ABILITIES CENTRE

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A new 125,000 square foot fitness and recreation facility primarily for special needs users, including indoor 200m track, basketball courts, climbing wall, theatre space, art and music rooms, and living skills training suite was built. AECOM provided project management services from inception through to final occupancy; assisted and guided the client on all aspects of functional programming, design development, costing and funding strategies, approvals, tendering and construction, and eventual turn over and operations; and also services for the supply of equipment, furnishings and security systems.
SECTION 2
PROJECT HIGHLIGHTS

This is a unique and sizable building type designed and built within Durham Region and the GTA. It is a state-of-the art building providing enhanced accessibility to the special needs community far and above what the Ontario building code requires. It provides space for programming for both physical (indoor 200m track, fitness and exercise spaces) and recreational activities (music, art rooms, performance spaces, life-skills training). Specialized equipment is provided in various locations throughout the building that provides users with an up-to-date approach for fitness and well-being from the recreational to the elite class of participant.

2.1 COMPLEXITY

The level of complexity was high based on meeting seemingly divergent requirements of both special needs users and the general public. Because abilities of the users run the gamut that include physical and cognitive challenges, finding design solutions that will work without barriers and restrictions was the ultimate challenge. Working with the multiple key stakeholders and helping to filter the massive inputs from these groups was one of the biggest project management challenges on this project.
SECTION 2
PROJECT HIGHLIGHTS CONT’D

2.2 MEETING CLIENT’S NEEDS

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2.3 ENVIRONMENTAL BENEFITS

To benefit the environment, a building must be sustainable. It should be usable for years to come. By designing the services well, AECOM has helped to ensure the sustainability of this facility. As the general population ages, the Abilities Centre is equipped to offer services suitable for a changing demographic. Although not a LEED certified project, the design initiatives for the project focused heavily on sustainable design concepts, that included a highly reflective roof, extensive soft landscaping, Low VOC building materials, FSC wood products including millwork to name a few.
SECTION 2
PROJECT HIGHLIGHTS CONT’D

2.4 INNOVATION
In terms of technical achievement, the project’s main design element is the clear span Fieldhouse. The main programme requirement for the Fieldhouse was to provide a space large enough to accommodate a 200m IAAF designed running track. Within the ‘infield’ of the track, multi-sport courts could be placed. The main criteria would be to achieve these elements in a clear span configuration. The innovation solution provided by the project’s design team was to use a parabolic shaped series of large trusses that could provide the necessary clear span. Other innovations included the detailed study and integration day lighting to reduce energy costs and provide suitable levels of natural, but diffuse light.
SECTION 2
PROJECT HIGHLIGHTS CONT’D

2.4 SOCIAL AND/OR ECONOMIC BENEFITS

Once the Abilities Centre opened its doors, there was little doubt that it would have a huge and positive affect on the community. For the first time in decades a major facility is now available to provide needed programmes for the Special Needs community in a state-of-the-art facility. The wide range of offerings in sports/fitness related as well as the arts provided by the Centre was second to none in the entire GTA. As an all-inclusive facility, it also provides the local community as a whole with a venue not otherwise available. It creates a centre of excellence where those original goals of inclusion, integration and recreation have been brought to the Town of Whitby, the GTA and the Region at large. The Centre has been selected as one of the Parapan AM venues in 2015, and is also now home to the Ontario Basketball Association.