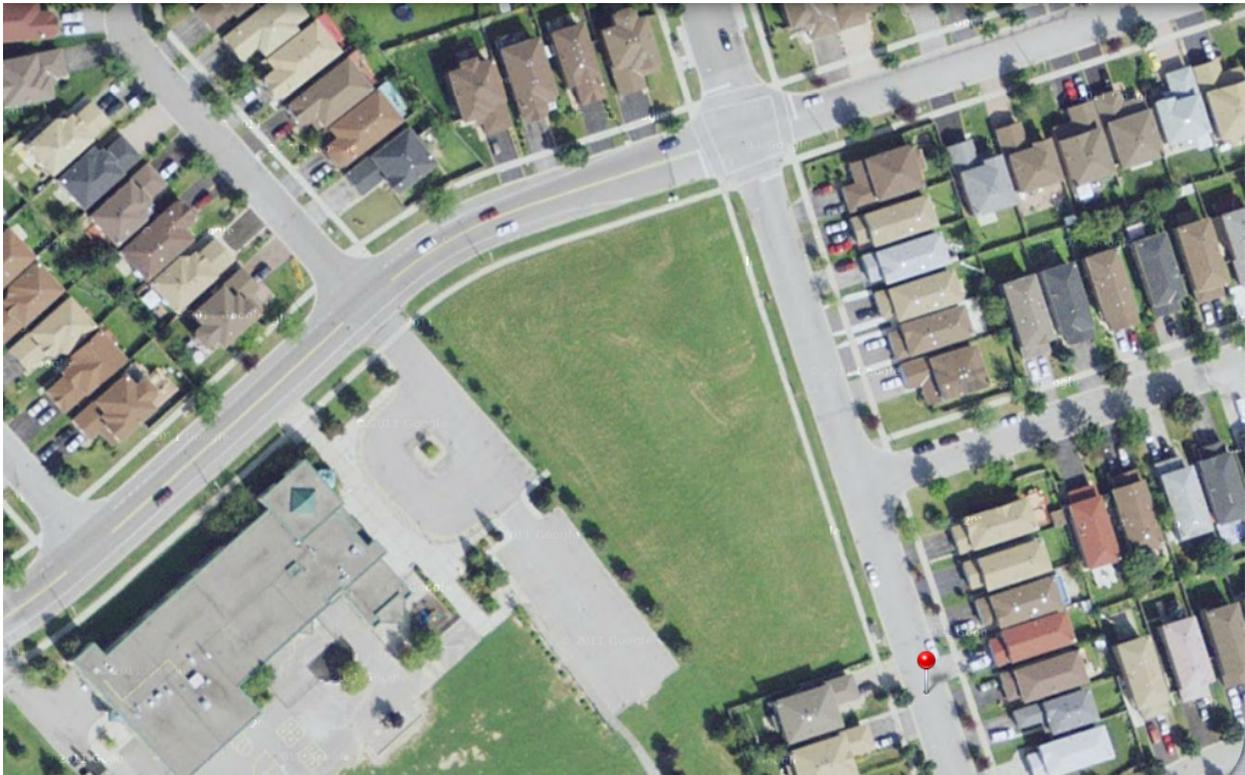

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Introduction

Malvern Family Resource Centre is currently comprised of a number of different facilities in various locations around north east Scarborough. The purpose of this proposal is to consolidate these services to a single site with a central and community oriented sense. In broad scope the centre is made up of various departments including a Seniors Centre, a Youth Centre, an Early years centre, a Women's Place, and a Family Centre. These could be considered as the core facilities associated with the family resource centre as a whole. To some extent, this proposal will also broaden the scope of the buildings services to include ancillary or accessory uses such as town hall meeting rooms and other community centered events. With these initial observations in mind, the information that follows will use drawings and commentary to suggest various architectural solutions that might be considered. The photograph below shows the project site located at the southeast corner of Sewells and Littles Road in Scarborough Ontario.



Option 1



Option 2



In this option, various building functions are brought toward the street face. This will work to create a strong pedestrian sense to the development. Tables along the sidewalk and separate doors to various functions of the centre could be accessed directly from the street. This option also speaks to the possibility of separate rental spaces for uses that are complimentary to Family Centre.

Option 3



In this option a linear array of buildings is placed along the west edge of the site. The gymnasium for this option is considered as an inflatable balloon type system. The youth family and seniors centre is located in this option at the front of the building with the gymnasium at the back. This is a different consideration than the prior options where the gymnasium is placed toward the street. Either option could be made to work.

Work plan

The work plan for this project can be divided into broadly into the categories below.

1. **Program.** This portion of the work will involve an assessment of current and future space requirements. Meetings will be held with various individuals and staff involved with the centre to make determinations on what space they have available now and what they like or dislike about the way it is organized or used. A program document will be prepared and delivered to the client as an initial milestone in the work and as a reference to carry out preliminary design drawings.
2. **Preliminary Design.** This portion of the work will involve drawings and presentation material to show one option for consideration. This process will allow the mandate and strategies of the work to become focused and will allow anyone having an interest in the work to comprehend and communicate their various intentions clearly. For this project there is one distinct issue that has been raised with regards to costs. The preliminary design phase of the work will include a full package of drawings to describe the work. The process of preliminary design could also include a public consultation or a town hall meeting as a way of getting input toward the expectations that various user groups may have toward the project as a whole.
3. **Feasibility study.** Take the preliminary design and develop the drawings to the extent that they can be distributed to various stakeholders who might become involved with the work. This process will involve consultations with various suppliers and contractors toward to formation of a detailed budget that outlines the general scope and magnitude of the work
4. **Site Plan Approvals.** This process will probably be the most time consuming of the various elements in this work plan.
5. **Design Development.** This process will see all drawings and specifications brought forward and coordinated with various consultants including structural, HVAC, and others who may need to become involved with the work.
6. **Contract drawings.** This process will involve the production of all drawings required for building permit and construction and will include working drawings and specifications to describe the work
7. **Tender** and awarding of contract
8. **General Review**

Costs

There are two primary budget considerations to assess with this project. The first is the cost of construction. What will it take to put this building up so that it can be occupied and used? The second budget consideration is the operating cost. Typically, over the life span of a building the operating costs are more significant than the construction costs. With this in mind, proposals should explore ways to minimize operating costs by design with the use of various strategies including passive and active solar systems as well as consideration for the placement of the building on the site to take advantage of predominant winds and south exposure where desired.

Construction Costs

There are two figures that can be used to identify the general magnitude and scope of construction cost. Historical analysis for buildings of this type points to an approximate high range of \$ 300.00 per square foot and a low range of approximately \$ 200.00 per square foot. Although the construction costs can be broken down into smaller components as the work progresses, information using historical analysis can be helpful to determine the general magnitude and scope of work. Consider the following numbers. The centre currently uses around 12,000 square feet of space in various buildings. In addition to the amount of spec currently being used, a gymnasium is proposed and will account for around 8,000 square feet of space. The gymnasium calculation is derived from the size of a basketball court (50 x 100 = 5000 sq. ft.) plus an 8 foot space between the court edge and the walls accounting for around 3000 sq. ft. of space. 5,000 + 3,000 = 8,000 square feet for the Gymnasium.

The 12,000 square feet currently allotted for the various facilities could also become smaller when one considers shared facilities. At present, in the various buildings where the centres are located, there are separate foyers, separate corridors, separate common spaces etc. The new building could consolidate a number of these spaces and account for possibly 2,000 square feet of space. A more detailed analysis of the current amount of space being used is necessary but 2,000 square feet of savings with shared facilities is a realistic consideration. For calculation purposes then, use 10,000 square feet of family centre space combined with 8,000 sq. ft. of gymnasium space for a total building size of 18,000 sq.ft.

1. Cost scenario 1 - $\$300.00 \text{ psf} \times 10,000 \text{ sf} = \$ 3,000,000.00$
2. Cost scenario 2 - $\$200.00 \text{ psf} \times 10,000 \text{ sf} = \$ 2,000,000.00$
3. Cost scenario 3 - $\$100.00 \text{ psf} \times 10,000 \text{ sf} = \$ 1,000,000.00$

These cost scenarios do not include the gymnasium. An 8000 square foot Gymnasium could be constructed for around 70.00 per square foot = \$ 560,000.00

There is one more important factor to bear in mind with respect to cost with this project. There are specific limits in the Ontario Building Code with regards to the type of construction and the requirement for items like sprinklers and combustible construction. Based on the proposed size of this project and the possibility of arranging and separating different uses, the proposed construction of the building could be a wood frame structure one or two storeys in height without the need for sprinklers. It is possible that this kind of a building if considered properly could be constructed in the range of \$ 100.00 to \$ 150.00 per square foot.

Operating Costs

The operating costs that are of concern with this proposal are those that can be affected by design and the architectural manipulation of forms. What are the main components of operating cost that can be affected by design? Air conditioning, Heating, Ventilation and Electricity. Water conservation is also desirable. In many cases it is hard to exercise green building strategies when there is not enough space or not enough southerly exposure to permit implementation. For this project the site does not have this problem. There are some real chances here to take advantage of a full southerly exposure as well as a prevailing wind. The wind pattern back and forth from the valley over the field can be considered when contemplating aspects like the ventilation of the building. These are simple recommendations but still worth mentioning because there are no impediments on the site to see these strategies from being carried out.

At present, there are a number of locally available technologies that work to minimize the operating costs of a building. For electricity, the currently preferred option is solar panels. For the air conditioning and heating, there are a number of passive strategies that can be explored before any machines are used to move or handle air. Passive strategies would include the manipulation of glass and shading elements combined with dark floor surfaces to retain daytime heat or the capture of prevailing winds to assist with ventilation. Again, when one considers the project site, there are a number of passive strategies that can be employed by design without the common impediment of adjacent buildings or structures. There is good southerly exposure, there is a prevailing wind pattern, and there is room the place the building in such a way as to take advantage of these natural forces.

One year of operating costs for a 10,000 sq. ft. family centre and 8000 sq. ft. gym. Water = 12,000.00, Electricity = 21,000.00, Heating = 18,000.00.

The design of a building could increase or decrease these amounts by 20 to 30 %.

Rent

The conceptual designs shown in this proposal suggest the possibility of tenant spaces included with the various spaces of the building. If considered properly, this could provide MFRC with ongoing revenue. Possible design solutions could include second floor office spaces, a ground floor coffee shop, a book store...

People

There will be different individuals brought to this project as the work progresses. For summary purposes, the following people will form the core team of this project to start the work. Resumes and curriculum vitae are attached to this proposal under separate cover.

1. John Boone Architect, B.L.Arch., B.Arch., OAA - Project lead and contact
2. Phillip H. Carter Architect, B.Arch., M.Arch., OAA - Partnering
3. Ted Footman, B.Arch - Designer
4. Antti Harjunharja, Staff Technologist
5. Sebastian Gugulski, Staff Technologist
6. Scott Schell, Contractor and Technical Consultant

Additional Drawings



View looking north along Little's Road



View looking north along Little's Road showing small buildings and pedestrian space



View looking north along Little Road showing a Public Building



View looking south at the intersection of Sewells and Little Road.