September 20, 2019

London Health Sciences Centre
800 Commissioners Road East
London, Ontario
N6A 5W9

Attention: Curtis Dray

Re: James Whyte and Frank Doherty Arenas
Thorold ON
HDR Project No: 10156965

Dear Mr. Dray,

HDR Architecture was requested to assess the existing architectural building conditions of the James Whyte and Frank Doherty Arenas located at 70 Front St. North in Thorold Ontario, including key public and user flows, access to services and interior finishes. The report includes observations while on site and recommendations for improvement of the architectural features.

Background

The James Whyte Arena was constructed in 1936. It is a one storey structure with a single ice pad and four change rooms, a referee's room and a dedicated women's change room. Additionally there is a furnace room and other ancillary services rooms. Multiple upgrades have occur over the life of the Arena including structural, parking and interior upgrades.

The Frank Doherty Arena was constructed in 1974. It is a 2 storey building which includes bleacher seating for spectators and a press box and has a single ice pad. It has seven change rooms, a referee's room, multiple storage rooms and elevator access to the second level. It also includes washrooms, and various service rooms.

A common lobby shared between the two arenas has washroom facilities, a small servery, bench seating and support service facilities. Additionally there is office space, committee/meeting rooms, a workshop, garage and storage facilities.

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Lobby and Common Area

The main entrance into the recreation centre is from Front Street. This entrance provides access to both the James Whyte and Frank Doherty Arenas. Because of the significant grade difference from Front Street to Ormond Street, approximately 3-5m, the building's main floor has been placed approximately 1m below the exterior grade level. The result is access to the facility through the front entrance requires visitors to descend five stairs to enter the lobby. This access is not ideal from an accessibility standpoint and visitors arriving via Front St. on foot.

The facility also has a entrance at the rear of the building from the parking lot. This entry point provides barrier free access with ramped curbs from the parking lot and push button operated doors. Additionally at the rear entry vestibule there is a small elevator for visitors to access the bleacher seating of the Frank Doherty Arena and gives full viewing of the ice surface.

The lobby/common area between the two areas hosts ticket booths at both entrances, a cantina for food and beverages, trophy/display cases, washroom access and access to utility rooms and office and meeting space.

While both ticket booths are an asset and allows flexibility for large events, they are both restrictive to the visitors and staff. The entry doors are undersized and do not provide barrier free access into them. Similarly for a visitor arriving at the ticket booth, a small counter extension would be difficult to access from a wheelchair. Access through the lobby is good, with a sufficiently wide area to travel. The washrooms have been recently renovated to conform to barrier free and universal washroom requirements.

Interior lobby finishes are in good condition, on floors, walls, and ceiling. The ceiling structure extends exposed timber beams, with a painted wood slat subfloor above. Walls are painted concrete block and board finish.

Frank Doherty Arena

Access to the arena and dressing rooms is through one of two sliding doors on the south side of the lobby. The doors are wide, allowing for dual direction travel. The doors are easily accessible from the lobby and are in clear sight. There is no separate entrance to the dressing rooms; for certain events, participants (for example hockey players) and visitors must enter and exit through the same doors. This can become

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problematic, with hockey in particular, when large equipment bags are going back and forth. An Ideal solution would be to separate the entry points.

One level of bleacher seating lines the arena on the east and west, with access to the second floor by way of an elevator. Designated seating areas have been incorporated into the second level for wheelchairs. The bleacher seats themselves are wood with steel supports and fittings, and are two-person seats. This style of seating was common for the time period the arena was constructed; however, it does not meet today's standards for seating and personal space. Guardrails at various locations throughout the Frank Doherty Arena do not meet Ontario Building Code standards. They currently allow for climbing and this deficiency should be addressed in the near future.

Acoustic panels have been installed around the arena on the second level behind the bleachers and throughout the ceiling space to improve acoustics. During our review acoustics did not seem to be an issue; however, for larger events including music concerts and entertainment shows, the acoustic properties may be of concern.

The roof system is a singular built up wood truss with steel beam and concrete post construction with wood slat deck and roof construction. Numerous structural reports have been previously prepared by other parties to assess the structural integrity of the existing support systems. Please review these reports for further details.

Seven dressing rooms lie below the bleachers to the east with access immediately inside the arena lobby doors. As mentioned previously a secondary access point to the dressing rooms would be ideal to streamline the paths of travel and access for visitors. Entry into the dressing rooms provides privacy for the users and includes stick holders by the doors. The rooms vary in size and are spacious. The floor is protected for skate blades and bench seating lines the perimeter walls with a continuous shelf above. Washroom and shower facilities are provided in each dressing room - typically with three showerheads, one urinal, one water closet and one lavatory. The washroom and shower facilities appear to be barrier free; however, the accessible showerhead in most instances is not reachable from a seated position. Additionally the equipment hooks above the benches throughout the dressing rooms are bent fixed steel rods mounted to a steel angle. These are not up to safety standards for public facilities - including dressing rooms - and should be replaced in the near future. Ceilings within are exposed concrete throughout.

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One of the seven dressing rooms is designated as the Referee Room however it is currently doubling as a laundry room. Non-fixed bench seating align one wall with equipment hooks similar to the other dressing rooms. Replacing these free standing benches with wall mounted fixed benches would provide a measure of safety and security for the user. Additionally access to the shower stall is through the washroom so does not allow use of the water closet if the shower is being used or vice versa. Access into the shower stall is inadequate and should be addressed. With the abundance of storage rooms, relocating the laundry services should be considered.

There is a small medical room with an exam table and hand wash sink. There is also a single washroom within the room. The washroom is not adequately sized and is difficult to access. The medical room is small and should ideally be twice as large to affectively service an injury.

Access to the ice surface is through two main aisles leading to the team benches.

There is an abundance of storage space under the bleachers on both the east and west sides. The storage rooms were inaccessible at the time of the site visit.

The hockey boards, glass and stanchions are all in good condition, as well as the penalty box and bench areas.

The press box is accessible by stairs, and is centrally located on the west side of the arena. Similar to the guards throughout the arena, the stair handrail does not meet Ontario Building Code standards. A folding table and stacking chairs are used in the press box, with an angled counter ledge at the viewing edge of the press box. The arena sound system is also housed in the press box.

James Whyte Arena

Access to the James Whyte Arena is through the lobby at the east side. The entrance is through a double door and is not as obvious an entry point as the Frank Doherty Arena from the lobby. There is wall signage to assist visitors' wayfinding.

After entering the arena you are led through a compressed entry point with ceiling height of approximately seven feet. To the immediate left of the entrance is a small three tier bleacher seating area along with a secondary seating area to the right.

Wayfinding from the main lobby is difficult with no signage directing users to the dressing rooms at the far north end of the arena.

Flooring is primarily concrete with rubber flooring laid in areas to protect skate blades.

Access around the perimeter of the arena is difficult. The large wooden supports for the truss system protrude into the path of travel making single file the only way around the rink. There is also a ramp system on the west side to move around the arena. It appears to provide visitors with an elevated path over services located below, which again makes travelling the arena area difficult. A handrail has been added at the ramp location to provide assistance while crossing; however, it terminates at the structural supports before restarting on the other side. Continuity of the handrail would be ideal. Space between the ramp and the arena boards allows the movement required for on ice activities; however, it poses a danger for small children who may accidently access the space.

The roof system is a multi-ply truss system with wood supports and gusset plates with wood plank roof substrate and roofing. The finish components of the roof and support system are peeling and in need of attention.

Finishes throughout the entire arena are in need of repair and refinishing.

Temperature control within the arena is a concern. There does not appear to be any insulation throughout the arena and during the time of the visit the temperature was uncomfortable for visitors.

There are currently four dressing rooms on the north side of the arena and one on the south side. Also on the south is a referee's room. The rooms on the south appear original to the building and where not accessible at the time of the visit. The entryway to the rooms, however, was open. It is not very well lit, and with a very narrow corridor and small doors, the rooms to the south are not easily accessible.

The four dressing rooms to the north appear to be a newer addition to the arena. These rooms have access to the exterior with a parking lot access. Floors outside the dressing rooms have been lined with rubber to protect the floor and skates from damage. The reviewed identified a separation outside the dressing rooms between the concrete block walls and the concrete roof slab. Investigations should be undertaken to resolve this issue immediately. Cracking in the walls was also observed in various locations. Each dressing room is laid out with perimeter bench seating fixed to the floor with row bent rod equipment hooks above. As noted above, these are not up to safety standards for public facilities and should be addressed in the near future. There is a hockey stick holding area at the entrance to each room and the floors are lined with rubber for protection.

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Each dressing room has washroom facilities, but these do not meet barrier free standards. The shower floors are in need of refinishing and should provide a measure of slip resistance.

The arena boards are a dated wood construction, including the on ice door access and penalty box area. Home and away benches are also wood construction. While the board system is currently functional it will be in need of replacement in the coming years.

There are various emergency exits around the perimeter of the arena; however, some exits are slide latched at top and bottom and are not ideal in an emergency. Consideration should be given to hardware replacement.

Similar to the Frank Doherty Arena, the James Whyte Arena includes a press box in the northeast corner. The press box is a combination wood and concrete block structure. It is small and does not provide sufficient access for multiple users at the same time.

Office and Meeting Spaces

Near the Front Street entrance on the North side off the Lobby is the Community Corner. This is a space to post events and ads for both the arena community allowing visitors a space to see what is happening in their community. This is a great use of space that would otherwise be a dead zone as people pass through to the surrounding spaces.

The Community Corner leads to the main office space. The office space is sufficient for two staff members with an additional office connected at the back of the main office. The furniture and layout could be reorganized to better utilize the space available. Access through to office is tight and would not satisfy barrier free requirements. Additionally the storage room is up a small flight of stairs, which is not ideal for transportation of stored goods.

There are two multipurpose rooms, one currently being used by a local sports team and the other as a flexible room for meetings and support staff. The larger of the two rooms has a counter with cabinets and sink. This allows for flexible use.

Further down the corridor from the Community Corner is a single washroom. It does not meet accessibility standards.

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Exterior

The exterior of the Frank Doherty Arena is a combination architectural concrete block and metal siding. The exterior appears to be in good repair; however, the entire shell is reflective of the era it was constructed and would benefit from a complete facelift.

The James Whyte Arena's exterior is not in good condition. It is a primarily metal siding shell; however; small portions also include wood siding. The most recent addition is architectural block and siding. The metal siding on the main building is dented and bent in numerous locations. The area of wood siding near the peak of the support building is reaching the end of its life cycle. Multiple holes were observed in various locations of the metal siding. Rust is present on door hardware and on areas of the metal siding.

Drainage appears to be an issue over the Community Corner and office/meeting spaces as additional drainage pipes have been added to the exterior of the building.

The parking north of the James Whyte Arena is in need of repair. Lines for visitors are no longer visible and there are numerous cracks in the asphalt. Parking to the east is in slightly better repair - lines are visible and there are fewer cracks. The east parking lot, being the primary lot, is not ideal for visitors with disabilities or reduced mobility because of the slope of the site.

Within the overall site, located on the west side, is an occupied residential lot with a detached garage/shed. This property divides the site and, if acquired, would allow for better cohesion and flow of the site, landscaping and wayfinding.

For first-time visitors, it is difficult to easily determine the location of the main parking area and access to the building. Improving these aspects would greatly benefit all visitors.

Conclusion

Both the Frank Doherty and James Whyte Arena currently function as the primary recreation centre and ice surfaces for the City of Thorold. The James Whyte Arena was original to the site and has passed its feasible life cycle. With numerous accessibility shortcomings and visitor path of travel concerns, issues with the current building enclosure and separation from the main lobby investing capital into this portion of the facility would not be recommended beyond life safety requirements. Although the Frank Doherty Arena was constructed more recently, it also has various

concerns as listed above. It is feasible to maintain the Frank Doherty arena for a time; however, serious consideration should be given to a state of the art replacement facility. The current lot size is conducive to a new build and would allow for intuitive site design, access and complementary services for the community at large.

Sincerely,

HDR Architecture Associates, Inc.

Jim Dodge, M.A.A.T.O, GGP
Project Manager

Cc. Mary Catherine Mehak, Mark Hentze