

4. QEII ICE STADIUM TRUST

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The purpose of this report is to advise the Community and Leisure Committee on recent developments associated with the establishment of an ice sports facility at QEII Park.

In September 1998, the Parks and Recreation Committee confirmed the following recommendations, subsequently supported by the full Council:

1. That the Council support, in principle, the proposal for the establishment of an Ice Sports Centre at QEII Park.
2. That the QEII Park Manager further develop the concept, with the interested parties, and report back providing a detailed proposal for consideration at a future Parks and Recreation Committee meeting."

A number of developments have taken place since:

1. The QEII Pools Redevelopment Project was completed in 2002. The new aquatic facilities were designed in anticipation that the addition of an ice sports facility might one day become a reality. Mechanical layout is such that both pools and ice would benefit through shared energy efficiencies.
2. Demand remains for an additional ice sports facility in Christchurch. Recent facility needs research confined to Christchurch, gave medium priority to the addition of another ice sports facility.
3. New ice sports facilities have been built in Auckland (a second rink for that city), and Gore. Dunedin is expected to have new facility in operation before the end of 2004.
4. The QEII Ice Stadium Trust was formed following several meetings of a steering committee interested in developing an International Olympic-sized Ice Stadium. Respective ice sports are well represented by experience and committed individuals.

In the process to develop a strategy for major recreation and sports facility needs recently, the need for additional covered ice space was received from a number of sports. A cluster group meeting was held at which it was identified that the various groups were already working together in a co-operative manner to examine the feasibility of an additional ice rink. In 2001 the combined membership of the ice sports groups was 526. All the groups identified an inability to accommodate greater numbers due to limited time available on the ice and in some cases the unsocial (early and late) hours at which they could gain access to the ice. When assessed against the criteria in the Strategy the ice sports needs fell in the medium band. The final stage of the Strategy in which the Council will identify the role (if any) it will play in meeting the facility needs identified, is yet to be completed.

The QEII Ice Stadium Trust subsequently commissioned a feasibility study, which was completed by Ross Maguire Architects Ltd, with additional information and statistics supplied by SGL Consulting Group, in May 2003.

The study looked at existing facilities and their operation, both in New Zealand and overseas. Demand and community need, potential users, social and economic benefits, impact on the community, ice rink design and proposed control and management were addressed in the study. Information on ice facility development trends, compliance, cost planning and income projections were also presented, as were proposed plans and elevations for the addition.

The feasibility study found that *"... the present Alpine Ice Sports Centre rink is comfortable with its monopoly in Christchurch and the level of patronage it currently receives. The management is unlikely to make an investment in providing additional ice space. There is no doubt that the ice sports require additional ice space for training and a new facility for international competition. All ice sports have indicated support for a new international rink and have provided this in writing. The Christchurch City Council supported the preparation of a feasibility study for the construction of an ice stadium at QEII Park.*

A preliminary design which includes the ultimate in ice making technology, accommodation for ice sports, club and public facilities, seating and provision for future expansion has been prepared. The preliminary assessment of costs for this design is 8 million dollars and exceeds the budget figure anticipated by the QEII Ice Stadium Trust. However research undertaken in preparation of this report gives strong indication that a second ice stadium is required in Christchurch and the stadium if sited at QEII will be well patronized by both the sports and the public.

The redevelopment of the QEII pools has had a dramatic effect on the number of patrons visiting the complex. The QEII site is developing into one of the more important sports training centres in New Zealand. The Ice Stadium Trust see this as an opportunity to take advantage of the popularity of the destination as a sports training centre, and the captive QEII patron who will have a wider choice for the discretionary spend.

The report concludes that the Ice Stadium should proceed, preferably at QEII."

New Zealand currently has five covered ice rinks; Auckland (2), Christchurch, Queenstown and Gore with a rink in Dunedin imminent. Plant assisted outdoor rinks exist in Tekapo, Alexandra and Naseby. None of these rinks are of Olympic dimensions.

Australia by comparison has 24 indoor rinks (nine of Olympic dimensions). The study states "there are a number of new ice skating facilities under development consideration in New South Wales, Queenstown and Victoria". These include rinks at Homebush, Liverpool, Castle Hill, Caboolture and Docklands.

The QEII Ice Stadium Trust propose "... that the new ice stadium will be an Olympic sized ice arena with the latest technology in ice skating and stadium design. Seating for approximately 1,000 spectators will be included and the seated area will be heated from the heat recovery system included in the ice making process.

The building envelope will be designed to compliment the new swimming pool development recently completed at QEII. Steel portal frames will support a simple pitched roof of composite insulating steel clad panels. The same steel clad insulating panels will clad the walls. The internal design will include the entry queuing space and the ticket office with the pro shop and café available internally. Seating and first floor spaces will be constructed over the changing rooms and various amenities on the ground floor.

A low emissivity ceiling will be installed to minimise ice surface melt which will have a significant impact on the amount of energy required to maintain the quality and temperature of the ice surface. Desiccant dehumidifiers will be installed to eliminate dripping and fogging as well as reducing latent heat load on the ice plant.

The ice sheet will be formed over a concrete slab with the cooling pipework encased in the concrete. The underside of the slab will be insulated with a compacted sand layer below containing heated water pipes to prevent permafrost forming under the slab. Avoiding permafrost will provide major energy savings. The heat for this underfloor heating will be recovered from the ice making process.

The ice making will consist of a twin compressor ammonia refrigerant system cooling brine circulating in a concrete slab beneath the ice surface. Space will be made in the plant room for a third compressor for future development. A condensing tower will cool the ammonia and the heat taken at this point will be used for heating the seated area, showers and the ice melting pit."

Revenue projections have been prepared using competitive entry charge, skate hire and rink hire rates. The study indicates an excess of income over expenditure of more than \$550,000 before interest and capital repayments. The Trust will seek to lease land off the Council and negotiate a site rental for the Ice Stadium. Car parking required by the consent process has been allowed for in capital projections.

The Leisure Unit is excited by the potential for this development. The design and location of the Ice Stadium comply with any expectations that the Council might have and that QEII Park, Christchurch and our community is all the better for this proposal. Our recommendation is that the Leisure Manager work closely with the QEII Ice Sports Trust in its endeavours to make this project a reality.

NATURAL + PEOPLE + ECONOMIC STEP ASSESSMENT

#	CONDITION:	Meets condition ✓✓0*	HOW IT HELPS MEET CONDITION:
The Natural Step			
N1	Reduce non-renewable resource use	0	The proposed facility will undoubtedly use power from one source or another. However, the proposed site adjacent to the QEII swimming pools should enable heat exchange between the tow areas to be explored.
N2	Eliminate emission of harmful substances	*	Inevitably the new facility will create some harmful waste substances in to the air. Potentially the heat exchange arrangements could help reduce the generation of polluting emissions. Utilisation of up to date plant and technology should also help to minimise the emission of harmful substances.
N3	Protect and restore biodiversity & ecosystems	0	
N4	People needs met fairly and efficiently	NA	NA - See People Step + Economic Step
The People Step			
P1	Basic needs met	0	NA
P2	Full potential developed	✓✓	The proposed ice stadium aims to increase participation amongst Christchurch people in ice sports. Capacity is currently a constraint on participation. Increased participation will potentially improve health, assist in human development and provide opportunities for people to develop their potential. Satisfying leisure activity is strongly correlated with perceptions of quality of life.
P3	Social capital enhanced	✓✓	Participation in ice sports, either through organised clubs or casually, provides opportunities for people to come together informally and engage with one another outside of work and home. The increased activity provides opportunities for people to develop relationships and build understanding and trust.
P4	Culture and identity protected	✓	The proposed ice stadium facility may provide some limited opportunities for spectators to attend ice sports competitions and support local teams/competitors. This sort of activity assists in developing local identity and pride.
P5	Governance and participatory democracy strengthened	✓	The ice sports organisations are voluntary organisations in which local people come together to meet their own needs. Similar to other recreation and sports activities, ice sports can be the vehicle to develop community leaders who later may become involved in a wider range of issues, local politics etc.
The Economic Step			
E1	Effective and efficient use of all resources	0	It is unclear what assistance the Council may be asked to contribute. Once this becomes clearer some form of cost:benefit analysis could be carried out.
E2	Job rich local economy	✓	The proposed ice stadium has some potential to generate income and jobs through the hosting of competition/events. Potentially it could become the only or one of very few Olympic sized facilities in New Zealand and consequently be in a good position to attract events.
E3	Financial sustainability	?	The financial sustainability of the facility is one of the areas for further work to be carried out on. It is unclear what assistance the Council may be asked to contribute nor the ice sports' ability to operate the facility in a sustainable manner.

Staff

- Recommendation:**
1. That the Council confirm that it is willing to provide land adjacent to QEII for an ice sport stadium as proposed by QEII Ice Stadium Trust.
 2. That the Leisure Manager assist the QEII Ice Stadium Trust and report to the Council on finalised details.

Chairman's

Recommendation: That the above recommendation be adopted.