

Monthly Summary Report No. 15 – Canada Games Park

Project:	Canada Games Park – 1813 Sir Isaac Brock Way, Thorold	
Owner:	2021 Canada Games Host Society Inc.	
Contract:	General Construction (GC) – Stipulated Price Contract (CCDC2) with Amendments	
Contractor:	Aquicon Construction – 131 Delta Park Blvd., Brampton, Ont. L6T 5M8	
Reporting Period:	March 1 st , 2021 to March 31 st , 2021	
Report Date:	April 15, 2021	UEM Project #19-802
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1.0 PROJECT CONTRACT WITH AQUICON CONSTRUCTION

The construction budget (excluding HST) for the Canada Games Park Project includes:

Construction (Aquicon Contract)	\$83,956,225.00
Contract Allowances	\$1,624,000.00
Contract Award	\$85,580,225.00
Approved Change Orders to February 28 th , 2021	\$5,932,258.73
Cost Included for Change Directive 6 on Certificate of Payment 15	\$138,450.50
Total Contract	\$91,650,934.23

2.0 PROJECT SCHEDULE

The CCDC-2 contract, including amendments to the CDC-2 between 2021 Canada Games Host Society Inc. and Aquicon Construction (the Contractor), included that specific works were to be completed on a “date certain basis”. In executing the contract, the Contractor agreed that the Phase 1 Work would be completed by July 16th, 2021. The Phase 1 Work includes:

- Outdoor athletic facilities (track & field facilities including track, jumps, and throw areas. Excluding warm up track and lighting) - (100% completed)
- Beach volleyball facilities including lighting - (80% completed)
- Canada Games Park parking lot & entrance - (65% completed)
- Storm water management - (100% completed)
- Water supply to site plumbing fixtures - (70% completed)
- Communication and power operational - (45% completed)

At the request of the Consortium completed Phase 1 Work will be retained by the contractor until substantial completion of the project. The contractor submitted the additional cost for maintenance and security as Change Order No. 110 approved by the Consortium on December 11th, 2020 and approved by the Consortium on December 11th, 2020. This change revises the Phase 1 “date certain” completion date from July 16th, 2021 to substantial completion. Site Instruction (SI) No. 68 (January 18th, 2021) removes the liquidated damages obligations from the contract.

The west parking lot (Brock parking) will be turned over no later than May 31st, 2021. A deficiency review will be coordinated with the contractor, consultants, and Brock prior to acceptance.

Aquicon provided a baseline project schedule on December 19th, 2019. An updated baseline schedule including a detailed critical path, work breakdown structure, increased level of details and constraints was provided on July 13th, 2020. On September 16th, 2020, the Canada Games Council and the 2021 Canada Games Host Society decided to reschedule the games until August 2022. A revised schedule without a mandatory construction shutdown in August 2021, was submitted on October 6th, 2020. The contractor

provides an updated schedule with its monthly draw as stipulated in the contract. Each iteration of the project schedule updates and expands the activities included in the schedule.

An updated schedule was provided by Aquicon on April 6th, 2021 that provides dates for recently completed or newly started activities; adding new items associated with the Brock parking lot completion; updated and expanded Change Directive 06 work (ongoing); (note that revised low roof, soffit framing and cladding tasks are dependent on the completion of the Change Directive 06 work); revised pre-construction meeting and installation of the vegetated roofs; revised arenas 1 and 2 pad pours. The updated schedule does not include the additional 20 working days noted in Change Order 130r1.

Aquicon advised that the Arena pad pour delay resulted from the following reasons:

- the frost lingered longer than anticipated.
- the sand supplier failed to meet their contractual obligations resulting in the need to source another supplier.

This delay does not impact the critical path and does not impact any other tasks other than the rink slabs.

UEM and the contract administrator have engaged in ongoing discussions since the beginning of the project with Aquicon to produce a more comprehensive schedule. Understanding there has been good progress with the latest schedule update submitted on April 6th, 2021. UEM continues to request additional detail surrounding the commissioning and start-up activities.

Our September 2020 report noted that the Consortium must develop its plans for assuming responsibility for the building and system operations including IT, communications, and security. When substantial performance (noted as December 1st, 2021) is certified, the Consortium will be responsible for insurances, maintenance, and all operations. Prior to substantial there will be building systems commissioning and operator training. It is recommended that the Consortium have its key personnel available to participate in these activities. The building systems and refrigeration/heat recovery systems are sophisticated operations that require experienced and trained personnel. We anticipate that they would be required on site no later than the Spring/Summer of 2021.

It is important that the consortium initiate the process to select a third-party operator in the near future. If the operator is to be in place by Spring/Summer 2021, the process must start soon.

Section 17.0 (Potential Project Risks) and Section 18.0 (Other Project Matters) note that the project schedule may again be impacted by the pandemic event and should continue to be monitored.

2019

CONSTRUCTION ACTIVITY	ESTIMATED DATE COMPLETE	ESTIMATED PERCENT OF PROJECT CONSTRUCTION COMPLETED
Construction Tender Issued	September 3 rd , 2019	0%
Construction Tender Public Opening	October 29 th , 2019	0%
Contractor Mobilization	December 2 nd , 2019	0%
Pulverize Existing Asphalt	Dec 13 th , 2019	1%

2020

Strip & Grade Building Pad	January 3 rd , 2020	3%
Temporary Brock Parking	January 6 th , 2020	4%
Flora Egerter Way Closed for Water Main Work	February 18 th -21 st , 2020	7%
Concrete Footings & Foundations	April 3 rd , 2020	15%
Damp Proofing & Backfill	April 3 rd , 2020	15%
Stormwater Pond <i>(Phase 1 Work)</i>	May 18 th , 2020	20%
Electrical and Communications Ductbanks <i>(Phase 1 Work)</i>	June 5 th , 2020	25%
Site Servicing (SAN, WTM, STM) <i>(Phase 1 Work)</i>	July 10 th , 2020	30%
Gymnasium Concrete Slab	August 18 th , 2020	34%
Concrete Curbs & Walkways	September 25 th , 2020	35%
Level 2 Concrete Slab	September 25 th , 2020	35%
Structural Steel	November 9 th , 2020	35%
Track & Field <i>(Phase 1 Work)</i>	November 12 th , 2020	40%
Asphalt Paving Road & Brock Parking	November 27 th , 2020	46%
Architectural Pre-Cast Concrete	December 21 st , 2020	50%

2021

Exterior Studs & Sheathing	January 29 th , 2021	61%
Roof Watertight	February 12 th , 2021	63%
Spray Insulation	February 25 th , 2021	64%
Mechanical & Electrical Rough-ins	March 19 th , 2021	68%
Interior Masonry	April 16 th , 2021	71%
Arena 2 Pad Pour	May 11 th , 2021	73%
Arena 1 Pad Pour	May 25 th , 2021	74%
Brock Parking Lot & Flora Egerter Way Turnover	May 31 st , 2021	74%
Elevator Delivery & Install	June 25 th , 2021	76%
Glass & Glazing	June 25 th , 2021	76%
Finish Hardware	June 25 th , 2021	76%

Exterior Cladding	September 10 th , 2021	82%
Vegetated Roof	October 15 th , 2021	84%
Asphalt Paving – Topcoat Canada Game Parking	October 15 th , 2021	90%
Landscaping, Planting, Sod	October 15 th , 2021	90%
Equipment Start-up & Commissioning Begins	November 1 st , 2021	95%
IT/AV/Security	November 5 th , 2021	97%
Signage & Wayfinding	November 26 th , 2021	99%
Substantial Performance	December 1 st , 2021	99%

2022

Total Completion	January 26 th , 2022	100%
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On April 8th, 2021 the contractor advised nineteen and three quarter (19.75) working days have been lost due to inclement weather and difficult working conditions in the inclement weather since the beginning of the project. The Project Manager reviews lost weather days with the contractor weekly and reports to the Consortium every other week. The number of lost weather days recorded from windy, wet, and hot weather is confirmed and the potential effect is considered in the contractor's updated schedule. To date there has been no material impact on the project schedule.

Total number of working days lost to the first provincially ordered shutdown is twenty (20), from April 4th, 2020 to May 4th, 2020.

Construction Site meetings are held every other Thursday starting December 19th, 2019.

Separate technical coordination review meetings will be held to discuss the construction critical items such as the running track, arena slab pours, gymnasium slab pour, main building slab pours and the green roof. These meetings will include all key trades and consultants. The purpose is to review the construction methods, specifications and to troubleshoot potential challenges to constructing the component. The dates for the meetings are as follows:

Track and field pre-construction meeting - May 29th, 2020

- Meeting minutes prepared on June 8th, 2020.
- Four-week delay mobilizing due to the COVID-19 work shut-down.
- Accessible access required for southern throwing areas.
- All equipment ordered and deliveries scheduled.
- Separate track & field construction schedule prepared.
- Construction is schedule over the next 5 months, completed by end of October 2020. Other schedule milestones include:
 - o Sub-drain piping – June 19th, 2020
 - o Irrigation piping – July 15th, 2020
 - o Asphalt paving – August 13th, 2020
 - o Sod field – August 28th, 2020

- Track Surfacing – October 12th, 2020

IT/AV pre-tender coordination meeting – June 3rd, 2020

- Tender to be a weighted evaluation based towards quality, capability, and experience.
- A recommended list of vendors was established by the Consortium, contractor, and design team.
- Specifications to specify equipment performance not specific products.
- Tendered June 8th, 2020

Landscape alternatives meeting – June 4th, 2020

- Contract administrator identified excess of soils on site. Landscape meeting held to assess options for placement and grading of excess soils.
- Architects to reevaluate the landscape design to include options for donor trees and bench opportunities.
- Architects to refine the storage container design/location.

Hardware coordination meeting – July 16th, 2020

- Proposed change from Medeco large format cylinders to Medeco small format interchangeable cylinders. (Consortium approved on July 24th, 2020)
- Direction to key the building using Brock's keying hierarchy

Landscape review meeting (on-site soils) – July 23rd, 2020

- Approval of revised locations of walkways, bike amenities, volleyball, and throwing areas
- Approval of storage facility location
- Remediated soil pile to remain on site, approximately 14,000 cubic meters will be utilized for landscape features on Canada Games Park

Roofing pre-construction meeting – September 3rd, 2020

- Reviewed numerous roofing/parapet/flashing details. Confirming design intent, constructability, and inspection requirements.
- Tri-Tech Pinnacle to begin inspections at end of September.

Arena slab pre-construction meeting – February 25th, 2021

- Reviewed the scope, specifications and sequencing with all subcontractors, consultants, and inspectors.
- Rink slab base confirmed (sand depth, insulation thickness, expansion joint, slip sheet).
- Contractor to prepare quote with revised chair spacing from 3 foot o/c to 2 ft o/c.
- Contractor to provide two datums for construction reference.
- Concrete supply timing and dispatch plant confirmed, pour must be continuous.
- Concrete mix is 30MPA, no air w/ 14mm aggregate. No water to be added on site.
- Concrete slump revised to 180mm +/- 30mm.
- Rink 2 slab pour scheduled for week of April 6th, 2021.
- Rink 1 slab pour scheduled for week of April 19th, 2021.

Green roof pre-construction meeting – August 2nd, 2021

3.0 FRONT END DOCUMENTATION AND RESPONSIBILITIES

New and renovated construction projects can require several pre-approvals and documentation prior to and during construction. Following is a brief checklist of the more common project front end responsibilities required as part of the contract at the provincial and regional/municipal levels.

3.1. BUILDING PERMIT & SITE PLAN APPROVAL

City of Thorold Site Plan Agreement

- ✓ **Completed** (January 30, 2020)

City of Thorold Building Permit

- ✓ **Completed** (February 4th, 2020)

City of Thorold Plumbing Permit

- ✓ **Completed** (February 4th, 2020)

Fire Suppression (Sprinkler) Permit

- ✓ **Completed** (January 27th, 2021)

Exhaust and suppression system permit

- ✓ **Outstanding** – To be completed by café tenant during final fit-out

Niagara Peninsula Conservation Authority (NPCA) Work Permit

- ✓ **Issued** (April 23rd, 2020)
- ✓ Work complete and permit closed (August 11th, 2020)

Pylon signage permit

- ✓ **Outstanding** – To be completed by signage contractor

3.2. LEGAL SURVEY OF SITE

Chambers and Associates Surveying Ltd. were retained to provide a legal survey of Canada Games Park.

- ✓ Reference Plan 15R-16723 was registered under the Surveys Act and Land Titles Act on June 10th and deposited with the Land Registry Office of Niagara on June 17th, 2020.

3.3. GENERAL REQUIREMENTS

The contractor is required to prepare a project specific “health and safety” plan for review by the Consortium and posted at the project site. The contractor is to provide safety training to trades and representatives that intend to access the project site.

- ✓ **Completed**

The contractor will engage the municipal building inspector and Fire Department at the beginning of the project to review building exits, fire access and other code matters.

- ✓ **Completed**

The contractor will provide prior to construction, a Gantt chart in sufficient detail to track (and update) progress and a cash flow forecast.

- ✓ **Completed** – Ongoing Updates

The contractor will provide a watermain commissioning plan.

- ✓ **Completed** (January 17th, 2020)
 - Watermain piping installation, commissioning and testing completed. City of Thorold witnessed the commissioning and confirmed the test results. Agreed it was acceptable to make final connections.

3.4. ENVIRONMENTAL REQUIREMENTS & APPROVALS

Ontario Regulation 102/94 – “Waste Audits and Waste Reduction Work Plans” mandates that a project consisting of the construction of one or more buildings with a total floor area of at least 2,000 square meters requires the contractor to:

- Conduct a pre-construction waste audit
 - ✓ **Completed**
- Prepare a written waste reduction plan based on the waste audit to reduce, reuse and recycle waste to be generated at the construction project
 - ✓ **Completed**
- Implement the waste reduction plan
 - ✓ **Completed / Ongoing**
- ECA Application for the new storm water pond.
 - ✓ **Completed** - Application to amend existing ECA approved, June 22, 2020

Renovation of buildings constructed prior to approximately 1979 require a project specific designated substance survey prior to construction. If hazardous or designated substances are identified, then remediation must be undertaken prior to the construction/renovation.

- **Not Required**

3.5. SERVICES FROM OTHER AGENCIES (INCLUDING SCHMON PARKWAY SANITARY UPGRADES)

Supply natural gas to Canada Games Park – Enbridge Gas

- ✓ **Completed**
 - NPL installation commenced on August 28th, 2020.
 - Complete installation included meter station September 25th, 2020

Thorold Sanitary Sewer Upgrade to Service Canada Games Park

- Design completed by Upper Canada Consulting (UCC)– April 22nd, 2020.
- Tender documents finalized based on comments from the City of Thorold.
- Contractor mobilized on January 25th, 2021.
- Underground construction completed on February 12th, 2021.
- Certificated of Payment 01 received on February 22nd, 2021.
- UCC, UEM and City of Thorold representatives met on site April 6th, 2021 to review road settlement. UCC preparing change order.
- Road repair and new asphalt to commence once local asphalt plants open.

3.6. INFRASTRUCTURE ONTARIO

Infrastructure Ontario provides advisory services on behalf of the Ministry of Heritage, Sport, Tourism and Culture Industries and Ministry Infrastructure. Five reports have been received from Infrastructure Ontario:

Report #1 – March 3rd, 2020

Report #2 – June 10th, 2020

Report #3 – June 29th, 2020

Report #4 – November 10th, 2020

Report #5 – January 18th, 2021

Report #6 – February 12th, 2021

Report #7 – March 12th, 2021

A schedule review meeting was held with Infrastructure Ontario, 2021 Canada Games Host Society Inc, Aquicon and UEM on July 3rd, 2020. Aquicon provided an updated schedule highlighting critical path activities, detailed work breakdown structure (including building interior), constraints and milestones on July 13th, 2020.

3.7. OTHER RESPONSIBILITIES

Coordination between the architect and the engineering design team is ongoing through the design phase and now into the construction. REVIT Software is used by the designers to model the building and building systems in three dimensions to ensure proper fitting of building components and systems. During the construction phase the steel fabricator used a different model (Tekla) which forms the basis for all the steel fabrication and coordination.

Weekly meetings were held with the structural, architectural, steel fabricator and general contractor to address design challenges and trouble shoot items that arose through the steel erection construction. The detailed Tekla model was shared with all trades to develop shop drawings from this very precise model. Differences between the two models are reviewed in detail and any changes are agreed to by the designers and contractor. This has resulted in structural changes that will benefit the building.

On January 11th, 2021, the contract administrator created a project deficiency log to compile all construction deficiency comments received through the various testing and inspection reports. This deficiency log will be updated, monitored, and discussed bi-weekly at the Canada Games Park construction meetings.

4.0 MAJOR ACTIVITIES COMPLETED/ONGOING

December 1st to December 31st, 2019

- Contractor mobilized
- Existing asphalt in parking lots U and V pulverized
- Site stripping, cut/fill underway

January 1st to January 31st, 2020

- Temporary parking lot completed (January 6th)
- Footings underway
- Storm water pond/ facility excavation started
- Foundations underway
- Foundation damp proofing underway
- Underground servicing underway

February 1st to February 29th, 2020

- Footing & foundations ongoing
- Foundation damp proofing ongoing
- Mechanical underground underway
- Electrical & communications duct-bank underway
- Site servicing completed (Water, Storm, Sanitary)

March 1st to March 31st, 2020

- Footing & foundations complete
- Foundation damp proofing ongoing
- Backfilling of foundation ongoing
- Relocation of topsoil underway
- Watermain installation commissioning completed

Section 17.0 notes that certain activities are likely to be delayed because of mandatory closures, on-site productivity and material supply delays.

April 1st to April 30th, 2020

On April 4th a government mandated shutdown halted the construction of Canada Games Park (See Section 18.0 for more detail).

- Site made safe for extended shutdown

May 1st to May 31st, 2020

On May 4th the government revised the list of essential services allowing the construction of Canada Games Park to resume.

- Poor soils remediation within building area footprint – excavation and relocation ongoing
- Mechanical underground ongoing
- Electrical & communications underground ongoing
- Track & field underground weepers and main drain installed
- Rinks 1 & 2 underground refrigeration piping underway
- Steel erection underway
- Masonry walls underway

June 1st to June 30th, 2020

- Steel erection ongoing
- Masonry walls ongoing
- Rinks 1 & 2 underground refrigeration piping complete
- Stormwater management pond excavation ongoing
- Track and field curbs ongoing
- Track and field drainage complete
- Track and field gravel base complete

July 1st to July 31st, 2020

- Steel erection ongoing
- Gymnasium structural steel complete
- Interior slab on grade preparation underway
- Steel decking underway
- Gymnasium ductwork underway
- Roadway and volleyball drainage weepers complete
- Stormwater management pond excavation completed

August 1st to August 31st, 2020

- Gymnasium slab pour complete
- Indoor running track metal decking complete
- Gymnasium change room masonry complete
- Arena 2 structural steel complete
- Arena 1 structural steel ongoing (95%)
- Outdoor track paving complete
- Track infield soil import complete
- Track irrigation ongoing

September 1st to September 30th, 2020

- Indoor running track concrete complete
- Arena 1 structural steel complete
- Track irrigation complete
- Track infield sod complete
- Track surfacing ongoing
- Building core slab on grad complete
- Arena 2 rink formwork underway
- Metal decking for roof underway

October 1st to October 31st, 2020

- Gymnasium metal decking complete
- Mechanical well metal decking complete
- Track surfacing and line painting complete
- Gymnasium roofing started
- Precast concrete seating installed in Arena 1
- Architectural precast installed on north and east side of facility
- Interior steel stud framing underway

November 1st to November 30th, 2020

- Track & field facilities completed
- Roof decking: Arena 1, Arena 2 complete
- Gymnasium roofing complete
- Mechanical well roofing ongoing
- Architectural precast installed on west side of facility
- Spray fireproofing ongoing
- Mechanical installation underway: sprinklers, ductwork
- Base asphalt west parking lot & Flora Egerter Way complete

December 1st to December 31st, 2020

- Mechanical well roofing complete
- Architectural precast on south side of facility ongoing
- Roofing: Arena 1, Arena 2 underway
- Aluminum window frame installation: Arena 2 and Gymnasium complete
- Arena 2 change room masonry ongoing

January 1st to January 31st, 2021

- Architectural precast complete
- Aluminum window frame installation: Arena 1 and south entry complete
- Exterior Glazing installation: Gymnasium and Arena 1 underway
- Arena 2 change room masonry ongoing
- Level 1 mechanical ductwork and plumbing ongoing
- Level 2 drywall and taping ongoing

February 1st to February 28th, 2021

- Aluminum window frame installation complete
- Exterior Glazing 95% complete
- Arena 2 masonry complete
- Arena 1 drywall ongoing
- AHU main ductwork distribution underway
- Interior drywall ongoing

March 1st to March 31st, 2021

- Exterior Glazing 99% complete
- Cooling tower installation complete
- Mechanical well cladding complete
- Arena 1 masonry complete
- Rink 1 and 2 sand base complete

5.0 FORECASTED CASH FLOW

The Aquicon contract includes the Canada Games Park construction (\$83,956,225) and allowances (\$1,624,000) for Testing and Inspection, Door Hardware, Interior Signage, Gas Services, and IT/AV Security for a total project budget of \$85,580,225. Projected cash flow (excluding HST) for monthly Aquicon contract draws follows.

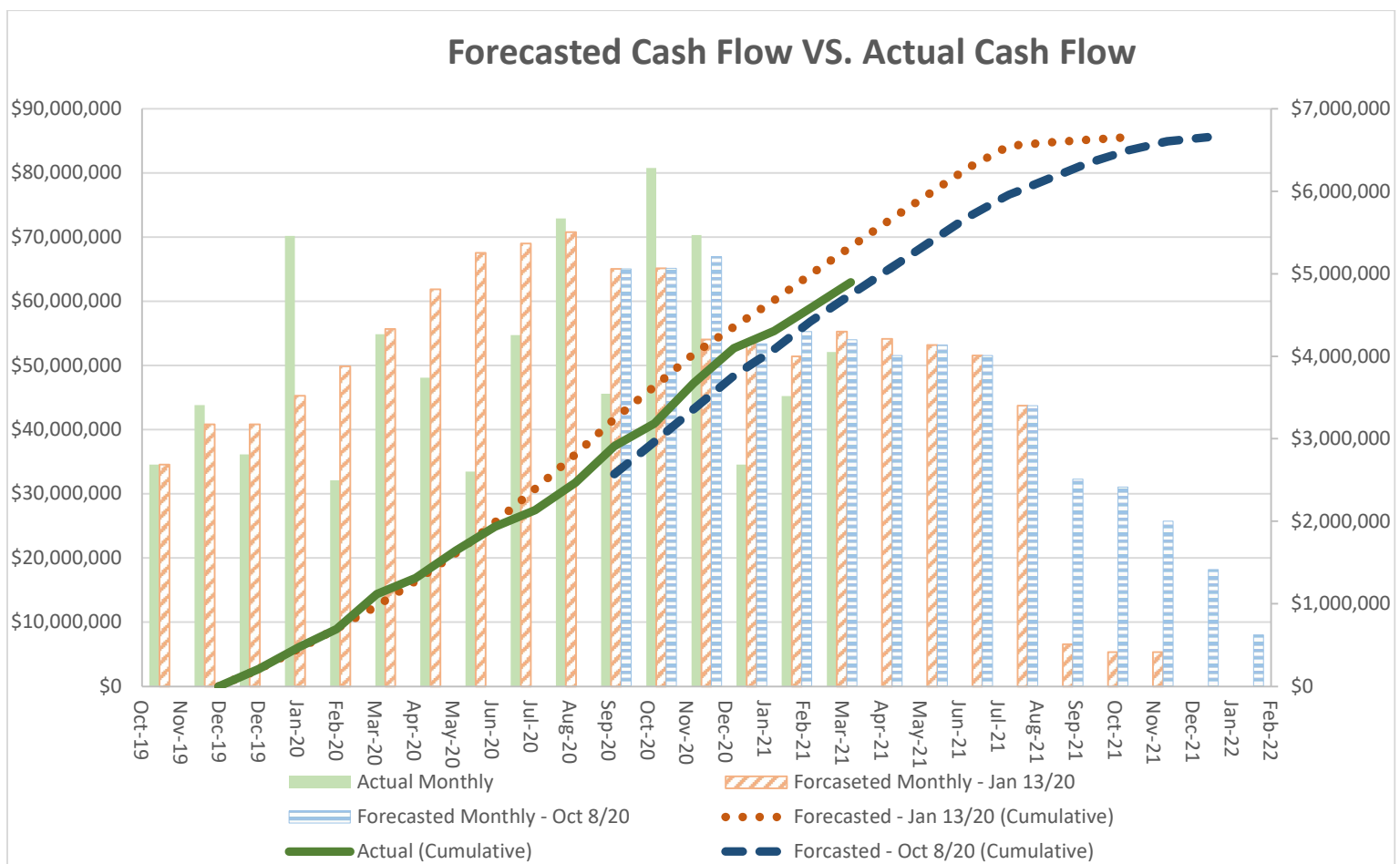
Projected and Actual Cumulative cash flow includes the total monthly amount Certified. The “actual monthly” and “actual cumulative” is before 10% of the certified amount is deducted for statutory holdback. It is also exclusive of HST. The cash flow forecast was updated on October 8th, 2020. For comparison the cashflow forecast from January 13th, 2020 is also noted on the following graph.

Also included is a month by month (non-cumulative) actual and forecasted cashflow.

Section 17.0 (Potential Project Risks) and Section 18.0 (Other Project Matters) note that the project schedule is likely to be impacted by the pandemic event. The forecasted cashflow has not yet been revised to reflect the impact because of the uncertainty when certain materials will be supplied to the project.

Construction Period Ending	Forecasted Cumulative – January 13, 2020 (Exc. HST)	Forecasted Cumulative – October 8, 2020 (Exc. HST)	Actual Monthly (Exc. HST & Inc. 10% Holdback)	Actual Cumulative (Exc. HST & Inc. 10% Holdback)
2019				
December	\$2,687,486		\$2,687,486	\$2,687,486
2020				
January	\$5,862,486		\$3,409,689	\$6,097,175
February	\$9,037,486		\$2,812,112	\$8,909,287
March	\$12,557,486		\$5,459,857	\$14,369,144
April	\$16,437,486		\$2,496,584	\$16,865,728
May	\$20,767,486		\$4,268,526	\$21,134,254
June	\$25,577,486		\$3,740,480	\$24,874,734
July	\$30,832,486		\$2,601,654	\$27,476,388
August	\$36,197,486		\$4,255,888	\$31,732,276
September	\$41,702,486		\$5,668,920	\$37,401,196
October	\$46,762,486	\$38,139,632	\$3,545,131	\$40,946,326
November	\$51,828,486	\$43,205,632	\$6,283,105	\$47,229,431
December	\$55,983,486	\$48,410,632	\$5,468,641	\$52,698,072
2021				
January	\$60,133,486	\$52,560,632	\$2,687,307	\$55,385,379
February	\$64,133,486	\$56,860,632	\$3,519,031	\$58,904,411
March	\$68,393,486	\$61,060,632	\$4,050,580	\$62,954,991

April	\$72,603,486	\$65,070,632		
May	\$76,738,486	\$69,205,632		
June	\$80,708,486	\$73,215,632		
July	\$84,108,486	\$76,615,632		
August	\$84,618,486	\$79,125,632		
September	\$85,019,356	\$81,541,502		
October	\$85,420,225	\$83,541,502		
November		\$84,957,372		
December		\$85,580,225		



6.0 PROPOSED CHANGE ORDERS (PCO)

Proposed Change	Date Issued	SI /RFI	Description of PCO	Status
PCO-001	Nov. 29/19		Structural Revisions – Structural Steel	CO-01
PCO-002R1	Dec.12/19	RFI-87	Structural Revisions – Sump Pit Modifications	CO-05
PCO-003	Dec. 11/19		Revisions to Sanitary Lines and MH 'F'	CO-02
PCO-004	Jan. 4/20		Relocate Existing Jersey Barriers (Parking Lot Safety)	CO-04
PCO-005	Jan. 21/20		Split Well Frost Protection	CO-03
PCO-006	Jan. 9/20		Revised Steel Framing	CO-06
PCO-007	Jan. 9/20		Revised Steel Framing	CO-07
PCO-008	Jan. 22/20		Door Schedule Revisions	CO-15
PCO-009	Jan. 23/20		Revised Steel Framing	CO-11
PCO-010	Jan. 29/20		Revised Skylight Framing	CO-10
PCO-011	Jan. 31/20		Steel Supports at Cantilevered Deck	CO-09
PCO-012	Feb. 10/20		Roof Curb for Emergency Generator	CO-16
PCO-013	Feb. 19/20		Revise Gymnasium Roof Framing	CO-17
PCO-014	Feb. 25/20		Revise Top Rail Anchoring – Arena 1 Vomitories	Canceled
PCO-015	Mar. 2/20		Revise Power & Data locations at CSC Reception	CO-18
PCO-016	Mar. 3/20		New Structural Detail – Masonry Wall Support	CO-20
PCO-017	Mar. 3/20		Poor Soils Remedial Measures	CO-58
PCO-018	Mar. 5/20		Gymnasium 2 nd Floor Framing - Balustrades	CO-25
PCO-019	Mar. 26/20	RFI-164 RFI-165	Revise Piping In-Trench Radiator & FFH-02-01 Feeds	CO-22
PCO-020	Mar. 30/20		Add Greywater Collection & Distribution System	Canceled
PCO-021	Mar. 30/20		Revise Precast Bleacher Support	Revised

PCO-021r1	Apr. 2/20		Revise Precast Bleacher Support	Revised
PCO-021r2	Apr. 28/20		Revise Precast Bleacher Support	CO-32
PCO-022	Apr. 7/20	RFI-176	Increase Curbs for RTUs 5, 7, 8, 9	CO-24
PCO-023	Apr. 16/20		Revise Precast Stair Landing Support	CO-26
PCO-024	Apr. 17/20		Revised Stormwater Pond Outlet	CO-29
PCO-025	Apr. 24/20		Revise Supports for Precast Screens	CO-28
PCO-026	May 12/20		Revised Sizing of Screens, Glazing, Door Heights	CO-41
PCO-027	Jun. 9/20		Revise Baby Change Station Specifications and Locations	CO-44
PCO-028	Jun. 11/20		Revised Boiler Room Venting	CO-50
PCO-029	Jun. 11/20	RFI-196	Remove Site Services Domestic Water Line Connection	Canceled
PCO-030	Jun. 22/20		Door Hardware Coordination	CO-47
PCO-031	Jun. 25/20		Revise Door D1041 from Double to Single	CO-46
PCO-032	June. 26/20		Add Water Line Stub-out for Track Irrigation	CO-54
PCO-033	June 29/20		Gymnasium Communication Conduit Rerouting	CO-48
PCO-034	Jul. 2/20		New Communication Sleeves in IT Room	Revised
PCO-034r1	Jul. 6/20		New Communication Sleeves in IT Room	CO-49
PCO-035	Jul. 10/20		Revised Outdoor Storage Area, Bike Amenities, Volleyball Courts and Landscaping	Revised
PCO-035r1	Jul. 14/20		Revised Outdoor Storage Area, Bike Amenities, Volleyball Courts and Landscaping	Revised
PCO-035r2	Jul. 29/20		Revised Outdoor Storage Area, Bike Amenities, Volleyball Courts and Landscaping	Revised
PCO-035r3	Jul. 31/20		Revised Outdoor Storage Area, Bike Amenities, Volleyball Courts and Landscaping	Revised
PCO-035r4	Aug. 14/20		Revised Outdoor Storage Area, Bike Amenities, Volleyball Courts and Landscaping	Revised

PCO-035r5	Aug. 31/20		Revised Outdoor Storage Area, Bike Amenities, Volleyball Courts and Landscaping	CO-66 (Partial Costs)
PCO-035r6	Email Clarifications September 2020		Revised Outdoor Storage Area, Bike Amenities, Volleyball Courts and Landscaping	CO-123
PCO-036	Jul. 23/20		Revised Specs for Type “G” Floor Grilles	CO-106
PCO-037	Jul. 31/20	RFI-234	Track Infield Topsoil	CO-57
PCO-038	Aug. 5/20		Revise Change Room Showers	CO-70
PCO-039	Aug. 7/20		Add Subdrains to CBMH 8 in West Parking Lot	CO-56
PCO-040	Aug. 11/20		Add Lintel Support Post – Pre-Cast Bleacher	Cancelled
PCO-041	Aug. 12/20		Door Coordination with Electrical	CO-80
PCO-042	Aug. 12/20	RFI-223	New Grease Pump-Out Box Detail	CO-78
PCO-043	Aug. 26/20		Revised CMU Partitions at Plumbing Chases	Revised
PCO-043r1	Aug. 28/20		Revised CMU Partitions at Plumbing Chases	CO-60
PCO-044	Aug. 31/20	RFI-262	Add Steel Stud Furring for Exterior Screens	CO-93
PCO-045	Sept. 1/20	RFI-261 / RFI-265	Revised Steel Deck Support and Partition Types	CO-73
PCO-046	Sept. 2/20		Revise Curtain Wall Support Angle	CO-63
PCO-047	Sept. 2/20		Delete Site Lighting Fixtures	Cancelled
PCO-048	Sept. 4/20		Revise Athletic Flooring Type in Arenas	CO-83
PCO-049	Sept. 11/20		Revise Edge of Deck Dimension	CO-68
PCO-050	Sept. 15/20		Revise Precast Bleacher Bearing Plate	CO-71
PCO-051	Sept. 15/20		Revise Slab Reinforcing in Zamboni Areas	CO-101
PCO-052	Sept. 15/20		Revisions as Part of the Value Engineering Agreement	Revised
PCO-052r1	Sept. 15/20		Revisions as Part of the Value Engineering Agreement	CO-104

PCO-053	Sept. 18/20		Revised Fire Rating of Column Hy-18z	Revised
PCO-053r1	Sept. 25/20		Revised Fire Rating of Column Hy-18z	CO-82
PCO-054	Sept. 22/20		Additional Diagonal Brace – Structural Steel	CO-75
PCO-055	Sept. 25/20		Edge of Deck Modification along Gridline Hx	CO-77
PCO-056	Sept. 30/20		Volleyball Net Foundations	CO-76
PCO-057	Oct. 2/20		Landscape Grading and Drainage Revisions	Revised
PCO-057r1	Oct. 5/20		Landscape Grading and Drainage Revisions	CO-100
PCO-058	Oct. 8/20		Gymnasium Corridor Bulkhead	CO-92
PCO-059	Oct. 14/20		Sprinkler Room 1093 North Wall	CO-103
PCO-060	Nov. 19/20		Exterior Scoreboard coordination	CO-124
PCO-061	Oct. 20/20		Non-Perpendicular Deck Edge Support	CO-84
PCO-062	Oct. 22/20		Add Breathable Barrier to R3 Roof Assembly	Revised
PCO-062r1	Nov. 2/20		Add Breathable Barrier to R3 Roof Assembly	CO-107
PCO-063	Oct. 22/20		Revise Shower Installation Height	CO-98
PCO-064	Oct. 30/20		Revised Floor Drain in Dedicated Team Room	CO94
PCO-065	Oct. 30/20		Revised Gas Line Routing	CO-108
PCO-066	Oct. 30/20		Revised AV Scope based on Value Engineering	CO-109
PCO-067	Nov. 2/20		Second Floor Screen Supports	CO-91 & CO-118
PCO-068	Nov. 6/20		Add Support for Wall at Cooling Tower Well	Revised
PCO-068r1	Nov. 6/20		Add Support for Wall at Cooling Tower Well	CO-112
PCO-069	Nov. 12/20	RFI-020	Mechanical Well Roof Back Slope	CO-105
PCO-070	Nov. 18/20		Grading at Pole Base P3 – Entry Plaza	CO-114
PCO-071	Dec. 17/20		Revised Roof Drainage – RWL at 14xBx	CO-125
PCO-072	Nov. 19/20		Interior Screen Header Supports	Revised

PCO-072r1	Nov. 25/20		Interior Screen Header Supports	CO-113
PCO-073	Nov. 19/20		Boiler Room Wall-Type Revisions	CO-116
PCO-074	Nov. 19/20		Curtain Wall Base Support at North Entrance	CO-119
PCO-075	Dec. 21/20		Lower Ceiling in Atrium for Interferences	CO-132
PCO-076	Jan. 27/21		Relocation of Backflow Preventor	CO-139
PCO-077	Feb. 11/21		Fire Damper Revisions	Revised
PCO-077r1	Feb. 12/21		Fire Damper Revisions	CO-135
PCO-078	Feb. 18/21		Security Panel Locations	CO-136
PCO-079	Feb. 23/21		Revise Stair D to Meet Headroom Requirements	
PCO-080	Feb. 23/21		Cable Tray Modifications	CO-130
PCO-081	Feb. 25/21		Revise Arena 1 Trophy Cases	CO-138
PCO-082	Mar. 1/21		Low Temp Glycol Loop Clarifications	
PCO-083	Mar. 2/21		Revise Guards and Finishes at Track Exit Stairs	
PCO-084	Mar. 5/21		Roof Irrigation Plumbing Feeder Reduction	
PCO-085	Mar. 9/21		Revise Header Detail at Screen ESC-121	
PCO-086	Mar. 12/21		Arena 2 Change Room Entrance Bull Nose Block	CO-134
PCO-087	Mar. 15/21		Revised Steel Smoke Baffle. Add Track Guard between GL 4 & 5	
PCO-088	Mar. 15/21		Exit Stair C Block Wall Extension	
PCO-089	Mar. 16/21		Revise Masonry at Recessed Force Flow Heater	
PCO-090	Mar. 25/21		Irrigation Booster Pump	Revised
PCO-090r1	Apr. 12/21		Irrigation Booster Pump	
PCO-091	Mar. 30/21		Exterior IT Infrastructure Improvements	
PCO-092	Mar. 26/21		Security Camera Data Drops	
PCO-093	Apr. 9/21		Add Partition Wall	

7.0 REQUEST FOR CHANGES (RFC) – CONTRACTOR

Proposed Change	Date Issued	Description of PCO	Status
RFCO-001	Feb. 26, 2020	Sub-Excavation of Footings & Lean-Mix Concrete	CO-12
RFCO-002	Feb. 27, 2020	Structural – Additional Drafting Costs	Rejected
RFCO-003	Feb. 27, 2020	Structural – Additional RTU Frames RTU's 05 & 09	CO-19
RFCO-004	Feb. 27, 2020	Structural - Additional RTU Frames (Line 1 & 9x)	CO-33
RFCO-005	Feb. 28, 2020	Structural – Additional Balustrade Framing	Rejected
RFCO-006	Mar. 3, 2020	Revised Bench Detail SI-24	CO-28
RFCO-007	Apr. 7, 2020	RTU Steel Framing for Arena 2	CO-34
RFCO-008	Apr. 9, 2020	Revise Ductwork at LVR-1	CO-29
RFCO-009	Apr. 14, 2020	Add Secondary Steel for Curtainwall Support	CO-21
RFCO-010	Apr. 21, 2020	Supply & Install Medium Voltage Transformer	CO-23
RFCO-011	Apr. 21, 2020	Supply of Concrete Fasteners for use on In-floor Heating System	CO-27
RFCO-012	Apr. 21, 2020	Change Fiber Reinforcing to Wire Mesh for Polished Concrete	CO-31
RFCO-013	May 12, 2020	Additional Reinforcing for Condenser Units	CO-35
RFCO-014	May 12, 2020	Balance of Building Footing Sub-Excavation	CO-36

RFCO-015	May 12, 2020	Replace Fixture Wrongly Identified on Drawings – SI-031	CO-37
RFCO-016	May 20, 2020	Structural Supply & Erect RTU Frames	Rejected
RFCO-017	Jun. 2, 2020	Supply of Above Ground Track & Field Equipment	CO-40
RFCO-018	Jun. 12, 2020	Revise Glazing Thickness (GL2)	CO-50
RFCO-019	Jun. 12, 2020	Revise Interior Screen Finish Colour	CO-42
RFCO-020	Jun. 19, 2020	Revised Partition Locations to Resolve Rainwater Leader Interferences (SI-035)	CO-43
RFCO-021	Jul. 15, 2020	Revised Overhead Door Lintels (SI-039r1)	CO-45
RFCO-022	Jul. 20, 2020	Revised Extents of ACT Ceiling at Gym Change Corridor (SI-032)	CO-51
RFCO-023	Jul. 23, 2020	Supply and Install Galvanized Pour Stops on Metal Decking	Rejected
RFCO-024	Jul. 28, 2020	Beam modification in Mechanical Well to Suit Deck Install	CO-53
RFCO-025	Jul. 30, 2020	Electrical Coordination Study (Panels & Breakers)	CO-88
RFCO-026	Aug. 11, 2020	Supply & Install Custom Shallow Frame Mortar Boxes (37) for Electric Door Hardware	CO-55
RFCO-027	Aug. 17, 2020	Category 3 Topsoil Track Infield	Canceled (Duplicate of PCO-037)
RFCO-028	Aug. 26, 2020	Revised Security Grille Equipment	CO-59
RFCO-029	Sept. 1, 2020	Lintel Reinforcing	CO-62
RFCO-030	Sept. 1, 2020	Indoor Track Concrete mix – Reduced Aggregate Size	CO-61
RFCO-031	Sept. 8, 2020	Concrete Pads for Gas Stations	CO-64
RFCO-032	Sept. 9, 2020	Landscaping Work Completed in August	CO-66
RFCO-033	Sept. 11, 2020	Arena 1 & 2 Radius Changes	CO-67
RFCO-034	Sept. 16, 2020	Delete Crossover Stairs	CO-69

RFCO-035	Sept. 11, 2020	Revise Concrete Paving Finish	Cancelled
RFCO-036	Sept. 11, 2020	Roof Leak Detection System	Rejected
RFCO-037	Sept. 11, 2020	Slab on Deck	CO-72
RFCO-038	Sept. 22, 2020	Anchor Bolt Remedial Work & Underground Services Repair	CO-89 (RFCO 38+52 combined)
RFCO-039	Sept. 22, 2020	Truss Deck Support at Splice Plates	Cancelled
RFCO-040	Sept. 28, 2020	Logo Change Costs – Track & Field Equipment and Pre-Cast Concrete	CO-78
RFCO-041	Sept. 28, 2020	Temporary Storage Costs for Track & Field Equipment	CO-74
RFCO-042	Oct. 5/20	Split AC Unit BAS Integration	CO-95
RFCO-043	Oct. 8/20	Aluminum Hardware Coordination	CAA-005r6
RFCO-044	Oct. 14/20	Dedicated Change Room Lintel	CO-96
RFCO-045	Oct. 16/20	Fire Dampers	CO-81
RFCO-046	Oct. 19/20	Key Control Cabinet	Canceled
RFCO-047	Oct. 22/20	Delay Due to COVID-19	Rejected
RFCO-048	Oct. 28/20	Credit RFCO-040 (CO-78) for revised Scope	CO-85
RFCO-049	Oct. 22/20	Revised High Voltage Transformer	CO-97
RFCO-050	Oct. 28/20	Elevator 2 Clearance	CO-86
RFCO-051	Oct. 30/20	Telescopic Seating Nose & Riser Change	CO-87 Canceled
RFCO-052	Nov. 2/20	Earthwork Related to PCO-35 as an Extension of CD-03 and CD-04	CO-89 (RFCO 38+52 combined)
RFCO-053	Nov. 5/20	Henley Island Rowing Center Deletion	CO-90
RFCO-054	Nov. 11/20	South Canopy Kicker Braces	CO-99
RFCO-055	Nov. 12/20	Truss Frame Modifications at Bx & 14x	CO-102

RFCO-056	Nov. 12/20	Landscape Grading and Drainage Revisions	Canceled
RFCO-057	Dec. 2/20	Track & Field – Aquicon Costs to Retain	CO-110
RFCO-058	Nov. 26/20	North Canopy Survey	CAA-017
RFCO-059	Nov. 30/20	South Canopy Outriggers (SI-64)	CO-126
RFCO-060	Dec. 3/20	Additional Fire Damper	CO-111
RFCO-062	Dec. 9/20	Smoke Baffle - Central Stair (SI-047)	CO-121
RFCO-063	Dec. 9/20	Standing Seam Fascia and Soffit	CO-117
RFCO-064	Dec. 16/20	Light Fixture Type Rating	Cancelled
RFCO-065	Dec. 16/20	Lighting Revision – Colour Option Black	Cancelled
RFCO-066	Dec. 16/20	Lighting Revision – Colour Option Black	CO-115
RFCO-067	Jan. 4/21	Second Floor Track Screen Support	CO-118
RFCO-068	Jan. 4/21	Sloped Girt Curtain Wall Support	CO-119
RFCO-069	Jan. 6/21	Deck Support Flashing	CO-120
RFCO-070	Jan. 12/21	Wall to Roofing Detail	Cancelled
RFCO-071	Jan. 14/21	Revise Rainwater leaders in Arena 2	CO-122
RFCO-072	Jan. 25/21	Reinforcing W1000 @ Canopy	
RFCO-073	Mar. 10/21	Temporary Equipment Storage Extension	Revised
RFCO-073r1	Mar. 10/21	Temporary Equipment Storage Extension	CO-127
RFCO-074	Mar. 10/21	Single Locker Benches Anchorage (RFI-400)	CO-129
RFCO-075	Mar. 10/21	Modify Vanities in Public WC 1-2	CO-128
RFCO-076	Mar. 11/21	Arena 2 Scoreboard Coordination (SI-077)	CO-133
RFCO-077	Mar. 11/21	Air Balancing Scope (Matina Mechanical)	Cancelled
RFCO-078	Mar. 11/21	Arena 1 Seating	
RFCO-079	Mar. 12/21	Liquid Flashing	Revised
RFCO-079r1	Mar. 12/21	Liquid Flashing	CO-131

RFCO-080	Mar. 25/21	Ductwork Revisions	
RFCO-081	Mar. 26/21	Low Roof Tapered Insulation	
RFCO-082	Mar. 29/21	SC 2066 Screen Supports	
RFCO-083	Apr. 8/21	Cabling for Window Shades	
RFCO-084	Apr. 9/21	Kitchen Hood Exhaust	
RFCO-085	Apr. 13/21	Screen Supports 1176b & 1202	
RFCO-086	Apr. 13/21	Metal Mesh Door (RFI-427)	

8.0 POTENTIAL CHANGES OF SIGNIFICANCE

The proposed change order (PCO), request for change order (RFCO), and change directive (CD) process often involves multiple quote submissions, requests for further detail, clarifications and negotiations before costing is finalized as a change order or the request is rejected.

There is one project change that will have significant cost implications that is currently in the analysis process.

Change Directive 06 - This change directive is for structural modifications to the roof deck and steel structure due to thermal stresses. A site review by the structural engineer prompted an internal design review. The continuous decking across the building envelope causes a thermal expansion stress/load condition that was not considered in the structural design. The engineer advised of 50 connection points that require analysis by the steel fabricator to determine the extent of the issue and required remedial work to correct the error. This directive includes the engineering analysis, engineering design, removal and reinstallation of roofing (overseen by roofing inspector), reinforcing the deck, cutting the deck, and potential reinforcement of steel superstructure.

The Change Directive work is underway along the east side of the gymnasium. Approximately \$139,000 has been billed to date on Certificate of Payment 16. Engineering analysis is ongoing for other connections throughout the facility.

9.0 APPROVED CHANGE ORDERS (CO)

The total cost of approved Change Orders and Change Directives is \$6,070,709.25 which is approximately 6.6% of the awarded contract cost. Changes required because of design team issues is 1.1% of the total contract Cost.

To assist in reviewing the scope and nature of change orders, each are summarized as follows:

Type of Change Order	Cost of Changes to Date	Percent of Total Change Orders	Percent of Total Contract Cost
Soil Conditions	\$4,234,302.50	67.0%	4.6%
Design Team: Errors, Omissions, Changes	\$983,851.09	15.6%	1.1%
Consortium Requested	\$963,400.31	15.3%	1.1%
Address Existing Conditions	\$134,717.08	2.1%	0.1%
Credits	(\$245,561.75)	N/A	N/A
Total Change Orders to Date	\$6,070,709.23		

9.1. SOIL CONDITIONS

The soil conditions encountered in construction were impacted by a wet Fall and Winter which significantly affected constructability. Construction also found unexpected areas of imported soil and rubble which required removal. No additional costs are expected because of soil conditions.

CO #	Change Orders to Original Contract	PC Reference	Date CO Issued	Date Approved	Cost/(Credit)
CO-14	Additional Material Removal in New SWM Pond	CD-02	Jan. 9/20	Mar. 20/20	\$4,560.88
CO-03	Frost Protection Under Split Well	PCO-005	Jan. 22/20	Jan. 24/20	\$7,401.90
CO-05	Sub-Excavation of Sump Pit & Lean-mix Concrete	PCO-002R2	Jan. 29/20	Feb. 7/20	\$16,146.58
CO-12	Sub-Excavation of Footings & Lean-mix Concrete. Part 1. Also See CO-36 for a Total Cost of \$390,466.83 for Parts 1 & 2.	RFCO-001	Mar. 3/20	Mar. 6/20	\$310,948.23
CO-36	Sub-Excavation of Footings & Lean-mix Concrete. Part 2. Also See CO-12 for a Total Cost of \$390,466.83 for Parts 1 & 2.	RFCO-014	May 14/20	May 15/20	\$79,518.60
CO-57	Supply and install category 3 topsoil for the track infield	PCO-037	Aug. 19/20	Aug. 21/20	\$23,794.05

CO-58	Poor Soils Remedial Measures – Building Area Footprint – Excavation and Relocation	CD-03 / PCO-017	Aug. 24/20	Sept. 4/20	\$1,112,330.14
CO-65	Poor Soils Remedial Measures – Track Infield & Parking Lot – Excavation and Relocation	CD-04	Sept. 10/20	Sept. 18/20	\$2,099,273.61
CO-89	Additional Earthworks for activities not captured in CO's 68 and 85.	RFCO- 038 / RFCO-052	Nov. 4/20	Nov. 13/20	\$580,328.51
Sub-Total Soil Conditions Change Orders					\$4,234,302.50
Percentage of Total Change Orders					67.0%

9.2. DESIGN TEAM ERRORS, OMISSIONS, DESIGN CHANGE

The following lists the approved change orders described as errors, omissions, and changes to the design by the architectural/engineering team. The percentage by discipline/division is as follows:

Discipline	Cost of Error/Omission, Design Change to Date	Percent of Error/Omission, Design Changes	Percent of Contract Cost (\$91,650,934)
Architectural (A)	\$158,062.36	16.1%	0.17%
Structural (S)	\$644,080.76	65.5%	0.70%
Electrical (E)	\$65,359.98	6.6%	0.07%
Mechanical (M)	\$67,779.52	6.9%	0.07%
Civil (C)	\$34,120.40	3.5%	0.04%
Other (O)	\$14,448.07	1.5%	0.02%

CO #	Change Orders to Original Contract	Discipline	PC Reference	Date CO Issued	Date Approved	Cost/(Credit)
CO-02	Revised Manhole 'F'	C	PCO-003	Jan. 16/20	Jan. 24/20	\$3,418.65
CO-06	Revised Structural Steel Framing	S	PCO-006	Jan. 30/20	Feb. 7/20	\$22,098.53
CO-07	Revised Structural Steel Framing	S	PCO-007	Jan. 30/20	Feb. 7/20	\$1,736.08

CO-09	Steel Supports at Cantilevered Deck	S	PCO-011	Feb. 15/20	Feb. 21/20	\$3,781.70
CO-10	Skylight Well Wall Framing	S	PCO-010	Feb. 15/20	Feb. 21/20	\$7,448.81
CO-11	Revised Steel Framing	S	PCO-009	Feb. 15/20	Feb. 21/20	\$11,149.54
CO-15	Door Schedule Revisions	A	PCO-008	Mar. 10/20	Mar. 20/20	\$287.08
CO-16	Roof Curb for Emergency Generator	S	PCO-012	Mar. 10/20	Mar. 20/20	\$12,710.36
CO-17	Additional Steel, Gym Roof	S	PCO-013	Mar. 17/20	Mar. 20/20	\$22,575.00
CO-18	Revise Power & Data locations at CSC Reception	E	PCO-015	Mar. 27/20	Apr. 3/20	\$1,887.17
CO-19	Structural – Additional RTU Frames RTU's 05 & 09	S	RFCO-003	Mar. 30/20	Apr. 3/20	\$32,342.10
CO-20	New Masonry to Support Arena 1 Bleachers	S	PCO-016	Apr. 3/20	Apr. 17/20	\$8,592.10
CO-21	Add Secondary Steel for Curtainwall Support	S	RFCO-009	Apr. 16/20	Apr. 17/20	\$20,170.74
CO-22	Revise Piping In-Trench Radiator & FFH-02-01 Feeds	S	PCO-019	Apr. 20/20	April 22/20	\$0.00
CO-23	Electrical Transformer	E	RFCO-010	Apr. 23/20	May 1/20	\$50,865.00
CO-24	Revise RTU Curb Height for RTUs 5, 7, 8, 9	A	PCO-022	Apr. 23/20	May 1/20	\$16,807.56
CO-25	Gymnasium 2 nd Floor Framing	S	PCO-018	Apr. 23/20	May 1/20	\$46,321.60
CO-26	Revise Precast Stair Landing Support	S	PCO-023	Apr. 27/20	May 1/20	\$6,753.63
CO-27	Fasteners for In-floor Heating System	A	RFCO-011	Apr. 30/20	May 1/20	\$5,930.52
CO-28	Steel Support for Change Room Bench	S	RFCO-006 / SI-24	Apr. 30/20	May 1/20	\$1,200.54
CO-29	Revise Ductwork at LVR-1	M	RFCO-008	Apr. 30/20	May 1/20	\$1,761.03

CO-30	Revised Pond Outlet	C	PCO-024	Apr. 30/20	May 1/20	\$12,936.00
CO-31	Change Fiber Reinforcing to Wire Mesh in areas with Polished Concrete	A	RCFO-012 / SI-25	May 1/20	May 15/20	\$13,496.12
CO-32	Revise Precast Bleacher Support	S	PCO-021R1	May 7/20	May 15/20	\$19,954.18
CO-33	RTU Steel Framing for Arena 1	S	RFCO-004	May 14/20	May 15/20	\$4,780.23
CO-34	RTU Steel Framing for Arena 2	S	RFCO-007	May 14/20	May 15/20	\$7,466.73
CO-35	Additional Reinforcing for Condenser Units	S	RFCO-013	May 14/20	May 15/20	\$8,453.00
CO-37	Additional Sink	M	RFCO-015 / SI-31	May 14/20	May 15/20	\$1,101.20
CO-38	Supports for Precast Screens	S	PCO-025	May 28/20	May 29/20	\$25,426.28
CO-39	Revise Anchor Rod Size at Columns along Grid 2Y	S	CD-05	May 29/20	Jun/12/20	\$5,628.74
CO-41	Revise Screen, Glazing and Door Dimensions	A	PCO-026	Jun. 15/20	Jun. 26/20	\$12,755.67
CO-42	Revise Finish on Interior Screens	A	RFCO-019	Jun. 15/20	Jun. 26/20	\$1,551.50
CO-43	Revised Partition Locations to Resolve Rainwater Leader Interferences	M	RFCO-020	Jun. 24/20	Jun. 26/20	\$2,381.47
CO-45	Revised Overhead Door Lintels	S	RFCO-021	Jul. 16/20	Jul. 24/20	\$1,765.50
CO-47	Door Hardware Coordination	A	PCO-030	Jul. 20/20	Jul. 24/20	\$2,555.08
CO-48	Revised Communications Conduit Routing	E	PCO-033	Jul. 21/20	Jul. 24/20	\$0.00
CO-49	New Communication Sleeves in IT Room	E	PCO-034r1	Jul. 21/20	Jul. 24/20	\$1,728.05

CO-50	Revised Boiler Room Venting	M	PCO-028	Jul. 21/20	Jul. 24/20	\$21,114.81
CO-51	Revised Extents of ACT Ceiling at Gym Change Corridor	A	RFCO-022 / SI-032	Jul. 22/20	Jul. 24/20	\$5,861.85
CO-52	Revise Glazing Thickness (GL2)	O	RFCO-018	Jul. 23/20	Aug. 7/20	\$13,027.35
CO-53	Beam modification in Mechanical Well to Suit Deck Install	S	RFCO-024	Aug. 5/20	Aug. 7/20	\$3,767.50
CO-54	New Irrigation Connection	M	PCO-032	Aug. 6/20	Aug. 21/20	\$18,002.71
CO-55	Custom Shallow Door Frame Mortar Boxes	A	RFCO-026	Aug. 12/20	Aug. 21/20	\$3,117.98
CO-56	Subdrains to CBMH 8 in West Parking Lot	C	PCO-039	Aug. 17/20	Aug. 21/20	\$7,725.40
CO-59	Revised Security Grilles	A	RFCO-028	Aug. 26/20	Sept. 4/20	\$1,671.34
CO-60	Revised CMU Partitions at Plumbing Chases	A	PCO-43r1	Sept. 3/20	Sept. 18/20	\$3,396.18
CO-61	Revised Indoor Track Concrete	S	RFCO-030	Sept. 3/20	Sept. 18/20	\$3,597.00
CO-62	Lintel Reinforcing	S	RFCO-029	Sept. 4/20	Sept. 18/20	\$2,402.15
CO-63	Revise Curtain Wall Support Angle	S	PCO-046	Sept. 4/20	Sept. 18/20	\$7,832.94
CO-64	Concrete Pad for Gas Station	O	RFCO-031	Sept. 10/20	Sept. 18/20	\$1,420.72
CO-67	Rink Radii Change	A	RFCO-033	Sept. 14/20	Sept. 18/20	\$1,824.35
CO-68	Revised Edge of Deck Dimensions	S	PCO-049	Sept. 15/20	Sept. 18/20	\$1,819.00
CO-70	Change Room Shower Modifications	M	PCO-038	Sept. 17/20	Oct. 2/20	\$0.00
CO-71	Precast Bleacher Bearing Plate	S	PCO-050	Sept. 18/20	Oct. 2/20	\$1,986.99

CO-72	Slab on Deck - Revise Aggregate Size	S	RFCO-037	Sept. 22/20	Oct. 2/20	\$6,900.00
CO-73	Revised Steel Deck Support and Partition Types	S	PCO-045	Sept. 25/20	Oct. 2/20	\$8,351.86
CO-75	New Diagonal Brace	S	PCO-054	Oct. 1/20	Oct. 2/20	\$5,906.40
CO-77	Revised Edge of Deck Dimensions	S	PCO-055	Oct. 2/20	Oct. 16/20	\$1,819.00
CO-78	Grease Pump-Out Box	A	PCO-042	Oct. 16/20	Oct. 30/20	\$471.68
CO-80	Power for Electronic Doors	E	PCO-041	Oct. 20/20	Oct. 30/20	\$4,855.66
CO-81	Gymnasium Fire Dampers	M	RFCO-045	Oct. 20/20	Oct. 30/20	\$1,743.00
CO-82	Revised Fire Rating of Column Hy-18z	S	PCO-053r1	Oct. 22/20	Oct. 30/20	\$1,064.32
CO-84	Non-Perpendicular Deck Edge Support	S	PCO-061	Oct. 23/20	Oct. 30/20	\$40,460.18
CO-86	Elevator 2 Clearance	S	RFCO-050	Oct. 30/20	Nov. 13/20	\$1,848.96
CO-88	Electrical Coordination Study	E	RFCO-025	Oct. 30/20	Nov. 13/20	\$1,259.39
CO-91	Second Floor Glazing Supports	S	PCO-067	Nov. 5/20	Nov. 13/20	\$12,785.85
CO-94	Floor Drain Revisions	M	PCO-064	Nov. 5/20	Nov. 13/20	\$0.00
CO-95	Split Unit BAS Integration	M	RFCO-042	Nov. 5/20	Nov. 13/20	\$2,824.80
CO-96	Dedicated Change Room Lintels	S	RFCO-044	Nov. 5/20	Nov. 13/20	\$547.31
CO-97	High Voltage Transformer	E	RFCO-049	Nov. 6/20	Nov. 13/20	\$2,128.23
CO-98	Shower head Heights	A	PCO-063	Nov. 6/20	Nov. 13/20	\$0.00
CO-99	South Canopy Kicker Braces	S	RFCO-054	Nov. 11/20	Nov. 13/20	\$12,985.88
CO-100	Plaza Drainage Clarifications	C	PCO-057r1	Nov. 12/20	Nov. 27/20	\$7,044.35

CO-101	In-Floor Wire Mesh – Zamboni Area	S	PCO-051	Nov. 12/20	Nov. 27/20	\$2,750.21
CO-102	North Elevation at GL 14x & Bx	S	RFCO-055	Nov. 12/20	Nov. 27/20	\$10,700.00
CO-103	Sprinkler Room 1093 Wall	A	PCO-059	Nov. 12/20	Nov. 27/20	\$2,517.94
CO-105	Mech Well Roof Tapered Insulation	A	PCO-069	Nov. 17/20	Nov. 27/20	\$4,937.52
CO-107	Gym Corridor Roof Assembly	A	PCO-061r1	Nov. 27/20	Dec. 11/20	\$68,313.87
CO-108	Gas Line Routing	M	PCO-065	Dec. 2/20	Dec. 11/20	\$0.00
CO-111	Additional Fire Damper	M	RFCO-060	Dec. 4/20	Dec. 11/20	\$1,138.49
CO-112	Support for Wall at Cooling Tower	S	PCO-068r1	Dec. 4/20	Dec. 11/20	\$10,195.16
CO-113	Interior Screen Header Supports	S	PCO-072	Dec. 14/20	Dec.14/20	\$14,639.63
CO-114	Grading at Pole Base P3	C	PCO-070r1	Dec. 16/20	Jan. 8/21	\$2,996.00
CO-115	Light Fixture Revision	E	RFCO-066	Dec. 21/20	Jan. 8/21	\$2,636.48
CO-116	Boiler Room Wall	A	PCO-073r1	Dec. 23/20	Jan. 8/21	\$0.00
CO-117	Standing Seam Fascia & Soffit	S	RFCO-063	Jan. 4/21	Jan. 8/21	\$36,556.83
CO-118	Screen Support	S	RFCO-067	Jan. 4/21	Jan. 8/21	\$4,487.86
CO-119	Sloped Curtain Wall Support	S	RFCO-068	Jan. 6/21	Jan. 8/21	\$1,891.23
CO-120	Deck Support	S	RFCO-069	Jan. 8/20	Jan. 22/21	\$8,563.17
CO-121	Smoke Baffle	S	RFCO-062	Jan. 14/20	Jan. 22/21	\$8,560.00
CO-122	Offset 6 RWL's in Arena 2	M	RFCO-071	Jan. 18/20	Jan. 22/21	\$11,134.67
CO-125	Revised Roof Drainage	M	PCO-071	Feb. 11/21	Feb. 19/21	\$6,577.34
CO-126	Canopy Outriggers	S	RFCO-59	Feb. 19/21	Mar. 5/21	\$11,415.00

CO-128	Modify Vanities in Public WC 1-2	S	RFCO-75	Mar. 11/21	Mar. 19/21	\$9,674.94
CO-129	Single Locker Bench Anchorage	S	RFCO-74	Mar. 11/21	Mar. 19/21	\$1,765.50
CO-131	Liquid Flashing	A	RFCO-79r1	Mar. 15/21	Mar. 19/21	\$6,655.46
CO-132	Lowered Ceiling at Atrium	A	PCO-075	Mar. 16/21	Mar. 19/21	\$5,910.66
CD-06	Thermal Mitigation of Roof Projections	S	CD-06	Cost Included on CoP 16		\$138,450.50
	Sub-Total Errors, Omissions, Design Changes Change Orders					\$983,851.09
	Percentage of Total Change Orders					15.6%

9.3. CONSORTIUM REQUESTED CHANGE

CO #	Change Orders to Original Contract	PC Reference	Date CO Issued	Date Approved	Cost/(Credit)
CO-40	Above Ground Track & Field Equipment	RFCO-017	Jun. 12/20	Jun. 26/20	\$343,200.00
CO-66	Landscaping (Aug. Work)	PCO-35r5	Sept. 11/20	Sept. 18/20	\$30,366.00
CO-74	Track & Field Equipment Storage	-	Sept. 28/20	Oct. 2/20	\$17,332.88
CO-79	Logo Changes – Track & Field Equipment and Pre-Cast Concrete	RFCO-040	Oct. 16/20	Oct. 30/20	\$45,468.68
CO-83	Revise Athletic Flooring Type in Arenas	PCO-048	Oct. 22/20	Oct. 30/20	\$76,315.20
CO-92	Gymnasium Corridor Bulkhead	PCO-058	Nov. 5/20	Nov. 13/20	\$8,455.52
CO-93	Framing Above Exit Doors	PCO-044	Nov. 5/20	Nov. 13/20	\$7,988.89
CO-110	Track & Field – Aquicon to Retain	RFCO-057	Dec. 3/20	Dec.11/20	\$48,468.13

CO-123	Revised Site Design at Storage Area, Volleyball, Throwing and Bike Wash	PCO-035	Jan. 19/21	Jan. 22/21	\$240,738.98
CO-124	Exterior Scoreboard Coordination	PCO-060	Jan. 6/20	Jan. 22/21	\$84,516.49
CO-127	Track & Field Equipment Storage	RFCO-73r1	Mar. 11/21	Mar. 19/21	\$3,514.95
CO-130r1	Cable Tray Locations & Single Mode Fiber	PCO-080	Mar. 11/21	Mar. 19/21	\$49,483.90
CO-133	Arena 2 Scoreboard Coordination	RFCO-76	Mar. 17/21	Mar. 19/21	\$7,550.69
Sub-Total Consortium Requested Change Orders					\$963,400.31
Percentage of Total Change Orders					15.3%

9.4. ADDRESS EXISTING CONDITIONS

CO #	Change Orders to Original Contract	PC Reference	Date CO Issued	Date Approved	Cost/(Credit)
CO-13	Existing Works Yard Rubble Berm Relocation	CD-01	Jan. 9/20	Mar. 20/20	\$131,406.08
CO-04	Jersey Barriers for Temporary Parking	PCO-004	Jan. 22/20	Jan. 24/20	\$3,311.00
Sub-Total Existing Conditions Change Orders					\$134,717.08
Percentage of Total Change Orders					2.1%

9.5. CREDITS

A credit Change Order 90 was issued on November 5th, 2020 and executed on November 8th, 2020 to delete the Henley cost of \$5,000,000.00 from the Canada Games Park Aquicon contract. This cost is not reported in the budget of UEM monthly reports and therefore not included in the change order summary tables.

CO #	Change Orders to Original Contract	PC Reference	Date CO Issued	Date Approved	Cost/(Credit)
CO-01	Revised Rebar in Non-Load Bearing Walls	PCO-01	Jan. 16/20	Jan. 24/20	(\$39,435.00)
CO-08	Delete Commissioning Allowance	-	Feb. 15/20	Feb. 21/20	(\$160,000.00)
CO-44	Revise Baby Change Station Specifications and Locations	PCO-027	Jun. 26/20	Jul. 10/20	(\$920.00)
CO-46	Revise Door D1041 from Double to Single	PCO-031	Jul. 16/20	Jul. 24/20	(\$185.00)
CO-69	Delete Crossover Stairs	RFCO-34	Sept. 15/20	Sept. 18/20	(\$10,500.00)
CO-76	Volleyball Net Foundations	PCO-056	Oct. 1/20	Oct. 2/20	(\$3,040.00)
CO-85	Logo Changes – Track & Field Equipment and Pre-Cast Concrete	RFCO-48	Oct. 29/20	Oct. 30/20	(\$10,752.25)
CO-104	Interior Revisions	PCO-052r1	Nov. 13/20	Nov. 27/20	(\$168.50)
CO-106	Revised Gym Floor Grilles	PCO-036	Nov. 18/20	Nov. 27/20	(\$3,800.00)
CO-109	Outdoor AV Scope Revision	PCO-066	Dec. 3/20	Dec.11/20	(\$16,761.00)
Sub-Total Credit Change Orders					(\$245,561.75)

10.0 CHANGE DIRECTIVES (CD)

CD #	Change Directives to Original Contract	Date CD Issued	CO Reference	Cost/(Credit)
CD-01	Existing Works Yard Rubble Berm Relocation	Jan. 9/20	CO-13	\$131,406.08
CD-02	Additional Material Removal in New SWM Pond	Jan. 9/20	CO-14	\$4,560.88
CD-03	Poor Soils Remedial Measures – Building Area Footprint – Excavation and Relocation	Mar. 4/20	CO-58	\$1,112,330.14
CD-04	Poor Soils Remedial Measures – Track Infield & Parking Lot – Excavation and Relocation	Mar. 25/20	CO-65	\$2,099,273.61
CD-05	Revise Anchor Rod Size at Columns along Grid 2Y	May 29/20	CO-39	\$5,628.74
CD-06r1	Thermal Mitigation of Roof Projections	Jan. 21/20	TBD	TBD
Total Change Directives				\$3,353,199.45

11.0 CASH ALLOWANCE AUTHORIZATION (CAA)

Section 12.0 is a summary of awarded contracts, billing progress and budget status for the cash allowances.

CAA #	Description	Date CAA Issued	Date CAA Approved	Cost/(Credit)
CAA-001	Testing & Inspection – Below Grade – Retain consulting firm Wood Environmental to be the onsite geotechnical engineer. See CAA-003.	Dec. 9/19	May 15/20	\$41,730.50
CAA-002	Testing & Inspection – Above Grade - Retain consulting firm EXP. (steel, concrete, reinforcing steel, masonry walls, metal deck, structural precast concrete, and structural precast coatings). Superseded by CAA-002r2.	Feb. 15/20	Feb. 21/20	\$33,955.00 Superseded
CAA-002r1	Testing & Inspection – Above Grade – additional scope in addition to CAA-002 for review of steel shop drawings. Increased the total allowance by \$25,800. Superseded by CAA-002r2.	Mar. 23/20	May 15/20	\$59,755.00 Superseded
CAA-002r2	Testing & Inspection – Above Grade - additional scope in addition to CAA-002r1 including floor flatness and precast concrete inspections. Increased the total allowance by \$3,840.	May 7 th /20	May 15/20	\$66,795.00 Superseded
CAA-002r3	Testing & Inspection – Above Grade - additional scope in addition to CAA-002r2 for additional shop steel inspections. EXP underestimated the number of visits required to complete the shop inspections for the structural steel. The additional visits are billed at the unit rate per visit included in their contract. This revision Increases the total allowance by \$22,920.	Mar. 19/21		\$89,715.00
CAA-003	Testing & Inspection – Below Grade – Additional scope by Wood Environmental. Full time, on-site inspection and testing services required by Wood because footing and subgrade excavations encountered “fill” that must be removed. Total below grade costs including CAA-001 is \$149,558.50.	Feb. 19/20	Feb. 21/20	\$107,828.00

CAA-004	Testing & Inspection – Below Grade - Additional geotechnical investigations of the sub-grade and fill by Wood Environmental. Develop a plan for maintaining the integrity of the subgrade.	Feb. 19/20	Feb. 21/20	\$11,180.00
CAA-005	Door Hardware – Supply & Installation by Egress Systems.	Mar. 23/20	May 15/20	\$209,000.00 Superceded
CAA-005r1	Door Hardware – Supply & Installation by Egress Systems. Additional scope in addition to CAA-005 for revised electrified door hardware identified in the shop drawing review process.	Jul. 7/20	Jul. 10/20	\$211,948.10 Superceded
CAA-005r2	Door Hardware – Supply & Installation by Egress Systems. Additional scope in addition to CAA-005r1. The allowance is increased by \$6,088.73 to update door hardware on revised doors included in CO-47.	Jul. 20/20	Jul. 24/20	\$217,956.83 Superceded
CAA-005r3	Door Hardware – Supply & Installation by Egress Systems. This CAA is for additional scope to CAA-005 including revisions 1 and 2. The allowance is increased by \$6,751.64 to include hardware for door D1133A which was not included in the hardware schedule. The full cost to switch the keying system to the Medeco small format interchangeable cores throughout the building is included.	Jul. 27/20	Aug. 7/20	\$224,711.47 Superceded
CAA-005r4	Door Hardware – Supply & Installation by Egress Systems for the Canada Games Park Project. This CAA is for additional scope to CAA-005. The allowance is increased by \$21,527.35 to include motion detectors, weather stripping, door contacts, kick plates, wall stops, access controls, thresholds and automatic closers. In addition, the IFC drawings stated that exterior aluminum door hardware was to be supplied “by others.” This is not correct. These items were therefore not included in the original hardware schedule.	Aug. 18/20	Aug. 21/20	\$246,238.82 Superceded
CAA-005r5	Door Hardware – Supply & Installation by Egress Systems for the Canada Games Park Project. This CAA is for additional scope to	Sept. 14/20	Sept 18/20	\$278,723.82 Superceded

	CAA-005. The allowance is increased by \$32,485.00 to include all hardware for glass doors. The IFC drawings stated that glass door hardware was to be supplied “by others.” This is not correct. These items were therefore not included in the original hardware schedule.			
CAA-005r6	Door Hardware – Supply & Installation by Egress Systems for the Canada Games Park Project. This CAA is for additional scope to CAA-005. The allowance is increased by \$2,001.00 to include hardware for two auto-operated doors for the barrier free washrooms in the core of the building. These doors were missed on the hardware schedule.	Oct. 8/20	Oct. 16/20	\$280,724.82 Superceded
CAA-005r7	Door Hardware – Supply & Installation by Egress Systems for the Canada Games Park Project. This CAA is for additional scope to CAA-005. The allowance is increased by \$2,065.10 to include a secured key cabinet (300 key capacity). The secured cabinet was missed on the issued for construction drawings and hardware schedule.	Oct. 19/20	Oct. 30/20	\$282,789.92 Superceded
CAA-005r8	Door Hardware – Supply & Installation by Egress Systems for the Canada Games Park Project. This CAA is for additional scope to CAA-005. The allowance is increased by \$2,673.40 to revise refrigeration room doors swings & hardware to accommodate refrigeration equipment layout.	Dec. 3/20	Dec.11/20	\$285,463.32
CAA-006	Testing & Inspection – Steel Fabrication Inspection – Out of province steel coating inspections by Englobe prior to shipping to site.	Mar. 23/20	May 15/20	\$4,215.00
CAA-007	Testing & Inspection – Building Envelope – Retain consulting firm Tri-tech Pinnacle Group Inc. to provide building envelope testing and inspection (insulation, glazing, flashing, roofing).	May 6/20	May 15/20	\$30,000.00
CAA-008	Audio Visual – Supply & installation by the recommended low bid contractor Allied Electronics Ltd. This scope includes the	Jul. 31/20	Aug. 7/20	\$276,405.50

	<p>supply and installation of all infrastructure and equipment for the buildings AV systems as specified during the design phase in consultation with the Consortium. The full equipment breakdown is included as backup to the CAA.</p> <p>Terms of reference for this work was prepared by S+A and shared for consortium review in December 2019 and February 2020.</p>			
CAA-009	<p>Communications and IT - Supply & installation by the recommended low bid contractor Activo Ltd. This scope includes IT infrastructure and hardware comprising of internal fiber, Cat6 cabling, racks, and shelves in the IT closets and network access throughout the building. The scope as tendered is not impacted by the ongoing IT discussions for new program design in the building. Any direction resulting in these discussions will be new scope in addition to the statement of work provided by Activo Ltd. This work should proceed so the project schedule is not impacted.</p> <p>Terms of reference for this work was prepared by S+A and shared for consortium review in December 2019 and February 2020.</p>	Jul. 31/20	Aug. 7/20	\$278,744.43
CAA-010	<p>Testing & Inspection – Indoor track floor flatness testing by EXP Ltd. This scope includes quality assurance testing for floor flatness of the second floor running track.</p>	Aug. 4/20	Aug. 7/20	\$1,600.00
CAA-011	<p>Testing & inspection services by Wood. The consultant provided assessment of two asphalt mix designs and four aggregate gradation reviews for the track & field construction.</p>	Aug. 11/20	Aug. 21/20	\$1,590.00
CAA-012	<p>Security - Supply & installation by the recommended low bid contractor Chubb, UTC Fire and Security Canada Inc. This scope includes access controls, cameras, CCTV and client workstations and access control servers.</p>	Aug. 28/20	Sept. 4/20	\$104,613.00
CAA-013	<p>Testing & inspection services by Wood. The consultant provided field sampling and</p>	Sept. 9/20	Sept 18/20	\$1,641.40

	laboratory testing of the on-site topsoils for the track infield construction.			
CAA-014	Testing & Inspection - additional below grade scope by Wood Environmental, including on-site inspection (12 weeks), compaction testing, and concrete testing. Wood's original scope of work underestimated the level of effort required for Canada Games Park.	Sept. 14/20	Sept 18/20	\$27,652.50
CAA-015	Testing & Inspection – Topsoil testing by Wood Environmental. This is for fieldwork, rush lab analysis and reporting for the stockpiled material stripped for later use.	Nov. 2/20	Dec.11/20	\$1,356.00
CAA-016	Testing & Inspection – Asphalt mix review and report by Wood Environmental.	Nov. 2/20	Dec.11/20	\$560.00
CAA-017	Testing & Inspection – North canopy survey by Niagara Rigging & Erecting. Deflection was observed on the large fascia beam of the north canopy, this survey is to compare the theoretical elevations to the as-built condition for the engineers to review and provide recommendations.	Nov. 27/20	Dec.11/20	\$1,075.25
CAA-018	Testing & Inspection – structural steel surveys and inspections of the north and south canopy steel by EXP. Field survey and inspection of the north and south canopy primary steel girders. The inspection reports determined that the girders have rotated by 0.5 degrees. The rotation is within acceptable tolerances and does not impact the structural duty of the members. No corrective action is required.	Feb. 26/21	Mar. 5/21	\$8,118.90
CAA-019	Testing & Inspection – Award of the air and water balancing work for Canada Games Park through the mechanical contractor to Vital Canada.	Mar. 11/21	Mar. 19/21	\$111,620.00
CAA-021	City of Thorold water meter permit fee	Apr. 8/21		\$8,762.41

12.0 CASH ALLOWANCE DRAWS (CAD)

The following cash allowance summary notes awarded contracts and tracks billing progress. The project cash allowances are drawn from the Allowance Budget as stipulated in the construction contract.

The Sum of Approved Allowances awarded to date is \$1,531,855.31 against the Allowance Budget of \$1,624,000.00. Difference of \$92,144.69 to be awarded.

The Testing and Inspection allowance is overdrawn by approximately \$106,000. This is because of the poor soil conditions experienced on site.

BUDGET ALERT: The Interior Signage allowance is estimated at \$100,000+/- (to be awarded in Summer 2021) and the probability of additional amendments to the testing and inspection allowance. There is certainty that the cash allowance budget will be exceeded. The amount of the exceedance is not known and will be addressed as a change order sometime in July 2021.

Cash Allowance Draws – Total Project

CAD Description	CAD Contract Cost (Exc. HST)	CAD Invoiced to Date (Exc. HST)	CAD Invoiced this Period (Exc. HST)	CAD Remaining to be Drawn (Exc. HST)
<u>Testing & Inspection</u>				
- Subgrade/Soils	\$191,948.40	\$189,456.00	\$0.00	\$2,492.40
- Above Grade	\$75,816.00	\$75,076.00	\$0.00	\$740.00
- Steel Fabrication	\$4,215.00	\$4,215.00	\$0.00	\$0.00
- Building Envelope	\$30,000.00	\$20,150.00	\$4,875.00	\$9,850.00
- Floor Flatness	\$1,600.00	\$1,600.00	\$0.00	\$0.00
- Asphalt & Aggregate	\$1,590.00	\$1,170.51	\$585.00	\$419.49
- Canopy Survey (NRE)	\$1,075.25	\$1,075.25	\$0.00	\$0.00
- Air Balancing	\$111,620.00	\$0.00	\$0.00	\$111,620.00
Door Hardware	\$285,463.32	\$224,949.82	\$214,739.82	\$60,513.50
Interior Signage	*			
Water Meter Permit	\$8,762.41	\$0.00	\$0.00	\$8,762.41
Electrical Services	*			
AV System	\$276,405.50	\$0.00	\$0.00	\$276,405.50
Security System	\$104,613.00	\$0.00	\$0.00	\$104,613.00
IT Cabling	\$278,744.43	\$0.00	\$0.00	\$278,744.43
Commissioning	\$160,000	\$160,000 ⁽¹⁾	\$0.00	\$0.00
Sum of Allowances	\$1,624,000.00	\$677,692.58	\$220,199.82	\$854,160.73

* The total cash allowance for the above items is \$1,624,000. The cost for each item will be allocated as the contractor awards the individual contracts.

(1) The commissioning scope was removed from the contract. A credit was issued in Change Order 08.

Note: The Testing & Inspection allowance was tendered and awarded for multiple phases of construction, the awarded contracts to date are summarized in the table above.

Testing & Inspection Summary

- Subgrade Testing and Inspection was awarded to Wood Environmental & Infrastructure Solutions for the fee of \$41,730.50 (excluding HST). On-site soil and subgrade issues required additional full-time inspection from Wood (see Section 17.0 for more information). The cost of this change is an extra \$107,828.00 (excluding HST). Additionally, Wood was requested to evaluate and provide recommendations to mitigate settlement risks at a cost of \$11,180.00 (excluding HST).
- Above Grade Testing & Inspection was awarded to EXP Services Inc. for a cost of \$66,795.00 (excluding HST)
- Testing and Inspection of steel coatings at the manufacture in Quebec was awarded to Englobe for a cost of \$4,215.00 (excluding HST)
- Testing and inspection of the indoor track floor flatness testing was awarded to EXP Ltd. for a cost of \$1,600.00 (excluding HST)
- Building Envelope Testing & Inspection was awarded to Tri-Tech Pinnacle Group Inc. for a cost of \$30,000.00 (excluding HST)
- Assessment of two asphalt mix designs and four aggregate gradation reviews by Wood Environmental & Infrastructure Solutions for the fee of \$1,590.00 (excluding HST).
- Assessment of one asphalt mix designs and four aggregate gradation reviews by Wood Environmental & Infrastructure Solutions for the fee of \$560.00 (excluding HST).
- Topsoil Testing and Inspection by Wood Environmental & Infrastructure Solutions for the fee of \$1,356.00 (excluding HST).
- Testing and Inspection of north canopy steel by Niagara Rigging and Erecting for a cost of \$1,075.25 (excluding HST)
- Testing and Inspection of north canopy steel by EXP for a cost of \$8,118.90 (excluding HST)

13.0 CERTIFICATE OF PAYMENTS SUMMARY

Certificate of Payment “CoP No. 15”, Draw 15 for the period ending February 28th, 2021 was issued by the Architect on March 8th, 2021 and recommended for payment by UEM on March 8th, 2021 for the Canada Games Park project. The amount payable excluding HST is \$3,167,128.30. The schedule of Certificate of Payments received and recommended is as follows. All figures exclude HST.

Certificate of Payment (CoP) / Period Ending	Cumulative Net Amount Certified by Architect (Exc. 10% Holdback)	Aquicon Contract Cost (Including COs & CDs)	Balance of Statutory Holdback (10%)	Balance to Complete Contract
\$2,418,737.40 (CoP No. 01) for Dec. '19	\$2,687,486.00	\$85,580,225.00	\$268,748.60	\$82,892,739
\$3,068,719.92 (CoP No. 02) for Jan. '20	\$6,097,174.80	\$85,594,902.74	\$609,717.48	\$79,497,727.94
\$2,532,811.13 (CoP No. 03) for Feb. '20	\$8,909,287.39	\$85,904,197.98	\$890,928.74	\$76,654,910.59
\$4,911,960.75 (CoP No. 04) for Mar. '20	\$14,369,143.56	\$86,449,874.69	\$1,436,914.36	\$72,080,731.13
\$2,246,925.60 (CoP No. 05) for Apr. '20	\$16,865,727.56	\$87,470,996.40	\$1,686,572.76	\$70,605,268.84
\$4,341,091.17 (CoP No. 06) for May '20	\$21,134,253.78	\$88,643,486.77	\$2,113,425.38	\$67,509,233.22
\$3,366,432.20 (CoP No. 07) for Jun. '20	\$24,874,734.00	\$89,803,092.44	\$2,487,473.40	\$65,028,358.44
\$2,645,882.57 (CoP No. 08) for Jul. '20	\$27,476,388.44	\$89,685,847.23	\$2,746,388.44	\$62,209,458.79
\$3,830,298.62 (CoP No. 09) for Aug. '20	\$31,732,275.80	\$90,031,301.31	\$3,173,227.58	\$58,299,025.51
\$5,102,027.85 (CoP No. 10) for Sept. '20	\$37,401,195.63	\$90,062,412.57	\$3,740,119.56	\$52,661,216.94

\$3,605,397.90 (CoP No. 11) for Oct. '20	\$40,946,326.31	\$90,244,688.02	\$4,094,632.63	\$49,298,361.71
\$5,654,794.50 (CoP No. 12) for Nov. '20	\$47,229,431.31	\$90,881,959.30	\$4,722,943.13	\$43,652,427.99
\$5,561,607.76 (CoP No. 13) for Dec. '20	\$52,698,072.18	\$91,007,853.58	\$5,269,807.22	\$38,309,781.40
\$2,418,576.19 (CoP No. 14) for Jan. '21	\$55,385,379.06	\$91,409,935.29	\$5,538,537.91	\$36,024,556.23
\$3,167,128.30 (CoP No. 15) for Feb. '21	\$58,904,410.50	\$91,446,512.63	\$5,890,441.05	\$32,542,102.13
\$3,645,522.00 (CoP No. 16) for Mar. '21	\$62,954,990.50	\$91,650,934.23	\$6,295,499.05	\$28,695,943.73

14.0 SUPPLEMENTAL (SITE) INSTRUCTIONS (SI)

SI	Date Issued	Description
SI-001	November 29, 2019	Building Layout Clarification
SI-002	December 23, 2019	Grading at Existing Field
SI-003	December 20, 2019	Value Engineering Revisions
SI-004	January 2, 2020	Dimension Clarifications
SI-005	January 10, 2020	Main Stair Support Column Revisions
SI-006	January 13, 2020	Value Engineering Electrical Items
SI-007	January 15, 2020	Column Location Revision
SI-008	January 15, 2020	Frost Slab Elevation Clarification (SUB-11)
SI-009	January 15, 2020	Frost Slab Elevation Clarification (SUB-12)
SI-010	January 21, 2020	Value Engineering 2 nd Floor Cut-Outs
SI-011	January 21, 2020	Revise Elevator Hoistway
SI-012	January 23, 2020	New Precast Detail (6/A333)
SI-013	January 23, 2020	New Locker Room Detail (20/A403)
SI-014	January 24, 2020	Revised Arch. Details (4/313, 7/A320, 8/A320, 3/A327)
SI-015	January 27, 2020	Revised Angle of Precast Panel Base (GL A)
SI-016	January 28, 2020	Delete Low-E Foil Ceiling at Arenas & Revise Metal Deck
SI-017	January 28, 2020	Glazing Clarification & Revised Foundation Wall Top
SI-018	February 4, 2020	Revisions: Refrigeration Room Doors, Screen ESC-112, Eyewash Station Location
SI-019	February 6, 2020	Revisions to Arena 1 Press Box
SI-020	February 19, 2020	Revise Exterior Glazing Header Support Angle
SI-021	February 21, 2020	Clarify Wood Door Frame Jamb Details and Finishes
SI-021r1	November 25, 2020	Clarify Wood Door Frame Jamb Details and Finishes

SI-022	February 25, 2020	Structural – Revised Design Loads
SI-023	February 25, 2020	Clarify Electrical Floor Box Locations
SI-024	February 25, 2020	Revise Bench Support Detail at CIP Concrete Walls
SI-025	March 25, 2020	Clarify Concrete Floor Reinforcing
SI-026	March 25, 2020	Clarify CW Header Support
SI-027	March 26, 2020	Misc. Revisions (Doors, Handrails, Ductwork)
SI-028	April 1, 2020	Clarify Arena 1 Light Fixture Elevation
SI-029	April 3, 2020	Granular Subbase Substitute
SI-030	April 17, 2020	Sitework Value Engineering
SI-031	May 11, 2020	Mechanical Tagging Clarification – Revise Fixture Type.
SI-032	May 25, 2020	Revised Extents of ACT Ceiling at Gym Change Corridor
SI-032r1	July 22, 2020	Revised Extents of ACT Ceiling at Gym Change Corridor
SI-033	May 27, 2020	Revised Beam Pocket on Gridline 2Y
SI-034	May 27, 2020	Clarify location of Concrete Wall Control Joints – Arena 1 Change Room Corridor
SI-034R1	May 28, 2020	Clarify Location of Concrete Wall Control Joints – Arena 1 Change Room Corridor
SI-035	June 5, 2020	Revised Partition Locations to Resolve Rainwater Leader Interferences
SI-036	June 9, 2020	Revised Door Dimensions for Arena 1 & 2 Change Rooms
SI-037	June 11, 2020	Clarify Thermostat Locations
SI-038	June 19, 2020	Revised Slab Depression Depth - Multipurpose Room
SI-039	July 6, 2020	Revised Overhead Door Lintels
SI-039r1	July 8, 2020	Revised Overhead Door Lintels
SI-040	July 29, 2020	Clarify Radiator Trench Depth
SI-041	July 29, 2020	Revise WC and Door Swings at Male Public Washrooms 1006 & 1193

SI-042	August 13, 2020	Revised CMU Dimensions to Accommodate Telescoping Gymnasium Bleachers
SI-042r1	August 25, 2020	Revised CMU Dimensions to Accommodate Telescoping Gymnasium Bleachers
SI-043	August 24, 2020	Painting Clarifications -Exposed PVC Piping
SI-044	September 4, 2020	Revised Location of Partition Wall Along Gridline 20z
SI-045	September 8, 2020	Revised RTU Roof Curbs
SI-046r1	September 21, 2020	Exit Stair E & F Masonry Top of Wall
SI-047	September 25, 2020	Smoke Baffle Framing at Central Stair
SI-048	September 28, 2020	Gymnasium Telescopic Seating Electrical Changes
SI-049	September 29, 2020	Fire Separation Clarification
SI-050	October 1, 2020	Mechanical Shaft Revision North of Elevator E-1
SI-051	October 8, 2020	Mechanical Shaft Wall construction Extents
SI-052	October 14, 2020	Revise Parapet Cap at Non-sloped Pre-Cast Cladding
SI-053	October 16, 2020	Revised Wall Assembly
SI-054	October 16, 2020	Elevator E-2 Shaft Ceiling Datum
SI-055	October 16, 2020	Clarify Locations of Control Joints in GWB Ceilings
SI-056	October 16, 2020	Mechanical Ductwork Revisions
SI-056r1	October 26, 2020	Mechanical Ductwork Revisions
SI-056r2	November 11, 2020	Mechanical Ductwork Revisions
SI-057	November 2, 2020	Revise Curtin Wall Header Detail
SI-058	November 2, 2020	Revised Balustrade Details at LED Screen
SI-058r1	November 9, 2020	Revised Balustrade Details at LED Screen
SI-058r2	February 23, 2020	Revised Balustrade Details at LED Screen
SI-059	November 13, 2020	Pre-Cast Panel Cladding Deficiency
SI-060	November 18, 2020	Masonry at Arena 1 North of Seating

SI-061	November 20, 2020	Boiler Room Wall Assembly Fire Ratings
SI-062	November 26, 2020	Clarify Cement Board Specification
SI-063	November 27, 2020	Revised Plan to Avoid Structural Bracing at Arena 2 Change Rooms
SI-064	November 30, 2020	South Canopy Steel Elevations
SI-065	November 30, 2020	Arena Overhead Door Height Clarification
SI-066	January 5, 2020	North Canopy Girder
SI-066r1	January 28, 2020	North Canopy Girder
SI-067	January 13, 2020	Wall to Roof Detail – Modify Flashing Detail
SI-068	January 18, 2020	Remove Liquidated Damages Clause from Contract
SI-069	February 10, 2021	Electrical Mounting heights Revision
SI-070	February 2, 2021	Clarify Floor Finishes
SI-070r1	February 2, 2021	Clarify Floor Finishes
SI-071	February 11, 2021	Arena 2 South Wall Bulkhead
SI-072	February 12, 2021	L6 Light Fixture Mounting Height
SI-073	February 12, 2021	Revised AV Mounting Heights
SI-073r1	February 16, 2021	Revised AV Mounting Heights
SI-074	February 12, 2021	Revise Ceiling Height to Accommodate Ductwork
SI-075	March 5, 2021	Revised OH Door Bulkhead Framing Room 1046
SI-076	March 8, 2021	Ducts Crossing Beams on GL 1
SI-077	March 9, 2021	Clarify Scoreboard Mounting at Arena 2
SI-078	March 16, 2021	Clarify Colour of RAF6A
SI-079	March 18, 2021	Masonry Changes (PCO 88 & 89 – No Cost)
SI-080	March 19, 2021	Testing and Inspection Requirements for CD-06
SI-081	March 22, 2021	Light Cove Dimensions

15.0 REQUEST FOR CONSORTIUM INFORMATION (RFCI)

RFCI	Date Issued	Description	Status

Note: Request for Information (RFI's) from the contractor are provided under separate cover.

16.0 STATUS OF PROJECT CONTRACT

The status of the project budget and costs (excluding HST) to March 31st, 2021 for the Canada Games Park are as follows.

Activity	Budget	Status to Mar. 31
Construction Cost		
Canada Games Park Construction	\$83,956,225	\$56,206,589 ⁽¹⁾
Allowances	\$1,624,000	\$677,693
Changes to Contract		\$6,070,709
TOTAL	\$85,580,225	\$62,954,991

(1) The status of construction costs to date represents the amount paid by the 2021 Canada Games Host Society Inc. to the contractor and INCLUDES Holdbacks (10%).

17.0 COMMISSIONING

CMFS-West Consulting Inc. was retained as the commissioning agent for the amount of \$37,600.00. The Canada Games Park Commissioning Plan and first Progress Management Report was distributed on July 22nd, 2020.

A Documentation Review Report for the BAS shop drawing submittal was distributed on October 5th, 2020.

Site visit report No. 1 was issued and distributed on January 13th, 2021.

A commissioning kick-off meeting was held on January 28th, 2021.

Site visit report No. 2 was issued and distributed on March 25th, 2021.

18.0 POTENTIAL PROJECT RISKS

All construction projects carry some level of risk and uncertainty to participants. Owners mitigate risk by following a rigorous planning, evaluative, investigative and design process and transfers risk by insurances, bonding, indemnification, supplementary conditions and contracts. However, there remains potential project risks to the owner that should be regularly assessed by a risk register and ongoing evaluation of the probability of specific risks.

The probability of a project risk is considered as “low” (unlikely), “moderate” (possible), “high” (likely) or “very high” (active). A construction risk can have one or more causes and one or more impacts. Construction project risks are interrelated and interdependent.

The assessment of potential project risks considers the probability, uncertainty and consequences of a potential risk. The probability of the risk may change as circumstances change or arise and are specific to a particular project. Some of the most consequential potential project risks experienced during construction include:

Schedule – The risk is that facilities required for the rescheduled 2022 Games (August 2022) are not completed. Substantial performance and full occupancy not granted by December 2021. Schedule risks include weather delays, unknown site conditions, fire, permit delays, contractor performance (including financial issues), supply (labour and material) problems, work stoppages (strikes and mandated shutdowns) and decision-making delays. The baseline schedule has minimal float and many constraints leaving no margin for further construction delays. The consequence of facilities not available for the games is failure. Other consequences may mean losing some of the governmental funding commitments, contractor force majeure claim, higher costs for owner oversight and management. The effect of the potential return of the pandemic in 2021 is considered in rating the schedule risk as “Moderate to High”. Potential schedule impacts are mitigated by agreeing to a critical path schedule and monitoring completion of milestone activities against the approved baseline.

Change Directive 06 work began in March 2021. The extent of corrective work is being reviewed by the structural engineers; as such, the impact to the schedule is not known at this time.

- **Risk to Project: Low**

- Twenty (20) working days lost to provincially mandated shutdown (April 4th, 2020 – May 4th, 2020)
- Working days lost to weather

Budget – The project costs significantly exceed the tender budget and contingency allowance; this is a significant project risk. Factors contributing to budget risk include design omissions and errors, unknown site conditions, contract disputes, schedule delays, increases in material costs, and work stoppages. Consequences could be that certain parts of the project are eliminated, changed, or not fully completed.

Change Directive 06 will have significant cost implications to the project budget. The extent of corrective work is being reviewed by the structural engineers. The work is being billed on a time & materials basis; as such, the impact to the budget is not known at this time.

- **Risk to Project: High**

Pandemic – A public health crisis would likely affect construction productivity, or the government could again mandate the construction industry, including supply of equipment, materials, and products, to stop work because of the COVID-19 virus. The consequence is a high level of uncertainty which has potential effects on the project schedule, cash flow, budget and potentially equipment, material and labour supply.

The effect of the Provincially mandated shutdown of approximately four weeks is that the supply of certain materials and equipment were delayed. The impact on schedule appears to be minimal. The January 12th, 2021 “State of Emergency”, April 3rd, 2021 “Emergency Brake”, and the April 8th, 2021 “State of Emergency” mandates did not require construction to stop. Impacts on the delivery of material and equipment is not known, although some minor delays have been experienced with supply. These delays have not impacted the schedule.

- **Risk to Project: Moderate**

- The Province of Ontario mandated that construction stop as of April 3rd, 2020.
- The Province of Ontario allowed construction of Canada Games Park to resume on May 4th, 2020.
- The Province of Ontario declared a “State of Emergency” on January 12th, 2021.
- The Province of Ontario Issued an “Emergency Brake” on April 3rd, 2021.
- The Province of Ontario declared a “State of Emergency” on April 8th, 2021.

Goods and Labour Supply – The supply of goods (equipment and materials) and labour (including availability of trades and specialized subtrades) can be affected by several factors such as a pandemic, mandated shutdowns, labour shortages, disputes and strikes, high demand for specific goods, currency exchange fluctuations and seasonal shutdown by manufacturers. The consequences are probable impacts on project schedule/completion date.

- **Risk to Project: Moderate**

Health and Safety – Worker safety is paramount to the general contractor, subtrades and the owner. Unsafe work conditions, carelessness or a serious workplace accident can affect the project schedule. The general contractor has implemented a comprehensive work health and safety program. Consequence is that workers health and safety is affected which in turn could impact project schedule and completion.

- **Risk to Project: Low**

Environmental – Unknowns and the unexpected such as severe weather events, subsurface conditions not suitable for construction, contaminated soils, underground hazards, structures and tanks, endangered or sensitive species or the presence of archaeological or historical resources represent high levels of risk. The consequences are impacts to budget, schedule and project completion.

- **Risk to Project: Low**

Contractor Performance – The quality of construction including defective work, the completion of the project on schedule, negligence, project close-out and operational readiness, the financial stability of the general contractor, bankruptcy, the availability of trades and labour, health & safety practices and labour unrest represent high levels of risk. The consequences affect all aspects of the project.

- **Risk to Project: Low**

19.0 OTHER PROJECT MATTERS

- Aquicon completed the temporary parking lot (extension to Lot “T”) for use by Brock University on January 6th, 2020. Concrete jersey barriers were required due to slope hazards on the south and west sides of the lot. Brock University laid out parking and had staff on site to direct cars.
- Brock University’s ‘Works Yard’ was located on the Aquicon construction site and not shown on the construction documents. Brock University hired Aquicon to relocate the Works Yard to another location on Campus. The contract to relocate of the Works Yard did not include the relocation of the earth/rubble berms surrounding the perimeter of the existing yard. Brock University stated that they did not want to berms relocated along with the Works Yard. To avoid delays in construction a change directive was issued to relocate the berms to another location on the construction site. The berms were relocated to the east side of the storm water management facility between the pond and Merrittville Highway.
- **Site Issues - Soil and Sub-Grade**
 - The site of the Canada Games Park was a farmer’s field. Approximately 20 years ago, Brock University constructed parking lots on the site. According to several sources, significant fill material was used to grade the site. An existing berm of unspecified material and imported “fill” from unknown sources was used to grade the site.
The geotechnical investigation (Soil Mat) found native soils (silt/clay) in most bore holes (35 boreholes completed within the building footprint).
Problems with the underlying “soils” started with the construction of the building footings. First advised by the contractor at the January 30th, 2020 construction site meeting. Construction rubble (concrete, asphalt, concrete pipe), topsoil and sands were found. These materials were machine packed but do not constitute engineered fill suitable for building footings.
At the direction of the underground testing and inspection consultant (Wood), areas where these conditions were encountered are over excavated to naturally consolidated soils and then filled to the bottom of the footing elevation with lean concrete. This procedure was used extensively and is ongoing. This work is a change and will be a significant cost to the project.
 - On February 6th, 2020 the contractor held a “subgrade meeting” to review the soils issues with the architect/engineering team and project managers.
A second “soils” issue is the integrity of the subgrade within the building. The freeze/thaw cycle and the significant amount of precipitation has saturated and possibly impacted the integrity of the building pad. The material will perform as intended if it dries out and is not impacted by construction activities. The contractor has taken measures to minimize impact by restricting construction traffic, but access is required to these spaces to construct the building as per schedule.
This material must be dry before the slab on grade is poured. Preparation for this work is scheduled for March 2020. We expect that there will be additional costs to address this problem.
 - On February 24th, 2020 the geotechnical engineer (Wood) further investigated the subgrade and “fills”. Eighteen test pits were excavated within the building footprint. A memorandum from Wood (February 26th, 2020) recommended that 1.2m below finished floor be excavated, that a geo-grid product be installed, and the area backfilled with granular to the bottom elevation of the floor

- assembly. This recommendation is to mitigate the issues and ensure the building pad (subgrade) performs as designed.
- On March 12th, 2020 the geotechnical engineer (Wood) further investigated the subgrade and “fills”. Twelve additional test pits were excavated under the track and parking lot locations. A memorandum from Wood (March 12th, 2020) recommended that a geo-grid is required under the running track and in “soft spots” in other areas of the track & field area and parking lot as identified during proof rolling.
 - On May 25th, 2020 the contract administrator advised that the quantity of relocated saturated soil is higher than estimated by the contractor. Original estimates were that the deposit of excavated soil would have increased the elevation across the “disposal site” (Part 2 of the reference plan south of the parking lot) by eighteen inches to two feet. The contract administrator estimated that the surplus excavated soils has increased the elevation from five to six feet higher; a difference of more than three feet. Receipt of this information prompted a landscape coordination meeting held on June 4th, 2020. (See section 2.0)
 - On July 23rd, 2020 a landscape review meeting was held to discuss excess on-site soil. Direction was provided to leave the remediated soil on site and use approximately 14,000 cubic meters for new landscaping features. Consortium approval received on July 28th, 2020.
 - On September 22nd, 2020, the contractor submitted RFCO 38 for costs associated with replacing anchor bolts and underground piping damaged by earthmoving equipment during the saturated soil removal work completed under CD-03. The costs were reviewed and approved by the Consortium on November 13th, 2020 as part of Change Order 89.
 - On November 2nd, 2020, the contractor submitted RFCO 52 for earthwork related to PCO 25 as an extension as CD-03 and CD-04. This includes the loading, hauling, shaping of soils on the Canada Games Park site as well as the corrective activities required due to ill-timed work; for the additional earthwork activities that were not captured in CO's 68 and 65 (CD 03 & CD 04 work). The costs were reviewed and approved by the Consortium on November 13th, 2020 as part of Change Order 89.

Other Matters Continued...

- On March 25th, 2020 Aquicon and Ritchfield (track contractor) advised the project team that the supply of track and field equipment may be delayed. The COVID-19 pandemic resulted in a temporary, but undetermined shutdown of manufacturer; Sportfield Specialties, located in New York State. Ritchfield has coordinated with a different supplier; UCS Equipment, located in North Carolina who can provide the required equipment on schedule for the same cost quoted by the original supplier. UCS Equipment required a 50% deposit to secure the order given the uncertainty in the world markets. The requested deposit (\$102,500) was approved and included in the March 2020 draw.
- On March 25th, 2020 Aquicon advised by letter of project delays caused by the COVID-19 pandemic.
- On March 26th, 2020 A Notice of Delay letter was received from the steel erector (Niagara Rigging & Erecting Company). The delay is caused by material supply stoppage and labour availability as result of the COVID-19 pandemic and mandated supplier shutdowns. Aquicon advised on March 31st, 2020 that if the Quebec supplier of steel resumes operation by mid-April, then the supply would not impact the project schedule. The erector following mandated separation distance would be reduced by half the normal workforce. This would impact the project schedule.

- A government mandate issued on April 3rd, 2020 shutting down all non-essential construction. Aquicon advised the project team by letter (April 3rd, 2020) that the Canada Games Park project will be stopped until the government mandate is lifted.
- On May 1st, the Provincial government announced a list of businesses permitted to resume operations following COVID-19 guidelines starting May 4th, 2020. Aquicon resumed construction on Canada Games Park on May 5th, 2020.
- On May 5th, 2020 Aquicon advised by letter "... notifying of a delay beyond our control experienced due to the COVID-19 Pandemic." "The total impact of delay/costs due to COVID-19 cannot be determined until such time that work will return to its original status as it was prior to the COVID-19 Pandemic, or a confirmed sense of how operations will be progressing moving forward."
- On September 16th, 2020 the Canada Games Council and the 2021 Canada Games Host Society decided to reschedule the Games until the Summer of 2022.

20.0 CLOSE OUT DOCUMENTS

There are four significant milestones at the end of a construction project that must be addressed to permit occupancy:

- Certificate of Substantial Performance
 - **Construction in Progress**
- Occupancy Permit from Building Department (in consultation with Fire Department) including verification/compliance letters (i.e. ESA, emergency lighting, fire alarm, seismic restraint, sprinkler, electrical, mechanical), letters from sub-contractors and from the design architects/engineers. Balancing and controls can be ongoing during occupancy.
 - **Building Inspector and Fire Department undertake periodic inspections during construction**
- Architectural/Civil, Electrical, Mechanical and Structural As-Built Drawings
 - **Construction in Progress**
- Operation and Maintenance Manuals
 - **Construction in Progress**

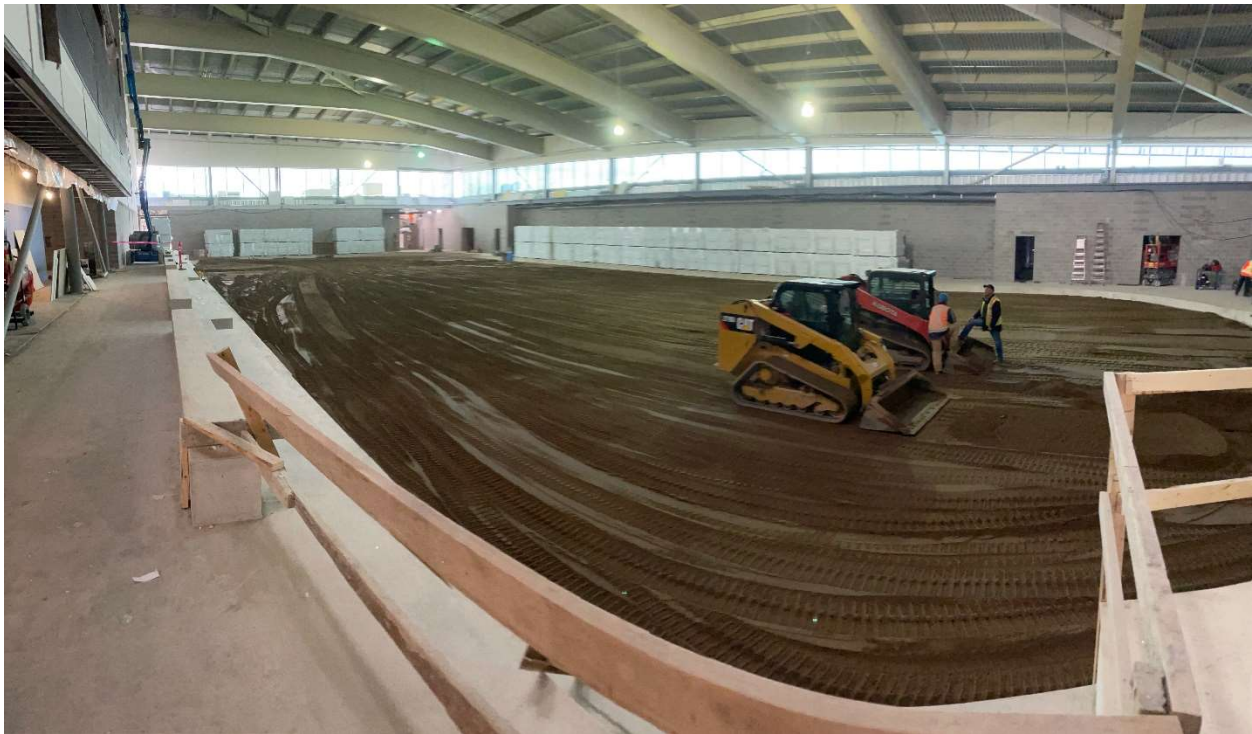
21.0 CONSULTANT & SUBCONTRACTOR LIST

Scope	Consultant / Contractor	Location
Architect	MacLennan Jaunkalns Miller Architects (MJMA)	Toronto
Associate Architect	Raimondo + Associates Architects	Niagara Falls
Project Management	Urban & Environmental Management (UEM)	Niagara Falls
Mech./Elec. Engineers	Smith + Anderson	Toronto
Structural Engineers	Blackwell Structural Engineers	Toronto
Civil Engineers	Upper Canada Planning & Engineering	St. Catharines
Commissioning Agent	CFMS- West Consulting Inc	Grimsby
Testing & Insp. - Subgrade	Wood Environmental & Infrastructure Solutions	Thorold
Testing & Insp. – Above Grade	EXP Services Inc	Hamilton
Testing & Insp. – Steel Fabrication	Englobe Corp.	Quebec
Testing & Insp. – Building Envelope	Tri-Tech Pinnacle Group Inc.	Aurora
Surveyor	Chambers & Associates Ltd.	Welland
General Contractor	Aquicon Construction	Brampton
Civil/Siteworks	Peters Excavation Inc.	Stevensville
Mechanical	Mattina Mechanical Ltd	Hamilton
Electrical	J.M.R. Electric Ltd.	Exeter
Masonry	George And Asmussen Limited	Breslau
Structural Works	Niagara Rigging & Erecting Company Ltd.	Thorold
Miscellaneous Metals	A.M. Reid Construction Ltd.	Washago
Concrete Formwork	Reimar Forming Construction	Hannon
Pre-Cast Concrete	Coreslab Structures (Ont.) Inc.	Dundas
Running Track	Ritchfield	Guelph
Ice Rink Refrigeration	CIMCO Refrigeration	Concord
Millwork	Archmill House Inc.	Ancaster
Elevator	Schindler Elevator Corporation	Ancaster
Glazing	Aerloc Industries	Dundas
Gypsum Board/ACT	Daly Smith Contracting	Hamilton
Flooring	Floorcraft Design Inc.	Stouffville
Painting	Platinum Painting & Decoration Inc.	Brampton
Arena Seating / Gym Equipment	Forum Athletic Products Inc.	Bolton

22.0 CANADA GAMES PARK FLOOR PLAN



23.0 SITE PICTURES



Arena 2 - Sand Installation



Arena 1 – Under Slab Heat Piping and Sand Installation Complete



Gymnasium – Installation of HVAC Ductwork, Drywall, Acoustic Panels



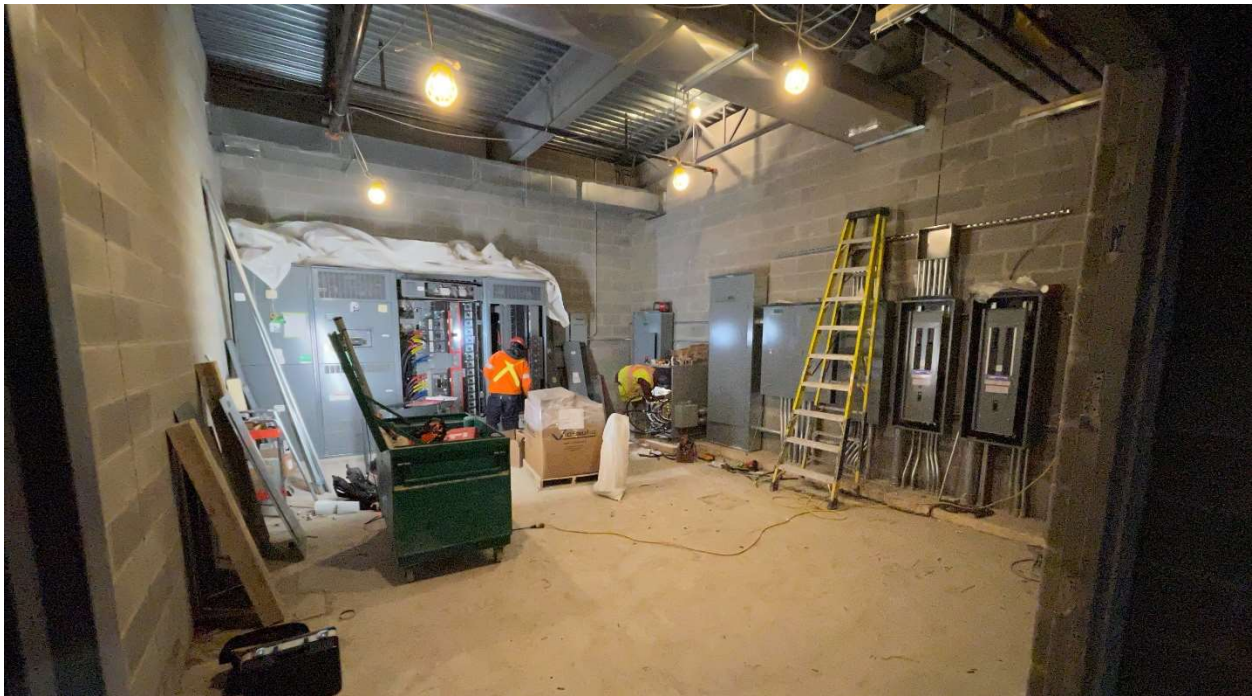
Atrium Skylight Installed



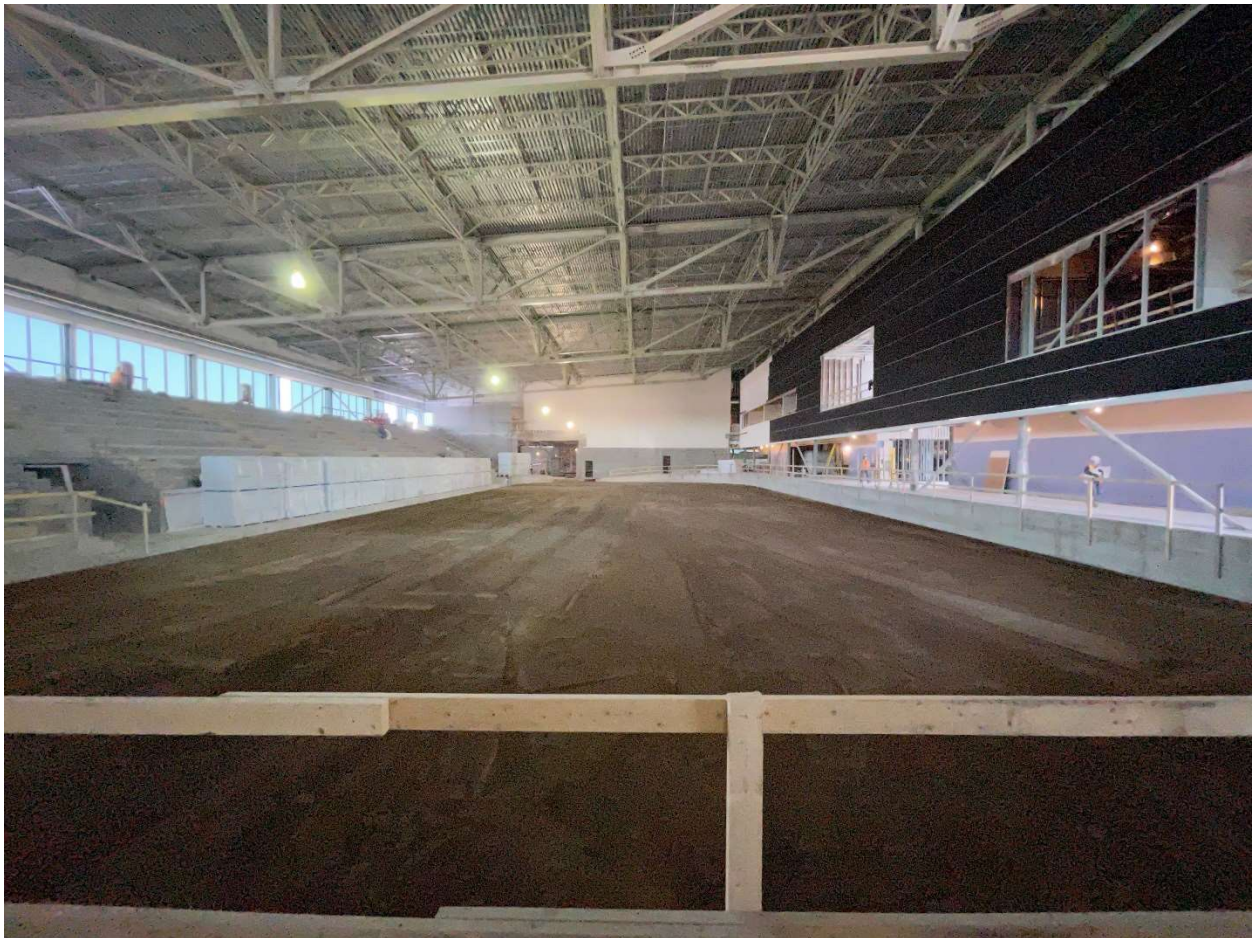
Colling Tower Installed



Mechanical Room Plumbing Underway



Main Electrical Room



Arena 1

PROJECT FACT SHEET

Canada Games Park Budget:	
Aquicon Construction	\$ 83,956,225
Construction Allowances	\$ 1,624,000
Construction Allowance Credit	(\$ 160,000)
Total Canada Games Park Budget (Ex. HST)	\$ 85,420,225
Canada Games Park Project Scope:	
- Gross Floor Area	19,035 m ² (204,900 ft ²)
- Site Area	24.43 ha (60.38 ac)
- Total Parking Stalls	1,420
- Green Roof	5,160 m ²
Canada Games Park Key Features:	
6 Outdoor Beach Volleyball Courts	Indoor 200m Elevated Running Track
4 Indoor Basketball Courts (2,400 m ² , 622 Seats)	2 Hockey/Lacrosse Arenas (1170 & 200 Seats)
Full Size Track & Field Track	Warm-up Area Grass Field
Indoor Cafe	
Administration & Office Spaces:	
Brock Center for Health & Well Being (w/workout room)	Sports Association
Brock Center for Sport Capacity (w/workout room)	Canadian Sports Institute Ontario
Schedule (Updated January 20 th , 2021):	
Substantial Completion	December 1 st , 2021
Occupancy	January 2022
2022 Canada Summer Games	August 6 th – 22 nd , 2022

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