

February 27, 2012

UBC Response to the Friends of the UBC Aquatic Centre and MacInnes Field 'Renovate and Expand' Proposal

Over the past several months, UBC has considered and evaluated the various stages of the Friends of the UBC Aquatic Centre and MacInnes Field 'Renovate and Expand' proposal for UBC Aquatic Centre (*full proposal included below this cover memo*).

After careful consideration, UBC is recommending that building a new aquatic centre on the current MacInnes Field site is the best approach to achieve the University's overall goals for the Gage South + Environs area and for a community aquatic centre that meets competitive and recreational swimming needs of the campus community.

The rationale for not pursuing the 'Renovate and Expand' proposal is as follows:

**Program**

UBC acknowledges that the 'Renovate and Expand' proposal provides greater recreational pool surface area and retains the diving tower and popular mezzanine seating area in the existing aquatic centre. However,

- a) The additional recreational pool area exceeds program requirements needed to meet current and projected future demand.
- b) The 'Renovate and Expand' proposal delivers less pool area for a separate, warm water leisure pool for families than Build New, a feature we know is a high demand component for the campus community.
- c) As UBC does not currently have a competitive diving program and the existing dive tower is receiving minimal use, this element has not been determined as necessary in the new facility. A diving tower has however been factored into the cost estimate for a new facility and could potentially be incorporated if there is a demonstrated need.
- d) The mezzanine seating area in the existing facility is a well used and desired element. Incorporating mezzanine seating in the Build New option will be explored further.

**Cost**

The base cost for the 'Renovate and Expand' proposal is estimated to be \$2 million less than Build New. However,

- a) This projection does not include the cost for updating the existing change rooms (\$1.65 million) or replacing the existing pool tank (\$6.02 million). Updating the change rooms is a fundamental requirement given the age and poor condition of finishes and systems and must be included in the project scope.
- b) The pool tank and deck are in need of re-tiling at a minimum to address visible wear and known failures. The deck also needs to be re-sloped to address drainage issues. It is estimated that the overall cost for this minimum pool tank and deck work will be \$2.7 million. When these requirements are included the Renovate & Expand cost is approximately \$2.5M (or 7%) greater than Build New.

- c) The standard UBC financial requirement for renewing an existing facility rather than building new is that the cost of renewal be less than 67% of building new. This threshold was developed in cooperation for the Provincial government for the UBC Renew program. The Renovate & Expand proposal for the Aquatic Centre does not meet this requirement.

### **Risk**

The 'Renovate and Expand' proposal presents a higher risk than Build New for construction cost and schedule overruns given unknown issues that are inevitably encountered when renovating existing buildings. While cost allowances have been made in the estimated budget for some of these risks, they do not cover major issues such as full replacement of the pool tank should leak issues be discovered during construction.

### **Operational Disruption**

The 'Renovate and Expand' proposal involves significant disruption to existing aquatic centre operations during construction. While a construction phasing plan is proposed, UBC anticipates the facility would need to be closed for a significant period given safety and functional considerations.

No disruption to aquatic centre operations is anticipated in Build New. This is a significant consideration given University commitments to students, varsity athletes, faculty, staff and UNA community members to provide continuing access to aquatic centre facilities.

### **Sustainability**

In terms of sustainability, retention of the existing concrete structure is beneficial. However, the extent of the required replacements (walls, roof, mechanical and electrical systems) plus the new building component in the 'Renovate and Expand' proposal reduces this benefit compared with Build New. The Build New option provides greater flexibility to achieve a full range of sustainability objectives and maximize energy efficiency among other things.

### **Gage South + Environs Layout**

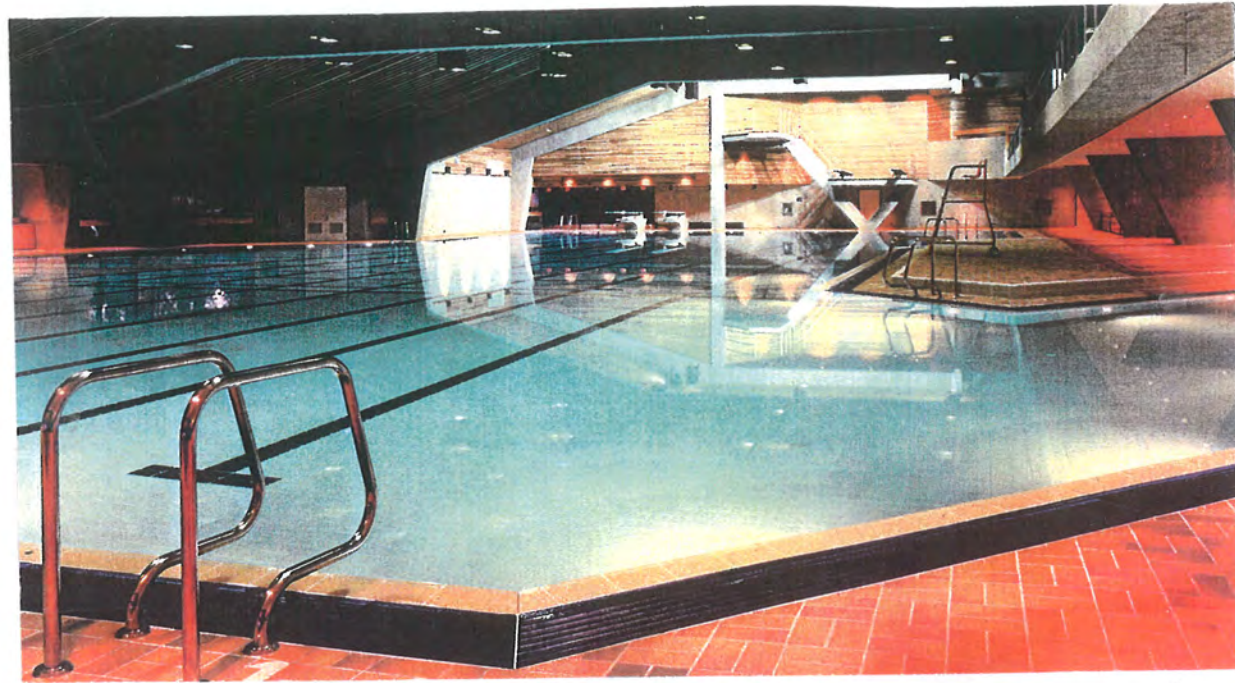
The 'Renovate and Expand' proposal results in a less efficient layout for the Gage South + Environs area and while the proximity of the existing Aquatic Centre to the New SUB provides convenient access to the academic community, access for the broader community is constrained. The main entry to the new aquatic centre would improve access to the facility from the North parkade.

In summary, UBC's analysis - supported by independent cost consultants - shows that the 'Renovate and Expand' proposal would result in:

- costs that are 7% higher than the Build New option
- higher construction risks
- not delivering as fully on the most needed program element (separate leisure pool)
- significant operational disruption with negative community and academic impacts
- lower land use efficiency, and
- sustainability performance neutral relative to Build New

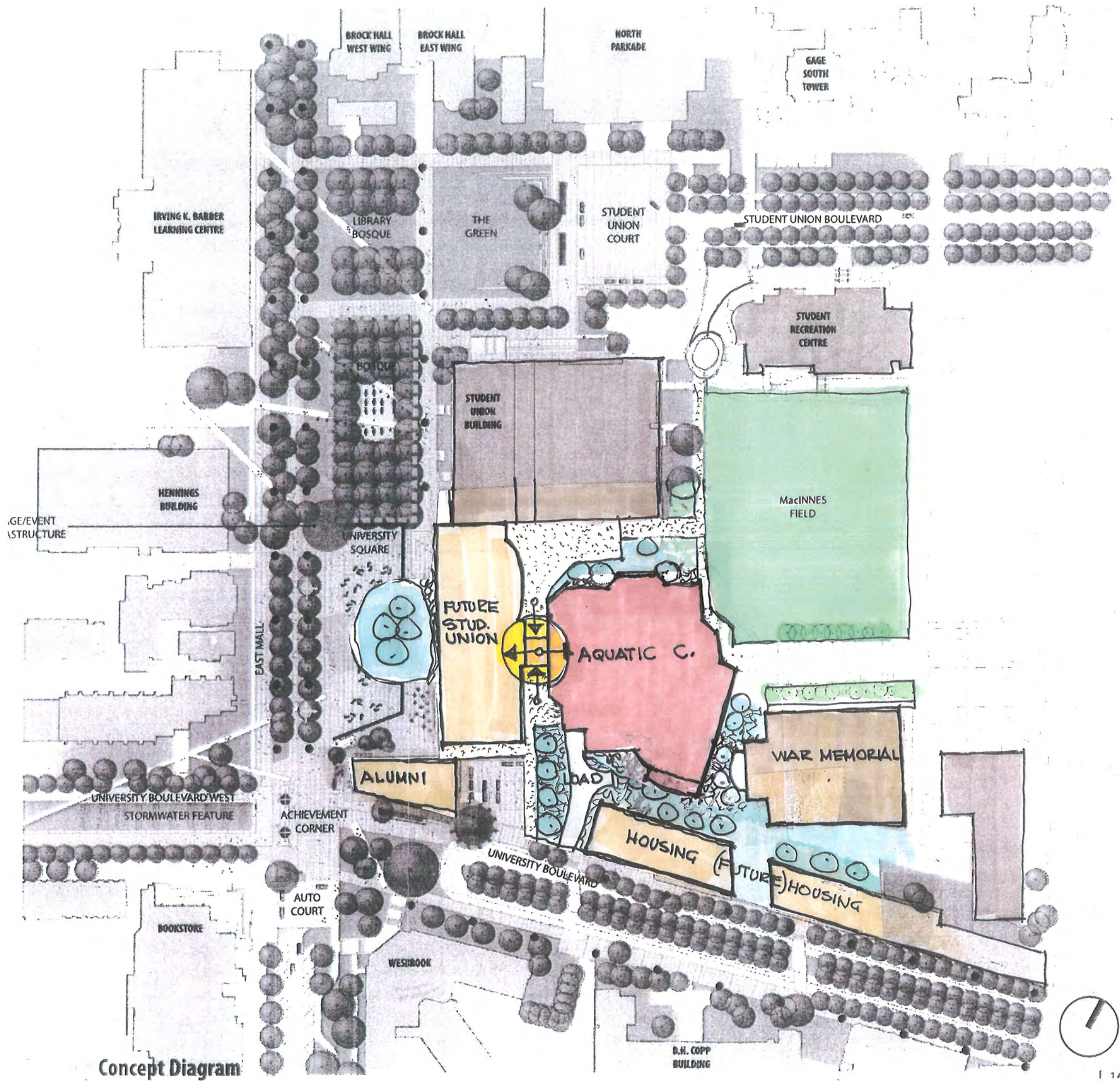
The 'Renovate and Expand' proposal raised some excellent points about retention of existing aquatic centre elements, principally the inclusion of mezzanine seating. This will be explored in the design of the new Aquatic Centre. Further, UBC would like to include a plaque or wall in the new facility acknowledging the history of pool facilities at UBC including recognition of those involved and the contribution they have made to varsity excellence and campus life.

UBC welcomes the participation of the Friends of UBC Aquatic Centre and MacInnes Field in the development of the new facility.



PROPOSAL FOR AN ADDITION  
TO THE U.B.C. AQUATIC CENTRE

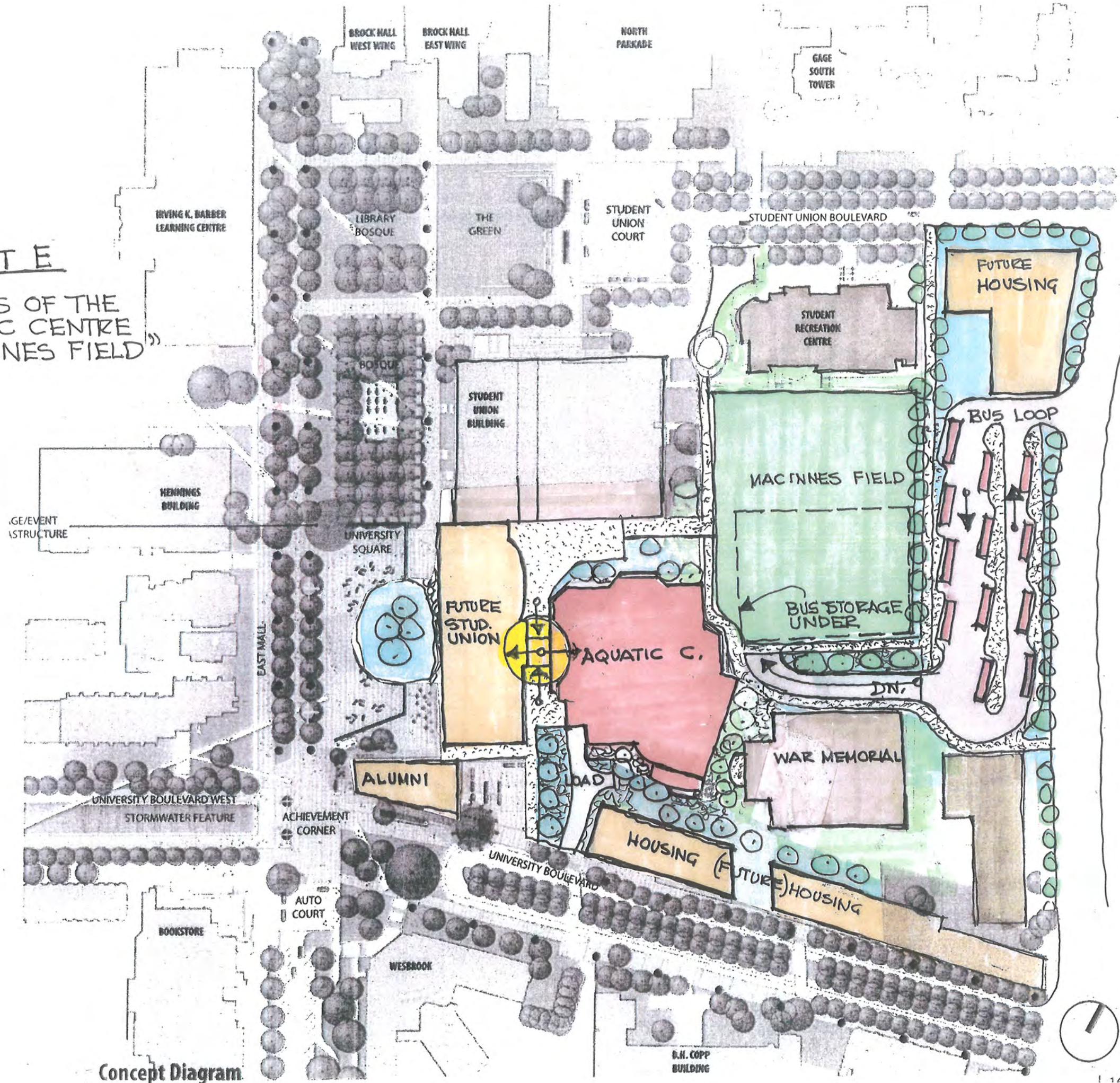




Concept Diagram

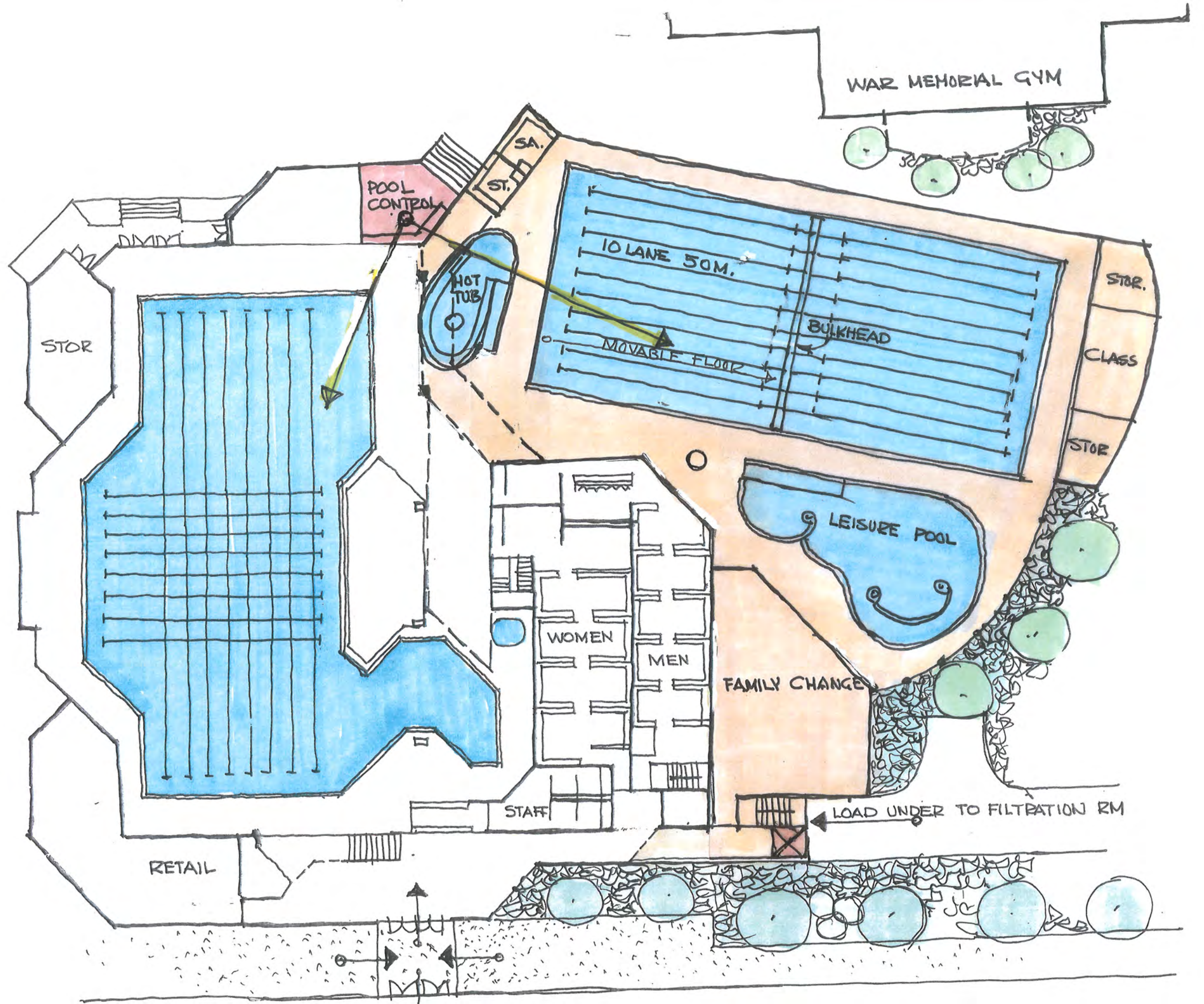


**CONCEPT E**  
BY FRIENDS OF THE AQUATIC CENTRE & MACINNES FIELD



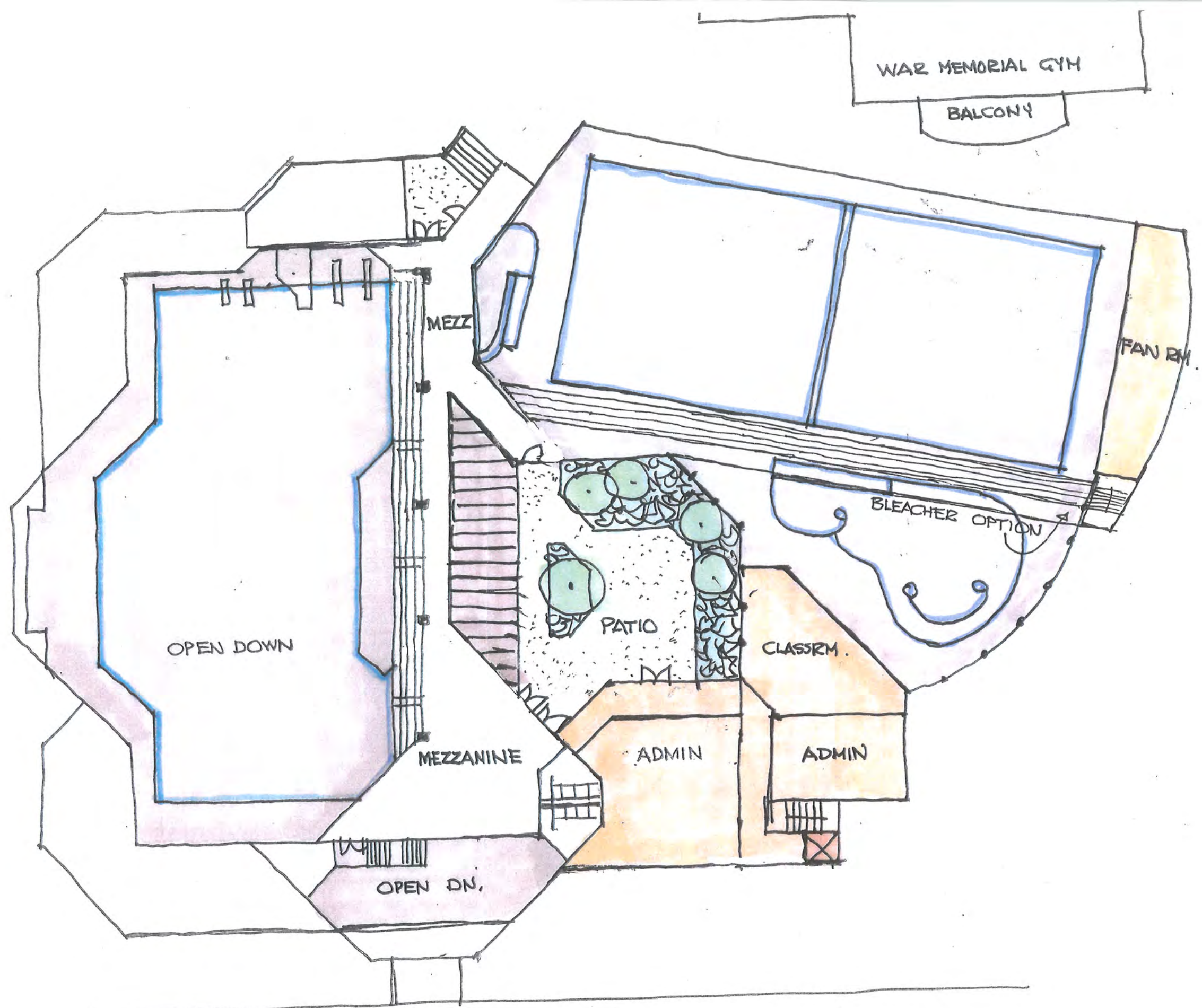
Concept Diagram





ADDITION TO EXISTING POOL  
 SCHEME A  
 1:400

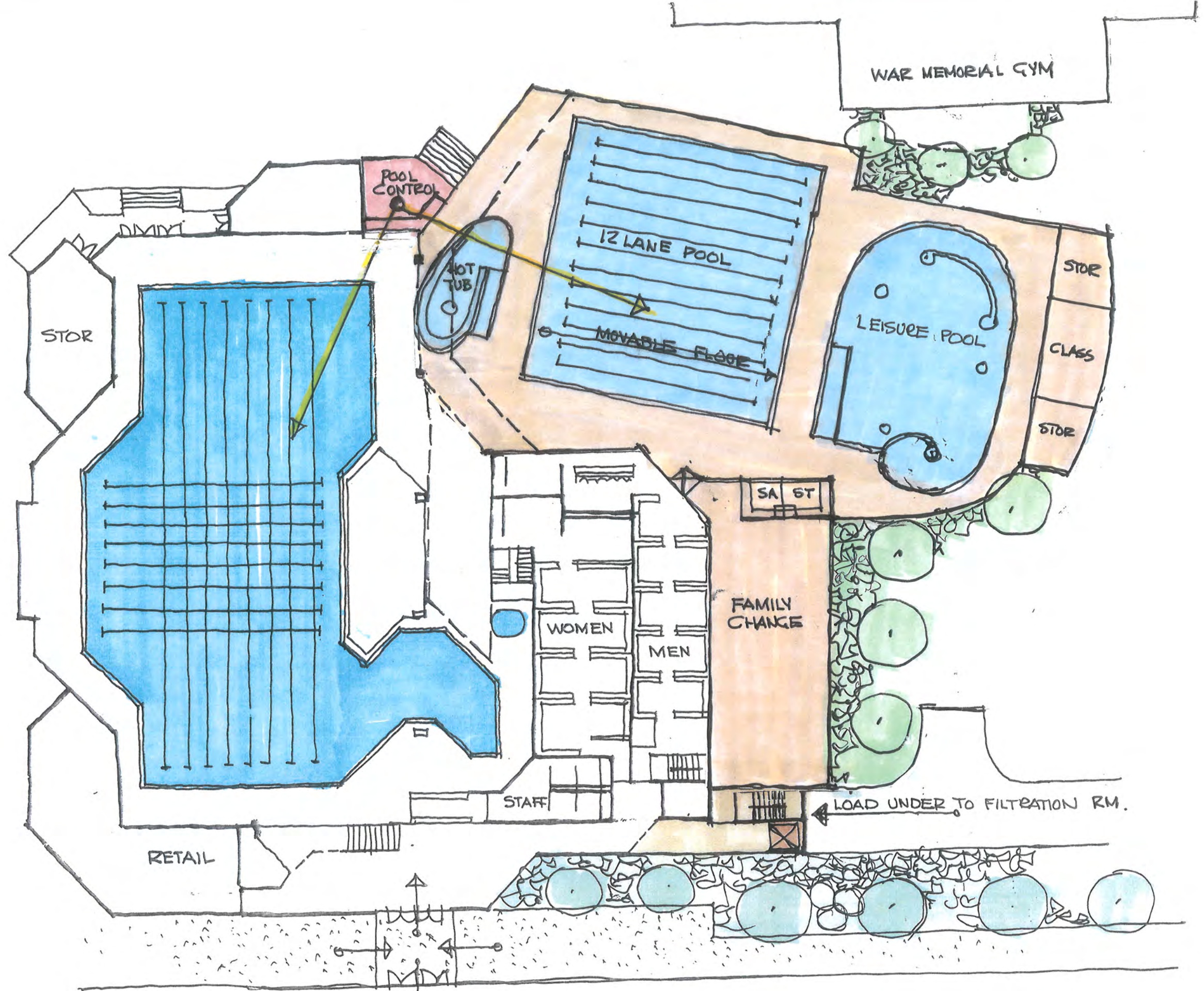




ADDITION TO EXISTING POOL  
SCHEME A  
1:400

UPPER FLOOR





ADDITION TO EXISTING POOL  
 SCHEME B  
 1:400

FUTURE  
 STUDENT UNION BUILDING

MAIN FLOOR



## Benefits of Addition Schemes A & B

- Less than half the cost of replacement
- Supports the UBC commitment to sustainability design
- Avoids the donor issues by preserving MacInnes Field and diffuses student controversy on this issue
- Follows the UBC Master plan
- Preserves integrity of raised bleachers for competitions – an ideal but expensive feature missing in the replacement scheme
- Allows for multiple entries including entry from university blvd. and the new student union building
- The mechanical system is replaced in the present location, with new technology
- Renovations to existing building are minimal. Seismic reviews are no longer an issue
- Scheme A is more flexible due to greater water area than the replacement scheme
- Keeps popular existing building that won 2 major design awards

## UBC Aquatic Centre

### Comparison of Schemes

REPLACEMENT	ADDITION SCHEME A	ADDITION SCHEME B
10 Lane 50m Pool	8 Lane 50m Pool Existing	8 Lane 50m Pool Existing
Dive Tank	Dive Tank Existing	Dive Tank Existing
Leisure Pool	Leisure Pool	Leisure Pool
10 Lane 25m Pool	20 Lane 25m Pool or 10 Lanes 50m	12 Lane 25m Pool
Hot Tub	Hot Tub	Hot Tub
Steam & Sauna	Steam & Sauna	Steam & Sauna
Men, Women & Family Dress	Men, Women & Family Dress	Men, Women & Family Dress
Retail	Retail	Retail

### Cost Comparison (not including soft costs or HST)

REPLACEMENT	ADDITION SCHEME A	ADDITION SCHEME B
Building 28,000,000	*Building (@ \$3,352/m.sq)	*Building (@ \$3,352/m.sq)
New Field 500,000	12,335,500	10,968,000
Adjustable Floor 500,000	New Mechanical 800,000	New Mechanical 800,000
Demolish Old Pool 500,000	Adjustable Floor 500,000	Adjustable Floor 500,000
Demolish Outdoor Pool 350,000	Demolish Outdoor Pool 350,000	Demolish Outdoor Pool 350,000
<b>TOTAL</b> \$29,850,000	<b>TOTAL</b> \$13,985,500	<b>TOTAL</b> \$12,618,000

\*Cost per sq.m. is same as New Building estimate



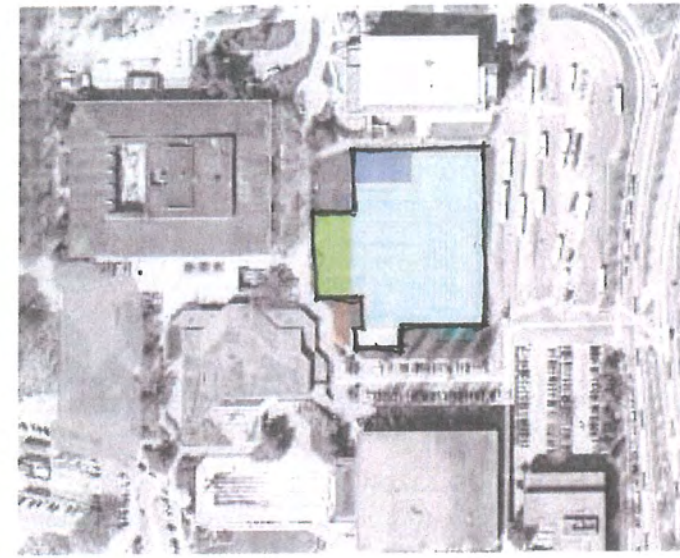


fig. 12 Site Plan

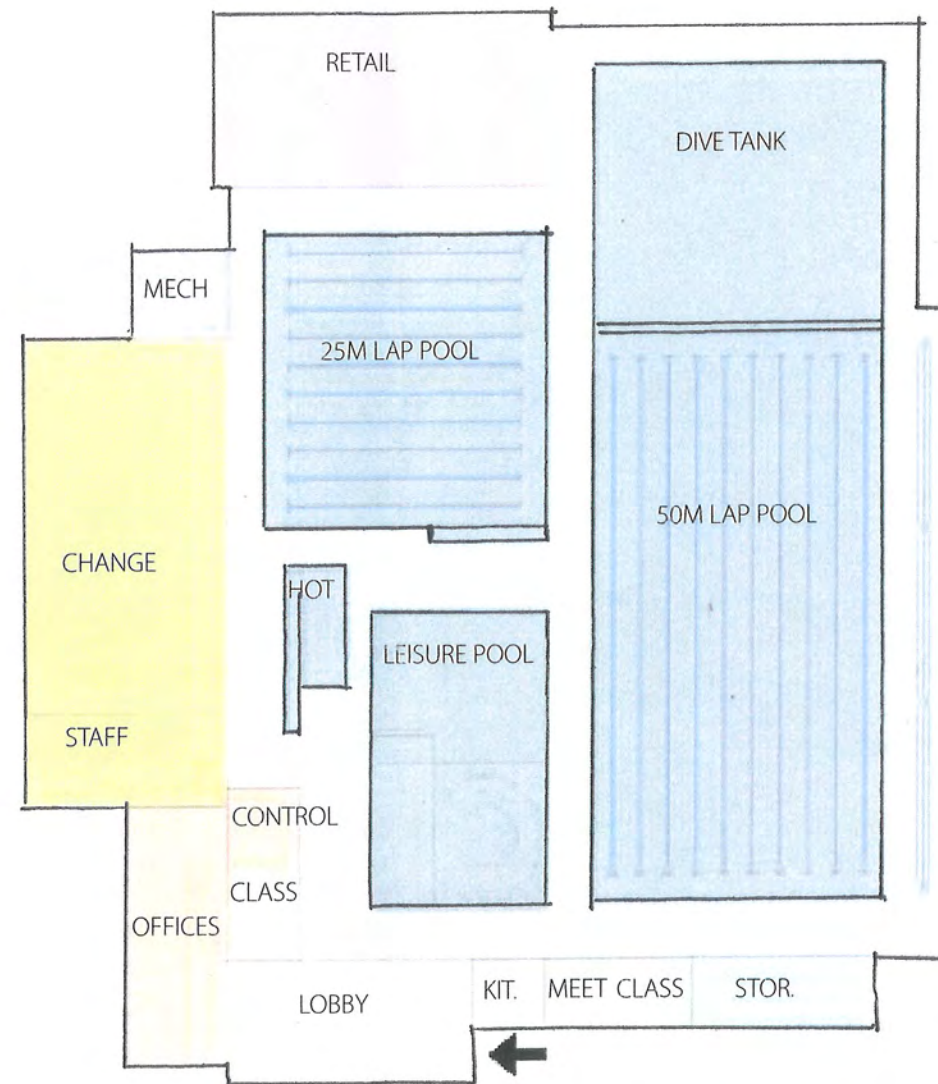
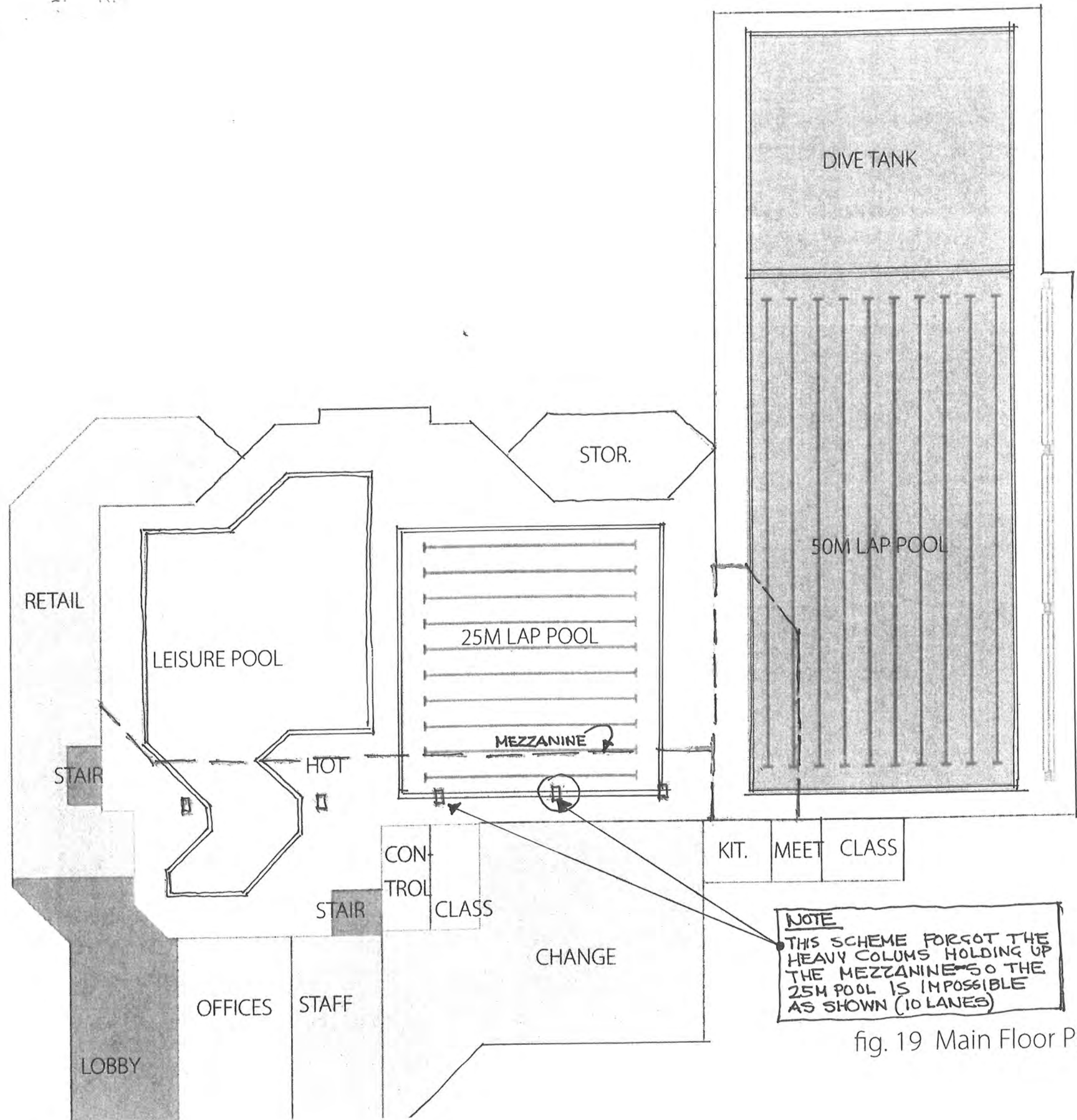


fig. 13 Main Floor Plan

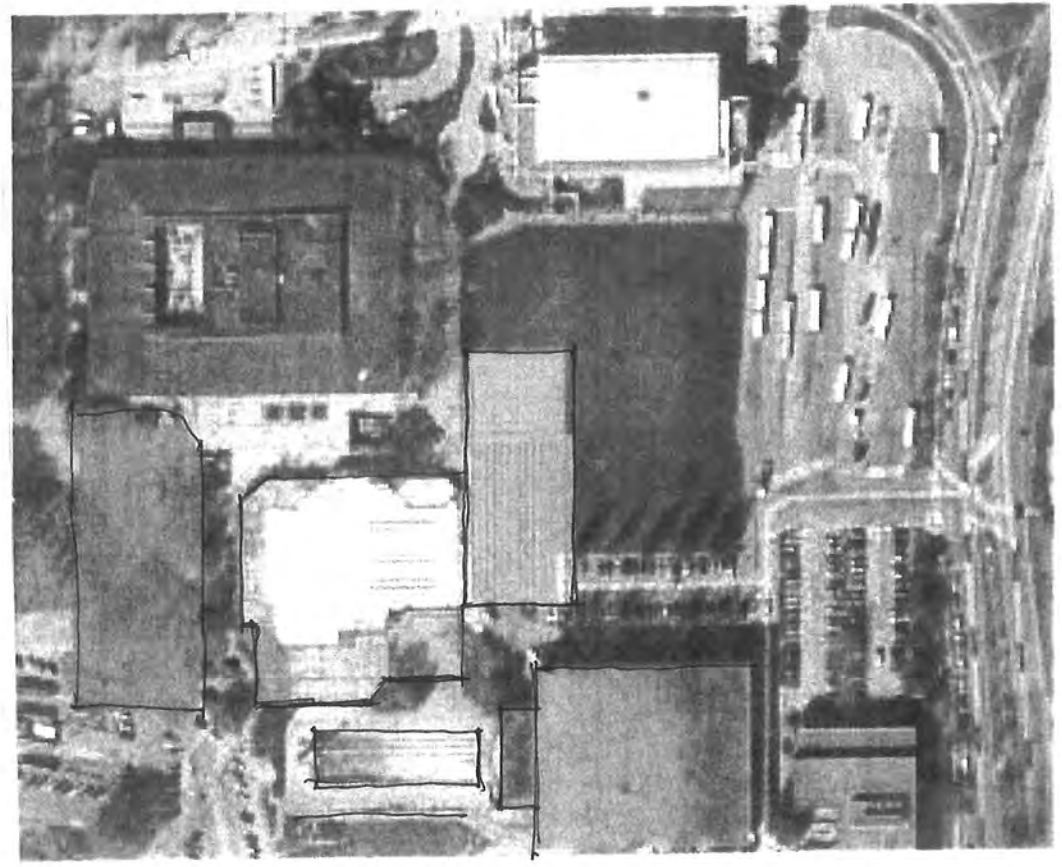
UBC NEW AQUATIC CENTRE STUDY  
**OPTIONS. "1 - BUILD NEW"**





**NOTE**  
 THIS SCHEME FORGOT THE HEAVY COLUMNS HOLDING UP THE MEZZANINE SO THE 25M POOL IS IMPOSSIBLE AS SHOWN (10 LANES)

fig. 19 Main Floor Plan



UBC NEW AQUATIC CENTRE STUDY  
**OPTIONS. 2 - "RENEW AND ADD"**

OF THIS OPTION  
 BUILDING ONLY \$33,000,000  
 NOT INCL. SOFT COSTS