# Town of Arnprior Staff Report

**Subject:** Nick Smith Centre Rink Replacement Design Project

**Report Number:** 23-10-23-03

**Report Author and Position Title:** Patrick Foley, Engineering Officer / Graeme Ivory, Director of Recreation

**Department:** Operations / Recreation

**Meeting Date:** October 23, 2023

## Recommendations:

That Council direct Staff to complete a tender-ready design for Option #4 – “Two Storey Storage and Public Spaces” and include updated costing values in the 2024 Capital and Long-Range Capital Forecast; and

That Council authorize $ 113,237.71 in funding from the Capital Expenditure Reserve Fund (CERF) to cover the increased design costs.

## Background:

The Nick Smith Centre, then Arnprior Civic Centre, was built in 1977 featuring the same amenities the facility still has today – two arenas, a swimming pool and community hall. Over its 46 years of operation, the facility has seen upgrades to the arena dressing rooms, pool (deck and liner), roof, mechanical equipment and the parking lot – to name a few, however the arena floors and refrigeration piping remain original to the building.

Over the past 5 years, significant brine leaks and repairs have occurred at the Nick Smith Centre as aging arena components have failed. The expected useful life of an arena slab is approximately 25 years and with the current slab, now 46 years old, staff endeavoured to begin preparations for its replacement.

Design for the replacement of the rink slabs was included in the 2023 capital budget. The Town invited submissions through a Request for Proposal (RFP) process to establish a design for the replacement of the following:

- Two (2) indoor concrete arena pads including all associated refrigeration piping, drainage and essential equipment
- Concrete surfaces leading to and from the Ice Machine garage including drainage
- Arena boards, glass, netting
- Arena spectator stands
- Arena rubber flooring
- Scraping and recoating of roof trusses
- Audience comfort heating
- Economization of space (including options increasing storage, washrooms or changeroom space utilizing the existing footprint of the slabs)
- Refrigeration Options Analysis

Council approved awarding the design scope to Architecture 49 on August 2, 2023. The design process has two phases:

1) Conduct an options analysis to provide all reasonable options available for the final design including refrigeration methods, layout options and possible economizations. The approach was taken to provide all options from the perspective that this will be the last major project within the arenas for the rest of the facility's useful life.

2) After Council selects a concept option, the final design will be produced as tender-ready Contract documents accompanied by a Class B Estimate.

This report outlines the options from the first phase of the design project.

## Discussion:

Town Staff first met with Architecture 49 and Goodkey Weedmark & Associates on August 10, 2023 for a facility site tour and general project discussions to support the development of design options and a refrigeration options analysis. This discussion section outlines the design work and options analysis, consultations and expected timelines moving forward.

Architectural, structural, mechanical, electrical, life safety, code compliance (AODA, OBC, ORFA) and costing have all factored into the discussion and design work of this project.

The design options all ensure that the Town of Arnprior's Nick Smith Centre can provide an enhanced, accessible and equitable user experience, providing varying degrees of flexible space for meetings, programming, events and storage, and improved public viewing areas.

<u>Design Options</u>

All of the following design options include full replacement of both arena floors (zero-degree entry), refrigeration lines, boards, expansion of players' benches, replacement of glass, netting and Arena B spectator stands, as well as scraping and recoating of roof trusses. Visual representations of the design options are included as Appendix A.

The following 4 options are presented for Council's consideration. Note that the monetary values are high level Class D estimates. A more concise Class B estimate will be provided

with the final design prior to tendering.

- **Option #1 – “Like-for-Like” $5,792,205 + HST**
    - Remove and replace all stands with modern accessible equivalents.
    - All four “towers” will remain in place with no additions to storage or meeting spaces.
- **Option #2 – “In-Fill” $5,792,205 + HST**
    - Demolish stands on both sides as well as two towers on exterior wall side.
    - New modern accessible stands across the entire side of the exterior wall side of the Bert Hall Arena (Arena A).
    - Existing towers along the demising wall would remain.
    - Construct 5 new storage rooms, a meeting room and a Pro Shop skate sharpening space.
- **Option #3 – “Single Storey Storage” $6,010,281 + HST**
    - Demolish stands on both sides and all four towers.
    - New modern accessible stands across the entire side of the exterior wall side of the Bert Hall Arena (Arena A). Construct 6 new storage rooms, an office space, meeting room and a Pro Shop skate sharpening space.
    - Replace stands on Glenn Arthur Arena (Arena B) allowing for access to select newly constructed rooms along the demising wall, as well as a service window for the Pro Shop.
- **Option #4 – “Two Storey Storage & Public Space” $6,338,682 + HST**
    - Demolish stands on both sides as well as all four towers.
    - Construct new modern accessible stands across the entire side of the exterior wall side of the Bert Hall Arena (Arena A).
    - Construct 6 new storage rooms, an office space, meeting room and a Pro Shop skate sharpening space.
    - On the second storey mezzanine level of the demising wall side, construct meetings room on each end, separated by an enclosed public space.
    - All three rooms on the mezzanine level would be accessible (via an elevator), overlook both arenas and the open public space would provide 24 additional spaces for accessible seating, in addition to general spectator viewing.

- Replace stands on Glenn Arthur Arena (Arena B) allowing for access to select newly constructed rooms along the demising wall, as well as a service window for the Pro Shop

Seating Capacity & Overall Occupancy

The below table compares all options regarding estimated seating capacity and usable spaces:

| | Current | Option #1 "Like for Like" | Option #2 "In-Fill" | Option #3 "Single Storey" | Option #4 "Two Storey" |
|---|---|---|---|---|---|
| **Seating** | | | | | |
| Arena A Seating Capacity | 1584 | 1400 | 880 | 880 | 880 |
| Arena B Seating Capacity | 200 | 200 | 200 | 190 | 190 |
| 2nd Floor Mezzanine | n/a | n/a | n/a | n/a | 130 |
| **Total Seating** | **1784** | **1600** | **1080** | **1070** | **1200** |
| **Space** | | | | | |
| Storage | 701 ft² | 701 ft² | 1,733 ft² | 1,561 ft² | 1,539 ft² |
| Meeting Rooms | 882 ft² | 882 ft² | 237 ft² | 786 ft² | 1,249 ft² |
| Enclosed Public Space | 0 | 0 | 0 | 0 | 1,184 ft² |
| **Total Usable Space** | **1583 ft²** | **1,583 ft²** | **1970 ft²** | **2,347 ft²** | **3,972 ft²** |

Though the above table does show a reduction in spectator seating, this does not take into account permitted standing room around the rink surface. Staff anticipate that overall permitted maximum occupancy of 1600 (including those in non-fixed seating and standing) will not significantly change.

Option #4 is the only option that allows for viewing capacity to increase on Arena B as the 2nd floor mezzanine and meetings room would include viewing windows for both ice surfaces.

Further, attendance data does support a seating capacity of 880 being sufficient. From 2018-2023 (excluding the 2020 season due to COVID-19 restrictions), Arnprior Packers playoff games had an average of 349 spectators in playoff games with 476 spectators at the highest in recent years (data available since 2017). The highest number of spectators in the entire Junior A league is typically below 700 at peak, with an anomalous game in Alexandia reporting 1,000 as a peak attendance in 2019.

Staff did look at Junior A attendance data as well to ensure that the Facility would remain sufficient should the Junior B Packers become a Junior A team in the future. Junior A spectator attendance in nearby communities (Pembroke, Renfrew, Smiths Falls and Carleton Place) average 358 per game with a maximum high of 1,045 (Smiths Falls).

Arnprior Rivermen had a maximum spectator count of 201 with an average audience of 162 in their 2 years at the Nick Smith Centre.

For additional context, the below table indicates the arena seating capacity from nearby municipalities:

| Municipality | Arena Capacity |
|---|---|
| Pakenham | 250 |
| Almonte | 500 |
| Casselman | 500 |
| Petawawa | 650 |
| Perth | 750 |
| Gananoque | 800 |
| Barry's Bay | 800 |
| Tweed | 900 |
| Carleton Place | 1,000 |
| Renfrew | 1,200 |
| Smiths Falls | 1,500 |
| Pembroke | 2,450 |

Refrigeration Options Analysis

Town Staff met with Architecture 49 and Goodkey Weedmark on August 10, 2023 on site for a facility tour and discussion of the facility needs. Based on comparable projects of similar scope within the region and the rest of Canada, the following were clear recommendations from the refrigeration options analysis:

- **Primary Coolant** – it is recommended that the existing ammonia-based refrigeration plant remain 'as-is' due to both cost and efficiency factors.
- **Secondary Coolant** – it is recommended to switch from brine to pre-mixed glycol as it is more user friendly; the plant and associated pumps and heat exchangers will last longer; annual maintenance costs will be lower; there is less risk to health and safety of staff; and glycol is more environmentally friendly than brine should a leak occur.
- **Secondary Coolant Headers** – it is recommended to switch from a trench header pipe to a buried header pipe within this project's scope. Over the past 30 years, buried headers have become the industry standard in new arenas due to efficiency and longevity factors.

Note: Full report included as Appendix B.

## Consultations

Similar Municipal Projects

Staff have consulted with counterparts at the Town of Petawawa, Town of Barry's Bay, Town of Renfrew and City of Ottawa on their recent arena floor replacement projects and/or arena expansions for feedback on their process, considerations, best practices and recommendations. Staff have also been present for the arena floor pours of both Petawawa

(2021) and Renfrew (2023).

User Group Engagement

The Director of Recreation and Engineering Officer, Facilities & Assets reached out to user groups that primarily operate out of the Nick Smith Centre arenas to gain a better understanding of their current needs and challenges, review preliminary design options and capture their feedback on proposed options.

Staff met with the Arnprior Minor Hockey Association (AMHA), Arnprior McNab Ringette Association (AMRA), Arnprior Figure Skating Club (AFSC), Arnprior Packers and the Arnprior Rivermen. While the division of space (office and storage spaces) is not currently equitable across all user groups, all groups did note the need to maintain or grow their existing storage space. Most groups were satisfied with shared office/meeting space so long as space was available for executive meetings and events (game days / tournaments / etc.). All groups asked that the players' benches be expanded to meet the industry standard.

In the initial design phase, these user groups were shown layouts that could feature a pair of dressing rooms along the demising wall on the Bert Hall Arena (Arena A), behind the stands – these would be change rooms with washrooms only (no showers). Most groups preferred storage space over additional change rooms and those that liked the change rooms did not see the benefit without showers – an option not cost-effective or feasible in this space. Given the limited footprint and the unfeasibility of showers in this space, it was resolved to address the possibility of more changerooms at a later date outside of the current project scope.

All groups were enthusiastic of the potential of the second story option that would provide expanded public spaces and meeting areas that would support the various aspects of their operations and future events.

All groups were pleased with the accessible enhancements proposed to the ice surfaces, stands and meetings areas that would support both participants and patrons.

Only one group expressed concern with the reduced spectator capacity on Bert Hall Arena.

All groups inquired of the possibility of potential licencing opportunities of the enclosed public area and meeting rooms.

Canadian Pro Shop

Designs were also reviewed with the owner and operators of the Canadian Pro Shop as the options looked to relocate their operations. This would not impact their operating space and they were in favour of the plan though did note that any opportunity to move the operation out of the arena and into the lobby area would be beneficial.

Recreation and Parks Master Plan Consultant Comments

As the consultants for developing the Town's new Recreation and Parks Master Plan, these proposed plans were reviewed by Stantec's Project Manager. Their remarks on the importance of enhancing storage and shared community space are included as Appendix C.

Timeline

The timing of this project is a crucial component to its operational and financial success. The following is a general expectation of the timeline over the next 24 months.

- October 2023 – Council approval of design option
- January 2024 – Class B Estimates and Final Design
- March 2024 – Release of construction tender
- April 2024 – Award of construction contract & commencement of procurement
- March 30, 2025 – Final Day of Arena Operations
- April 2025 – Commencement of construction
- September 2025 – Completion or arena replacement project; arenas re-open

## Options:

Design Option #4 is recommended as it provides an enhanced, accessible and equitable experience for all users and visitors to the Nick Smith Centre providing varying degrees of flexible space for meetings, programming, events, storage and improved public viewing areas. This option will ensure that the Nick Smith Centre remains a Community Hub for Arnprior for the decades to come.

Council may also choose to direct staff to proceed with the following design options:

- Option #1 – "Like-for-Like"
- Option #2 – "In-Fill"
- Option #3 – "Single Storey Storage"

Alternatively, Council may choose to direct staff to explore other design options.

Staff do not recommend any of these options as Design Option #4 delivers the greatest benefit to facility and program operations for the next 30 years of the Nick Smith Centre.

## Policy Considerations:

Staff have noted that Option #4 best meets the needs of the community, is in line with the

Strategic Plan, as well as preliminary drafts of the upcoming Recreation Master Plan.

## Financial Considerations:

Design Costs:

The budget for the design of the rink slab replacements was $160,000 with $147,310.83 (incl. net HST) already approved by Council. A value of $12,689.17 remains uncommitted from the total budget of $160,000.

During the preliminary design phase, it was discovered that part of Arena B appears to be settling unevenly indicating a subgrade issue which will carry a projected additional design cost of approximately $46,000. This cost must be assumed regardless of which option is selected as the repair is essential to the continued use of the facility.

The increased scope encompassed by options other than the original “like for like” option will carry additional design consultant costs of an anticipated $79,926.88 (incl. net HST) as detailed below:

| | | |
|---|---|---|
| Architectural: | | $ 38,250.00 |
| Structural: | | $ 10,972.50 |
| Mechanical & Electrical Engineering: | | $ 14,500.00 |
| Mechanical (Convert secondary coolant to glycol): | | $ 2,800.00 |
| Code Consultant | | $ 7,500.00 |
| Project Management | | $ 4,522.00 |
| | Net HST | $ 1,382.38 |
| | Total: | $ 79,926.88 |

Note that these design costs, as well as those approved by Council previously, include all costs relating to construction administration and inspections that are to occur throughout the project. Note that construction administration and inspections were included in the original RFP scope to encourage more competitive pricing in the proposal phase thus $48,371.67 will not be expensed until the Construction phase.

The total design consultant costs and funding are broken down as follows:

| | |
|---|---|
| “Like for Like” Design Consultant Cost | $ 147,310.83 |
| Existing structural failure mitigation (Arena B) | $ 46,000.00 |
| Design Scope Change | $ 79,926.88 |
| Total Design Consultant Cost | $ 273,237.71 |
| Less: Capital Project Budget Value | $ 160,000.00 |
| Additional funding required from CERF | **$ 113,237.71** |

Construction Costs:

These construction costs are high level estimates (Class D). A more detailed Class B estimate will be prepared in the next phase of the design project. A summary of the options is

outlined below.

| | Option #1 “Like for Like” | Option #2 “In-Fill” | Option #3 “Single Storey” | Option #4 “Two Storey” |
|---|---|---|---|---|
| Cost Estimates | $5.79M | $5.79M | $6.01M | $6.34M |
| Seating Capacity | 1600 | 1080 | 1070 | 1200 |
| Storage / Public Meeting | 1583 $ft^2$ | 1970 $ft^2$ | 2347 $ft^2$ | 3972 $ft^2$ |
| Storage / Public Rooms | 6 | 8 | 8 | 10 |
| 2nd Floor Mezzanine | No | No | No | Yes |

Option #4 allows the opportunity to address several facility issues including lack of storage, accessible seating, accessible meeting space and an enclosed viewing area. Option #4 is considered the best-value-for-money for the presented options. The additional cost of these features is $550K over Options #1 (Like-for-like) and Option #2 (In-Fill).

The Long Range Capital Forecast currently includes construction costs at $2.975M which took into account projects at other municipal arenas however construction costs have significantly increased over the last few years which is reflected in recent tender pricing.

Moving forward with the next design phase is key for ensuring that this project is shovel ready. Shovel ready design will allow for a quicker implementation should another serious brine leak disable the facility and will also allow for more robust applications for possible grants. Additionally, a shovel ready project will assist with staff’s pursuit of grant funding for the project or components therein.

As this project is a two-year project, it is recommended that the project funding, while committed ahead of time during the tender process, will be split over 2024 and 2025 in the Long Range Capital Forecast. Given the nature of this project, a funding model could be considered with a split between reserve funding and financing. While the Town maintains a pay-as-you-go model, this model and the Town’s debt management policy does include specific times where financing could be considered appropriate. Under the debt management policy, consideration is given to the impact of the debt on current and future ratepayers. As this large facility investment will extend the life of the facility components (slabs, header trench, etc) over 30 years, financing a portion of the project would meet the policy requirements. That said, given current lending rates, financing is not recommended at this time but will be reviewed prior to the full expenditure in 2025.

## Consultation:

- Architecture 49
- Goodkey Weedmark Engineering
- Arnprior Minor Hockey Association (AMHA)
- Arnprior McNab Ringette Association (AMRA)

- Arnprior Figure Skating Club (AFSC)
- Arnprior Packers
- Arnprior Rivermen
- Canadian Pro Shop
- Stantec Consulting Ltd (Recreation and Parks Master Plan Consultants)

## Documents:

1. Architecture 49 Design Options
2. Refrigeration Options Analysis
3. Stantec Endorsement Letter

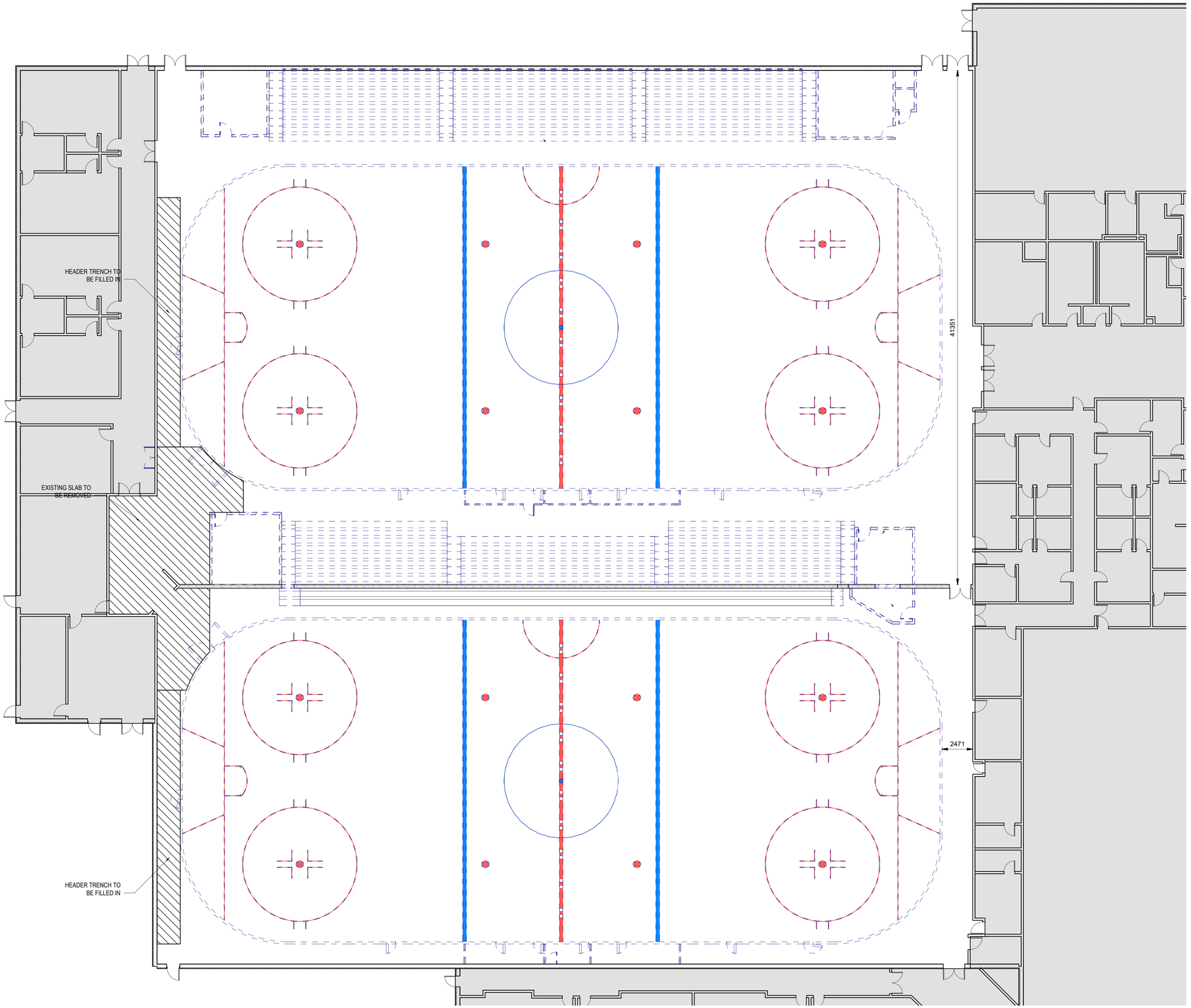
## Signatures

**Reviewed by Department Head:** Graeme Ivory

**Reviewed by General Manager, Client Services/Treasurer:** Jennifer Morawiec

**CAO Concurrence:** Robin Paquette

**Workflow Certified by Town Clerk:** Shelley Mackenzie

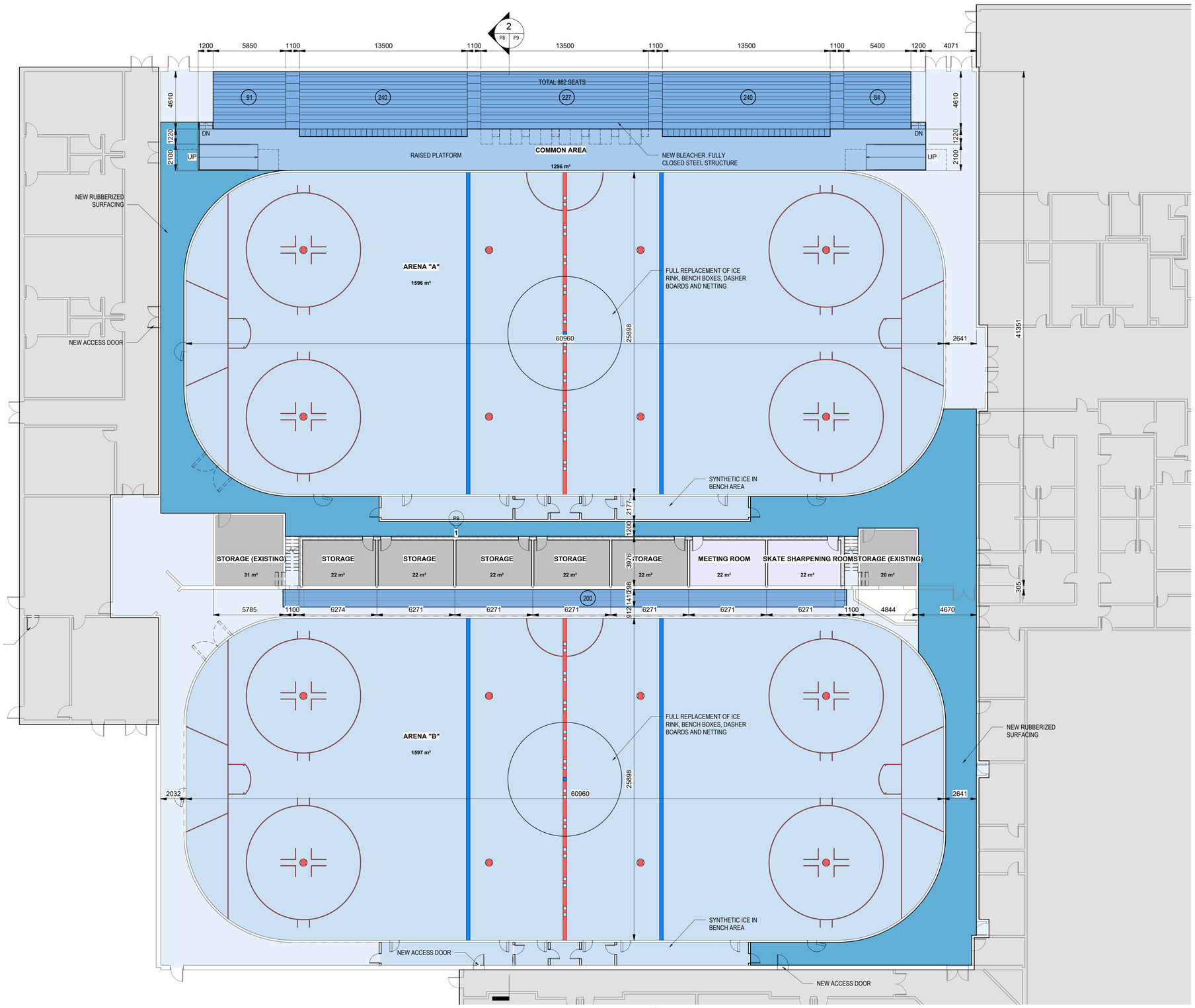



ARCHITECTURE 49

150 ISABELLA STREE, SUITE 1000
OTTAWA (ONTARIO) CANADA K1S 5H3
Phone: 613-690-3983 | Fax: 613-238-6597 | WWW.ARCHITECTURE49.COM

# NICK SMITH CENTRE RINK REPLACEMENT | OPTION 1 - LIKE-FOR-LIKE

scale 1 : 150 | 9/11/2023 | drawing

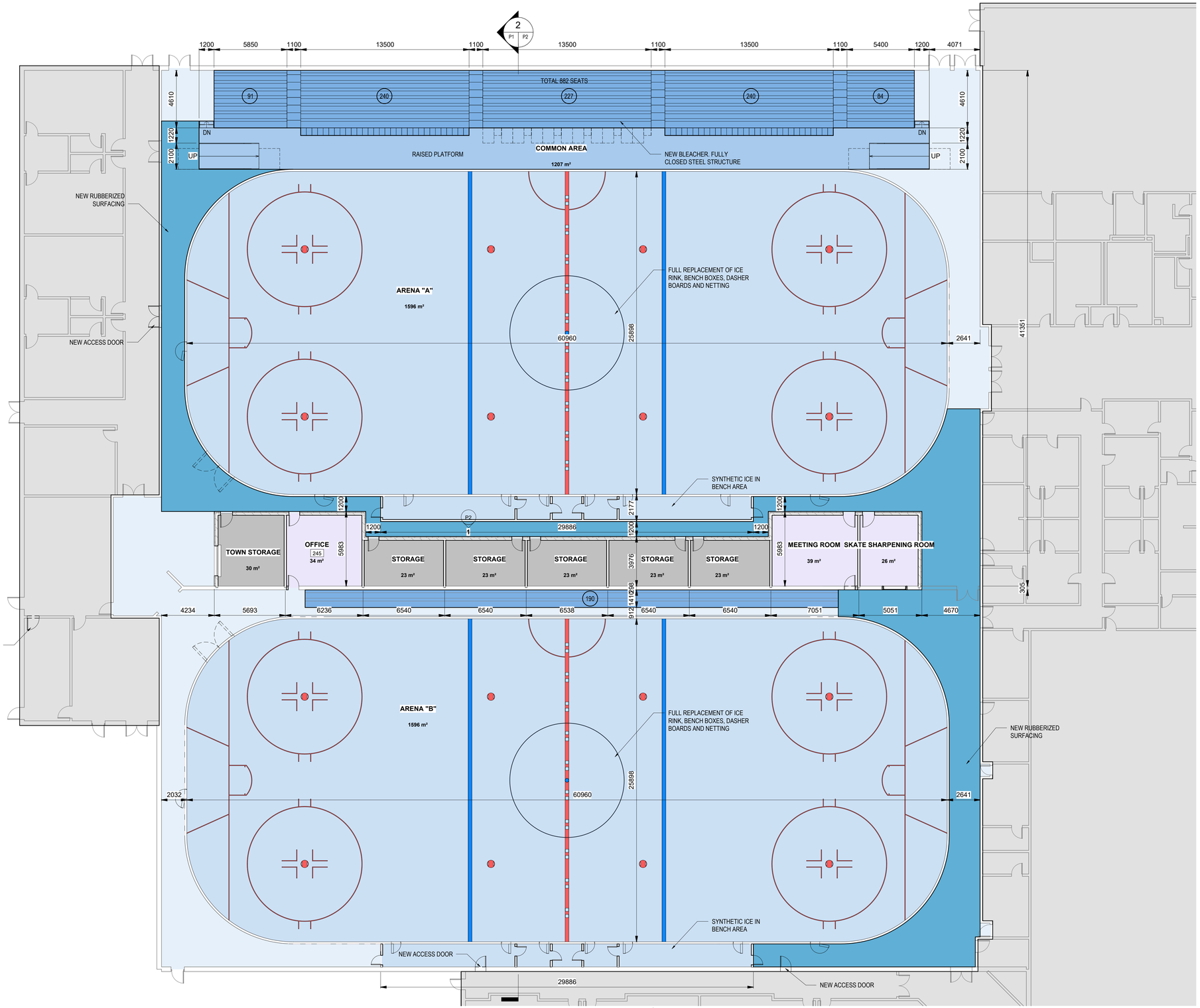



ARCHITECTURE 49

150 ISABELLA STREE, SUITE 1000
OTTAWA (ONTARIO) CANADA K1S 5H3
Phone: 613-690-3983 | Fax: 613-238-6597 | WWW.ARCHITECTURE49.COM

# NICK SMITH CENTRE RINK REPLACEMENT | OPTION 2 - IN-FILL

scale 1 : 150 | 9/11/2023 | drawing

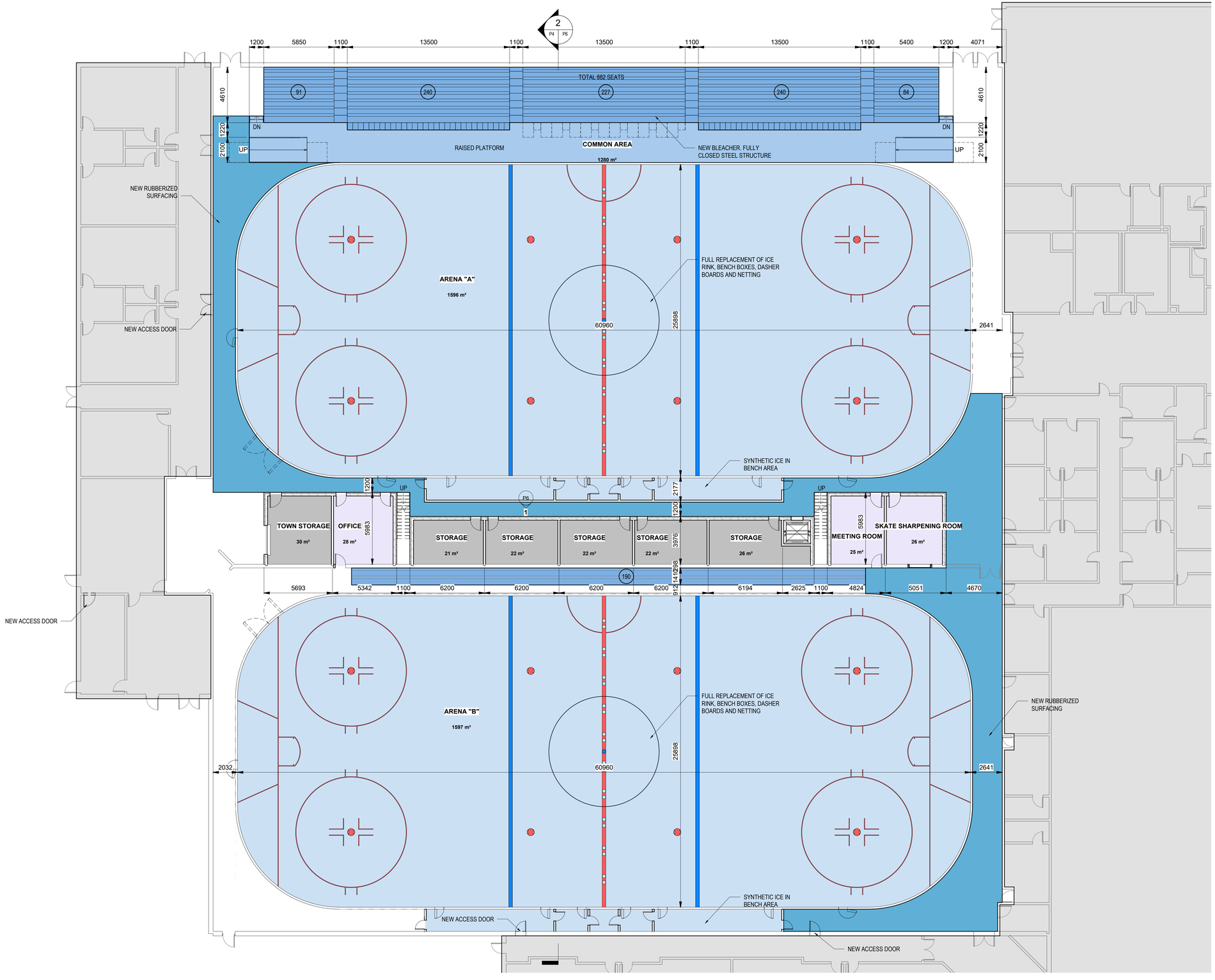



ARCHITECTURE 49

150 ISABELLA STREE, SUITE 1000
OTTAWA (ONTARIO) CANADA K1S 5H3
Phone: 613-690-3983 | Fax: 613-238-6597 | WWW.ARCHITECTURE49.COM

# NICK SMITH CENTRE RINK REPLACEMENT | OPTION 3 - SINGLE STOREY STORAGE

scale 1 : 150 | 9/11/2023 | drawing



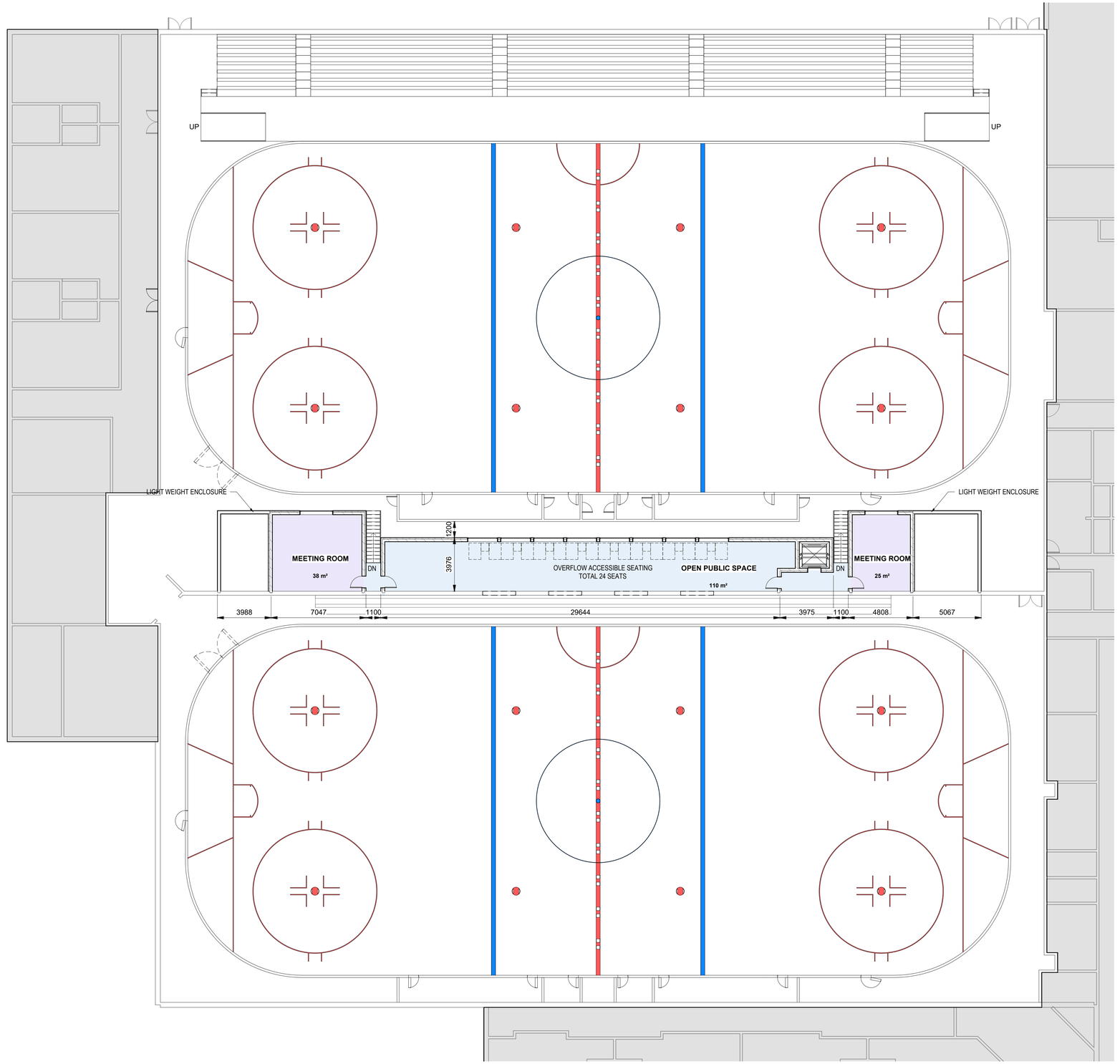

ARCHITECTURE 49

150 ISABELLA STREE, SUITE 1000
OTTAWA (ONTARIO) CANADA K1S 5H3
Phone: 613-690-3983 | Fax: 613-238-6597 | WWW.ARCHITECTURE49.COM

# NICK SMITH CENTRE RINK REPLACEMENT

## OPTION 4 - TWO STOREY STORAGE & PUBLIC SPACE

scale 1 : 150 | 9/11/2023 | drawing




ARCHITECTURE 49

150 ISABELLA STREE, SUITE 1000
OTTAWA (ONTARIO) CANADA K1S 5H3
Phone: 613-690-3983 | Fax: 613-238-6597 | WWW.ARCHITECTURE49.COM

# NICK SMITH CENTRE RINK REPLACEMENT | OPTION 4 - TWO STOREY STORAGE & PUBLIC SPACE

scale 1 : 150 | 9/11/2023 | drawing

Your Trusted Choice for Mechanical & Electrical Consulting Engineers

GWAL
Goodkey Weedmark & Associates Ltd.



# 77 James St. - Arnprior, ON - Nick Smith Centre
# Rink Replacement Design Services
# RFP #PW-2023-09

## Refrigeration Options Report

**GWAL 2023-512**
**August 24, 2023**

**Prepared By:**
Robert Lefebvre, P.Eng. LEED® AP | Partner, Senior Mechanical Engineer

**TABLE OF CONTENTS**

## 1.0 SCOPE

The following are the options analysis and recommendations for the rink slab replacements at the Nick Smith Centre. The agreed upon options by the Town of Arnprior shall form the basis of the design.

## 2.0 LIMITATIONS

This report is prepared for Town of Arnprior, the material in it reflects Goodkey, Weedmark & Associates Ltd.'s (GWAL) best judgement in light of information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it are the responsibilities of such third parties. GWAL accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

## 3.0 ARENA REFRIGERATION SYSTEMS OVERVIEW

Nick Smith Centre is an existing community arena with two (2) NHL size rinks with spectator seating. One (1) rink operates with year-round operation and the other is seasonal. Both rink slabs are cooled by a common refrigeration plant with Ammonia (NH3) as the primary refrigerant and Calcium Chloride brine (CaCl) as the secondary refrigerant. The brine is cooled by a recently replaced titanium plate heat exchanger and is pumped through a single brine pump to a common header. The supply and return header splits to each rink just outside the mechanical room into an open header trench. The supply and return tubing for each rink slab connects to the steel nipples on the header with stainless steel clamps.

## 4.0 OPTIONS ANALYSIS AND RECOMMENDATIONS

### 4.1 PRIMARY COOLANT

The primary coolant is the refrigerant that is used within the refrigeration plant to produce the cooling. Options for the primary coolant are ammonia (NH3) and carbon dioxide ($CO_2$).

Ammonia is by far the most popular choice for a community rink of this size and nature. Ammonia is also the most efficient and cost-effective primary coolant for a stand alone refrigeration system. The ammonia will be contained in the mechanical room.

$CO_2$ systems are gaining traction in Quebec where electricity is very inexpensive. There are very few $CO_2$ installations in Ontario. $CO_2$ systems are more expensive than ammonia systems and they work best when the arena is coupled with a heat sink that can use low grade heat (like an indoor pool).

While the Nick Smith Centre does have a pool, it is not part of the renovation program and is located at the very opposite end of the Community Centre. In addition, the existing refrigeration plant is ammonia based and the plant has recently undergone equipment replacements. Replacement of the existing refrigeration plant was not part of this project's scope or budget.

It is recommended that the existing ammonia-based refrigeration plant remain as is.

### 4.2 SECONDARY COOLANT

The secondary coolant is the fluid that is used to transfer the cooling from the refrigeration plant to the ice slab. Options for the secondary coolant are brine (CaCl) and glycol.

Brine offers the best heat transfer to the slab, but it has some drawbacks. It is very corrosive especially if exposed to air, requires constant monitoring and adjustment to ensure the concentration and inhibitors are correct, and is not very environmentally friendly if there is a leak.

Glycol's energy transfer coefficient is not as good as brine and the initial costs more. Pre-mixed 50% ethylene glycol comes pre-packaged in barrels with the correct mixed ratio of glycol and additions. If a glycol pre-mix is used inhibitors do not need to be monitored and added, it is not corrosive so overall the piping and equipment will last longer, and it is more environmentally friendly.

It is recommended to use pre-mixed glycol as the glycol is more user friendly, the plant and associated pumps and heat exchangers will last longer and is more environmentally friendly than brine should a leak occur.

### 4.3 SECONDARY COOLANT HEADERS

The supply and return headers are the 6" pipes that supply the brine to the tubing that runs in the refrigerated slab. Options for headers are an open trench header and a buried header.

The open trench header runs horizontally in an open concrete trench at the end of the rink and the tubing for the slab connects to the top of the header pipes. While the headers are accessible for maintenance in the trench there are issues with this system:

- The trench is covered with wooden planks that are heavy and cumbersome to move, and in themselves form a potential trip or fall hazard.
- The two (2) circular triangles between the end of the rink boards and the header trench freeze which causes a slip hazard.
- The exposed headers freeze over with ice and then thaw when shutdown. This freeze and thaw action corrodes the header pipes and supports from the outside and reduces the header lifespan.

Most new arenas and slab replacements use a buried header. The supply and return header are buried underground with insulation and vapour barrier and extend from the refrigeration plant to under the rink floor at approximately the end zone face-off circle. The slab tubing connects to the header under the slab. While the headers are no longer accessible, they have the following advantages:

- No trench or frozen slab, so less potential for falls and slips by customers and staff.
- Headers no longer experience seasonal freeze and thaw of exterior ice, so the header pipes should last longer.
- Headers are insulated so the energy gets transferred directly to the slab and is not lost to the atmosphere.

Buried headers have been used in new arenas for over 30 years now and have become the accepted standard for new design. It is recommended to use buried headers for the slab replacements.

## 5.0 SUMMARY OF RECOMMENDATIONS

The recommendation for the slab replacement is as follows:

- Maintain the ammonia-based refrigeration plant.
- Proceed with 50% pre-mixed ethylene glycol as the secondary refrigerant.
- Use buried headers for the new secondary refrigerant distribution.

**Stantec Consulting Ltd.**
300 - 1331 Clyde Avenue
Ottawa ON K2C 3G4

October 18, 2023

Project/File: 160401806

**Graeme Ivory**
Director of Recreation
Town of Arnprior
77 James Street
Arnprior ON K7S 1C9

Dear Graeme Ivory,

**Reference: Nick Smith Centre Rink Replacement**

Stantec Consulting Ltd (Stantec) has been retained by the Town of Arnprior to update the Recreation and Parks Master Plan in the Spring 2023. At this stage in the development of the Master Plan, strategic directions are currently being drafted following a thorough review of the municipal outdoor and indoor recreation facilities available in Arnprior, the analysis of comparable surrounding municipalities in terms of their offer of recreation opportunities, and the assessment of the service levels for the different recreation facilities and amenities.

We understand that the Town of Arnprior is working with Architecture 49 to replace and update the two ice pads located at the Nick Smith Centre with the objective to continue to provide the service level related to available ice pads of comparable municipalities. In addition to replacing the ice pads, three (3) options have been developed by Architecture 49; these options consider accessibility improvements, a component that was found to be very important for the residents during the public engagement included as part of the Recreation and Parks Master Plan, and the addition of storage spaces for the different organizations and meeting rooms. The following provides a description of the different options developed by the architects:

A. Option 1 – “Like-for-Like” Option with no additional storage or meeting rooms.

B. Option 2 – “In-Fill” Option with one (1) level configuration for additional spaces including

    a. Seven (7) storage spaces – five (5) new spaces for rental to the community organizations and reuse of two (2) existing storage spaces.

    b. One (1) new meeting room.

    c. One (1) new skate sharpening room replacing the existing skate sharpening room.

C. Option 3 – “Single Storey Storage” Option with one (1) level configuration for additional spaces including

    a. Six (6) storage spaces – five (5) new spaces for rental to the community organizations and one (1) new space for the Town.

**Reference: Nick Smith Centre Rink Replacement**

b. One (1) new office space.

c. One (1) new meeting room.

d. One (1) new skate sharpening room replacing the existing skate sharpening room.

D. Option 4 – "Two Storey Storage & Public Space" Option with two (2) level configuration for additional spaces including

a. Six (6) storage spaces – five (5) new spaces for rental to the community organizations and one (1) new space for the Town. All storage spaces are located on the main level of the arena.

b. One (1) new office space located on the main level of the arena.

c. Three (3) meeting rooms – one (1) new meeting room located on the main level of the arena and two (2) new meeting rooms located on the second level of the arena.

d. One (1) new skate sharpening room located on the main level of the arena to replace the existing skate sharpening room.

e. One (1) new open public space located on the second level of the arena and overlooking both ice pads.

As part of the update of the Recreation and Parks Master Plan, the condition review and the assessment of the service levels for the different recreation facilities and amenities established that the Town of Arnprior requires more storage spaces and office spaces at Nick Smith Centre but also currently provides meeting rooms below the average service level of comparator municipalities. Based on the County of Renfrew Official Plan Population Projections estimated at 10,406 by 2036 for Arnprior, it is recommended that the Town provides at least two (2) additional meeting rooms over the life of the Recreation and Parks Master Plan.

In review of the three (3) design options for the replacement of the ice pads and provision of additional storage and meeting spaces, including the high-level Class D cost estimate, Option 4 appears to be the option that responds to the requirements for storage and office space at the Nick Smith Centre while offering the additional meeting rooms established as required based on the projected growth of the municipality. In addition, Option 4 provides attractive additional public space on the second level that will benefit the community at a cost similar to what is provided by Option 3.

We remain available to further discuss the recreation needs in Arnprior.

Sincerely,

**STANTEC CONSULTING LTD.**

**Reference: Nick Smith Centre Rink Replacement**

**Isabelle Lalonde** B.LA, OALA, CSLA, AAPQ
Senior Landscape Architect
Phone: (613) 724-4369
Mobile: (613) 716-3693
isabelle.lalonde@stantec.com