery has evolved into a more conventional cemetery where virtually all of the burials that occur in Maple Ridge take place. Given the pace at which demographics, interment trends and memorialization patterns are changing, Staff identified the need to embark upon a master planning process that would address the key community needs for meaningful places of burial and commemoration. This master plan addresses the current and projected levels of demand for interment and memorialization services that will be required over the next 25 years. Those demands, in combination with projected changes in interment choices (burial or cremation), have been used to project future cemetery land requirements. A program of recommendations that address the key findings in the project have been prioritized in an Implementation Plan that concludes this report.

Following a review of the District's burial statistics, site information, Vital Stats and Stats BC cemetery data, a program of consultations was undertaken. This included interviews with Staff, representatives from the two funeral homes, a workshop with Council and the Heritage Advisory Commission. A public open house was held to garner public input, in addition to input solicited from residents through a web survey. This information has been synthesized into a series of key findings. These include:

Key Demographic and Interment Trend Findings

- The number of people that die in the District will rise due to an increased population and to the fact that the population is aging. It is expected that 28,000 people will die in Maple Ridge between now and 2035.
- Rising death rates will lead to an increased demand for cemetery services in the District over the next 20 years.
- The cremation rate will rise above the current 80% rate to approximately 85%.
- There will continue to be a demand for full depth (in ground) burial space, and for cremated remains interment and memorialization opportunities.
- The trend towards columbaria and intensive forms of cremated remains interment will continue.
- The demand for "green" burials (that minimize the ecological footprint of interment) will slowly rise over the coming years.
- An increased expectation of site, service and ceremonial service options will need to be addressed.

Interment Options: Key findings

- Drainage conditions are poor in the remaining traditional (in-ground) burial area.
- Lot layouts are very efficient, but this leaves little room for seating, amenities or tree planting.
- Only a limited range of traditional burial options are available.
- In-fill of roads has already taken place, leaving little capacity on/near existing roadways.
- There is no designated communal commemorative space.
- Landscape/ buffer areas along some of the Maple Ridge Cemetery site are not effective.
- Cremation borders are laid out in a very tight pattern.
- Columbaria, ossuaries and family vessels are interment options for cremated remains that are not presently offered in Maple Ridge.
- The scattering garden was expanded but is nearing capacity.
- Memorialization of interment lots is limited to flat/ at-grade markers.

Infrastructure Assessment: Key Findings

- Roads are narrow and curbless, leading to damage to graves and deteriorating pavement.
- On and off-site signage is inadequate.
- Turf is in generally good condition, although poor drainage poses an ongoing challenge.
- Maintenance buildings are in good condition, although the level of service they offer is rudimentary.
- There is limited access to washrooms, no indoor place for a funeral service and the site is not designed for customer service.

Marketing, Bylaws, Policy Assessments: Key Findings

- Marketing of cemetery services in Maple Ridge is virtually non-existent.
- Concern was expressed by funeral home professionals, and the community, that many people do not know there is a cemetery available for their use in Maple Ridge.
- The Cemetery Bylaw needs to be updated to account for changing customer expectations, interment trends and to align it with the Provincial Cemetery and Funeral Services Act.
- The policy regarding ornamentation needs to be formalized and consistently applied by Staff and Council.

In order to address these findings, a series of recommendations have been brought forward. Key recommendations are included in the following table.

Maple Ridge Cemetery Master Plan Implementation Table

	Priority	Implemen- tation	Delivery Method	Net Cost Estimates*	Operating or Capital Cost
Meeting Future Needs					
In-fill at Maple Ridge Cemetery (Cremated Remains)					
Family Vessels, columbaria	High	1 - 3 years	Staff, consultants, contractors	\$ (100,000.00)	Primarily Capital
Columbaria in Section 2	High	1 - 3 years	Staff, consultants, contractors	\$ (75,000.00)	Primarily Capital
Cremation Garden in SE area	High	1 - 3 years	Staff, consultants, contractors	\$ (100,000.00)	Primarily Capital
In-fill at Maple Ridge Cemetery (Traditional Burial)					
Hydro/geotech study of drainage in Section 3	High	ASAP	Consultant	\$ 10,000.00	Capital
Implement drainage improvements in Section 3	High	Year 1	Staff, contractors	\$ 25,000.00	Capital
Mausolea Design and Business Case Analysis	Medium	Year 3 - 5	Consultant	\$ 10,000.00	Capital
Phase I Mausolea Design and Construction	Medium	Year 4 - 6	Contractor, Consultant, Staff	\$ (100,000.00)	Primarily Capital
North Expansion Areas					
Land acquisition, preliminary planning	High	ASAP	Consultants, staff	\$ 20,000.00	Capital
Design and infrastructure services	High	Year 2	Consultants, staff	\$ 30,000.00	Capital
Plot layout and cremation garden construction	High	Year 3	Consultants, staff, contractors	\$ (50,000.00)	Capital
Off Site Cemetery Lands					
Land Acquisition Planning, Site Identification	High	Year 2 - 4	Consultants, staff	\$ 20,000.00	Primarily Capital
Interim pre-cemetery land use studies	Medium	Year 5 - ?	Staff, consultants	\$ 25,000.00	Capital
Interim land use implementation	Low	Year 15 - ?	Staff	TBD	Capital
Cemetery Lands Preparations	Low	Year 25 - ?	Consultants, staff	\$ -	Capital
Marketing the Cemeteries					
Changing Cemetery Section Names	High	Year 1	Staff	\$ 5,000.00	Operating
On and off-site signage improvements	High	Year 1	Staff, consultants	\$ 30,000.00	Capital
Enhanced Cemetery profile in the community					
Website development and roll out	High	Year 2	Staff, consultants	\$ 12,000.00	Capital
Newsletter/brochure development and roll out	High	Year 2 - 3	Staff, consultants	\$ 10,000.00	Capital
Increasing Effectiveness and Partnerships					
Bylaw update	High	Year 1	Staff, consultants	\$ 8,000.00	Capital
Ornamentation Procedures Update	High	Year 1	Staff	\$ 8,000.00	Operating
Create an Advisory Board	Medium	Year 2	Staff	\$ 7,500.00	Operating
Cemetery Infrastructure Maintenance and Enhancements	High	Year 1 - 3	Staff, contractors	\$ 50,000.00	Capital
Enhancing Cost Recovery					
Product introductions	Low	Year 5 - ?	Staff, consultants	\$ (25,000.00)	Capital
Perpetual Care Fund Contribution Update***	High	Year 1 - 10	Staff, consultants	\$ 180,000.00	Operating
Comprehensive Cemetery Financial Plan	ASAP	Year 1 - 7	Staff, consultants	\$ 30,000.00	Capital
Update fees and charges****	High	Year 1 - 10	Staff	\$ (224,000.00)	Operating Revenue
Net Total Cost (Revenue)				\$ (193,500.00)	

* Net cost estimates include estimated revenues over a maximum 10year period (in many cases the ROI will occur over a much shorter period)

** Net revenues are included for years 1 - 10; costs beyond year 10 are not included

*** Assuming a 5% increase over current contributions occurring on average over the next 10 years

**** Assuming a 10% fee increase to meet industry standard and inflation on average over the next 10 years

In order to move cemetery services in Maple Ridge towards full cost recovery, a comprehensive cemetery business plan is recommended. A series of new interment options for both casket and cremated remains interment need to proceed in order to meet the needs of Maple Ridge residents as well as the expectations of funeral home service providers in the community. Implementing the initial recommendations in this plan over a two - four year period would instill a sense of confidence with the funeral home owners, generate interest in the community and would move this important civic service towards full cost recovery.

Chapter 1: Introduction

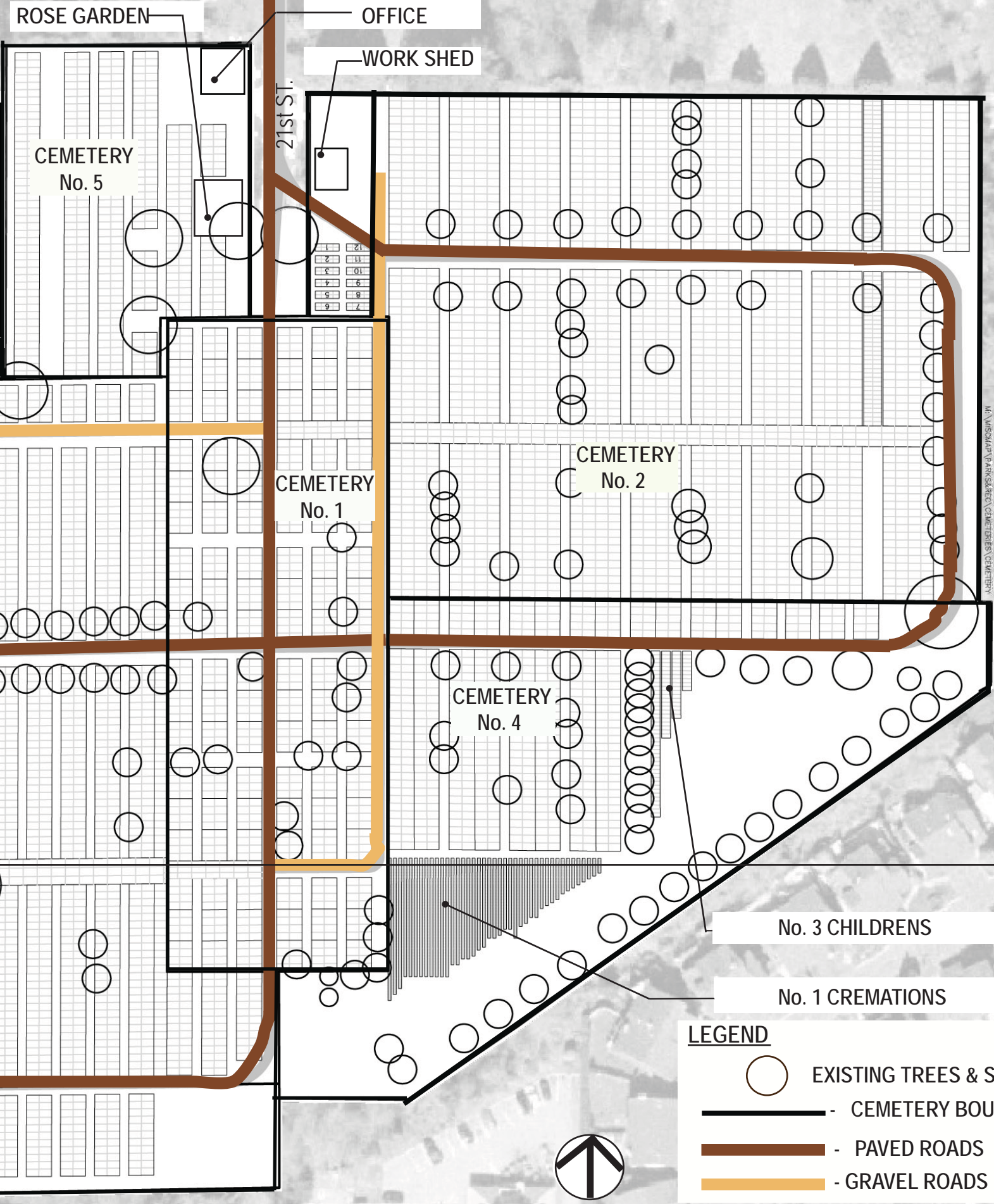
The Maple Ridge Cemetery on Dewdney Trunk Road has been serving the community since 1878. Over the last 130 years the burial grounds have grown to accommodate the growth of the District and its citizens' needs for places of interment, memorialization and commemoration. The Lee Cemetery in Whonnock is a small pioneer cemetery with a rich history and an important cultural landscape, but due to its size and location will not have a significant bearing on the District's long term interment capacity.

Although not as prominent a service as others within the Parks and Leisure Services Department, cemetery services are a crucial component of the District's service delivery. In recent years, cemeteries have become much more than just a final resting spot. They are seen as spaces for the living as well, with community events being held on their grounds (even weddings in some cases), and as park space for passive recreation. Not only a part of family history and genealogy, cemeteries reflect community memory in a tangible way.

The purpose of this study is to look at the long term capital, operating and spatial needs of the cemetery. Spatial needs have been addressed and will be impacted by the physical restriction of expansion space, the expectation that gravesites are for single use - in perpetuity - and the large numbers of baby boomers that will die over the next two decades.

The assessments and recommendations in this report were formed by an analysis of burial statistics, death projections, site assessments and financial performance, and interviews with District staff and funeral home representatives. A full list of data sources can be found in Appendix C. A summary of the history of the cemetery is followed by a synopsis of projected death and interment trends in Maple Ridge. This is followed by key findings from interviews with staff, stakeholders and funeral service providers. A synopsis of input, received at the open house and from web feedback forms, which informed our work follows the key findings. An analysis of interment services provided as well as physical opportunities and constraints underpins the land needs assessment. The land needs assessment details how much land will be required to meet needs for the next twenty-five years. Recommendations, including an implementation plan, address the key findings and the need for additional land.

Maple Ridge Cemetery Area Takeoffs								
	Total Area (sq.m)	Grave Area (sq.m)	Grave %	Road Area (sq.m)	Road %	Buffer Area (sq.m)	Buffer %	Empty
Cem. 1	5903	3775	64%	1993	34%	134	2%	9
Cem. 2	13884	10333	74%	2913	21%	638	5%	140
Cem. 3	29654	18746	63%	2396	8%	8512	29%	390
Cem. 4	2287	1630	71%	479	21%	178	8%	2
Cem. 5	3514	996	28%	1528	43%	990	28%	0
Total Full Burial	55242	35480	64%	9310	17%	10453	19%	541
Children's Area 1	266	89	33%	176	66%	1	0%	3
Children's Area 3	2482	140	6%	186	7%	2156	87%	55
Total Childrens	2748	229	8%	362	13%	2157	79%	58
Cremation 1	2846	417	15%	380	13%	2049	72%	9
Cremation 2	1611	723	45%	760	47%	128	8%	1056
Total Cremation	4457	1139	26%	1140	26%	2177	49%	1065



No. 2 CREMATIONS

CEMETERY
No. 3

CEMETERY
No. 1

CEMETERY
No. 4

CEMETERY
No. 2

No. 3 CHILDRENS

No. 1 CREMATIONS

LEGEND

- EXISTING TREES & SHRUBS
- CEMETERY BOUNDARY
- PAVED ROADS
- GRAVEL ROADS



Cemetery History

The Maple Ridge Cemetery is an historic burial ground that consists of six hectares of public property located on 214th Street south of Dewdney Trunk Rd. It is a fine example of the type of rural cemetery that was the traditional style in Canada starting in the late nineteenth and early twentieth centuries. In 1878 the Municipality established the Maple Ridge Cemetery on a half acre donated by George Howison and William Nelson. By 1895 the community purchased an additional half acre from the original donors. The original entrance was located on River Road, one of the major historic transportation corridors in the area. The first burials occurred in the mid-1870s on a private lot belonging to William Nelson, which he donated to the District. Its heritage value lies with the prominent settlers of the District of Maple Ridge who helped to develop Maple Ridge and for whom it is now their final resting place. These include the Haney family, early founders and entrepreneurs in the District as well as pioneers of the Japanese community in Maple Ridge. Aside from grave markers, no formal records were kept before 1897. A flood in 1950 resulted in the destruction of many burial records. Identities of most people buried in cemetery section 1 are known, but not the exact locations of their graves where headstones are absent. In 1915 the District of Maple Ridge purchased a second section of the cemetery. In 1917 the first plots in cemetery section 2 were available for sale to residents. After that time the cemetery grew rapidly with section 3 being added in the 1950s and sections 4 and 5 more recently.



Maple Ridge Cemetery

The history of the site is apparent in the different methods of commemoration over time, including the move to horizontal lawn markers, more uniform in size and material, after the 1960s. Restoration projects have kept some of the stones and markers looking fresh even after a hundred years. The cemetery has an important connection to the artistic growth of the community as reflected in the entry gates: they are the work of Maple Ridge's first artist-in-residence, Colin Southwell.



Maple Ridge Cemetery Gates

The Whonnock Cemetery consists of two parts: the Norwegian or Lee Cemetery of 1905 and the lands purchased by Maple Ridge from Kwantlen First Nation in 1919. The Lee Cemetery was established by closely related pioneer families from Norway who settled in Whonnock. In 1982 the property was transferred to the District of Maple Ridge. The historic Lee Cemetery in Whonnock accommodates two or three burials a year.



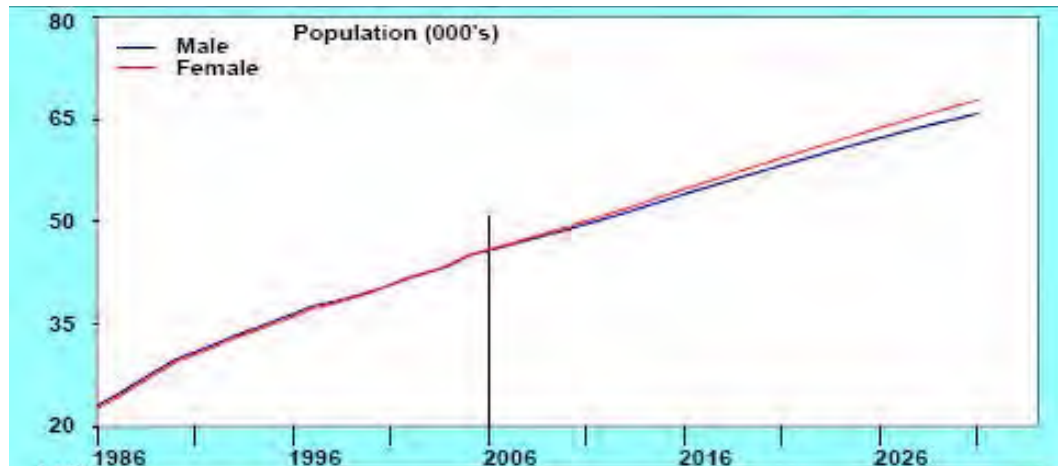
Historic Lee Cemetery in Whonnock

Death and Interment Trends

Several key demographic and interment trends have been examined in order to understand the current and future need for cemetery services within the District. This information, combined with an assessment of interment services, provided the necessary data to project land needs over the next twenty-five years.

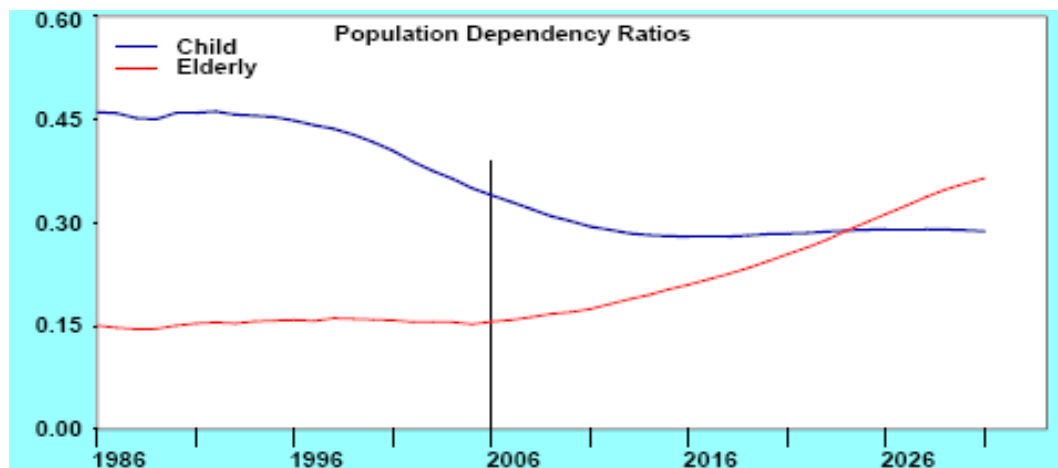
Population Trends

Growth in the over-65 age class in Maple Ridge has been growing steadily and is predicted to grow faster in the coming years. In fact, by about 2025, there will be more dependent elderly than children in Maple Ridge. The median resident age in Maple Ridge in 1986 was 31 years old. In 2005, it was 37, and by 2031 it is projected to be 45 years of age.



Projected Population of Maple Ridge

Source: P.E.O.P.L.E. Projections 31



Projected Population Dependency Ratios of Maple Ridge

Source: P.E.O.P.L.E. Projections 31

Death Trends

With the aging population, the death rate is rising. In 2006, 562 people died in Maple Ridge. This is projected to grow to 926 decedents in the year 2020 and 1273 decedents in the year 2030 (P.E.O.P.L.E. Projections 32). As the baby boomer cohort dies, additional cemetery space will be required.

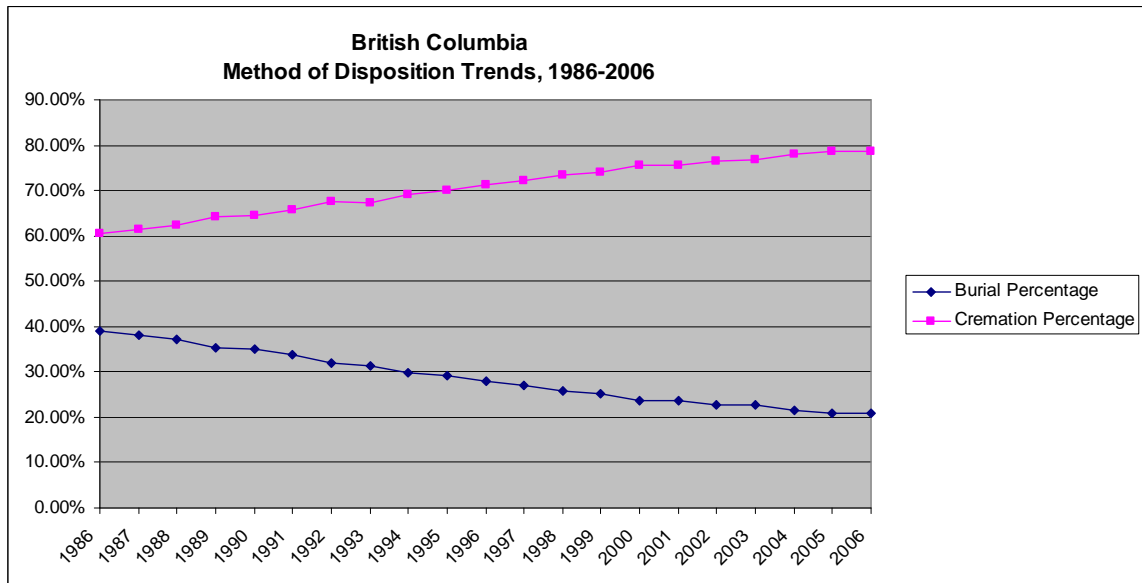
DATE	DEATHS	CREMATIONS	%	BURIALS	%
2001	447	397	82%	86	18%
2002	514	436	82%	93	18%
2003	540	467	82%	102	18%
2004	528	415	84%	78	16%
2005	558	506	86%	79	13%
2006	562	490	87%	72	13%
2007	567	498	88%	69	12%
2008	618	548	89%	70	11%
2009	643	575	89%	68	11%
2010	667	602	90%	65	10%
2011	692	630	91%	62	9%
2012	719	655	91%	64	9%
2013	743	676	91%	67	9%
2014	772	703	91%	69	9%
2015	795	724	91%	71	9%
2016	820	746	91%	74	9%
2017	844	768	91%	76	9%
2018	871	793	91%	78	9%
2019	896	816	91%	80	9%
2020	926	843	91%	83	9%
2021	953	868	91%	85	9%
2022	984	896	91%	88	9%
2023	1019	928	91%	91	9%
2024	1056	961	91%	95	9%
2025	1092	994	91%	98	9%
2026	1133	1031	91%	102	9%
2027	1165	1061	91%	104	9%
2028	1197	1090	91%	107	9%
2029	1233	1122	91%	111	9%
2030	1273	1159	91%	114	9%
2031	1314	1196	91%	118	9%
2032	1357	1235	91%	122	9%
2033	1404	1278	91%	126	9%
2034	1453	1323	91%	130	9%
2035	1502	1367	91%	135	9%
TOTAL (2007-2035):	28,708	26,087		2621	

Source: P.E.O.P.L.E. Projections 32 for death projections. Past cremations and Burials from Vital Stats BC. Cremation and Burial Projections have been estimated based on 2006 percentages.

Interment Trends

In general, a shift to choose cremation over burial is one that has been seen all over North America and is most pronounced here in BC. Research undertaken by our firm (with the Mustel Group) on interment and memorial preferences and decision "drivers" indicate that cremation is the most preferred method of disposition. This is certainly the case in Maple Ridge, where in 1998, of those that lived in the Maple Ridge Local Health Area 22% chose

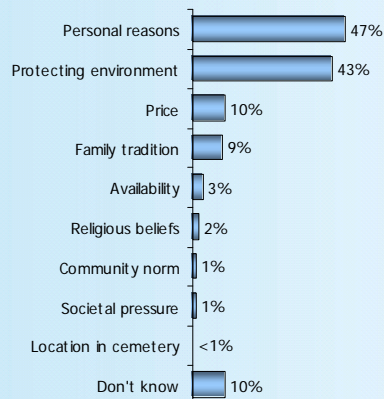
to be buried and 78% chose cremation. By 2005 the cremation rate had increased to 87% and the traditional in-ground burial rate reduced to 13%. This constitutes a significant shift and one that has had an important impact on the cemetery system.



Source: Vital Stats BC

Why are people choosing cremation? Our research indicates that aside from undisclosed personal reasons, protecting the environment is the single largest reason for choosing cremation. Our sense is that this is a perception that may change as more evidence emerges about the deleterious effects of pollutants associated with cremation and the amount of CO₂ released during the process.

► Reasons for Preferring Cremation



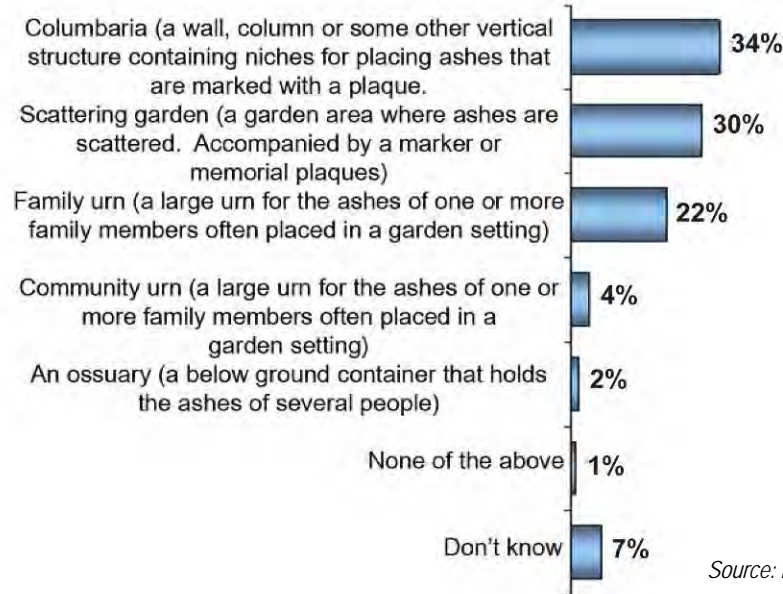
Base: Respondents who stated a preference for cremation (n=241)

Q. 8b) Can you tell me why this is your preferred choice?

- Similar to burial, many hold a preference for cremation for undisclosed personal reasons.
- Concern regarding the protection of the environment is registered as the second most common reason.
- Price, tradition and availability are among the other minor considerations.

Source: Mustel Group Research

What are people choosing to do with the cremated remains? Many choose to scatter remains in undisclosed locations, or have them interred in a cemetery. Research with the Mustel Group found that the most preferred options for interment of those cremated remains were columbaria, a scattering garden or a family urn.



Source: Mustel Group Research

Interments at Maple Ridge Cemetery

The following table tracks the record of interment of cremated remains in the cemetery compared with total number of cremations in the Maple Ridge Local Health Area:

	2005	2004	2003	2002	average
Total Cremations in Local Health Area	506	415	467	436	456
Cremated remains interred in the ground at the Maple Ridge Cemetery	120	102	114	105	110
Cremated remains interred in the Rose Garden at the Maple Ridge Cemetery	19	13	21	28	20
Total cremated remains interred in the Maple Ridge Cemetery	139	115	135	133	131
Cremated remains at other cemeteries, not picked up or kept at home (not accounted for)	367	300	332	303	326
% of Total Cremations from the Maple Ridge LHA interred at the Maple Ridge Cemetery	27%	28%	29%	31%	29%

Source: District of Maple Ridge

These findings are typical of the patterns we would expect in a municipal cemetery system – approximately 25% of families those that choose cremation bring the remains to a cemetery for interment. The question that remains is: “where do all the ashes go?” They are either at another cemetery, scattered somewhere other than in a cemetery or no decision has been made as to what to do with the ashes and they are in safe keeping in undetermined locations.

The following table tracks the record of traditional in-ground burials at the cemetery compared with total number of burials in the Maple Ridge Local Health Area:

Burials	2005	2004	2003	2002	average
Total Burials in Local Health Area	79	78	102	93	88
Burials interred at MRC	57	57	65	78	64
At other locations	22	21	37	15	24
% of Total Burials interred at MRC	72%	73%	64%	84%	73%

Source: District of Maple Ridge

Market Share

Not all the people that die in Maple Ridge will be interred in the District cemetery. The extent to which the City cemetery accommodates the need for traditional burials and the need to inter cremated remains has a direct impact on the amount of land that will be required.

During the year 2005, the Maple Ridge Cemetery served the following proportion of those residents in the Maple Ridge Local Health Area that died:

- 27% of those that chose cremation were buried in the Maple Ridge Cemetery.
- 72% of those that chose burial were buried in the cemetery.
- 73% of those that chose cremation chose to scatter the ashes, or keep them at a location other than the cemetery, or interment at a cemetery other than the Maple Ridge Cemetery.

Key Findings

The demographic, burial and cremation trends researched for this study have been based on BC Stats, P.E.O.P.L.E. Projections and Maple Ridge Cemetery data.

- Rising death rates will lead to an increased demand for cemetery services in the District over the next 20 years.
- The cremation rate will rise somewhat, but is not likely to move significantly beyond the 85% level.
- There will continue to be a demand for full depth (in ground) burial space, and
- The need for cremated remains interment opportunities will be sustained for at least the next 20 years, quite possibly beyond that time.

Recent research in the Lower Mainland shows that the desire for columbaria and more intensive forms of cremated remains interment will continue. Green burials (that minimize the ecological footprint of interment) will slowly rise over the coming years. P.E.O.P.L.E. Projections show an increase in migration to Maple Ridge over the coming years, and with this will likely come additional cultural interment considerations. An increased expectation of site, service and ceremonial service options will need to be addressed in response to this trend.

Chapter 2: The Cemetery Site

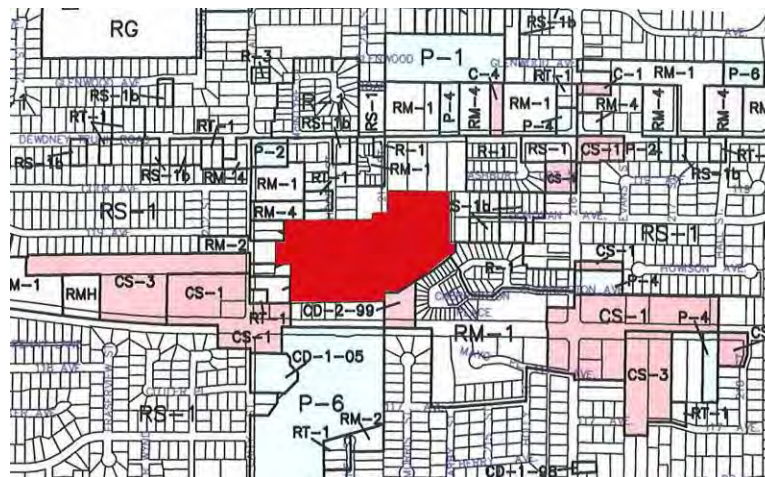
The Maple Ridge Cemetery has an orderly and open spatial quality with the plots and pathways laid out at right angles across a relatively flat site. Designed to enhance views within and across it, a formal spatial structure is created, considered fashionable in the era in which it was established. The cemetery features an open expanse of lawn with a mix of mature trees and more recent plantings. There are many decorative and unique monuments and headstones, ranging in materials from wood to granite, marble, zinc and other metals. The cemetery is a tranquil and beautiful site shaded by some large maple trees near the entry.

The perimeter of the cemetery is almost entirely fenced with 6' chain link fencing with plantings of shrubs and trees. These plants add to the sense of enclosure, but also cast shade across the site.

Context

The Maple Ridge Cemetery is located in a largely residential neighbourhood of modest family homes that developed as the commercial centres of Haney and Hammond took shape.

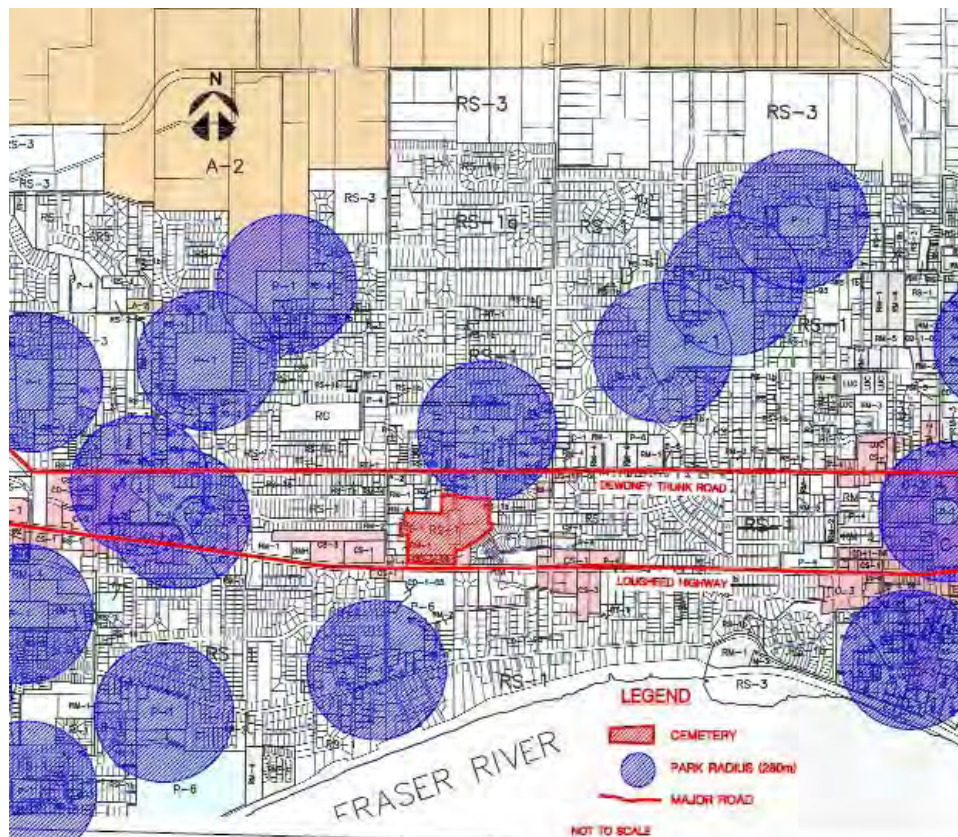
The projected growth in population in Maple Ridge will result in the growth in density in the area. The OCP encourages a variety of higher density residential forms including townhouse and multi-family housing development in the cemetery's surrounding neighbourhood.



Cemeteries as Crucial Community Open Spaces

One of the often overlooked aspects of cemeteries is the important role they play in the community's range of open space types and recreation experiences. The Maple Ridge Cemetery is an example of how sacred space can be a keystone of the suburban and urban open space fabric. While the cemetery's hidden qualities create a quiet and reflective space suitable for a cemetery, if the site had access and visual sight lines from Dewdney Trunk Road it would be perceived as a more accessible open space. We heard from many people at the open house that recreation use should be encouraged for walking, quiet contemplation, running, tai chi and even dog walking. (We hasten to add that off leash dog walking is not proposed in this report.)

The following diagram shows the parks in the neighbourhood areas around the cemetery and the 400 metre walking distance to them. The importance of the cemetery to the open space and recreation opportunity spectrum in Maple Ridge is quite evident.



5 minute walking radii on parks in the cemetery area.



1



2



3



4



5

DEWDNEY TRUNK RD.

HOOD ST.

21st ST.

very poor visibility and signage at entry.

artistic entry gates provide effective threshold.

area bright and exposed

buffer to work shed required.

area would benefit from vertical definition

OFFICE

ROSE GARDEN

WORK SHED

CEMETERY No. 5

CEMETERY No. 1

CEMETERY No. 2

CEMETERY No. 4

CEMETERY No. 3

prime location for additional interment options.

stream setback

soil storage - potential problem regarding setback, not well organized

area likely too wet for interment

- POTENTIAL EXPANSION AREA
- UNDESIRABLE VIEWS
- POTENTIAL INFILL AREA
- POTENTIAL PLANTED AREA
- EXISTING FUTURE INTERMENT
- NON DESIGNATED INTERMENT
- RIPARIAN AREAS
- SOIL STORAGE
- EXISTING TREES & SHRUBS
- CEMETERY BOUNDARY

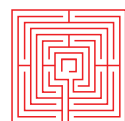
OPPORTUNITIES/ CONSTRAINTS

- Road infrastructure has degraded to the point of replacement.
- No designated parking exists on site.
- Variety of trees creates a park like setting
- Way/grave finding is difficult

area would benefit from vertical definition

unsightly shops /adjacent residential visible from this part of cemetery

shade in this area detracts from use



LEES + ASSOCIATES
Landscape Architects

Maple Ridge Cemetery-Opportunities/Constraints



Scale 1:40,000

Site Ecology

McKinney Creek, which runs along the south of the cemetery, is a fish-bearing tributary to the Alouette River. Regulations regarding ecological value and restricted development around water-courses will affect use of land adjacent to the Creek and hence the cemetery capacity. In light of this, the area where soil is currently being stored needs to be examined to ensure current practices and future possible interments are planned with these setbacks in mind.

Vegetation

The vegetation is largely what gives both of the cemeteries in Maple Ridge their distinctive feel. The Maple Ridge Cemetery is characterized by the maturing maple trees at the main cemetery, and an enclosed feeling created with evergreen plantings around the perimeter of the site. The Whonnock Cemetery's mossy groundplane and forested context add its quintessential rural cemetery ambience.



At the Maple Ridge Cemetery, trees help to frame views within the site and to add visual interest. Hedges and tree planting at the edges of the cemetery help to define the cemetery boundaries. The importance of the vegetation at the cemetery cannot be overstated and its care needs to be emphasized.

The following are the key findings based on our assessment:

- There is a large dead conifer tree outside the site office which needs to be removed.
- Remedial pruning of some trees is required;
- A new tree/ replacement tree program should be instituted and formalized in annual capital budgets.
- Shrubs and hedges should be managed with views in mind as well as to create an appropriate sense of enclosure;
- When entering the Maple Ridge Cemetery the two mature maples create a distinctive 'gateway' feel as visitors walk beneath their canopies;
- Hardy shrubs, grasses and perennials – ideally those native to the Maple Ridge area – should be planted where practical.



Opportunities and Constraints

The aerial photograph on the pull-out page depicts the physical boundaries, cemetery layout, amenities of the site and the land uses of adjacent properties. Areas shown in black highlight empty burial plots, i.e., the remaining cemetery capacity. The aesthetic of both the Maple Ridge Cemetery and the Lee Cemetery in Whonnock are of “secret gardens.” The perimeter of native vegetation combined with more exotic trees at the Maple Ridge Cemetery give the site a distinct horticultural character – opportunities that need to be exploited.

Located in the middle of a built-up area, the cemetery is an oasis of calm and peace. In terms of design of the space, the “secret garden” feel should be emphasized as a place where one feels as though they have just discovered it.

On the whole, the cemetery has the makings of a beautiful place of interment and memory. Ongoing enhancement of the visual amenities on the site will help to ensure this potential.

Lot layouts are generally efficient. Some roads have been in-filled with burial lots leaving very little walkway space or potential for additional in-fill. Other walkways are wider than they need to be and could be used for a limited range of cremated remains interment options.

Opportunities include:

- Maintaining the buffering of views and sounds of the Lougheed Highway through planting along the south boundary of the site.
- Buffering the residential and other land uses which are adjacent to the site, particularly in the south-west corner of the site, with a planting program.
- Creating more communal amenity areas, such as plazas or fountains, for communal grieving. These would become visual amenities.
- Screening the operations shed and proposed parking area;
- Enhancing the entry experience through a re-design and re-development of the entry signage and planting.
- Creating more interesting places in the current burial and cremation plot areas.
- Strengthen the presence of the cemetery sign at the intersection of 214th - and Dewdney Trunk.
- Framing of selected views outside of the cemetery – at present there are few.
- Integrating future expansion northwards with the existing developed portion of the cemetery.



One of the site's key constraints is that there is only one entrance and exit. This inhibits access to the cemetery, community visibility and possible links to the surrounding community. It also limits options as funeral entourages enter and leave the cemetery. The site would benefit from more frontage on Dewdney Trunk Road. This would address security issues such as theft and vandalism by creating better visibility. More exposure would certainly encourage passive recreation and would make finding the site easier for out of town visitors and members of the funeral entourage.

Another key constraint is the extent to which the burial area to the west is so poorly drained. In the winter time there is often standing water in this part of the site and pumps need to be used to drain the graves prior to burial. Poor drainage in this area has effectively reduced the remaining cemetery grave capacity by around 100 - from 471 to roughly 360 lots.



Chapter 3: Interment Options and Services

The current services offered at the Cemetery are limited to a small range of casket burial and cremation lots, as well as a scattering garden. The lot layouts and choice of locations are limited. Columbaria, ossuaries, family vessels and other services offered by both the public and private sector are not available in the District's cemeteries.



The current ethnic diversity of the District is not reflected in the cemetery system, although there are Asian and Japanese grave markers, most of these are from previous generations. It is difficult to determine if this is the result of the limited range of interment and memorialization options. Asian families in particular appreciate upright grave markers – an option not presently available in Maple Ridge.

Community input, including interviews with funeral home service providers was clear: an enhanced program of services is long overdue at Maple Ridge Cemetery.

This chapter examines the traditional (in-ground) and cremated remains interment options which are currently available and those that could be considered as possible options in the future at Maple Ridge Cemetery.

Interment Options: In-Ground Burials

Options for those families that prefer full depth traditional in-ground burial in the District's cemetery system are limited compared to other private and public cemeteries in Western Canada. The range has not changed significantly over the last many years and needs to broaden in order to both meet the needs of the community and to compete with other cemeteries.

At the present time, only traditional, single depth, in-ground burial graves are available for those that choose to be buried in a casket.

Key findings of the assessment of in-ground burial options and services include:

- Physical conditions are poor in the remaining interment area. The ground is extremely wet and requires pumping out of water in the winter months. This

reduces the available number of interment lots and also affects the funeral experience when there is standing water on and near the grave sites.

- Limited traditional burial options hamper the extent to which the cemetery can serve Maple Ridge residents.
- The limited options constrain the ability for the cemetery services to attain financial self sufficiency.

An increased range of in-ground burial options should incorporate the following options:

- Double depth burials (one grave over-deepened with another casket interred on top of the first);
- Outdoor mausolea (above ground crypts for interment of remains in caskets);
- Indoor mausolea (indoor crypts for interment of remains in caskets);
- Green burial (in-ground burial, typically without embalming, nor with any metal casket parts)

Allow double depth graves

The single depth policy compromises the ability of the District to optimize the opportunity for more people to be buried there. It also compromises the ability of family members to be buried together. While this policy cannot be started in existing burial areas due to concern of sidewalls caving in, it should be explored for new areas of the cemetery, where plots can be laid out using slightly wider grave dimensions.

Mausolea

Of those that choose casket burial, a small percentage wish to be buried in above ground crypts called mausolea. These can be stand alone structures designed for one family or larger buildings where the mausolea are indoors. In the latter case, they typically include glass fronted niches for interment of cremated remains as well. This type of interment is the most expensive and has the highest net revenue potential. Mausolea can be effective structures for separating uses in a cemetery, providing walls and giving structure to a cemetery space.



Family mausolea (6-8 families) at COLMA Cemetery in California.



Family mausolea (6-8 families) at COLMA Cemetery in California.



Family mausolea (6-8 families) at COLMA Cemetery in California.

Green Burial

Green burial is a relatively new burial option. To suggest it is a trend at this point is a stretch; however, within a year there will be a green burial area in at least one cemetery in a prominent BC community, with several others close behind. Green burials are interments that occur without embalming the decedent, interment in a simple wood casket without metals or refined materials, or in a shroud. Green burial areas will have more trees planted on or near the grave and with discrete memorials, if any. Alternatively, a memorial wall could be located near to the green burial site. Input from some residents indicated that a Green Burial site would be well received. At the present time the District does not offer green burial services or areas where this can occur.

One of the components of a green burial site- as envisioned by some practitioners –is the ability to re-use a grave after a certain period of time. Usually, in this climate and with the soils such as those found in Maple Ridge, there will be little or no remains evident after 20 years. Re-use of the grave for another interment is an effective way to keep using the ground, thereby taking advantage of the microbial cycle. This implies a fixed time for the right of interment. The present Provincial act requires a right of interment in perpetuity. In other words, it may be awhile before a fixed term of interment is allowed and for re-use of graves to be a common offering at cemeteries, even though this is the practice in Europe and most other parts of the world except North America.

Interment Options: Cremated Remains

Options for interring cremated remains in the District's cemetery system are limited compared to other private and public cemeteries in Western Canada. The range has not changed significantly for many years and needs to broaden in order to meet the needs of the community and to compete with other cemeteries.

At the present time, the following cremated remains interment options are available at the Maple Ridge Cemetery:

- Interment of cremated remains in the ground, single depth;
- Interment of cremated remains in the same place as a burial plots (max. 4 per plot);
- Scattering of cremated remains in the Rose Garden.

Service Type	Currently Offered
Cremated Remains Burial	
Cremation borders	Yes
Outdoor Columbaria	No
Indoor columbaria	No
Ossuary	No
Scattering Garden	Yes
Living Memorials	No
Garden/family urn	No
Green cremation plots	No

Key findings of the assessment of cremated remains interment options and services include:

- Cremation lots are very closely laid out with no amenities, communal commemoration, walkways or landscaped areas.
- There is no cremation “garden” that includes a range of options within defined, landscaped areas.
- The Rose Garden is a very popular area of the Cemetery and is nearing capacity. There are currently 87 of the 144 new spaces left. There is demand to expand it or to create a new one for future needs.
- The design, layout and creation of places of interment for cremated remains warrants more resources.



Cremated remains interment in No. 2 Cremations area.

An increased range of cremated remains interment options should incorporate the following:

- Columbaria (above ground structures that include niches that accommodate one or more urns that contain the cremated remains of a decedent);
- Several types of community columbaria (individual, family, community in single or double niches);
- Double depth cremated remains for in-ground interment;
- Community and family scattering gardens with memorial walls and other forms of commemoration;
- Cremation borders (in-ground interment of cremated remains);
- Community vessels (large, 2' diameter urns) for interment of cremated remains in individual urns or co-mingled cremated remains;
- Family vessels, as above, but for members of the same family;
- Ossuaries (above or below ground large vessels for co-mingling cremated remains);
- Glass front niches, typically indoor, as part of an indoor mausoleum.

Columbaria

The provision of columbaria for cremated remains is long overdue at Maple Ridge Cemetery. The funeral service providers emphasized a latent demand identified over the last several year with their customers. In addition to meeting the needs of the community, columbaria are a good solution where space constraints exist such as at the Maple Ridge Cemetery. They allow for infill within the existing site and reduce the need to expand. A range of “off the shelf” and custom columbaria are available from local suppliers and others across Western Canada.



Newly installed formal columbaria at Mountain View Cemetery, Vancouver



Informal columbaria at Capilano View Cemetery, North Vancouver



Smaller columbaria at Mountain View Cemetery, Vancouver



Repeated column columbaria at Mountain View Cemetery, Vancouver

Rose Garden

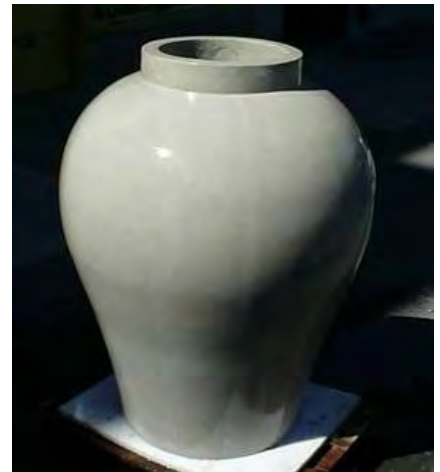
The rose garden is a well-loved part of the cemetery where families have been scattering cremated remains for some time. It was recently expanded to accommodate 144 new spaces – currently only 87 of those spaces remain. Consideration of expansion to either side of the rose garden, or in a new cremation garden in the triangular south-east portion of the site, for this type of service should be explored. Procedures need to be brought forward that enhance the capacity of the scattering gardens to accommodate as many decedent's remains as is aesthetically reasonable.



Sketch of a Scattering Garden

Family Urns

Family urns, as have recently been provided at Mountain View Cemetery in Vancouver, allow for multiple cremated remains to be interred in one above-ground vessel. Research undertaken by the Mustel Group, on behalf of several BC communities, indicates that family vessels rank only just behind columbaria as a desired form of interment. Like columbaria, they also allow for higher density within the existing cemetery site and can be located in relatively narrow areas where columbaria may not be an appropriate fit either aesthetically or for access reasons.



Family Urn

Interment Options: Memorialization

At the present time, the following memorialization options are available at the Maple Ridge Cemetery:

- Memorialization on flat/ at-grade markers,
- Memorialization on a wall at the Rose Garden,
- Memorial benches.

Key findings of the assessment of memorialization options and services include:

- The aesthetic of the few memorial benches which are provided do not fit with the heritage nature of the site.
- Flat/ at-grade markers do not meet the needs of many in the community that want a more elegant monument and a greater tableau upon which to inscribe an epitaph.

An increased range of memorialization options should incorporate the following:

- Different types of flat and upright markers,
- Memorialization walls,
- Brass and stone plaques,
- Community memorial stones,
- Living Memorials.



Rose Garden Memorial Walls

Living Memorials

Living memorials are memorial trees, shrubs or gardens planted at the time of interment of the casket or cremated remains. In some instances they are not associated with the actual interment and are entirely a memorial gesture, in which case the planting of the tree or other plant occurs at the time of memorialization. Living memorials are an increasingly popular form of memorialization, a central component of the green burial movement, and are often requested for lands outside of cemeteries. This trend has led to the management of memorial sites (sometimes even with non-authorized spreading of cremated remains) in parks, golf courses and other public lands. Living memorials are fitting ways to accommodate the need for memorialization in cemeteries, enhance the biodiversity and aesthetic interest of the cemetery, and utilize lands that may not be useable for interment purposes.

Key Findings

The District's cemetery does not offer an adequate range of interment services in order to meet the needs of residents and site space constraints. Many additions, alternatives and improvements to the present interment services are available and should be actively considered through the in-fill and cemetery expansion processes. Future land needs and the services that will be provided by the cemetery need to be discussed at the same time as the financial viability of the cemetery. The concluding chapter to this report describes this need in further detail.

Chapter 4: Infrastructure and Amenities

Cemetery infrastructure consists of the visible and invisible structures that result in the efficient circulation of funeral entourages and other site visitors as well as meeting the practical needs for security, stormwater drainage and turf health. Infrastructure includes roads, pathways, fencing, lighting, electrical systems, signage, refuse containers, drainage and irrigation. Cemetery amenities include the benches, flower taps, portable coverings, funeral accoutrements and other features that add to the comfort and use of the site. In order for a cemetery system to be sustainable, the infrastructure and amenities need to be well planned, managed and maintained. This chapter addresses infrastructure and amenities that will, over the short and long term, meet the desired levels of service, efficiency and aesthetic criteria.

The table below includes major elements of the Maple Ridge Cemetery, along with some that are typical in similar cemeteries:

	YES	NO	COMMENT
Facility	Yes	No	Comment
Administration Building	X		Does not include a formal customer service area
Maintenance Shop	X		Well organized and adequately sized
Parking		X	limited parking at entrance
Potable Water	X		
Power	X		
Sewer	X		recent septic tank installation
Washrooms	X		were updated a few years ago
Bus Route Access	X		on Dewdney Trunk Road

A cemetery office is on site, as well as an equipment shed. These buildings are in reasonable condition although they do not include a formal customer service area, which limits the way in which and ease with which customers can find information and make decisions about burial at the cemetery. There is a bathroom in the cemetery office which was upgraded recently to an acceptable standard for public use, however, it is only open when staff are in the office.

There are no designated parking areas at the Maple Ridge Cemetery. During services, people park along the internal roads. Since graves are only two feet off the road, this creates issues with driving over markers and sometimes over graves. There are no curbs on the roads which can lead to turf damage as cars negotiate the tight radius corners. Some of the perimeter internal roads are gravel, not paved and become pot holed and poorly drained in the winter months.

Fencing along the perimeter of the cemetery is utilitarian and although it fulfills the need of blocking unwanted access, it lends an institutional quality to the space. Existing benches on site are not aesthetically pleasing and do not add to the elegance of the site.

Tents are not available to protect families during services when the weather is inclement. Chairs are also not available for services and sometimes the Funeral Director will provide chairs from their funeral home when they have a large entourage or several elderly family members they wish to accommodate.



Existing benches are not aesthetically pleasing

Signage

On and off site signage is crucial at this cemetery because the site visibility is poor and access off Dewdney Trunk Road is difficult to see, especially when approaching from the west. There is a good interpretive sign at the entrance which speaks of the history of the site, but additional internal wayfinding would help visitors "self guide" to graves and points of interest if they so desired. In general, patrons to a cemetery should be able to find graves without difficulty and without guidance from staff. Existing directional signage is not sufficient to allow for self-directed wayfinding or for funeral entourages. Wayfinding is by section marker spray-painted on the asphalt walkways. Although this is cost effective there are alternatives that would enhance the heritage quality of the site.



Wayfinding- Typical Section Marker

Signage in the cemetery should be improved. When there is proper street frontage on Dewdney, a large formal sign should be incorporated into a stone wall. Additional interpretation of significant historic monuments should be explored. A program of wayfinding signage needs to be prepared.

Key requirements for an effective cemetery signage program which should be considered at the Maple Ridge Cemetery include the following:

- Signage specifically to assist with the funeral entourage and direction to recent graves;
- Section, block, plot and lot layout signs/maps available for self-directed grave finding;
- "Available graves" information, including how to contact staff, where and during what hours;
- Self guided interpretive maps and signs for significant monuments and graves;
- Consistency in text, colour, font and form of signs, and
- Positively worded regulatory signage.

Drainage

There is poor drainage on the south side of the site near to McKinney Creek. As previously mentioned, it is so wet that future gravesites will not be able to be dug in the eastern most parts of this section. Key findings include:

- Drainage be undertaken on an as-need basis, contingent on site verification of geo-technical conditions;
- Drainage of the south area be a key priority in the short term.

Level of Maintenance

The level of maintenance and the level of interment services is an important measure of service to the bereaved, families and members of the community that use the cemetery as a place for quiet contemplation or passive recreation.

One staff person is on site all year, with an additional staff member on site for six months to assist with grass cutting.

In general, equipment is in good shape. The Parks backhoe is used for opening, closing and other materials handling. This seems to be working well.

The Whonnock Cemetery has been maintained at a fairly low standard. This has been and will continue to be appropriate in the short term, but as the cemetery system matures and a greater sense of the historic and cultural importance of that site and the adjacent First Nation's burial ground emerges, a greater level of maintenance will be warranted. In the short term, increased care and maintenance of the maturing trees and shrubs should be undertaken.

Ornamentation has been one of the most difficult management issues at this cemetery, as it has been for almost every municipal cemetery in BC. During the time before and in the months after a funeral, the time honoured tradition of leaving a memento becomes part of the grieving process. This is not only understandable but needs to be accommodated wherever practical. Ongoing, additional ornamentation and semi-permanent or even permanent installations such as gardens, stone mulches, glass lanterns and other materials

can become a maintenance and safety issue. As well, if ornamentation is not managed within a defined set of criteria - that are supported across the organization - it tends to grow to a point where rectifying the issue can become a major issue that is both difficult for Council and Staff and families.



Ornamentation issue – No. 3 Childrens Area

Our overview assessment of the maintenance at the Maple Ridge Cemetery is that:

- The cemetery appears to be well cared for, well attended and in generally good condition.
- Grass is being cut in a timely manner and sunken graves are topped up and seeded promptly.
- Headstones are generally in satisfactory condition.
- Perimeter gates and fences are in generally good condition, although over the long term the perimeter edge should be addressed through alternates to chain link construction.
- Road systems are narrow and barely wide enough to accommodate hearses and the necessary movement of cars and people during funerals. Care should be taken to be sure the useable traveled parts of the roadways are not significantly narrowed.
- Some cracking of older pavement is evident. Ongoing cracksealing is required;
- Curbs are required, especially in the tightest radii corners to avoid asphalt erosion and damage to turf;
- Sight lines in and out of the cemetery need to be addressed to mitigate vandalism and control views from inside the site.
- Maintenance attention is required on the unpaved roadways to fix potholes and water hazards.
- Water could be made available at other locations than the office for watering of flowers.
- Tents for inclement weather as well as moveable chairs for services should be provided.
- Ornamentation needs to be addressed as a priority policy and management issue.



Erosion issues caused by cars driving over turf



Excess soil is placed south of the perimeter fence near to the creek

Chapter 5: Organizational Assessment

This chapter looks at customer service and records management aspects of the cemetery organization. Fees, charges, and policy changes are discussed in the business management chapter. Enhancement of the professional attitude toward management and marketing will be required as well as support for the cemetery services as a “business unit” within the realm of the District’s municipal services. Future land needs and the services that will be provided by the cemetery need to be discussed within the context of a business case philosophy.

Customer Service

The customer service at the cemetery needs to be addressed. While the present site staff member is very helpful in addressing issues and concerns, there is no staff member on site who deals solely with the public and the funeral side of the cemetery. As it stands, when someone arrives at the cemetery looking for records or to locate a grave, they must find the field staff who are often out working on maintenance of the site. This can disrupt their workflow and creates a “stall” in the customer service cycle. Communication between the funeral service providers and the site should be reviewed to ensure that funeral service provider’s needs are being met. They require easy access to the person on site for making the necessary arrangement and for dealing with any “last minute” issues prior to the funeral entourage arriving at the cemetery from the funeral home.

On-site grave finding services have been requested in community consultations and with the funeral directors. As mentioned previously this needs to be part of a renewed signage program. It should also be integrated in to the criteria for the implementation of a computerized cemetery records management program.

Visitor Centre

In terms of customer service, we heard feedback that a visitor centre on site would enhance customer service. A review of the customer service cycle, including the possibility of serving cemetery and potentially other customers at the cemetery is needed. In the long term, a customer service building should be considered.

Record Keeping

The computer program in which records are kept is out-dated, with card copies filed on an impressive rolodex system. A detailed procedure is in place for capturing decedent and customer service information at the time of the plot sale. A typewriter is used to type the information onto cards. There is no computer on site. Although this system has worked, it does not meet industry standard, is cumbersome and is vulnerable to theft and fire.

Given the antiquated nature of the record keeping, opportunities for mistakes in locating graves, directing customers to graves and in recording the precise location of graves as per industry best practices increases. Both the cemetery field office records and those kept at City Hall should be on the same system to ensure accuracy, appropriate redundancy and adherence to records management protocols. Currently, multiple users cannot access the program at the same time. There are key functionality issues that need to be addressed in order to meet best practices in the industry.



Site Office

The old records management system should be replaced with a purpose-built commercial cemetery records management program.

Quality control and assurance of the records needs to be done on cemetery records to ensure that they are up-to-date and accurate. With a quality control/assurance program in place and a modernized cemetery records program implemented, answering questions from family members regarding existing graves will be a much more straight-forward task.

The current map of the cemetery is not accurate. In the field, as lots are used, a small amount of space on each side is consumed but that land is not reflected on the map. This results in half-size lots at the edges of plots. An accurate cemetery lot layout map is needed and should be updated using current database and mapping technology.

Cemetery Bylaw

An overview of the cemetery bylaw has been undertaken as part of this project. The Maple Ridge Cemetery Bylaw No. 5784-1999 lays out definitions, policies and requirements for all the different aspects of cemetery management and operations.

A particular issue of concern which the bylaw addresses is ornamentation of graves. The bylaw states that no individual grave space can be defined by a fence, hedge, railing or curb, and that no memorial other than a tablet type memorial, level with grade, as specified in the bylaw can be installed on a grave. Additionally, no individual can landscape an individual grave site or alter the existing planted landscape in any way. Yet, despite this language in the bylaw, ornamentation continues. This exemplifies the need to, on the one hand, address the issue in the bylaw and secondly, deal with it as a management priority.

Provincial legislation permits municipal cemeteries to offer services that include the selling of monuments, urns, caskets, flowers and the provision of cremation and funeral home facilities. These items are also not currently provided by the District.

These are just several examples of changes that need to be addressed in the bylaw. A detailed list of bylaw changes has been generated in consultation with Staff. These need to be incorporated in a major bylaw revision, brought to Council and the Municipal Solicitor for review and taken to the public for comment. A detailed listing of the changes is included in Recommendation #23.

Chapter 6: Land Needs Assessment

Additional cemetery lands will be required in order to meet near and long term requirements in Maple Ridge. The previous sections of this report detailed the primary demographic factors that will necessitate these additional land requirements. This chapter looks at how much land will be required to meet the projected number of decedents that will be interred in the cemetery. Additional infrastructure, buffering and amenity land needs are also part of this assessment.

Existing Capacity

The following table shows the remaining designated plots within the system. Occupied plots are those that have been sold and have a casket buried in them. Reserved plots have been sold but have not yet accommodated an interment. Empty plots are grave spaces that have not yet been sold.

Available Plot Interment Space- Maple Ridge Cemetery, 2007				
Section	Occupied	Reserved	Empty	Total
Maple Ridge				
Baby 1	78	0	3	81
Baby 2	138	0	0	138
Baby 3	101	0	55	156
Baby Total	317	0	58	375
Burial 1	861	12	9	882
Burial 2	1814	439	70	2323
Burial 3	3730	611	390	4731
Burial 4	540	34	2	576
Burial 5	382	55	0	437
Burial Total	7327	1151	471	8949
Cremation 1	893	216	9	1118
Cremation 2	489	370	1056	1915
Cremation Total	1382	586	1065	3033
Maple Ridge Total				12357
<i>**some of the burial shown as empty may not be available due to water concerns.</i>				
Whonnock				
Cemetery 1	239	23	62	324
Cremation 1	8	13	2	23
Cremation 2	0	5	21	26
Lutheran Burial	65	24	32	121
Whonnock Total	312	65	117	494

Source: District
of Maple Ridge

These do not include the undeveloped lands on the east of the Number 3 Children's Cemetery, nor do they include undeveloped land around the Rose Garden. From this table it is clear that space for interment will soon be depleted if current trends of interment continue.

Existing Grave Capacity in Cemetery (from District of Maple Ridge info.):

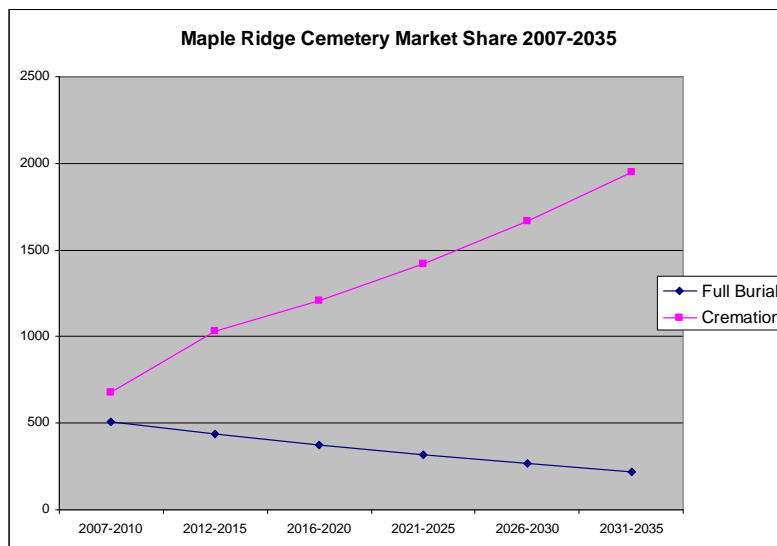
- Full Burial 471
- Children 58
- Cremation 1065

This information leads to the following key findings:

- By 2014 the designated in-ground inventory of burial lots will be exhausted. There are currently 471 spots remaining. However, due to drainage issues as many as 100 plots will likely not be useable which means that the cemetery will be at capacity by 2012.
- By 2012 the designated interred cremated remains lots will be full.

Projected Land Requirements

The following graph shows the number of full burials and cremated remains interments that are projected over the next 28 years at Maple Ridge Cemetery.



Source: LEES + Associates

The graph shows that required land for interment will continue to grow each year. Looking at five year increments, just over 1000 people will be interred during the years 2011 to 2015. By 2031 to 2035, nearly double that, or 2000 people, will be interred.

In calculations for determining the amount of land which will be required to accommodate future burials and interment of cremated remains, several factors must be taken into consideration:

- Size of full depth burial plots
- Size of interred cremated remains plots
- Amenity space
- Access/Service Roads
- Buffer space between plots

Burial Lot Yields at Maple Ridge Cemetery

The cemetery "yield" is the number of graves per hectare a particular cemetery provides. It is a function of the layout of graves, areas set aside for trees, roads, buffers and amenities such as benches, fountains etc.

The following table shows area takeoffs for each Cemetery Area with area of graves, roads and buffer space broken out:

Maple Ridge Cemetery Area Takeoffs							
	Total Area (sq.m)	Grave Area (sq.m)	Grave %	Road Area (sq.m)	Road %	Buffer Area (sq.m)	Buffer %
Cem. 1	5903	3775	64%	1993	34%	134	2%
Cem. 2	13884	10333	74%	2913	21%	638	5%
Cem. 3	29654	18746	63%	2396	8%	8512	29%
Cem. 4	2287	1630	71%	479	21%	178	8%
Cem. 5	3514	996	28%	1528	43%	990	28%
Total Full Burial	55242	35480	64%	9310	17%	10453	19%
Children's Area 1	266	89	33%	176	66%	1	0%
Children's Area 3	2482	140	6%	186	7%	2156	87%
Total Childrens	2748	229	8%	362	13%	2157	79%
Cremation 1	2846	417	15%	380	13%	2049	72%
Cremation 2	1611	723	45%	760	47%	128	8%
Total Cremation	4457	1139	26%	1140	26%	2177	49%

Source: LEES + Associates

The following 'Cemetery Yield' numbers show an average number for the entire Maple Ridge Cemetery, followed by examples of typical burial and cremation areas:

Existing Cemetery Yield

- Overall cemetery yield: 632 in ground graves/acre (1605/ha)
- Yield of burial area #3: 725 in ground graves/acre (1842/ha)
- Yield of the cremation area #2: 2722 in ground cremation graves/acre (6915/ha)

The table below shows the gross plot size for both burial and interred cremated remains which were used in calculations to determine future land requirements. These calculations include provisions for infrastructure to service the plots, taking the larger site needs and including them in each plot size calculation. As mentioned in the amenity and infrastructure text in previous chapters, the Maple Ridge Cemetery is generally low on the amount of

amenity space (includes seating areas, fountains, etc.), access/ service roads and paths, and buffer space (includes plantings). Taking this into account, the amenity, roads and buffer space numbers have been increased in order to include desired proportions of layout into the projected land needs calculations.

Land Calculation Figures

Full Burial	
Net plot size (m ²) (2.5m x 1.25m)	3.13
Gross plot size (m ²)	--
Amenity Space @ 27%	0.84
Access/Service Roads and Paths @ 40%	1.25
Buffer Space @ 25%	0.78
Total	6.00
Cremation	
Net plot size (m ²) (.61m x .91m)	0.56
Gross plot size (m ²)	--
Amenity Space @ 27%	0.15
Access/Service Roads @ 40%	0.22
Buffer Space @ 25%	0.14
Total	1.08

Source: LEES + Associates

The key finding in the table is that a total of 6m² is required in calculations for required land for full burial, while 1m² is required for cremated remains interment.

In the table below, current burial and cremation rates are projected over thirty years in order to determine how many people will be buried and how many will be cremated. This table takes into account market share numbers, which are numbers of deaths reported in the District of Maple Ridge as a ratio of the numbers of interments in Maple Ridge Cemetery. The historical average (1996-2006) of market share was applied forward through 2035.

The following table summarizes land requirements, broken down by five year increments. The table begins at the year 2012 because it has already been determined that there is enough designated interment space remaining in the cemetery to carry through until that year. This table uses the 6m² per grave and 1m² per cremated remains lot to calculate the lands needed for the future.

Year	2012-2015	2016-2020	2021-2025	2026-2030	2031-2035	Cumulative
Full Burial (m ²)	1007	2225	2225	2616	3065	10814
Cremation (m ²)	689	1300	1523	1791	2098	7402
Total (m ²)	1697	3526	3749	4407	5163	18216
Total (ha)	0.17	0.35	0.37	0.44	0.52	1.82
Total (Acres)	0.4	0.9	0.9	1.1	1.3	4.5
Cumulative acres	0.4	1.3	2.2	3.3	4.5	

Source: LEES + Associates

The key findings in the table on the previous page are that in the next thirty years, nearly 2 ha (nearly 5 acres) of land is required to meet the needs of residents in Maple Ridge.

Key Findings

There will be a projected 28,700 deaths in Maple Ridge by the year 2035. Of these, 2600 of the decedents will be buried and 26,100 will be cremated. With the market share of burials at 81%, 2000 decedents will be buried in the Maple Ridge Cemetery. With the market share of cremations at 30%, 7550 will have their remains interred in the Cemetery. Therefore, nearly 10,000 residents will be interred in the Maple Ridge Cemetery by the year 2035.

The District has only four years supply of developed cemetery land for cremation and full burial. By 2035, based on the demographics, analyses of the disposition and interment patterns and utilizing the current plot layout, it is estimated that the District of Maple Ridge will need an approximate total of nearly two hectares (nearly five acres) of land designated for cemetery purposes.

It should be emphasized that given the much higher land consumption associated with full depth burial as compared to cremation, that lands for traditional burial are the primary “driver” for cemetery land needs, especially in the short term. Depending on the outcome of the following recommendations, the need for new lands may be extended by a relatively short period past 2012.

Chapter 7:

Recommendations

A summary of key findings in this report: By the year 2035, there will be an estimated 28,700 deaths in Maple Ridge. Calculations of the market share captured in the Maple Ridge Cemetery show there will be an estimated 2000 traditional burials and 7550 cremated remains interred in the cemetery. There are currently 370 empty useable burial lots and 1065 empty cremation lots. With limited designated interment space remaining in the cemetery, by the year 2012 those remaining cremation and burial lots will be full. By the year 2025 the cemetery will require 0.37 hectares (2.22 acres) of land, and by the year 2035 a total of 2 hectares (5 acres) will be required to meet projected interment needs.

In addition to future land needs recommendations including infill and acquisition, this section of the report makes a series of recommendations for provision of interment services, improvements to infrastructure and to the organizational systems of the cemetery. Recommendations are broken into 3 categories:

- Meeting Future Land Needs
- Infrastructure and Amenities
- Organizational

Recommendations specific to business planning, including priorities and an implementation matrix conclude this report.

Meeting Future Land Needs

There are several short and long term strategies that would meet the District's cemetery land needs. These include:

- In-fill of existing cemetery roads and pathways;
- Acquisition of new lands;
- Altering some bylaws which restrict certain types of interment (eg. double depth burial and cremation – these are included in the 'Organizational Recommendations' at the end of this chapter).

Infill at the Maple Ridge Cemetery

Over the course of the evolution of the cemetery, the in-fill of redundant paths and roads has been an effective way to extend the capacity of the cemetery. These options are now

DEWDNEY TRUNK RD.

LAITY ST.

HOOD ST.

21st ST.

RECOMMENDATIONS FOR EXPANSION AREA

- Existing house on site to be retained as on-site Administrative/Visitor's Centre.
- Variety of interment options.
- Amenity space for sitting/communal gathering (eg. fountains etc.)
- Allocate space for designated parking lot

improve signage and visibility.

proposed planting to screen equipment shed.

shade trees to be planted

small flowering trees to be planted

EQUIPMENT SHED

ROSE GARDEN

OFFICE

CEMETERY No. 5

CEMETERY No. 2

CEMETERY No. 1

CEMETERY No. 4

-No. 3 CHILDRENS

CEMETERY No. 3

No. 1 CREMATIONS

No. 2 CREMATIONS

proposed planted buffer to screen unsightly shops /adjacent residential

prune and replace trees in this area to allow light but still buffer adjacent road and uses.

proposed cremation and mausoleum garden area

enhance children's area with seating

manage buffer to enhance biodiversity

organize soil storage

explore drainage options to maximize grave yield and create seating.

ADDITIONAL RECOMMENDATIONS

- Overall planting plan required that adds to park like nature of the site.
- Roads and pathways to be improved/graded. Attention to curves and corners, surface replacement, pervious pavement ,

LEGEND

- CEMETERY BOUNDARY
- EXPANSION AREA
- OFFICE PARKING
- LINEAR INFILL (eg. columbaria, ossuary family vessels)
- PLANTING
- CREMATION GARDEN (columbaria and cremation border)
- CREMATION, MAUSOLEUM AND BURIAL
- BUFFER PLANTING
- FAMILY VESSELS
- ORGANIZE SOIL STORAGE
- DRAINAGE CONCERNS

much more restricted, but there are still areas where in-fill is a desirable option – especially for the interment of cremated remains. When examining infill possibilities within the site, the two types of interment will be considered separately – traditional in-ground burial and the interment of cremated remains.

Traditional Burial Infill

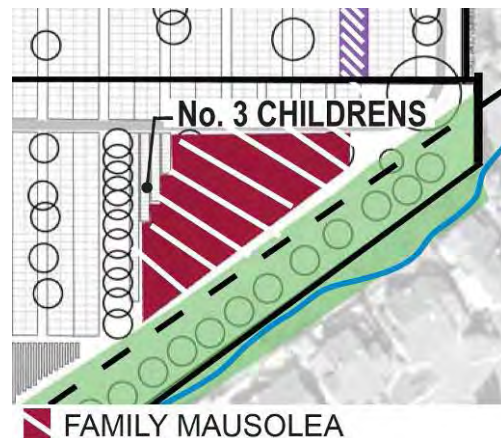
The future needs of traditional burial are the primary concern and driver of land needs in the near future. As mentioned, projected numbers of in-ground burials will fill the remaining empty lots by 2012. However, if the cemetery were to address drainage concerns, the length of time that the existing cemetery could accommodate in-ground burial could be extended by about 2 years.

☐ **Recommendation # 1: Improve Drainage to Extend Capacity**

Improve drainage to optimize grave yield. A geo-technical engineer with experience in surface water drainage issues should be commissioned to review the present conditions and bring forward recommendations for improving both the surface and sub-surface drainage issues in the south-central part of the cemetery.

☐ **Recommendation # 2: Install Family and/or Community Mausolea**

Install two or three outdoor mausolea in the south-east corner of the cemetery. These should be small (6 – 8 casket) garden mausolea that could accommodate one family or be available for individuals in the community.

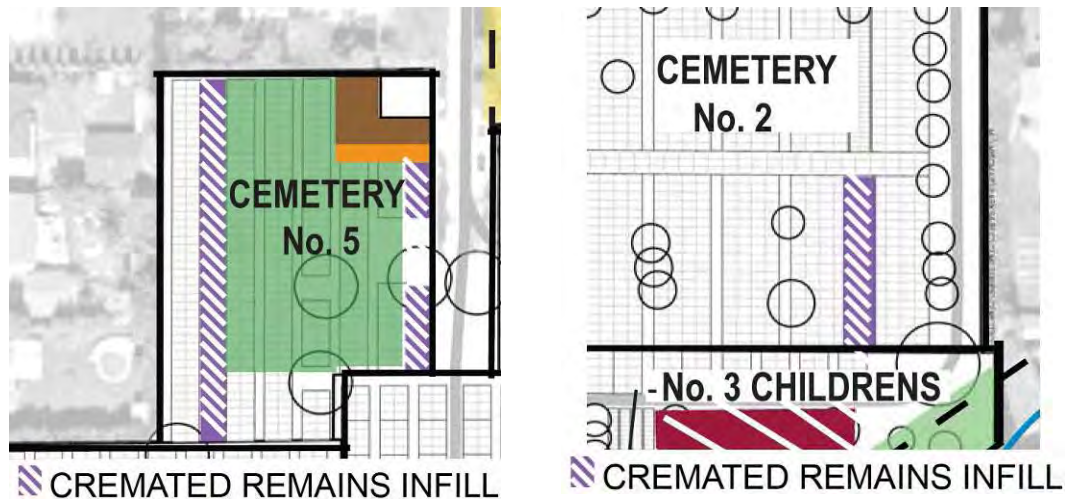


Cremated Remains Infill

While designated cremation lots will be full by the year 2012, there is less concern for meeting future demand because there are potential infill areas in the cemetery. The attached Recommendations Plan includes several areas that have potential for linear cremated remains options, such as columbaria and family vessels.

☐ **Recommendation # 3: Infill Existing Site with linear cremation elements**

Columbaria should be installed within the existing site to allow for vertical infill, where space between existing graves is greater than 8'-0". Where space is less than 8'-0", but greater than 6'-0", family vessels and ossuary should be installed.



- **Columbaria**
Columbaria can be installed within the existing site to allow for vertical infill. This would give vertical definition to the cemetery, which is mostly at-grade. We recommend that columbaria be installed immediately in the cemetery to meet the anticipated latent and future demand. These should be installed in the locations identified on the Recommended Site Plan.
- **Family Vessels**
These are ideal interment options in areas where space is too limited for a cremation border or columbaria. They should be offered as both family and community vessels.
- **Ossuary**
This is typically the most affordable interment option for cremated remains and is also very space efficient where there is little horizontal space.

□ Recommendation # 4: Create a Cremation Garden in the Triangular Area at the south of the Site.

This area is well defined by the south boundary of the cemetery, existing roads and plantings and as such has the character of an outdoor room within the cemetery. It is an ideal location to bring forward several different interment options for cremated remains. It is the same area shown above for installation of family mausolea.

The Cremation Garden should consist of the following:

- **Columbaria and Family Vessels**
These are the most distinct architectural elements in a cremation garden. They should be accessible from all sides, have ample circulation space around them and should be used to create structure and focal points to the garden.
- **Ossuary**
Several ossuary could be planned and one installed within the first phase of the Cremation Garden.
- **Create Another Scattering Garden**
The existing Rose Garden was extremely popular and is nearly full. A similar interment option should be implemented in the new cremation garden, but given the shade and cost of maintaining roses, it is recommended that plants be chosen from more of a woodland palette. The interment of cremated remains in the scattering garden should allow for the scattering of a small amount of the cremated remains, if the family wishes, with the remaining remains interred 10 – 14 inches below a mulch layer in direct contact with the soil. Several forms of memorial options should be available for those that choose to use the new rose garden for scattering, including inscriptions on a stone wall, bronze plaques grouped in no more than 24 – 36 names also on stone walls and digital memory devices as technology becomes available. Etched inscriptions, bronze plaques mounted on wood bases and many plaques grouped together should be avoided.
- **Cremation Borders**
Cremation borders are in-ground interment of cremated remains, whether in a linear 'border' element or in a large expanse as are in the No. 2 Cremations area at Maple Ridge Cemetery. This option allows for a larger plaque, and, if the family wishes, interment of the cremated remains in a small vault. (This allows for portability if the family wants to relocate the remains in the future.) Cremation borders should be incorporated in to the cremation garden but they should not be any greater than 2 cremation lots "deep" in order to facilitate visitation of the sites without stepping on other's memorial plaques, and in order to avoid a sea of small plaques that are costly to mow around and make grave finding difficult.

Acquire Land for Expansion

The cemetery land needs assessment identified the need for nearly 2 hectares of cemetery land in order to meet the needs of population and death projections to the year 2035. The implementation of immediate, mid and long term development and management recommendations is required. Criteria for cemetery lands acquisition need to be applied to

current and future potential sites as an ongoing matter of cemetery management and planning.

Cemetery Lands Criteria

Given the growth in the community and the increasing cost of acquiring property, the acquisition of new lands should be a priority. Through the course of this project, our team has reviewed the anticipated growth patterns, and the long term demographic changes expected in Maple Ridge and has discussed the existing and future cemetery lands locations with staff and members of the funeral home industry. These consultations have informed our recommendations for future land needs and locations.

Cemetery lands should:

- Accommodate most of the short/medium term cemetery needs in one location;
- Be located in an attractive, setting and one that can be designed and built to create a meaningful place of remembrance;
- Be situated on stable, free draining soils;
- Be readily accessible;
- Not be a detriment to the neighbourhood.

Short Term Land Acquisition Needs

□ Recommendation # 5: Acquire lands to the north of the cemetery

The adjacent four properties which are located north of the cemetery are ideal for acquisition to expand the cemetery. They fulfill many requirements, including:

- Cemetery space requirements through 2028.
- Enable sightlines into the cemetery which would increase safety and reduce vandalism with frontage on Dewdney Trunk Rd.
- Keeps all cemetery operations in one area, thus keeping operating costs down.
- Existing house on site could be retained as on-site administration/ Customer Service Centre and park area.
- Provide space for a variety of interment options.
- Provide space for site amenities, funeral services space (eg. fountains etc.).
- Frontage on a major street would enhance the marketability of the services and encourage passive recreation.
- Provide space for increased parking.

Size of Lands

- Total size of four properties north of cemetery: **10240 (m²)/ 1.02 ha (2.53 acres)**

The following recommendations (# 6 - # 14) should be considered as/ when expansion lands are planned, designed and implemented for the area immediately north of the existing site:

- ☐ **Recommendation # 6: Allow double depth graves**
Allow double depth graves in expansion areas in order to optimize capacity. This means the first interment has to be at the "over deepened" depth. The lands north of the existing cemetery are better drained and would include supplemental drainage in order to avoid problems such as those now present at the southern edge of the cemetery.
- ☐ **Recommendation # 7: Build Mausolea on the Lands North of the Cemetery**
Indoor and outdoor mausolea should be part of the range of interment options for the lands north of the existing cemetery site. Indoor mausolea typically include glass front columbaria niches as well as casket crypts. This would not only enhance customer service, but would also enhance the capacity for the Maple Ridge Cemetery services to increased net revenue. A mausolea business case analysis, including market survey should be undertaken in conjunction with the master planning for the expansion area.
- ☐ **Recommendation # 8: Designate Green Burial Area(s)**
The District should explore the market interest in "Green Burial" through surveys and introduction of green burial options within the range of services available within this expansion area. Accommodation for approximately 100 green burial graves should be incorporated in to the plan for this area. This new service option should be implemented as part of an overall strategy to enhance the environmental sustainability of the cemetery system.

Cremated Remains

- ☐ **Recommendation # 9: Create Cremation Gardens**
Cremation gardens should be the primary form of interment on the expansion lands. The components of the cremation garden should be similar to those shown for the Woodland Cremation Garden, but should be designed to meet the more urban condition found nearer to the Dewdney Trunk Road. This area would contain a variety of interment options include columbaria, cremation borders, family vessels, ossuary and scattering gardens.
- ☐ **Recommendation # 10: Allow double depth cremated remains**
Use double depth graves in a newly created area of the cemetery where plots can be laid out with sizes capable of accommodating two markers. Similar to the double depth graves above, this could occur on newly acquired land to the north of the cemetery fronting on Dewdney. This could also occur in 'Linear Cremation Infill' areas, in locations specified on the attached Recommendations Plan.

Memorialization

- ☐ **Recommendation # 11: Allow ornamentation in designated areas of the site**
Create an area of the cemetery that will allow a defined and acceptable level of ornamentation. Fees for this service should increase in order to offset the costs of the additional maintenance necessary to cut turf, trim, remove and manage ornamentation and undertake any horticultural tasks necessary to keep the area at an acceptable standard. Small (18" x 12") garden areas should be incorporated with the ability of families to choose upright markers if they wish.
- ☐ **Recommendation # 12: Allow vertical markers in designated areas of the site**
Create an area of the cemetery for upright markers. The size, material, base dimensions, method of installation and costs should be determined with staff, the funeral service industry and in compliance with the Cemetery and Funeral Services Act.

Customer Service

- ☐ **Recommendation # 13: Create a Customer Service Centre**
A Customer Service Centre on the lands immediately north of the existing cemetery is recommended. This would allow administrative and field staff to serve customers from the same location, would help with grave finding for visitors, friends and family of decedents and would allow for more effective liaison with the funeral services industry. Vandalism and site security would also be enhanced if there was a consistent, conspicuous presence at the cemetery. The option of adapting one of the existing residences to a customer service building should be considered although this may not meet programming and design criteria.

If an indoor mausolea/columbaria building is envisioned in the future it should be integrated with the customer service building, site conditions and other master planning issues permitting.

- ☐ **Recommendation # 14: Create a play area for children**
Input at the Open House included the suggestion of a play area for children. It would encourage visitors to stay longer and would encourage use of the space by youngsters of bereaved and visiting families. It should be located in an area which is buffered to a certain degree from the cemetery. Benches, tables, and the shade of trees would encourage use by a wide range of visitors and enhance the experience for both the bereaved, those interested in the cultural significance of the cemetery and those using the site for passive purposes.

Long Term Land Acquisition Needs

☐ **Recommendation # 15: Acquire lands for long term Cemetery Purposes**

Additional lands, over and above those available to the north of the existing site will be required near the year 2028. Lands in the eastern part of the community should be acquired to satisfy needs from 2028 beyond.

The District should consider interim uses for lands needed for the long term cemetery needs. There are several ways of amortizing the cost of acquiring and developing cemetery lands, as well as ways of funding the acquisition of cemetery lands that could dovetail effectively with interim uses. For example, if the District were to integrate the acquisition of cemetery lands along with other parks, environment, recreation and open space needs, future cemetery lands could work double or triple duty over the coming 50 – 100 years. Lands that are not required for immediate cemetery purposes could be used for playing fields, arboreta, tree nurseries, gardens, playgrounds, habitat areas, indigenous plant conservation zones or one of a number of other appropriate public interim uses. With suitable caveats, the lands could be leased to a private entity for farming, horticultural or other “non-built” purposes until some or all the land is required for future interments. Legacies of this use, could be beneficial to the creation of a beautiful cemetery.

Infrastructure and Amenities

Signage

Entry signage, wayfinding signage and signage for funeral entourages needs to be improved.

☐ **Recommendation # 16: Improve Signage**

Improve entry signage

Improve the site presence at Dewdney Trunk Road. This should occur as an order of high priority and also be addressed in site planning when expansion takes place to the north.

Improve existing wayfinding system

- Name different sections of the cemetery after locally significant people/ places. Work with the Heritage/Cultural Advisory Committee to identify appropriate naming options. The existing numbered sections could still be used for the administration of the cemetery (data management/ historical data reasons).
- Section, block, plot and lot layout signs/maps should be made available for self-directed grave finding;

- Self guided interpretive maps and signs for significant monuments and graves needs to be implemented in partnership with local heritage advocates, cultural and ethnic groups.

Create signage for funeral entourages

Moveable, weatherproof signage should be created to assist with funeral entourages and directions to recent graves. These should be portable, but also should be part of entry kiosk information that aids the entourage as they proceed in to the cemetery.

Improve regulatory signs

- "Available graves" information, including how to contact staff, where and during what hours needs to be provided.
- Consistency in text, colour, font and form of signs is important in the professional presentation of the cemetery services.
- Positively worded regulatory signage is needed in order to create a welcoming feeling and at the same time meet the necessary bylaw needs.

Roads

Road infrastructure upgrading needs to be incorporated into the annual budget to ensure maintenance of gravel and installation of curbs (only where necessary) is undertaken on an annual, incremental basis.

☐ **Recommendation # 17: Improve road infrastructure**

Replace roads

The road infrastructure has declined to the point of replacement in some cases. A program of cracksealing, grading and re-surfacing should be adopted and implemented.

Install curbs at intersections

Install curbs at intersections where cars are cutting corners and driving over graves.

Improve circulation system within the site

Test the efficacy of a temporary one-way system for vehicles moving around the site during large funerals, using moveable signage. This should help to alleviate the issue of cars driving over grave sites in order to get around parked cars as they leave the cemetery.

Amenities

☐ **Recommendation # 18: Provide increased amenities**

Provide benches

Benches should be placed and chosen for durability, appearance and function. They should be part of a consistent family of materials and styles chosen for all amenities.

Provide water taps

Presently the only water tap is at the site office building. Water taps for flowers should be incorporated at regular intervals around the site and incorporated with waste containers and, where practical, signage.

Chairs/ rain shelter for funeral services

The purchase of collapsible chairs for use at graveside services and a cover for inclement weather is recommended.

Portable walking mats

Given the climate, drainage conditions and need for customers of differing mobility abilities, portable walking mats should be purchased. This will enhance access to the gravesite and prevent wet feet and other discomforts.

Level of Maintenance

☐ **Recommendation # 19: An ongoing site upgrade program is required**

Restore damaged grave markers

There are several damaged grave markers in the Cemetery and as the years pass, the older markers are deteriorating. This is partly due to age and partly due to vandalism over the years that has not been repaired. The evaluation, restoration, and repair of the oldest most culturally significant should be undertaken with the guidance of trained professionals.

Ongoing Tree and Shrub Planting and Maintenance

Both the Lee Cemetery and the Maple Ridge Cemetery warrant an additional level of horticultural and arboricultural care and attention. The Recommended Site Plan provides opportunities for additional planting that could be part of a tribute tree program.

Organizational

A series of organizational actions are required to meet the best and improving practices in the industry. These are primarily related to record keeping, bylaw amendments and policy.

Record Keeping

- ☐ **Recommendation # 20 -: Acquire a new record keeping computer program**
'Stone Orchard' is Canada's leading cemetery records management computer program. Multiple users can use the program and it includes a hand-held palm unit for the on-site caretaker or staff to locate information in the system. This program or an equivalent program with a proven track record of service and flexibility should be purchased as a matter of high priority.
- ☐ **Recommendation # 21: Update cemetery maps and records**
Mapping improvements are recommended to ensure paper maps and records are reconciled and to also ensure redundancy in records management in the event of fire or other disasters. Quality control and quality assurance during this process is imperative. Ideally, this work should occur at the same time as the computerized records management process is initiated.

Customer Service

- ☐ **Recommendation # 22: Keep gates open after 4pm on weekdays**
Input at the Open House requested longer accessible hours to the cemetery, with the present 4 pm closing time thought to be too restrictive. The cost and operational implications of extending the opening hours of the cemetery should be examined by staff. It should be noted that longer "opening" hours does not mean that interments would occur later than the time shown in the bylaw.

Bylaw Recommendations

Changes need to be made to the cemetery bylaw to bring it in line with current practices and to give Staff and Council the necessary tools to manage site issues, such as ornamentation, new interment options, opening and closing times etc.

- ☐ **Recommendation # 23-: Update the Bylaw**
Proposed updates to the Cemetery Bylaw include:
(*note that any numbers in the text below refer to the existing Bylaw numbers for reference)

Definitions

- Identification of the age of an infant versus that of a child (Infant is under 1 year and a child is over one year up to ten years of age);

- Addition of definitions for "Scattering Garden", "Family Vessels," "Columbaria", and "Ossuary";
- "Resident" - proof of former residency required which should be at least 5 (or 10?) years as a property owner;

License to Use the Cemetery

- No more than 2 plots to be purchased for reserving by a person (one for husband/partner and wife/partner). Adult children should come in and purchase their plots themselves;
- Transfers by the owner can only be made to another family member (transfer fee for each plot transferred) or the plot must be sold back to the municipality if they wish to relinquish their rights to the plot;
- Any interment in the rose garden (or other scattering place) must have a date of interment given at the time of purchase of the plot that is within 6 months of the purchase;

Fees and Charges

- Consider removal of costs from the bylaw as they change more than the bylaw does;
- Determination of how much a person receives when they sell their plot back to the municipality is needed in the bylaw;

Permission to Inter, Exhume and Cremate

- Language that references only the caretaker or his designate shall inter remains in the cemetery is needed;

Interment in the Cemetery

- Maximum allowable size of interred ashes container – relates to how deep the caretaker must dig the hole needs to be specified;
- Size of liner – inside measurements to tell people the maximum size of wood or cardboard container than can be interred;
- Bylaw #20 (b) Reference to "Double Depth" graves if decision is made to create in new burial section;
- Bylaw #20 (d) Alter the language regarding "a concrete or steel vault" – there has been misinterpretation of this in the past; (note: this requires additional discussion with Staff and the Funeral Home Industry)
- Language regarding the solely at the discretion of the Municipality to decide what type of grave liner the municipality uses is needed; Any request to use a liner that is not of the municipal choosing will not be considered.
- Bylaw #22 – Consider revision to read that a body may be interred in the cemetery on Sat, Sun or Stat Holiday for added fee. This revision should be considered in conjunction with and contingent upon a review of staffing levels as interment on the weekend will trigger the need for overtime funding and/or additional part time staff on the weekends.
- Determining whether or not interring ashes in a full burial plot before the casket is interred should be allowed;

Administration and Care Fund

- Clarification of what the contribution will be from interment in columbaria, a scattering garden and ossuary into the Perpetual Care Fund;

Memorials

- No person other than the caretaker or his designate shall place a marker at any site in the cemetery;
- Marker sizes of infant and child should be uniform since the grave plot sizes are the same;
- Clarification that "In Memory" names can be placed on the rose garden plaque - this is if there are no remains interred in the cemetery, and that other forms of memorial will be allowed, without actual interment occurring;
- Clarification that headstones cannot be placed on grave sites unless they reflect the person/s buried at that site;
- Clarification that markers can only be accepted at the cemetery and placed after the interment of remains;
- Clarification on allowance of a non-conforming marker adjacent to a previously installed non-conforming marker;
- Clarification of marker sizes for burial and cremated remains;
- Bylaw #33 (d) Addition of "memorialization of two persons on an ashes size grave" and addition of "Cremation interment on casket graves (up to four)";
- A second plot cannot be purchased to get a larger marker for one person. Double markers must have the room to put the second name on the marker. Each plot reserved must have a designated person to occupy that plot. Language that meets this need must be drafted.

Other language that formalizes the recommendations in this report and that brings the bylaw in to compliance with the Cemetery and Funeral Services Act needs to be drafted. The Municipal Solicitor should be consulted in the drafting of the revised bylaw.

Chapter 8: Business Planning Strategies

In order to move forward with the recommendations included in this report, strategies are required that will ensure the long term economic sustainability issues are addressed. This chapter integrates the site, service and infrastructure recommendations within a strategic framework that also includes:

- Marketing;
- Partnerships;
- Organizational management, and
- Financial management.

Community consultations at the open house and via feedback forms, staff and funeral home interviews and our professional experience in managing and planning cemeteries has informed the recommendations in this report. One of the themes that emerged through the consultations was the desire to “make the cemetery the best it can be.” This report is a road map that describes how the District can meet that challenge. Aside from the physical changes needed to ensure the long term sustainability of the cemeteries and the enhanced services needed to meet the existing and anticipated demand, there are additional actions required in order to meet financial objectives.

For the purposes of this report, we have assumed that minimizing the load on tax-based revenues for all the costs associated with land acquisition, planning, management and operations of the cemetery is desirable. This is not to say that the cemetery services section of the Department should become a profit centre, but it does imply that cemetery services should be managed in a business-like manner. This approach was corroborated by local funeral directors we spoke with during the course of our consultations. They do not expect the District to maximize their potential returns, but they are expecting a business-like approach be adopted.

Strategies to meet these needs, within a business planning context, include:

- Increasing Interment Services (and then Products);
- Marketing the Cemeteries;
- Increasing Effectiveness and Partnerships, and
- Enhancing Cost Recovery.

Increase Interment Services

This report brings forward recommendations to enhance interment, site and memorialization services. Customer service and the introduction of product sales also needs to be addressed.

A range of interment service enhancements need to be brought on stream. We recommend they be implemented in the following priority:

- Cremation gardens (columbaria, scattering areas, family vessels and ossuaries);
- Outdoor family mausolea;
- Indoor mausolea and columbaria, and
- Funeral service products.

A phased program of enhancements is recommended in order to optimize available capital funds and not strain existing staffing levels. As enhanced interment services for cremated remains are established, then mausolea should be considered. A business case analysis for mausolea should be integrated with site selection, planning and design. Potential mausolea sites are referenced in the master site plan.

As mentioned, a range of cremated remains interment options is recommended, where space permits. Where space does not permit, then site specific designs, supplemented with simple business case analyses should be undertaken in order that all costs and revenues associated with the interment option are incorporated in a full cost recovery model.

The central theme in this strategy is to start with in-fill projects, working up to the more ambitious and demanding mausolea services. The latter represent the highest level of customer service, the greatest potential return and also the most skill sets in terms of customer and interment services. Pending the outcome of land acquisitions, a cemetery expansion area design will be required for the lands north of the existing site. If these lands are not acquired then design and business case decisions will need to be made as alternate new cemetery lands options are explored.

As interment and site services improve, the introduction of products should be considered. This could include the sale of flowers, markers, commemoration cards and a host of other items that would both meet the needs of customers and generate revenue. The introduction of product sales needs to occur in sync with the consistent improvement and enhancement in service and interment options. This exemplifies the “walk before run” approach that underpins recommendations in this report.

Marketing the Cemeteries

The Maple Ridge and Whonnock cemeteries are not easily “imageable” places. This is partly due to their locations, partly due to poor signage and partly due to the lack of an ongoing, effective marketing strategy. Those that participated in the consultations talked about the Maple Ridge Cemetery as a “secret garden” or a “hidden room,” and although those are apt descriptors of the cemetery, they also reveal one of the challenges in meeting resident’s interment needs. If people don’t know the cemetery is there, or that the service even exists, how can we expect to meet their needs?

A multi-pronged approach is required that includes:

- Changing the Maple Ridge Cemetery section names;
- Improved on and off-site signage, and
- Enhanced cemetery profile in the community.

□ Recommendation # 24: Coordinated Marketing

A coordinated set of cemetery marketing actions are required, starting with the renaming of the Municipal Cemetery. The logical choice would be the “Maple Ridge Memorial Gardens,” but confusion with Memorial Park could be created if this name were chosen. Therefore, we recommend the cemetery name remain as is, but that the existing section names (Cemetery # 1, 2, 3 etc) be renamed after Maple Ridge’s founding mothers and fathers and other worthy notables. It may be appropriate, for example, to re-name the section where many Japanese are interred after one of the founding Japanese families or to use a Japanese word or title for that section. In this way, the cultural significance of the site is made more evident and the meaning of the cemetery as a sacred place is enhanced. Similarly, the Whonnock Cemetery, founded by the Lee family, should be re-dedicated as the “Lee Cemetery.” The Lee’s were founding members of the Whonnock community and were some of the first loggers and farmers to settle that part of the District. The history of that cemetery is also closely linked to the First Nations of the Whonnock area who sold an acre of land to the District for cemetery purposes. It is also adjacent to a First Nation’s cemetery – due east of the District’s cemetery.

The District’s cemeteries are a rich repository of community history, hardship and experience. They tell the community’s story as it has evolved over the last 100 years. They need to be brought more in to the public realm in order that recent and future generations be remembered, and *their* stories honourably told. Re-naming the cemeteries and giving discrete cemetery sections within the cemeteries proper names will help tell those stories and at the same time, add to the interest and marketability of the services offered there.

Improving the signage, both on and off site at the Maple Ridge and Whonnock Cemeteries will not only help with wayfinding, but also will assist those attempting to find graves and funeral homes directing families. The lack of signage was another common refrain we heard during the consultation process. A coordinated signage program would also lessen the impact of regulatory “blunt” messaging and temper it within modern, welcoming language, graphics and placement. A combination of on and off site directional, regulatory,

interpretive and informational signage is required. This should be considered a key priority in the marketing program.

The profile of the cemetery is perceived as low by the consultants and by the funeral home directors we spoke to as part of this project. Re-naming the cemeteries and signage improvements will boost the profile of the services, but a concerted effort is needed to increase the profile of the cemetery services. Many municipal cemeteries have adopted some or all of the following actions as part of their ongoing marketing strategy:

- Monthly or quarterly newsletters;
- On site "events" such as "Mums for Mothers Day," poppies and white crosses for Veteran's graves at Remembrance Day, Historical tours, Night for All Souls, Ching Ming Festivals etc.;
- Interactive websites;
- On site grave finding services;
- Links to "find a grave" websites;
- Information in annual tax notices, and
- Participation in Radio call-ins.

These and other actions need to be considered and incorporated in to an increased marketing program. In the next 3 years, we recommend that:

- A Maple Ridge Cemetery website be developed;
- A quarterly newsletter be developed, and
- Information brochures be included in tax notices.

Increasing Effectiveness and Partnerships

In order to make the cemetery the "best it can be," and in order to move the cemetery services towards full cost recovery, efforts towards increasing effectiveness and enhancing partnerships are required. Within the policy and bylaw framework, certain procedures and the application of the various regulations need to be reviewed to ensure they meet the needs of customers, the funeral service providers and the District's objectives. As well, partnership opportunities need to be identified and leveraged over the coming years.

Staff, funeral home operators and some members of the community have identified the need to review the Cemetery Bylaw as well as work procedures in order that they meet customer needs and management concerns. A host of bylaw amendments are mentioned in this report. They need to be formalized by Council in order to ensure the bylaw meets or exceeds the standards set by the Business Practices and Consumer Protection Authority (BPCPA). They also need to be updated to accommodate changes to interment and memorialization options, ornamentation issues, fees and charges and operational issues identified by Staff.

It is important to note that the application of the bylaw needs to occur in a consistent and timely manner. Unauthorized ornamentation (placement of non-authorized items in the cemetery) has become a major issue at the Maple Ridge Cemetery. For the bylaw to be effective, it needs to be controlled early and consistently by staff and with the backing of Council. This can be a difficult and emotional matter for families, especially those suffering the loss of a child. Visiting the grave is a healthy way for families to grieve and often times leaving mementoes is an act that accompanies the visit. However, safety and aesthetic issues arise as well as additional costs when flat marker graves have artifacts placed upon them. Removal of the items in a timely manner is part of the site management and is an action that needs to be explained to families at the time of grave purchases, via signage and other communications. Clear ornamentation procedures need to be established and applied as an ongoing cemetery management priority.

□ Recommendation # 25: Create a Cemetery Advisory Commission

Communication with the community, including funeral homes that operate in Maple Ridge, is a central component of an increasing service trajectory. We recommend that a Cemetery Advisory Commission (or another entity that fits the District's "advisory" system) be created. This Commission should include:

- 3 members at Large from the Community
- 2 members from the Funeral Home Industry
- 1 member of Council
- 1 Member of the Heritage Advisory Commission
- Staff support and attendance as required.

The purpose of the Commission would be to:

- Enhance communication between the District, cemetery users and the funeral homes;
- Advise Council in the application of the Cemetery Master Plan;
- Assist in the marketing of the cemeteries;
- Review issues, budgets and matters pertaining to the Cemetery as forwarded from Council and advise to Council as necessary.

Enhancing Cost Recovery

Cemetery services are one of the few services provided by local governments that have the potential to recover most, if not all of their operating and capital costs. The 2007 – 2011 Long Range Business plan for the District's cemetery services indicate a positive trend towards cost recovery. In the last 3 years, operating costs have been recovered partly through cemetery service fees and partly through plot sales. Plot sales have been used to subsidize the operation by approximately \$60,000 per year. In the next 4 years, cemetery services, including plot sales, are expected to recover slightly more than operating costs.

Although these trends are encouraging, it is important to note that they do not include land costs, capital development, planning or business analysis costs. If the District is to operate this service not necessarily as a business, but in a more "business-like" manner, financial scenarios are required that seek to limit demands on tax based funding, yet provide quality service at reasonable rates to residents of the District. Moving the cemetery system towards full cost recovery will necessitate the following financial planning initiatives.

- Assessment of the status of the Perpetual Care Fund;
- Review rates and charges for services and products;
- Develop Capital Development Cost Estimates, and
- Integrate the above components in to a comprehensive financial plan.

Perpetual Care Fund

The Perpetual Care Fund (PCF) is a fund set up for the care and maintenance of the cemetery for the time when operating revenues may no longer be available. This is a requirement of the Cemetery and Funeral Services Act. A minimum percentage of each burial lot, columbaria or mausolea sale must be deposited in a stand-alone fund. The interest on that fund can be used for maintenance purposes only, according to the Act. Typical practice is for interest to compound with the principal up until the time when there are sufficient principal funds to generate a significant contribution towards maintenance of the cemetery. Many municipalities do not use any interest at all in their cemetery maintenance as the principal amounts are typically quite low.

In the case of Maple Ridge, the current PCF fund stands at \$586,000 as of December, 2006. Approximately \$36,000 has been contributed to the fund, on average, over the last 5 years. With declining returns on investment, the interest on the principle amount would barely pay for a small portion of the \$173,000 annual cost of maintenance. It should be noted that if all revenue were to cease, the level of maintenance would be reduced to a minimum standard and hence costs would decline commensurate with less grass cutting, trimming, repairs and other activities that are now part of the regular maintenance cycle.

The key finding here is that the current PCF balance is well below what it would need to be if/when operating revenues at the Maple Ridge Cemetery slow or stop altogether. A principal amount of approximately \$1.5 million would be required to generate \$75,000 at a consistent interest return rate of 5%. If more conservative interest rates are applied, then of course the principal requirement would increase. Meeting this requirement could take one of several routes:

- Increase the PCF contribution beyond existing amounts for an expanded range of services and products;
- Lump sum contributions from any surplus operating revenues, or
- A combination of the above strategies.

Increasing the PCF rates above the statutory requirement is the preferred and most common strategy to bring the PCF fund up to where it needs to be. In this way, the long term maintenance of a plot sold today is funded, to a larger degree, by the owner of the

plot, rather than future customers or from tax based revenues. Maple Ridge already charges a 33% PCF contribution, which is 8% over the requirement of 25% for burial lot sales. This rate should be increased by a minimum 5% in order to hasten growth in the principle amount. The rate can always be brought back down to the statutory minimum if/when the PCF reaches a desired target amount.

Lump sum contributions to the PCF can be made, although the amounts available (based on recent performance) from operating revenue surpluses are relatively small. This is not a recommended approach. As the fund grows, scenarios for using interest from the fund should be analyzed in the context of the other business plan components.

Rates and Charges

Rates and Charges for Cemetery Services are well below the industry standard. The burial lot and interment fees in Maple Ridge are \$1000.00 lower than the average of 10 other BC municipal cemeteries, not including PCF contributions. Non-resident fees for the same services are \$1400.00 below the BC average. Rates for other land and interment services are similarly well below the industry standard. There is clearly room to adjust those rates upwards and still maintain the desired goal of affordability for Maple Ridge residents. The challenge is the extent to which net returns can be expected and at the same time increase PCF contributions and maintain "affordability." This challenge is further compounded if full cost recovery is expected in the very short term. Although there is some elasticity in demand, Maple Ridge residents do have choices and in fact many presently choose to either not patronize the cemetery or are not choosing to use *any* cemetery.

The following table shows the District's 2007 Fee schedule as compared against 6 other BC Municipalities

	Maple Ridge		New Westminster		City of North Vancouver		West Vancouver		Langley		Coquitlam		Port Coquitlam			Minimum		Average		Maximum		
PLOTS	Resident	Non-Resident	Resident	Non-Resident	Resident	Non-Resident	Resident	Non-Resident	Resident	Non-Resident	Resident	Fmr-Resident	Resident	Non-Resident		Resident	Non-Resident	Resident	Non-Resident	Resident	Non-Resident	
Adult SINGLE Depth																						
	Plot	885.00	1,778.00	2,912.00	3,931.20	1,550.00	3,100.00	2,400.00	4,800.00	600.00	900.00	3,090.00	4,668.00	1,500.00	3,600.00		600.00	900.00	1,848.14	3,253.89	3,090.00	4,800.00
	Care	295.00	593.00	728.00	982.80	1,630.00	3,260.00	600.00	1,200.00	200.00	300.00	773.00	1,167.00	500.00	1,200.00		200.00	300.00	675.14	1,243.26	1,630.00	3,260.00
Total	\$ 1,180.00	\$ 2,371.00	\$ 3,640.00	\$ 4,914.00	\$ 3,180.00	\$ 6,360.00	\$ 3,000.00	\$ 6,000.00	\$ 800.00	\$ 1,200.00	\$ 3,863.00	\$ 5,835.00	\$ 2,000.00	\$ 4,800.00		\$ 800.00	\$ 1,200.00	\$ 2,523.29	\$ 4,497.14	\$ 3,863.00	\$ 6,360.00	
Cremation - SINGLE																						
	Plot	132.00	248.00	958.00	958.00	540.00	1,080.00	930.00	1,860.00	187.50	281.25	1,017.00	1,017.00	705.00	787.50		132.00	125.00	536.46	771.25	1,017.00	1,860.00
	Care	44.00	83.00	239.50	239.50	430.00	860.00	230.00	460.00	62.50	93.75	254.00	254.00	235.00	262.50		44.00	75.00	190.96	298.32	430.00	860.00
Total	\$ 176.00	\$ 331.00	\$ 1,197.50	\$ 1,197.50	\$ 970.00	\$ 1,940.00	\$ 1,160.00	\$ 2,320.00	\$ 250.00	\$ 375.00	\$ 1,271.00	\$ 1,271.00	\$ 940.00	\$ 1,050.00		\$ 176.00	\$ 200.00	\$ 727.43	\$ 1,069.57	\$ 1,447.00	\$ 2,720.00	
INTERMENT FEES	Resident	Non-Resident	Resident	Non-Resident			Resident	Non-Resident	Resident	Non-Resident	Resident	Non-Resident	Resident	Non-Resident		Resident	Non-Resident	Resident	Non-Resident	Resident	Non-Resident	
Adult																						
Standard	\$ 589.00	\$ 589.00	\$ 650.00	\$ 650.00	\$ 1,180.00	\$ 2,360.00	\$ 870.00	\$ 870.00	\$ 600.00	\$ 600.00	\$ 675.00	\$ 675.00	\$ 1,050.00	\$ 1,050.00		\$ 589.00	\$ 589.00	\$ 802.00	\$ 970.57	\$ 1,180.00	\$ 2,360.00	
Cremated Remains																						
In-ground Interment	\$ 217.00	\$ 217.00	\$ 300.00	\$ 300.00	\$ 320.00	\$ 640.00	\$ 300.00	\$ 300.00	\$ 200.00	\$ 200.00	\$ 414.00	\$ 414.00	\$ 280.00	\$ 280.00		\$ 200.00	\$ 200.00	\$ 290.14	\$ 335.86	\$ 414.00	\$ 640.00	
OTHER PRODUCTS																						
Grave Vault/Liner	\$ 206.00			n/a	\$ 540.00		\$ 360.00		\$ 275.00					\$ 330.00		\$ 206.00		\$ 372.20		\$ 540.00		
Cremation Vault/Liner	\$ 62.00			n/a			\$ 80.00		\$ 0.00							\$ 62.00		\$ 71.33		\$ 80.00		
COMPARISONS	Resident	Non-Resident	Resident	Non-Resident			Resident	Non-Resident	Resident	Non-Resident	Resident	Non-Resident	Resident	Non-Resident		Resident	Non-Resident	Resident	Non-Resident	Resident	Non-Resident	
Plot and Burial (in-ground)																						
(liner if req'd, no marker fees)																						
1 Adult	\$ 1,975.00	\$ 3,166.00	\$ 4,290.00	\$ 5,564.00	\$ 4,900.00	\$ 9,260.00	\$ 4,230.00	\$ 7,230.00	\$ 1,675.00	\$ 2,075.00	\$ 4,538.00	\$ 7,185.00	\$ 3,380.00	\$ 6,180.00		\$ 1,675.00	\$ 2,075.00	\$ 3,569.71	\$ 5,808.57	\$ 4,900.00	\$ 9,260.00	
1 Cremated Remains	\$ 455.00	\$ 610.00	\$ 1,497.50	\$ 1,497.50	\$ 1,290.00	\$ 2,580.00	\$ 1,540.00	\$ 2,700.00	\$ 450.00	\$ 575.00	\$ 1,685.00	\$ 1,685.00	\$ 1,220.00	\$ 1,330.00		\$ 450.00	\$ 575.00	\$ 1,162.50	\$ 1,568.21	\$ 1,685.00	\$ 2,700.00	

* Based on data collected from the BC Municipal Cemeteries Network, (c/o Mountain View Cemetery Vancouver), 2007

In order to move to full cost recovery, rates for burial plots and interment services would have to increase by at least 100%, possibly by as much as 150%. The range would depend on a variety of cost factors including land and development costs, financing charges, rates of inflation and other market considerations.

It is recommended that rates and fees for all services be increased, following a detailed review of financial considerations undertaken during the development of a comprehensive cemetery financial plan.

Capital Development Cost/Revenue

Capital Development Plans are useful ways to plan and test the financial viability of enhanced cemetery services. These amount to mini-business plans for services such as cremation gardens and mausolea. As mentioned previously, we recommend a “walk before run” strategy wherein improvements to the traditional and existing services are improved before embarking on significant new service provision for mausolea. The Capital Development Plans need to take into account not only the land, construction and soft costs but also any charges associated with internal “borrowing” if that is an option palatable to Council. Often times it is more effective to create a complete interment garden rather than just install one columbaria or a single scattering garden. Experience with the interment of cremated remains has shown that the creation of a “place” is more successful than just the creation of an interment niche or series of niches. This can require more funding, which may or may not be available from capital budgets, hence the potential need to finance larger, more comprehensive projects.

□ Recommendation # 26: Develop a Comprehensive Cemetery Financial Plan

A comprehensive financial plan is recommended and should be considered a high priority for implementation. This plan should be formulated in sync with site designs and development plans in order to ensure the range, number, type and price point of proposed interment services and products associated with those elements matches the location, material, level of finish and extent of amenities proposed. Many a lofty cemetery financial projection has grounded on the shoals of poorly conceived site designs and conversely, many thoughtful cemetery designs have been insufficiently grounded in sound financial projections. Conspicuously absent in many financial plans, for example, is the cost of land acquisition. With the days of “free” or discounted municipal lands now but a distant memory, land acquisition costs need to be taken into consideration when fees and charges rates are determined. Principles that should guide the financial and physical planning should include:

- A desire to increase the number of Maple Ridge residents that use the Cemeteries;
- Affordability must be sustained;
- Minimization of tax based revenues in cemetery operations and development;
- Optimization, not maximization, of cemetery lands is the goal,
- Progress towards full cost recovery.

Cost and revenue implications of the recommendations in this report must take into consideration these principles. Marketing, for example, comes at a cost, but presumably results in increased use of the cemetery by residents. That "market share" needs to be incorporated in the business plan. Offering a range of interment options will also attract more residents to the cemetery. Setting prices so that there are affordable options will mean there are always ways for residents to use the cemeteries regardless of income levels. Providing more enhanced services at rates higher than the existing levels will also enhance the long term financial sustainability of the system.

Implementation

The Maple Ridge Cemetery is in need of an infusion of capital dollars in order to meet the needs outlined in this report. Our sense is that implementation of these recommendations over a two - four year period would instill a sense of confidence with the funeral home owners and generate interest in the community. The following is a prioritized implementation table, including cost estimates.

Appendix A

Stakeholder Consultations- Key Issues and Opportunities

Discussions were held with senior staff, office/ administrative staff, field staff and funeral service providers in order to receive input on the key issues and suggestions for potential cemetery improvements and services. Names and dates of meetings are in the appendix. Key issues identified are as follows:

1. Cemetery By-law

- The by-law has not been updated since 1999 except for a 2002 fee update. Updating it is of high importance.
- It is not clear and leaves room for interpretation. A stronger document would ease enforcement of rules when presented with odd requests.
- A modernized by-law would include a variety of interment options to reflect the needs of the demographics and cultures of Maple Ridge's residents. Over time public perception of what cemeteries can include changes (eg. a denser structure with columbaria, scattering gardens for ashes).
- Many people feel that there is no choice with the memorial markers and they do not want to be restricted to low at-grade markers.
- Stakeholders want the by-law to include current industry standards and practices.

2. Visibility and access to the cemetery

- The cemetery does not front onto a major road- it is set back from both Lougheed Hwy. and Dewdney Rd. Limited visibility into the site results in increased opportunity for vandalism. Stakeholders feel that means of expanding the appearance of the cemetery to the rest of the community should be explored.
- Stakeholders feel that connections through the cemetery site linking Lougheed to Dewdney were important. A bike path through the cemetery would allow commuters to ride through the site. Historic routes through the site have been cut off with fencing and vegetation.
- The cemetery is seen as an important passive recreation space. The adjacent neighbourhood is not currently being served by other parks.

3. Cemetery site capacity

- The existing site has limited capacity for cremation interment and full depth burial. Other areas exist for potential interment, but they have not yet been identified.
- There is further limitation to available land due to poor drainage in the southern area of the site near to the McKinney Creek.
- It is important to try and acquire adjacent lands in order to keep cemetery operations together. To add another site in a different location would create difficulties for getting equipment and staff back and forth.
- Other sites which are not adjacent were mentioned as



possible expansion sites in discussions (eg. the Jackson Farm).

4. Customer service

- Stakeholders feel that wayfinding could be improved in the cemetery. There are few on-site markings to direct visitors to gravesites. Maintenance work is interrupted when visitors have questions or require assistance. Stakeholders feel that an additional staff member in the cemetery who is familiar with the funeral side to play a customer service role might be warranted.
- Stakeholders want avenues of communication between funeral service providers and the cemetery site to be reviewed. Some feel that they worked well, while others did not.

5. Plot ornamentation

- There are ongoing issues with ornamentation. Although the by-law restricts ornamentation, borders are continually being created around plots with bricks which become 3'x8' gardens. They currently number around two hundred. When the grass season starts, the staff move them to a shed. This causes heated emotions and people replace the ornamentation.
- Stakeholders find that the ornamentation issue increases the time necessary for cutting grass, as areas have to be maintained manually.

6. Columbaria

- There are no columbaria in the Maple Ridge Cemetery and they are "long overdue". People are either going to other cemeteries to be buried in columbaria, or are waiting for columbaria to be built in Maple Ridge. Maple Ridge Cemetery is not meeting the needs of its residents and it is losing revenue.
- There are few choices for interment. The Rose Garden is full. Besides columbaria, stakeholders feel that other interment options should be explored including scattering gardens.

7. Municipal role in cemetery operations

- Stakeholders feel that a review of the municipal role in cemetery operations would be in order. The assumption that the cemetery is a core service of the District was queried.
- Privatization of the cemetery is an option. Stakeholders feel the state of the private cemetery industry should be examined, as should possible partnerships with local funeral service providers.

8. Cemetery economics

- Long term economics are important to the Cemetery Master Plan (includes the Perpetual Care Fund). As a core service, stakeholders feel that the cemetery should be run in an efficient manner.
- Stakeholders would like fees charged to reflect operating costs. They also feel that rates charged on burials and markers should compare to average rates of other municipalities in the Lower Mainland. Fees have not been raised for several years.

- Stakeholders want the costs associated with cemetery operations and the Parks Department to be examined.

9. Cemetery software system

- Of high priority is to have an updated computer program which uses proper legal terms for managing the cemetery records.
- Stakeholders want records to have a house-keeping done on them to ensure that they are accurate and up-to-date. It is of utmost importance to maintain detailed records in order to answer questions from family members regarding existing graves.

Open House Input (Oct. 18th '07 - also from feedback forms sent in)

1. Interment Options and Services

Increased interment options are desired at the Maple Ridge Cemetery including:

- columbaria,
- ossuaries,
- green burial,
- scattering gardens.
- family burial sites which allow denser interments.

Increased services desired include:

- a playground for children,
- improved customer service with a staff person to welcome visitors, help in locating graves and also be a deterrent to vandals,
- a store to purchase flowers etc.

2. Site

- Re-name the cemetery to reflect its age, its historical significance and its natural beauty- Maple Ridge Memorial Park or Heritage Memorial Park;
- The dignity of the cemetery should be maintained in its site design;
- Encourage public use of the cemetery;
- The Maple Ridge Cemetery has a special 'Secret garden' character to it which should be preserved and enhanced.
- The Cemetery should be exposed to public view from two sides. "Opening up" the site to busy streets will increase visibility, aiding in security concerns. Increased visibility would also make more people aware of the site and increase its use for passive recreation;
- Shaded areas in the cemetery are needed for enjoyment of peace and quiet;
- Security issues of theft and vandalism in the cemetery must be addressed;
- Any new site chosen for expansion of the cemetery should be:
 - located in a growth area (probably east or north east),
 - at least twice the size that is needed,



- serviced by public transport by 2031 and,
- accessible.

3. Organizational

- The cemetery should have the database of existing graves properly archived in a useable system;
- The cemetery should promote and build awareness of services;

4. Infrastructure

- The infrastructure in the cemetery could better service visitors with:
- designated parking,
- wider roads for two-way access,
- water available other than only at front for flowers (water taps),
- the addition of benches to encourage passive use of the cemetery,
- maintenance of the unpaved roadways- potholes, water hazards,
- restoration of damaged grave markers,
- rain protection during funerals,
- chairs for elderly people at funerals,
- better entrance sign on Dewdney Trunk Rd.

5. Bylaw

- A few of the feedback forms have Pitt Meadows addresses, meaning that they are not considered 'residents' for interment in the cemetery and are likely not aware of that fact;
- Upright headstones are desired;
- Request was made to keep the gate open later than 4pm on weekdays;
- Ornamentation issue: The prohibition of individual landscaped graves in the bylaw should be enforced, however a grandfather clause could allow existing ornamented graves to remain.

This is a summary of responses from the feedback forms received at the Open House and those sent in to the District.



District of Maple Ridge Cemetery Master Plan
Open House

Fraser Room (Maple Ridge Library, second floor)
Oct. 18, 2007

INPUT FORM

1. At the present time, the District offers the following options for interment of cremated remains at the cemetery. Please let us know what your preferred option would be :

Rose Garden (similar to a scattering garden)	<input type="checkbox"/> 7
Cremated Remains Plots (burial in the ground)	<input type="checkbox"/> 17
Inter cremated remains (up to 4) in addition to a traditional casket burial	<input type="checkbox"/> 14

2. Additional options for interring cremated remains could potentially be added at the cemetery. Please let us know if you would consider one or more of these options if they were made available at the cemetery in Maple Ridge:

Columbaria (niches in which urns containing cremated remains are kept)	<input type="checkbox"/> 14
Ossuaries (in ground vessels in which cremated remains are co-mingled)	<input type="checkbox"/> 3
Family vessels (large 3' high vessels in which multiple urns are nested)	<input type="checkbox"/> 11

3. Additional options for full casket burials could potentially be added at the cemetery. Please let us know if you would consider using one or more of these options if they were made available at the cemetery in Maple Ridge:

Double depth graves (burial of 2 people in one grave)	<input type="checkbox"/> 17
Indoor Mausolea (a building in which indoor crypts are available)	<input type="checkbox"/> 5
Outdoor Mausolea (garden or family estate mausolea for 4 – 8 caskets)	<input type="checkbox"/> 5

4. Do you believe there should be more passive use areas at the cemetery?

Yes ☐ 13 No ☐ 6

5. Please check which options you think should be considered in future site planning:

- | | | |
|--|--|---|
| <input type="checkbox"/> 11 Additional parking | <input type="checkbox"/> 6 Additional entry, exit points | <input type="checkbox"/> 8 Caretaker residence |
| <input type="checkbox"/> 15 Public washrooms | <input type="checkbox"/> 16 Historic interpretive signs | <input type="checkbox"/> 7 Additional landscaping features |
| <input type="checkbox"/> 21 On site grave finding service | <input type="checkbox"/> 6 Drinking fountains | <input type="checkbox"/> 16 Water taps (for flowers) |
| <input type="checkbox"/> 13 Rain protection during funerals | <input type="checkbox"/> 17 Benches | <input type="checkbox"/> 7 Alternate memorial markers |
| <input type="checkbox"/> 1 Areas designated for specific faiths or religions | <input type="checkbox"/> 8 Shade structures | <input type="checkbox"/> 10 Permanent vases/holders |
| <input type="checkbox"/> 9 Indoor funeral facility | <input type="checkbox"/> 5 Outdoor funeral area | <input type="checkbox"/> 13 Chairs (for elderly attendees at services) |

7. Tours are available for those interested in the historic significance of the cemetery. Do you:

- | | |
|--|-----------------------------|
| a) know about these tours? | <input type="checkbox"/> 10 |
| b) have an interest but have never attended? | <input type="checkbox"/> 10 |
| c) wish to know more? | <input type="checkbox"/> 11 |

8. Many of the site burial plots at the cemetery have individual landscapes which and are contrary to the cemetery bylaws and interfere with routine maintenance and safety . Should the landscapes be:

- | | |
|---|-----------------------------|
| a) Removed and not permitted in future | <input type="checkbox"/> 6 |
| b) Permitted with some restrictions related to safety, for an additional fee paid by the licence holder (for maintenance) | <input type="checkbox"/> 19 |

Appendix B

Interviews Conducted

July 19, 2007

Discussions were held with senior staff, office/ administrative staff, field staff and funeral service providers in order to receive input on the key issues and suggestions for potential cemetery improvements and services.

- Nance Worfolk (Cemetery Administration);
- Shannon (Finances);
- Bruce McLeod (Manager of Parks and Open Space);
- Jane Pickering (Director of Planning); Roland Hill (On-site);
- David Boag (Director of Parks and Facilities);
- Jane Baile (Operations Supervisor);
- Mike Murray (General Manager: Community Development, Parks and Recreation Services)

July 23, 2007

Discussions were held on site with field staff in order to receive input on the key issues and suggestions for potential cemetery improvements and services.

- Roland Hill

July 23, 2007

Discussions were held with council in order to receive input on the key issues and suggestions for potential cemetery improvements and services.

- Mayor Gordy Robson;
- Councillor Ernie Daykin;
- Councillor Judy Dueck;
- Councillor Al Hogarth;
- Councillor Linda King;
- Councillor Craig Speirs;
- Councillor Ken Stewart;
- David Boag (Director of Parks and Facilities)

July 23, 2007

Discussions were held with funeral service providers in order to receive input on the key issues and suggestions for potential cemetery improvements and services.

- Garden Hill Funeral Chapel;
- Tim Logue (Owner- Funeral Director/ Embalmer);
- Peggy Logue (Owner- Funeral Director);
- Nathan Logue (Funeral Director/ Embalmer);
- Nolan Logue (Funeral Director/ Embalmer Apprentice).

August 27, 2007

Discussions were held with funeral service providers in order to receive input on the key issues and suggestions for potential cemetery improvements and services.

- Maple Ridge Funeral Chapel and Crematorium:
- Joan Gibson (Owner- Funeral Director/ Embalmer);
- Diane MacKenzie (Owner- Funeral Director/ Embalmer);
-

October 18, 2007

Discussions at the Open House were held in order to receive input on the key issues and suggestions for potential cemetery improvements and services.

- Claus Andrup (Heritage Commission Representative)
- Sheila Nichols (Maple Ridge Historical Society)
- Nance Worfolk (Administrative Staff)
- Dave Boag (Senior Staff)
- Nathan Logue (Funeral Service Provider)

Appendix C

Information & Documents Reviewed

Information/Documentation regarding the Cemetery Master Plan proposal

- 1) Maple Ridge Official Community Plan Bylaw No. 6425-2006
- 2) Zoning Bylaw 3510-1985 (consolidated March 2007)
- 3) Cemetery Bylaw 5784-1999 (Amending Bylaw 6095-2002)
- 4) 2007 Business Plan -- Municipal Cemeteries including cemetery statistics for Jan to Aug, 2005 and Jan to Sept 2006
- 5) Organizational Chart
- 6) Maple Ridge Cemeteries Annual Report -2006
- 7) Proposed Cemetery Financial Plan 2007-2011
- 8) Comparison Chart for GVRD Cemeteries
- 9) Procedures for Full Burial, Child Burial, Cremation Interment and Rose Garden Interment
- 10) Cemetery Perpetual Reserve Trust Fund
- 11) Detailed costs of conducting a full burial at the cemetery -2002
- 12) Detailed costs of conducting a full burial at the cemetery -2003
- 13) Cemetery Annual Statistics 1992-2006
- 14) Cemetery fees increase steps - 1998 to 2006 (not increased since 2003)
- 15) Grave Section Status Report -June 14, 2007 (Maple Ridge Cemetery Cremation Section)
- 16) Cemetery Maintenance Budget for 2007
- 17) Maple Ridge Cemetery
 - a) Colour Ortho Photo
 - b) Black and white ortho map
 - c) Layout of cemetery showing hectares
 - d) Layout of cemetery showing contours
 - e) Layout of cemetery showing creek
 - f) Layout of cemetery showing sewer system (small and enlarged)
 - g) Right in Interment Form for Maple Ridge Cemetery
- 18) Whonnock Cemetery
 - a) Colour Ortho Photo
 - b) Legal Plan of Lutheran section of cemetery showing rest of cemetery which is
 - c) Layout of cemetery showing hectares
 - d) Layout of cemetery showing contours
 - e) Layout of cemetery showing creeks in surrounding area
 - f) Right in Interment Form for Whonnock Cemetery
- 19) Application Form of Cemetery Plot Purchase

Maps

- 1) Maple Ridge Cemetery layout map
- 2) Whonnock Cemetery layout map
- 3) Zoning bylaw map A Bylaw 5556-1997
- 4) Streamside setback guidelines map
- 5) Generalized future land use Schedule B Bylaw 6425-2006
- 6) Natural Features map Schedule C Bylaw 6425-2006

Miscellaneous Forms

- 1) Buy-back for fees paid prior to 10 years ago (if plot purchase in 1982 the refund would be
- 2) Proposed changes to cemetery bylaw
- 3) Rose Garden interments by years
- 4) Procedure for cemetery transaction (purchases of plot and/or interment)

Appendix D

Glossary of Terms

Related to the Funeral and Cemetery Industry

Source: Adapted from the Cemetery and Crematorium Association of B.C. by LEES + Associates

TERM	DEFINITION
AT-NEED	<ul style="list-style-type: none">▪ At the time of, or immediately following, death.▪ Usually refers to the time of purchase of funeral or cemetery services.
BOOK OF MEMORIES	<ul style="list-style-type: none">▪ Plaque with a list of names of the deceased, some of whom may not be interred at the cemetery.▪ A type of memorial monument.
BURIAL	<ul style="list-style-type: none">▪ Interment in the ground.▪ The placement of human or cremated remains in a grave.
BURIAL PERMIT	<ul style="list-style-type: none">▪ A legal document issued by a regulatory authority authorizing final disposition of human remains.
BURIAL VAULT	<ul style="list-style-type: none">▪ A protective, sealable outer receptacle, into which a casket or urn is placed, designed to restrict the entrance of gravesite elements into the casket or urn.
BYLAWS	<ul style="list-style-type: none">▪ The written regulations, rules or laws governing the organization, management and operation of a cemetery, mausoleum, columbarium or crematorium.
CARE FUND (also known as PERPETUAL CARE FUND or MAINTENANCE FUND)	<ul style="list-style-type: none">▪ A trust fund established, held and administered in accordance with applicable law, with the income from the fund that can be used for the upkeep and repair of a cemetery, mausoleum or columbarium.
CASKET	<ul style="list-style-type: none">▪ A rigid container usually constructed of wood, metal or similar material, designed for the encasement of human remains.
CEMETERY	<ul style="list-style-type: none">▪ Land set apart or used as a place of interment or cremation, together with any incidental or ancillary buildings.

TERM	DEFINITION
CEMETERY SERVICES	<ul style="list-style-type: none"> ▪ The disposition of human remains by interment or cremation and includes the supply of goods incidental to the provision of such service.
COLUMBARIUM (plural: COLUMBARIA)	<ul style="list-style-type: none"> ▪ A structure, building, or an area in a structure or building that contains, as an integral part of the structure or building or as a freestanding sections, niches for the inurnment of cremated remains. ▪ Can be "Individual", "Family" or "Community", based on the number of niches, and how they are sold.
COMMINGLING	<ul style="list-style-type: none"> ▪ The mixing of the cremated remains of more than one deceased person.
CONTAINER	<ul style="list-style-type: none"> ▪ A self-contained receptacle or enclosure other than a casket, made of rigid cardboard, pressed wood or other similar material that is of sufficient strength to hold and conveniently transport human remains, but does not include a metal or fibreglass casket, or receptacle or enclosure made of plastic or similar substance, or a pouch or bag.
CREMATED REMAINS	<ul style="list-style-type: none"> ▪ The human bone fragments that remain after cremation that may also include the residue of any other materials cremated with the human remains.
CREMATION	<ul style="list-style-type: none"> ▪ The irreversible reduction of human remains to bone fragments through the application of flame and intense heat; in some jurisdictions this may include the repositioning or movement of the body during the process to complete the cremation; and the manual or mechanical reduction of the bone fragments after removal from the cremation chamber.
CREMATION LOT	<ul style="list-style-type: none"> ▪ A space used, or intended to be used, specifically for the interment of cremated remains. ▪ Typically, a smaller than full-sized in-ground lot.
CREMATORIUM	<ul style="list-style-type: none"> ▪ The building or part of a building that is fitted with approved appliances for the purpose of cremation human remains and includes everything incidental or ancillary to it.
CRYPT	<ul style="list-style-type: none"> ▪ One kind of lot ▪ Typically, a space in a mausoleum used or intended to be used for the entombment of human remains.

TERM	DEFINITION
DEATH CERTIFICATE	<ul style="list-style-type: none"> A legal document certifying the vital statistics pertaining to the life and death of a deceased person.
DIRECT (or IMMEDIATE) DISPOSITION	<ul style="list-style-type: none"> The final disposition of human remains without any formal viewing or visitation, ritual, rite, service or ceremony.
DISINTERMENT	<ul style="list-style-type: none"> The removal of human remains, along with the casket or container or any remaining portion of the casket or container holding the remains, from the lot in which the remains had been interred.
EASEMENT	<ul style="list-style-type: none"> The right acquired, whether or not supported by a certificate, to interment in a lot.
ENTOMBMENT	<ul style="list-style-type: none"> One form of interment. The placement of human remains in a mausoleum crypt.
FLAT MARKER	<ul style="list-style-type: none"> A grave marker set flush with the ground.
FUNERAL SERVICES	<ul style="list-style-type: none"> The arrangements, care and preparation of human remains for interment, cremation or other disposition and includes the supply of goods incidental to the arrangements, care and preparation, but does not include the sale of lots.
GRAVE	<ul style="list-style-type: none"> One kind of lot. A portion of ground in a cemetery, used or intended to be used, for the burial of human remains or cremated remains.
GRAVE LINER	<ul style="list-style-type: none"> A fibreglass or concrete structure installed over a casket once it has been placed in the grave.
INTERMENT	<ul style="list-style-type: none"> The disposition by: <ul style="list-style-type: none"> a. burial of human remains or cremated remains in a grave; b. entombment of human remains in a mausoleum, crypt, or; c. inurnment of cremated remains in a columbarium niche.
INURNMENT	<ul style="list-style-type: none"> One form of cremated remains interment. The process of placing cremated remains in a receptacle including, but not limited to, an urn and placing the urn into a niche.

TERM	DEFINITION
LAWN CRYPT	<ul style="list-style-type: none"> ▪ A concrete or other durable and rigid outer receptacle installed in a grave prior to burial.
LOT	<ul style="list-style-type: none"> ▪ A space used, or intended to be used, for the interment of human remains or cremated remains under a right of interment and includes a grave, crypt, niche or plot.
LOT HOLDER	<ul style="list-style-type: none"> ▪ The person in whose name the right of interment in a lot is registered in the records of a cemetery and, where the interment has taken place, includes the person who has legally acquired ancillary rights to the lot.
MAINTENANCE FUND (also known as CARE FUND or PERPETUAL CARE FUND)	<ul style="list-style-type: none"> ▪ A fund established for the upkeep and repair of a cemetery, mausoleum or columbarium.
MAUSOLEUM (plural: MAUSOLEA)	<ul style="list-style-type: none"> ▪ A structure or building that contains interior or exterior crypts designed for the entombment of human remains.
MAUSOLEUM CRYPT	<ul style="list-style-type: none"> ▪ A chamber of a mausoleum or sufficient size for entombment of human remains.
MEMORIAL	<ul style="list-style-type: none"> ▪ A product, meeting the bylaw requirements of a cemetery, used or intended to be used to identify a lot or to memorialize a deceased person interred or to be interred in a lot, including but not limited to: <ul style="list-style-type: none"> a. a marker, headstone, tombstone monument, plaque, tablet or plate on a lot; or b. a tablet an inscription, lettering or ornamentation on a crypt or niche front, or c. a tree, boulder or other feature so identified; ▪ A ceremony, rite or ritual commemorating the life of a deceased individual without the human remains being present.
NICHE	<ul style="list-style-type: none"> ▪ One kind of lot. ▪ A space, usually within a columbarium, for placing a receptacle containing cremated remains.

TERM	DEFINITION
OSSUARY	<ul style="list-style-type: none"> ▪ A vessel for the interment of two or more cremated remains. ▪ Typically, the cremated remains are commingled, although the urns may be “nested” next to one another.
OUTER CONTAINER	<ul style="list-style-type: none"> ▪ A receptacle, which is designed for placement in a lot to accept the placement of a casket or urn.
PERPETUAL CARE FUND (also known as CARE FUND or MAINTENANCE FUND)	<ul style="list-style-type: none"> ▪ An irrevocable trust fund established, held and administered in accordance with applicable law, with the income from the fund to be used for the upkeep and repair of a cemetery, mausoleum or columbarium.
PRE-NEED	<ul style="list-style-type: none"> ▪ Any time prior to death. ▪ Usually refers to the time of purchase of funeral or cemetery services. ▪ “Pre-need planning” refers to the process of making arrangements and/or entering into contracts regarding future cemetery services for one or more persons who are still alive at the time.
REGISTRAR	<ul style="list-style-type: none"> ▪ In British Columbia, the person responsible for the administration and enforcement of applicable laws and regulations relating to cemetery and funeral services. (Outside of B.C. may be referred to as the Regulatory Authority or Regulator.)
SCATTERING	<ul style="list-style-type: none"> ▪ The dispersal of cremated remains over land or water, or commingling in a defined area in a cemetery.
SCATTERING GARDEN	<ul style="list-style-type: none"> ▪ An area within a cemetery, usually providing an attractive natural or ornamental setting, dedicated to the scattering of cremated remains.
UPRIGHT MARKER	<ul style="list-style-type: none"> ▪ A grave marker that is not flush with the ground, is mounted on a footing and intended to be visible over the surrounding finished grade.
URN	<ul style="list-style-type: none"> ▪ A receptacle for holding cremated remains.

**Maple Ridge Cemetery Master Plan
Implementation Table**

	Priority	Implementation	Delivery Method	Net Cost Estimates*	Operating or Capital Cost
Meeting Future Needs					
In-fill at Maple Ridge Cemetery (Cremated Remains)					
Family Vessels, columbaria	High	1 - 3 years	Staff, consultants, contractors	\$ (100,000.00)	Primarily Capital
Columbaria in Section 2	High	1 - 3 years	Staff, consultants, contractors	\$ (75,000.00)	Primarily Capital
Cremation Garden in SE area	High	1 - 3 years	Staff, consultants, contractors	\$ (100,000.00)	Primarily Capital
In-fill at Maple Ridge Cemetery (Traditional Burial)					
Hydro/geotech study of drainage in Section 3	High	ASAP	Consultant	\$ 10,000.00	Capital
Implement drainage improvements in Section 3	High	Year 1	Staff, contractors	\$ 25,000.00	Capital
Mausolea Design and Business Case Analysis	Medium	Year 3 - 5	Consultant	\$ 10,000.00	Capital
Phase I Mausolea Design and Construction	Medium	Year 4 - 6	Contractor, Consultant, Staff	\$ (100,000.00)	Primarily Capital
North Expansion Areas					
Land acquisition, preliminary planning	High	ASAP	Consultants, staff	\$ 20,000.00	Capital
Design and infrastructure services	High	Year 2	Consultants, staff	\$ 30,000.00	Capital
Plot layout and cremation garden construction	High	Year 3	Consultants, staff, contractors	\$ (50,000.00)	Capital
Off Site Cemetery Lands					
Land Acquisition Planning, Site Identification	High	Year 2 - 4	Consultants, staff	\$ 20,000.00	Primarily Capital
Interim pre-cemetery land use studies	Medium	Year 5 - ?	Staff, consultants	\$ 25,000.00	Capital
Interim land use implementation	Low	Year 15 - ?	Staff	TBD	Capital
Cemetery Lands Preparations	Low	Year 25 - ?	Consultants, staff	\$ -	Capital
Marketing the Cemeteries					
Changing Cemetery Section Names	High	Year 1	Staff	\$ 5,000.00	Operating
On and off-site signage improvements	High	Year 1	Staff, consultants	\$ 30,000.00	Capital
Enhanced Cemetery profile in the community					
Website development and roll out	High	Year 2	Staff, consultants	\$ 12,000.00	Capital
Newsletter/brochure development and roll out	High	Year 2 - 3	Staff, consultants	\$ 10,000.00	Capital
Increasing Effectiveness and Partnerships					
Bylaw update	High	Year 1	Staff, consultants	\$ 8,000.00	Capital
Ornamentation Procedures Update	High	Year 1	Staff	\$ 8,000.00	Operating
Create an Advisory Board	Medium	Year 2	Staff	\$ 7,500.00	Operating
Cemetery Infrastructure Maintenance and Enhancements	High	Year 1 - 3	Staff, contractors	\$ 50,000.00	Capital
Enhancing Cost Recovery					
Product introductions	Low	Year 5 - ?	Staff, consultants	\$ (25,000.00)	Capital
Perpetual Care Fund Contribution Update***	High	Year 1 - 10	Staff, consultants	\$ 180,000.00	Operating
Comprehensive Cemetery Financial Plan	ASAP	Year 1 - 7	Staff, consultants	\$ 30,000.00	Capital
Update fees and charges****	High	Year 1 - 10	Staff	\$ (224,000.00)	Operating Revenue
Net Total Cost (Revenue)				\$ (193,500.00)	

* Net cost estimates include estimated revenues over a maximum 10year period (in many cases the ROI will occur over a much shorter period)

** Net revenues are included for years 1 - 10; costs beyond year 10 are not included

*** Assuming a 5% increase over current contributions occurring on average over the next 10 years

**** Assuming a 10% fee increase to meet industry standard and inflation on average over the next 10 years

These are order of magnitude cost and revenue estimates. This table provides implementation recommendations regarding order of priority and possible mechanisms for fulfilling the tasks brought forward in this report. The cost and revenue estimates reveal a net positive potential return of approximately \$193,000, which could be used to repay any internal funding necessary for land acquisition, however, it is imperative to note that these costs do NOT include land acquisition. We believe that on the cost side they are sufficiently accurate for budget allocation purposes and should be considered very conservative on the revenue side – hence the recommendation to complete a comprehensive financial plan. A comprehensive financial plan, based on detailed site, market and organizational factors needs to be developed as an early first step in the implementation of this master plan.