

Submitted to the City of Cold Lake on September 9, 2016

City of Cold Lake Cemetery Services Master Plan

Submitted to:



Submitted by:





E. Lees & Associates Consulting Ltd.



EXECUTIVE SUMMARY

LEES+Associates is a landscape architecture and planning firm that specializes in the planning and design of cemeteries across North America and abroad. The City of Cold Lake is committed to providing quality cemetery services to the citizens of Cold Lake and as such commissioned LEES+Associates in the Spring of 2016 to deliver a comprehensive Cemetery Services Master Plan that will provide a clear road map to guide the development and operation of the cemeteries, and meet the needs of the community into the future.

This Executive Summary highlights the key findings, recommendations and actions proposed to move the cemetery system towards long term, sustainable cemetery operations.

CONSULTATION KEY FINDINGS

Key findings that emerged from the Cemetery Immersion Workshop, City staff and stakeholder interviews, as well as community consultations, include:

- Internal stakeholders who attended the site visits and staff workshop noted the need for updating the Cemetery Bylaw, implementing standard operating procedures for grave opening and closing and maintenance, enhancing records management systems, increasing the range of services and interment options offered on a fee for service basis, improving signage and increasing the overall profile of the cemeteries within the community.
- External stakeholders who attended the workshop expressed a desire for new service
 offerings including columbaria, green burial, scattering and a new Field of Honour. A need
 for improved maintenance, access improvements, and enhanced snow removal were also
 noted.
- Members of the public who attended the Open House are strongly supportive of the concept designs presented, and support the City offering new interment and memorialization options, especially columbaria, a memorial wall, green burial and a cenotaph. Upgrading the cemetery driveways and access, improving overall aesthetics, and introducing walking paths, benches and rest areas were noted as priorities for improvement.

OPPORTUNITIES + CONSTRAINTS KEY FINDINGS

- Lakeview Cemetery (2.0 acres) is located in Cold Lake North. The cemetery is 74% sold within around 50 traditional in-ground plots remaining. The cemetery has an attractive park-like character. Opportunities for improvement include improving access and circulation for visitors and operations, increasing the range of cremation interment options to include columbaria and scattering, creating a formalized storage area, marking and celebrating the existing Veterans area, adding benches and seating, and enhancing signage and wayfinding.
- Grand Centre Memorial Park (1.9 acres) is located in Cold Lake South. The cemetery is 30% developed. The cemetery is on a sloping site creating attractive view towards the west. Opportunities for improvement include improving access and circulation for visitors and operations, increasing the range of interment and memorialization options to include columbaria, scattering, and other cremated remains interment options, creating specialized interment areas, enhancing buffers and fencing, creating a formalized storage area, adding



benches and seating, adding trees and other character defining elements, and improving signage and wayfinding from Hwy 28.

DEMOGRAPHICS, MARKET + CULTURAL TRENDS ANALYSIS

Key findings that emerged from this analysis for the City of Cold Lake's cemetery market include:

- The City population has been growing at an average rate of 2.6% per year for 5 years;
- The City's future population growth will increase to an average 3.0% per year over the next 25 years;
- The City population is on average, younger than the rest of the Municipal District of Bonnyville and the rest of the Province;
- The City has averaged a lower death rate (4.4 deaths per 1,000 people) than the rest of the Province (5.6 deaths per 1,000 people) over the past 5 years;
- The City has a lower cremation rate (68.1% in 2015) than the Province (70.3% in 2015).
 The cremation rate is increasing across the Province of Alberta;
- Casket market capture was below average compared to the standard market capture rate of casket burials in Cold Lake cemeteries from 2011 to 2015;
- Cremated remains market capture was below average compared to the standard market capture rate for cremated remains in Cold Lake cemeteries from 2011 to 2015;
- In the next 25 years, the City's death rate will increase to 5.3 per 1,000, due to the passing of the large Baby Boomer Generation;
- In the next 25 years, the City will experience approximately 2,850 deaths, and
- In the next 25 years, 500 residents (18%) from the City of Cold Lake will choose casket burial and 2,350 residents (82%) from the City of Cold Lake will choose cremation.

DEMAND/NEEDS ANALYSIS + FUNCTIONAL PLAN

Key findings that emerged from this land needs assessment are that Cold Lake Cemeteries:

- Will experience 540 interments 160 caskets (30%) and 380 cremated remains (70%) interments in the next 25 years;
- Will sell all existing burial plots within 5 years, assuming demand is met by all inventory as
 it remains available from both Lakeview Cemetery and Grand Centre Memorial Park;
- Have enough plots available to bury residents for another 20 to 26 years, and
- Will need to develop slightly less than 1 acre of land over the next 25 years to meet sales and interment demand after the existing inventory is used, depending on the City's in-fill strategy, new service offerings and its density plan for future development.
- 1.4 acres of land is available for development at Grand Centre Memorial Park therefore the City does not need to acquire new land to meet 25 years of forecast demand. However, additional land will be required to meet a longer horizon of community interment needs.

It is recommended that the City of Cold Lake:

- Consider the development of in-fill areas at Lakeview Cemetery;
- Prioritize development of smaller, 2 ft. by 2 ft. cremation lots to the current interment offer;



- Add and install new cremation options such as columbaria niches, scattering gardens and family vessels into the City's cemetery inventory. This will decrease the high demand and pressure on the use of land for the in-ground burial of cremated remains;
- Develop a green burial section to respond to community interest in this type of interment, and to further diversify the current offerings at Cold Lake Cemeteries;
- Develop 1 acre of land at Grand Centre Memorial Park within 5 years to accommodate new plot sales. This will meet the City's cemetery needs for the next 25 years;
- Designate 2 acres of land adjacent to Grand Centre Memorial Park as future cemetery lands to be developed as needed within 15 to 20 years, when City capital funds permit.
- Begin to track and report the number and type of multiple interments in each lot sold at each cemetery site, to better evaluate the sites' interment density. This includes recording the number of caskets and urns within each in-ground burial lot at each cemetery site, and how many double depth interments take place each year, and
- Plan to revisit the cemetery land needs assessment five years after the recommendations in this study are implemented in order to effectively respond to updates in land use and interment trends that emerge from new services offered (such as green burial) as well as enhanced operations and community engagement.

OPERATIONAL REVIEW + BUSINESS MODEL FOR CEMETERY SERVICES

It is recommended that the City of Cold Lake:

- Change the pricing structure to include "Resident" and "Non-Resident" fees. Create a Non-Resident Boundary Map for the fees that aligns with the planning boundaries used by the Province of Alberta;
- Define "Resident" in the Cemetery By-law as anyone who has lived within or has owned property within the City of Cold Lake limits, for a minimum of 5 years;
- Inform the community the cemetery rates structure will change and fees increased in 2017.
 Provide residents with a means to provide feedback about the proposed changes;
- Increase prices annually, at a minimum, by the rate of inflation (approximately 2%), as annually defined by the Bank of Canada, Consumer Price Index;
- Raise Cold Lake cemeteries prices in 2017 to better align rates with those offered within the Alberta cemetery market. Specific price recommendations are in Chapter 7.
- Evaluate the feasibility of providing interments through City staff or by the City directly contracting interment services;
- Discuss potential alliances with industry partners to provide new memorial and grave-side service options. The City should acknowledge partners in future marketing efforts;
- List prices for interments in the fee schedule, including rates for burying adults, children
 and infant caskets, urns, niche opening and closing, scatterings, etc. Consider adding
 distinct rates for weekends, holidays and double depth burial;
- Offer new cemetery products and services, including smaller cremation graves, green burial, columbaria niches, scattering areas, family vessels, new memorialization, accessory and grave-side set-up. Proposed rates for new offerings are in Chapter 7;





- Update and expand upon the Definitions section in the cemetery bylaw;
- Add clarification around legalities of Ownership in the cemetery bylaw;
- Move all monument type and size requirements to Schedule "B" in the cemetery bylaw;
- Add rules and conditions in the bylaw for new forms of interment that are not currently offered at the cemeteries (e.g. scattering, columbaria, family vessels and green burial);
- Incorporate clarifying details about ornamentation emphasizing the importance of safety in the bylaw. Create a handout for families with key policies regarding planting;
- Provide clarity on enforcement of the bylaw;
- Adopt new definitions for veterans of the Armed Forces and Protection Services and policy for the new Field of Honour in the cemetery bylaw;
- Revise the bylaw to clarify who is responsible for grave cover and headstone maintenance, and the circumstances under which cracked or broken grave covers should be removed.
- Adopt specialized cemetery software that enhances record-keeping and performance measurement (e.g. Stone Orchard Software) and links records to electronic maps of graves.
 Implement the iCemetery App for use by field work staff, contractors and the public;
- Begin the process of reconciling the inventory, interment and customer records at Lakeview
 Cemetery to enable more efficient land management and customer service;
- Create an organizational chart which outlines a reporting structure as well as roles, responsibilities for all those involved in the cemeteries;
- Develop standard operating procedures for grave marking, opening/closing, maintenance, etc.;
- Formalize the procurement of a contractor to perform opening and closing, with clear reporting structure to the City and review and renewal of the contract every 5 years;
- Establish the role of a Cemetery Manager, responsible for administration and maintenance;
- Hold quarterly meetings per year with all City staff who are involved in the cemeteries;
- Hold one meeting per year with the City staff and external cemetery stakeholders;
- Send at least one member of City staff to a cemetery conference or training every year, building cemetery knowledge within the staff team;
- Replace tracked backhoe with wheeled equipment. Require use of 4' x 8' plywood boards to reduce turf impacts;
- Plan to increase care and maintenance at both City cemetery sites (e.g. the City could plow snow on site to provide some pedestrian access through winter);
- Identify a budget, staff resources and vision for a City cemeteries' marketing strategy. This
 should include developing a plan for "start-up" initiatives such organizing social media
 accounts, community events and cemetery walking tours;
- Adopt the proposed alternate business model in Chapter 7 to guide future planning. This
 model includes price increases and creating a perpetual care fund where 30% of plots
 sales and 10% of niches are invested annually;
- Add new revenue accounts to enhance performance measurement and the ability to track sales by customer segment (resident/non-resident), product/service type (casket plots, cremation plots, niches, permits, etc) and time of sale (at-need/pre-need);



- Add new expense accounts to enhance the City's ability to track costs by function; these
 could include creating new accounts and account groupings for administration costs,
 maintenance costs, contractor costs (for interments), etc;
- Draft policies for posting cemetery-related sales and expenses to ensure consistent and accurate reporting. This includes posting an appropriate % portion of maintenance and labor expenses from the Parks budget to cemetery expense accounts;
- Meet with the representatives of the churches receiving a City transfer of funds to support
 their cemeteries. Gather information and evaluate whether the annual transfer should
 continue. If it is decided that it should, then draft an updated agreement that outlines the
 terms, conditions, accountability and responsibilities of all parties involved;
- Create a Perpetual Care Fund by consulting with an investment specialist. Contribute 30% of annual plot sales and 10% of columbaria niche sales to the PCF annually. The City will need to decide on the appropriate measures to increase the PCF balance;
- Transfer future profits to a new Development Fund. This will fund future inventory, land acquisitions and improvements to cemetery site infrastructure;
- Monitor changes in revenue, expenses, profit/loss and community response, to ensure the proposed marketing plan and financial strategies evolve as expected and that the impact of these changes on the cemetery-community relationship is measured, and
- In 5 to 10 years, revisit the market capture, and financial projections for the cemeteries.

CONCEPT DESIGNS + SITE IMPROVEMENT RECOMMENDATIONS

- Concept designs are proposed for Grand Centre Memorial Park and Lakeview Cemetery, outlining access and circulation improvements as well as recommendations for new interment, amenity and landscape areas.
- The proposed concept designs will provide approximately 30 years of additional burial capacity.

DEVELOPMENT + PHASED IMPLEMENTATION PLAN

- The total estimated costs for the proposed improvements are:
 - o Grand Centre Memorial Park Phase 1: \$810,631 and Phase 2: \$510,315
 - o Lakeview Cemetery Phase 1: \$551,401 and Phase 2: \$301,990

CONCLUSION

The purpose of this comprehensive Cemetery Services Master Plan is to review the cemetery needs of the City, outline recommendations to enhance the cemetery properties and operations over the coming years, and serve as a guide for future development.

This plan will assist the City of Cold Lake in preparing to effectively meet the future interment and service needs of the community for the foreseeable future and charting a path forward that will move this important social service towards long term sustainability in its future operations.



ACKNOWLEDGEMENTS

We would like to thank all those who contributed to this report:

CITY OF COLD LAKE

Tasha Elliott, Planner
Jim Fedyk, Recreation Manager
Kristy Isert, Legislative Advisor
Robert Serediuk, Parks and Recreation Foreman
Shannon Boychuk, Operator
George Urlacher, Transportation Services Manager
Jazelle Robb, Greenspace Coordinator
Cindy Reimer, Executive Secretary to CAO/City Manager
Sophie Ke, Intermediate Secretary of Corporate Services

COMMUNITY STAKEHOLDERS

CAF St. Mark's Protestant Chapel

Cold Lake Community Church
Cold Lake Mosque
Cold Lake Seniors' Society
Community Baptist Church
Family and Community Support Services
Lakeland Lutheran Church
Momento Funeral Chapel
Points West Living Residents Association
Royal Canadian Legion Br. 211
RCAF Association
United Church

CONSULTANT TEAM

Erik Lees, Principal, LEES+Associates Heidi Redman, Senior Associate, Project Manager, LEES+Associates Richard Cook, Associate, LEES+Associates Jennifer Thibert, Associate, Business Manager, LEES+Associates

PROJECT NUMBER: 15-820 STATUS: DRAFT REPORT DATE: SEPTEMBER 9, 2016



TABLE OF CONTENTS

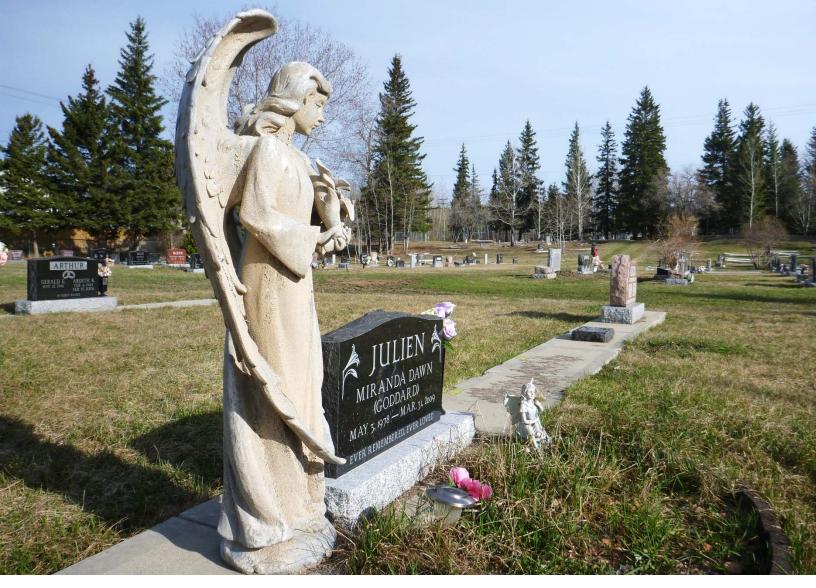
E	EXEC	CUTIVE SUMMARY	iii
F	ACKI	NOWLEDGEMENTS	viii
1	IN	ITRODUCTION	1
	1.1	OVERVIEW	1
2	2 M	ETHODOLOGY	3
	2.1	DATA ASSEMBLY	3
	2.2	STAFF, STAKEHOLDER + COMMUNITY CONSULTATION	4
	2.3	ANALYSIS TOOLS + METHODOLOGY	4
3	B D	EMOGRAPHICS, MARKET + CULTURAL TRENDS ANALYSIS	6
	3.1	REGIONAL CONTEXT	6
	3.2	DEMOGRAPHIC PROFILES	
	3.3	DISPOSITIONS + INTERMENTS PROFILE	
	3.4	HISTORIC COMMUNITY USE	
	3.5	FUTURE COMMUNITY USE	
	3.6	KEY FINDINGS: DEMOGRAPHIC, MARKET + CULTURAL TRENDS ANALYSIS	15
4	C	ONSULTATIONS	17
	4.1	THE CONSULTATION PROCESS	17
	4.2	CONSULTATION SUMMARY HIGHLIGHTS	18
5	0	PPORTUNITIES + CONSTRAINTS	20
	5.1	LAKEVIEW CEMETERY - OPPORTUNITIES AND CONSTRAINTS	21
	5.2	GRAND CENTRE MEMORIAL PARK – OPPORTUNITIES AND CONSTRAINTS	
6	D D	EMAND-NEEDS ANALYSIS + FUNCTIONAL PLAN	22
	6.1	FUTURE CEMETERY DEMAND	23
	6.2	EXISTING INVENTORY	23
	6.3	FUTURE LAND NEED	25
	6.4	OPPORTUNITIES TO EXPAND CAPACITY	
	6.5	KEY FINDINGS: DEMAND-NEEDS ANALYSIS + FUNCTIONAL PLAN	
	6.6	RECOMMENDATIONS: DEMAND-NEEDS ANALYSIS + FUNCTIONAL PLAN	30
7	0	PERATIONAL REVIEW + BUSINESS MODEL	31
	7.1		
	7.2		
		RECOMMENDATIONS: MARKET PRICES + OFFERINGS	
		CEMETERY BYLAW REVIEW	
	75	KEV EINDINGS - CEMETEDY RVI AW	30



7.6		
7.7 7.8		
7.9		
7.1		
7.1		
7.1		
7.1		
7.1	4 RECOMMENDATIONS – FINANCIAL PLAN	. 55
8 (CONCEPT DESIGNS + SITE IMPROVEMENTS	.57
8.1		
8.2		
8.3		
8.4	CONCEPT DESIGN – LAKEVIEW CEMETERY	. 61
9 [DEVELOPMENT + PHASED IMPLEMENTATION PLANS	.62
9.1	PHASING PLANS	. 62
9.2	COST ESTIMATES	. 65
10	CONCLUSION	.68
11	APPENDICES	.69
APP	PENDIX A – STAFF + STAKEHOLDER CONSULTATION	.70
APP	PENDIX B – DEMOGRAPHIC PROFILES	.76
۸DD	PENDIX C – CEMETERY MARKET DISPOSITIONS AND MARKET CAPT	IIDE
	AILS	_
APP	PENDIX D – CEMETERY INVENTORY DETAILS	.82
APP	PENDIX E – CEMETERY MARKET PRICES	.83
APP	PENDIX F – NEW INTERMENT OPTIONS	.85
APP	PENDIX G – CEMETERY BYLAW INFORMATION	.88
APP	PENDIX H – PERPETUAL CARE FUND OVERVIEW	.90
APP	PENDIX I – SITE ANALYSIS PLANS	.92
APP	PENDIX J – CEMETERY CONCEPT DESIGNS	.93
APP	PENDIX K – CEMETERY PHASING PLANS	.94



APPENDIX L – PUBLIC OPEN HOUSE SUMMARY	95
APPENDIX M – GLOSSARY OF CEMETERY TERMS	96



1 INTRODUCTION

1.1 OVERVIEW

The City of Cold Lake is committed to providing quality cemetery services to the citizens of Cold Lake and as such commissioned LEES+Associates in the Spring of 2016 to deliver a comprehensive Cemetery Services Master Plan to provide a clear road map to guide the development and operation of the cemeteries, and meet the needs of the community into the future.

This cemetery services master plan provides the City with a guiding vision and strategy for the long term sustainability of its cemetery operations. The plan considers how best to provide attractive interment options to the City's growing population and how cemeteries can be recognized as valuable community spaces. The end result is a concise set of recommendations for improvements to the physical, operational and business components of the cemetery system.



Report chapters can be summarized as follows:

1. Introduction

An overview of the City of Cold Lake cemetery master plan project;

2. Methodology

A summary of the analysis and planning methodologies used in this plan;

3. Demographics, Market + Cultural Trends Analysis

 An analysis of the Cold Lake cemetery market, demographics, disposition trends, interment practices, and future demand;

4. Consultations

 A summary of the key findings from the cemetery immersion workshop, and City staff, stakeholder and community consultations for this project;

5. Opportunities + Constraints

 A summary of the key opportunities and constraints for the two cemetery sites analyzed through this project;

6. Demand-Needs Analysis + Functional Plan

 A comparison of the forecasted cemetery demand to the remaining land supply at Cold Lake cemeteries. A spatial-needs analysis in this section summarizes current site capacity and provides time estimates for the cemeteries' remaining developed and undeveloped land;

7. Operational Review + Business Model

 An analysis and key recommendations concerning City cemetery offerings, operations, bylaws, policies, procedures, financial performance, and the establishment of a sustainable Perpetual Care Fund;

8. Concept Design Options + Site Improvements

a. Concept design options for each cemetery site, and a summary of recommended aesthetic and functional improvements;

9. Development + Phased Implementation Plans

 A phasing plan that outlines a prioritized list of development initiatives, and order of magnitude cost estimates to provide a roadmap for capital planning and future improvements at each cemetery site;

10. Conclusion

a. This chapter concludes the City of Cold Lake cemetery master plan, and

11. Appendices

a. Supplementary and supporting details for the City of Cold Lake Cemetery Services Master Plan findings and recommendations.



2 METHODOLOGY

2.1 DATA ASSEMBLY

LEES+Associates gathered background information from City Staff concerning historic cemetery operations. This information was analyzed in conjunction with external cemetery market research and a review of demographic, disposition and interment activity in the City of Cold Lake. Data sources reviewed in the process of generating this report include, but are not limited to:

- Alberta Vital Statistics and Alberta Municipal Affairs data;
- Statistics Canada, (National Census 2006 + 2011 and Household Survey 2011);
- Cold Lake Municipal Census (2006 to 2015);
- Cemetery Bylaw # 431-AD-12 and Land Use Bylaw 382-LU-10;
- Cemetery Maps and Aerial Photos;
- Municipal Development Plan 2007 2037;
- Open Space and Linkages Plan 2013, and



Additional cemetery records, financial reports and correspondence provided by the City
of Cold Lake staff.

2.2 STAFF, STAKEHOLDER + COMMUNITY CONSULTATION

LEES+Associates engaged internal and external cemetery stakeholders in the process of information gathering and analysis through a cemetery immersion workshop with City Staff, and a workshop with external stakeholders including private sector and community representatives to achieve a holistic perspective of the City's cemetery operations, as well as land, cultural and social needs. Feedback from the staff and stakeholder workshops is summarized in **Appendix A**.

2.3 ANALYSIS TOOLS + METHODOLOGY

This analysis examines the expected demand, land need, inventory (developed interment space for sale), and remaining land capacity at the City's cemeteries. Death data for the City of Cold Lake segmented by disposition type (cremation versus casket) was obtained from Alberta Vital Statistics. The majority of those served by Cold Lake cemeteries are residents of the City of Cold Lake, therefore in this report, it is assumed the primary market catchment area for Cold Lake cemeteries is defined by the boundaries of the City of Cold Lake.

Future demand for cemetery services was extrapolated from historic death and disposition trends, and a determination of cemetery use patterns, known as "market capture." Cemetery market capture was calculated by comparing annual interments (provided by City Staff) to the number of deaths reported by Alberta Vital Statistics. For these analyses, market capture rates were assumed to remain consistent over the next 25 years. If changes to cemetery operations (such as increased sales, marketing, maintenance and community engagement initiatives) are implemented, then it is possible that market capture rates would increase.

The primary tool for this analysis is LEES+Associates Cemetery Business Case Analysis Tool (CBCAT). The CBCAT is municipal cemetery planning tool specifically developed for tracking and analyzing market trends in Canada. The CBCAT incorporates baseline historic market data and cemetery sales activity data within a pro-forma template used for long term land needs and financial forecasting.

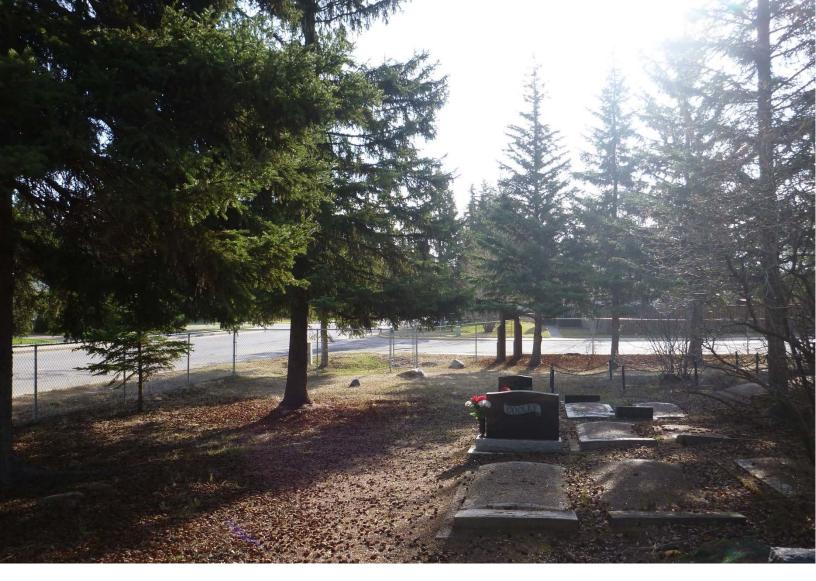
Business model analyses and financial projections in this report build upon the Demographic, Market and Cultural Trends Analysis, as market changes are expected to be key sales and cost drivers. Alternative scenarios are presented based on a detailed sensitivity analysis of key variables to determine how the City could achieve more sustainable cemetery operations.







Figure 1: Cold Lake Cemeteries Aerial Photographs (Left - Lakeview Cemetery, Right - Grand Centre Memorial Park), Source: City of Cold Lake.



3 DEMOGRAPHICS, MARKET + CULTURAL TRENDS ANALYSIS

This chapter identifies the regional context, age distribution, population profile, death, cremation and burial trends that affect cemetery land capacity and service options for Cold Lake cemeteries.

3.1 REGIONAL CONTEXT

Originally three communities, the City of Cold Lake was formed by merging the Town of Grand Centre, the Town of Cold Lake, and Medley (Canadian Forces Base 4 Wing). Grand Centre is locally known as Cold Lake South. The original Cold Lake is known as Cold Lake North. The City of Cold Lake was incorporated in the year 2000.

The City of Cold Lake is situated in the Municipal District of Bonnyville, 300 km (190 mi) northeast of Edmonton, near the Alberta-Saskatchewan provincial border. The area surrounding the City is sparsely populated, and consists mostly of farmland. The Cold Lake Air Weapons Range, located to the north of the City, is the country's premier air weapons training base.



The City maintains and operates two cemeteries to serve residents of the area; Grand Centre Memorial Park and Lakeview Cemetery. Both cemeteries offer traditional in-ground burial or inground cremation.

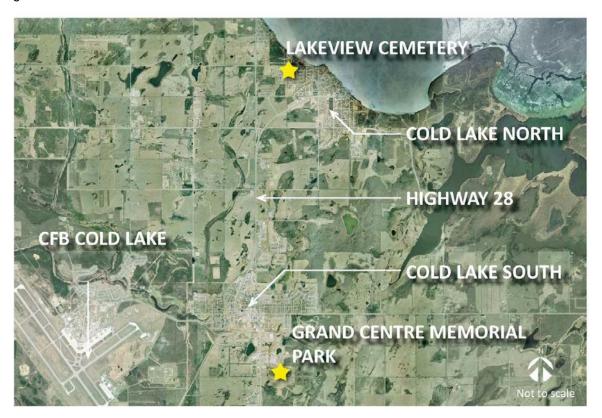


Figure 2. Cemetery location map, Source: LEES+Associates.

Lakeview Cemetery is located at 2205 1st Ave, Cold Lake, Alberta. Lakeview Cemetery was established in 1930 by the United Church. The City of Cold Lake officially took over the ownership, management and maintenance of the cemetery in January 2001. The land for the existing Lakeview Cemetery is 8,087 sq. meters (2.0 acres). The historic Northern half of this cemetery with 613 plots is 100% sold. The Southern section of the cemetery featuring 20 concrete runners with 200 plots, is 74% sold, which equates to approximately 50 traditional in-ground burial plots remaining. There is a small Field of Honour for veterans in the Northern half of the cemetery; no plots remain available within this section.

Grand Centre Memorial Park (also known by the community as "Cold Lake South") is located at 4608 38th Ave, Cold Lake, Alberta. Grand Centre Memorial Park was established in 1992. The site is 7,810 sq. meters (1.9 acres). The cemetery has five concrete runners installed on the Western side with 180 plots which occupy approximately 30% of the site. The rest of the land is undeveloped.



Most graves, unless otherwise marked, are 4 feet wide and 10 feet 6 inches long with a 2-foot cement ribbon along the top side.

Ensuring that the cemeteries remain relevant to the community they serve means accommodating the needs of the significant proportion of the Cold Lake population that are shorter term or transient residents due to their association with the Canadian Forces Base and the oil and gas industry. In addition, the City of Cold Lake has a significant First Nations population from the Cold Lake First Nations Band, and the Cold Lake 149 Reserve, although it is understood from stakeholder consultations that most members of these communities are laid to rest on reserve. The City of Cold Lake has a growing Muslim population approximately 30 Muslim families living in Cold Lake at this time (Ajaz Quaraishi, personnel communication, June 29, 2016). According to stakeholder consultations, most members of the Cold Lake Muslim community are buried in Edmonton.

There are 10 other cemeteries located within the cemetery market area of Cold Lake operated by private and religious groups that are likely to serve community residents. These cemeteries are identified on the regional map shown in Figure 4 and include the following sites:

Duclos Memorial United Church Cemetery (G)



Figure 3: Alberta Municipal District Map 2013, Source: Wikimedia Commons.

- Lies 16 miles [25.7 km] to the Southwest (SW) of Cold Lake North, in Alberta;
- Owned by the United Church of Canada, run by volunteers;
- http://www.findagrave.com/cgi-bin/fg.cgi?page=cr&CRid=2237012&CScn=Duclos+&

Golden Ridge Roman Catholic Cemetery (F)

- Lies 44 miles [70.8 km] to the East Southeast (ESE) of Cold Lake, in Saskatchewan.
- Also known as: Saint Mary Roman Catholic Cemetery, and
- http://www.findagrave.com/cgi-bin/fg.cgi?page=cr&CRid=2237877



Holy Family Cemetery (H)

- Lies 27 miles [43.5 km] to the West Southwest (WSW) of Cold Lake, in Alberta, a
- Owned by the Holy Family Church, Catholic Diocese, and
- http://www.findagrave.com/cgibin/fg.cgi?page=cr&CRid=2417442&CScn=Holy+Family+Cemetery+&CScntry=10&

North Pine Mennonite Cemetery (C)

- Lies 17 miles [27.4 km] to the East (E) of Cold Lake, in Saskatchewan;
- Owned by the Emmanuel Mennonite Church, and
- http://www.findagrave.com/cgibin/fg.cgi?page=cr&CRid=2574136&CScn=North+Pine+Mennonite&

Our Lady of the Assumption Roman Catholic Cemetery (D)

- Lies 4 miles [6.4 km] to the South Southwest (SSW);
- http://www.stdominicparish.ca/

Rife and District Cemetery (J)

- Lies 38 miles [61.2 km] to the West Southwest (WSW) of Cold Lake;
- http://www.findagrave.com/cgibin/fg.cgi?page=cr&CRid=2547881&CScn=Rife&CScntry=10&
- http://www.cwgc.org/find-acemetery/cemetery/2090844/Rife%20and%20District%20Anglican%20Cemetery

Sacred Heart Russian Greek Catholic Cemetery (I)

Lies 27 miles [43.5 km] to the West Southwest (WSW) of Cold Lake, in Alberta;

Saint Dominic Roman Catholic Cemetery (B)

- Lies less than 2 miles to the South Southeast (SSE), in the vicinity of Cold Lake, in Alberta:
- http://geneofun.on.ca/cems/ab/ABBON1411, and
- http://www.findagrave.com/cgi-bin/fg.cgi?page=cr&CRid=2344866&CScn=Saint+Dominic+Roman+Catholic+Cemetery&

Sideview Cemetery (E)

- Lies 48 miles [77.2 km] to the West (W) of Cold Lake. Owned by the Sideview Cemetery Company,
- Owned by Sideview Cemetery Company, and
- http://www.findagrave.com/cgibin/fg.cgi?page=cr&CRid=2260857&CScn=Sideview+Cemetery+&

St-John the Evangelist Anglican Church Cemetery (K)

- 4,810 50th Ave, Cold Lake, and
- Owned by Anglican Diocese of Edmonton.

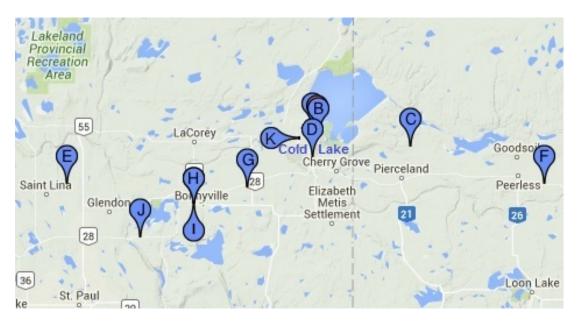


Figure 4: Cemetery Sites in the Cold Lake Region, Source: Roadside Thoughts.com.

3.2 DEMOGRAPHIC PROFILES

In summary, research shows that:

- The City of Cold Lake has a younger than average population the median age in the City is 30.5; in the Municipal District of Bonnyville it is 37.1 and across the Province of Alberta it is 36.5;
- A full 29% of the City's population is not affiliated with any particular religion;
- The most prevalent religion in the City is Catholicism at 35%;
- "Other religions" groups in the City include those who are Muslim, Sikh, Buddhist and those who follow traditional Aboriginal spirituality;
- 77% of City residents are Caucasians of European descent. A high proportion of these are from a heritage originating in the British Isles, French, Germany and Ukraine, and
- The City's largest minority group is Aboriginals composing 12% of the total population.

Over the past five years, the City has been growing at an average rate of 2.6% per year, slightly faster than the rest of the Province at 2.4%. The military and oil sectors are currently driving growth in the community, with military personnel increasingly choosing are staying in Cold Lake and living out their lives in the community.

Over the past five years, the City's death rate has averaged 4.4 deaths per 1,000 population, which is lower than the Provincial average of 5.6 deaths per 1,000 population.

The following graph shows the distribution of religions in the City of Cold Lake as of the 2011 National Household Survey.



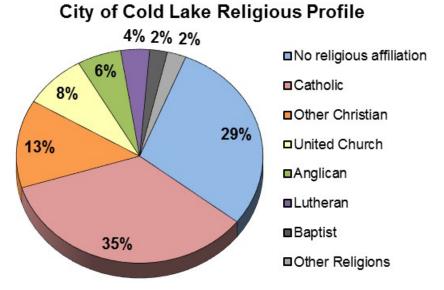


Figure 5: City of Cold Lake Religious Profile, Source: National Household Survey 2011.

Additional demographic details can be found in "Appendix B - Demographic Profiles."

3.3 DISPOSITIONS + INTERMENTS PROFILE

Disposition is the way in which human remains are transformed after the event of death, in preparation for any formal viewing or visitation, ritual, rite, service or ceremony. Disposition in this analysis means the casket burial or cremation of a cemetery customer.

Canadian disposition trends indicate that cremation is becoming the preferred option nationwide. The average cremation rate in Canada rose from 56% in 2006 to 67% in 2014, and is expected to continue to rise in most provinces (including Alberta).

The average cremation rate in Alberta was 60% in 2006 and increased to 69% in 2014.

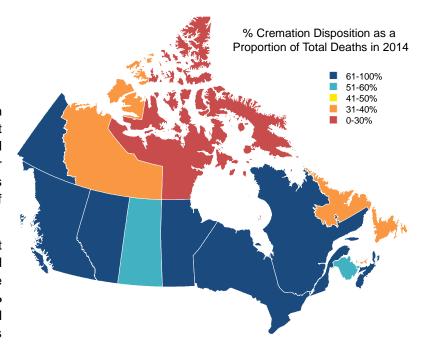


Figure 6: Canadian Rates of Cremation, Source: Cremation Association of North America.



In comparison, the annual average cremation rate in the City of Cold Lake was **44%** in 2006 and **61%** in 2014, lower than the Provincial and National averages.

The Cremation Association of North America predicts Alberta cremation will rise to **75% by 2019**. If the City's cremation rate increases at the same pace as the Province, it will be **71% by 2019**.

From 2011 to 2015, the City of Cold Lake experienced:

- 334 deaths, of which:
 - 121 residents chose casket burial;
 - o 210 residents chose cremation;
 - o 3 residents chose to donate their bodies to the Department of Anatomy, and
 - o 68 residents were interred in City Cemeteries.
- 20% of all interments during this period were at City Cemeteries;
- 35 of all local interments were for casket burial (51%), and
- 33 of all interments were for the burial of cremated remains (49%).

Further disposition and interment information and graphs are available in "Appendix C – Cemetery Market Dispositions and Market Capture Details."

3.4 HISTORIC COMMUNITY USE

The extent to which residents in an area choose to be buried in City cemeteries is known as the market capture. Municipal and religious Canadian cemeteries generally experience the following standard market capture rates under conditions of low to medium competition intensity:

- 80 90% of all casket interments, and
- 10 20% of all cremated remains interments.

These rates are based on our firm's experience, market research and results of monitoring Canadian cemeteries over the last 18 years. From 2011 to 2015, Cold Lake City cemeteries experienced:

- 30% market capture of all traditional casket burials in City of Cold Lake;
- 16% market capture of all cremations in the City of Cold Lake, and
- 20% total market capture of all deaths in the City of Cold Lake.

Historically, most of the deaths in the local First Nations community lead to burials in caskets on reserve. In addition, City staff and local stakeholders report that they are not aware of any active military members from the local military base buried in Cold Lake cemeteries.

Market capture is affected by historic family choice of cemetery, customer satisfaction, marketing, price, distribution, competition, and range of available interment options. Cremated remains usually



have a lower capture rate because they can be kept or interred in many different places, or structures, or spread on non-sanctioned ground. Those that opt for in-ground burial usually have no choice but to use a cemetery.

It is important to keep in mind that market capture rates are highly variable depending on the number of private, religious and not-for-profit cemeteries within the same or overlapping service areas.

"Appendix C – Cemetery Market and Market Capture Details" provides additional information on the City's historic cemetery market capture trends in detailed graphs.

3.5 FUTURE COMMUNITY USE

The following graph summarizes the future cemetery market demand that can be expected for City cemetery services over the next 25 years.

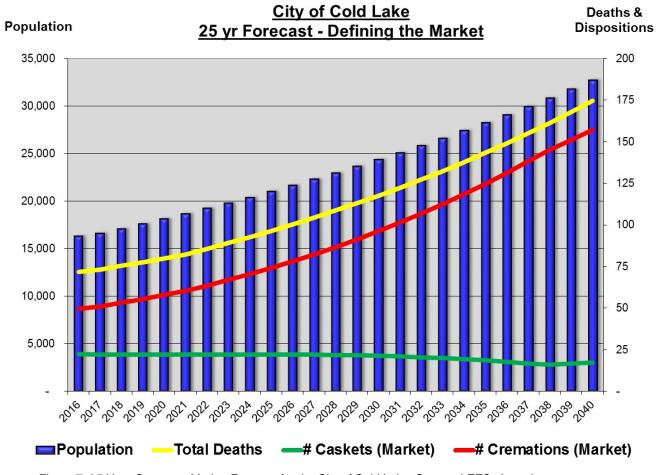


Figure 7: 25 Year Cemetery Market Forecast for the City of Cold Lake, Source: LEES+Associates.



According to the City of Cold Lake's Municipal Development Plan 2007 – 2037, the City is expecting its future growth to increase to an average of 3.0% per year over the next 25 years.

The City's annual death rate is also expected to increase over the next 25 years due to the anticipated passing of the large "Baby Boom" generation. Demographically, the largest single cohort in Canada is the "Baby Boom" generation: people born between **1952 and 1965**¹.

As this generational cohort reaches its life expectancy, an increase in the demand for cemetery services is expected. According to Statistics Canada, the aging of the population should cause cemetery and funeral related purchasing to accelerate from 2022 to 2032.

The oldest Baby Boom generation members reached the age of 65 in 2017. The average life expectancy for this cohort is about 80 years. In 2032, the oldest of this group will reach the age of 80. An increase in demand for death-related goods and services is expected prior to this, around 2022 or sooner. The number of deaths is then expected to decrease again towards 2045, when the youngest of this generation turns 80.

Overall, the average number of deaths in the City of Cold Lake is expected to rise from 72 per year in 2016 to 174 per year in 2040, in the upcoming 25-year period.

Assuming current operating practices continue as they are and past trends continue, the City of Cold Lake can expect approximately 2,850 deaths, but only 540 interments at City cemeteries over the next 25 years.

The remaining resident deaths are expected to be accommodated by cemeteries in neighbouring communities, or the many different locations and structures where an urn with cremated remains may be kept or spread on non-sanctioned interment grounds.

http://www.huffingtonpost.ca/robert-l-brown/canada-baby-boom_b_6478760.html

-

¹ "Canada's Baby Boom Is Nothing like the One in the US," Robert L. Brown, Past President of the Canadian Institute of Actuaries, expert advisor EvidenceNetwork.ca,



The following graph identifies where City of Cold Lake resident deaths are expected to be accommodated over the next 25 years.

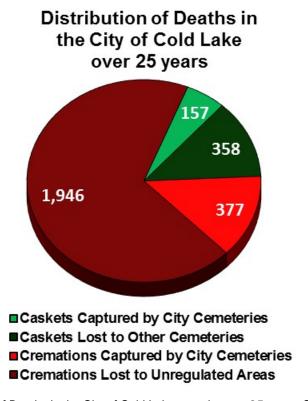


Figure 8: Distribution of Deaths in the City of Cold Lake over the next 25 years, Source: LEES+Associates.

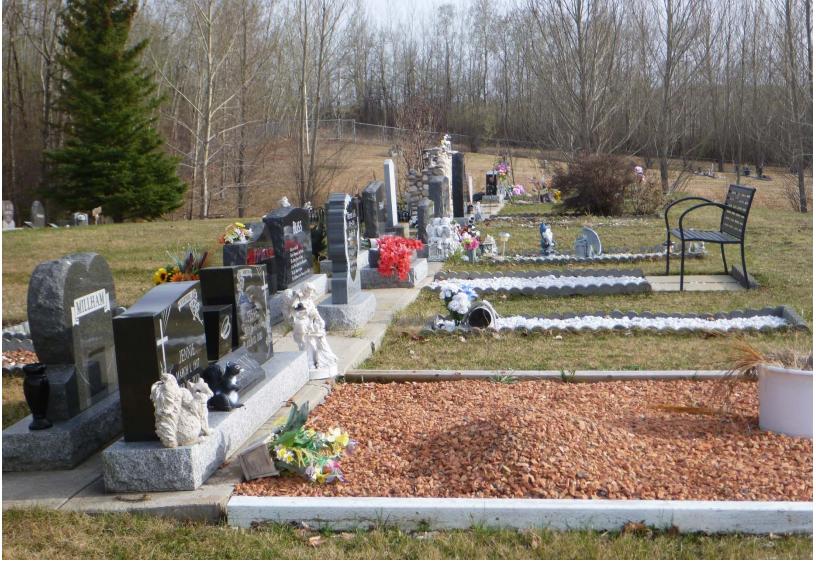
3.6 KEY FINDINGS: DEMOGRAPHIC, MARKET + CULTURAL TRENDS ANALYSIS

Key findings that emerged from this analysis of the City of Cold Lake's cemetery market include:

- The City population has been growing at an average rate of 2.6% per year for 5 years;
- The City's future population growth will increase to an average of 3.0% per year over the next 25 years;
- The City population is on average, younger than the rest of the Municipal District of Bonnyville and the rest of the Province;
- The City has averaged a lower death rate (4.4 deaths per 1,000 people) than the rest of the Province (5.6 deaths per 1,000 people) over the past 5 years;
- The City has a lower cremation rate (68% in 2015) than the Province (70% in 2015). The cremation rate is increasing across the Province of Alberta;



- Casket market capture was below average compared to the standard market capture rate of casket burials in City of Cold Lake cemeteries from 2011 to 2015;
- Cremated remains market capture was below average compared to the standard market capture rate for cremated remains in City of Cold Lake cemeteries from 2011 to 2015;
- In the next 25 years, the City of Cold Lake's death rate will increase to 5.3 per 1,000, due to the passing of the large Baby Boom generation;
- In the next 25 years, the City of Cold Lake will experience approximately 2,850 deaths, and
- In the next 25 years, 500 residents (18%) of the City of Cold Lake will choose casket burial and 2,350 residents (82%) from the City of Cold Lake will choose cremation.



4 CONSULTATIONS

This chapter provides a summary of the key findings from the City staff, stakeholder and community consultations for this project.

4.1 THE CONSULTATION PROCESS

In order to bring forward core issues and identify key opportunities and constraints related to the cemetery system, consultations were held with City staff, external stakeholder representatives and the public, including:

- Site Visits with Cemetery Staff: site visits were conducted at each cemetery site with City of Cold Lake staff who are involved in the administration and maintenance of the cemeteries in order to become oriented and document significant site features, opportunities and constraints.
- 2. Internal Cemetery Immersion Workshop: a workshop was held with City staff including a presentation of cemetery trends and issues in cemeteries internationally, nationally, and locally in Alberta. The workshop included discussion about key staff needs as well as the cemeteries and cemetery services offered.



- 3. External Stakeholder Cemetery Immersion Workshop: a workshop was held with external stakeholders including representatives from local funeral homes, the Legion, CFB Cold Lake, residents' associations, seniors' associations and local faith communities in order to gather stakeholder feedback about the cemeteries.
- **4. External Stakeholder Interviews:** follow-up emails and telephone interviews were conducted with external stakeholder representatives who indicated an interest in the project but were not able to attend the workshop.
- 5. Public Open House: a Public Open House was held on June 29, 2016 from 3pm to 8pm at the Cold Lake Energy Centre. Conceptual design options and supporting information was displayed, in order to seek feedback and engage the community on the range and type of improvements they would like to see at the cemeteries. Approximately 30 people attended.
- 6. Online Questionnaire: a hard copy feedback form was available at the Open House, and was posted online on the City website for three weeks. Copies of the Open House display boards were also made available online. There were approximately 21 downloads of the Open House boards, and 7 people completed the online questionnaire.

4.2 CONSULTATION SUMMARY HIGHLIGHTS

The following is a summary of key findings and issues that were brought forward during the consultation workshops with internal and external stakeholders as well as the Public Open House:

Internal City Staff noted that:

- The Cemetery Bylaw requires clarification and updating notably around responsibility for maintenance for grave covers and monuments, enforcement and regulations regarding ornamentation.
- The City requires standard procedures for grave layout and marking, grave opening and closing, headstone releveling and addressing sinking graves.
- There is a need for improved record keeping, maintenance and clarity around roles and responsibilities for those involved in maintaining, using and administering the cemeteries.
- There is an interest in increasing the range of services and interment options offered on a fee for service basis.
- Wayfinding and educational signage at the sites could be improved.
- There is interest in increasing the profile of the cemeteries, and building community.



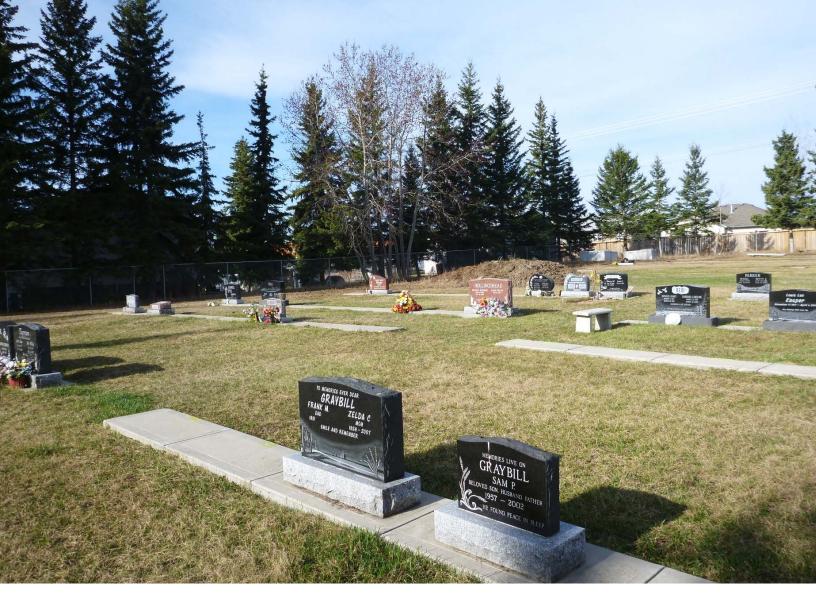
External Stakeholders noted that:

- New service offerings are desired including columbaria, a green burial area, a designated scattering area, and a new Field of Honour for retired veterans.
- Poor maintenance is an issue, particularly at Grand Centre where the dirt road is often muddy and there is a need for enhanced snow removal to improve winter access.
- Access improvements should be considered including relocation of the main gate at Lakeview.

Members of the Public noted that:

- They strongly support the proposed concept designs presented at the Open House. 100% of questionnaire respondents indicated that they either "support" or "strongly support" the proposed upgrades to the cemetery.
- Upgrading the cemetery driveways and access, and enhancing the overall aesthetics are the top priorities for improvement.
- Of the new interment and memorialization options proposed, the strongest support is for the addition of columbaria (67%), and memorialization without interment (100%). Approximately 40% of respondents indicated they would consider green burial if it were made available.
- Walking paths, benches and rest areas, trees and horticultural features and improved winter access are the priorities for improved amenities.
- Other requests for improvements include a cenotaph.

Please see "Appendix A – Staff + Stakeholder Consultations" for a full summary of staff and stakeholder feedback, and "Appendix L – Public Open House Summary" for a full report of community feedback.



5 OPPORTUNITIES + CONSTRAINTS

This chapter provides a summary of the key opportunities and constraints for the two cemetery sites analyzed through this project.

On April 28 and 29, 2016, LEES+Associates and members of the City's Project Team visited Lakeview Cemetery and Grand Centre Memorial Park. From this site analysis a series of opportunities and constraints for the development and enhancement of the cemeteries were determined. Those key elements summarized in this section. Site Analysis Plans accompanying this chapter are located in Appendix I.



5.1 LAKEVIEW CEMETERY – OPPORTUNITIES AND CONSTRAINTS

- The cemetery entry sign needs renewing and relocation closer to the 22nd Street entry, which is used as the primary entry to the site;
- The pedestrian gate in the northwest corner does not connect to any internal pathways;
- Large mature trees throughout the cemetery create an attractive, park-like character at the site;
- Perimeter trees give a strong boundary, and have been pruned optimizing views in and out of the cemetery;
- The cemetery has a Veterans area but it is full and not well marked;
- The existing internal roadway is not well defined and can be muddy in wet conditions;
- The primary access point on 22nd Street is not aligned with internal roadways;
- There is a lack of seating in the cemetery;
- The materials spoil and supply of concrete vaults should be moved to a less prominent location, and
- Buffering to adjacent residential properties to the south and west could be enhanced.

5.2 GRAND CENTRE MEMORIAL PARK – OPPORTUNITIES AND CONSTRAINTS

- The site's sloping topography creates attractive views towards the west;
- An allee of mature trees gives strong definition to the southern edge of the property;
- The interior of the cemetery lacks trees and other character defining elements;
- The existing dirt road can be muddy in wet conditions;
- The existing chain-link fence and entry gates are unsightly and need replacing;
- The materials spoil should be relocated to a less prominent location;
- The site sometimes serves as an informal park and picnic area for locals in the area, as there are few greenspaces in this part of the City;
- There is a lack of seating in the cemetery;
- The entry lacks signage and a formalized parking area;
- There is a need for directional signage to the cemetery from Highway 28, and
- The access road to the cemetery from Highway 28 is rough and can be difficult to navigate in wet conditions.



6 DEMAND-NEEDS ANALYSIS + FUNCTIONAL PLAN

This chapter compares the forecasted cemetery demand to the remaining land supply at Cold Lake cemeteries and provides a functional plan to guide the City in meeting expected future demand over the next 25 years. The spatial-needs analysis in this chapter summarizes current site capacity and provides estimates of the years of remaining capacity within the cemeteries' remaining undeveloped and developed land.

The analysis in this chapter assumes that community use, market capture rates and historic sales trends will not change and that the City will continue to provide its existing cemetery products and services, with no changes to the current offerings. Increasing the attractiveness of the cemetery sites through greater diversity of products and services, marketing and community engagement; and customer service enhancement would likely increase the rate of future land use at Cold Lake cemeteries. It will be important for the City to monitor and address changes in land use patterns in future updates to the City of Cold Lake's cemetery plan, as new community trends are established.



6.1 FUTURE CEMETERY DEMAND

The following graph summarizes the future cemetery activity that can be expected for City cemeteries over the next 25 years.

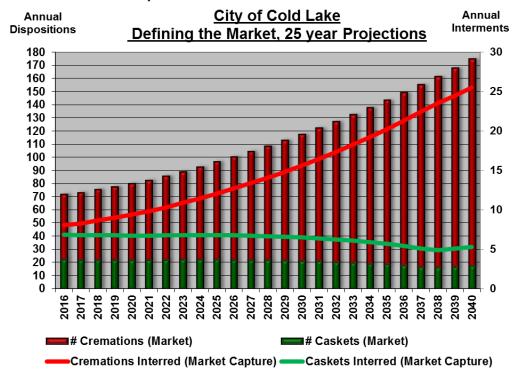


Figure 9: 25 Year Capture Forecast of the City of Cold Lake Cemetery Market, Source: LEES+Associates.

Assuming operating practices and trends continue as they are, the City can expect to receive 540 interments – 160 casket (30%) and 380 cremated remains (70%) interments over the next 25 years.

6.2 EXISTING INVENTORY

All graves in Cold Lake cemeteries are currently 4 ft. x 10.5 ft. with a 2' concrete ribbon. These graves are used for interring both caskets and cremated remains. The City does not offer smaller size graves for infants, children or cremated remains.



The following graph summarizes the distribution of existing developed inventory at Cold Lake Cemeteries.

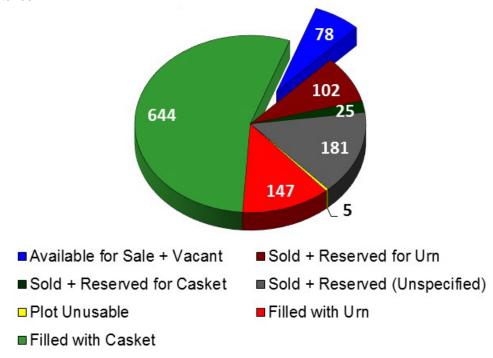


Figure 10: Distribution of Inventory of Existing Inventory at Cold Lake Cemeteries, as of March 15, 2016, Source: City of Cold Lake Inventory Records.

Inventory details by cemetery site can be found in "Appendix D - Cemetery Inventory Details."

After all plots are sold, cemeteries continue to have interments in reserved lots, purchased prior to the time of death. Burials will continue in reserved lots for years after all inventory is sold.

A cemetery site's total capacity is greater than its inventory, as one lot or niche can contain more than one set of interments. For instance, the City permits multiple interments in a single grave.

When a grave is used for the multiple interment of urns, it may be subdivided into 6 sections, approximately 2 ft. x 3 ft. Graves can also accommodate a combination of a casket and urns. In this case, the area is subdivided into 4 sections, approximately 2 ft. x 4.5 ft. Multiple interments have not been common at City of Cold Lake cemeteries in the past 5 years, with only 5 urns being added to previously purchased plots.

In this assessment, "Minimum Use" demand is the remaining time estimate based on the assumption of one sale and one interment per plot.

"Likely Use" demand is the remaining time estimate based on the expected, long term, average interment capacity for each type of inventory during a cemetery's entire life cycle. For this analysis, the "Likely Use" of a plot assumes that 50% of families will eventually opt for a double depth, or second burial, within a previously purchased plot over the active life of the cemetery, creating a likely average site capacity of 1.5 interments per burial plot. Usually this second burial is anticipated to be the interment of an urn with cremated remains.



The City and local Funeral Home do not explicitly advertise the option of double depth and multiple interments to the community. While the City's bylaw does technically permit double depth burial of caskets, plots at Cold Lake Cemeteries have not typically accommodated multiple casket interments. Historically, the second interment in a burial plot has always been cremated remains.

The table below compares the existing inventory at Cold Lake cemeteries to the expected future demand, and provides estimates for the time remaining before inventory is exhausted.

Cold Lake Cemeteries Developed Inventory	Current Supply (plots)	– Average	25 Years	Minimum Use, New Plots Needed	Use, New	Minimum Use, Time Horizon	Likely Use, Time Horizon
Plots for Sale	78	118	495	417	377	5 years	5 years
Plots for Interment	386	579	540	154	0	20 years	26 years

Table 1: Estimated Remaining Capacity based on Projected Demand at the Status Quo Market Capture Rate. Source: Cold Lake Inventory Records + LEES+Associates' Cemetery Market Review.

6.3 FUTURE LAND NEED

The following table identifies the land area that needs to be developed in order to continue selling lots and carrying out interments after existing developed capacity is used. This scenario assumes that 0.002 acres of land is needed for each new casket-sized burial plot. This will accommodate the average interment space of 4 ft. x 10.5 ft. and surrounding buffer space for monuments, paths and other cemetery infrastructure. In the place of a casket-sized plot, four 2 ft. x 2 ft. cremated remains lots can be placed. Therefore, each new cremation lot would use 0.0005 acres of land.

Inventory	Minimum Use, New Plots Needed	Likely Use, New Plots Needed	Added Land Need under Minimum Use	Added Land Need under Likely Use
Plots for Sale	417	377	0.83 acres	0.75 acres
Plots for Interments	154	0	0.31 acres	0.00 acres

Table 2: Estimated Land Need for 25 years of Sales and Interments at the Status Quo Market Capture Rate, Source: Cold Lake Inventory Records + LEES+Associates' Cemetery Market Review.

The land need identified in the Table above summarizes the amount of land that needs to be developed to meet the City of Cold Lake's community demand for the next 25 years, or up to 2040.

[&]quot;Plots for Interment" includes both lots that are currently available for sale, as well as lots that have been pre-purchased but are expected to be filled in the future.



6.4 OPPORTUNITIES TO EXPAND CAPACITY

BEST PRACTICES FOR EXPANSION

This plan forecasts up to 25 years of cemetery land need for the City of Cold Lake. Typically, it takes Canadian cemetery operators an average of 5 to 7 years to design, obtain government approvals, and develop a cemetery property.

Due to the long initial start-up time, and the multi-generational, perpetual nature of cemeteries, it is the industry best practice for Canadian municipalities to use a longer time horizon of 100 to 150 years for future cemetery capacity planning.

The City currently owns lands to the north of Grand Centre Memorial Park. To effectively meet industry best practice, the City should designate 2 acres of these lands, directly north of Grand Centre, as future cemetery land.



Figure 11. Potential future expansion lands (2 acres) at Grand Centre Memorial Park.



INFILL + UNDEVELOPED CAPACITY

In addition to the developed inventory at Cold Lake cemeteries, the City has undeveloped land and infill capacity at its existing cemetery sites that can be used to create more capacity.

Traditionally, a design measure of approximately 500 casket-sized burial lots per acre of land, is used to develop cemetery sites in Canada. Industry design standards also typically assume that the area of one casket burial lot can also accommodate four 2 ft. x 2 ft. cremation lots.

Lakeview Cemetery's northern half is 100% sold. Lakeview Cemetery's southern half is 70% sold. This site has maximized its development of casket interment inventory, however a cremation garden with columbaria, scattering, and family vessels could be added to the site. In addition, approximately **200 additional in-ground cremation burial lots** could be infilled along the site's existing roads in the future.

Grande Centre Memorial Park is currently 30% developed. Approximately 1.4 acres of land is currently available for development at this site. This could create **675 additional burial plots** to Cold Lake cemeteries, providing approximately **30 years** of additional sales capacity and **35 years** of additional interment capacity to the community.

Therefore, added to the existing inventory, with the full development of Grand Centre Memorial Park, the City could have upwards of 35 years of plot sales and 61 years of interment capacity.

NEW INTERMENT OPTIONS

New service options, such as smaller dedicated cremations plots (2 ft. x 2 ft.), columbaria, family vessels, and scattering areas would increase the horizon of in-ground cemetery inventory, as some of the projected in-ground land use for burial would be converted to these new aboveground interment options, which have a much smaller land use "foot-print."

Smaller burial plots for cremated remains, columbaria niches and scattering gardens are popular, commonly offered cremated remain interment options at Canadian municipal cemeteries. Typically, approximately 25% of all cremated remains interred at Canadian municipal cemeteries are interred columbaria. Family vessels are a new aboveground interment option at Canadian municipal cemeteries. These are large, secure containers designed to hold several smaller urns that contain the remains of members of one family, or serve as an ossuary for community interment, or comingled cremated remains.



Figure 12. Example of columbaria, Source: LEES+Associates.



The City of Cold Lake is also considering the addition of "Green Burial" services to Cold Lake cemeteries. Green burial is a new service and revenue stream for most Canadian cemeteries and there is little market trend data currently available to reasonably project the degree of conversion for Cold Lake cemeteries from existing services to green burial. Conversion to green burial often correlates with the degree of marketing investment in community engagement and educating the community about green burial. There is variation in the acceptance of green burial between different geographic areas and communities with different demographic profiles and sustainability culture.

Green burial service providers have observed that the majority of conversion (approximately 80%) to traditional green burial seems to come from families who would have otherwise chosen cremation. Therefore, the City's projected land use would be expected to increase marginally. However, service providers have also noted a particular interest in the scattering of cremated remains within green burial areas. This would decrease the demand for in-ground burial, consequently decreasing the City's land use.

At this time, green burial is not very well known in Canadian communities and established green burial service providers still have a relatively low annual capture rate from the market compared with other cemetery services. However, green burial service providers have seen numbers increasing and are confident that these numbers will grow over time, as awareness increases.



Figure 13: Green Burial Funeral Service, Source: LEES+Associates.

6.5 KEY FINDINGS: DEMAND-NEEDS ANALYSIS + FUNCTIONAL PLAN

Key findings that emerged from this land needs assessment are that Cold Lake cemeteries:

- Will experience 540 interments 160 caskets (30%) and 380 cremated remains (70%) interments in the next 25 years;
- Will sell all existing burial plots within 5 years, assuming demand is met by all inventory as it remains available from both Lakeview Cemetery and Grand Centre Memorial Park;
- Have enough plots available to bury residents for another 20 to 26 years, and



City of Cold Lake Cemetery Services Master Plan - DRAFT Report

- Will need to develop slightly less than 1 acre of land over the next 25 years to meet sales and interment demand after the existing inventory is used, depending on the City's in-fill strategy, new service offerings and its density plan for future development.
- With 1.4 acres of land available for development at Grand Centre Memorial Park the City does not need to acquire new land to meet 25 years of forecast demand. However, additional land will be required to meet a substantially longer, multi-generational horizon of community interment needs.



Figure 14: Lakeview Cemetery, Source: LEES+Associates.



6.6 RECOMMENDATIONS: DEMAND-NEEDS ANALYSIS + FUNCTIONAL PLAN

It is recommended that the City of Cold Lake:

- Consider the development of cremation in-fill areas at Lakeview Cemetery;
- Prioritize the development of smaller, 2 ft. by 2 ft. cremation lots as an addition to the current interment offer;
- Add and install new cremation interment options including columbaria niches, scattering gardens and family vessels into the City's inventory. This will decrease the high demand and pressure on the use of land for the in-ground burial of cremated remains;
- Develop a green burial section to respond to community interest in this type of interment, and to further diversify the current offerings at Cold Lake cemeteries;
- Develop 1 acre of the undeveloped land at Grand Centre Memorial Park within 5 years to accommodate new plot sales. This will meet the City's cemetery needs for the next 25 years;
- Designate 2 acres of land adjacent to Grand Centre Memorial Park as future cemetery lands to be developed as needed within 15 to 20 years, when City capital funds permit.
- Begin to track and report the number and type of multiple interments in each lot sold at each cemetery site, to better evaluate the sites' interment density. This includes recording the number of caskets and urns within each in-ground burial lot at each cemetery site, and how many double depth interments take place each year, and
- Plan to revisit the cemetery land needs assessment in five years after the recommendations in this study are implemented in order to effectively respond to updates in land use and interment trends that emerge from new services offered (such as green burial) as well as enhanced operations and community engagement.



Figure 15: Grand Centre Memorial Park, Source: LEES+Associates.



7 OPERATIONAL REVIEW + BUSINESS MODEL

This chapter provides an analysis and key recommendations concerning City cemetery fees, diversity of offerings, operations, bylaws, policies, procedures, financial performance, and the establishment of a sustainable Perpetual Care Fund.

7.1 REGIONAL CEMETERY MARKET PRICING

RESIDENT AND NON-RESIDENT POLICIES

The current practice of many Canadian municipalities is to charge different rates for cemetery plots to residents and non-residents.



To provide clarity about the criteria for resident cemetery fees, these municipalities will usually define "resident" and "non-resident" in the local municipal cemetery bylaw, using language such as:

- **Resident** means a person who currently resides in the municipality (City/Town/Region) and/or is a property owner within the municipality for 5 consecutive years, and
- **Non-resident** means any person who resides beyond the geographical boundaries of the municipality and has not owned property within the municipality for the past 5 years.

Municipalities usually set a qualifying time period for residency, most commonly ranging between 1 and 5 years. Although a less common practice, some Canadian communities do require upwards of 10 years of residence.

The City of Cold Lake does not currently distinguish between residents and non-residents of the community in its cemetery fee schedule.

This is because, historically, customers at the cemeteries are mostly locals or families that used to live in Cold Lake.

It is an industry best practice for municipal cemeteries to charge a premium to non-residents. This practice recognizes the financial contribution that residents provide to the cemetery system, indirectly through their contributions to an annual tax subsidy for cemetery operations. Charging nonresidents higher rates balances the contributions from families that use the cemetery, by increasing City revenues and decreasing the tax subsidy required to support cemetery operations.



Figure 16: City of Cold Lake Residential Boundaries, Source: Alberta Municipal Affairs, http://www.municipalaffairs.alberta.ca/mc_boundary_maps.

PRICE BENCHMARKING

The tables in this section summarize regional cemetery fees and key benchmarks that identify the average fees for the communities of comparable market profiles to the City of Cold Lake, reviewed in this study. The communities examined include Lac La Biche, Slave Lake, Whitecourt, High River, Camrose, Okotoks, Leduc, Rock View County and Grand Prairie.

The following table summarizes the average **resident grave and niche** fees for the Alberta communities examined in this study. The City of Cold Lake's cemetery rates are generally substantially lower than the regional average rates.



Product/Service	Cold Lake Rate	Regional Average Rate	Canada Average Rate ²	Comparing Benchmarks to Cold Lake
Adult Casket Grave Resident	\$500	\$892	\$1,250 to \$2,250	Lower than Regional and Canada Benchmarks
Child Casket Grave Resident	\$300	\$645	\$400 to \$1,000	Lower than Regional and Canada Benchmarks
Infant Casket Grave Resident	\$300	\$435	\$250 to \$750	Lower than Regional and on par with Canada Benchmarks
Cremation Grave Resident	\$500	\$598	\$500 to \$1000	On par with Regional and Canada Benchmarks
Veteran's Grave Resident	\$300	\$580	\$625 to \$1,125	Lower than Regional and Canada Benchmarks
Columbaria Niche Resident	not applicable	\$1,284 to \$1,389	\$1,250 to \$4,000	Not offered by Cold Lake Cemeteries

Table 3: Cold Lake Cemeteries Resident Grave Prices Compared to Regional + National Benchmarks – Source: LEES+Associates.

The following table summarizes the average **non-resident grave and niche** fees for the Alberta communities examined in this study.

Product/Service	Cold Lake Rate	Regional Average Rate	Canada Average Rate	Comparing Benchmarks to Cold Lake
Adult Casket Grave (Flat Marker) Non-Resident	\$500	\$1,144	\$1,550 to \$2,800	Higher than Regional and on par with Canada Benchmarks
Child Casket Grave Non-Resident	\$300	\$858	\$600 to \$1,500	Lower than Regional and Canada Benchmarks
Infant Casket Grave Non-Resident	\$300	\$634	\$500 to \$1,500	Lower than Regional and Canada Benchmarks.
Cremation Grave Non-Resident	\$500	\$709	\$500 to \$750	Higher than Regional and Canada Benchmarks
Veteran's Grave Non-Resident	\$300	\$654	\$775 to \$1,400	Lower than Regional and Canada Benchmarks
Columbaria Niche Non-Resident	not applicable	\$1,419 to \$1,524	\$1,250 to \$4,000	Higher than Regional and on par with Canada Benchmarks

Table 4: Cold Lake Cemeteries Non-Resident Grave and Niche Prices Compared to Regional + National Benchmarks – Source: LEES+Associates.

The City does not offer **opening and closing services** to the community. Currently, the Funeral Home recommends a contractor to the family to provide the opening and closing services at Cold Lake cemeteries, who then bills the family directly. The contractor is typically paid \$850 for the service of opening and closing a grave. This charge is reduced to \$250 for urns as the contractor is able to use a smaller machine (auger) in this circumstance. For winter burials, the contractor has also historically provided snow clearing to grave sites for families prior to a funeral at no extra cost.

It is an unusual practice for Canadian municipalities to grant local funeral homes direct control over burial services at its cemetery sites. More typically, staff from the Public Works or Parks department

² LEES+Associates pricing benchmark studies, 2014 + 2015.



will provide opening and closing services directly to the families or the municipality will establish a direct municipal-contractor arrangement to provide interment services at its cemetery sites.

While the practice of fully outsourcing opening and closing services does reduce the cost of cemetery operations for the City of Cold Lake, it also diminishes the City's ability to manage quality control over interments, fees, and grave-side customer service.

The following table summarizes the average opening and closing fees for the Alberta communities examined in this study.

Product/Service	Cold Lake Rate via Contractor	Regional Average Rate	Canada Average Rate ³	Comparing Benchmarks to Cold Lake
Adult Casket Opening/Closing	\$850	\$639	\$750 to \$1,250	Higher than with Regional rates, and Canada Benchmarks
Child Casket Opening/Closing	\$850	\$624	\$500 to \$1,000	Higher than Regional rates, on par with Canada Benchmarks
Infant Casket Opening/Closing	\$850	\$577	\$250 to \$750	Higher than Regional and Canada Benchmarks
Cremation Grave Opening/Closing	\$250	\$331	\$250 to \$500	On par with Regional and Canada Benchmarks
Columbaria Niche Opening/Closing	not applicable	\$173	\$100 to \$250	The City doesn't offer columbaria niche inurnment

Table 5: Cold Lake Cemeteries Opening/Closing Prices Compared to Regional + National Benchmarks – Source: LEES+Associates.

Canadian municipal cemeteries also typically offer the scattering of cremated remains in areas of flowering plants or in an ossuary at \$100 to \$350 per scattering. Municipal cemeteries also often offer specialized interment areas, such as green burial or Muslim burial areas which accommodate special requirements such as burial in a shroud, direct contact of the casket with the earth, and specialized grave orientation. These interment options are not currently offered to the community at Cold Lake cemeteries.

The cemetery industry's best practice for price benchmarking entails the comparison of prices in communities of comparable supply and demand. This involves identifying and examining the rates of other cemeteries with similar business models, in communities with similar populations, trends, ethnic and religious composition.

Pricing policies often vary significantly between small and large, rural and urban communities, due to the different, competitive markets for cemeteries within each environment. Pricing policies also tend to be very different between municipal, non-profit, religious and private cemeteries. Private cemeteries often charge higher prices to reflect their very wide range of attractive, premium cemetery offerings.

Religious groups often choose to either focus on offering high-end, premium cemetery products and services (similar to private organizations), or at the other end of the spectrum, there are religious groups that offer cemetery services to their members for a fee significantly lower than

³ LEES+Associates pricing benchmark studies 2011 to 2016.



City of Cold Lake Cemetery Services Master Plan - DRAFT Report

standard market rates. St-Dominic's Cemetery, less than two miles from Cold Lake, is run by a Catholic Society that offers plots for \$250.00 and a \$250.00 perpetual care fee. They also offer an urn burial plot at the same price. Families can also pay \$200 for an engraved plaque which is affixed to a remembrance wall for people from Cold Lake, but are buried elsewhere.

The City's plot rates are significantly lower than the regional market average. On the one hand, these low rates may make Cold Lake cemeteries more attractive than other sites in the Province. These lower rates provide Cold Lake with a certain sales advantage within its community, decreasing the risk of residents choosing interment outside of the City.

However, cemetery demand is inelastic and there is usually little customer response to price changes provided they are within the normal market range. Therefore, the City can expect to increase rates without incurring a significant loss in sales. In addition, the undervaluing of cemetery land – a limited resource, which is used in perpetuity – is not financially sustainable in the long term nor is it in the best interest of the community to create a cemetery system that is an inadequately resourced, indefinite tax burden.

Therefore, the City needs to increase its fees to generate greater revenues, and better support its cemeteries' sustainability - minimizing the risk that the cemetery system will need to be supported by taxes in the long term.

PRICING PRACTICES

The City last increased its cemetery fees in 2012, when the price of a plot increased from \$300 to \$500. The Canadian cemeteries best practice is to increase fees annually (at minimum) by the rate of inflation. This pricing policy is increasingly becoming the standard across Canada. The Bank of Canada's Consumer Price Index reports that inflation has ranged from 2% to 3% over the past decade.

Typically, non-residents are charged a premium of 25% to 50% on plots at municipal cemeteries. Currently, the City does not charge a premium to non-residents interred at its cemeteries.

Cemetery pricing in most Canadian cemeteries tends to follow consistent market trends. These trends include:

- Larger communities often have higher rates due to the increased demand relative to local supply, and they often offer greater diversity of offerings than smaller communities;
- Cemeteries with a greater diversity of offerings often have greater market capture and charge higher rates than other sites. Families value a variety of interment options and are willing to pay a premium to accommodate their cultural, religious and personal preferences;
- Cemeteries typically charge 1.5 times the standard interment rate for "Double Depth" and "Burial after Hours" on Weekdays, Weekends and Statutory Holidays.

A detailed list of Cold Lake's current cemetery rates and other municipal cemeteries in similar Alberta communities can be found in "Appendix E – Cemetery Market Prices."



7.2 CEMETERY OFFERINGS DIVERSITY

Cold Lake cemeteries currently offer the community a very limited range of product and services. All graves are sized for in-ground casket burial and accommodate both flat and upright markers. The City does not currently offer smaller size graves for infants, children or cremated remains.

There are only two plot rates offered in the City's fee schedule – one rate for adult plots and one rate for child, infants and veteran plots. The City does not offer special rates for indigent/social services cases or cremated remains. The City also does not currently offer any above-ground interment options to the community.

Concrete vaults are mandatory for all graves as of the most recent update of the cemetery bylaw. Concrete ribbons are now used and preferred by staff, due to the clean lines and ease of locating grave plots.

Opening and closing services, graveside set-up and casket lowering is currently handled by the Funeral Home and their designated contractor. The Funeral Home supplies greens and the lowering device. No chairs, or canopy are currently provided to families.

NEW CEMETERY SERVICE OPTIONS

Products and services not currently offered at Cold Lake cemeteries, which are often available at other Canadian municipal cemeteries include:

- Dedicated cremated remains plots (2 ft. x 2 ft.);
- Smaller infant and child plots;
- Columbaria niches;
- Family vessels:
- Cremation ossuaries and scattering areas (gardens, ponds);
- Mausolea crypts and niches;
- A diverse range of memorialization options, and
- Custom grave-side set-up services for a wide range of religious groups, and
- Specialized interment areas, such as green burial, and Muslim burial.

Columbaria niches are increasing in demand across Canada and are very profitable. Columbaria installations are expected to be a key element of long term cemetery development across Alberta. With cremation on the rise



Figure 17: Mountain View Cemetery, Columbaria, Family Vessels and Mausoleum, Source: LEES+Associates.

and their popularity at Canadian cemeteries, niches are a key source of sales growth and provide effective conservation of limited land capacity. Columbaria construction costs vary widely depending on size, design details and the amenities placed within the adjacent landscape.



Family vessels are a new product recently introduced to the Province in the Town of Slave Lake and the Regional Municipality of Wood Buffalo. Royal Oak Burial Park in Victoria, BC is the most experienced cemetery site selling these vessels, and provides an optimized benchmark for selling small family vessels at \$6,810 apiece.

Memorialization products are not currently offered by the City of Cold Lake for its cemetery sites. Common memorialization options offered at Canadian municipal cemeteries include memorial walls, benches, and trees, engraved rock markers, statuary, vases, plaques, and wreathes.

"Appendix C – New Interment Options" includes additional details about products and services typically offered at Canadian municipal cemeteries that are not presently offered at Cold Lake Cemeteries.



Figure 18: Family Vessel developed for Royal Oak Burial Park, Source: LEES+Associates.

7.3 RECOMMENDATIONS: MARKET PRICES + OFFERINGS

It is recommended that the City of Cold Lake:

- Change the cemetery pricing structure to include "Resident" and "Non-Resident" fees and create a Non-Resident Boundary Map for the fees that aligns with the planning boundaries used by the Province of Alberta (see Figure 12);
- Define "Resident" in the Cemetery Bylaw as anyone who has lived within or has owned property within the City of Cold Lake limits, for a minimum of 5 years;
- Plan to increase prices annually, at a minimum, by the rate of inflation (approximately 2%), as annually defined by the Bank of Canada, Consumer Price Index, and
- Inform the community that the cemetery rates structure will change and fees will be increased in 2017. Provide residents with a means to provide feedback about the changes; Raise cemeteries prices in 2017 to better align rates with those offered within the Alberta cemetery market. Recommendations for changes in pricing include:
 - o Increase the adult resident casket grave to \$700 and add a non-resident rate of \$875;
 - o Offer a new rate for cremation-only graves, \$500 for residents and \$625 for non-residents;
 - Increase the veteran casket plot rate to \$350 and add a veteran cremation-only plot rate at \$250;
 - Increase the child resident casket grave rate to \$400, and add a non-resident rate of \$475.
 Add a non-resident infant grave rate of \$375;
 - Increase the Marker/Monument Permit Fee to \$100 (the regional rate averages \$100 per permit in the Province of Alberta);



- Evaluate the feasibility of providing opening and closing services through City staff or by the City directly contracting interment services with an external service provider. This would enable the City to control the quality of grave-side service, improve the opening and closing experience and offer new provisions to families (e.g. a tent, canopy, seating, etc.). If a contract is let, establish a clear reporting structure with regular performance reviews, and a review and renewal of the contract every five years.
- Develop relationships and discuss potential alliances with industry partners (local funeral home and regional monument, niche, urn and other suppliers) to provide and promote their memorialization, accessory and grave-side service options. The City should acknowledge partners in marketing materials and on their website;
- Expand the range of prices for interment services in the City's cemetery fee schedule.
 Fees should include distinct rates for adults, veterans, children and infant caskets, cremation urns (in smaller graves), niche opening and closing, scattering, etc. The City should consider offering distinct rates for interment on weekends, and holidays and for double depth burial;
- Add new offerings to enhance the City's list of cemetery products and services. The City should add smaller cremation graves, green burial, columbaria niches, scattering areas, family vessels, a new Field of Honour for veterans, interment without memorialization, and accessory and grave-side set-up options, to its list of offerings. Recommended rates for new offerings include:
 - Columbaria niches, with prices ranging from \$1,000 to \$2,500 per niche depending in height and orientation. After columbaria are added, the City should add a new opening and closing rate for niches of \$250 on the fees list;
 - The scattering of cremated remains in designated areas at \$130 per scattering (lower than the National average, but on par with the City of Calgary).
 - Family vessels at \$6,000 per vessel and \$200 for each vessel interment, and
 - o Green burial plots offered at the same rate as for non-green burial plots. This is the industry best practice for green burial, as it reflects the intrinsic value of offering an uncommon, sustainable interment alternative and the plot's perpetual land value.



Figure 19: Royal Oak Burial Park Green Burial Section, Source: LEES+Associates.



7.4 CEMETERY BYLAW REVIEW

This section provides an analysis of the City of Cold Lake Cemetery Bylaw No. 431-AD-12 in conjunction with the Alberta Cemeteries Act, C-3 RSA 2000, and the relevant Provincial Regulations.

7.5 KEY FINDINGS – CEMETERY BYLAW

The present Cemetery Bylaw covers many items in detail that have concerned cemeteries in the past, but fails to adequately address new and emerging topics that are currently being raised in the administration, policy, and management of Canadian municipal cemeteries.

It would be prudent at this time to update the present bylaw to better meet best practices and current cemetery legislation, and to expand the present document to proactively add and clarify items that are giving legal challenges to cemeteries in Canada.

The City should prioritize revisions to the bylaw on the following issues in order to meet the current needs of the community and to address future growth, cultural and burial practices. This will improve customer service and prevent potential misunderstandings between the City, families, suppliers, and other community partners in the future.

Introduction

The beginning of the bylaw should declare that the bylaw is in compliance with all Acts and Legislation that govern them in any way. By stating that the bylaw is in accordance with all of the Provincial acts, listed at the beginning of the bylaw, all references to "in accordance (or pursuant) to the Cemeteries Act" can be removed.

Definitions

The City should update and expand the Definitions Section of the bylaw for further clarity and enhanced communication with the community with respect to cemetery and funeral industry terminologies. An updated Definitions Section will provide a more user friendly, concise and clear interpretation of the bylaw, by linking the wording of the Provincial Cemeteries Act and its definitions to the common terms used by the cemeteries and its administration.

Ownership Priority

The bylaw should include a guideline with regard to ownership priorities or designated next of kin – this information is necessary to establish legal rights as generations pass and family members come to the Cemetery to use/reuse family owned interment sites. This is particularly pertinent as blended families and estates become more common.

General Provisions

Update the clause around permitted activities within the cemeteries currently restricted to funerals or a ceremony of observance in order to expand the range of functions and programming that can occur in the cemeteries, with prior approval of the cemeteries administration.

City of Cold Lake Cemetery Services Master Plan - DRAFT Report

Monuments

The existing sections of the bylaw dealing with Monuments (specifically, types or materials, minimum and maximum sizes allowed) should be moved to Schedule "B." This would consolidate all monument/marker information in one location while leaving it in a schedule for ease of change or addition. The detailed schedule of monument dimensions and descriptions should be provided to monument suppliers while a short, abbreviated description on monuments should be made available to families as they purchase the appropriate burial space.

New Forms of Interment

Add rules and conditions to address new forms of interment that are not currently offered at Cold Lake cemeteries but will be introduced in the future such as scattering, columbaria niches, family vessels, and green burial.

Ornamentation

Ornamentation is a very sensitive issue in all cemeteries. Stronger language emphasizing the importance of safety would add clarity for the community with respect to the cemetery rules concerning ornamentation. Expand the items concerning floral/decorations (items #3, #4) on the handout of most important cemetery regulations (Schedule "C") and include contact information (phone, email) of the cemetery caretaker/office or City Hall as fits. Develop a handout for families specific to decorations and plants that can be distributed at the time or a plot sale or interment (see example in "Appendix G – Cemetery Bylaw Information").

Enforcement

Clarity around enforcement of the bylaw should be provided through expansion of the Enforcement Sections which describe enforcement of the Rules and Regulations of the Cemetery, special cases, and supervision and control of persons and activities in the Cemetery. An Error Correction Section and Disclaimer Section should be added to address future occasions where the Bylaw is challenged, for example an error in a plot sale.

Veteran Burial

The City's Cemetery Bylaw should be updated to better reflect present day and future Veterans' needs. The current bylaw limits interment in a Veterans' area in the cemetery to those who saw active service "in any war which Canada participated." This definition combined with a diminished inventory has limited burials within a distinct Veterans' section. The City is committed to create a new Veterans' Field of Honour at Grand Centre Memorial Park to ensure the community's Veterans are honoured and recognized for years to come. In tandem with this development, we recommend an update of the definition of Veteran in the bylaw to be in accordance with the Department of Veterans Affairs Canada. Additional information pertinent to Veteran burial, such as reference to the department of Veterans Affairs monument regulations and interment of a Veteran spouse should be included in the bylaw. We also recommend that a new burial section and corresponding definition for Veterans of Protection Services (ie. those who served in police or fire services) be included.



Grave Covers

The Cemetery Bylaw requires updating to remove contradiction and ambiguity around grave covers, and to provide greater clarity regarding who is responsible for maintaining grave covers in the cemetery. The current bylaw states no new covers are permitted, but also states it is permissible to match a new cover to an existing cover if prior to bylaws. This should be clarified.

Over time grave covers can pose safety implications for visitors, staff and equipment due to settlement of the ground beneath the covers, and subsequent breaking. In order to start eliminating safety concerns related to old grave covers the bylaw should make clear that when there is damage or concern about safety on existing covers, that the covers will be removed, the ground filled and leveled and seeded at the expense of the Cemetery. The safety implications for visitors and staff and equipment should be emphasized.

When stating the right of the Cemetery to remove monuments to preserve proper appearance – the emphasis should be on the importance of safety. No one can argue about the responsibility and the City's duty when it comes to safety in the cemeteries, whereas proper appearance can be subjective.

7.6 RECOMMENDATIONS: CEMETERY BYLAW REVIEW

It is recommended that the City update the Cemetery Bylaw, in conjunction with the introduction of new forms of interment and other cemetery improvements. The following recommended changes should be incorporated into the update to ensure the bylaw is user friendly, uses current language, reflects the present day and future needs of the community, and is brought in line with Provincial definitions, guidelines and regulations:

- Update the Introduction to ensure clarity around compliance with all Acts and Legislation;
- Expand and update the **Definitions** section;
- Add clarification around legalities of Ownership;
- Move all monument type and size requirements to Schedule "B";
- Add rules and conditions to address new forms of interment that are not currently offered by the City such as scattering, columbaria, family vessels and green burial;
- Incorporate clarifying details about ornamentation at the Cemetery emphasizing the importance of safety. Create a handout for families with key policies regarding planting;
- Provide clarity on enforcement of the bylaw;
- Adopt new definitions for veteran burial, including member of the Armed Forces and Protection Services and policies for the new Field of Honour, and
- Provide clarity around who is responsible for maintenance of grave covers and headstones, and under what circumstances cracked or broken grave covers should be removed.



7.7 OPERATIONS REVIEW

RECORDS MANAGEMENT

The City of Cold Lake stores its cemetery records within a Microsoft Access database. The current records management software limits the ability of administrative and operations staff to locate graves in an accurate and timely fashion. A lack of accurate records, particularly at Lakeview Cemetery has led to operational challenges and inefficiencies.

There is an opportunity for the City to enhance the accuracy, transparency, and degree of detail within its records management by upgrading their systems to a dedicated cemetery records management software, such as **Stone Orchard Software**, that integrates interment records with financial information and inventory data, as well as up-to-date, electronic maps of grave locations.

With a cemetery specific software, such as Stone Orchard, the City could link digital records spatially with GIS mapping to improve the City's cemetery site operations and customer service.

This enhanced system would enable the City to meet the cemetery industry's best practices in records management and deliver advantages to Staff and the community including:

- Simple, efficient, secure and accurate record keeping and retrieval;
- The ability for cemetery records to be accessed remotely by Staff and members of the public, and utilized as an historical, educational and genealogical resource;
- A reduction in Staff time needed to respond to requests for information, and
- The ability for Staff and members of the public to easily and accurately locate a grave.

In addition to the cemetery management software and electronic maps, the **iCemetery app** for smartphones would be a significant addition to the City's range of options for serving customers and for timely, convenient grave location by field Staff without having to refer back or return to the office. It is an affordable, easy to use solution that takes advantage of the power of GIS and the standard cemetery records management software available.



Figure 20: Stone Orchard Software GIS Mapping and iCemetery APP can provide digital way-finding in the field, Source: LEES+Associates.



City of Cold Lake Cemetery Services Master Plan - DRAFT Report







Figure 21: iCemetery screenshots, Source: LEES+Associates.

HUMAN RESOURCES, ORGANIZATION + STANDARD OPERATING PROCEDURES

The General Manager of Corporate Services is responsible for the department under which the administration of the cemeteries falls. Parks, Community Services and Publics Works staff have all been assigned to work on the City cemeteries. No City staff member is exclusively dedicated to cemetery operations. There is no plan or funds currently budgeted to the annual training of staff in cemetery sales, operations and industry trends.

The City of Cold Lake does not currently have a cemetery-specific organizational chart, clearly showing staff responsibilities, reporting relationships and specific support structures for cemetery operations.

The City also does not have an internal standard operating procedures document to guide staff working for the cemetery system, beyond what is presently included in the cemetery bylaw. Standard operating procedures usually include sections with detailed guidance and instruction in:

- i. Provincial Cemetery Legislation;
- ii. Municipal Bylaws and Policies;
- iii. Work Place Safety and Work Safe Procedures;
- iv. Cemetery Section and Grave Location
- v. Measurement and Plot Location;
- vi. Opening and Closing Procedures;
- vii. Cemetery Equipment Care and Operations, and
- viii. Cemetery Site Maintenance Snow Removal, Landscape Care, and
- ix. Financial Policies.



ENGAGEMENT + STAKEHOLDER RELATIONSHIPS

Recent evidence collected by research firms such as the Institute for Citizen-Centered Service (ICCS) and the Treasury Board Secretariat from the SQM Group links public sector employee engagement with citizens' service satisfaction and trust and confidence in public institutions.

Encouraging internal City staff engagement includes supporting the diligent and thorough training of cemetery staff, including regular attendance at regional cemetery conferences and enrollment of staff in cemetery industry training seminars.

The City has an opportunity to increase the attractiveness of using its cemeteries by enhancing its customer service. This can be accomplished by encouraging City staff engagement with the funeral home employees and families who use and visit the cemetery sites. There is significant potential for growth through the development of relationships with cemetery stakeholders.

Efficiencies can be gained through a regular quarterly meeting of all City cemetery staff to discuss current operations. This includes staff involved with the cemeteries' management, administration, financial records and field work. The City's cemetery staff would also benefit from an annual meeting with external stakeholders, such the local funeral home and representatives from local interest groups.

FIELD WORK: MAINTENANCE

City staff are responsible for maintaining the two cemetery sites. Historically, maintenance begins on May 1, led by a full-time operator from the Community Services department, with summer student support. No staff member is exclusively dedicated to cemetery maintenance. The operator has many tasks to perform over the summer and cemeteries are only a small part of their duties. The Parks department also hires 18 summer students each summer and some of them do work in the cemeteries, but not exclusively.

The City provides snow plowing to the cemetery gate, but internal roads or pathways are not cleared regularly, therefore there is very little visitation to the cemeteries in the winter. The City does not specifically track snow removal costs for the cemeteries.

The local Funeral Home oversees snow removal within the cemetery to provide access to plots, as required for interment services. Funeral Home representatives report that Grand Centre Memorial Park in particular suffers from lack of winter maintenance and needs to be maintained year round.

At Lakeview Cemetery the alley adjacent to the cemetery is often used for access by cemetery operations and the funeral homes, however it is not regularly plowed. The cemeteries have poor accessibility in winter and the condition of the dirt roads is considered to be a problem. There have been complaints from the community about how the cemeteries look after the snow has melted.

The Community Services department oversees the cutting of the grass and does some maintenance of graves. City staff are not often involved with the direct maintenance of grave sites, apart from sweeping headstones, and topping up and reseeding recent interment sites. The City has experienced challenges with the public when trying to remove personal items from a plot.

Bylaw enforcement is an issue at both cemeteries particularly around personal gardens established by families on grave plots.



There is currently a lack of clarity regarding who is responsible for maintaining grave covers and monuments at the cemetery sites. The City does not currently undertake any headstone releveling.

FIELD WORK: INTERMENTS

The Parks department is responsible for marking each grave with ribbons and stakes before each interment in preparation for the contractor hired by the Funeral Home and families to open and close the plot using a tracked backhoe. Use of the tracked backhoe results in muddy conditions in locations of the cemeteries that see a lot of backhoe use.

These conditions could be improved upon by obtaining alternate wheeled equipment that has less impact on turf, or field staff could lay down 4 ft. x 8 ft. plywood boards along the backhoe's path to improve this situation. There is currently no protocol in place for City staff to inspect and ensure the cleanliness of the site after a funeral service is complete.

Interments are more challenging in the winter time. There is often damage done when graves are dug in the snow. The visibility of existing plots is limited in the winter and it is difficult to mark plots for opening due to presence of snow and freezing ground conditions.

There have been challenges resulting from the indirect contract arrangement in which interment services including opening and closing are outsourced to a contractor. There is a lack of clarity surrounding the nature of the relationships, lines of reporting, authority and responsibility between all parties. This represents a potential liability for the City in the event that something goes wrong.

PARK SPACE + COMMUNITY USE

Employees working in the surrounding businesses of Cold Lake South make use of Grand Centre Memorial Park as a site for informal picnicking and lunch. There are very few community greenspaces or parks in this part of the City.

City cemeteries would benefit from more character-defining elements to make them more park like and more appealing to City residents. Both sites lack seating and benches. The Grand Centre Memorial Park site lacks trees; especially species such as white spruce and pine which are representative of the Cold Lake landscape.

CEMETERY SALES AND MARKETING

The City has not historically allocated a budget or staff time to cemetery marketing, sales or promotional initiatives for its cemeteries. Municipal cemeteries commonly invest **2% to 5%** of projected gross revenues into marketing, community engagement, and promotional initiatives.⁴

The City's current cemetery sales practices are passive in nature, relying mainly on walk-in or call-in business. Currently there are no active strategies in place to attract families or engage the community with Cold Lake's cemeteries. This puts the City in a very weak position compared to proactive competitors and is likely the leading reason for the City's low market capture.

There are a number of free and/or low cost opportunities available to the City to increase public awareness of its cemeteries, including but not limited to:

⁴ American Cemetery, August 2014, Marketing Roundtable, Patti Martin Bartsche.



City of Cold Lake Cemetery Services Master Plan - DRAFT Report

- **Social Media.** Municipalities often set up cemetery Facebook, Twitter, LinkedIn, YouTube, Pinterest and/or Instagram accounts;
- Community Events. Municipalities will often host gatherings at cemeteries celebrating a holiday, religious, cultural and historic events (e.g. Remembrance Day, Halloween, All Souls Night, Mothers and Fathers' Day, etc.). These events may include fundraisers, art exhibitions, performances, annual spring clean ups, etc.; and
- Walking Tours. Municipalities will often partner with local museums, genealogical and historical societies, schools, and youth groups to organize the aforementioned events and cemetery walking tours.

There is a wide range of further marketing opportunities available to the City cemeteries. This includes developing a cemeteries webpage on the municipal website, initiating brochure distribution throughout the cemeteries' catchment area, and pursuing active lead generation.



Figure 22: Alberta Cemetery Walking Tour, Source: The Eagle 100.9 FM. http://okotoksonline.com/the-agle-100-9-blog/29751-cemetery-tour-history-from-headstones



7.8 RECOMMENDATIONS – OPERATIONS REVIEW

It is recommended that the City of Cold Lake:

- Adopt specialized cemetery software that enhances record-keeping and performance measurement (e.g. Stone Orchard Software) and links records to electronic maps of graves.
- Begin the process of reconciling the inventory, interment and customer records at Lakeview Cemetery to enable more efficient land management and customer service;
- Implement the iCemetery App for use by operations staff, contractors and the public;
- Create an organizational chart which outlines a reporting structure as well as roles and responsibilities for all those involved in the cemeteries;
- Develop Standard Operating Procedures that address key policies and procedures such as grave marking, opening and closing, standards for maintenance, etc.;
- Formalize the procurement of a contractor to perform grave opening and closing, with clear reporting structure to the City and review and renewal of the contract every 5 years;
- Establish the role of a Cemetery Manager who is responsible for both administration and maintenance;
- Hold four quarterly meetings per year with all City Staff who are involved in the cemeteries;
- Hold at least one annual meeting per year with City Staff and key community stakeholders who are involved with the cemeteries;
- Send at least one member of City staff to a cemetery conference or training every year building cemetery knowledge within their staff team;
- Replace the tracked backhoe with wheeled equipment and require the use of 4' x 8' plywood boards to reduce turf impacts;
- Plan to increase care and maintenance at both City cemetery sites (e.g. the City should plow snow on site to provide some pedestrian access through winter), and
- Identify a budget, staff resources and vision for a City cemeteries' marketing strategy. This should include developing a plan for "start-up" initiatives such organizing social media accounts, community events and cemetery walking tours.



7.9 FINANCIAL PRACTICES + HISTORIC PERFORMANCE

The City would prefer to move its cemetery operations towards costs recovery. Municipal cemetery operations across Canada are increasingly striving for the goal of long term self-sustainability.

FINANCIAL MANAGEMENT + PERFORMANCE

Financial Tracking + Reporting

The City uses the municipal accounting software, Bellamy⁵, which is not linked to its cemetery records system. The City's chart of accounts and internal tracking codes are limited, constraining the City's ability to effectively measure product and service performance at Cold Lake Cemeteries.

The City does not currently record interment revenue since this service is not provided directly by the City. The City does record plots sales, but does not separate its revenue by source or the interment form within each plot. All cemetery sales are recorded under one account entitled "Sale of Plots" even miscellaneous revenue such as permit and transfer fees.

Communities that follow best practices track revenue and costs by cemetery site, and have sales accounts for each cemetery product and interment service (e.g. a separate account for casket plots, cremation plots, niches, permits, etc). Highly sophisticated cemetery systems will also have tracking codes or separate accounts to identify resident/non-resident and at-need/pre-need sales.

The City has the opportunity to better manage operating costs by increasing the number of its cemetery expense accounts and grouping them by functions. For example, the City could allocate its staff salaries into the following categories, "Staff Salaries – Administration," "Staff Salaries – Maintenance", and "Staff Salaries – Interment (for those that perform interments in the future)."

Supporting Religious Cemeteries

The City has historically transferred \$1,000 to the local Anglican and Assumption cemeteries to assist those parishes with maintenance costs of their cemeteries. City records do not include any historical documents that outline the origin, terms or administration of these transfers.

According to staff, the City unofficially took over the management and maintenance of Lakeview Cemetery from the United Church in the 1960's and these transfers may have been set up in an attempt to be fair to other churches operating cemeteries in the community.

Canadian municipalities typically examine and revisit funding transfer arrangements every 5 to 10 year. Ideally, City staff should arrange a meeting with the leaders of the churches that currently receive this annual transfer, to discuss and reconcile how these funds are currently being spent. The church leaders may also have records in their archives concerning the origin and terms of this historic arrangement available to share with the City.

After these groups have been consulted, the City should evaluate whether it is in the community's best interest that these annual transfers continue. If it is decided that these should continue, then an updated agreement concerning the terms, conditions, accountability and responsibilities of all parties should be drafted and approved.

⁵ http://www.bellamysoftware.com/



Perpetual Care and Maintenance

Currently, the City does not clearly identify and group cemetery maintenance costs in its chart of accounts, budgets or cemetery income statements. This is a very important performance indicator related to Perpetual Care Fund (PCF) planning.

The City of Cold Lake does not currently have a Perpetual Care Fund. This is a very important factor in the future viability of a cemetery system. Canadian cemeteries typically contribute to a PCF by setting aside a portion of lot fees and/or other cemetery revenue.

Alberta provincial legislation currently mandates **15%** of interment right purchases to a care and maintenance trust fund for all <u>privately owned</u> cemeteries. Religious and municipal cemeteries in Alberta are exempt from this care and maintenance fund requirement. Other Canadian Provinces mandate that municipal cemeteries must also contribute a portion of plot, crypt, niche and permit sales to a dedicated Perpetual Care Fund. Although municipal cemeteries are exempt from mandatory contributions, the City of Calgary sets aside **40%** of the rights purchase towards care and maintenance. This is a practice several Canadian municipal cemeteries have adopted: contributing above and beyond the PCF statutory requirements.

In the past decade, interest rates on Perpetual Care Funds have averaged **2% to 5%** under conservative investment practices. Due to recent economic conditions, returns have declined to as low as **1% to 2%** in the past three years, creating new challenges to the long term financial sustainability of cemetery operations. Provincial legislation typically permits cemeteries to withdraw the interest earned, provided it is applied against the cemetery's current year care and maintenance costs. However, Canadian municipal cemeteries that follow best practices retain this interest income within the PCF, leveraging the long term strategic advantage of compounding.

Additional details concerning best practices for cemetery perpetual care and Provincial legislative requirements concerning PCF's, can be found in "Appendix H – Perpetual Care Overview."

Historic Financial Performance

From 2011 to 2015, Cold Lake cemeteries reported an average:

- \$9,000 loss (net balance) per year;
- \$5,200 in revenue per year with a decrease of 65% since 2012. City staff report that sales at Grand Centre have been slow and that higher sales years reported, occurred when families decided to purchase a bulk number of plots;
- \$14,000 in expenses per year and a 23% increase in expenses since 2012, and
- \$7,800 in site maintenance costs each year, not presently included in the Cold Lake Cemeteries financial report.

Cold Lake cemeteries operate at a loss, requiring a tax levy from the City to subsidize cemetery operations. The majority of municipal cemeteries operate in this matter and require tax support.

Budgeted resources for cemetery operations has not historically been reviewed at length and compared to actual financial performance by City staff. Historically, City accounting has allocated an account with \$10,000 annually for cemeteries, which current cemetery staff were unaware of.



The following graph summarizes the financial position (Revenue, Expenses and *Net Balance) as reported for Cold Lake cemeteries over the past 5 years.* Net Balance = Revenue - Expenses

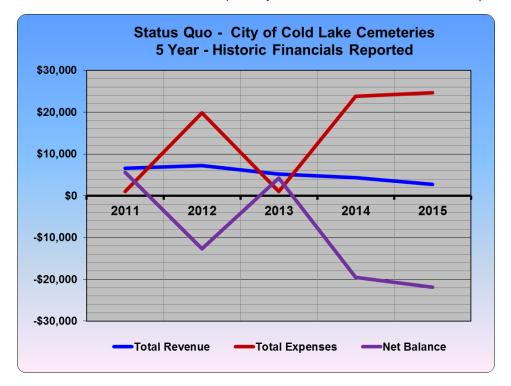


Figure 23: Historic Revenue, Expenses and Net Balance for Cold Lake Cemeteries, Source: City of Cold Lake Financials.

In practice, total revenue reported is limited to cemetery plot sales. This is because the City does not have other fees listed on its Cemetery Schedule of Fees, such as extra charges for funerals on weekends or statutory holidays, a permit fee for the installation of monuments, the transfer of a burial plot, or a permit fee to in-urn within an occupied plot.

Total expenses reported by the City of Cold Lake for its cemeteries do not include an allocated expense for site maintenance related to the mowing, weed whacking, fertilizer, herbicide, seeding and fuel costs related to the care of City cemeteries.

Total expenses also do not include any portion of regular City staff salaries. The salaries of staff that work on the cemeteries come out of the parks budget as maintenance of cemeteries is a very small portion of what they do over the summer.

In addition, City finance staff do not consistently post the expense of summer student work to the cemetery operations accounts. It is included in the total expenses for 2012, 2014 and 2015. In 2011 and 2013, the level of resourcing for summer students working in cemeteries was approximately the same as in other years, but their compensation was posted to the City's Parks department accounts.



7.10 FINANCIAL PLAN – SCENARIO ANALYSIS

To identify the best strategy for the City's future operations, two scenarios are presented in this section: Scenario 1: "Maintaining Status Quo" and Scenario 2: "New Business Model."

"Maintaining the Status Quo" assumes a scenario where there are no changes to the Cold Lake Cemeteries business model. In this scenario, future cemetery prices, offerings and market capture does not change and financial performance is only driven by the future demographic demand and changes in the cemetery market.

The "New Business Model" is a more optimal alternative scenario resulting from changes to the City's internal operations, as well as external market factors.

On the revenue side of the equation, the financial estimates are related to market conversion (number of local families who choose to be interred in the cemetery system), annual rate increases, and anticipated adjustments to the fee schedule.

On the expense side of the equation, costs are related to inflation and prearranged contract agreements that exist (if any). A discussion of the two scenarios concludes this chapter.

The assumptions and expected changes incorporated in both financial scenarios include:

- Demographic and sales trends will define future demand and drive future revenues;
- Market capture will not change significantly in the next 50 years under status quo conditions. Market capture is anticipated to increase if the City invests in community engagement, customer service, marketing and sales initiatives;
- Annual cost increases will be equivalent to the historic rate of inflation at 2% per year;
- The City will acquire and develop land as needed and actively provide cemetery services for the next 50 years, and
- Forecasts do not include extraordinary capital costs for acquiring land, development, and new infrastructure needed.

Graphs in this section illustrate the key aspects of each financial scenario, including projected revenues, expense, profits and losses (net balance), as well as PCF changes for the next 50 years.

Graphs in this section also refer to "Active Maintenance Cost," which is the cost of maintaining Cold Lake cemeteries as an active system and "Inactive Maintenance Cost," which is the cost of maintaining Cold Lake cemeteries as inactive sites (without further interments). Maintenance costs for an inactive site usually decrease to 50% of the site's active maintenance costs, due to lower levels of on-site traffic.



7.11 SCENARIO 1: MAINTAINING STATUS QUO

The following graph summarizes the projected financial position of the Cold Lake cemeteries over the next 50 years under Scenario 1, assuming nothing changes in future cemetery operations.

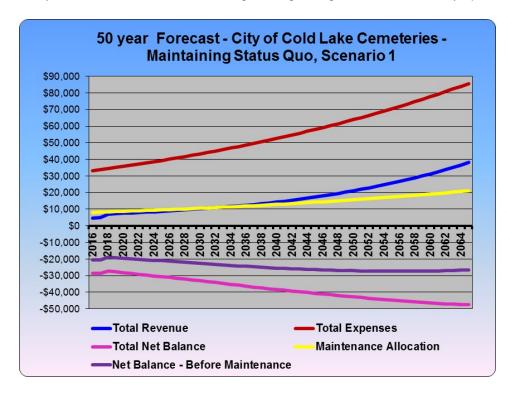


Figure 24: Cold Lake Cemeteries, Scenario 1 - Maintain Status Quo, 50 Year Forecast, Source: LEES+Associates.

The upcoming passing of the "Baby Boom" generation will boost sales, and steadily increase revenue growth over time. However, even with this positive trend, under status quo conditions, Cold Lake cemeteries are not expected to break-even in the foreseeable future.

Currently City Staff estimate that Cold Lake spends approximately \$7,800 per year on cemetery care and maintenance of Cold Lake cemetery grounds. This is an approximation of a key performance indicator for long term sustainability and requires further tracking, verification and refinement by the City, to ensure all labour time and material costs for site care are accounted for.

Assuming the City's estimation of 2015 maintenance costs, in 50 years, the costs of site care will increase, from inflation alone, to **\$21,000** per year. If the cemetery system is inactive at that time, then it is expected that the annual cost of supporting site maintenance would drop to **\$10,500** per year, at the lower levels of care provided at a cemetery site with less on-site traffic.

Under this scenario, the City does not have a PCF and would have to perpetually support this cost with an annual tax subsidy. Assuming an interest rate of 2%, the City would need to have a PCF balance of **\$1.1 million**, to fully cover the active care costs in 50 years,



7.12 SCENARIO 2: NEW BUSINESS MODEL

Scenario 2 is an assertive model that increases revenue through increased prices, market capture growth and changes to PCF practices. Key assumptions under Scenario 2 include:

- 2015 was an unusually low sales year. It is assumed plot sales will increase back up to the average performance experienced in the past five years by 2018, through increased marketing and community engagement initiatives. After 2019, demand and sales will be driven higher by demographic trends;
- Price changes proposed in this chapter will begin in 2017. Cemetery services and products without specific rate changes identified in this chapter will increase by 2% in 2017;
- From 2017 forward, ongoing price increases of 2% per year will apply to all rates;
- The City of Cold Lake will establish a Perpetual Care Fund in 2017, which will receive a transfer of 30% of all annual plot sales;
- The City's new PCF will earn an average of 2.0% per year over the next 50 years, and
- City staff will allocate some of their time towards marketing strategies and community engagement activities for Cold Lake Cemeteries.

The following graph summarizes the financial position of Cold Lake cemeteries over the next 50 years under Scenario 2, assuming the City adopts this study's proposed new model.

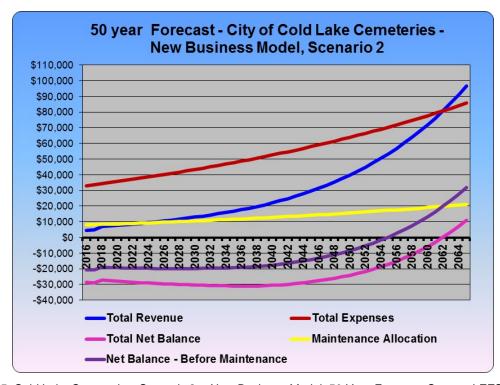


Figure 25: Cold Lake Cemeteries, Scenario 2 – New Business Model, 50 Year Forecast, Source: LEES+Associates.



It is expected under Scenario 2 that Cold Lake cemetery operations will become fully self-sustaining and begin to break even consistently (after maintenance costs are accounted for) in **47 years** or **by 2062**.

After the Cold Lake cemetery system begins to generate a profit, it is recommended that any excess income be allocated as an extra contribution to the new Perpetual Care Fund, as well as a new dedicated Cemetery Development Fund, designed to support capital projects such as developing new inventory, enhancing infrastructure, and purchasing new land in the future.

The projected sales revenue in this scenario does not include new cemetery offerings (e.g. columbaria niches, family vessels, scatterings, etc). This is because the City does not have any established sales patterns or history of demand for these offerings to reasonably extrapolate from. At cemeteries with low sales volumes, any projected revenues from high priced offerings such as columbaria niches are expected to have a substantial impact. Therefore, it is prudent to be conservative about their impact on future cash flows.

The following graph highlights the forecasted Perpetual Care Fund balance, interest income and the maintenance costs to be covered under Scenario 2.

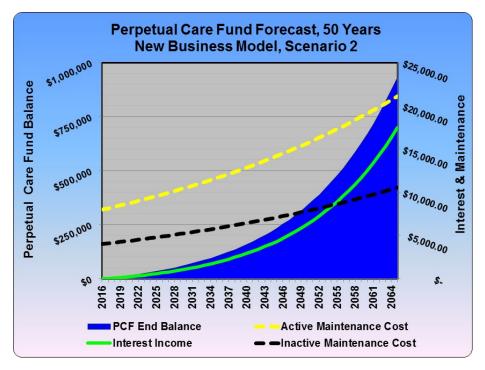


Figure 26: Cold Lake Cemeteries Perpetual Care Fund Forecast, Scenario 2 – New Business Model, Source: LEES+Associates.

Under this scenario, the PCF will reach a balance of **\$930,000** in 50 years. This will generate interest of **\$18,600** per year, at the rate of 2.0%. In this scenario, the City will comfortably achieve basic, inactive site sustainability within **40 years**.



If the City wishes to continue the current level of care (at the forecasted Active Cemetery Cost) using the PCF interest income, then it will likely take approximately **55 years** to achieve full active site sustainability, unless the City chooses to contribute a greater proportion of annual sales to the PCF or budgets a substantial donation to the PCF from its capital or general fund.

The projected PCF balance in this scenario does not include contributions from new cemetery offerings. Municipal cemeteries across Canada will often contribute **10%** of annual columbaria niche sales to further grow their PCF. The City can also choose to adopt this practice in order to further grow the PCF and shorten the timeline to full financial sustainability.

7.13 KEY FINDINGS – FINANCIAL PLAN

The key findings for the operating model and financial plan analysis include:

- Cold Lake cemeteries currently generate an annual loss, requiring tax subsidy from the City to support operations. This is consistent with the performance of most other Canadian municipal cemeteries;
- Increasing prices and City Staff time investment in marketing initiatives is necessary to increase revenue and achieve more sustainable financial projections in the long-term, and
- The City's perpetual care needs are underfunded. Under status quo conditions, when cemeteries become inactive the City will likely have an obligation to cover basic cemetery maintenance through ongoing tax subsidies.

7.14 RECOMMENDATIONS – FINANCIAL PLAN

The following recommendations are expected to improve future cash flows, performance tracking and perpetual care funding. To achieve self-sustaining operations the City should:

- Adopt Scenario 2 to guide future planning. This will enable the City to:
 - Reduce the City's tax subsidy of cemetery operations;
 - Achieve the recovery of anticipated operating costs with reasonable price increases within the anticipated range of Alberta's cemetery market value, and
 - Improve long-term sustainability by growing a PCF to a balance which will generate sufficient interest to meet future maintenance costs.
- Add new revenues accounts to enhance performance measurement and the ability
 to track sales by customer segment (resident/non-resident), product/service type
 (casket plots, cremation plots, niches, permits, etc) and time of sale (at-need/pre-need).
- Add new expense accounts to enhance the City's ability to track costs by function; these could include creating new accounts and account groupings for administration costs, maintenance costs, contractor costs (for interments), etc.



City of Cold Lake Cemetery Services Master Plan - DRAFT Report

- Draft policies for posting cemetery-related sales and expenses to ensure consistent and accurate reporting. This includes identifying and allocating an appropriate % portion of maintenance and labor expenses from the Parks budget to cemetery expense accounts to accurately track site costs;
- Meet with the representatives of the churches receiving a City transfer of funds to support their cemeteries. Gather information and evaluate whether the annual transfer should continue. If it is decided that it should, then draft an updated agreement that outlines the terms, conditions, accountability and responsibilities of all parties involved;
- Establish a Perpetual Care Fund by consulting with an investment specialist.
 Contribute 30% of plot sales and 10% of columbaria niche sales to the PCF annually.
 - The City also needs to decide on the appropriate measures to increase the PCF balance, to compensate for the years of sales that did not contribute to perpetual care. This could include donations to the PCF from the City's budget.
- Transfer future profits to a new Development Fund. This will fund future inventory, land acquisitions and improvements to cemetery site infrastructure;
- Monitor changes in revenue, expenses, profit/loss and community response, to ensure
 the proposed marketing plan and financial strategies evolve as expected and that the
 impact of these changes on the cemetery-community relationship is measured, and
- In 5 to 10 years, revisit the anticipated market capture, and financial projections for Cold Lake Cemeteries. It will be important to evaluate the response to the City's new cemetery offerings and community engagement efforts, as well as course-correct the City cemetery operations in response to changing market conditions.



8 CONCEPT DESIGNS + SITE IMPROVEMENTS

This chapter provides concept design options for both Grand Centre Memorial Park and Lakeview Cemetery, and summary of recommended aesthetic and functional improvements. The concept plans have been created in response to the need to:

- Improve the overall aesthetics of the cemeteries;
- Expand the range of interment types offered at each cemetery site to respond to changing community demographics, religious and cultural needs;
- Address access and operational deficiencies that reflect best practices and trends, and
- Enhance the potential for increased programming and use of the cemeteries as important assets in the community's park and open space system.

8.1 GRAND CENTRE MEMORIAL PARK – CONCEPT DESIGN

The following sections describe key recommendations for new interment, amenity and landscape areas designed for Grand Centre Memorial Park (Cold Lake South).

CREMATION GARDEN

A new cremation garden is proposed as a key feature of the cemetery upgrades. The cremation garden will feature ornamental plantings to provide horticultural interest, a sculptural feature and benches situated to optimize views to the west. A variety of cremation interment options are proposed including community columbaria, family vessels, and a scattering garden. Columbaria will be phased in over time, with two units recommended as part of the first phase of development.

GREEN BURIAL AREA

The introduction of a green burial area represents strong interest from stakeholder groups in the community interested in more environmentally sustainable interment options, and presents a marketing opportunity for the City to promote sustainability initiatives. More information on green burial is provided in "Appendix F – New Interment Options."

MUSLIM BURIAL AREA

The addition of a specialized interment area for Muslim Burial area reflects the current demographics of the

Figure 27. Example of community columbaria, Source: LEES+Associates

community which has a growing Muslim population, as well as consultations with representatives of the Cold Lake Mosque. Members of the Cold Lake Muslim community currently use cemeteries



in the City of Edmonton which provide specialized burial areas. Burial plots in the Muslim Burial Area will be aligned towards Mecca, at 28.19° from North towards East.

ACCESS IMPROVEMENTS

Access improvements proposed for Grand Centre Memorial Park respond to the need to mitigate muddy conditions on the current driveway, and a desire for a more formalized arrival area and processional into the cemetery for visitors. Proposed improvements include paving of the internal cemetery driveway, creation of a formalized parking area at the cemetery entry, as well as improved entry gates for vehicle and pedestrian access. Road access from Highway 28 to the cemetery should be improved in the long-term.

VETERANS PLAZA AND WALK OF HONOUR

The Veterans Plaza and Walk of Honour is designed to honour Veterans, and will include a plaza space for ceremonial purposes, processions and gatherings. A central obelisk defines the space and provides a place for the laying of wreaths. A Field of Honour with areas for in-ground casket and cremation burial areas will be provided for Veterans of the Armed Forces as well as Veterans of Protective Services - those who served in the police or fire services. The Veterans Plaza includes spaces for the installation of columbaria dedicated to Veterans.



Figure 28. Rendering of the proposed Veterans' Memorial Plaza at Grand Centre Memorial Park, Source: LEES+Associates

The Concept Plan for Grand Centre Memorial Park including proposed access and interment diagrams are included in "Appendix J – Cemetery Concept Designs."



8.2 LAKEVIEW CEMETERY – CONCEPT DESIGN

The following sections describe key recommendations for new interment, amenity and landscape areas designed for Lakeview Cemetery (Cold Lake North).

CREMATION GARDEN

A new cremation garden is proposed as a key feature of the cemetery upgrades. The cremation garden will feature ornamental plantings to provide horticultural interest, and benches. A variety of cremation interment options are proposed including community columbaria, family vessels, and a scattering garden. Columbaria will be phased in over time, with two units recommended as part of the first phase of development.



Figure 29. Rendering of proposed cremation garden at Lakeview Cemetery, Source: LEES+Associates

ACCESS IMPROVEMENTS

Access improvements proposed for Lakeview Cemetery include relocation of the primary vehicle entry along 22nd St in order to align with the primary internal driveway, and facilitate operational access. The primary east-west driveway will be upgraded for vehicle use, with the north-south driveway enhanced as a pedestrian pathway. A walking loop and benches around the perimeter of the cemetery provide space for reflection, and will increase the park-like function of the cemetery.

The Concept Plan for Lakeview Cemetery including proposed access and interment diagrams are included in "Appendix J – Cemetery Concept Designs."

OVERVIEW

Grand Centre Memorial Park (Cold Lake South) is currently 30% developed. The objectives of the design are to:

- 1. Enhance the overall aesthetics of the cemetery;
- 2. Respond to the site's topography;
- 3. Optimize views;
- 4. Improve access and circulation;
- 5. Accommodate a wider range of interment and memorialization options, and
- 6. Provide more opportunities to celebrate and remember loved ones who have passed away.

The proposed expansion will provide approximately 30 years of additional burial capacity.

RENDERING OF PROPOSED VETERAN'S PLAZA



GREEN BURIAL





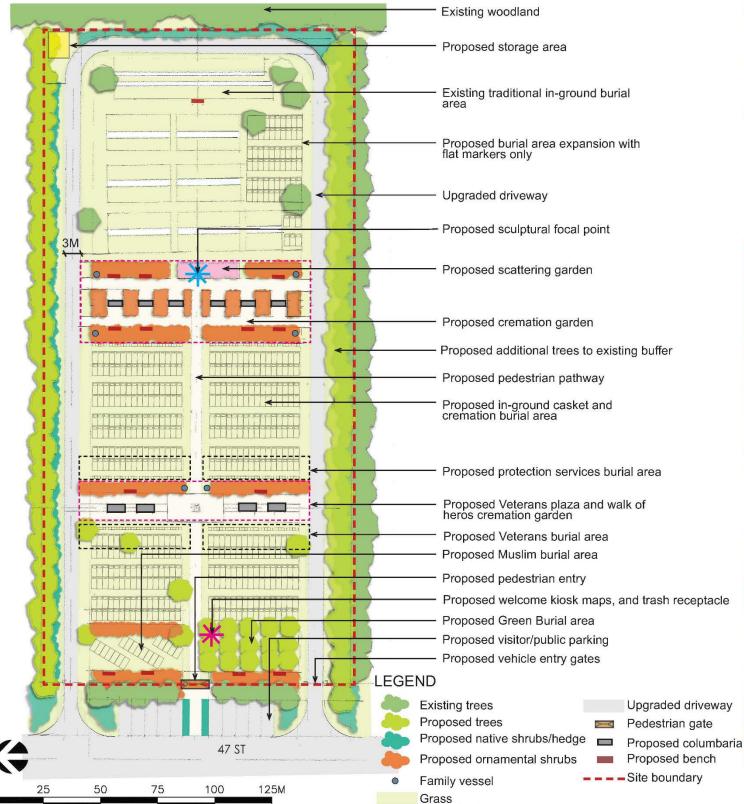
"Green" or "Natural" Burial is an alternative to traditional burial practices and is seen as more environmentally friendly. The five principles of Green Burial are:

- 1. No embalming;
- 2. No outer burial container;
- 3. A biodegradable casket or shroud;
- 4. A communal marker, and
- 5. An element of habitat enhancement.

To find out more visit the Green Burial Society of Canada's website:

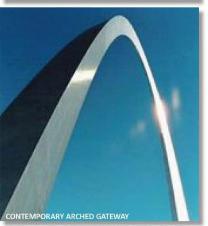
www.greenburialcanada.ca

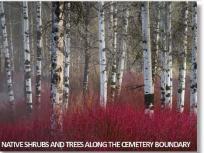
CONCEPT DESIGN



PRECEDENT IMAGES















OVERVIEW

The north half of Lakeview Cemetery is currently 100% sold, and the south half is 70% sold. The proposed concept plan will enhance the appearance of the existing site and provide increased capacity. The objectives of the design are to:

- 1. Improve the overall aesthetics of the cemetery;
- 2. Provide a more park like experience with trees and resting areas;
- 3. Improve access and circulation within the site;
- Create additional cremation interment options;
 Enhance the existing Veterans Field of Honour.

The Lakeview Cemetery improvements will provide approximately 30 years of additional cremation interment capacity as part of a phased development.

RENDERING OF PROPOSED CREMATION GARDEN

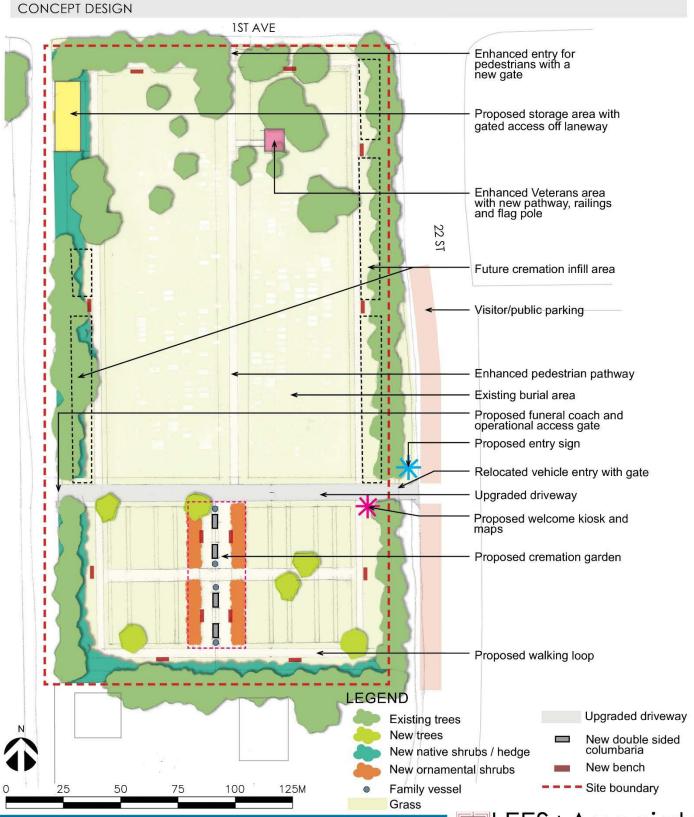


COLUMBARIA

A columbarium is a structure that contains niches for the interment of urns containing cremated remains. Columbaria may be "Family," or "Community," based on the number of niches and how they are sold. They have removable shutters for inscriptions and may have ledges for placing reliquary such as flowers or candles.







PRECEDENT IMAGES















9 DEVELOPMENT + PHASED IMPLEMENTATION PLANS

This chapter provides phasing plans that outline a prioritized list of development initiatives, as well as order of magnitude cost estimates to provide a roadmap for capital planning and future improvements at each cemetery site.

9.1 PHASING PLANS

It is recommended that the improvements for each cemetery site be delivered in phases. The recommended site changes are prioritized in the tables and figures below and identified as either Phase 1 or Phase 2 priorities.

The proposed phasing reflects the need to balance upcoming demand for new services and an expanded range of interment types along with functional improvements, while spreading the cost of development.

Grand Centre Memorial Park - Proposed Improvements	Phase 1 Development	Phase 2 Development
New Cremation Garden (Allow for 2 columbaria in Phase 1)		
New Veterans Memorial Plaza		
New Tree and Shrub Planting and Fence Upgrade to Buffer		
New Pedestrian Pathway		
5. New Pedestrian Entry with Gate, Welcome Kiosk and Maps		
Relocated Materials Storage Area		
7. New Asphalt Driveway		
New Vehicle Entry Gates		
9. New Parking Area		

Table 6. Summary of Recommended Priorities by Phase - Grand Centre Memorial Park

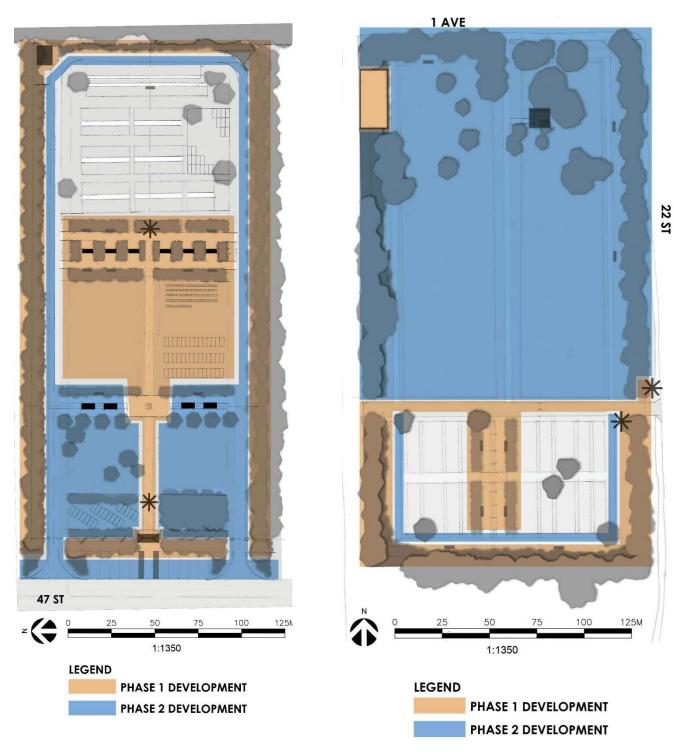


Figure 31. Phasing Plan - Grand Centre Memorial Park

Figure 30. Phasing Plan - Lakeview Cemetery

Lakeview Cemetery - Proposed Improvement	Phase 1 Development	Phase 2 Development
New Cremation Garden (Allow for 2 columbaria in Phase 1)		
Upgraded Driveway with Relocated Vehicle Entry Gate		
Relocated Materials Storage Area		
4. New Entry Sign		
5. Welcome Kiosk and Maps		
6. New Pedestrian Pathways and Walking Loop with Benches		
7. Improved Veterans Area with New Pathway, Railings and Flag Pole		
New Native Shrub Planting to Buffer		
Existing Gate to North Converted to Pedestrian Only Entry		

Table 7. Summary of Recommended Priorities by Phase - Lakeview Cemetery

9.2 COST ESTIMATES

An opinion of probable costs for the proposed cemetery enhancements is presented in the tables below.

GRANDE CENTRE MEMORIAL PARK - PHASE 1 SUMMARY		
ITEM	ESTI	MATED COST
SITE PROTECTION, DEMOLITION AND REMOVALS	\$	2,000.00
NEW EASTERN BOUNDARY FENCE	\$	12,000.00
CREMATION GARDEN PAVING, LANDSCAPE, SCULPTURE, MEMORIAL WALL, AND		
BENCHES	\$	220,134.00
CREMATION GARDEN COLUMBARIA NICHES	\$	71,180.00
NEW CREMATION GARDEN FAMILY VESSELS AND OSSUARY	\$	23,100.00
NEW CREMATION BURIAL AREA WITH SECTION MARKERS	\$	8,180.00
NEW TRADITIONAL IN-GROUND BURIAL AREA WITH SECTION MARKERS	\$	10,000.00
NEW VETERANS PLAZA WITH MEMORIAL OBELISK, FLAGPOLES AND BENCHES	\$	79,520.00
NEW SANBLASTED CONCRETE PATHWAY	\$	35,520.00
NEW PEDESTRIAN ENTRY GATE FEATURE, METAL BOUNDARY RAILINGS , VEHICLE ENTRY GATES, AND SHRUB PLANTING	\$	100,000.00
NEW TREES AND HEDGING ALONG WESTERN CEMETERY BOUNDARY	\$	32,320.00
NEW MATERIALS STORE	\$	7,000.00
TOTAL CONSTRUCTION COSTS	\$	600,954.00
LANDSCAPE MAINTENANCE	\$	5,000.00
GENERAL REQUIREMENTS	\$	7,000.00
DESIGN AND CONSTRUCTION ADMIN FEES @ 15%	\$	91,943.10
CONTINGENCY @ 15%	\$	105,734.57
TOTAL	\$	810,631.67

Table 8. Summary of Estimated Costs - Grand Centre Memorial Park, Phase 1

GRANDE CENTRE MEMORIAL PARK PHASE 2 - SUMMARY		
ITEM	EST	IMATED COST
SITE PROTECTION, DEMOLITION AND REMOVALS	\$	4,900.00
NEW GREEN BURIAL AREA WITH COMMUNAL MARKER	\$	59,980.00
CREMATION GARDEN PAVING, LANDSCAPE, AND BENCHES	\$	98,192.00
CREMATION GARDEN COLUMBARIA NICHES	\$	62,000.00
NEW CREMATION GARDEN FAMILY VESSELS	\$	15,400.00
NEW TRADITIONAL IN-GROUND BURIAL AREAS WITH SECTION MARKERS	\$	15,000.00
NEW ASPHALT CEMETERY DRIVEWAY AND PARKING AREA	\$	88,400.00
NEW NATIVE TREE BUFFER ALONG NORTHERN CEMETERY BOUNDARY	\$	30,000.00
TOTAL CONSTRUCTION COSTS	\$	373,872.00
LANDSCAPE MAINTENANCE	\$	5,000.00
GENERAL REQUIREMENTS	\$	7,000.00
DESIGN AND CONSTRUCTION ADMIN FEES @ 15%	\$	57,880.80
CONTINGENCY @ 15%	\$	66,562.92
TOTAL	\$	510,315.72
PHASES 1 AND 2 COMBINED TOTAL	\$	1,320,947.39

Table 9. Summary of Estimated Costs - Grand Centre Memorial Park, Phase 2

LAKEVIEW CEMETERY PHASE 1 - SUMMARY		
ITEM	ESTII	MATED COST
SITE PROTECTION, DEMOLITION AND REMOVALS	\$	2,000.00
NEW MAIN ENTRY GATE AND UPGRADED DRIVEWAY CREMATION GARDEN PAVING, LANDSCAPE AND BENCHES	\$	99,500.00 82,720.00
CREMATION GARDEN TAVING, LANDSCALE AND BENCHES CREMATION GARDEN MEMORIAL WALL	\$	20,000.00
CREMATION GARDEN COLUMBARIA NICHES	\$	86,700.00
NEW CREMATION GARDEN FAMILY VESSELS NEW TREES TO EXISTING TRADITIONAL IN-GROUND BURIAL AREA	\$ \$	16,400.00 8,000.00
NEW SECTION MARKERS TO EXISTING TRADITIONAL IN-GROUND BURIAL AREA	\$	10,000.00
NEW MAIN ENTRY SIGN	\$	20,000.00
NEW WELCOME KIOSK WITH MAPPING NEW SHRUBS ALONG SOUTHERN AND WESTERN CEMETERY BOUNDARY	\$ \$	20,000.00 19,618.50
NEW MATERIALS STORE	\$	20,000.00
TOTAL CONSTRUCTION COSTS	\$	404,938.50
LANDSCAPE MAINTENANCE	\$	5,000.00
GENERAL REQUIREMENTS	\$	7,000.00
DESIGN AND CONSTRUCTION ADMIN FEES @ 15%	\$	62,540.78
CONTINGENCY @ 15%	\$	71,921.89
TOTAL	\$	551,401.17

Table 10. Summary of Estimated Costs - Lakeview Cemetery, Phase 1

LAKEVIEW CEMETERY PHASE 2 - SUMMARY		
ITEM	ESTI	MATED COST
SITE PROTECTION, DEMOLITION AND REMOVALS	\$	5,900.00
NEW INFILL CREMATION AND TRADITIOAL IN-GROUND BURIAL AREAS WITH SECTION MARKERS	\$	25,000.00
IMPROVED VETERANS PLAZA, MONUMENT RESTORATION, COMMUNAL MARKER, PATHWAY, RAILINGS, BENCH AND FLAGPOLE	\$	42,000.00
UPGRADE WITH PEDESTRIAN ENTRY GATE AT THE NORTHERN BOUNDARY	\$	20,000.00
NEW PEDESTRIAN GRAVEL PATHWAYS WITH CONCRETE EDGES	\$	68,385.00
SIX NEW BENCHES	\$	24,000.00
NEW NATIVE TREE AND SHRUB BUFFER ALONG WESTERN CEMETERY BOUNDARY	\$	21,549.00
TOTAL CONSTRUCTION COSTS	\$	206,834.00
LANDSCAPE MAINTENANCE	\$	5,000.00
GENERAL REQUIREMENTS	\$	7,000.00
DESIGN AND CONSTRUCTION ADMIN FEES @ 20%	\$	43,766.80
CONTINGENCY @ 15%	\$	39,390.12
TOTAL	\$	301,990.92
PHASES 1 AND 2 COMBINED TOTAL	\$	853,392.09

Table 11. Summary of Estimated Costs - Lakeview Cemetery, Phase 2

10 CONCLUSION

This Cemetery Services Master Plan comprehensively reviews the cemetery needs of the City of Cold Lake, and outlines recommendations to serve as a guide to future cemetery site development and operations. This plan will help ensure that the City of Cold Lake will have the resources required to effectively meet the future interment and service needs of the community for the next 25 years, and charts a path forward that will move this important social service towards long term sustainability in its future operations.

11 APPENDICES

- Appendix A Staff + Stakeholder Consultation
- **Appendix B Demographic Profiles**
- Appendix C Cemetery Market and Market Capture Details
- **Appendix D Cemetery Inventory Details**
- **Appendix E Cemetery Market Prices**
- **Appendix F New Interment Options**
- Appendix G Cemetery Bylaw Information
- Appendix H Perpetual Care Fund Overview
- Appendix I Site Analysis Plans
- **Appendix J Cemetery Concept Designs**
- **Appendix K Cemetery Phasing Plans**
- **Appendix L Public Open House Summary**
- Appendix M Glossary of Cemetery Terms

APPENDIX A – STAFF + STAKEHOLDER CONSULTATION

MEETING #1 - SITE VISIT TO GRAND CENTRE MEMORIAL PARK

Date: April 28, 2016 at 1:30 PM

Location: Grand Centre Memorial Park

Attending:

Client Representatives: Tasha Elliott, Jim Fedyk, Shannon Boychuk, George Urlacher, Jazelle

Robb, Cindy Reimer, Sophie Ke, Kristy Isert, Robert Serediuk - City of Cold Lake

Cemetery Consultants: Heidi Redman, Richard Cook - LEES+Associates

- The City provides snow plowing to the cemetery gate; the Funeral Home does snow removal
 within the cemetery to provide access to plots as required for interments; internal roads or
 pathways are not cleared regularly, therefore there is very little visitation to the cemeteries
 in the winter.
- 2. Maintenance begins on May 1, corresponding with annual hiring of summer students by the City; the summer students cut grass at the cemeteries and sweep headstones along with other parks maintenance duties.
- By-law enforcement is an issue, particularly around personal gardens established by families
 on grave plots. These gardens cause maintenance issues at both of the cemeteries, but
 especially at Grand Centre.
- 4. There is a lack of moisture at both sites; irrigation is an expectation by many community members.
- 5. Concrete vaults are mandatory per the most recent update of the bylaw. Previously rough wooden boxes were used.
- 6. The General Manager of Corporate Services is responsible for the department under which the administration of the cemeteries falls. Cemetery maintenance is handled by Parks.
- Concrete ribbons are now used and preferred by staff, due to the clean lines and ease of locating grave plots.
- 8. Groundwater is not an issue at Grand Centre (estimated at 3-4m depth).
- 9. A contractor handles the opening and closing (not City forces). The contractor is contracted by the Funeral Home but paid the City? (TBC) The funeral home recommends the contractor to the family. The contractor is subcontracted and billed to the family. The funeral home describes it to remain 'arms-length.' The City's perspective is that the funeral home subcontracts the contractor. The City is not involved.

- 10. There are no pre-dug graves in the winter.
- 11. Plot sales at Grand Centre have been fairly slow.
- 12. Customers at the cemeteries are mostly locals or families that used to live in Cold Lake.
- 13. The military and the oil sector are driving growth in the community. More and more military (CFB) people are staying in Cold Lake and living out their lives in the community.
- 14. There is no cemetery on the military base.
- 15. There is often damage when graves are dug in the snow; the visibility of existing plots is limited in the winter and it is difficult to mark plots for opening due to presence of snow and freezing ground conditions.
- 16. Wayfinding to Grand Centre is an issue. More signage is needed to direct people to the cemetery.
- 17. There are no trails or green space linkages in proximity to Grand Centre Cemetery. The area is mostly semi-industrial.
- 18. Maintaining perimeter fencing at the site is important due to the adjacent stables, and to keep out snow machines in the winter.
- 19. Employees working in the surrounding businesses make use of the site for picnicking / lunch. There are very few community greenspaces or parks in this part of the city.
- 20. Green burial was discussed on site as a potential new form of interment that may have traction in the community.
- 21. The cemetery would benefit from more character-defining elements to make it more parklike and more appealing to City residents. The cemetery lacks trees; especially species such as white spruce and pine which are endemic to the Cold Lake landscape.

Notes by: Heidi Redman

MEETING #2 – WORKSHOP WITH EXTERNAL STAKEHOLDERS

Date: April 28, 2016

Location: Golf course meeting room

Attending:

Client Representatives: Tasha Elliott, Jim Fedyk – City of Cold Lake

Stakeholder Representatives: Evelyn Berkshire (Points West Living Residents Association); Bev Brule; Helen Flaming, Judy Soholt (Lakeland Lutheran Church); Cathy Aust (Family and Community Support Services); Mary Ann Latty (Seniors Society/United Church); Jeff Thackeray (Momento Funeral Chapel); Phil Crump (Community Baptist Church); Hayward Eastman (Cold Lake Community Church); John Camp (Cold Lake Community Church); Capt Chris Willis (CAF St. Mark's Protestant Chapel); Todd Rorke (Royal Canadian Legion Br. 211); Keith Reider (RCAF Association)

Cemetery Consultants: Heidi Redman, Richard Cook - LEES+Associates

- 1. There was a question/comment about how the Grand Centre (GC) cemetery could possibly be an open space when it is so far from everything?
- 2. Question about wayfinding options within the cemetery itself.
- 3. Someone shared that most of the deaths in the First nations community lead to burials in caskets on the Cold Lake reserve
- 4. Comment that Lakeview cemetery only has vehicle access on the north side which is a very limited space.
 - a. Suggestion for access gate off of 25th Street located about the middle of the parcel length
- 5. Several concerns raised about the landscaping at each site.
- 6. The Legion would like to see a Field of Honour in one or both cemeteries (he personally knew of some military members buried in the Grand Centre cemetery)
- 7. Some comments that the costs associated with a columbarium would affect its viability.
- 8. Padre Willis from 4 Wing said he hasn't witnessed any active military members buried in Cold Lake.
 - a. Jeff from Memento Funeral Home added that he hasn't seen any active military members buried in Cold Lake either, and
 - b. Interest in a special area for retired military members to be buried was expressed from the Legion.
- 9. Memento Funeral Home:
 - a. Sees a need for a columbarium.
 - Grand Centre cemetery has poor maintenance, poor accessibility in winter (snow removal should be enhanced), dirt road is a problem and needs to be maintained year round.
- 10. Options discussed:
 - a. At least some interest in green burial was expressed.
 - b. Also an 'official' place to scatter ashes.
 - c. Perhaps a stream to scatter ashes.
- 11. Pet cemetery:
 - a. Lots of military members have pets
 - b. People don't currently have a lot of options when burying pets
 - c. LEES pointed out there are regulations/restrictions around burying people and pets in the same vicinity
- 12. Cold Lake Legion:
 - a. Asked if the City can collect info from people when they request a burial about whether the person is a veteran or not.
 - b. Then subsequently pass that info onto the Legion for memorial purposes.

Notes by: Tasha Elliott

MEETING #3 - SITE VISIT TO LAKEVIEW CEMETERY

Date: April 29, 2016 at 9:00 AM **Location:** Lakeview Cemetery

Attending

Client Representatives: Tasha Elliott, Jim Fedyk, Shannon Boychuk, George Urlacher, Jazelle

Robb, Cindy Reimer, Sophie Ke, Kristy Isert - City of Cold Lake

Cemetery Consultants: Heidi Redman, Richard Cook - LEES+Associates

- 1. There is a lack of clarity regarding who is responsible for maintaining grave covers and monuments in the cemetery.
- 2. Once a funeral service at the site is completed, there is currently not a protocol in place for City staff to inspect / ensure cleanliness of the site.
- Grave marking has been an issue. There are no grave marker pins, which makes grave marking particularly difficult in the older section where many families have reserved side by side plots in very tight locations.
- 4. There is a need for clean-up after the snow melts, but before the maintenance activity resumes on May 1.
- 5. The contractor uses a tracked backhoe; this results in muddy conditions in some locations of the cemetery that see a lot of backhoe use. Using wheeled equipment that has less impact on turf, and/or putting 4x8' plywood boards down were discussed as possible options to improve the situation.
- 6. The alley adjacent to Lakeview Cemetery is used for access by operations and the funeral homes, however it is not regularly plowed.
- 7. The Materials spoil is currently in a prominent location in the cemetery. It should be moved to a less visible location.
- 8. Lakeview Cemetery has more foot traffic than Grand Centre due to its location within an established neighbourhood.
- 9. Ornamentation is managed more consistently and actively at Lakeview Cemetery, and as a result poses less of a problem than at Grand Centre.
- 10. The site is very dry, and has many sinking graves.
- 11. There is a small Field of Honour at Lakeview but it is poorly marked, and is full.

- 12. Graveside set-up and casket lowering is handled by the funeral home (they supply greens and the lowering device). No chairs, or canopy are provided. This may be a service the City could consider providing on a fee for service basis.
- 13. There have been historic water table issues at Lakeview, but these have now been resolved with installation of a pump system.
- 14. The City does not undertake any headstone releveling, but field staff would be interested in learning about this and possibly incorporating releveling into the maintenance program.
- 15. The Cemetery Bylaw requires clarity around who is responsible for maintenance of grave covers and headstones, and under what circumstances cracked or broken grave covers should be removed.
- 16. Generally, there needs to be more clarity with regards to roles and responsibilities of those involved in maintaining, using and administering the cemeteries.
- 17. Mother's Day is a very popular event, with many families leaving flowers at the cemetery.
- 18. There is a lack of seating or benches at the cemetery.
- 19. Records for the older sections of Lakeview Cemetery exist only in map format. GIS record keeping would be a useful addition to assist with operations.
- 20. There is a need for section or row markers to help with wayfinding, as well possible use of stakes in the winter to help locate grave rows.
- 21. The existing concrete ribbons were installed approximately 10-15 years ago.
- An increase in the maintenance program will require a commensurate increase in staff resources.
- 23. There is currently minimal signage on site (one entry sign); increased wayfinding and educational signage (regarding bylaw), is required.
- 24. A handout for families outlining key policies in the bylaw, and what is permissible on site would be helpful to handout at the time of a plot sale or interment.
- 25. The City is interested in increasing the profile of the cemeteries, and building community.

Notes by: Heidi Redman

MEETING #4 - ADDITIONAL STAKEHOLDER INPUTS

Location: received via email

Stakeholder Representatives: Heather Hiebert (Community Baptist Church Cold Lake)

Cemetery Consultants: Heidi Redman (LEES+Associates)

1. There is an expression of interest in the offering of natural burial options in Cold Lake, with reference to the Natural Burial Association of Canada.

Notes by: HR

Location: via telephone

Stakeholder Representatives: Mahmoud El-Kadri (Cold Lake Mosque)

Cemetery Consultants: Heidi Redman (LEES+Associates)

- The Cold Lake Mosque currently works with a mosque in Edmonton who arranges burial
 for members in Edmonton Cemeteries. The Edmonton mosque sends a car to the Cold
 Lake hospital, provides transportation of the body, and assists with arrangements for a
 funeral in Edmonton.
- As far as Mahmoud is aware, all members of the Cold Lake Mosque are currently being buried in Edmonton.
- There may be potential interest in burial in City of Cold Lake Cemeteries by member of the Cold Lake Mosque in the future. The Muslim community in Cold Lake is small but continuing to grow.
- 4. There was discussion of the potential for an area of graves within the Cold Lake South cemetery which would accommodate members of the Muslim community to be buried in a plot aligned towards Mecca.

Notes by: HR

Location: Cold Lake Energy Centre

Stakeholder Representatives: Ajaz Quariashi

Cemetery Consultants: H.Redman, R.Cook (LEES+Associates), Jim Fedyk (City of Cold Lake)

- The local Muslim community is growing with approximately 30 Muslim families in Cold Lake.
- At this time, the local Muslim community inters their loved ones in Edmonton cemeteries.
 Interment typically involves burial in shroud with a concrete vault that allows contact with the ground.
- 3. The capacity shown in the proposed Muslim burial section at Grand Centre looks about right. The design could include the addition of a bench for reading the quran.

Notes by: HR

APPENDIX B - DEMOGRAPHIC PROFILES

The following graphs shows the age distribution of the City of Cold Lake, Municipal District of Bonnyville and Province of Alberta.

City of Cold Lake - Age Distribution

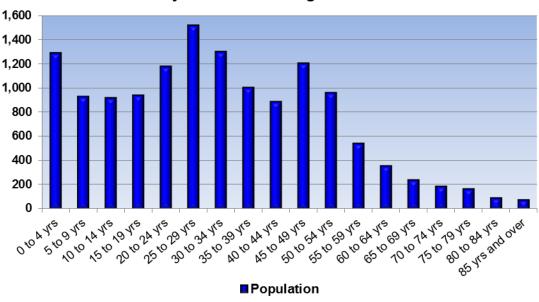


Figure 32: City of Cold Lake's Population Age Distribution as of 2011, Source: Statistics Canada.

Municipal District of Bonnyville - Age Distribution

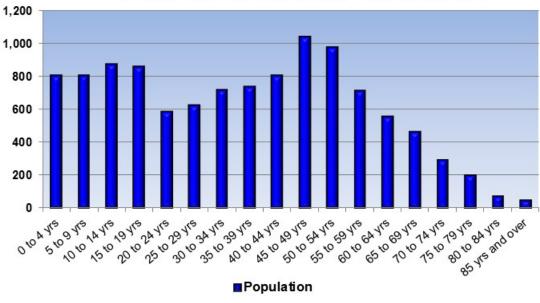


Figure 33: Municipal District of Bonnyville's Population Age Distribution as of 2011, Source: Statistics Canada.

Figure 34: Alberta's Population Age Distribution as of 2011, Source: Statistics Canada.

The following table shows the historic population growth rates for City of Cold Lake and the Province of Alberta, over a 5 year and 10 year period.

Population Measurement	2006 Population	2011 Population	2015 Population	2011-2015 Population Growth/Yr 5 yr *AVG	2006-2015 Population Growth/Yr 10 yr *AVG
City of Cold Lake	12,586	14,240	16,018	2.62%	2.73%
Alberta	3,421,361	3,790,193	4,196,464	2.37%	2.30%

Table 12: Municipal and Provincial Population Growth Rates, Source: Alberta Municipal Census. *AVG = Annual Average Rate.

The following table shows the death rates in the City of Cold Lake compared to the Province of Alberta over a 5 year and 10 year period.

Deaths Measurement	2006 Deaths	2011 Deaths	2015 Deaths	2011-2015 Deaths/Yr 5 yr *AVG	2006-2015 Deaths/Yr 10 yr *AVG
City of Cold Lake	57	57	72	67	65
Alberta	19,523	21,018	24,299	22,500	21,410
City of Cold Lake Death Rate per 1,000 people	4.53	4.00	4.49	4.41	4.56
Alberta Deaths per Death Rate per 1,000 people	5.71	5.55	5.79	5.62	5.64

Table 13: Municipal and Provincial Death Rates, Source: Alberta Vital Statistics and Alberta Municipal Census.

The death rate in this report measures the number deaths for each 1,000 individuals in the region's population for a particular year or stated time period.

APPENDIX C – CEMETERY MARKET DISPOSITIONS AND MARKET CAPTURE DETAILS

The pie charts below show the rate of disposition in the City of Cold Lake and Alberta in 2015.

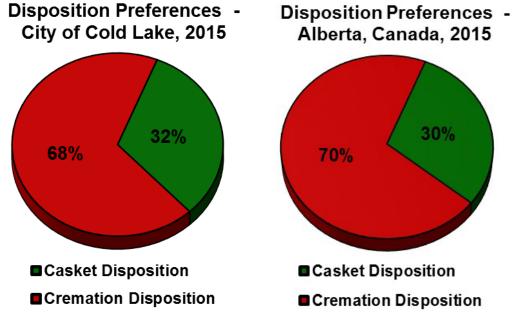


Figure 35: Disposition Preferences in the City of Cold Lake and Alberta, Source: Alberta Vital Statistics, LEES+Associates.

The following table summarizes the interment activity at City cemeteries over the last 5 years.

Service Type	5 years of City of Cold Lake Cemeteries Activity, 2011-2015											
	Total Interments	Average Interments	% of Total Interments									
Traditional Casket	35	7	51%									
Cremation Urns	33	7	49%									
Total	68	14	100%									

Table 14: Summary of 5 Years of Interments by Service Type at City of Cold Lake Cemeteries, Source: City of Cold Lake Interment Records.

The following two graphs summarizes the historic cemetery market that characterized the City of Cold Lake for the past 5 years.

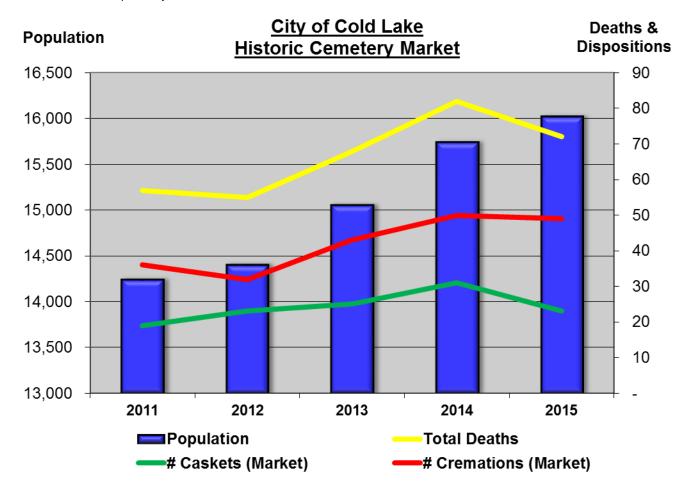


Figure 36: 5 Year City of Cold Lake Cemetery Market Overview, Source: LEES+Associates.

The following graph summarizes the historic cemetery market capture activity that characterized the City of Cold Lake cemeteries for the past 5 years.

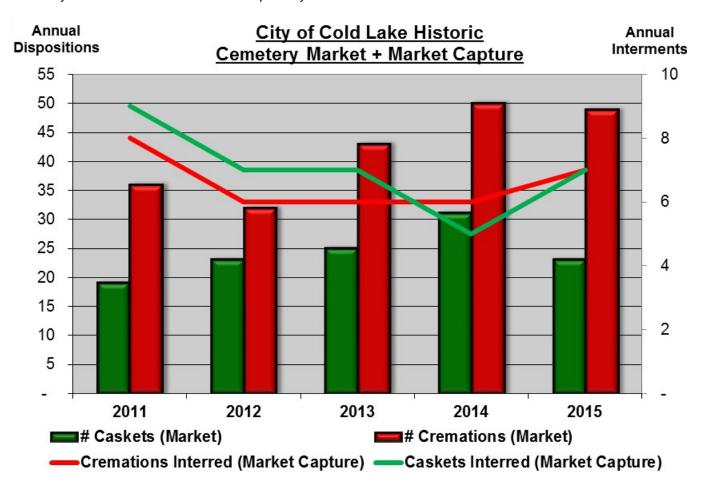


Figure 37: 5 Year Cemetery Market Capture of the City of Cold Lake Cemetery Market, Source LEES+Associates.

APPENDIX D - CEMETERY INVENTORY DETAILS

The following graph summarizes the distribution of existing inventory at Lakeview Cemetery

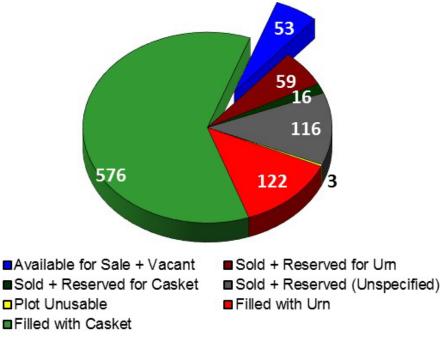


Figure 38: Distribution of Inventory of Existing Inventory at Lakeview Cemetery, Source: City of Cold Lake Inventory Records.

The following graph summarizes the distribution of existing inventory at Lakeview Cemetery

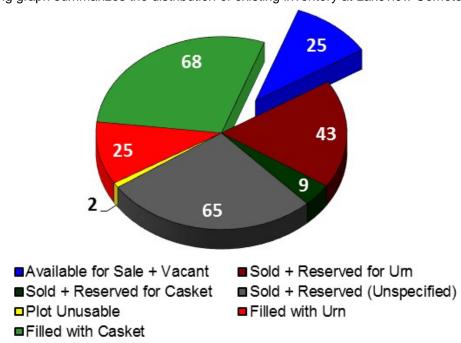


Figure 39: Distribution of Inventory of Existing Inventory at Grand Centre Memorial Park, Source: City of Cold Lake Inventory Records.

APPENDIX E – CEMETERY MARKET PRICES

	City of Cold Lake - 2016 Resident Rates Comparison																					
	Cemetery Plot / Niche Price Comparison																					
Product	La	of Cold ake sident	Town of Slave Lake Resident		e Lake Bic		Lac La Town of Biche Whitecour Resident Resident		Hig	own of h River sident	Camrose Resident		c	own of kotoks esident	Leduc Resident		Rocky View County Resident		P	Grand Prairie esident	Aver Resi	dent
Population 2011	13,	,839	-	6,782	w	3,402		9,605	1	2,920	*	17,286	•	23,981	2	4,279	3	6,461	5	5,032	20,8	859
							S	ale of Ce	met	ery Plot	s											
Adult Flat Casket Plot	\$ 5	500.00	\$	310.00	\$	550.00	\$	400.00	\$	00.088	\$	752.00	\$	894.89	\$	850.00	\$2	,458.90	\$ 1	,325.00	\$8	92
Adult Upright Casket Plot	\$ 5	500.00	\$	310.00	\$	550.00	\$	400.00	\$	880.00	\$	752.00	\$	1,081.08	\$	850.00	\$3	,046.19	\$ 1	,325.00	\$9	69
Child Plot	\$ 3	300.00	\$	310.00	\$	550.00	\$	400.00	\$	880.00	\$	376.00	\$	894.89	\$	475.00	\$	935.00	\$ 1	,325.00	\$6	45
Infant Plot	\$ 3	300.00	\$	310.00	\$	150.00	\$	400.00	\$	310.00	\$	376.00	\$	894.89	\$	100.00	\$	935.00	\$	575.00	\$4	35
Veteran Casket Plot	\$ 5	500.00	\$	310.00	\$	550.00	\$	-	\$	880.00	\$	376.00	\$	468.75	\$	850.00	\$ 1	,240.43	\$	825.00	\$6	00
Cremation Flat Plot	\$!	500.00	\$	310.00	\$	550.00	\$	400.00	\$	290.00	\$	376.00	\$	453.02	\$	450.00	\$ 1	,778.32	\$	575.00	\$5	68
Veteran Cremation Plot	\$!	500.00	\$	310.00	\$	550.00	\$		\$	290.00	\$	376.00	\$	220.22	\$	450.00	\$	834.27	\$	675.00	\$4	21
Columbaria Niche MIN	n	n/a	\$	990.00	\$1,	,500.00	\$	500.00		n/a	\$1	,050.00	\$	1,305.15	\$ 1	,100.00	\$3	,474.30	\$	350.00	\$1,2	284
Columbaria Niche MAX	n	n/a	\$	990.00	\$1,	,500.00	\$	750.00		n/a	\$1	,050.00	\$	1,443.75	\$ 1	,550.00	\$3	,474.30	\$	350.00	\$1,	389

			City of Col	d Lake - 20	16 Non-Re	sident Rate	s Comparis	on					
	Cemetery Plot / Niche Price Comparison												
Product	City of Cold Lake Non- Resident	Town of Slave Lake Non- Resident	Lac La Biche Non- Resident	Town of Whitecourt Non- Resident	Town of High River Non- Resident	Camrose Non- Resident	Town of Okotoks Non- Resident	Leduc Non- Resident	Rocky View County Non- Resident	Grand Prairie Non- Resident	Average Non- Resident Fee		
Population 2011	13,839	6,782	8,402	9,605	12,920	17,286	23,981	24,279	36,461	55,032	20,859		
				Sal	e of Cemete	ry Plots							
Adult Flat Casket Plot	\$ 500.00	\$ 310.00	\$ 700.00	\$ 550.00	\$ 880.00	\$1,504.00	\$ 2,357.35	\$ 850.00	\$ 2,458.90	\$ 1,325.00	\$1,144		
Adult Upright Casket Plot	\$ 500.00	\$ 310.00	\$ 700.00	\$ 550.00	\$ 880.00	\$1,504.00	\$ 2,927.93	\$ 850.00	\$ 3,046.19	\$ 1,325.00	\$1,259		
Child Plot	\$ 300.00	\$ 310.00	\$ 700.00	\$ 550.00	\$ 880.00	\$ 752.00	\$ 2,357.35	\$ 475.00	\$ 935.00	\$ 1,325.00	\$858		
Infant Plot	\$ 300.00	\$ 310.00	\$ 150.00	\$ 550.00	\$ 310.00	\$ 752.00	\$ 2,357.35	\$ 100.00	\$ 935.00	\$ 575.00	\$634		
Veteran Casket Plot	\$ 500.00	\$ 310.00	\$ 700.00	\$ -	\$ 880.00	\$ 752.00	\$ 1,533.68	\$ -	\$ 1,240.43	\$ 825.00	\$674		
Cremation Plot	\$ 500.00	\$ 310.00	\$ 700.00	\$ 550.00	\$ 290.00	\$ 752.00	\$ 1,179.75	\$ 450.00	\$1,778.32	\$ 575.00	\$709		
Veteran Cremation Plot	\$ 500.00	\$ 310.00	\$ 700.00	\$ -	\$ 290.00	\$ 752.00	\$ 1,234.81	\$ -	\$ 834.27	\$ 675.00	\$530		
Columbaria Niche MIN	n/a	\$ 990.00	\$1,500.00	\$ 850.00	n/a	\$1,050.00	\$ 2,037.00	\$ 1,100.00	\$ 3,474.30	\$ 350.00	\$1,419		
Columbaria Niche MAX	n/a	\$ 990.00	\$1,500.00	\$ 850.00	n/a	\$1,050.00	\$ 2,425.50	\$ 1,550.00	\$ 3,474.30	\$ 350.00	\$1,524		

	C	City of Cold	Lake - 2016	Rates Con	nparison -	Cemetery	Services Pri	ce Compar	ison			
Service	City of Cold Lake - Via Contractor	Town of Slave Lake	Lac La Biche	Town of Whitecourt	Town of High River	Camrose	Town of Okotoks	Leduc	Rocky View County	Grand Prairie	Average Fees	
Population 2011	13,839	6,782	8,402	9,605	12,920	17,286	23,981	24,279	36,461	55,032	20,859	
	Opening / Closing											
Adult Burial	\$ 850.00	\$515.00	\$700.00	\$350.00	\$310.00	\$1,024.00	\$551.25	\$500.00	\$840.00	\$600.00	\$624	
Adult Burial - Weekend/Holiday	\$ 850.00	\$515.00	\$700.00	\$450.00	\$560.00	\$1,575.00	\$897.75	\$750.00	\$850.50	\$1,200.00	\$835	
Child Burial	\$ 850.00	\$515.00	\$700.00	\$350.00	n/a	\$1,024.00	n/a	\$300.00	\$500.00	\$600.00	\$605	
Infant Burial	\$ 850.00	\$515.00	\$700.00	\$350.00	n/a	\$1,024.00	n/a	\$250.00	\$500.00	\$275.00	\$558	
Cremated Remains Burial	\$ 250.00	\$105.00	\$700.00	\$150.00	\$120.00	\$320.00	\$207.90	\$200.00	\$210.00	\$300.00	\$256	
Cremation Burial - Weekend/Holiday	\$ 1,050.00	\$155.00	\$700.00	\$150.00	\$120.00	\$320.00	\$279.90	\$200.00	\$346.50	\$300.00	\$362	
Columbarium Inurnment	n/a	\$105.00	\$50.00	\$150.00	n/a	n/a	\$207.90	\$100.00	\$210.00	n/a	\$137	
Scattering Ashes	n/a	n/a	n/a	n/a	n/a	\$107.00	n/a	n/a	\$543.38	n/a	\$325	
Disinterment - Adult Casket	n/a	n/a	\$700.00	n/a	n/a	n/a	\$810.34	n/a	\$3,150.00	\$800.00	\$1,365	
Disinterment - Cremated Remains	n/a	n/a	\$700.00	n/a	n/a	n/a	\$465.88	n/a	\$945.00	\$400.00	\$628	
Monument Permit	\$75.00	n/a	n/a	n/a	n/a	\$107.00	\$52.50	\$50.00	\$274.43	\$50.00	\$101	

APPENDIX F – NEW INTERMENT OPTIONS

Columbaria niches are increasing in demand and can be very profitable. Columbaria installations at cemetery sites should be prioritized as a key element in future development. With cremation on the rise and their popularity at Canadian cemeteries, niches are a key source of sales growth and provide effective conservation of limited land capacity. Columbaria construction costs vary widely depending on size, design details and the amenities placed within the adjacent landscape.

Scattering gardens are areas in a cemetery that provide an attractive natural or ornamental setting, dedicated to the scattering of cremated remains. Scattering gardens often include memorial walls. With increasingly mobile families and people choosing not to inter the cremated remains of their loved ones in a cemetery environment, there is a large market for the sale of plaques that will enable people to memorialize family members whose remains are interred or scattered elsewhere. Developing scattering gardens at cemeteries offers an opportunity to improve the cemetery's means of meeting the rising demand for the interment of cremated remains.

Community and family vessels are large, secure containers designed to hold several smaller urns that contain the remains of members of one family, neighborhood or community group. These vessels are a new interment option in Canada, therefore the introduction of a new product into the community will require target marketing time and investment to increase the awareness of this new option. Best practices advise that vessels inventory be developed in phases, as driven by demand – with small numbers of inventory on hand to show customers. These vessels can be strategically located at attractive positions adjacent to scattering gardens, columbaria and paths.

Green burial is emerging as a type of full body interment that is attracting increasing interest across North America. Also known as "natural burial, "country burial" or "woodland burial," this type of interment is an emerging choice in Canada. In 2014, the Green Burial Society of Canada was established. Its role is to promote green burial standards, including cemetery participation in the (international) Green Burial Council's certification system.

Green burial is defined as traditional Figure 40: Green Burial Serve earth burial with:

Figure 40: Green Burial Serve earth burial with:

Victoria BC,

Figure 40: Green Burial Service, Royal Oak Burial Park, Victoria BC, Source: LEES+Associates.

- No embalming;
- Burial directly in the ground;
- No use of grave liners or vaults;
- A fully biodegradable burial container (casket or shroud);
- Interment sites planted with only indigenous groundcover, and
- No individual grave markers.

Green burial has three core tenets:

- Social:
- Economic, and
- Environmental Sustainability.

Societal trends exhibit a preference for environmentally sustainable choices, opening up green burial as an attractive service option and new revenue stream. Green burial can generate equivalent or larger margins than other interments due to the intrinsic ethical value families place on this service.

Green burial interment areas can be developed as separate areas of developed cemeteries, such as meadows or a wooded area requiring minimal maintenance, and no individual memorials marking the grave.

Green burial allows for slightly shallower excavations (1.2m/ 4' depth) compared with the 1.8m/6' depth of conventional burials. Excavated soils do not need to be removed, nor does the grave need to be replanted with

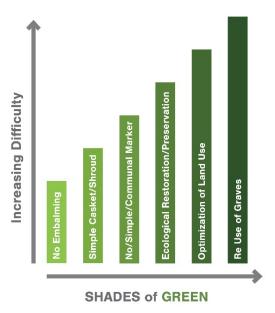


Figure 41: Shades of Green in Green Burial Practices, Source: LEES+Associates.

turf grass. Families typically pay for the re-vegetation of graves with native plant materials, which gradually restores the area to a more natural condition.

In the spring of 2014 the inaugural meeting of the Green Burial Society of Canada occurred. This organization is working collaboratively with the US Green Burial Council to develop a "made in Canada" green burial, funeral and products standard and to advocate for green burial cemeteries and areas within established cemeteries in Canada.

With the involvement of environmentalists, scientists, lawyers, and representatives from the funeral service industry, the US Green Burial Council has set forth the World's first standards for burial grounds, funeral homes and burial products. The Council maintains all relevant documentation (i.e. conservation easements, deed restrictions, general price lists, material safety data sheets, engineering reports) to demonstrate proof of compliance with green burial standards.

Best Management Practices:

Green Burial cemeteries and areas within cemeteries are becoming more prevalent in many countries around the world. Royal Oak Burial Park in Victoria, BC opened Canada's first green burial site in 2008. Waverley cemetery in New South Wales, AU utilizes a 'Limited Renewable Tenure' policy whereby a family can purchase a grave and inter three full bodies and 3 cremations for a fixed period.

Green burial has its roots in a desire felt by some to reconnect with the key events of life, including death, and to restore the personal meaning to the traditions that surround these events. Many who would otherwise choose cremation are attracted to green burial, especially as it better meets their environmental values by imposing a much smaller "environmental footprint."

Choosing green burial is for many an expression of their personal values. Since the people choosing green burial would typically not choose to be interred in a conventional cemetery, offering green burial could be a means of tapping into a market segment that is currently unavailable.

Most people have heard of green burial and are curious to learn more about it. The largest green burial area in a public cemetery in Canada is the "Woodlands" at Royal Oak Burial Park near Victoria, BC. This site opened in late 2008 and since then has sold over 70 at-need and 100 preneed lots. Offering green burial is advantageous in terms of its **marketing value**. Print, TV and radio media are very attuned to stories about green burial. Stephen Olson, the Executive Director of Royal Oak attests to the promotional value of green burial to his cemetery.⁶

Green burial should be just as valued – and valuable – as traditional burial grounds and for that reason should be priced commensurate with other full depth burial sites. Over the long term, maintenance becomes less as a green burial area is expected to return to nature, if not take on a naturalistic, less manicured appearance.

Due to the small number of cemetery sites currently offering green burial, any new dedicated green burial area would have a distinct advantage to capture market share from families interested in the service.

(http://bc.ctvnews.ca/more-people-opting-for-the-green-goodbye-1.1158345)

-

⁶ CTV News, 'More people opting for 'The Green Goodbye', February 20, 2013

APPENDIX G – CEMETERY BYLAW INFORMATION

Example of topics that can be covered in a Cemetery Bylaw

i. introductio	n
----------------	---

II. Definitions

III. Administration of the Cemeteries

- 1. Application
- 2. Non-Limitation
- 3. Amendments
- 4. Special Cases
- 5. Error Correction
- 6. Disclaimer
- 7. Admission
- 8. Enforcement

IV. Sale and Ownership of Plots

- 1. Responsibilities
- 2. Address Change
- 3. Cost
- 4. Easement
- 5. Hold Request
- 6. Documentation
- 7. Subdivide
- 8. Cancellation
- 9. Refunds
- 10. Error Correction
- 11. Replacement
- 12. Resale
- 13. Reclamation
- 14. Replot
- 15. Inheritance
- 16. Ownership Priority

V. Burial/ Interment/ Disinterment

- 1. Authorization
- 2. Space User
- 3. Responsibilities
- 4. Burial Information
- 5. Documentation
- 6. Ownership Proof
- 7. Burial Restriction
- 8. Notice
- 9. Information
- 10. Schedule Times

- 11. Scheduling
- 12. Rescheduling
- 13. Overtime
- 14. Burial Receptacle
- 15. Suitable Container
- 16. Further Usage
- 17. Funeral Services
- 18. Casket Opening
- 19. Veteran Burial
- 20. Veteran Expenses
- 21. Indigent Burial
- 22. Disinterment Permission
- 23. Disinterment Requirements
- 24. Disinterment Restriction
- 25. Disinterment Procedures

VI. Lot Burial Options

- 1. Casket Burial Number
- 2. Double Depth
- 3. Total Burial Number
- 4. Cremains in Full Size Plot
- 5. Existing Occupied Plots
- Unauthorized Additional Burial
- 7. Veteran Restriction

VII.Markers and Monuments

- 1. Regulations
- 2. Material Specifications
- 3. Permits
- 4. Authorization
- 5. Plot Costs
- 6. Section Guidelines
- 7. Additional Memorialization
- 8. Liability
- 9. Contractors
- 10. Installation
- 11. Preneed Memorialization
- 12. Grave Covers, Vaults, Crypt, Curbing
- 13. Grave Identification
- 14. Removal, Alteration, Additions
- 15. Repair
- 16. Removal
- 17. Safety

- 18. Work Times
- 19. Liability
- 20. Owner Responsibility

VIII. Cemetery Operation and Maintenance

- 1. General Maintenance
- 2. Authority
- 3. Floral Arrangements
- 4. Floral Timelines
- 5. Landscaping
- 6. Memorial Programs
- 7. Personal Responsibilities
- 8. Authorization of Work
- 9. Times of Work
- 10. Liability
- 11. Access
- 12. Vehicle
- 13. Activities
- 14. Behaviour
- 15. Injury
- 16. Fire Arms
- 17. Hours
- 18. Memorial Services
- 19. Rule Information
- 20. Enforcement
- 21. Changes

IX. Flowers and Decorations

- 1. Purpose
- Planting
- 3. Authorized Vases
- 4. Seasonal Memorialization
- 5. Burial Flowers
- 6. Seasonal Decorations
- 7. Retrieval
- 8. Authorization
- 9. Liability

Bylaw Handout Sample

-Decorations, Plants handout

SELECTED REGULATIONS AND GUIDELINES

NO planting of any kind.

Decorating with fresh cut and artificial flowers is appropriate and welcomed. Decorations must be placed within vases approved by the cemetery management and installed by cemetery personnel.

The approved vase is a retractable permanent metal vase that is part of the marker or installed separately in front of the memorial or in the case of an upright monument the vase is attached to the monument.

Artificial flowers can be left in vases all year round, however we encourage fresh flowers if possible in the summer months. Artificial wreaths, crosses and decorations are permitted from October 31 to March 31 only and will be removed without notice after March 31.

At the time of burial, floral tributes will be left on the grave until they are wilted or in the case of artificial flowers left for about a week. Flowers or arrangements will be removed without notice by the cemetery staff to prepare or sod the grave. After sodding, all flowers must be in the approved vases, not set out on the grass.

One week after major holidays all seasonal decorations will be removed. Each week during the mowing season cemetery personnel will remove unsightly (wilted flower) decorations and all decorations not in the approved vases to properly attend to the cleaning and maintenance required through the cemetery.

Flowers, arrangements or decorations removed from the graves will be placed in a common area of the cemetery for families to claim.

No unattended open flames or candles are permitted on any Cemetery property.

No memorials may be set, or borders added except by the Cemetery personal in accordance with the cemetery regulations. Improperly or unapproved memorials will be removed without further notice.

The cemeteries are open when cemetery employees are not present and there have been occasions when flowers and decoration have been stolen; the cemetery cannot assume any liability for decoration placed at burial sites. Please do not leave articles of value on the grave sites or monuments.

The rules and regulations of the Cemeteries are uniformly enforced. All consideration will be given to family requests and needs but employees working in the cemeteries who happen upon decorations or flowers in violation of the rules will remove the offending items, for the safety of all and the beauty of the Cemeteries.

Visiting hours are daily during day light hours. Anyone found in the cemeteries after dark could be subject to prosecution. No pets are allowed in the Cemetery and children under 16 years of age must be accompanied by an adult.

FOR INFORMATION CONTACT

APPENDIX H – PERPETUAL CARE FUND OVERVIEW

DEFINITION OF PERPETUAL CARE + LEGISLATIVE REQUIREMENTS

Cemeteries are generally expected to become inactive in the future and subsequently become dependent on a PCF for the care and maintenance of the property. The PCF investment income is used to maintain, secure and preserve the cemetery, including its grounds, buildings, structures and infrastructure, and the equipment used to maintain, secure and preserve the cemetery.

A PCF grows thorough annual contributions and interest retained within the fund. Annual contributions are often (but not always) provincially legislated. If a PCF is not adequately funded, a tax subsidy will be required to maintain a cemetery after it is full and after operating revenues cease.

This maintenance obligation begins at the time a cemetery is established, extends through the period during which they are active and generating revenue, and continues long after they are full and no longer generating sales.

Canadian Provincial Legislation:

Ontario provincial legislation mandates that all cemeteries contribute **40%** of the price of a right of interment related to an in-ground grave, **15%** of a right of interment related to a columbarium, **20%** of a right of interment related to a mausoleum, and **\$50** to **\$200** for each memorial installed at the place of interment.

British Columbia provincial legislation mandates that all cemeteries contribute 25% of the price of a right of interment related to an in-ground grave, 10% of a right of interment related to a columbarium or mausoleum, and \$10 for each memorial installed at the place of interment. In the last two years of pricing research, LEES+Associates has also found British Columbia communities are often contributing above the provincial minimum to the Care and Maintenance Fund - at 30% of plot sales, 20% of columbaria and 15% of mausolea sales.

The level of care at Canadian cemeteries varies widely. While a cemetery is active, it is in the interest of its owner to maintain it so the site will attract families seeking a pleasant, respectful and safe environment for the interment of their loved ones. Once it is no longer active, there is less incentive for an owner to invest in site care and maintenance.

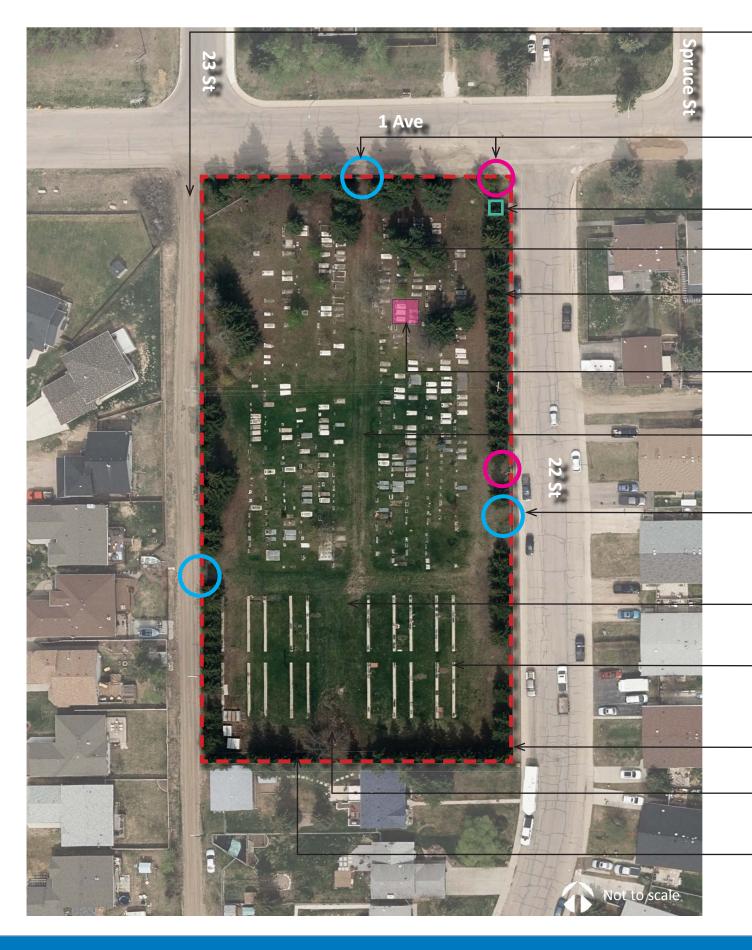
It is important to recognize that long term changes in community demographics, interment choices (cremation or burial) and memorialization practices will have an impact on the level of revenues received. As demand increases, so do projected sales.

Optimal strategies used by Canada's most sustainable municipal cemeteries for the strategic planning of long term care and maintenance include:

- Charging the appropriate % contributions from sales to the PCF. The most sustainable
 municipalities often choose to contribute more than the minimum % required and/or contribute
 to the PCF from more than just the mandated services;
- Effective investment practices maximize interest returns. The most financially sustainable
 practice is to retain annual interest within the fund and let it compound rather than withdraw
 it annually to cover current operating costs, and
- Tracking the current maintenance costs for each cemetery site, which are then projected into the future, is based on the expected rate of inflation. Identifying non-maintenance expenses such as sales and opening/closing costs is important as these will no longer be incurred once the cemetery becomes reliant on PCF interest income.

Canadian municipal cemeteries are increasingly moving away from withdrawing interest income and leaving it to compound within the PCF to maximize long term growth and sustainability.

APPENDIX I – SITE ANALYSIS PLANS



THE ALLEY IS USED FOR ACCESS BY OPERATION AND FUNERAL HOME VEHICLES

THE NORTH SIDE VEHICLE AND PEDESTRIAN GATES ARE NOT USED OFTEN

ENTRY SIGN NEEDS RENEWING AND RELOCATING

LARGE MATURE TREES GIVE CHARACTER TO THE SITE

PERIMETER TREES HAVE
BEEN PRUNED CREATING
ATTRACTIVE VIEWS IN AND
OUT OF THE CEMETERY

THE VETERANS AREA IS FULL AND NOT WELL MARKED

THE EXISTING ROADWAY IS NOT WELL DEFINED

PRIMARY ACCESS
POINT IS NOT WELL
ALIGNED WITH
INTERNAL ROADWAYS

THERE IS A LACK OF SEATING IN THE CEMETERY

CONCRETE RIBBONS PROVIDE CLEAN LINES AND MAKE IT EASIER TO LOCATE GRAVES FOR OPENING AND CLOSING

EXISTING CHAINLINK PERIMETER FENCING

THE MATERIALS SPOIL + SUPPLY OF CRYPTS SHOULD BE MOVED TO A LESS PROMINENT LOCATION

- BUFFER TO ADJACENT PROPERTIES COULD BE ENHANCED



VETERANS' AREA



PEDESTRIAN GATE



VIEW TOWARDS THE SOUTHEAST

LEGEND

SITE BOUNDARY

VEHICLE ACCESS/ GATE
ENTRY SIGN

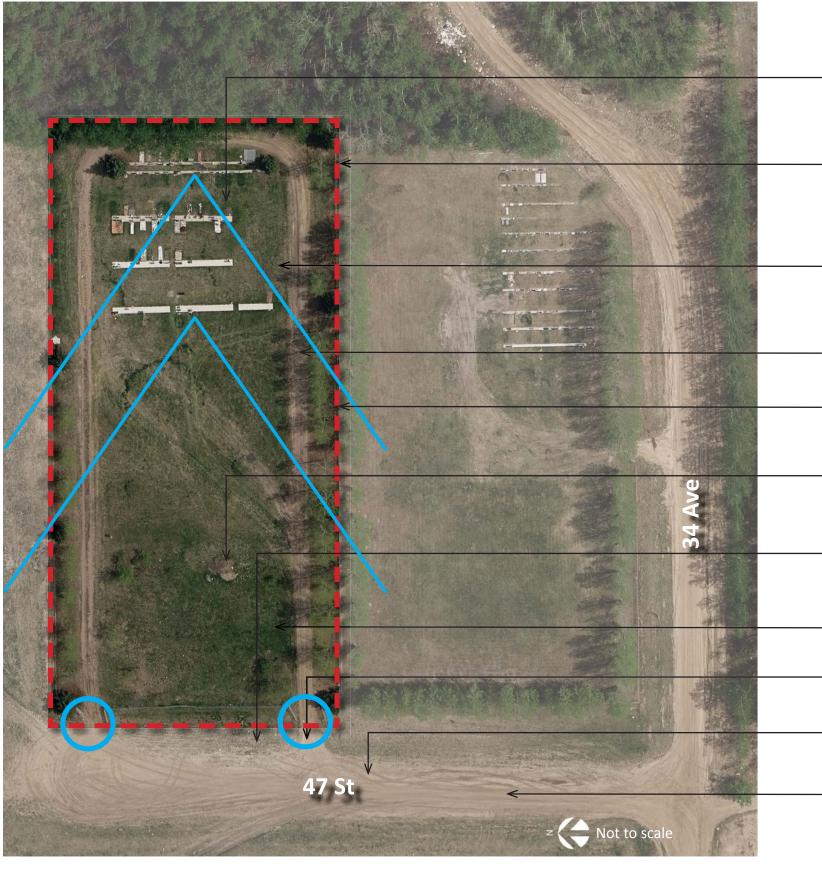
VETERANS AREA



LAKEVIEW CEMETERY - SITE ANALYSIS PLAN
CITY OF COLD LAKE CEMETERY SERVICES MASTER PLAN







THE SITE'S SLOPING TOPOGRAPHY CREATES ATTRACTIVE VIEWS TOWARDS THE WEST

AN ALLEE OF MATURE TREES DEFINES THE SOUTHERN EDGE OF THE PROPERTY, ALONG WITH AN UNSIGHTLY CHAINLINK FENCE

THE CEMETERY LACKS TREES AND OTHER CHARACTER DEFINING ELEMENTS

THE EXISTING DIRT ROAD CAN BE MUDDY IN WET CONDITIONS

THE EXISTING CHAINLINK
FENCING + ENTRY GATES NEED
REPLACING

THE MATERIALS SPOIL SHOULD BE RELOCATED TO A LESS PROMINENT LOCATION

THE SITE IS SOMETIMES USED FOR PICNICKING AS THERE ARE FEW GREENSPACES IN THIS PART OF CITY

THERE IS A LACK OF SEATING IN THE CEMETERY

THE ENTRY LACKS SIGNAGE AND A FORMALIZED PARKING AREA

THERE IS A LACK OF DIRECTIONAL SIGNAGE TO THE CEMETERY FROM HIGHWAY 28

THE ENTRY ROAD IS ROUGH AND CAN BE DIFFICULT TO NAVIGATE



VIEWS TOWARDS THE SOUTHWEST



MAIN ENTRY GATE



BOUNDARY WITH ADJACENT CEMETERY

LEGEND

- - - SITE BOUNDARY

VEHICLE ACCESS/ GATE









APPENDIX J – CEMETERY CONCEPT DESIGNS

OVERVIEW

Grand Centre Memorial Park (Cold Lake South) is currently 30% developed. The objectives of the design are to:

- 1. Enhance the overall aesthetics of the cemetery;
- 2. Respond to the site's topography;
- 3. Optimize views;
- 4. Improve access and circulation;
- 5. Accommodate a wider range of interment and memorialization options, and
- 6. Provide more opportunities to celebrate and remember loved ones who have passed away.

The proposed expansion will provide approximately 30 years of additional burial capacity.

RENDERING OF PROPOSED VETERAN'S PLAZA



GREEN BURIAL





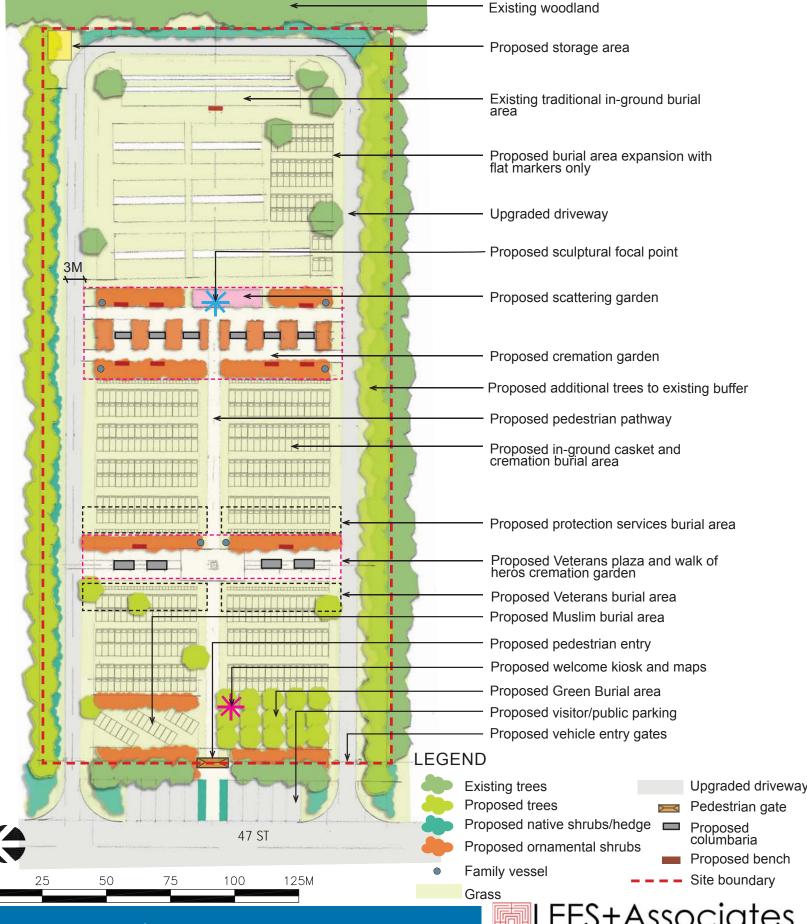
"Green" or "Natural" Burial is an alternative to traditional burial practices and is seen as more environmentally friendly. The five principles of Green Burial are:

- 1. No embalming;
- 2. No outer burial container;
- 3. A biodegradable casket or shroud;
- 4. A communal marker, and
- 5. An element of habitat enhancement.

To find out more visit the Green Burial Society of Canada's website:

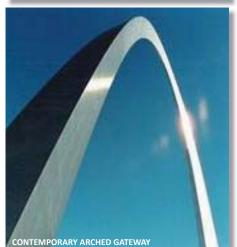
www.greenburialcanada.ca

CONCEPT DESIGN



PRECEDENT IMAGES





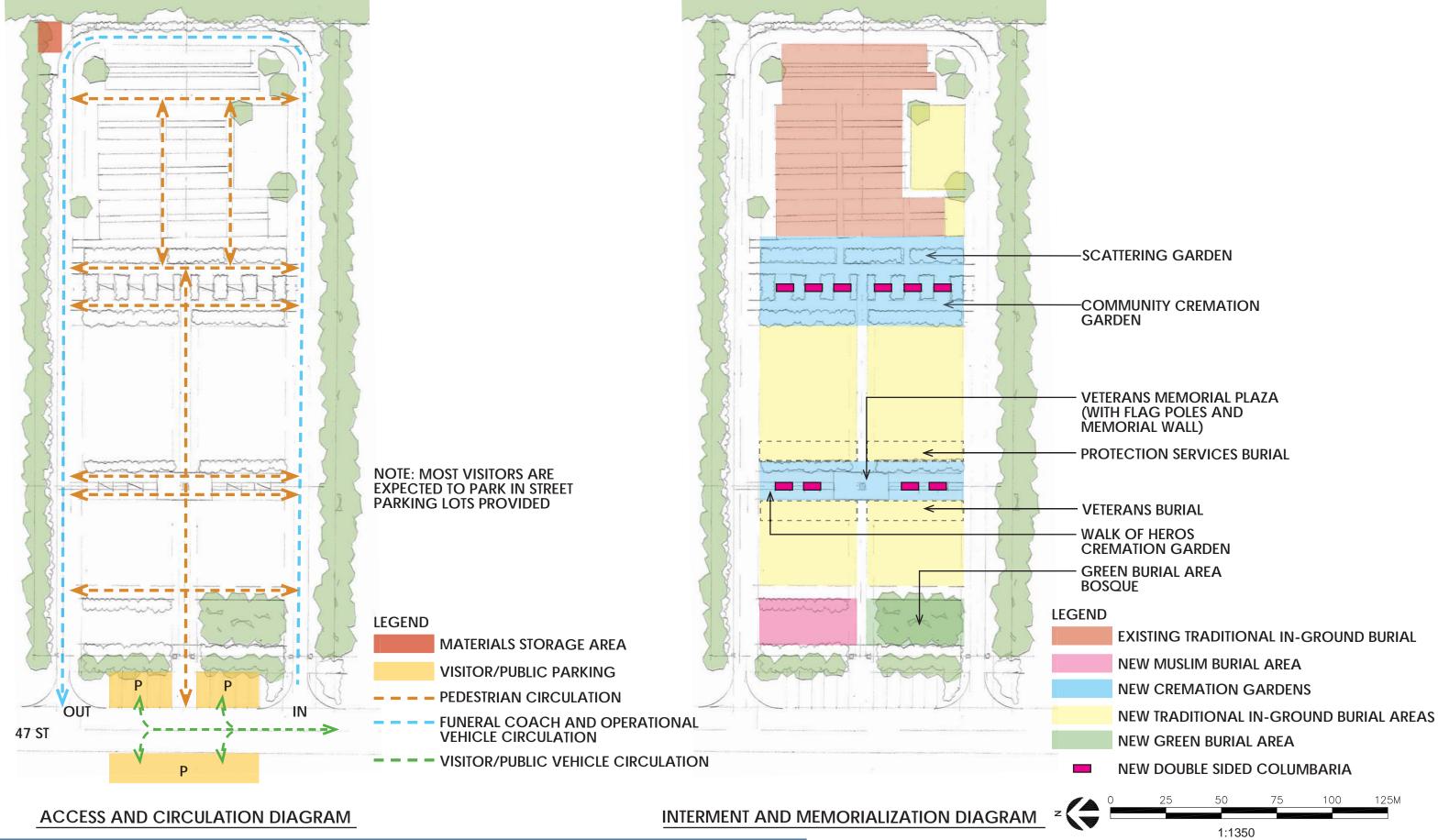






66 Klondike Rd Whitehorse YT Canada Y1A 3M1 | p: 867 332 3806





GRAND CENTRE - ACCESS & INTERMENT
CITY OF COLD LAKE CEMETERY SYSTEM MASTER PLAN





OVERVIEW

The north half of Lakeview Cemetery is currently 100% sold, and the south half is 70% sold. The proposed concept plan will enhance the appearance of the existing site and provide increased capacity. The objectives of the design are to:

- 1. Improve the overall aesthetics of the cemetery;
- 2. Provide a more park like experience with trees and resting areas;
- 3. Improve access and circulation within the site;4. Create additional cremation interment options;
- 5. Enhance the existing Veterans Field of Honour.

The Lakeview Cemetery improvements will provide approximately 30 years of additional cremation interment capacity as part of a phased development.

RENDERING OF PROPOSED CREMATION GARDEN

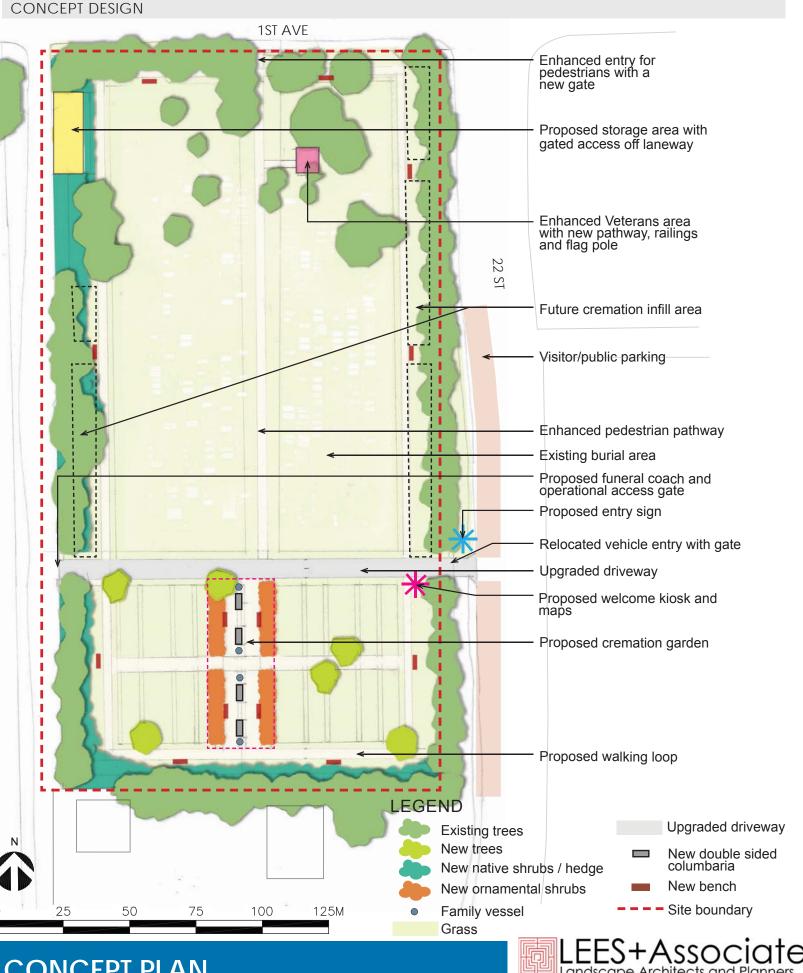


COLUMBARIA

A columbarium is a structure that contains niches for the interment of urns containing cremated remains. Columbaria may be "Family," or "Community," based on the number of niches and how they are sold. They have removable shutters for inscriptions and may have ledges for placing reliquary such as flowers or candles.







PRECEDENT IMAGES





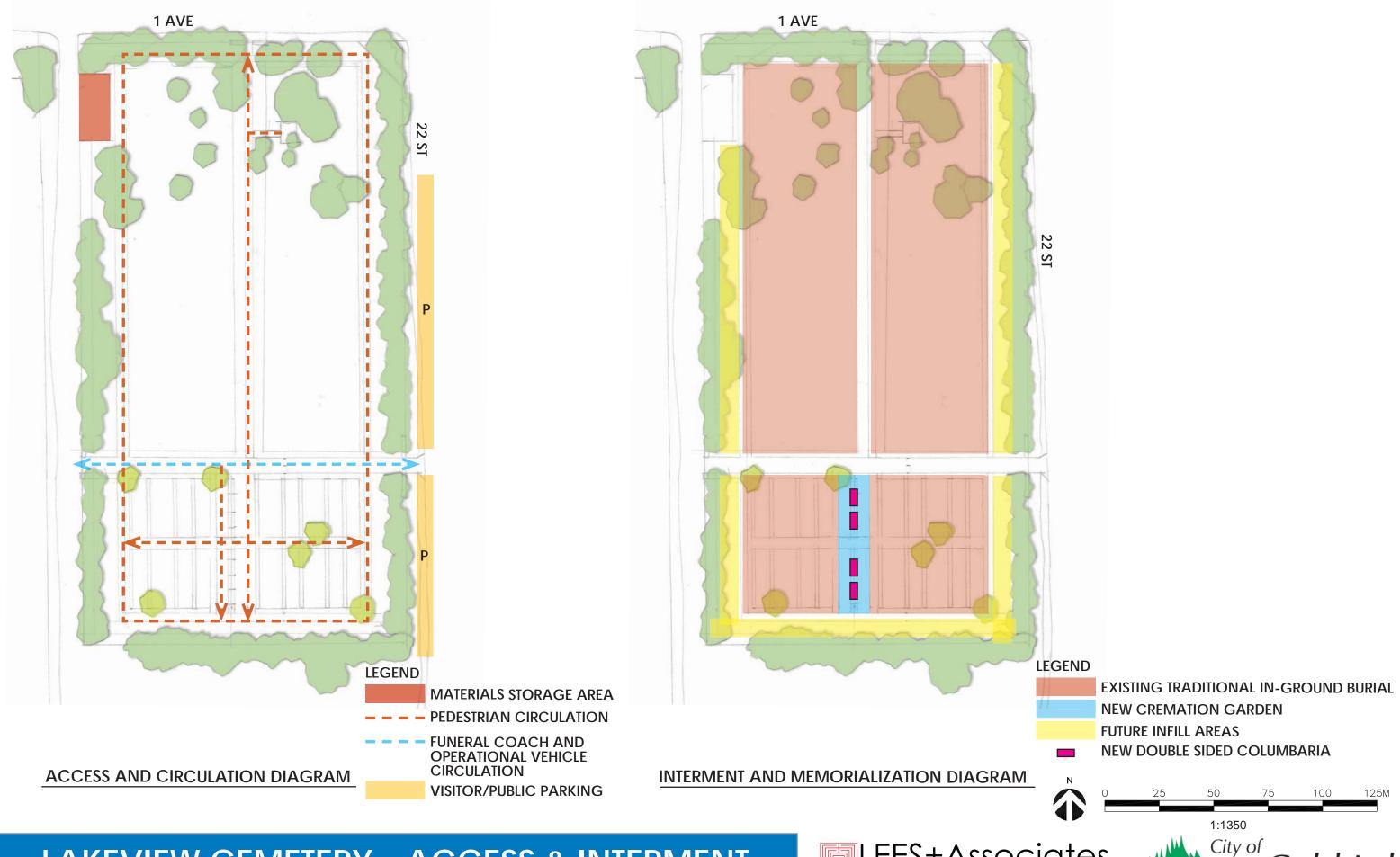






66 Klondike Rd Whitehorse YT Canada Y1A 3M1 | p: 867 332 3806











IN-GROUND CREMATION GARDEN



BIRCH BOSQUE



DOUBLE-SIDED COLUMBARIA



FAMILY VESSEL



LYCH GATE



GREEN BURIAL AREA



BENCHES WITH ORNAMENTAL PLANTING



WELCOME KIOSK AND MAPS



MEMORIAL WALL



VETERANS MONUMENT



SCATTERING GARDEN



WALK OF HEROES

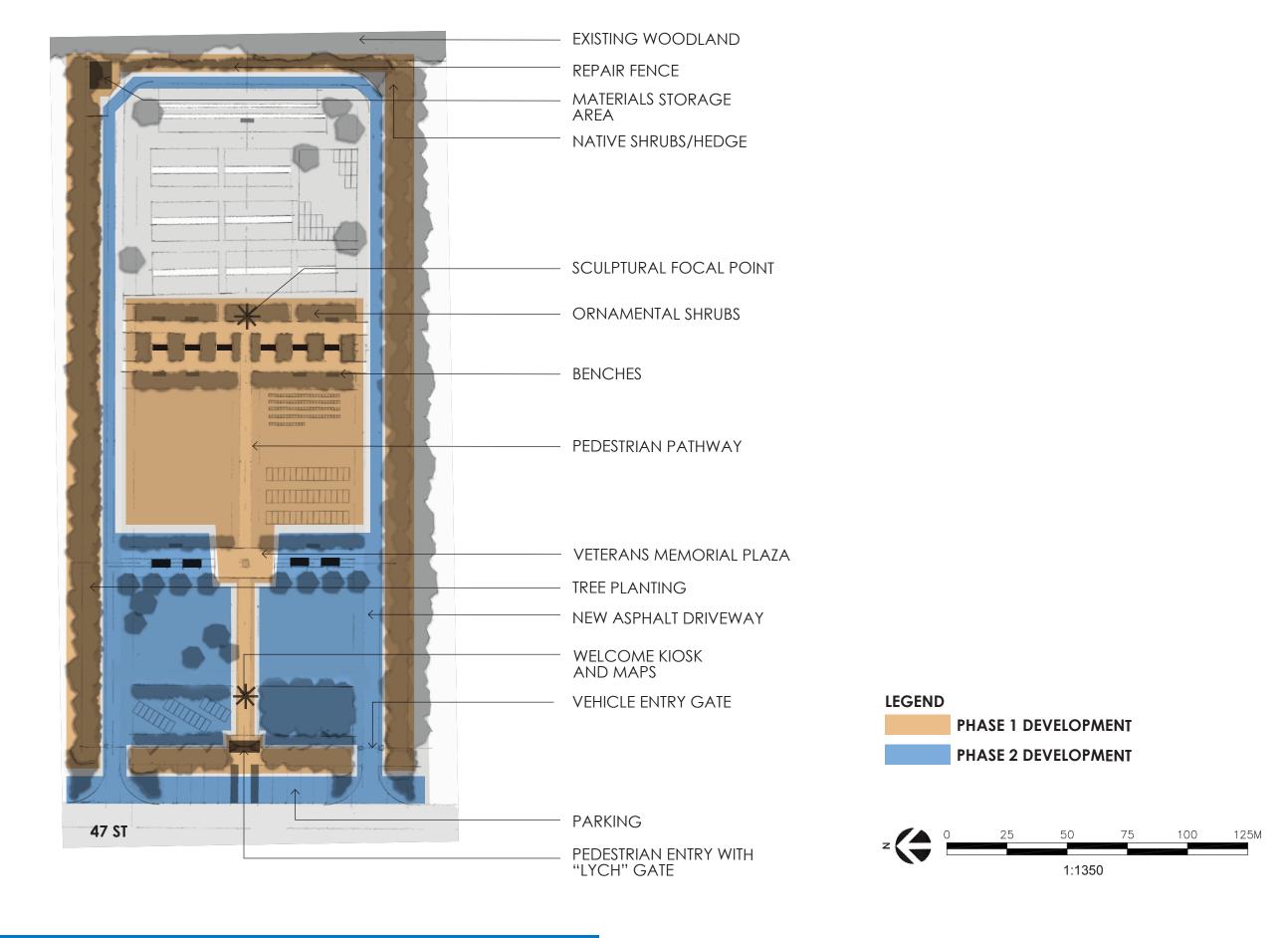


NATIVE SHRUBS



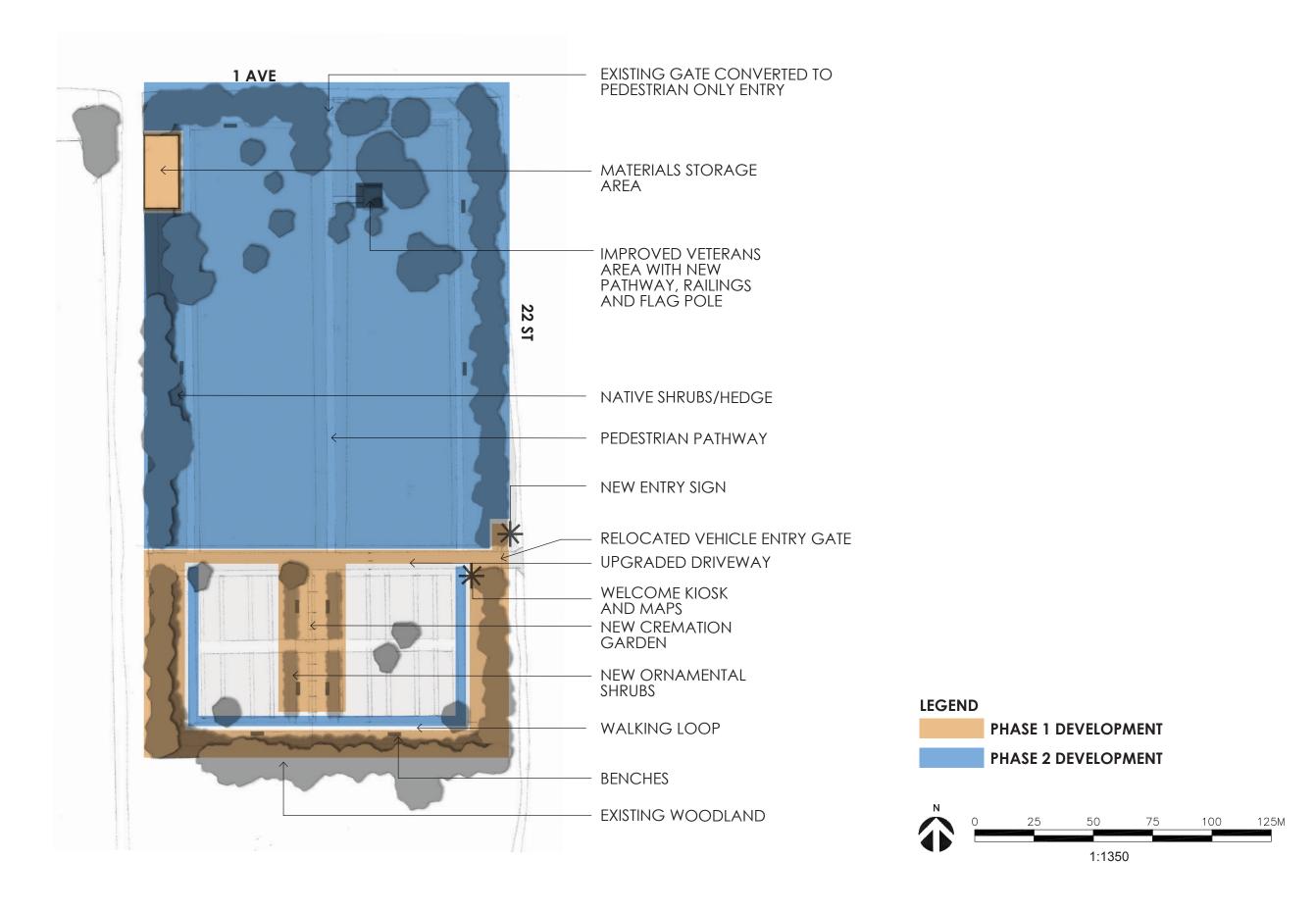


APPENDIX K - CEMETERY PHASING PLANS













APPENDIX L – PUBLIC OPEN HOUSE SUMMARY

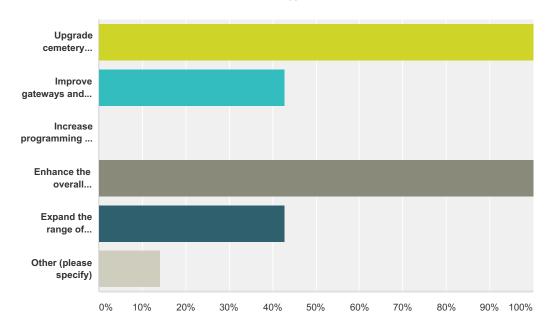
Q1 What is your overall impression of the proposed concept designs?

Answered: 5 Skipped: 2

#	Responses	Date
1	Beauty of trees,etc is exciting More vegetation, pathways, brick/paving stones, clean finishes	7/6/2016 9:23 PM
2	Absolutely beautiful!	7/5/2016 3:06 PM
3	Great possibility to beautify the areas and make it more welcoming. Hopefully access will be a major improvement.	7/4/2016 11:13 AM
4	Very informative and well laid out.	7/4/2016 10:40 AM
5	Looks great.	7/4/2016 10:37 AM

Q2 What are the top three features that you think the City should include as part of future cemetery improvements? Please choose three.

Answered: 7 Skipped: 0



nswer Choices	Responses	
Upgrade cemetery driveways and access	100.00%	7
Improve gateways and fencing	42.86%	3
Increase programming and events at the cemeteries	0.00%	0
Enhance the overall aesthetics of the cemeteries	100.00%	7
Expand the range of interment options at the cemeteries	42.86%	3
Other (please specify)	14.29%	1

City of Cold Lake - Cemetery System Master Plan

Total Resp	ondents: 7	
#	Other (please specify)	Date
1	No comments.	7/4/2016 10:37 AM

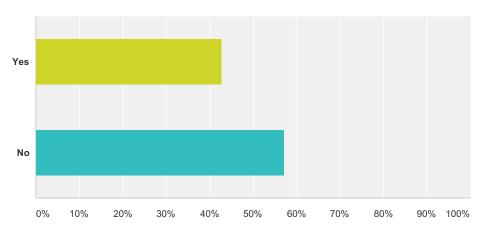
Q3 Are there any additional specific religious, cultural or secular practices that you would like to see accommodated at the cemeteries?

Answered: 2 Skipped: 5

#	# Responses				
1	Cenotaph, remembrance ceremonies	7/6/2016 9:23 PM			
2	Success interfaith practices as well as religious practices are unlaunched.	7/4/2016 11:13 AM			

Q4 Green Burial is an interment option that involves no embalming, and burial in a simple biodegradable casket or container. Would you consider Green Burial if it were made available at Grand Centre Memorial Park (Cold Lake South)?

Answered: 7 Skipped: 0



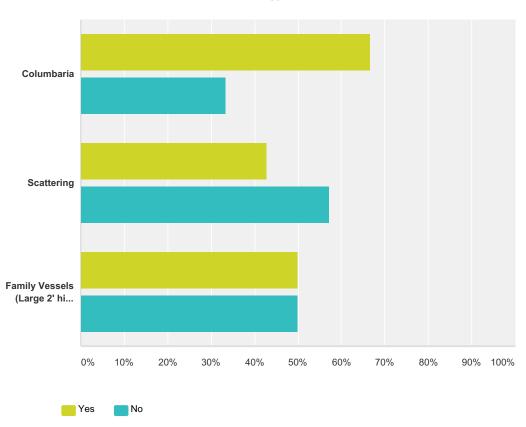
Answer Choices	Responses
Yes	42.86% 3
	57.14% 4
No	
Total	7

Q5 Would you consider one or more of the following options for cremated remains

City of Cold Lake - Cemetery System Master Plan

interment if they were made available?



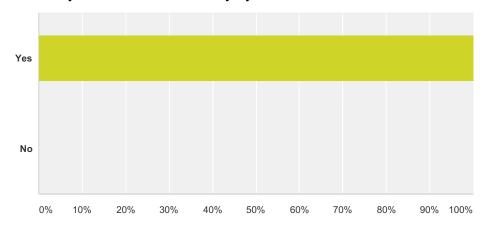


	Yes	No	Total
Columbaria	66.67%	33.33%	
	4	2	6
Scattering	42.86%	57.14%	
	3	4	7
Family Vessels (Large 2' high vessels in which multiple urns are nested or cremated remains are commingled)	50.00%	50.00%	
	3	3	6

Q6 Is an inscription as part of a memorial wall an option your family might choose for commemoration of loved ones, possibly even memorializing those buried elsewhere?

Answered: 6 Skipped: 1

City of Cold Lake - Cemetery System Master Plan

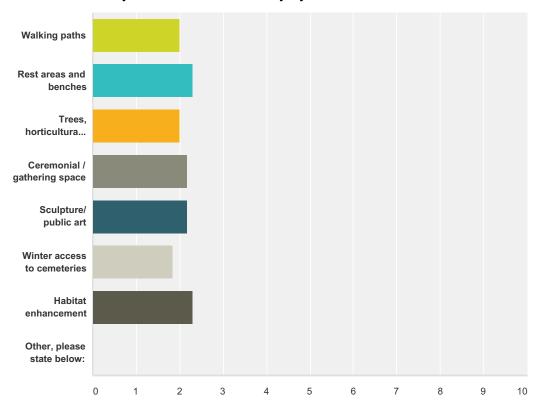


Answer Choices	Responses	
Yes	100.00%	6
No	0.00%	0
Total		6

Q7 The cemeteries are intended to accommodate a wide variety of uses other than burial, including acting as extensions of the community's green spaces. What are the MOST IMPORTANT amenities you would like to see in the improved cemeteries?

Answered: 7 Skipped: 0

City of Cold Lake - Cemetery System Master Plan



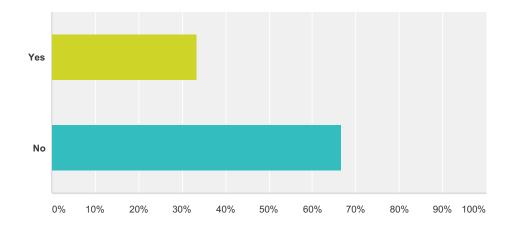
	Very Important	(no label)	(no label)	(no label)	Not Important	Total	Weighted Average
Walking paths	57.14%	14.29%	0.00%	28.57%	0.00%		
	4	1	0	2	0	7	2.00
Rest areas and benches	28.57%	42.86%	0.00%	28.57%	0.00%		
	2	3	0	2	0	7	2.29
Trees, horticultural features	57.14%	14.29%	0.00%	28.57%	0.00%		
	4	1	0	2	0	7	2.00
Ceremonial / gathering space	50.00%	0.00%	33.33%	16.67%	0.00%		
	3	0	2	1	0	6	2.17
Sculpture/ public art	33.33%	33.33%	16.67%	16.67%	0.00%		
	2	2	1	1	0	6	2.17
Winter access to cemeteries	66.67%	16.67%	0.00%	0.00%	16.67%		
	4	1	0	0	1	6	1.83
Habitat enhancement	42.86%	14.29%	14.29%	28.57%	0.00%		
	3	1	1	2	0	7	2.29
Other, please state below:	0.00%	0.00%	0.00%	0.00%	0.00%		
	0	0	0	0	0	0	0.00

#	Other (please specify)	Date
	There are no responses.	

Q8 Would community events at the cemeteries such as music, candle-lighting services or 'Night for All Souls' appeal to you or your family?

Answered: 6 Skipped: 1

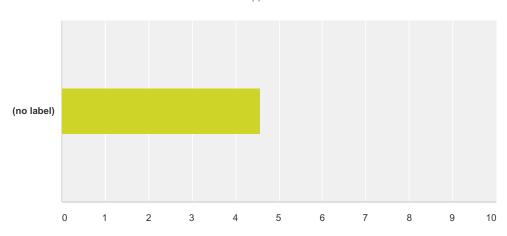
City of Cold Lake - Cemetery System Master Plan



Answer Choices	Responses
Yes	33.33% 2
No	66.67% 4
Total	6

Q9 Are you supportive of the proposed upgrades to the cemeteries?





	Strongly Opposed	Opposed	Neutral	Support	Strongly Support	Support Total Weighted A	
(no label)	0.00%	0.00%	0.00%	42.86%	57.14%		
	0	0	0	3	4	7	4.57

Q10 Do you have any additional suggestions or comments in relation to the Master Plan?

Answered: 3 Skipped: 4

#

APPENDIX M – GLOSSARY OF CEMETERY TERMS

Adapted from various sources by LEES+Associates.

AT-NEED	• At the time of, or immediately following, death.
	 Usually refers to the time of purchase of funeral or cemetery services.
BOOK OF MEMORIES	 Plaque with list of names of the deceased who typically are located in areas not readily accessible.
	A type of memorial monument.
BURIAL	 One form of interment.
	The placement of human or cremated remains in a grave.
BURIAL LINER	 Similar to a burial vault, however, unlike a vault it only covers the top and sides of the casket
BURIAL PERMIT	 A legal document issued by a regulatory authority authorizing final disposition of human remains.
BURIAL VAULT	 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	 The written regulations, rules or laws governing the organization, management and operation of a cemetery, mausoleum, columbarium or crematorium.
CARE FUND	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
(also known as PERPETUAL CARE FUND	
or MAINTENANCE FUND)	of a cemetery, mausoleum or columbarium.
CASKET	 A rigid container usually constructed of wood, metal or similar material, ornamented and lined with fabric, designed for the encasement of human remains.
CASKET ENTOMBMENT	 When a casket is interred in a mausoleum.

CEMETERY SERVICES

 The disposition of human remains by interment or cremation and includes the supply of goods incidental to the provision of such service, but does not include the sale of lots.

COLUMBARIUM

(plural: COLUMBARIA)

- A structure, building, 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.

COMMEMORATION

 A ceremony, service or symbol of memory for a person/people or event

COMMINGLING

 The mixing of the cremated remains of more than one deceased person.

CONTAINER

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 fibre glass casket, or receptacle or enclosure made of plastic or similar substance, or a pouch or bag.

CREMATED REMAINS

 The human bone fragments that remain after cremation that may also include the residue of any other materials cremated with the human remains.

CREMATION

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

- A space used, or intended to be used, specifically for the interment of cremated remains.
- Typically, a smaller than full-sized lot.

CREMATORIUM	 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.
CRIB GRAVE	 A grave lot surrounded by a small picket fence.
CRYPT	One kind of lot.
	 Typically, a space in a mausoleum used or intended to be used for the entombment of human remains.
DEATH CERTIFICATE	 A legal document certifying the vital statistics pertaining to the life and death of a deceased person.
DIRECT (or IMMEDIATE)	The final disposition of human remains without any formal
DISPOSITION	viewing or visitation, ritual, rite, service or ceremony.
DISINTERMENT	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.
DOUBLE DEPTH LOT	A lot dug at extra depth at the time of the interment of the first casket to allow for the accommodation of a second interment at regular depth.
EASEMENT	The right acquired, whether or not supported by a certificate, to interment in a lot.
ENTOMBMENT	 One form of interment.
	 The placement of human remains in a mausoleum crypt.
FAMILY COLUMBARIUM	 See columbarium
FAMILY ESTATE LOTS	 A family estate lot contains 6-12 lots together.
FAMILY VESSEL	A large urn for several cremated remains. Remains may be comingled or may be contained in smaller, individual urns, held within the larger vessel.
FLAT MARKER	A grave marker set flush with the ground.

the sale of lots.

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

FUNERAL SERVICES

GRAVE

- 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

 A fibreglass or concrete structure installed over a casket once it has been placed in the grave.

GRAVE MARKER

Can be in-ground (flat) or upright.

GREEN BURIAL

- A more environmentally conscious alternative to "traditional burial." Typically includes:
 - a. no embalming;
 - b. burial directly in the ground without a grave liner or vault:
 - c. a fully biodegradable burial container (casket or shroud);
 - interment sites planted with indigenous ground cover, and
 - e. without individual grave markers.

INTERMENT

- Disposition by:
 - a. burial of human remains or cremated remains in a grave;
 - b. entombment of human remains in a mausoleum, crypt, or;
 - inurnment of cremated remains in a columbarium niche.

INURNMENT

- 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.

LAWN CRYPT

 A concrete or other durable and rigid outer receptacle installed in a grave prior to burial.

LOT

 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

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)

 A fund established for the upkeep and repair of a cemetery, mausoleum or columbarium.

MAUSOLEUM

(plural: MAUSOLEA)
MAUSOLEUM CRYPT

- A structure or building that contains interior or exterior crypts designed for the entombment of human remains.
- A chamber of a mausoleum or sufficient size for entombment of human remains.

MEMORIAL

- A product, meeting the bylaw standard 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:
 - a. a marker, headstone, tombstone monument, plaque, tablet or plate on a lot; or
 - b. a tablet 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.

NECESSARIUM

 Necessaria are stations located throughout a cemetery for filling vases and disposing of garbage. They often provide watering cans, flower vases, a rake and hand tools. They should be located within 60m from all graves.

NICHE

- One kind of lot.
- A space, usually within a columbarium, for placing a receptacle containing cremated remains.

OSSUARY

- A vessel for the interment of two or more cremated remains.
- Typically, the cremated remains are commingled

OUTER CONTAINER

 A receptacle, which is designed for placement in a lot to accept the placement of a casket or urn.

PERPETUAL CARE FUND (also CARE FUND or MAINTENANCE FUND)

 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

- 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

The person responsible for the administration and enforcement of applicable laws and regulations relating to cemetery and funeral services. In British Columbia or Alberta, this person is known as the "Director of Cemeteries."

SCATTERING

 The irreversible dispersal of cremated remains over land or water, or commingling in a defined area in a cemetery.

SCATTERING GARDEN

 An area within a cemetery, usually providing an attractive natural or ornamental setting, dedicated to the scattering of cremated remains.

SPIRIT HOUSE

 A wooden shelter over a grave to house the spirit of the dead, typical of First Nations cemeteries.

UPRIGHT MARKER

 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

A receptacle for containing cremated remains.