

# Athletics and Recreation Centre (ARC)

Algonquin College-Woodroffe Campus  
Ottawa, Ontario, Canada

## Site Plan Approval Planning Rationale

Dated: June 24, 2019

Prepared for:

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City of Ottawa

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Project No. 19.32300.00

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## 1.0 PROJECT BACKGROUND

### 1.1 THE PURPOSE OF THE PROJECT

The main purpose for this development is to provide a facility to encourage health and wellness through recreational and social programs for the entire student body at Algonquin College. This 2-storey building + basement proposed development consists of a number of athletics and recreational programs including: fitness spaces, 400m indoor running track, climbing & bouldering walls, a bowling alley, multi-purpose studios, 3 gymnasiums (one single gym for general recreational sports, and one double gym for competitive varsity level games and special events), gendered and gender-neutral locker / change rooms, a licensed lounge, and an office administration area..

### 1.2 SITE CONTEXT AND EXISTING LAND USE

The subject property is located within the Algonquin College campus at 1385 Woodroffe Ave. The subject parcel for the proposed new development is rectangular in configuration within the existing main (central) parking lot of the campus, running parallel to the North Access Road and is bounded by Woodroffe Ave to the west and Navaho Drive to the north.

### 1.3 PLANNING CONTEXT

#### CITY OF OTTAWA OFFICIAL PLAN

The property is designated as a Mixed Used Centre in accordance with Schedule B of the City of Ottawa Official Plan. It is also located within the Baseline and Woodroffe Secondary Plan.

The purpose of the Mixed Used Centre designation is to *“ensure that these large scale, high traffic generating institutions locate only on large parcels of land, with direct access to an arterial road and near rapid transit stations; impose regulations which ensure that the size and intensity of these uses is compatible with adjacent uses; and permit minor institutional uses and provide for a range of ancillary service uses.”*

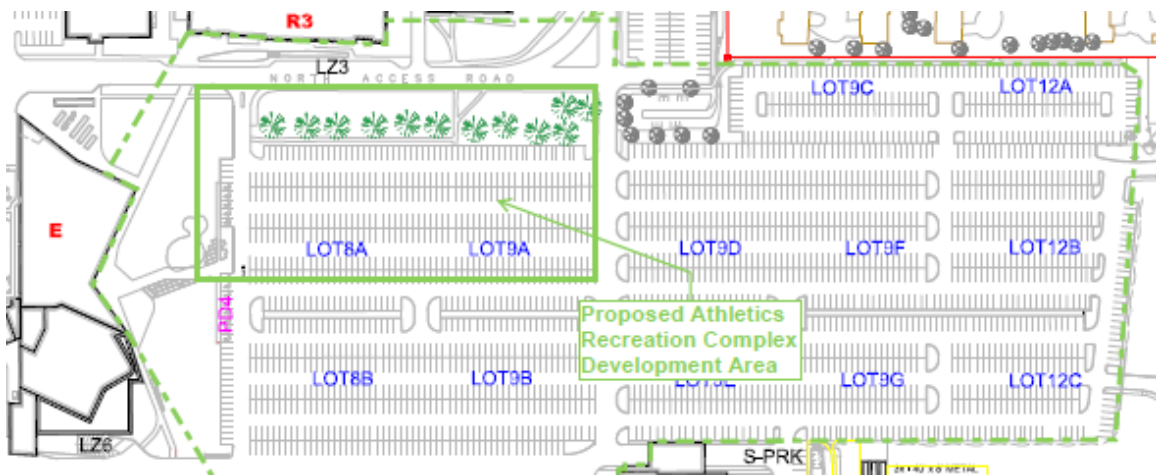
## ZONING BY-LAW 2008-250

The subject property is zoned I2A. The I2A subzone is a post-secondary educational facilities subzone.

## 2.0 AREA OF WORK

The proposed development will provide functional spaces for the client's recreational and athletic activities within this stand-alone building. The proposed design solutions must meet both physical and operational requirements defined in the approved ARC Functional Program.

The new ARC building will be developed in the defined area indicated below.



## 3.0 ARCHITECTURAL CONCEPT

### 3.1 ARCHITECTURE

The new 'ARC' facility will be 2 stories in varying heights including a mezzanine at the second floor of the fitness program. The building also has a lower level that

houses the athletics (varsity) program and shared locker/change rooms for the entire facility.

The building's design and layout has resulted in a Gross Floor Area of 125,485 GSF (11,658 m<sup>2</sup>).

With regards to its massing and elevational treatment, the north side is responding to the east/west orthogonal orientation allowing most of the vision glass facing north to address both energy control and dynamic views to the main active recreational fitness areas, such as the "discovery track" along North Access Road. The west elevation, clad with both vision and spandrel/fritted glass curtainwalls, will have a symbiotic relationship with the front lawn of the existing Student Commons building and as well showcase the heart of the facilities active fitness program for the student body.

## 3.2 DESIGN PRINCIPLES

The planning principles guiding the design and development of the ARC facility include:

- Campus cohesion & integration
- Connectivity to adjacent campus buildings
- Accessibility
- Sustainability
- Inclusion
- Foster Wellness and Health
- Sense of Place
- Maximize daylight
- Social integration for all student body
- Enhance the existing the Algonquin College/SA student culture
- Flexible and multi-use spaces

### CAMPUS COHESION

The new ARC will eventually be connected to the existing Student Commons Building with a +15' pedestrian link and as such it is appropriate that the new facility integrate into the massing, orientation and physical characteristics of the adjacent building. The landscape concept blends with, and extends, the existing hard and soft landscape design which in turn supports this integration. All measures will be taken to ensure a cohesive integration to the campus in general.

## BUILDING AND SITE ORIENTATION

The new facility will endeavor to align with the existing North Access road. The building's east / west orientation with a shallow +/- 8 meter setback from the street and proposed massing will strengthen the "urban context" and relationship with the neighboring student residence" and other campus buildings. The orientation will also allow to maximize access to daylight.

## MATERIALITY

The overall architectural statement will be generally monolithic in form with elements that tie itself to the ground with the use of more durable masonry cladding. In the spirit of cohesion with the neighboring Student Commons building, the ARC will have a pallet of materials that supports a strong sense of identity and continuity. The building will be clad with iron-spot brick wrapped around the south, east and partly north elevations at grade level and a combination of steel panel at the second level. To address solar glare and heat gain / loss at the west elevation the proposed building introduce different levels of sun control devices integrated with the curtainwall.

## BUILDING MASSING

The sheer length and height of proposed new facility allows opportunity to create architectural and visual interest through the articulation of building massing and rendered building materials. This principle will help ensure the new facility does not appear unduly out-of-place on the campus but allows to boldly identify itself.

## CLIENT CULTURE

The overall design of the new ARC facility will respond to the specific way in which the occupants and user groups (Algonquin college student body) will inhabit the different programmed spaces. The design and arrangement of spaces seeks to provide access to views and daylight through the provision of glazed curtain walls, clerestory windows. The "right to light" within areas such as fitness areas, multipurpose, lounge, recreational activities and general office spaces is critical for the occupants and end-users. The introduction of controlled natural and artificial lighting will be further explored to enhance the active recreational areas and varsity

gymnasiums. The proposed new facility will provide a grand sense of place that encourages collaboration, socialization, and inclusion through its carefully arranged active recreational activities.

## ACCESSIBILITY

The new ARC facility will be guided by the principles of universal barrier-free accessibility, the minimum standards for which are defined by the Ontario Building Code and AODA compliance. The ARC building and Algonquin College seek to exceed the minimum requirements wherever possible. A barrier free running track as the major design feature inside the building, supported gender neutral change rooms and washrooms throughout are some of the many measures the ARC building addresses accessibility beyond the minimum requirement.

## SUSTAINABILITY

The new facility will seek for a LEED Gold Certification. All sustainability principles and best practices will be pursued wherever feasible and practical. This LEED Gold Certification target will be used to assess and to determine appropriate strategies to achieve energy efficiency, sustainable design and a healthy work /play environment. The new ARC building will be designed to conform to the OBC SB10 energy compliance metrics or better.

## INTERIOR MATERIALS

The new facility is primarily a fitness environment with special use areas that will require attention to durable, long-lasting materials.

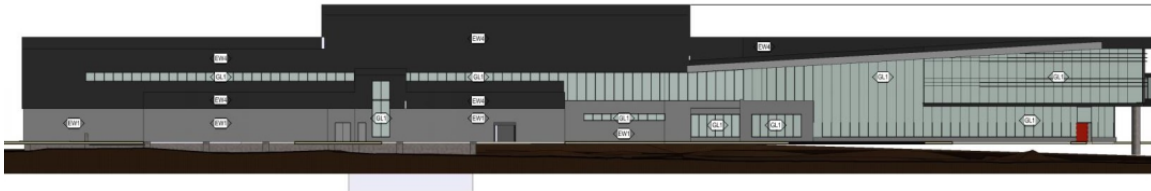
The principles that will inform interior materials include;

- Durability
- Life-cycle analysis and longevity
- Sustainability
- Health and well-being

In keeping with the principle of recognizing the importance of access to a healthy environment, and in addition the principle of providing access to daylight and views,

the interior programed recreational spaces and active zones of the new facility will benefit with an abundance of controlled natural light.

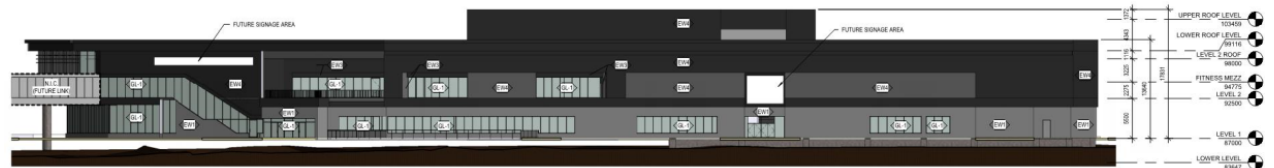
### BUILDING ELEVATION - NORTH



### BUILDING ELEVATION - EAST

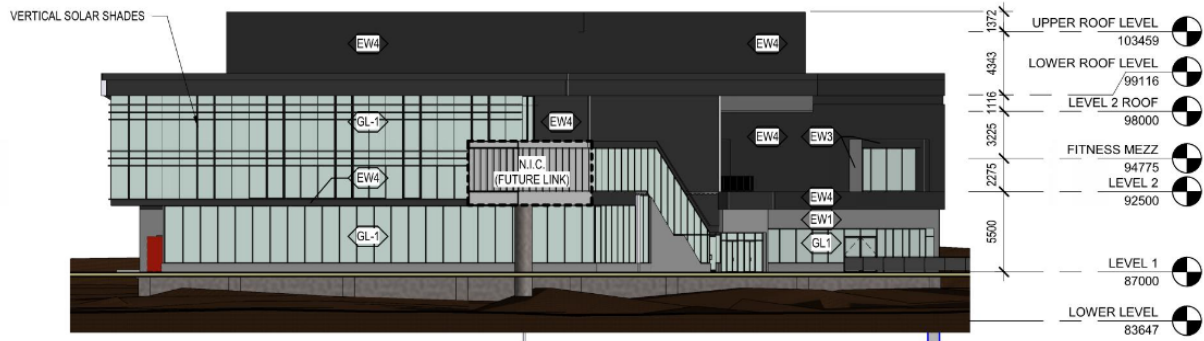


### BUILDING ELEVATION - SOUTH





## BUILDING ELEVATION WEST



## 4.0 LANDSCAPE CONCEPT

### 4.1 PROPOSED LANDSCAPE

Refer to the landscape plan submitted as part of this application.

The main pedestrian walkway is an existing division line that separates the Commons parcel from the ARC parcel. The division is physical in that the existing road separates the two adjacent greenspaces but the road is also a dividing line that brings two drainage areas together. The proposed concrete pedestrian walkway will merge the two land parcels together. The paving pattern is symbolic of a common stitching pattern used to literally join two pieces of fabric together.

The introduction of sloped paving / surface under the building overhang serves a very functional role. It provides an offset to keep people away from the building and provide a low / no maintenance condition. Reusing the site's existing *ArmorStone* is a positive upcycling of material and respects a noble material that has been on the site.

The introduction of limestone is a commonly used construction material and found in the natural environment of the Ottawa area. This maintenance edge could be seen as a modern, constructed interpretation of a natural occurrence. Naturally occurring limestone outcrops will have small, low, drought tolerant, hardy, plants growing on them. One such native plant is the wild strawberry and is a significant plant to many aboriginal communities.

## 5.0 CIVIL CONCEPT

### 5.1 STORM WATER MANAGEMENT APPROACH

Refer to the Storm Water Management Report submitted as part of this application.

## 6.0 SUSTAINABLE OBJECTIVES & DESIGN

Sustainable Development objectives must be addressed throughout the evolution of the project. Sustainable Development is defined in broad terms as a strategy that routinely and consistently includes the consideration of the environmental, economic and societal impact of every decision made for the project. The general areas of focus are in accordance with LEED Gold, ASHRAE 90.1, SB-10 and C2000 standards including:

- R-40 roof, R28 walls.
- 30% Window-to-wall ratio with high performance curtain wall systems.
- High-albedo reflective white top coat roofing.
- Proximity to sustainable sites features such as rapid transit and bike parking.
- Energy efficiency and conservation,
- Greenhouse gas emissions reduction,
- Water management and conservation,
- Pollution prevention,
- Product selection and resource conservation,
- Indoor environmental quality (thermal, air, and lighting quality),

- Site conservation (protection and preservation of valued natural site features),
- Environmentally friendly maintenance procedures and products.
- A solid waste management program must be implemented for all construction phases.

## 7.0 SUMMARY

Through consultations with the City of Ottawa's planners, the application for Site Plan Control Approval for the proposed development has been fully reviewed from a land use planning perspective.

The proposal is in conformity with the City of Ottawa Official Plan and City of Ottawa Zoning By-law.

Submitted by:



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