



# STAFF REPORT

<b>REPORT #:</b>	EMC 2012-01
<b>DATE:</b>	August 27, 2012
<b>SUBMITTED TO:</b>	Mayor & Members of Council
<b>SUBMITTED BY:</b>	Executive Management Committee Marta Proctor, Director of Parks, Recreation and Culture Dave McNalty, Manager Fleet, Facilities and Purchasing
<b>SUBJECT:</b>	Centennial Pool and Single Pad Arena Options

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## 1. RECOMMENDATION:

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**THAT** Council receive staff report EMC 2012-01 for information, and  
**FURTHER THAT** .

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## 2. SUMMARY AND BACKGROUND:

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On July 16, 2012 Council passed Resolution No. 330 directing staff to,

*Pursue the following recommended options, and develop a project timeline and detailed estimates; and bring the report back to Council not later than August 27, 2012:*

1. *Construct a Single Pad Arena that could be phased into a double pad*
8. *Enclose the Outdoor Pool with a Fabric Building.*

The decision made this evening will have a major impact on the future of three important recreational assets: Heritage Park, Central Park and the Eddie Bush Memorial Arena (EBMA) and, in fact, will set the stage for future development of recreational facilities in the Town of Collingwood. It will define the direction Council has determined will best meet the aquatic and ice needs of the citizens of today and for the next 20 years while balancing the costs of providing these facilities and services with the costs of providing mandated services such as roads and wastewater treatment in a manner that is affordable for all.

There is no doubt in the individual and collective minds of Council that recreation facilities and opportunities are an integral component in building a strong, vibrant, healthy community that has pride of place. It is also foremost in their minds that the community must be financially sustainable and fiscally responsible in the turbulent economic times we face today.

This report summarizes our findings for Council discussion.

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### 3. DISCUSSION:

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#### Summary:

In preparing this report staff emphasis was on meeting the aquatic and ice needs identified in the Central Park Steering Committees Final Report while preserving other recreational facilities that, at this point, we cannot displace. There are neither the funds nor the available land to relocate the Lawn Bowling Club or all of the ball diamonds.

Estimated Capital Cost Requirements:

	Minimum		Maximum
<b>Centennial Pool</b>	\$3,856,975	To	\$4,390,900
<b>EBMA</b>	\$2,143,480	To	\$3,123,480
<b>Central Park</b>	\$9,234,035	To	\$11,741,125
<b>Central Park Site Works</b>	<u>\$1,000,000</u>	To	<u>\$1,000,000</u>
	<u>\$16,234,490</u>	To	<u>\$20,255,505</u>

#### **Enclose the Outdoor Pool with a Fabric Building**

In researching this option staff developed the following specifications, again, in part, drawing from the Central Park Steering Committee report and work. These specifications, if Council chooses to proceed with this project, will form the basis of the RFP that will be issued to obtain final design and costings. Improvements around the facility would be limited to drainage and grading, landscaping and parking lot improvements at this time. No other Heritage Park amenities would be displaced in order to enclose the existing Centennial Pool facility.

Council should be aware that there are a limited number of suppliers for this type of constructed building that would allow for year round use. It is possible to relocate or

repurpose the Insulated Fabric Membrane structure to another location in the future, if so desired..

The basic **Design Components** will include:

- Insulated pool enclosure with daylighting roof panels with dimensions of 120ft by 140ft.
- Eight (8) operable insulated doors to allow for an open environment in favourable weather.
- Interior spectator seating for 250 preferably on the east side.
- New mechanical room with additional space and upgraded servicing.
- Chemical storage room with direct exterior access and suitable containment.
- Male, female and family change rooms with accessible washrooms and lockers.
- Pool entry facilities (showers, etc.)
- Complete accessibility to the pool for disabled persons including a portable lift.
- Lobby and customer service area.
- Separate staff locker/lunch room.
- Manager's office.
- Swim team office.
- Janitorial closets, pool equipment room and storage room.
- Sanitary design and room finishes.
- Complete sound, telephone and communications system serving all areas of the facility.
- Fire alarm system.
- HVAC systems throughout.
- Energy efficient lighting and electrical fixtures including occupancy controlled switching.
- Efficient non-touch plumbing fixtures and components.

Additional options that will be considered are:

- Potential mezzanine over the main floor amenities for storage/offices/HVAC equipment.
- Vending machine area at the main exit.

**Staff estimates for this project:**

Capital cost requirements:

Basic Design as specified above	\$3,225,700
Options as specified above	<u>\$ 508,500</u>
Total if options as included	<u><u>\$3,734,200</u></u>
Site Works:	
Parking, storm and sanitary sewer, water, electrical	\$ 400,000

**Soft Costs:**

Permits, fees, design costs	\$ 50,000
Contingency (5%) – Basic Design	\$ 181,275
Contingency (5%) – Options	\$ 25,425

Total costs would be estimated at a minimum of \$3,856,975 and maximum of \$4,390,900.

The Insulated Fabric Membrane structure researched for this report would be provided as a turnkey solution for covering the existing outdoor pool. The cost includes the demolition of the existing pool change house and mechanical room and reconstruction of a more modern facility within the new structure.

A significant advantage to this approach is that the complete design and engineering works are included in the cost of the project and are fully quantified at the time of order. This allows the project to carry a minimal contingency and a relatively small allowance for permits and fees. Additionally, the proposal may be limited to the supply and construction of the Insulated Fabric Membrane structure and the interior components allowing the Town to contract the remaining site works independently.

**Operating Costs:**

Council is aware that operating a year round pool facility will increase operational costs. Estimates have been derived based on the average five year historical net departmental results from the Centennial Pool operation. During the period 2007 to 2011, the total net departmental cost to the run the pool was \$337,600 or, on average, \$67,520 per three month season. Extrapolating this average to a twelve month period would result in additional annual operating costs of approximately \$270,000.

**Timeline:**

It is conceivable that this type of building could be constructed and up and running by mid December depending on permits, approvals, weather conditions and staffing ability.

**Other Considerations:**

We could find no other pools of this construction in Ontario. There are, however, many in the U.S., and other areas of the world. That being said, there are many advantages to becoming an early adopter or trendsetter for new concepts and technologies. The relationship with customer and vendor is synergistic. The customer is exposed to the problems, risks and annoyances of “being first” and is usually rewarded with especially attentive vendor assistance or support, preferential pricing, and favourable terms and conditions. The vendor benefits from receiving revenues, the customers’ endorsement and assistance in further developing the product or its marketing program.

Collingwood has always exhibited a willingness to think outside the box and use innovative problem solving to meet the community needs. The Zenon membrane system for water

treatment, our LEED Gold Library with geo-thermal heating and green roof and, most recently, our partnership with PowerStream are examples of our leadership and willingness to look for the non-conventional solution.

The materials used in the construction of the researched Insulated Fabric Membrane structure are an extruded aluminum framing system with an exterior and interior membrane. This membrane encloses R-30 encapsulated insulation developed specifically for harsh environments. The aluminum structure will not corrode and the type of insulation recommended is reported to resist moisture and eventual microbial growth that may be prevalent in an indoor pool environment.

The exterior membrane is made from DuPont™ Tedlar® polyvinyl fluoride (PVF) film. This product is widely used in the aircraft industry to protect the interior surfaces and photovoltaic solar energy as the backing sheet for photovoltaic modules. The reasons these industries adopted the technology: maximum design flexibility; lightweight; easy to clean; scuff-resistant, conformability; matchability; durability; weather resistance; UV resistance; moisture barrier properties.

Council has adopted a Public Art policy with the new fire hall being the pilot project. The exterior membrane cover researched lends itself quite readily to the addition of exterior public art. The estimated cost to include, for instance, a wave motif on the outside is in the \$30,000 to \$50,000 range.

The building, as priced, represents a turnkey operation. The main consideration here is that we do not have experience in operating a pool of this size as a year round facility. We may find that it is more economical and efficient for the taxpayer if we were to partner with the Y in some manner for operation of the facility.

The current hard ball diamond may require a net be placed on the field facing the pool building. This not a material element but Council should be aware that this most likely be required.

There may be some planning issues that will need to be resolved. Set backs/height restrictions to be flushed out.

**Construct a new Single Pad Arena that could be phased into a double pad**

This option is, somewhat, more involved. There were two types of construction to investigate; certain costs will be incurred no matter which type of building is constructed, if Council chooses to direct staff to pursue this project; certain costs may be incurred depending on where Council decides to locate an arena on the Central Park site. Again, the following specifications, if Council chooses to proceed with this project, will form the basis of the RFP that will be issued to obtain final design and costing no matter which type of construction is considered. The components, as outlined, are necessary to have this

building function as the year round arena while retaining the ball diamonds and the outdoor rink.

Council, staff and the public should be aware of the fact that the construction of a single pad arena at Central Park does not renege on the acceptance in principle of the Central Park grand vision nor does it negate in any way the work of the Steering Committee. It is a prudent first step, an affordable phase 1 of the grand vision.

The basic **Design Components** will include:

- Full size 85ft by 200ft ice surface complete with premium dasher boards and glass all around.
- Glass will be 5-½ft with aluminum rail.
- Dropdown centre style score board.
- Six (6) player dressing rooms facing directly to the ice surface (including showers, toilets and sinks) each with dimensions of 12ft by 20ft.
- Two (2) referee rooms (male/female) each capable of accommodating a minimum of eight (8) referees and complete with showers, toilet, sinks, etc.
- First Aid room complete with shower, toilet, sink etc.
- Minimum of 250 spectator seats with overhead radiant heating (potential for coin operated heating with an override switch).
- Ice resurfacers room and mechanical and electrical rooms suitable for an Olympia style ice resurfacers.
- Large service door with direct access to the ice surface.
- Dual purpose meeting/party/music/media room with an ice view.
- Digital entry notice board.
- Ice level warm viewing area/lobby.
- Resilient flooring for all ice level areas.
- Manager's office.
- Staff locker/lunch room to accommodate six (6) staff on the main level.
- Separate offices for Minor Hockey and Figure Skating
- First floor vending area.
- Pro Shop approximately 12ft by 20ft.
- Main floor accessible/family washrooms.
- Janitorial closets, storage rooms.
- Complete sound, telephone and communication systems serving all areas of the facility.
- Fire alarm system and building sprinklers.
- HVAC system for entire facility (capable of handling a second floor mezzanine).
- Energy efficient lighting and electrical equipment including occupancy controlled switching.
- Efficient non-touch plumbing fixtures and components.
- Second floor mezzanine.

- Elevator to second floor.
- Second floor lounge area.
- Second floor kitchen and bar service room.

**Staff estimates for this project:**

**Capital cost requirements:**

<b>PRE-ENG STEEL BUILDING</b>	\$ 6,856,157.26	<b>INSULATED FABRIC MEMBRANE STRUCTURE</b>	\$ 7,534,800.22
<i>Single Ice Pad with potential to be twinned in the future. Placement of the arena in the park determines displaced amenities and future evolution towards the complete multi-use complex.</i>		<i>Single Ice Pad with layout planned for future additional arena. Placement of the arena in the park determines displaced amenities.</i>	
SUB TOTAL	\$ 6,856,157.26	SUB TOTAL	\$ 7,534,800.22
<b>RECOMMENDED UPGRADES</b>		<b>OPTIONAL UPGRADES</b>	
Green Roof	\$ 100,000.00		
Sub Floor Heating	\$ 50,000.00		
Radiant Floor Heating	\$ 600,000.00		
Cistern and Dual Plumbing System	\$ 100,000.00		
Structure to Support Photo-Voltaics	\$ 100,000.00		
Building Automation System	\$ 200,000.00		
Upgrade Insulation??			
2nd Floor Mezzanine/Lounge	\$ 995,037.02		
SUB TOTAL	\$ 2,145,037.02		
SITE AND PARK DEVELOPMENT	\$ 1,164,281.00	SITE AND PARK DEVELOPMENT	\$ 1,164,281.00
DESIGN FEES/PERMITS/MISCELLANEOUS (5%)	\$ 508,273.76	DESIGN FEES/PERMITS (ALLOWANCE)	\$ 100,000.00
CONTINGENCY (10%)	\$ 1,067,374.90	CONTINGENCY (5%)	\$ 434,954.06
SUB TOTAL	\$ 2,739,929.67	SUB TOTAL	\$ 1,699,235.06
<b>TOTAL</b>	\$ <b>11,741,123.94</b>	<b>TOTAL</b>	\$ <b>9,234,035.28</b>

Two building construction types were investigated – Pre-Engineered Steel and the Insulated Fabric Membrane structure. Staff also researched the cost of a bricks and mortar building and determined the cost variance between it and the Pre-Engineered Steel building was approximately \$550,000 more for bricks and mortar.

The Pre-Engineered Steel Building or the Insulated Fabric Membrane Structure may be positioned within the park to limit the immediate displacement of existing amenities. Either of the arenas would have the potential of being twinned in the future and either could be positioned to be the first phase of the grand vision for Central Park.

Each of the arenas proposed would qualify for a LEED Silver accreditation. In order to receive the accreditation there would be additional 'commissioning' costs for either structure. The difference in the two buildings is that the Insulated Fabric Membrane structure has the LEED requirements built into its basic design whereas, the traditional industrial pre-engineered building must be modified to meet the requirements leading to additional engineering costs and custom components. These costs have not been considered in this analysis.

Similarly as with the Centennial Pool enclosure, the Insulated Fabric Membrane structure researched for this report would be provided as a turnkey design build arena solution. The full costs of engineering and design would be fully known and committed to at the time of order. A minimal allowance for permits, fees and site design would be carried with the project. Since the contract would include the supply and construction of the arena only, further site development may be designed, contracted and constructed independently by the Town.

#### Operating Costs:

Operating costs estimates received from PRC look at the current situation with the EBMA, outdoor rink and Curling Club. The Curling Club has been included in the analysis because of the interconnectedness of the ice plant with the outdoor rink and staffing levels available for all of the facilities. Currently, the 2012 net departmental budgets for the three facilities shows a requirement for \$315,493 from tax revenues to sustain operations. The estimated increase in operational costs for operating four facilities is \$92,300 or a total of \$407,775 required from taxes to sustain the operations.

#### Timeline:

A significant advantage to the Insulated Fabric Membrane structure is the time to complete. The purpose built packaged facility is typically designed and constructed within a six to eight month period. Traditional construction methods are usually subject to significant design and procurement periods followed by the construction. A Pre-Engineered Steel structure would be expected to develop over a sixteen to eighteen month period.

#### Other Considerations:

There are several other items to consider prior to making a decision on this facility.

#### EBMA –

Regardless of the decision made this evening, the EBMA is in need of significant renovation and upgrading. Staff have prepared and submitted a grant application for CIIF funds to assist with funding of these upgrades. The estimates received from WGD Architects for the necessary remediation to the facility are:

#### Priority Renovations:

New ice plant, dressing rooms, ice slab, refrigerant piping, dasher boards	\$1,780,000
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#### Soft Costs:

Permits, fees, design costs (12%)	\$ 213,600
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#### Extended Renovations:

Roof replacement, interior finishes, mechanical and electrical system upgrades	\$ 755,290
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#### Soft Costs:

Permits, fees, design costs (12%)	\$ 90,635
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Contingency (10%)	<u>\$ 283,955</u>
Sub total	\$3,123,480
Less: potential CIIF funding	<u>(\$1,000,000)</u>
Town portion	<u>\$2,143,480</u>

The intent is to prepare the EBMA for transition from a year round arena to a winter arena and summer event hub that will contribute to the vibrancy of the downtown core. Although no detailed design has been completed, this budget has been incorporated into the Ontario Community Infrastructure Improvement Fund (CIIF) application submitted on August 24, 2012.

If CIIF funding is received, the timeline for completion is March 2014. If the EBMA remains the only indoor ice facility there could be major interruptions to the ice times available for users.

#### Central Park –

There are necessary site works and preparation that must be completed. These costs will be incurred regardless of which type of construction is chosen. Staff estimates are in the range of \$1m and relate to parking, storm and sanitary sewers, water and electrical requirements.

The Insulated Fabric Membrane structure, as mentioned in relation to the Centennial Pool, would adapt readily to the incorporation of public art into the exterior. In addition, the variety of exterior finishes available would allow us to ensure that a colour pallet that is sympathetic to the heritage aspects of the Curling Club and the surrounding neighborhoods could be chosen.

Staff would like to locate the new arena in such a way as to preserve Ball Diamond #1 (north east corner) and #3 (south west corner). If this is not possible, we would or could incur additional costs to realign Diamond #2. This is estimated at \$50,000. The new arena is to be designed as a potential phase 1 for a twin pad. Again, depending on the layout the funds spent to realign Diamond #2 may be a futile expenditure particularly if we acquire land to create a summer recreation complex down the road.

The retention of the current outdoor arena may limit the potential synergies for future twinning of the ice pads.

The Central Park complex would become a multi-use recreational asset. The park would contain the YMCA, Curling Club, Lawn Bowling Club, two ball diamonds and a dog park.

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#### **4. DEPARTMENT HEAD REVIEW:**

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This report was reviewed by the Executive Management Committee, Director of Parks, Recreation and Culture and the Manager of Fleet, Facilities and Purchasing August 21 and circulated to Department Heads for comment August 23. Comments received were reviewed and incorporated prior to having the report proceed to Council.

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## 5. EFFECT ON TOWN FINANCES:

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We have the following funds available:

Reserve	\$1,500,000
County – purchase of Poplar Sideroad	\$1,300,000
COLLUS	\$8,000,000
Potential DC – Heritage Park – parking/landscaping (22%)	\$ 88,000
Potential DC – Central Park – arena enclosure (18%)	<u>\$ 821,488</u>
Total available	<u>\$11,709,488</u>

This would leave a minimum of \$4,525,000 and a maximum of \$8,546,000 requiring long term financing.

Current debenture repayment amounts for the above calculate to:

Term	Interest Rate	\$4,525,000	\$8,546,000
5 Yrs	2.2%	\$960,651	\$1,814,303
10 Yrs	2.87%	\$523,752	\$989,169
15 Yrs	3.28%	\$384,356	\$721,901
20 Yrs	3.55%	\$317,915	\$600,420

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## 6. DISPOSITION:

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Staff will follow through to ensure that the direction of Council is carried out.

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## 7. APPENDICES:

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Respectfully submitted,

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Executive Management Committee:

Ed Houghton, Acting CAO; Larry Irwin, Director of IT Services; Sara Almas, Clerk; and, Marjory Leonard, Treasurer.

With input from:

Marta Proctor, Director of Parks, Recreation and Culture,  
Dave McNalty, Manager Fleet, Facilities and Purchasing,  
Dennis Seymour, Manager Recreation Facilities