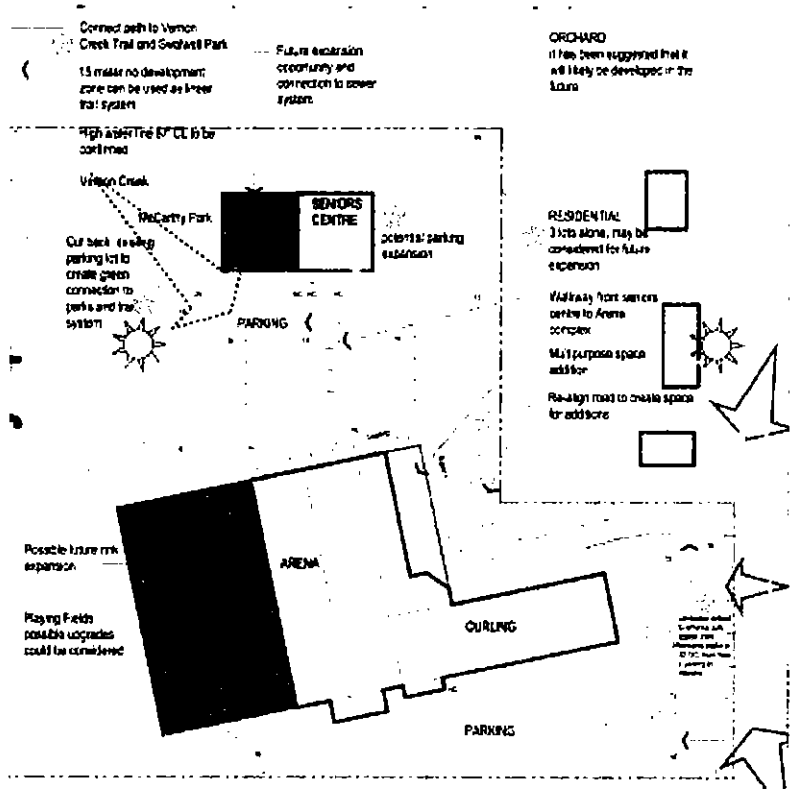
District of Lake Country Parks and Recreation Department

WINFIELD RECREATION CENTRE / MASTER PLAN STUDY



FINAL REPORT
31 May 2006

bruce carscadden **ARCHITECT** inc
PERC (Professional Environmental Recreation Consultants)

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28 June 2006

Steve Schaffrick
Director of Parks and Recreation, District of Lake Country
1015 Bottom Wood Lake Road
Lake Country, BC V4V 2M1

Dear Mr. Schaffrick:

RE: DISTRICT OF LAKE COUNTRY PARKS AND RECREATION DEPARTMENT
Winfield Recreation Centre / Master Plan Study

Together with PERC and our engineering team, we are pleased to present you with our final report for the Winfield Recreation Centre / Master Plan Study, dated May 31, 2006. The information contained herein should be considered a working document and another step in maintaining and renewing the Winfield Recreation Centre.

This report has benefited from the contributions of the District of Lake Country staff, volunteers, and community users, all who have been dedicated to envisioning a bright, open, state of the art arena and public facility that can be a source of pride and place to be enjoyed by the community at large.

It has been a pleasure working with you on this project. Please do not hesitate to call should we be able to provide any further assistance.

Yours truly,

BRUCE CARSCADDEN ARCHITECT INC

Bruce Carscadden, MAIBC

PERC

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Generally, the 30 year old facility is in good condition with many years of service left. Significantly, however, the refrigeration and services rooms do not meet current standards, and immediate upgrades are recommended.

Stakeholder Consultation

The consultants conducted interviews and undertook research with the public and users' groups. The consultants met with representatives from the School District, Seniors' Society, Curling Club, Adult Hockey (male and female), Minor Hockey, Figure Skating and Parks and Recreation staff in the fall and winter of 2005/06. A summary of the information gathered during these discussions is included in the appendices and the program decided upon is presented below:

1. Six dressing rooms on west side of building at 600 ft² each, one that would be gender friendly
2. Multi-purpose space - for meetings and other activities, 4 rooms at 900 ft² each
3. Expand entrance / lobby space - 1500 ft²
4. Improve skaters area and concession - part of new lobby
5. Improve office space -200 ft²
6. Facility storage for arena personnel and curling club - 200 ft²
7. Provide a separate space for figure skaters (during season) – 400 ft²
8. Seniors Centre Expansion – double existing of 5,000 ft²
9. Mechanical and Zamboni Room and shop expansion/replacement 1,800 to 2,500 ft²

This program was used to inform the concept options developed to explore the site potential.

Facility Space Analysis / Concept Options

Planning options were presented in workshops to demonstrate and consider future options. Generally, these options looked at addressing the community's needs by adding to, and renovating, the existing facilities. The preferred option suggests immediate upgrades to the refrigeration and services rooms, intermediate enhancements and additions to the building to add multipurpose space and improved skate change, and long term suggestions to twin the ice area with a modest Olympic sized spectator arena seating 600 to 1000.

A project budget for the immediate upgrades was estimated to be in the range of 1 to 2 million depending on the size and features of the ice refinisher room and work shop.

1 introduction

1.1 Team

The consulting team for the District of Lake Country Parks and Recreation Department Winfield Recreation Centre / Master Plan Study included:

Architecture and Planning	**Bruce Carscadden Architect Inc**
Recreation Consultant	**Professional Environmental Recreation Consultants Ltd. (PERC)**
Landscape Consultant	**Tracy Penner, Environmental Landscape Design**
Structural Engineering	**CWMM Engineering**
Mechanical Engineering	**Jade West Engineering Co. Ltd**
Electrical Engineering	**Falcon Engineering**
Refrigeration Consultant	**RH Strong and Associates**

1.2 Stakeholders' Signatures

The assessment and review process greatly benefited from the knowledge and expertise of District Staff, board members, community representatives and those who volunteered their time.

District of Lake Country Parks and Recreation Department
Steve Schaffrick, Director of Parks and Recreation

District of Lake Country
Jayson McCarthy, Chairperson

District of Lake Country
Bill Clark, Councilor

WCL Rob Thompson

Minor Hockey ~~Jeff Gland~~ GLAND

WFSC Lauren Daniel

Seniors' Centre Society Roberta ~~Loewen~~ LOEWEN

GESS Carolyn Gillespie

Rec Adult Hockey Lara R. Fitzpatrick

2 facilities assessment

2.1 Information Gathering

Following is a record of the documents made available for review:

TITLE and DISCIPLINE		DATE	AUTHOR	PAGES
Site Plan	A	Jan 1975	George Barnes	12
Music Room & First Aid Room	A	Oct 1993	TG	1
Door Additions Views and Sections	A	Feb 1995	BV	2
Installation of Hi-Impact "Ever White Plastic hockey Rink Boards	A	March 1976	Rotomatic Display Products Ltd	5
Heating Ventilation Plan and Detail	M	Nov 1974	Booker Engineering Ltd	1
Partial Floor Plan	M	May 1993	J. Matteotti & Associates	2
Foundation Plan Hockey Rink	S	Nov 1974	Booker Engineering Ltd	6
Music Room & First Aid Room	S	Oct 1993	TG	1
Electrical Site Plan Single Line Diagram	E	May 1975	Brooker Engineering Ltd	4 (2 Sets)
Site Utilities and Mech Area Floor Plan	P	Jan 1975	Brooker Engineering Ltd	2
Refrigeration Plans & Details	R	Jan 1975	D.M. Drake & Co	1
Piping Schematic	R	Feb 1991	R.H. Strong	2

2.2 Review and Analysis

Establishing a comprehensive picture of the existing facility's condition is critical to the decision making process of staff and council with regards to future capital costs, upgrades and expansions. With an integrated design approach, the team met with staff, toured the facilities and collected drawings, maps and information in November of 2005. Following the tour, group discussion centered on the need for remediation and opportunities for future expansion.

Field reports were prepared by the engineering and architectural consultants to record their observations of the existing facilities and to make recommendations for remedial, mid-term, and replacement options. Architectural and landscape reviews looked at the building envelope, spatial relationships and maintenance issues which where presented with drawings and diagrams. Following is a summary of these discussions and conclusions.

Life cycle analysis based on these reviews provides an overview of the existing facility's condition. Immediate maintenance, life safety issues, as well as future upgrades were identified and cost estimates presented.

2 facilities assessment (continued)

2.2.1 Architectural

Based on the preliminary nature of the investigation, it is important to recognize that these comments provide an overview only and are not to be considered as final recommendations at this time.

The facilities include an NHL size ice sheet, four curling sheets, a curling lounge, four change rooms and related support spaces. Minor additions have been constructed over the years including shop and storage space added to the rear and various interior modifications. The major materials include concrete block walls and wood roof trusses.

Generally, the 30 year old facility is in good condition with many years of service left. The building has been well maintained; however, increased maintenance costs should be anticipated as many of the buildings components are now nearing the end of their expected service life. Specifically these would include the roofs, doors, and windows. We recommend a capital reserve fund be established to address these futures needs.

2.2.3 Landscape

The landscape review examined the site, local context, parking requirements and review of the official community plan. The consultants spoke to Town Centre Project planner Brian McEwan regarding Swalwell Park and future plans that may not have been published at this time. The current recreation complex site is not part of the ALR, nor is the orchard site north of it; however, the site immediately south is currently in the ALR, but may be rezoned.

- OCP By Law 391 (2001) http://www.lakecountry.bc.ca/Documents/Official%20Community%20Plan/default.aspx
- Town Centre plan and amendments dated 1996, 2000 and 2002.
- Town Centre Zoning and Signage Regulation Bylaw 98-194 and amended documents: http://www.lakecountry.bc.ca/Documents/Bylaws/Bylaws.aspx?BylawType=0&BylawCat=Land%20Use%20and%20Developments

The drawings developed and presented are included in appendix C of this report.

2 facilities assessment (continued)

2.2.2 Structural

The structure is in good condition and does not appear to require any upgrading for snow loading or seismic capacity. With no signs of rot or decay, maintenance concerns relate to exterior grade and soils being piled against wood framing which is recommended to be removed.

The engineering report completed by CWMM Engineering is included in appendix E.

2.2.3 Mechanical

Most of the mechanical and plumbing equipment is original to the building. While it appears that the equipment has been regularly maintained, since the facility is 30-years-old, much of the system will need to be replaced in the near future. Significantly, immediate recommendations include installing a tempering valve to the domestic hot water, gas sensors and exhaust systems for the ice resurfacing room.

The engineering report competed by Jade West Engineering in included is appendix E.

2.2.3 Electrical

The facility is well maintained, however, there a several items for immediate upgrading. Emergency light testing and upgrades, fire alarm bells, pull stations and heat detectors have been identified.

The engineering report competed by Falcon Engineering is included in appendix E.

2.2.3 Refrigeration

The current ice slab was constructed in 1975 and is presently in fair condition. This arena does not meet the standards for "Risk Assessed" classification by the BC Safety Authority. Significantly, the current room construction does not have the fire ratings, vestibule and safety features required by the BC Building Code. Reconstruction of this room is recommended.

The engineering report competed by RH Strong and Associates Engineering in included is appendix E.

3 community needs assessment and service prioritization

The consultants engaged in several activities in order to identify priorities related to short and long term needs. These included discussions with current user groups and staff, a review of trends related to recreation services and facilities, the establishment of a number of short and long term facility priorities, and meetings with the Project Steering Committee and staff.

The following information summarizes the results of these activities:

3.1 Discussions with User Groups

Meetings were conducted with the following primary user groups:

Minor Hockey	Figure Skating
Curling Club	Seniors Society
School District	Adult Hockey

These discussions revealed the following interests and concerns:

3.1.1. Arena

- Dressing rooms are generally considered to be too small, and there is an interest in at least one additional dressing room, as well as additional showers and improved restrooms.
- Adequate office space should be considered for staff and user groups.
- Current storage is limited – individual groups have storage requirements in addition to space necessary for arena operations. It should be pointed out that storage is an item of particular concern in most public recreation facilities. The design process should ensure that detailed conversations take place between the architects, user groups and District officials.
- Improvements are needed to the player's boxes, penalty boxes and other similar features, in order to ensure safer, more efficient operation.
- A multi-purpose room is required for meetings, off-ice instruction, dance classes, pre-school activities and the like. Figure skating specifically mentioned the need for a spacious change area, as well as a music room and an improved sound system.
- The lobby should be expanded and should be more welcoming, with visible display cases, notice boards and a concession area.
- A viewing area was suggested on several occasions, and could be accommodated in the curling lounge and / or from the lobby and skaters' lounge onto the ice surface.
- The current concession area could be better located, to ensure greater visibility and access.

- The parking lot and general access to the facility should be addressed, as well as parking lot lighting.
- Generally, the facility looks uninviting, and requires a "fresh coat of paint".
- The addition of a second sheet of ice, with a larger seating capacity, was also suggested.

3.1.2 Curling Rink

- One or two change rooms with lockers are needed for curlers.
- As with the arena, the need for storage was mentioned, and as noted above, should be carefully considered in the design process.
- The upstairs kitchen is considered to be too small.
- The restrooms haven't been improved / updated for a lengthy period of time, and are very small.
- Curling Club officials indicated that heat is being lost through the ceiling, and that problems have been encountered with the existing lighting. (These items have been addressed in the engineering reports included in the Appendix section of the report.)
- Like the arena, the office area is very small, and additional space is needed in order to accommodate administrative activities.

3.1.3 Senior's Centre

- There is a need for additional meeting and multi-purpose activity space, which could be located over the former lawn bowling area.
- There is a need for improved access externally and internally.
- Additional storage is required, along with a larger kitchen, and improvements to the heating system.
- Consideration should be given to a connection to the District's sewer system.
- It was also suggested that the senior's centre should be considered as parking improvements are made to address arena requirements.

3.1.4 New Facilities

A number of other facilities were also suggested, including an indoor aquatic centre, a gymnasium with an indoor running track, a health / fitness centre, and additional multi-purpose space. While these items were discussed with the Steering Committee, it was determined that the focus of the consultants' report would, at this time, focus on improvements to the arena.

3 community needs assessment and service prioritization (continued)

3.2 Trends Affecting Recreation Services

Over the years, the consultants have actively engaged in information gathering related to trends in the delivery of recreation services. Based on current information, the following trends are expected to impact the delivery of services in the Lake Country area during the next decade and beyond.

3.2.1 Demographics

According to the 2001 Census, BC Stats and Statistics Canada reported that Lake Country's population was approximately 9,300. By 2004, the Statistics Division of the B.C. Government estimated that the District's population had grown to 10,064. Recent growth has been estimated at 1.6% to 1.7% per year, which is higher than the BC average, but similar to many other communities in the Okanagan.

The 2006 Census will be completed over the next few months, and updated population figures will be available in early 2007. That information will likely suggest a population that is in the area of 12,000 residents. As in other communities in B.C., much of the growth has been and will continue to be as a result of movement to the Okanagan of empty nesters – people who are 50 years of age or older, who are moving to the community as couples with no dependent children.

While the population grows, therefore, and Canada's birthrate declines, the trend will continue to be toward fewer children – for at least the next ten to twelve years.

3.2.2 Aging Population

Our aging population has been one of the most stated trends over the past decade. The number and proportion of older people in our communities will continue to increase, and with age, the preferences and the ability of the recreation participant to engage in certain activities will change.

The next decade of retirees will be more active than previous generations, and will be driven by three factors: (1) the anticipation that the new retiree will be desirous of continuing with current levels of activity, (2) the desire to "postpone" aging, and (3) the desire to ensure the health benefits of active living. Interestingly, many in this new generation of retirees are unlikely to want to be accommodated by stand-alone seniors' centres, but will prefer to remain integrated in mainstream centres and programs.

It should be noted that in some communities, this age group is making more use of existing recreation facilities such as ball diamonds and other sports fields, aquatic centres and arenas during the day, and participating in increasing numbers in slo-pitch softball leagues, a wide variety of fitness classes and senior's hockey programs.

3.2.3 Children and Youth

In recent years, it has been noted that interest in many team sports has been on the decline in Canada. While this is not necessarily the case in every community, it has been noted that low cost, spontaneous, and less structured activities – such as skateboarding – have become more popular, and many youth in particular, are devoting an increasing amount of their time to activities that are motivated by technology. With fewer youngsters, and with interests in other activities, there has been a decrease in some of our more traditional activities such as figure skating, minor hockey and baseball.

3.2.4 Facility Trends

Indoor and outdoor leisure facilities are changing in several key areas. Many recreation facilities are taking on a greater role in attracting tourism and economic development. In particular, tournaments, cultural and special events, and heritage activities are regarded as a means of economic growth and development. In fact, larger events provide the added benefit of providing the impetus and funding for facility construction and renovation.

Multi-purpose facilities are also becoming more popular. They are designed to provide more options for users, to provide access to the broadest range of patrons, and to serve all age groups. These amenities are often designed to meet new activity trends and to focus on smaller groups and less competitive activity, in a more spontaneous and flexible manner than many existing facilities.

As an example of this, recreation professionals are seeing an increasing emphasis on comprehensive community centers that include a swimming pool, ice arena, gymnasium, dedicated space for seniors and youth, areas for socialization and areas for a wide variety of programs and classes. In addition, an increasing number of "partners" – Regional Health Authorities, libraries, private health professionals and other businesses - have joined

With specific reference to arenas, in recent years, the consultants have observed the following trends in design:

- Larger, more pleasant lobby and entrance spaces, with views to the ice, and heated seating areas.
- Increased use of technology, particularly in terms of mechanical, lighting, heating and electrical systems; the inclusion of interior snow pits and vertical lift board gates for the ice resurfacing machines; and greater consideration of features that focus on addressing issues related to sustainability.
- Improved accessibility inside and outside the facility, including greater consideration of patron safety as they park their vehicles and move from the parking area toward the

arena, ensuring increased protection in terms of rink boards, perimeter glass and protective netting.

- Larger dressing rooms, and an increased number of dressing rooms to better accommodate evening play when there are as many as six teams in the facility, two of which are on the ice, two of which are getting prepared to play, and two are leaving the building.
- Almost all new and renovated arenas have made accommodation for "gender friendly" dressing rooms, in terms of mirrors, locker space, showers and restrooms.
- The provision of some type of multi-purpose space in order to accommodate a number of off-ice activities, and to better accommodate tournaments and larger events, and ensuring the potential for additional revenue streams ranging from meeting room rentals, to special events, school programs and the like.
- Greater consideration of the atmosphere – with improved lighting overall, as well as colour schemes that are appealing to a broad cross-section of the community.
- This should not be considered a trend, but several B.C. communities have considered, and in some cases have constructed, Olympic-sized ice sheets. The majority of arenas in the province continue to be NHL sized facilities (85' x 200'), in comparison with an Olympic facility, which is 100' x 205', and allows a greater number of figure skaters and youth hockey players to participate at any one time, as well as for larger spectator activities, trade shows and other events.
- Although not a significant trend in British Columbia, a number of communities have also constructed "leisure ice" facilities, which, much like today's aquatic centres, allow for a far greater variety of activities and programs than more traditional ice sheets, and allow the traditional facility to accommodate more hockey and figure skating activity.

In recent years, minor hockey registration has been in the area of 200 players. While Minor Hockey executive members have advised that registration has increased to approximately 240 in the past two years, figure skating registration has remained roughly the same as in previous years.

There is no question that the District's population will continue to grow. It is anticipated, however, that much of the growth will be among those who are 50 years or older, with no dependent children, and school projections suggest a period of continued decline for the next 10 years or so.

It is suggested that Lake Country officials should carefully analyze the need for another sheet of ice, review the results of the 2006 Census, and ensure that other recreation facility needs are addressed before committing to the construction of a second sheet of ice.

It should be noted that the work undertaken in Phase One will not result in the need for additional staffing at the facility, and operating costs should remain as they are at the present time.

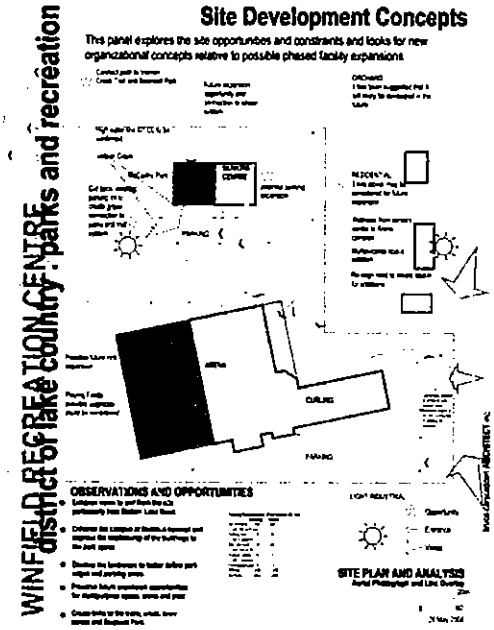
With the addition of the proposed new dressing rooms and the conversion of the existing dressing rooms into multi-purpose spaces, it is anticipated that additional time will be required to maintain the facility. However, the total amount of additional space is quite small, and it is likely that increases in expenditures will be minor.

4 facility space analysis / concept options

Planning options were presented in a series of workshops and meetings that explored various program proposals and demonstrate possible options for site development. The program, site and context were probed for opportunities to address the community's needs by adding to, and renovating, the existing recreation facilities.

In the previous steps, the steering committee, staff and user groups suggested priorities for maintenance / code upgrades and potential program improvements. These program enhancements and maintenance upgrades where explored graphically in a site analyses and are summarized below:

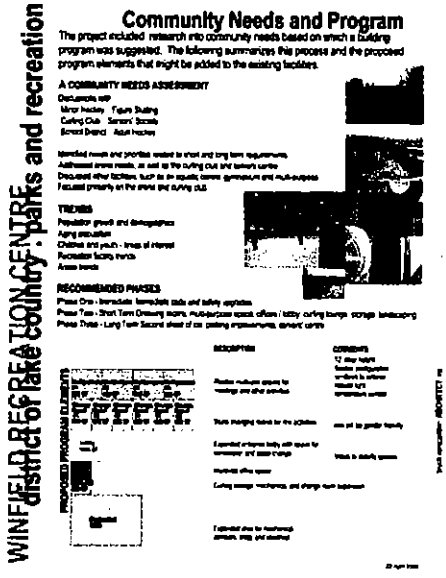
Code and Maintenance Upgrades	**Program Enhancements**
• Refrigeration room upgrades • Install exhaust and gas systems for ice refinishing • Mechanical upgrades • Dasher board corner radius and netting / glass protection upgrades	• Skate change room additions • Lobby and entrance and concession • Multi purpose spaces • Administration improvements • Curling rink storage • Exterior appearance • Second sheet of ice • Parking improvements • Senior expansion



4.1 Program

The building "program" is a list of spaces, functions and technical requirements that are to be included in the design proposal. With community input and building on the pervious steps this "program" was developed. Presented as a balance of user needs and maintenance priorities this program emerged as the priorities for the first phase of a multiphase project.

1. SIX DRESSING ROOMS
   600 ft² each, one that would be gender friendly
2. MULTI-PURPOSE SPACE
   4 rooms at 900 ft² each, meetings, crafts, studio and other activities
   3,600 ft2
3. EXPAND ENTRANCE / LOBBY SPACE
   1500 ft² , views out and in to activity spaces, central
4. IMPROVE SKATERS AREA AND CONCESSION
   part of new lobby, access to washroom, views of pick up area
5. IMPROVE OFFICE SPACE
   200 ft²
6. Facility storage for arena personnel and curling club -
   200 ft²
7. FIGURE SKATERS CHANGE ROOM
   400 ft² during season
8. SENIORS CENTRE EXPANSION
   double existing of 5,000 ft²
9. MECHANICAL AND ZAMBONI ROOM
   1,800 to 2,500 ft² - shop expansion/replacement



Gross up at 1.2 times the program areas gives a reasonable estimate of the total gross floor area.

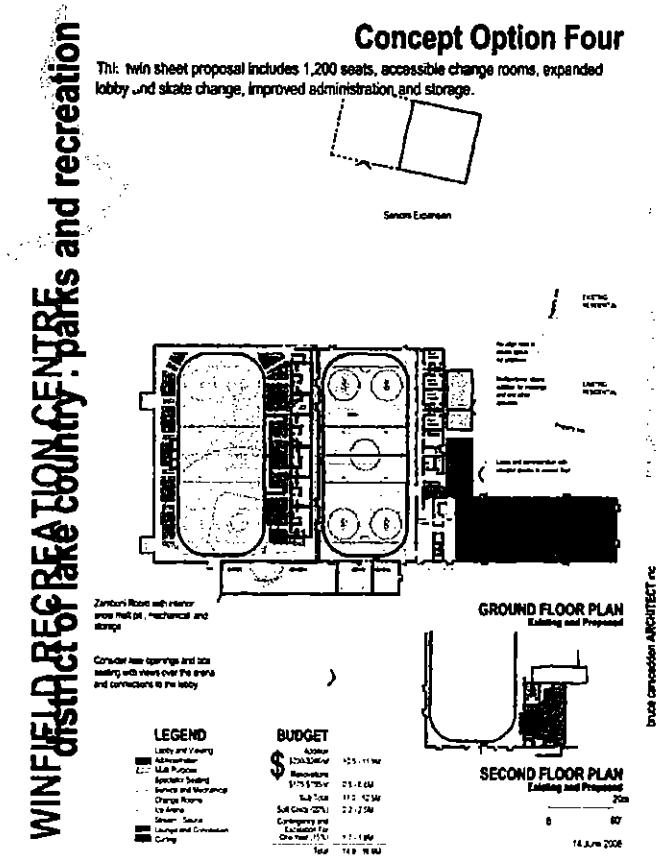
4.2 Context Analysis

An analysis of the context, site and facility spaces was undertaken to identify significant influences and project opportunities. The importance of the structure's relationship to the street, surrounding park, creek and commercial centre was identified as important to the urban context.

This analysis was represented graphically and used to justify the concept design options developed in the next step (see Appendix C for the "Urban Context", "Existing Facilities" and "Site Development Concepts" panels).

4.3 Concept Options

Three or four concept options were developed that address the proposed program and site opportunities. The options ranged in cost and functions and each was illustrated in large-scale colour graphics. Each included gross floor area calculations and cost estimates. These concept options address the program and attempt to satisfy expectations for the Recreation Centre's long-term growth. The project costs range from 2.7 to 16.5 million. (See Appendix C for "Concept Options" 1, 3 and 4)



5 appendices

The following appendices provide supplementary information and record documents for the project.

Appendix **A**	Project Directory and Consultation Meeting Notes	
Appendix **B**	Dasher Board Reference	
Appendix **C**	Presentation Panels	
Appendix **D**	Project Budgets	
Appendix **E**	Engineering Reports:	
	Structural	**CWMM Engineering**
	Mechanical	**Jade West Engineering**
	Electrical	**Falcon Engineering**
	Refrigeration	**RH Strong and Associates**
	Life Cycle Analysis	**Bruce Carscadden Architect**

APPENDIX A

PROJECT DIRECTORY

9 November 2005

WINFIELD RECREATION CENTRE / MASTER PLAN STUDY

#05-20

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MEETING RECORD No. 1

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TO **Steve Schaffrick**, Director of Parks and Recreation, District of Lake Country
Parks and Recreation Department
10150 Bottom Wood Lake Road
Lake Country, British Columbia V4V 2M1

CC **Bill Webster** PERC
David MacKinnonCWMM Engineering Ltd
John Makepeace Jade West Engineering
Geoff Hann Falcon Engineering Ltd
Eric Bradley RH Strong

FROM Bruce Carscadden MAIBC

PROJECT WINFIELD RECREATION CENTRE – MASTER PLAN STUDY

DATE 4 November 2005

REMARKS

The following is a brief record of our meeting 10am, Wed 2 November 2005 at the Winfield Recreation Centre.

PRESENT

Steve Schaffrick	Director of Parks and Recreation, District of Lake Country Parks and Recreation Department (DLC)
Dan Clifford	Manager of Parks and Recreation, (DLC)
Jayson McCarthy	Councilor, District of Lake Country
Bill Webster	Professional Environmental Recreation Consultants Ltd (PERC)
Bruce Carscadden,	Bruce Carscadden Architect Inc (BCA)

ITEM	DESCRIPTION	ACTION
1	**INTRODUCTION**	
1.1	Steve and Dan provided an overview of their vision for the Recreation Centre, indicating that the population of Lake Country was likely to grow to approximately 20,000 by 2004. In part, the District's wish is to make improvements to an older facility, expand it as necessary, and improve its visual appearance. In particular, there is an interest in the addition of a more appealing social area, a spacious lobby; skate change rooms and maintenance upgrades and improvements. It is recognized that the site could be a "centre" for the community, with a connections to Swalwell Park, and trail connections to the business community.	info

ITEM	DESCRIPTION	ACTION
1.2	It was suggested that the study should involve the seniors who participate in activities at the Seniors Centre, as well as a number of other user groups and stakeholders. It is also important to remember that Lake Country is in close proximity to Kelowna, and that residents of each community make use of the other's facilities.	info
1.3	It was suggested the outcome of the master plan might provide a "vision" of the centre in next 5 years, 15 years and 25 years.	
2	**STUDY METHODOLOGY**	
2.1	Bruce and Bill reviewed the proposed methodology and potential enhancements to the project. Early steps in the process will include the collection of existing reports and documents related to the facility, a site visit by the architect and engineering consultants, and discussions with local stakeholders and user groups. With reference to the stakeholders, meetings will tentatively be held on Thursday and / or Friday, November 17 and 18 with the following groups: Minor Hockey, Figure Skating, Adult Hockey, the School Board, the Boys and Girls Club, the Curling Club and Seniors (including the Horseshoe Club).	Info
2.2	Other steps in the process will include a Focus Group workshop, possibly with local Parks and Recreation Departments and facility managers; a review of trends in facility development; discussions with staff; meetings with the project review committee; the preparation of a small number of options for the client's consideration; estimates of construction and operating costs; and the presentation of a draft and final report	info
2.3	Several "enhancements" were also suggested, including the administration of a survey of local residents which would assist in determining specific needs, and materials that would support the District should a decision be made to seek referendum approval. It was determined that these topics could be re-visited at a future date.	Info
3	**BACKGROUND INFORMATION**	
3.1	Councilor McCarthey provided historical information regarding the development of the existing arena and the "grassroot" involvement of the community. He also indicated that the site included more than an arena, and mentioned the ball diamond, the seniors' centre, and the lawn bowling green, and the interest in ensuring some type of connector between the recreation facilities and Swalwell Park and the businesses located on the west side of Vernon Creek	info
3.2	BCA collected the existing drawings, most in fragmented sets, for scanning / duplication and distribution to the engineering consultants. BCA suggested that the owner make available at the time of the engineering field reviews any available maintenance records, energy consumption records, maintenance manuals or related historical information. The owner advised that facility personnel with a historical perspective of the building will be available at this time.	DLC
3.3	The connection to the larger community, to commercial uses and pedestrian bridge over the creek was identified. Other documents and sources for related information included Vernon Creek Plan, The Town Centre Plan (Catherine Berris Landscape Architect)	BCA
4	**COMPLETION DATE**	
4.1	It was noted that the project start-date was to have been in August, and determined that it would take 3 to 4 months to complete the assignment. Bruce and Bill will prepare a revised timeline for the client's consideration.	info

bruce carscadden **ARCHITECT** inc

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MEETING RECORD No. 2

☐ COURIER
☐ POST
☐ FAX PAGE(S) INCLUDING THIS PAGE

TO **Steve Schaffrick**, Director of Parks and Recreation, District of Lake Country
Parks and Recreation Department
10150 Bottom Wood Lake Road
Lake Country, British Columbia V4V 2M1

CC **Bill Webster** PERC
David MacKinnonCWMM Engineering Ltd
John Makepeace Jade West Engineering
Geoff Hann Falcon Engineering Ltd
Eric Bradley RH Strong

FROM Bruce Carscadden MAIBC

PROJECT WINFIELD RECREATION CENTRE – MASTER PLAN STUDY

DATE 24 April 2006

REMARKS

The following is a brief record of our meeting Friday 16 December 2005 at the Winfield Recreation Centre.

PRESENT

Steve Schaffrick	Director of Parks and Recreation, District of Lake Country Parks and Recreation Department (DLC)
Dan Clifford	Manager of Parks and Recreation, (DLC)
Jayson McCarthy	Councilor, District of Lake Country
Bill Webster	Professional Environmental Recreation Consultants Ltd (PERC)
Bruce Carscadden,	Bruce Carscadden Architect Inc (BCA)
Lauren Daniel	WFSC
Rob Thompson	WCL
Jeff Olamd	Minor Hockey
Roberta Loemen	Senior Centre Society
Carolyn Gillespie	GESS
Jayson McCarty	Champion
Lara R. Fitzpatrick	Rec Adult Hockey

ITEM	DESCRIPTION	ACTION
1	**COMMUNITY NEEDS ASSESSMENT**	
1.1	Bill Webster summarized the information gathering and agency discussions with minor	info

ITEM	DESCRIPTION	ACTION
	hockey, figure skating, seniors and ____ completed in November	
1.2	Comments from stakeholders and staff included need for dressing rooms, storage, multi-purpose, lobby, viewing and parking lot lighting.	info
1.3	Seniors comments included additional meeting and activity space, improved access, improved insulation, sewer, heating and cooling	
2	**SCHEDULE**	
2.1	Bruce Carscadden reported on the engineering and landscape review undertaken in November. Table draft versions of structural, mechanical, electrical and refrigeration and report that this phase was on schedule.	BCA
3	**REVIEW AND ANALYSIS**	
3.1	BCA presented 5 presentation panes (dated 15 Dec 05) summarizing the review and analysis of the existing facilities. Generally, BCA reported that structurally the building was in acceptable condition and generally aging on schedule with theoretical life cycle analysis of immediate concern was the refrigeration room, fire resistance rating and lack of vestibule.	BCA
3.2	Urban and Site Reviews BCA summarized urban design and constraints represented on two panels.	BCA
3.3	Concept Options BCA summarized 2 concept options. The first addressed primarily those immediate needs and code upgrades indentified in 1.1 and 2.0 above. The second concept speculated about a 25 year built out that included a second ice sheet and pool.	BCA
4	**CONCLUSION**	
4.1	the next meeting is tentively scheduled for late January 2006	info

These notes are considered an accurate account of subjects discussed and decisions reached during the meeting. Please advise the writer by fax of any errors or omissions.

BRUCE CARSCADDEN ARCHITECT INC

B. C

Bruce Carscadden, MAIBC

PERC

William D. Webster

Bill Webster

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MEETING RECORD No. 3

☐ COURIER
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TO **Steve Schaffrick**, Director of Parks and Recreation, District of Lake Country
Parks and Recreation Department
10150 Bottom Wood Lake Road
Lake Country, British Columbia V4V 2M1

CC **Bill Webster** PERC

FROM Bruce Carscadden MAIBC

PROJECT WINFIELD RECREATION CENTRE – MASTER PLAN STUDY

DATE 22 March 2006

REMARKS

The following is a brief record of our meeting Monday 20 February 2006 at the Winfield Town Hall.

PRESENT

Steve Schaffrick	Director of Parks and Recreation, District of Lake Country Parks and Recreation Department (DLC)
Bill Clark	Councilor, District of Lake Country
Bill Webster	Professional Environmental Recreation Consultants Ltd (PERC)
Bruce Carscadden,	Bruce Carscadden Architect Inc (BCA)
Laaureen Daniel	WFSC
Rob Thompson	WCL
Jeff Olamd	Minor Hockey
Roberta Loemen	Senior Centre Society
Carolyn Gillespie	GESS
Jayson McCarthy	Chairperson
Lara R. Fitzpatrick	Rec Adult Hockey

ITEM	DESCRIPTION	ACTION
1	**COMMUNITY NEEDS ASSESSMENT**	
1.1	Bill Webster summarized the community needs assessment relative to meeting #2, concept options one and two and client's directions. Generally it was agreed that residential land acquisition was not a priority and that additional change rooms, future twin arena and immediate code and safety upgrades should be explored.	info

ITEM	DESCRIPTION	ACTION
2	**CONCEPT OPTIONS**	
2.1	Bruce Carscadden presented concept options three and four (20 Feb 06) for review and discussion. Generally these explored phased construction including new refrigeration and zamboni and service spaces, new lobby and multipurpose spaces, 6 new skate change rooms and an additional sheet of ice. Comments are recorded as follows:	BCA
2.2	The client would like to see a phased approach: (1) immediate code and safety upgrades as identified by the engineering team: (2) future upgrades, such as the new dressing rooms and expansion of multi-purpose spaces, lobby, etc; and (3) long term aspirations, such as a new arena on the west side.	BCA
2.3	Curling Rink: Storage and change spaces could expand into the existing skate change. Options for external storage room additions could also be considered.	BCA
2.4	Arena: recommendations for adequate parking if a second ice sheet is added are required. Consider a drop-off area for hockey players. The question of an International ice surface was raised. Include viewing from the curling lounge if possible. Confirm layout of existing first aid room, referee's room, penalty, timekeeper's box, and sound booth. An elevator should be considered as an option, as well as additional office space.	BCA
2.5	Seniors Centre. Include upgrades including sewer connection. Building improvements to be included are storage, and a larger kitchen and maybe an elevator, but not necessarily at the present time.	BCA
2.6	Landscape. Bruce presented the landscape consultants options one, two and three (19 Feb 06) for review and discussion. Generally, these explored use of landscape to improve and enhance the buildings appearance particularly as seen from the road. A pergola structure that could be used to grow vines, provide shade and lead towards the entry was suggested for further development.	BCA
3	**CONCLUSION**	
3.1	The next meeting is tentively scheduled for March 20th and has now been confirmed **March 23rd at 11:00 am.**	info

These notes are considered an accurate account of subjects discussed and decisions reached during the meeting. Please advise the writer by fax of any errors or omissions.

BRUCE CARSCADDEN ARCHITECT INC

B. Carscadden

Bruce Carscadden, MAIBC

PERC

William D. Webster

Bill Webster

DISTRICT OF LAKE COUNTRY

WINFIELD RECREATION CENTRE
MASTER PLAN STUDY

SUMMARY OF MEETINGS WITH LOCAL ORGANIZATIONS

LAKE COUNTRY ADMINISTRATIVE STAFF

Randy Rose, Administrator; Mike Reiley, Director of Development Services; Steve Schaffrick, Director of Parks and Recreation

- Focus of study is to be on improvements to facilities at current arena / seniors centre site, as well as on the possible expansion of the facilities and the development of new facilities (what does the public really want?)
- Other locations could be considered including a site closer to Swallwell Park and the Town Centre – the latter would create a focus for the Town Centre, and in both cases, phased development would be necessary – existing property could be sold for other purposes – might be some interest from the private sector
- Council has made commitments to other projects in recent years, and the feeling is that it's time to focus on parks and recreation
- Comparison with other communities would likely be appropriate (Quesnel, Merritt, Summerland, Revelstoke, Trail)
- Features to consider: outdoor ice (similar to Vernon) and multi-purpose space – keep other local facilities in mind (i.e. don't duplicate)

SCHOOL DISTRICT

Carolyn Gillespie, Vice Principal, Secondary School

- Recreation centre is quite close to the Secondary School, but if it were closer, it would be far easier to access
- Hockey school uses the arena regularly – excellent program, reasonable rental rates (much lower than other arenas in the area); in second year of operation (1 semester; multi grades); rolling schedule for other classes creates some difficulty; students pay for instructors, uniforms, and ice time
- Dressing rooms are too small / should be secured
- There is need for additional storage for gear, sticks, cones, etc. – for exclusive use
- Also a need for a multi-purpose room, roughly the same size as a classroom – for off-ice instruction
- A warm viewing area would be appropriate
- Rental skates – not everyone owns ice skates – could develop a skating program through physical education classes
- Need for a gymnasium, an indoor aquatic facility, a fitness centre, an all-weather indoor playing surface, an indoor running track and an area for physiotherapy – a pool could be used for swimming lesions, recreational swimming, kayaking, canoeing, water safety, etc.
- Currently looking at a more extensive active living program – including golf
- Current joint use initiative seems to be working very well

SENIORS SOCIETY

Anne Robinson (Lake Country Health Planning Society); Marion McIntyre, Margaret Lyle, Bbby Lewen, Larry Kerr (Lake Country Senior Citizen Society)

- Building is too small – could be expanded to take up space that has been used in the past for lawn bowling; should be large enough to accommodate Interior Health – should be under the same roof
- Have made numerous requests to Council for assistance and support for a larger facility
- Building should have wheelchair access and an elevator
- Building needs better insulation
- Kitchen should be larger – lunch program is very successful
- Currently have 225 registered members and 29 groups
- The hall is rented for special events
- Additional storage is needed
- Site has limited parking; space is also need for covered bus parking
- Site needs connection to sewer system
- More multi-purpose space is required
- An improved heating / cooling system is needed
- More seniors are going to be moving to the community
- Could be a drop-in centre
- Socialization is as important as activity – it would be nice if there were an area that could be set-up permanently for people to visit and chat

CURLING CLUB

Ron Masson, President; Rob Thompson, Manager

- Membership has been decreasing over the past few years – expect more people to join as local population grows; there seems to be an increasing number of younger people in the club – good information is available from Curl BC
- Club operates from September through April, and host roughly a dozen bonspiels each year
- Need for one or more dressing rooms with lockers that can be secured (20' x 20') and space to store rocks
- Upstairs kitchen is functional but very small
- Bathrooms haven't been upgraded for 25 years – too small
- Ceiling – need something to cover the rafters – losing heat through roof
- Need improved heating system and improved lighting
- Office area is too small and lack power
- Need a large storage area either at the end of the building or on one side
- Parking lot – vandalism; soon will be too small
- Can white paint on floor be removed?
- Good relationship with District

ADULT HOCKEY

Rick Ryckman, Knights of Columbus; Lara Fitzpatrick, Mixed Recreational Hockey

- Dressing rooms are too small, and there aren't enough of them; need for more showers
- Some discussion of dressing rooms designed with females in mind
- Mixed hockey has a waiting list – will continue to grow
- Facility needs to be upgraded, but retain the small town feeling; ice surface is good
- Need for lighted external signage; lighting is also inadequate in the parking lot
- Other considerations – day care, gymnasium, 2nd sheet of ice, swimming pool

APPENDIX B

ORFA

ONTARIO RECREATION
FACILITIES ASSOCIATION INC.

SUGGESTED GUIDELINES FOR EVALUATING ARENA BOARDS AND GLASS

DECEMBER 2001

ONTARIO RECREATION FACILITIES ASSOCIATION INC.
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INTRODUCTION

Due to the changes in sport activities accommodated in facilities specifically arenas, safety of players and spectators has become an issue. This is due, in part, to the age of many arenas, combined with various and non-standard building practices used during the construction of the facilities.

Consequently, the industry is experiencing an increase in the number of injuries, some fatal, sustained by spectators and players alike. This has resulted in an increased concern for potential litigation.

In Canada, several ongoing claims for injuries has brought this issue to the forefront. At the 1999 Annual Forum of the Canadian Recreation Facilities Council, (C.R.F.C.) the need to develop specific guidelines to determine the safest height for glass for arena facilities was identified.

C.R.F.C. is a network of Provincial and Territorial recreation facility associations from across Canada. This volunteer organization is working collectively to improve the recreation facility industry.

In response to the need for owners and operators to demonstrate a duty of care to users of their facilities, the Ontario Recreation Facilities Association recommends the following guidelines and facility analysis to help reduce unnecessary risks and assist in maximizing the safety of our patrons.

The main objective of this process is to ensure that the arena facility has taken all reasonable steps to minimize risk to user groups and spectators.

Please read through the following guidelines in evaluating your facility and set up your own committee or task force to implement the recommendations attached. Designate one person to implement these guidelines in your facility.

EVALUATING YOUR PREMISES

- Are the persons who are responsible for the maintenance of the board and glass system aware of the following:
- The age and type of construction of your facility's board and glass system?
- The exact height of glass as measured from the ice surface to the top of the glass?
- The exact height of glass measured from the concrete floor on the spectator (off ice) side to the top of the glass?
- The type and dimensions of the spectator seating?
- Is the board and glass system removable or permanent?
- can the existing board system support an increase to glass height?
- does the seating cause any risk to the spectator at any point?
- are all of the exposed supports padded?
- Are you aware of the facility requirements necessary for the type of programs that you are scheduling?
- Do you have access to information about programs offered at your facility or specific playing guidelines for that activity?
- Do you actively review accident/incident forms involving participant and or spectator injuries? Is this done to the extent that a summary of incidents/accidents received in your facility reveal recommendations and or changes to be made in either the programming or the structure.
- Is there a design problem noticed through consistent spectator or player injury and what action is to be taken.

Site Visit

Self-assessment is an important step in effectively evaluating your facility. A planned walk through of your playing surface is mandatory in the assessment process. For your self-assessment you will require a measuring tape and equipment such as a hockey or lacrosse stick. It is recommended that you invite key personnel such as the Fire Department, Building Department, Joint Health and Safety Committee and or insurance advisors, to join this step of the process. All are excellent resources with an interest in accident prevention and should be utilized.

1. Evaluate your dasher boards

    - measure outside surface to top of glass shields
    - measure ice side surface to top of glass shields
    - width of dasher boards
    - height of dasher boards
    - type and condition of facing
    - are shield supports intact?
    - Condition of dasher board (stability)
    - loose gates, hinges, latches should be identified
    - Condition of lexan and/or board advertising kits

2. Draw a map of your arena and mark in the following areas:
    - Players boxes
    - penalty boxes
    - camera and media areas

- gates and resurfacer gates (note if machine gate is a lift gate or a swing gate)
- seating areas
- concession areas if applicable
- opening to outside corridors or lobby
- areas along the dashers where there is no shielding separating the ice from the spectator area
- steps or risers in the spectator area

3. Look for any gaps or spaces in your shielding system that may allow objects or sticks to leave the playing area without going over the shields. Gates are especially bad for this. Use the stick and a puck to confirm whether this is possible. Mark these areas on the floor plan with a large "X".

4. Look for ice- side deviations that may cause a stick, blade or body part to become caught and thereby result in an injury. Mark these problem spots on the ice side of the floor plan with an "X".

Observations

The following are guidelines to assist you in summarizing the state of your arena and identifying potential risks. This information will help you to establish your Action Plan. Review the following possible conclusions drawn from the data gathered.

General Evaluation

Note any consistencies in player or spectator injury observed by staff or user groups.

- Are there any programming issues that may pose a hazard to public safety.
- Should there be any policies or procedures implemented to protect user groups and spectators. (e.g. ensuring that all gates are closed during practice sessions.)

Boards/Glass Evaluation

- In the data sheets, highlight the existing problems by marking an "X" on your drawing.
- Check the outside measurement of the dasher system. Compare to the inside and measure the shield height.
- Is the height of the dashers on the spectator's side of your arena shorter than the ice side? If yes, are patrons at risk when standing or sitting around the rink?
- Are the patrons of your rink protected from the risk of a flying puck or stick while standing or sitting in any part of your arena?
- Are there any gaps where pucks or other objects can go through?
- Can a flying puck or ball get into an adjacent traffic area?
- Are there any gaps or weak spots in the boards that will cause a player to become injured or allow for a stick to get caught?

Action Plan

From the above summary, list your specific problem areas that need to be addressed. For every problem, identify and list possible solutions that may or may not be feasible including any associated costs and ease of implementation.

Example:

Problem: Gap in glass

Solution:
1. Replace and fix shield supports
2. Stop playing activity
3. Replace glass

From your list of possible solutions, pick the most feasible considering budget, safety, liability, time constraints and ease of implementation. This plan will outline the steps your organization will need to take to establish the most appropriate levels for glass that are consistent with industry practices and legislation under the occupiers liability act. Be resourceful in dealing with the problem since the ideal solution may take several years to achieve. It is strongly recommended that any board or glass deficiencies or recommended upgrades determined from your evaluation process, should be incorporated into your capital budget submission each year. This will serve notice to the importance of the matter

Recommended Guidelines For Community Arena Events

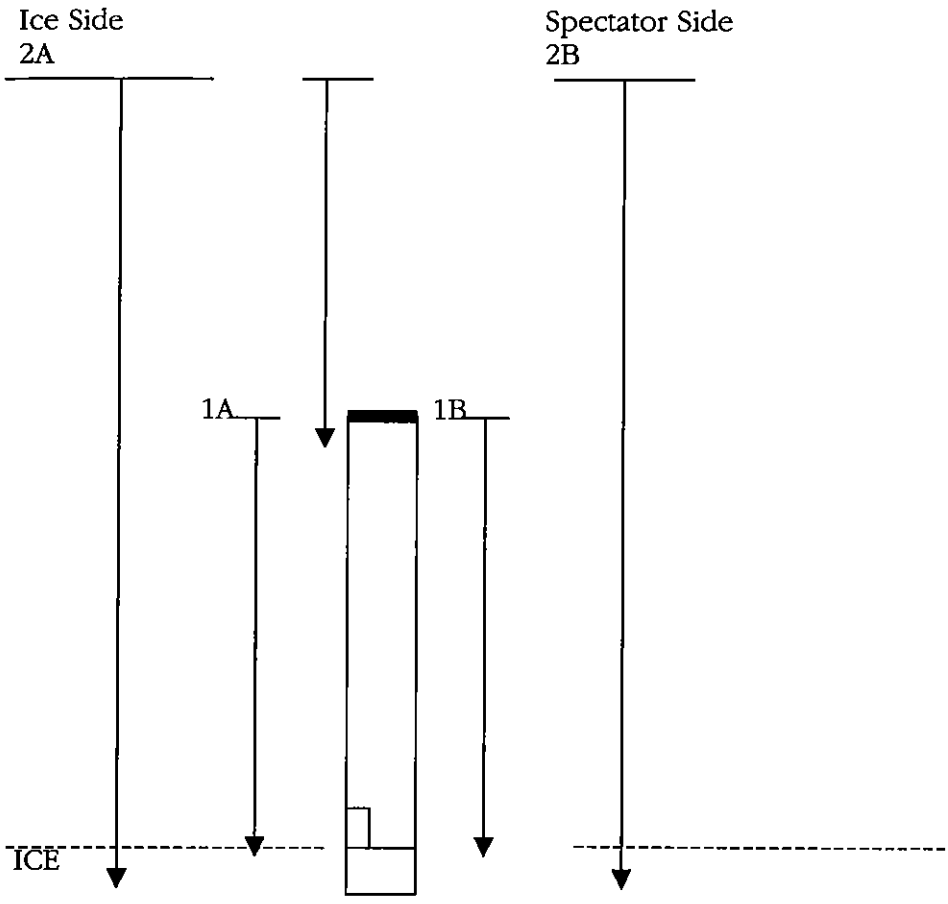
After collaboration with facility personnel, agencies, manufacturers and national sport organizations, the Ontario Recreation Facilities Association recommends the following guidelines for all recreation arena facilities.

- Each facility must post the following signage in a highly visible area:
  Patrons Entering These Premises Voluntarily Assume All Risks and Dangers Incidental to any Game or Event.
- Prior to the game/event and before the beginning of each period of any sporting event the following announcement is highly recommended for broadcast over the facility public address system.
  Attention Fans! - "Be aware that pucks/balls/sticks/equipment may leave the surface at anytime which can cause serious injury. Please pay attention to the activities on the playing surface at all times!"
- Where tickets are sold, please indicate the following disclaimer somewhere on the portion retained:
  The facility owners /arena and/or host club/organization shall not be held liable for any injury that may occur at the event taking place on this date. Each patron assumes all risks and dangers associated with this spectator event/activity.
- Meet with each user group annually to discuss pending changes to their sport or activity, facility layout, as well as to review any facility operational concerns and risk management techniques.
- Report each incident and/or accident by filling out the appropriate form(s). Staff training is required on how to properly assess the situation and to take the appropriate actions. This process should be in accordance with the Employer's recognized policies and procedures.
- For all new or major retrofits to a community arena facility: glass should be a minimum of four feet in height or a height that will provide a minimum clearance 8 feet, as described in item no.11; ½ inch in thickness from radius to radius. (½ inch thickness for tempered or acrylic glass).
- All other remaining perimeter glass should be a minimum of 6 ft. in height and 5/8 inch thickness for tempered and ½ inch thickness for acrylic glass.

- All players benches and penalty benches shall have protective glass of the same height as the adjoining board glass along the ends and back of the bench to protect spectators in walkways, alleys and seating area. In front of the home and visitors penalty boxes the glass shall be continuous and be the same height as the adjoining board glass. It is recommended that all timekeepers boxes be totally enclosed with protective glass. For consistency and fairness of play, glass installation and height should reflect the installation at the opposite end.
- Protective netting is strongly recommended to be installed from the top of the glass to a height as to adequately protect all spectators in the arena proper (seated or mobile). The safety netting should not exceed a 1 ½ inches x 1 ½ inches opening.
- Arena Board height should be consistent with recognized industry standards of a minimum of 42 inches to a maximum of 48 inches. For community arenas where majority of its primary users are minor hockey (boys or girls), the desired height of board from the floor surface to top of sill is 48 inches.
- For all existing community arenas, it is strongly recommended that every precaution reasonable be taken in the protection of the spectator and participant, whether it is an increase in glass height or the installation of the preferred safety meshing.

Measure:

- measure height of dashers from top of topsill to ice (1A) and top of topsill to the base of the dasher (1B)
- measure total height of dasher system from top of shields to ice (2A) and from top of shields to surface behind the dashers (2B).
- measure top of shields to topsill for shield height at both the sides and the ends.



Calculate:

- on a flat floor 1A and 1 B should be equal, less the thickness of the ice. If there is a difference its probable that the dashers sit on a curb. This should be noted.
- an elevated walkway will be evident if there is a difference between 2A and 2B. This should be noted and taken into consideration when determining a safe shield height.
- it is strongly recommended that an 8 ft. clearance be achieved on both sides of the boards (8 ft. clearance from lowest point of ice/surface/floor to top of glass/shield).

Risk Maintenance

Scheduled inspections of board and glass systems are an important risk management tool. The inspection report should identify components that require ongoing assessment such as glass supports, spacers, checking boards for cracks, loose fitting or projecting screws and nails. Be sure that all board advertising kits and lexan coverings are inspected. The inspection should also include the safety netting for tears, holes and weak spots in the mesh netting.

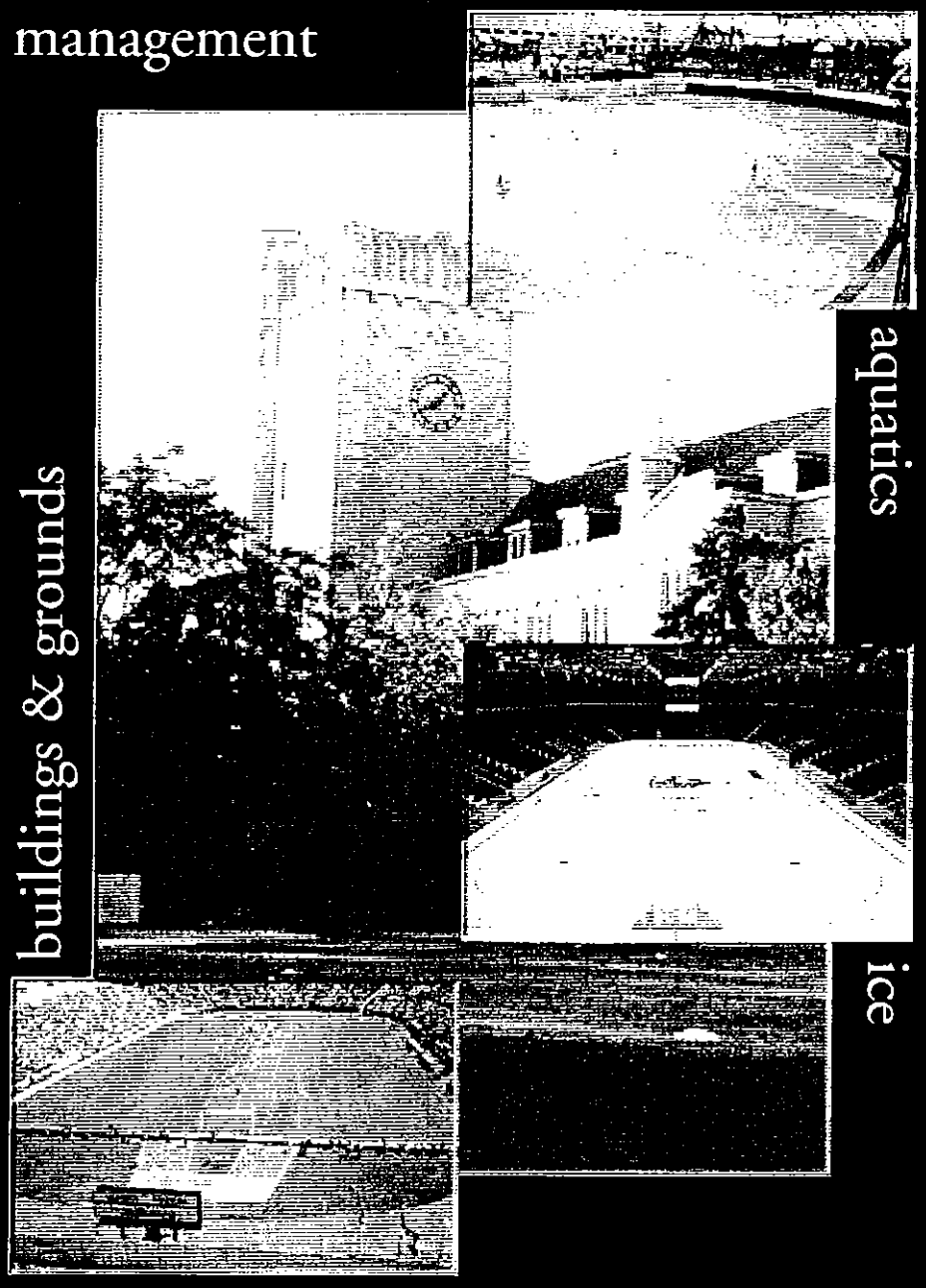
These reviews should be conducted on a daily and/or weekly basis. Staff should be trained to recognize the potential hazards that may exist in their facility. It is important to provide staff with the necessary resources such as policies, procedures and training to address any facility concerns that may affect the operation. Program requirements must be known and understood by all in order to facilitate a safe activity for all.

It is recommended that facility owners develop a daily and/or weekly inspection checklist to be completed by identified staff. This will facilitate the evaluation of your facility safety program and take appropriate action when it is required.

Conclusion

These guidelines will serve to enhance your current risk management program and improve the public safety within your facility. Once you have evaluated your facility, we encourage you to take the necessary steps to protect your organization, your patrons and your users from undue harm. It is your responsibility to take every precaution necessary to provide a safe facility environment for all of your patrons.

management



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5/11/2004

The Puck Stops Here - CSA Announces New Standard For Canadian Indoor Sporting Arenas

New Standard Designed to Reduce Risk of Injury to Spectators

Toronto, May 11, 2004 – Canadian Standards Association (CSA), Canada's leading developer of standards and codes, officially announces that it has published a **new voluntary standard designed to reduce the risk of injuries to spectators and non-participants at indoor sporting events**.

"CAN/CSA-Z262.7-04, **Guidelines for Spectator Safety in Indoor Arenas**" provides guidance on safety to owners and operators, architects, planners, engineers, construction companies, construction contractors and appropriate inspectors in the design, construction, and operation of indoor arenas.

The standard is voluntary, meaning that arenas are not required to implement the new standard. It is not retroactive, but can be used to **guide future arena renovations and new construction, and sets requirements for indoor arenas**, including a board and glass system that permanently surrounds each playing area with a recommended minimum height of 2.4 m at the sides and 3.2 m at the ends of the playing area when measured from the playing surface. Additional protection systems may consist of a moveable board and glass system or a moveable safety netting system.

The standard also outlines additional requirements to consider when an object can travel in a direct line from the playing surface to the spectators and non-participants' area, including:

- Highly visible warnings on signs throughout the premises
- Printed warnings on event tickets
- Game time broadcast announcements warning of potential dangers
- Advising spectators that they need to pay attention to objects leaving the playing area during games

"CSA is well known and respected for developing standards designed to protect hockey players," says Pat Keindel, President, Standards, Canadian Standards Association. "These standards have contributed significantly to the reduction of head, face and eye injuries. With the rapidly evolving speed and intensity of sporting events, there is an increasing risk of serious injury or even death to spectators. **This new standard is supported by the Canada Safety Council, endorsed by the Canadian Recreation Facilities Council, and is designed to help prevent injuries at indoor arenas so that spectators can better enjoy Canada's national pastime and other indoor sports.**"

The standard was developed by the CSA Technical Committee on Equipment and Facilities for Ice Hockey Players, which includes stakeholders such as:

- Health Canada
- The National Hockey League

- The Canadian Hockey Association
- The National Hockey League Players' Association
- Ringette Canada
- Manufacturers, municipalities and medical professionals

The Canada Safety Council initiated and provided funding for development of the standard.

"There have been horrific incidents of pucks hitting spectators in arenas," says Emile Therien, President, Canada Safety Council. "Millions of Canadians visit these facilities regularly, especially during the hockey season. Deaths are rare, but lost eyes and skull fractures are all too common."

According to Therien, **the lack of national standard has made it difficult for those in charge of arenas to know how best to protect spectators**. The Canada Safety Council took action on its longstanding concern by providing seed funding for CSA to develop a voluntary standard, the first of its kind in the world. Therien hopes that other countries will follow Canada's lead when planning safety features in their arenas.

"There are more than 2,501 community arenas in Canada and many of them date back at least 30 years," says Randy Kinnee, Chair, Canadian Recreation Facilities Council (CRFC) and Manager of Operations, Parks and Recreation, Moose Jaw, Saskatchewan. "Many of these facilities are due for renovations and **this new standard will serve as an excellent resource for owners and operators committed to incorporating new measures to protect fans, vendors and others in the stands**. CRFC fully endorsed the development of this standard and recommends that it be used at indoor arenas across Canada when renovations, upgrades or new construction is being planned."

To purchase a copy of CAN/CSA-Z262.7, Guidelines for Spectator Safety in Indoor Arenas, please visit www.shopcsa.ca

About CSA
Canadian Standards Association (CSA) is a membership association serving industry, government, consumers and other interested parties in Canada and the global marketplace. A leading developer of standards and codes, CSA aims to enhance public safety, improve quality of life, preserve the environment and facilitate trade. To help people understand and apply standards, CSA offers information products and training. The Canadian Standards Association is a division of CSA Group, which also consists of CSA International for product testing and certification, and QMI for management systems registration. For more information visit www.csa.ca

About the Canada Safety Council
The Canada Safety Council is a knowledge-based, charitable organization devoted to educating Canadians about the importance of safety on the road, in the community, in sports and leisure activities, on the job and at home. Its mission is to lead in the national effort to reduce accidental deaths, injuries and economic loss. CSC serves as a credible, reliable resource for safety information, education and awareness. Behind the scenes, CSC helps in legislation, enforcement and other countermeasures to improve safety for Canadians. For more information visit www.safety-council.org

About Canadian Recreation Facilities Council
The Canadian Recreation Facilities Council (CRFC) is a volunteer driven, not for profit, nationally recognized council who's mission is to provide a national forum and other services that support the development and management of recreation facilities. For more information visit http://www.crfc.ca

- 30 -

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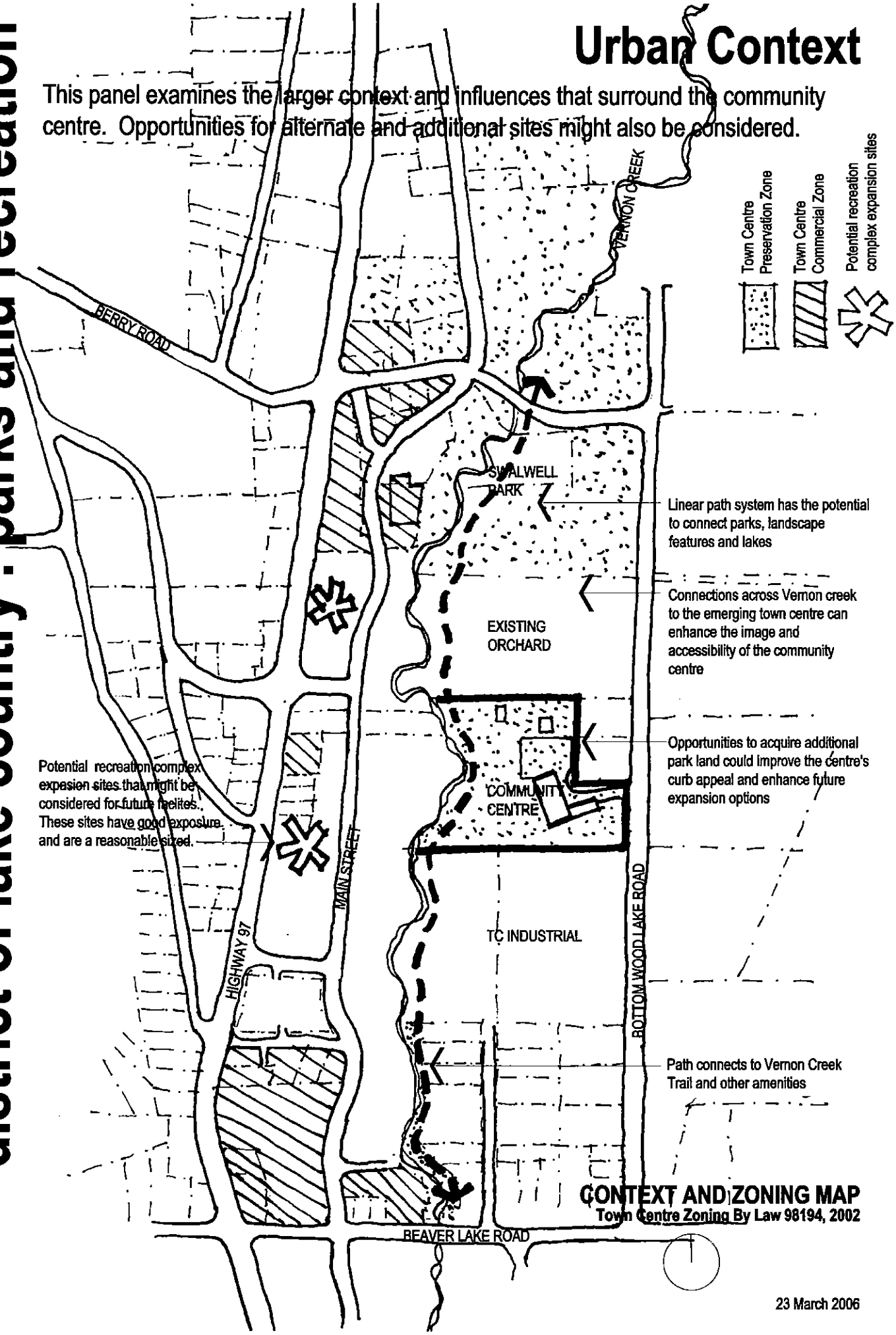
RELATED LINKS:
-Our Key Performance Indicators - CSA contributes to the reduction of recreational injuries

APPENDIX C

WINFIELD RECREATION CENTRE
district of lake country: parks and recreation

Urban Context

This panel examines the larger context and influences that surround the community centre. Opportunities for alternate and additional sites might also be considered.



CONTEXT AND ZONING MAP
Town Centre Zoning By Law 98194, 2002

23 March 2006

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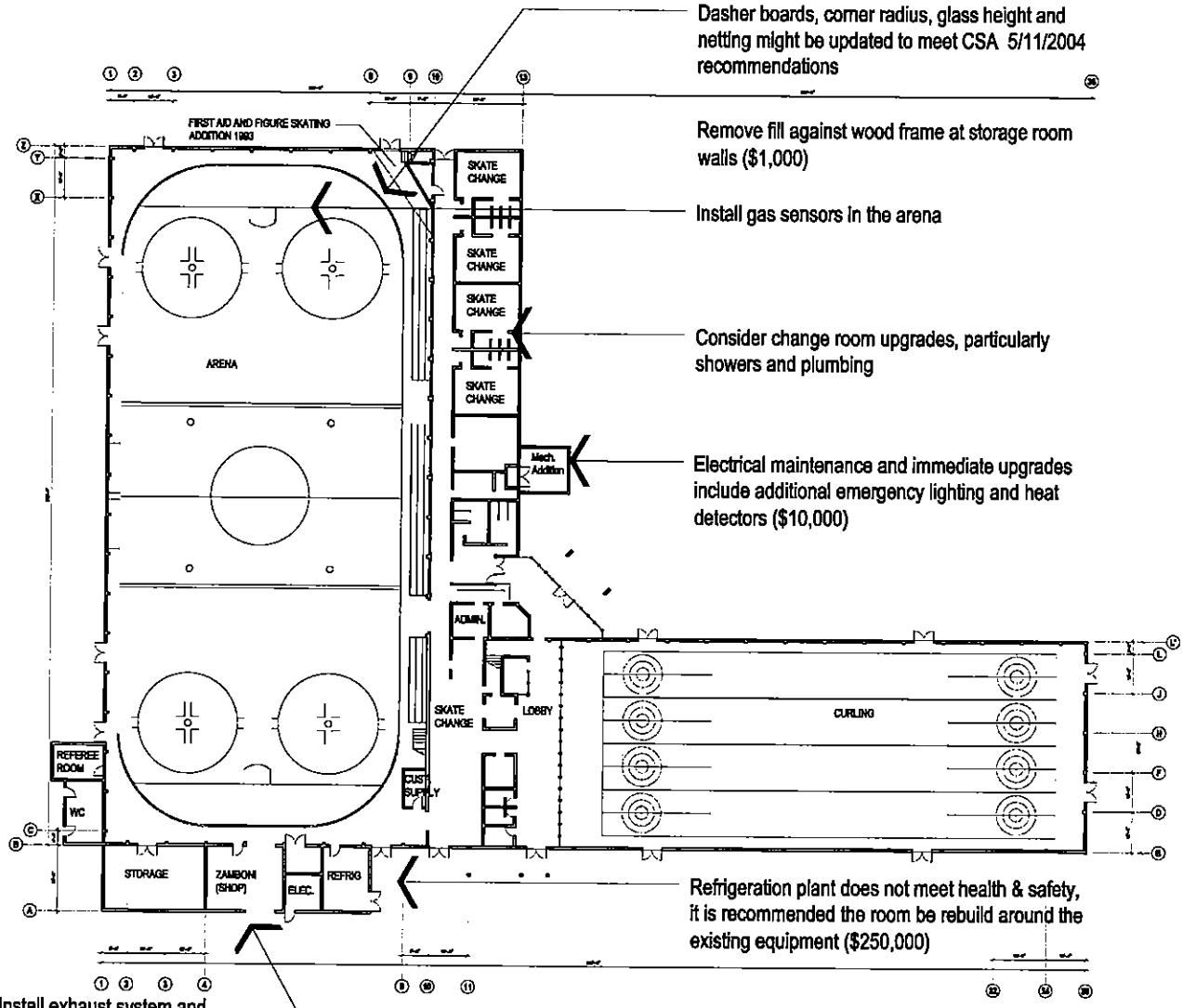
WINFIELD RECREATION CENTRE
district of lake country : parks and recreation

The Existing Facilities

The facility was constructed in 1975 / 1976 with minor additions in 1993 and 1995. This study includes a condition assessment of the building envelope, structural, mechanical, electrical and refrigeration systems. This panel summarizes some of these observations:



Dasher boards, corner radius, glass height and netting might be updated to meet CSA 5/11/2004 recommendations

Remove fill against wood frame at storage room walls ($1,000)

Install gas sensors in the arena

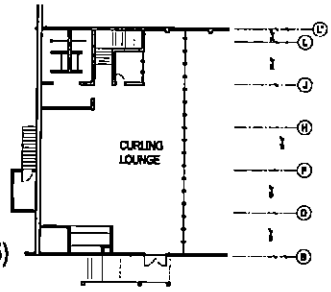
Consider change room upgrades, particularly showers and plumbing

Electrical maintenance and immediate upgrades include additional emergency lighting and heat detectors ($10,000)

Refrigeration plant does not meet health & safety, it is recommended the room be rebuild around the existing equipment ($250,000)

Install exhaust system and additional gas sensors in the Zamboni room, consider an interior snow melt pit

GROUND FLOOR PLAN
Existing



SECOND FLOOR PLAN
Existing

10m
0
30'

Condition Assessments

Engineering Reports undertaken as part of this study have identified maintenance and necessary upgrades:

CWMM Consulting Engineers, (Condition Assessment 6 Dec 05)
Jade West Engineering Co. Ltd. (Review of the Mech. and Plumbing, Dec. 05)
Falcon Engineering Ltd. (Electrical Building Review, 8 Dec. 05)
RH Strong & Assoc.

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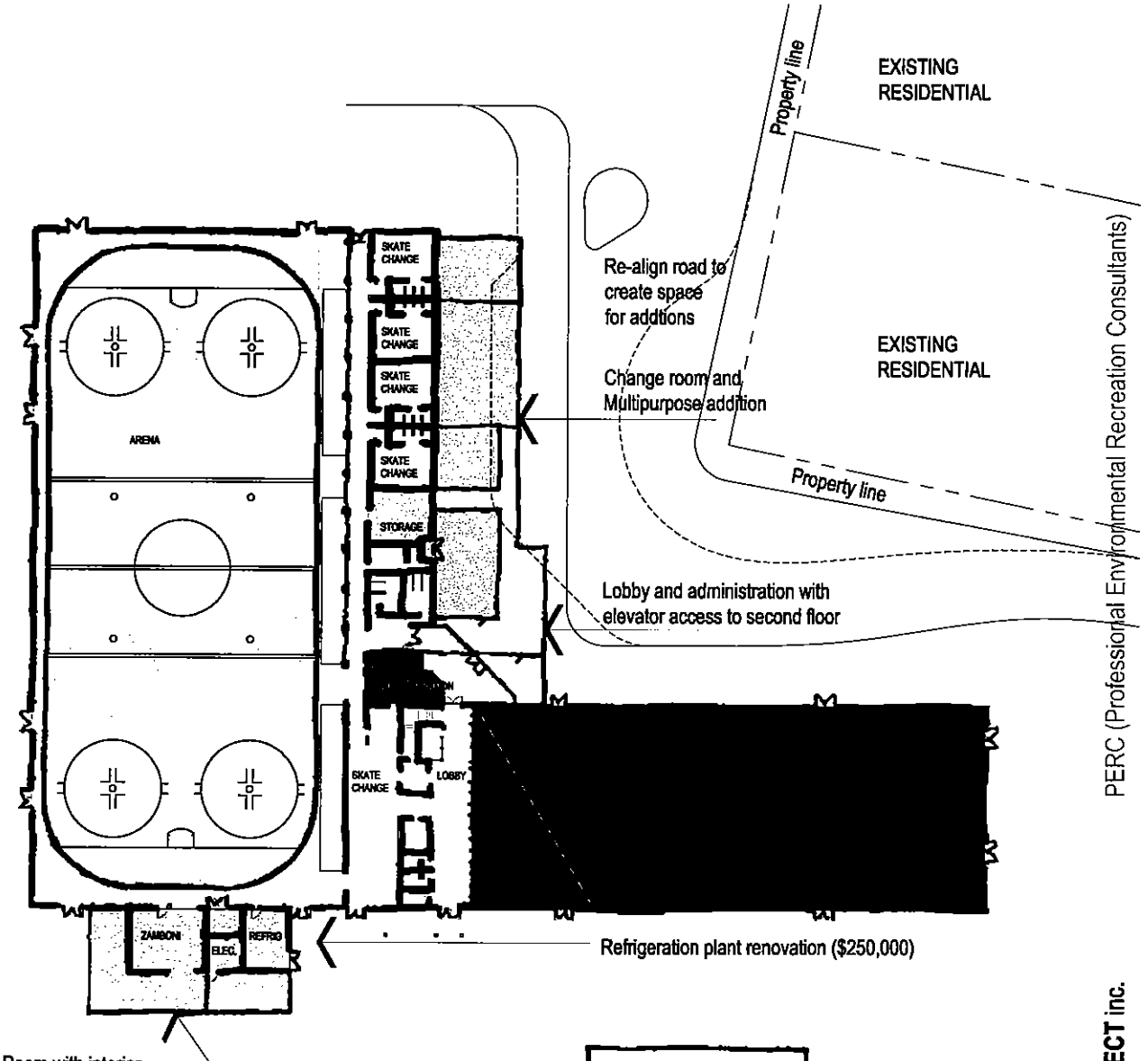
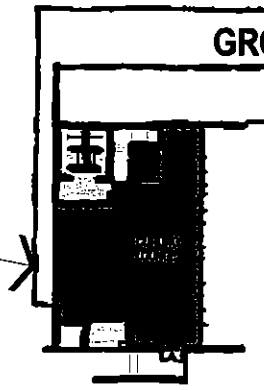
14 June 2006

WINFIELD RECREATION CENTRE
district of lake country : parks and recreation

Concept Option One

This concept explores modest additions renovations to address identified needs including a new change room, multipurpose space, lobby and administration.





Consider new openings and box seating with views over the arena and connections to the lobby

GROUND FLOOR PLAN
Existing and Proposed

LEGEND

- Lobby and Viewing
- Administration
- Multi Purpose
- Spectator Seating
- Service and Mechanical
- Change Rooms
- Ice Arena
- Stream / Sauna
- Lounge and Concession
- Curling

BUDGET

$	Addition $230-$260/sf	1.4 - 1.5M
	Renovations $175-$195/sf	0.5 - 0.6M
	Sub Total	1.9 - 2.1M
	Soft Costs (20%)	0.4M
	Contingency and Escalation For One Year (15%)	0.3M
	Total	2.6 - 2.8M

SECOND FLOOR PLAN
Existing and Proposed

10m
0 30'

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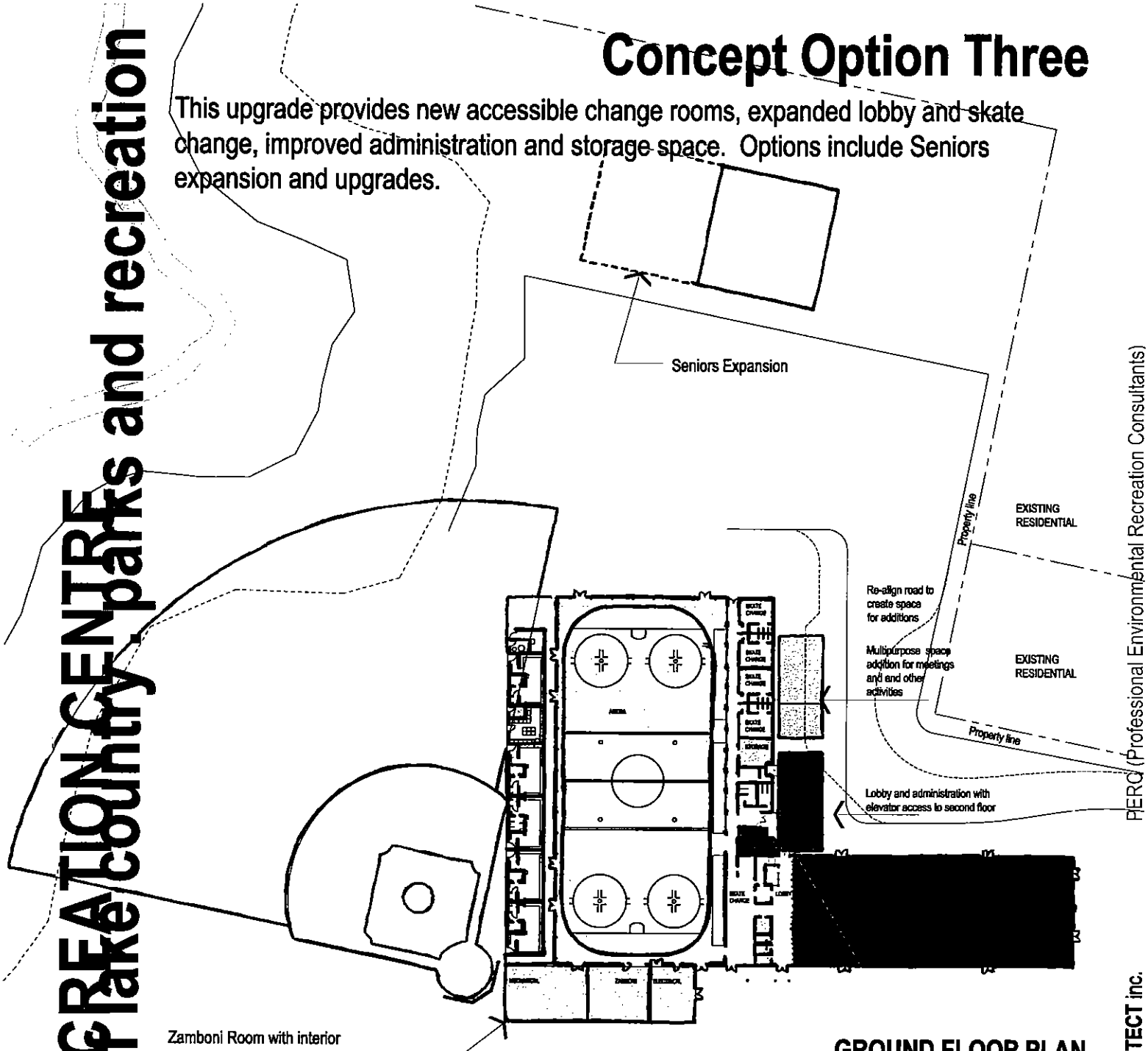
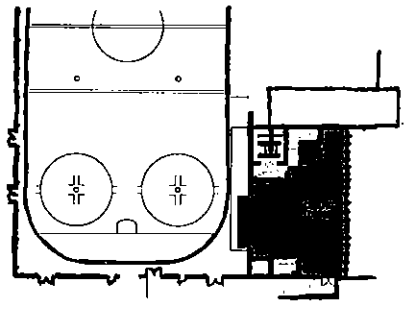
WINFIELD RECREATION CENTRE
district of lake country parks and recreation

Concept Option Three

This upgrade provides new accessible change rooms, expanded lobby and skate change, improved administration and storage space. Options include Seniors expansion and upgrades.



GROUND FLOOR PLAN
Existing and Proposed



SECOND FLOOR PLAN
Existing and Proposed

20m
0 60'

LEGEND

- Lobby and Viewing
- Administration
- Multi Purpose
- Spectator Seating
- Service and Mechanical
- Change Rooms
- Ice Arena
- Stream / Sauna
- Lounge and Concession
- Curling

BUDGET

$ Addition $230-$260/sf	3.1 - 3.5M
Renovations $175-$195/sf	0.5 - 0.6M
Sub Total	3.6 - 4.1M
Soft Costs (20%)	0.7 - 0.8M
Contingency and Escalation For One Year (15%)	0.5 - 0.6M
Total	4.8 - 5.5M

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14 June 2006

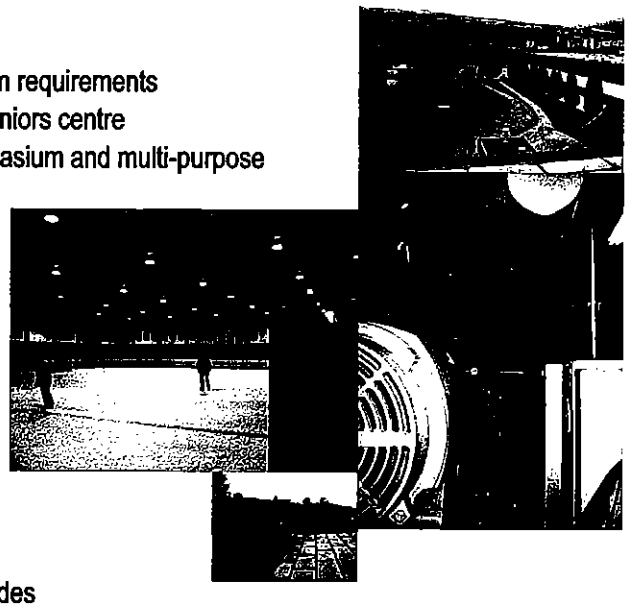
Community Needs and Program

The project included research into community needs based on which a building program was suggested. The following summarizes this process and the proposed program elements that might be added to the existing facilities.

A COMMUNITY NEEDS ASSESSMENT

Discussions with:

Minor Hockey Figure Skating
Curling Club Seniors' Society
School District Adult Hockey



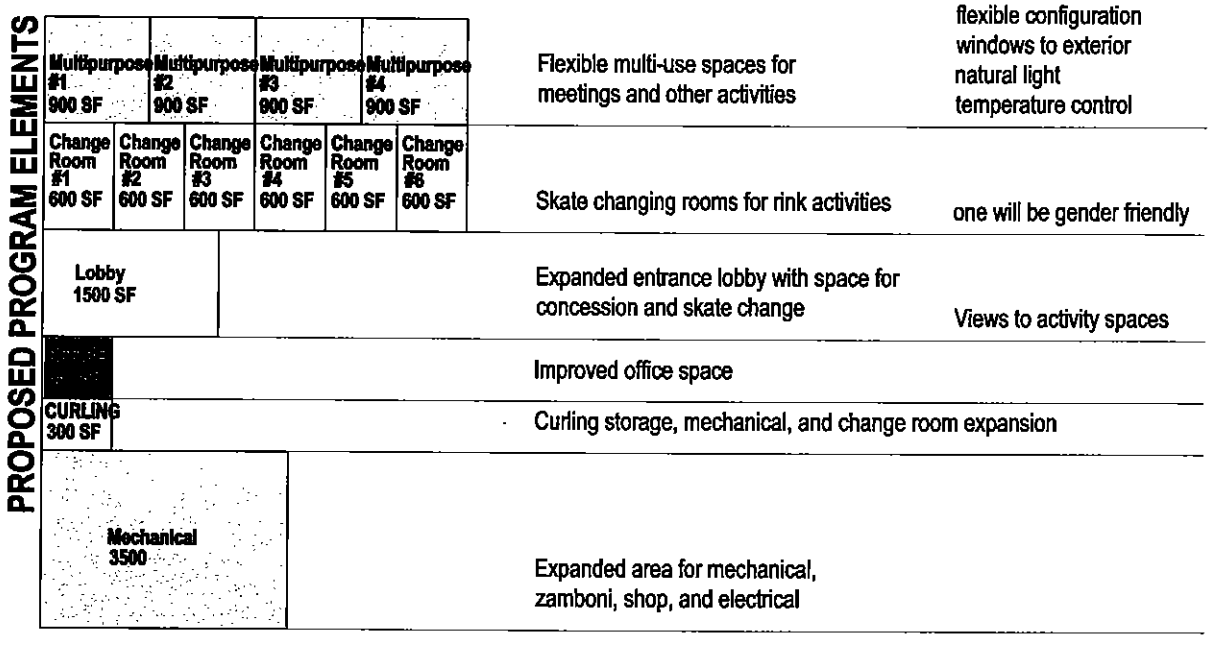
Identified needs and priorities related to short and long term requirements
Addressed arena needs, as well as the curling club and seniors centre
Discussed other facilities, such as an aquatic centre, gymnasium and multi-purpose
Focused primarily on the arena and curling club

TRENDS

Population growth and demographics
Aging population
Children and youth - areas of interest
Recreation facility trends
Arena trends

RECOMMENDED PHASES

Phase One - Immediate Immediate code and safety upgrades
Phase Two - Short Term Dressing rooms; multi-purpose space; offices / lobby; curling lounge; storage; landscaping
Phase Three - Long Term Second sheet of ice; parking improvements; seniors' centre



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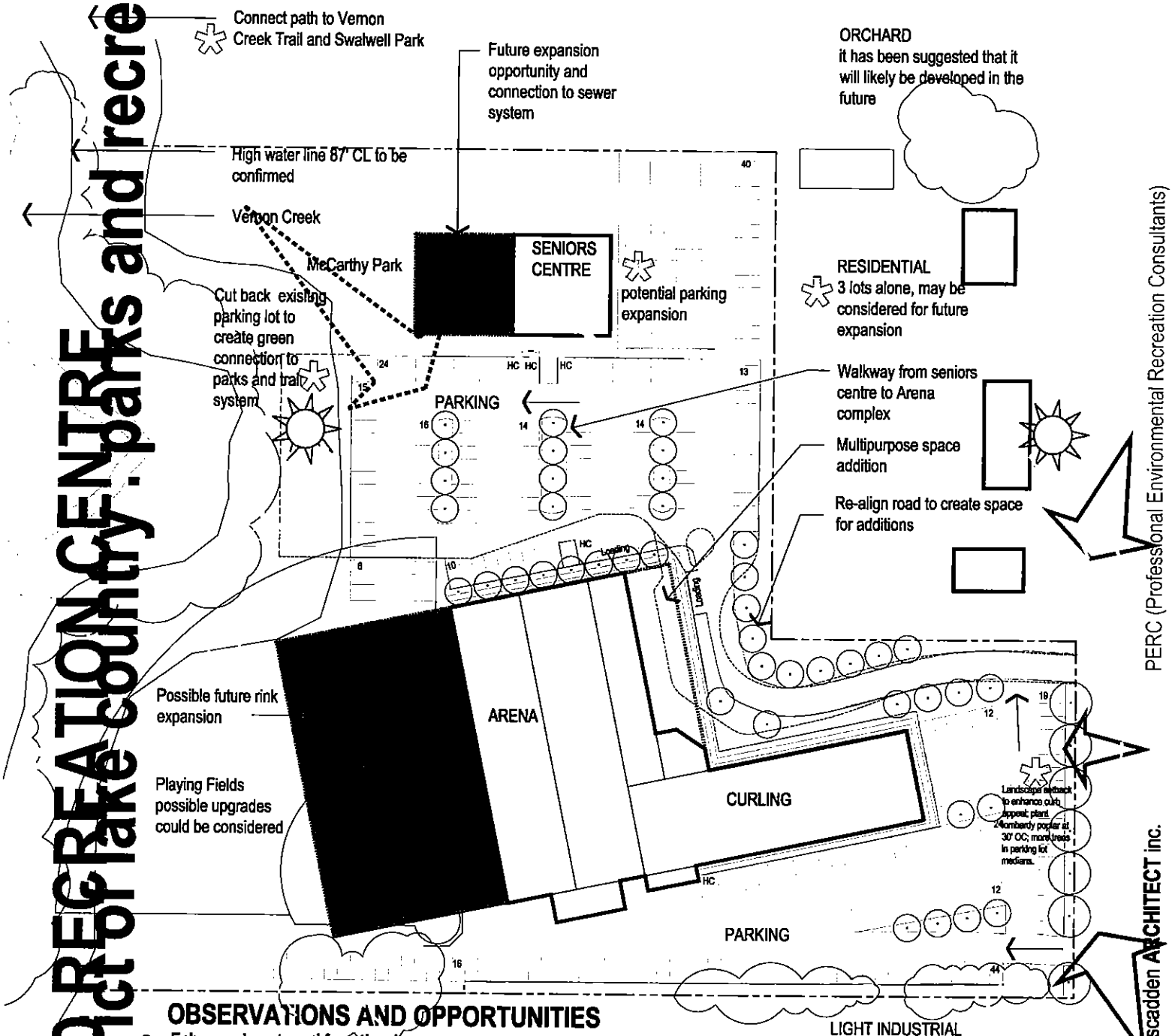
Site Development Concepts

This panel explores the site opportunities and constraints and looks for new organizational concepts relative to possible phased facility expansions.

WINFIELD RECREATION CENTRE
district of lake country: parks and recreation



OBSERVATIONS AND OPPORTUNITIES

- **Enhance views to and from the site, particularly from Bottom Lake Road.**
- **Enhance the campus of facilities concept and improve the relationship of the buildings to the park space.**
- **Develop the landscape to better define park edges and parking areas.**
- **Preserve future expansion opportunities for multipurpose space, arena and pool.**
- **Create links to the trails, creek, town centre and Swalwell Park.**

Parking Requirements (from By-law 98-194)	Existing	Future
Ice Arena(s) (1 per 109 sq ft ice)	154	308
Curling rink (1 per 4 players)	16	16
Rec. services (1 per 109 sq ft)	25	40
Outdoor sports (1 per 3 players)	14	0
Park/playground	6	6
TOTAL	215	370
ACTUAL	214	279

SITE PLAN AND ANALYSIS

Aerial Photograph and Line Overlay

20m
0 60'

26 May 2006

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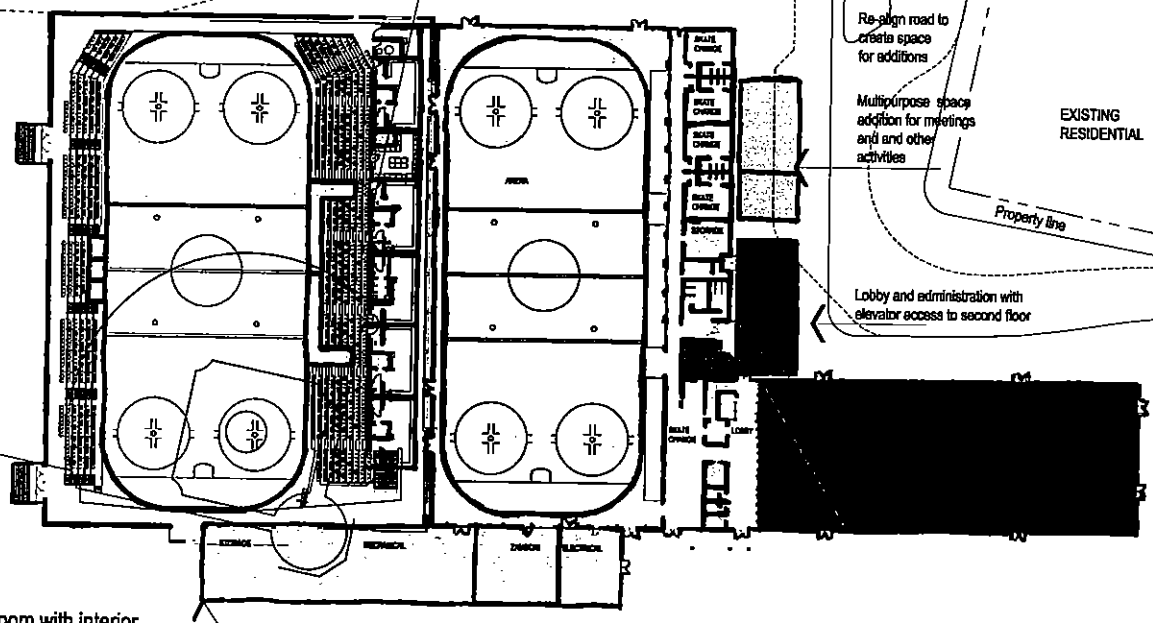
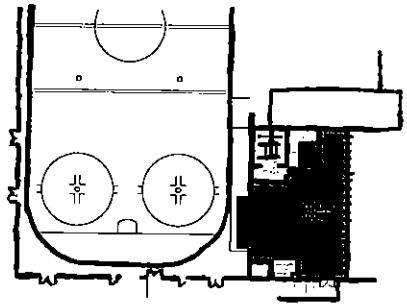
WINFIELD RECREATION CENTRE
district of lake country, parks and recreation

Concept Option Four

This twin sheet proposal includes 1,200 seats, accessible change rooms, expanded lobby and skate change, improved administration and storage.



GROUND FLOOR PLAN
Existing and Proposed



SECOND FLOOR PLAN
Existing and Proposed

20m
0 60'

LEGEND

- Lobby and Viewing
- Administration
- Multi Purpose
- Spectator Seating
- Service and Mechanical
- Change Rooms
- Ice Arena
- Stream / Sauna
- Lounge and Concession
- Curling

BUDGET

$ Addition $230-$260/sf	10.5 - 11.9M
Renovations $175-$195/sf	0.5 - 0.6M
Sub Total	11.0 - 12.5M
Soft Costs (20%)	2.2 - 2.5M
Contingency and Escalation For One Year (15%)	1.7 - 1.9M
Total	14.9 - 16.9M

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14 June 2006

Perspective Sketches

These perpective sketches on the proposed second and third phase suggest possible treatments to improve the entry lobby and views form the street.

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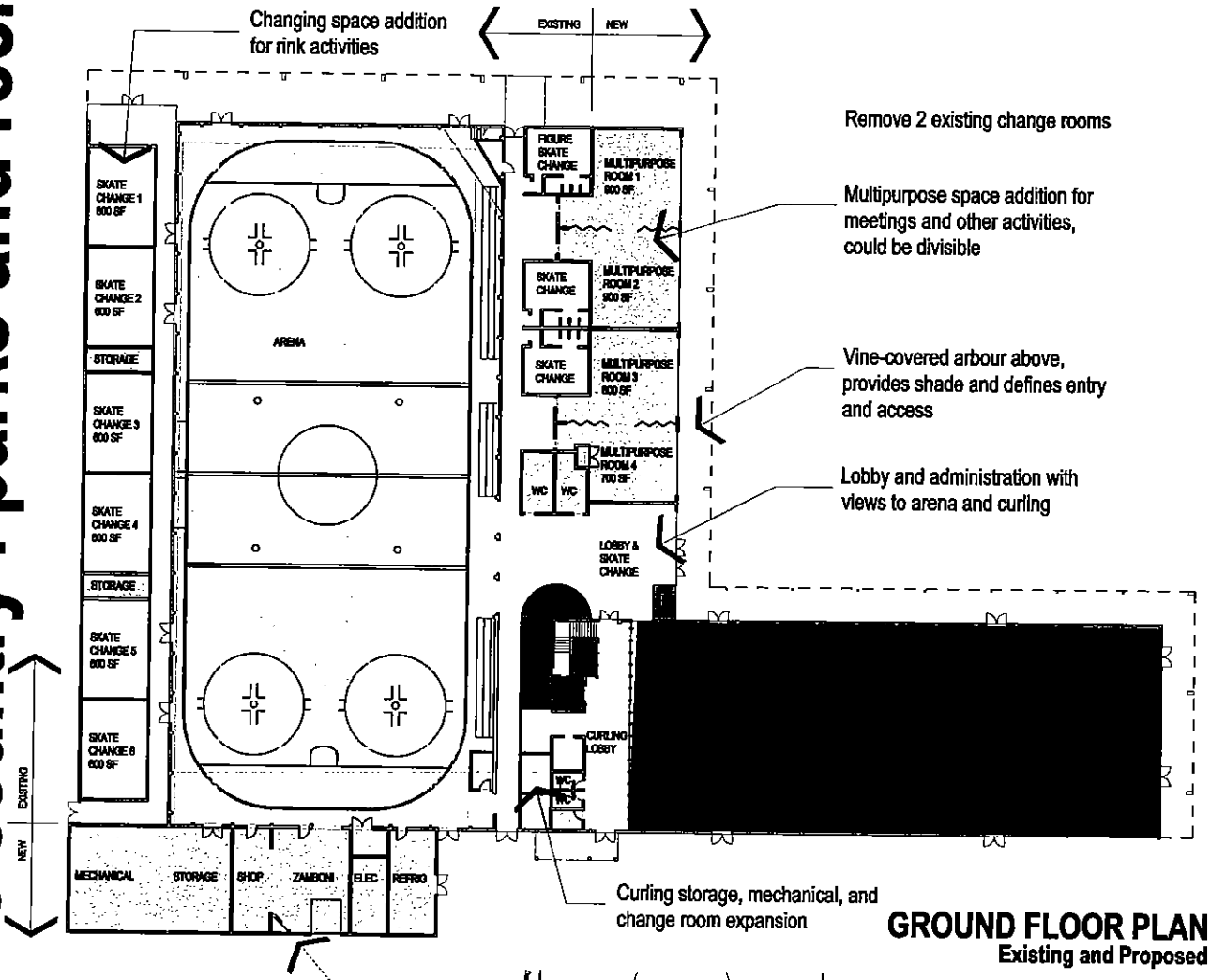
WINFIELD RECREATION CENTRE
district of lake country, parks and recreation

WINFIELD RECREATION CENTRE
district of lake country : parks and recreation

The Preferred Option

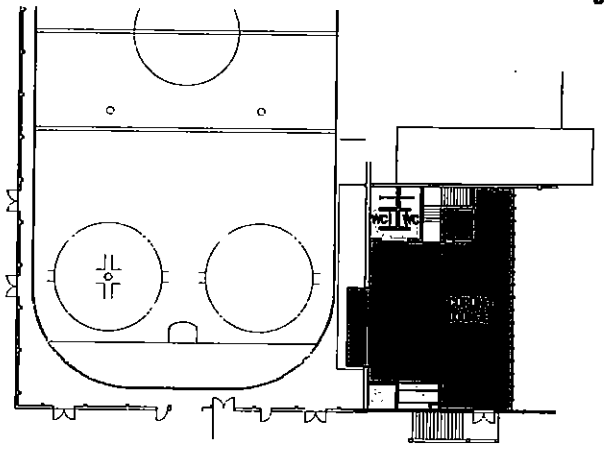
This upgrade looks at phase C and provides new accessible skate change rooms, expanded lobby and skate change, improved administration and storage space, and new zamboni and mechanical spaces.



GROUND FLOOR PLAN
Existing and Proposed

Zamboni Room with interior snow melt pit , mechanical and storage - 2500 SF

Consider new openings and box seating with views over the arena and connections to the lobby



LEGEND

- Lobby and Viewing
- Administration
- Multi Purpose Spectator Seating
- Service and Mechanical
- Change Rooms
- Ice Arena
- Steam / Sauna
- Lounge and Concession
- Curling

SECOND FLOOR PLAN
Existing and Proposed

10m
0 30'

25 April 2006

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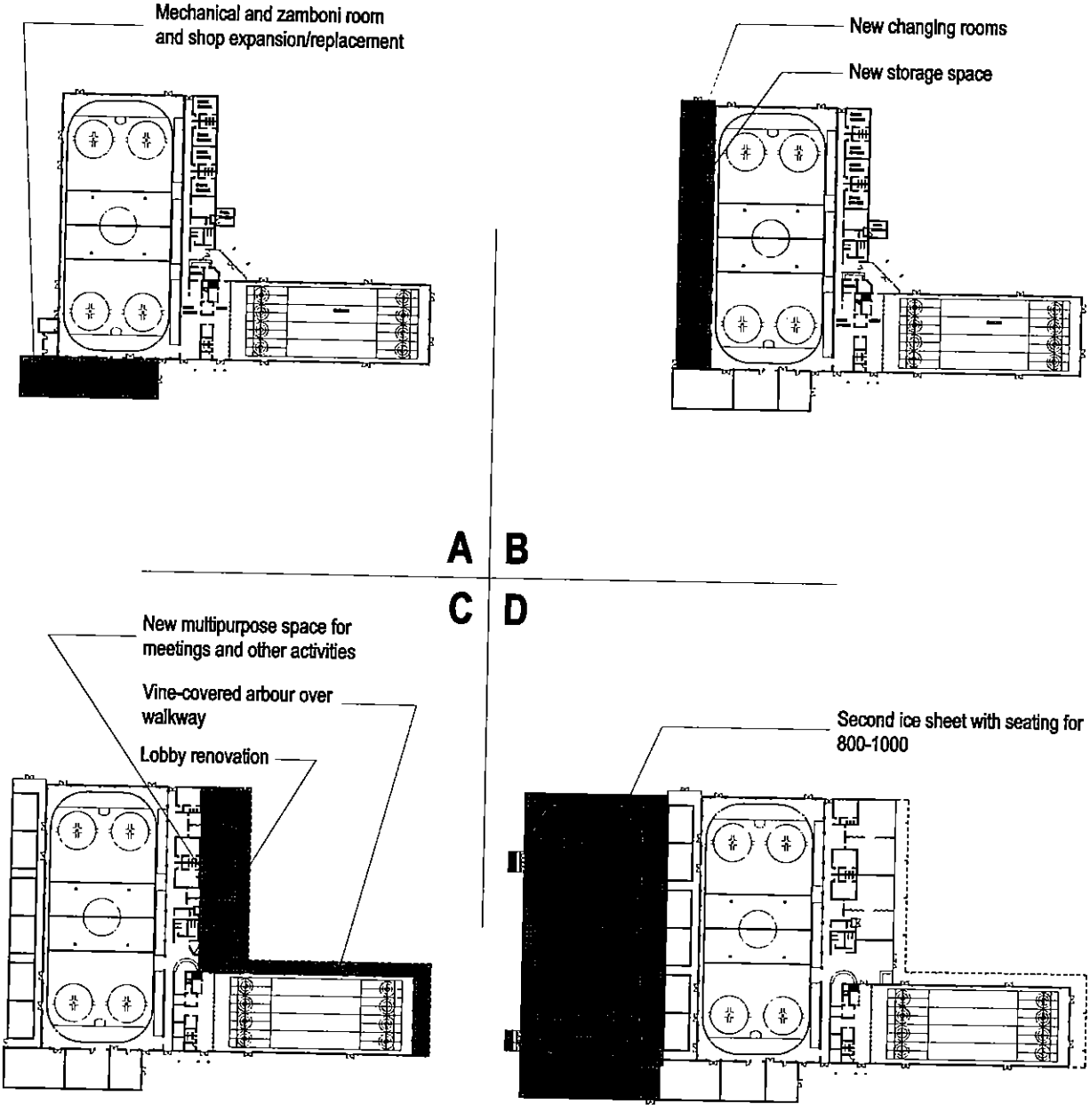
WINFIELD RECREATION CENTRE
district of lake country : parks and recreation

Phasing Diagrams

This first phase immediate needs have considered the potential of continuing growth and takes into account future additions to the facility that expand upon and compliment the current project.



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23 March 2006

APPENDIX D

WINFIELD RECREATION CENTRE - phase one
district of lake country

project budget - 1800 ft2

Rehabilitation Priorities and safety upgrades

This estimate is based on conceptual design drawings
The construction cost estimate is based on cost for square foot and comparable projects

	Area	Cost	Total Cost	*Remarks*
Construction Cost Summary				
New Construction	1800	$250	$450,000	
Demolition	1600	$100	$160,000	
Refrigeration Upgrades			$100,000	
sub total			$710,000	
General Requirements and Fee			$142,000	*20% is estimated*
Net Building Cost		#	**$852,000**	
Site Development				
Site Work			$0	
Ancillary Work				
General Requirements & Fee				
Net Construction Cost			**$0**	
Design Allowance (10%)			$85,200	*consider 8 - 10% contingency*
Construction Allowance (8%)			$68,160	
TOTAL CONSTRUCTION COST			**$1,005,360**	
Non-construction Costs				
Architectural Fees	*see note 5*		$100,500	*10% of total construction cost (7.25% to 12.5% range)*
Structural Fees	"		$14,400	*6.5% of 22% (structural) of net building cost*
Mechanical Fees	"		$14,400	*6.5% of 22% (mechanical) of net building cost*
Electrical Fees	"		$7,700	*7.5% or 12% (electrical) of net building cost*
Refrigeration Fees			$10,000	*estimated fee*
Specialty Consultants			$3,000	*est: geotech, surveyor, inspections, acoustics*
Professional Disbursements			$7,735	*estimate at 5% of total fees*
Building Permits, DCC			$15,100	*1.5% of construction cost is typical*
Legal Fees			$1,000	*estimate*
Furnishings and Equipment			$0	*owner to confirm*
Move in Costs			$0	
Off Site Services			$0	*water , sewer and power connections*
Inflation at 12% per year			$120,600	*12% is included in anticipation of construction spring 07*
Project Contingency			$10,100	*2% of construction cost (consider 2-3%)*
TOTAL NON-CONSTRUCTION COST			**$304,535**	
Payable GST		0.00%	$0	*on hard and soft costs*
Total Project Cost			**$1,309,895**	

NOTES:
1. *Estimated costs have been included for permits as indicated*
2. *The estimate includes payable GST, % to be confirmed*
3. *Contingencies have been included for design and construction phases*
4. *Contingencies have been included for project costs and inflation*
5. *Professional Fees based on Fee Guidelines for Engineering Services published by APEGBC, Tariff of Fees for Architectural Services, fourth edition published by AIBC market conditions will affect fees*

WINFIELD RECREATION CENTRE - phase one
district of lake country

project budget - 2500 ft2

Rehabilitation Priorities and safety upgrades

This estimate is based on conceptual design drawings
The construction cost estimate is based on cost for square foot and comparable projects

	Area	Cost	Total Cost	*Remarks*
Construction Cost Summary				
New Construction	2500	$250	$625,000	
Demolition	1600	$100	$160,000	
Refrigeration Upgrades			$100,000	
sub total			**$885,000**	
General Requirements and Fee			$177,000	*20% is estimated*
Net Building Cost		#	**$1,062,000**	
Site Development				
Site Work			$0	
Ancillary Work				
General Requirements & Fee				
Net Construction Cost			**$0**	
Design Allowance (10%)			$106,200	*consider 8 - 10% contingency*
Construction Allowance (8%)			$84,960	
TOTAL CONSTRUCTION COST			**$1,253,160**	
Non-construction Costs				
Architectural Fees	*see note 5*		$125,300	*10% of total construction cost (7.25% to 12.5% range)*
Structural Fees	"		$17,900	*6.5% of 22% (structural) of net building cost*
Mechanical Fees	"		$17,900	*6.5% of 22% (mechanical) of net building cost*
Electrical Fees	"		$9,600	*7.5% or 12% (electrical) of net building cost*
Refrigeration Fees			$10,000	*estimated fee*
Specialty Consultants			$3,000	*est: geotech, surveyor, inspections, acoustics*
Professional Disbursements			$9,515	*estimate at 5% of total fees*
Building Permits, DCC			$18,800	*1.5% of construction cost is typical*
Legal Fees			$1,000	*estimate*
Furnishings and Equipment			$0	*owner to confirm*
Move in Costs			$0	
Off Site Services			$0	*water , sewer and power connections*
Inflation at 12% per year			$150,400	*12% is included in anticipation of construction spring 07*
Project Contingency			$12,500	*2% of construction cost (consider 2-3%)*
TOTAL NON-CONSTRUCTION COST			**$375,915**	
Payable GST		0.00%	$0	*on hard and soft costs*
Total Project Cost			**$1,629,075**	

NOTES:
1. *Estimated costs have been included for permits as indicated*
2. *The estimate includes payable GST, % to be confirmed*
3. *Contingencies have been included for design and construction phases*
4. *Contingencies have been included for project costs and inflation*
5. *Professional Fees based on Fee Guidelines for Engineering Services published by APEGBC, Tariff of Fees for Architectural Services, fourth edition published by AIBC market conditions will affect fees*

APPENDIX E

Life Cycle Cost Analysis

Winfield Arena

% of Total Replacement Cost	Replacement Value		Comments	% Remaining	Remaining Life	Life Expectancy	Value remaining
		ARCHITECTURAL					
11%	$1,407,450	Exterior walls	Good Condition	75%	53	75	$1,055,588
3%	$383,850	Windows	Adequate Condition	50%	20	40	$191,925
1%	$127,950	Doors	Requires Replacement	0%	0	35	$0
6%	$767,700	Roofs	Requires Replacement	0%	0	20	$0
5%	$639,750	Concrete Interior Partitions	Good Condition	75%	38	50	$479,813
3%	$383,850	Stairs and Guards	Good Condition	75%	30	40	$287,888
1%	$127,950	Flooring	Adequate Condition	50%	10	20	$63,975
2%	$255,900	Dasher Boards	Requires Replacement	0%	0	40	$0
2%	$255,900	Seats/Bleachers	Adequate Condition	50%	15	30	$127,950
3%	$383,850	Partitions and Accessories	Adequate Condition	50%	13	25	$191,925
3%	$383,850	Finishes	Adequate Condition	50%	13	25	$191,925
40%	**$5,118,000**	**Sub Total**					**$2,590,988**
		STRUCTURE					
8%	$1,023,600	Concrete foundations	Good Condition	75%	53	75	$767,700
4%	$511,800	Concrete slab-on grade	Good Condition	75%	38	50	$383,850
8%	$1,023,600	Superstrucutre	Good Condition	75%	38	50	$767,700
20%	**$2,559,000**	**Sub Total**					**$1,919,250**
		MECHANICAL					
7%	$895,650	HVAC	Adequate Condition	50%	10	20	$447,825
6%	$767,700	Dehumidifcation	Adequate Condition	50%	10	20	$383,850
3%	$383,850	Plumbing	Poor Condition	25%	6	25	$95,963
3%	$383,850	Sprinkler	Sprinkler Required	0%	0	25	$0
19%	**$2,431,050**	**Sub Total**					**$927,638**
		ELECTRICAL					
4%	$511,800	Distribution	Adequate Condition	50%	13	25	$255,900
3%	$383,850	Lighting	Adequate Condition	50%	10	20	$191,925
1%	$127,950	Emergency Lighting	Adequate Condition	50%	10	20	$63,975
1%	$127,950	Fire Alarm	Poor Condition	25%	4	15	$31,988
1%	$127,950	Security	Adequate Condition	50%	8	15	$63,975
10%	**$1,279,500**	**Sub Total**					**$607,763**
		REFRIGERATION					
4%	$511,800	Refrigerated Ice Slab	Adequate Condition	50%	13	25	$255,900
7%	$895,650	Refrigeration Mechanical	Poor Condition	25%	5	20	$223,913
11%	**$1,407,450**	**Sub Total**					**$479,813**
100%	**$12,795,000**	Replacement Value = 42,650 square feet x $300/sf					**$6,525,450** Value remaining
							51%