
TO: CITY MANAGER **DATE:** 2008 October 27

FROM: MAJOR CIVIC BUILDING PROJECTS
COORDINATION COMMITTEE

SUBJECT: EASTBURN POOL AND COMMUNITY CENTRE FEASIBILITY STUDY

PURPOSE: To report the findings of the Eastburn Pool and Community Centre Feasibility Study and to obtain Council approval to retain the services of an architectural consultant to undertake the detailed design of the proposed Centre.

RECOMMENDATION:

1. **THAT** staff be authorized to prepare Terms of Reference for the issuance of a Request for Proposal (RFP) to retain the services of an architectural consultant to undertake the detailed design of the Eastburn Pool and Community Centre project.

REPORT

1.0 BACKGROUND:

The aging Eastburn Community Centre, the changing demographics and growth in the Southeast Quadrant (Edmonds area) and the current and growing shortfall in the amount of capacity in Burnaby public pools, led to an RFP in early 2007 to explore the potential of a swimming pool and expanded community centre at the Eastburn site at Edmonds Street and Humphries Avenue. (*See Figure 1*)

The Eastburn Swimming Pool and Community Centre Feasibility Study, investigates and addresses important questions and issues about the future of the Eastburn site. It takes into consideration an expanded community and aquatics centre at Eastburn and how the new facility would relate to its context; Richmond Park, Edmonds Street, the surrounding neighbourhood, along with the cost of planning and construction of the proposed facility.

The project led by Hotson Bakker Boniface Haden Architects, working with a team of sub-consultants, and City staff undertook a series of comprehensive workshops to discuss key issues in the project such as:

- the integration with Richmond Park;
- site context;
- programming opportunities;
- landscape opportunities;
- architecture opportunities;
- transportation;
- mechanical engineering;

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- electrical engineering;
- structural engineering; and,
- establishing goals for the facility.

The discussions also focused on potential opportunities for sustainable design in terms of passive and active design, energy recovery and on-site renewable energy options and opportunities.

2.0 PROJECT OBJECTIVES:

The outcome of the integrated work was the generation of a number of key objectives. It was agreed that a building design that addresses the following objectives was the fundamental goal of the process.

The design elements and considerations must produce a building facility that:

- becomes the heart of an Edmonds Village by being open, welcoming and tied to community needs.
- is durable and easy to maintain and will last for 50 years.
- is flexible when built and accommodates future needs with minimal structural interventions.
- is functionally and conceptually integrated with the park and enhances the opportunity for the park to become a more effective urban park for the Edmonds neighbourhood, and impinges on the park green spaces as little as possible.
- has options with respect to core program space and add-ons to allow flexibility in terms of project scope/cost, phasing and possible site expansion.
- is a landmark and also contains a memorable orientation/entry space.
- relates strongly to Edmonds Street and reinforces the street's role as a pedestrian scaled community and retail street.
- makes effective use of indoor/outdoor links, in particular outdoor covered spaces.
- meets LEED Silver or better overall environmental performance. LEED Gold would be preferred if feasible and affordable.
- uses proven technologies and passive building design to minimize energy use, energy cost and target specific overall energy usage level below comparable Burnaby Facilities (exact number to be determined).
- provides a payback in terms of capital cost/energy cost savings of green technologies of an average of seven years and a maximum of ten years.
- maximizes transportation access alternatives while minimizing private vehicle use.
- minimizes staffing costs while maximizing access and security.
- makes effective use of CPTED principles to create indoor and outdoor spaces which are safe and feel safe.
- minimizes the negative impact on the neighbourhood while maximizing the positive impact.

3.0 COMMUNITY AND PUBLIC INPUT:

As part of developing the overall building program, surveys were distributed to households within the Southeast Quadrant of Burnaby to assess current and future recreational needs and use of the Eastburn Community Centre. In total, 328 responses were received. Of these, about 35% were provided by households where English is not the primary language spoken, indicating that responses came from a diverse group of respondents consistent with the diversity in the neighbourhood.

The community survey provided a broad perspective on appropriate future uses for the community centre. The program was also informed by interviews with the following stakeholders:

- Eastburn Community Centre users
- Edmonds Town Centre Business and Community Association
- Fraser Health Authority
- Burnaby Social Services
- Edmonds Community School
- Burnaby RCMP
- Aquatic Organizations – Burnaby Caprice Synchro, Hayack Swim Club, Burnaby Mountain Mantas Summer Swim Club, Vancouver Underwater Hockey
- Edmonds Senior Centre Members
- Eastburn/Edmonds Staff

In summary, the survey indicated a high level of interest in aquatic and particularly in leisure aquatic activities (swimming, sauna, steam, hot tub). A weight-room / fitness facility was widely identified as being an important component of a community centre as were gymnasiums, senior's areas, and active-use spaces (dance studio, aerobics room, etc.).

4.0 THE PROGRAM

Creating the program was a critical first step in determining the kind of facility that will be appropriate for the site as it will determine the sizes, uses and their relationship.

To be certain that the facility's program meets the community needs, a public open house was held in December 2007. The open house at the Eastburn Community Centre presented a preliminary program to the community and asked for confirmation that the proposed program accurately reflected the community's expectations. Generally, feedback was very positive and affirmed the program. There was particular enthusiasm for the "play" aspects of the natatorium (water slide, lazy river, hot tubs, saunas, steamrooms), multi-purpose activity rooms that are conducive to a variety of uses (such as yoga, martial arts, aerobics), and the gymn space. The program was finalized following the open house, providing the project team with the necessary information to proceed to conceptual design work and technical analysis.

The current building program totals 88,500 sq. ft. (8,220 m²) on two levels with one level of under-building parking.

Major elements of the program include:

- The natatorium and change rooms: this area includes the main swimming pool of six 25-meter lanes, a free-formed leisure pool, whirlpools, a water slide, change rooms, deck space, a sauna, and a steam room.
- Multi-purpose space: including art studios, activity rooms, preschool uses, senior and youth lounges, games rooms and meeting rooms.
- Gymnasiums: two gymnasiums enclosed in a rectangular, clear-span, large volume area.
- The weight room: a weight room primarily for individual workouts, but also able to accommodate some group activities.
- Administrative and support spaces: Circulation spaces, administration functions, and mechanical spaces are also identified.

It should be noted the final program element sizes to meet the needs of the Community can only be determined through the detailed design process and it is anticipated that the final facility size will be in the range of 85,000 sq. ft. to 95,000 sq. ft.

5.0 PROPOSED SITE:

Concurrent with the public consultation work, the project team conducted a high level analysis of the site. This background work was a first step in developing a concept plan for a community centre that is well designed and well-integrated with the neighbourhood.

The Eastburn Community Centre is located on the corner of Edmonds Street and Humphries Avenue in the Southeast Quadrant of Burnaby. Edmonds Street is envisioned as a retail oriented, neighbourhood Main Street for the Edmonds Village. This particular stretch of Edmonds street is currently comprised primarily of retail uses, though it also includes some cultural and community anchors.

In 2003, the “Edmonds Village Urban Design Review” suggested approaches to improving the overall design and character of Edmonds Village for the benefit of the community through land-use planning and street design. This study argued that Edmonds Street was secondary to the more major arterial of Kingsway, but that it nevertheless was an important community oriented street providing everyday services to the local neighbourhood.

A new Eastburn Swimming Pool and Community Centre represents an opportunity to make a positive contribution to the streetscape of Edmonds Street. The Eastburn opportunity includes a strong street relationship defined by active street-side uses, extensive glazing, and an intimate public plaza or passage is proposed. There is an opportunity for a strong architectural element along Edmonds Street, but additional consideration should be given to creating continuity and enclosure along the street edge.

6.0 TRAFFIC AND PARKING:

As part of the study, traffic patterns and flows were analyzed to best understand the impact that a new facility will have in the neighbourhood. The analysis indicates that a wide array of transit services, shopping and recreational opportunities are located within a reasonable distance to the centre and the surrounding residential community. Consequently it is anticipated that a new Eastburn Pool and Community Centre has the potential to attract a significant portion of walking trips and transit and walking combined trips.

As a land use, the proposed facility also has a relatively high potential to have a good mode split to cycling, given its user types, provided that proper bicycle end of trip facilities are included in the building program and design.

Another key issue in determining the feasibility of such a facility relates to parking and its impact on the site. After establishing the program for the centre the consulting team evaluated the potential number of users, the times they would attend and the associated parking demand.

Based on existing Zoning Bylaw requirements, the proposed facility would require approximately 184 parking spaces to address this need. The preferred building concept would accommodate approximately 115 parking spaces under the building, an additional 69 spaces would be developed on Humphries Avenue, and approximately 15 to 20 spaces would be added surface stalls and would be linked to the existing 48 parking spaces in Richmond Park accessed via Fulton Avenue. The current concept design provides for 200 new spaces and retains the existing 48 parking spaces in Richmond Park.

Consideration will be given during the detailed design process to daylight a considerable portion of the under building parking and incorporate lighting and security features that improve safety for the users of the facility.

7.0 PREFERRED BUILDING OPTION

The conceptual design exercise undertaken by the project team, combined public input, site analysis work, sustainable design strategies, and careful consideration of practical issues such as parking, servicing, and infrastructure. (See Figure 1) The preferred option is not a finished design, but it does successfully address several fundamental issues related to the future facility. The option also demonstrates that a swimming pool and upgraded community centre at this site offers exciting possibilities to enhance the streetscape of Edmonds Street as well as to establish a strong relationship with Richmond Park, a key urban design objective of the facility design.

The program has lent itself well to providing dynamic and positive building facade-weight rooms, swimming pools, and other frequently used spaces with windows to the street or park to create a sense of activity within these public spaces. The site analysis identified that, currently Edmonds Street lacks definition and animation with many street-front properties setback from the street to accommodate surface parking. This detracts from the pedestrian environment along Edmonds and is generally contrary to good street design.

Facility users also benefit from a strong relationship with adjacent spaces, with natural light contributing to the interior comfort of the building. A unique opportunity that exists at the Eastburn site is to integrate the facility with the park, thereby enhancing the quality of both public spaces. Conceptually, this may be achieved through shared courtyard or patio spaces that serve as a transition space between activities within the facility and activities within the park.

The project team, including Burnaby Parks Recreation and Cultural Services staff, undertook preliminary design exercises for Richmond Park to more fully understand the potential relationship between the park and the proposed facility. However, it is important to note that designs were only developed to a preliminary stage and considered as a possible park framework. Burnaby Parks staff is preparing a more detailed park redesign separate from this study, which will be subject to a public consultation and review process.

The holistic solution to a good building layout, a strong street relationship, a linkage to Richmond Park from Edmonds Street, a welcoming public atrium / lobby, and a distinctive civic landmark for the community is articulated by the diagonal atrium in the concept design. However, this solution lends itself well to more than just urban design considerations. The orientation of the lobby space along an east-west axis contributes positively to the passive sustainable design strategies of the building.

As part of a high-level analysis of the preferred option, various mechanical systems were explored to determine the most suitable approach for this facility. Objectives included achieving a high level of energy performance without creating undue maintenance complications or detracting from the long-term durability of the facility.

In terms of passive design strategies, the diagonal atrium space was identified as being particularly conducive to sustainable design strategies. The combination of the northwest / southeast orientation and double-height (two-storeys) space facilitates natural ventilation. Another advantage is that the resulting roof line is ideally oriented for solar collectors.

Following an analysis of a variety of mechanical options for the proposed facility, it was determined that a radiant system would prove most effective. This system may be used either with or without renewable energy sources. It is estimated that up to 2/3 of the building's energy; however, may be accommodated through a combination of solar and geothermal energy. The radiant system has particular advantages in the pool area; where less evaporation from the tank will occur, thereby reducing the burden of dehumidifying this area.

The payback period for alternate systems are reasonable and further study and analysis will be undertaken during the detailed design phase to determine how they might be incorporated in the project.

8.0 CONCLUSION:

Over the last year Hotson Bakker Boniface Haden Architects working with community groups and staff have completed the Eastburn Pool and Community Centre Feasibility Study.

The study is very comprehensive in nature and addresses community needs and objectives, building programming, parking requirements, the relationship of the proposed centre with Edmonds Street and Richmond Park, and the use of alternate energy sources and sustainability measures.

The preliminary costs developed for the project in 2008 dollars indicate that the preferred option with under-building parking and alternate energy sources is estimated to cost in the range of \$46.0 million. In addition to base construction estimates, a further \$6.7 million escalation allowance is estimated based on a 2010 construction start. The escalation value may be adjusted downward depending on prices in the construction market when the project is tendered.

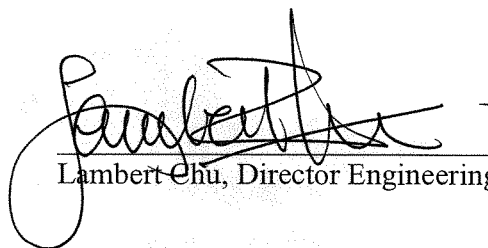
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In order to advance the project to the detailed design phase, staff, with the concurrence of Council will prepare Terms of Reference and issue a Request for Proposal (RFP) via the City's Purchasing Department to retain the services of an architectural consultant.

Upon receiving the proposals, staff will evaluate the submissions, conduct interviews and report back through the Finance and Civic Development Committee with the findings and recommendations. At that stage, funding to undertake the detailed design will also be addressed through a separate report to Council.



Basil Luksun, Chair, Major Civic Building
Project Coordination Committee



Lambert Chu, Director Engineering



Dave Ellenwood, Director Parks, Recreation
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Attachment-Figure 1

cc: Deputy City Manager Director Finance
Fire Chief Chief Building Inspector
City Clerk Purchasing Manager
Chief Librarian

