



City Council Agenda

Tuesday, April 16, 2024

**Tom Davies Square
Mayor Paul Lefebvre, Chair**

4:30 p.m. Closed Session, Committee Room C-12 / Electronic Participation

6:00 p.m. Open Session, Council Chamber / Electronic Participation

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1. **Call to Order**
2. **Roll Call**
3. **Closed Session**
Resolution to move to Closed Session to deal with one (1) Security of Municipal Property / Education and Training item regarding security protocols during Council and Committee meetings in accordance with the Municipal Act, 2001, par. 239(2)(a) and sub. 239(3.1).
4. **Recess**
5. **Open Session**
6. **Moment of Silent Reflection**
7. **Roll Call**
8. **Declarations of Pecuniary Interest and the General Nature Thereof**
9. **Matters Arising from the Closed Session**
At this point in the meeting, the Chair of the Closed Session, will rise and report. Council will then consider any resolution(s) emanating from the Closed Session.
10. **Matters Arising from Operations Committee**
 - 10.1 **March 25, 2024**
Council will consider, by way of one resolution, Operations Committee resolutions, which will be posted online following the meeting. Any questions regarding the resolutions should be directed to Councillor Signoretti, Chair, Operations Committee.
11. **Matters Arising from Community and Emergency Services Committee**
 - 11.1 **March 25, 2024**
Council will consider, by way of one resolution, Community and Emergency Services Committee resolutions, which will be posted online following the meeting. Any questions regarding the resolutions should be directed to Councillor Lapierre, Chair, Community and Emergency Services Committee.
12. **Matters Arising from Audit Committee**
 - 12.1 **March 26, 2024**
Council will consider, by way of one resolution, Audit Committee resolutions, which will be posted online following the meeting. Any questions regarding the resolutions should be directed to Councillor McIntosh, Chair, Audit Committee.

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| 13. | Matters Arising from Finance and Administration Committee | |
| 13.1 | March 26, 2024 | |
| | Council will consider, by way of one resolution, Finance and Administration Committee resolutions, which will be posted online following the meeting. Any questions regarding the resolutions should be directed to Councillor McIntosh, Chair, Finance and Administration Committee. | |
| 14. | Matters Arising from Planning Committee | |
| 14.1 | April 15, 2024 | |
| | Council will consider, by way of one resolution, Planning Committee resolutions, which will be posted online following the meeting. Any questions regarding the resolutions should be directed to Councillor Cormier, Chair, Planning Committee. | |
| 15. | Consent Agenda | |
| | For the purpose of convenience and for expediting meetings, matters of business of repetitive or routine nature are included in the Consent Agenda, and all such matters of business contained in the Consent Agenda are voted on collectively. | |
| | A particular matter of business may be singled out from the Consent Agenda for debate or for a separate vote upon the request of any Councillor. In the case of a separate vote, the excluded matter of business is severed from the Consent Agenda, and only the remaining matters of business contained in the Consent Agenda are voted on collectively. | |
| | Each and every matter of business contained in the Consent Agenda is recorded separately in the minutes of the meeting. | |
| 15.1 | Adoption of Minutes | |
| 15.1.1 | City Council Minutes of January 16, 2024 | 15 |
| 15.1.2 | City Council Minutes of January 30, 2024 | 28 |
| 15.1.3 | City Council Minutes of February 13, 2024 | 35 |
| 15.1.4 | Planning Committee Minutes of February 26, 2024 | 37 |
| 16. | Presentations | |
| 16.1 | Event Centre Renewal and New Build Review | 49 |
| | This report and presentation provides recommendations as requested by Council at its September 26, 2023 meeting directing staff to explore both the renovation and new build options for an event centre in Greater Sudbury’s downtown South District. | |
| 17. | Managers' Reports | |

17.1 Appointment – Committees of Council and Boards

This report sets out the procedure for Council to appoint members to the Hearing Committee, Operations Committee, Board of Health for Public Health Sudbury and Districts and the Sudbury Airport Community Development Corporation Board.

18. By-laws

Draft by-laws are available for viewing a week prior to the meeting on the agenda.

Approved by-laws are available on the City's website:

<https://www.greatersudbury.ca/city-hall/by-laws/> after passage.

The following by-laws will be read and passed:

18.1 By-laws 2024-55 to 2024-67Z 2024-55

A By-law of the City of Greater Sudbury to Confirm the Proceedings of Council at its Regular Meeting of April 16, 2024

2024-56

A By-law of the City of Greater Sudbury to Amend By-law 2018-121 being a By-law of the City of Greater Sudbury Respecting the Appointment of Officials of the City

This by-law updates certain appointments to reflect staff changes.

2024-57

A By-law of the City of Greater Sudbury to Amend By-law 2010-246F being a By-law of the City of Greater Sudbury to Adopt an Investment Policy

City Council Resolution #CC2024-52

This by-law amends the Investment Policy to increase the limit of long term investment to \$250 million.

2024-58

A By-law of the City of Greater Sudbury to Authorize the Payment of Grants to Various Non-Profit Community Organizations in the Leisure Services Sector

This by-law authorizes payment of the 2024 annual grants authorized as part of the budget process. Grants are generally used by recipients towards operating costs and costs to deliver special events and programs.

2024-59

A By-law of the City of Greater Sudbury to Authorize Certain Grants Under the

Lake Stewardship Grant Program

Refer to Report under Correspondence for Information Only

This by-law authorizes the payment of grants to the successful applicants to the Lake Stewardship Grant Program for the year 2024.

2024-60

A By-law of the City of Greater Sudbury to Authorize the Payment of Grants from the Healthy Community Initiative Fund, Various Wards

Community and Emergency Services Committee Resolution #CES2024-07

This by-law authorizes grants funded through the Healthy Community Initiative Fund for various Wards.

2024-61

A By-Law of the City of Greater Sudbury to Authorize Grants Under the Strategic Core Areas Community Improvement Plan

Planning Committee Resolution #PL2024-51

This by-law authorizes certain grants under the Strategic Core Areas Community Improvement Plan and authorizes the General Manager of Growth and Infrastructure to sign the grant agreements with the recipient of the grants.

2024-62

A By-law of the City of Greater Sudbury to Authorize the Purchase of Vacant Land West of Dell Street, Sudbury Described as PIN 02245-0355(LT), Part Lot 17, Plan M-7B, Township of McKim from Loris Cecchetto Construction Limited

Planning Committee Resolution #PL2024-45

This by-law authorizes the acquisition of vacant land west of Dell Street, Sudbury for the Junction Creek Reconstruction and Reprofilling Project and to protect the encroaching municipal infrastructure.

2024-63

A By-law of the City of Greater Sudbury to Authorize the Sale of an Easement over Land on Ramsey Lake Road, Sudbury, Described as Part PIN 73592-0141(LT) being Parts 4-6, Plan 53R-20429, and Part of PIN 73592-0280(LT), being Part 18, Plan 53R-20429, Township of McKim to Third Amen Holdings Inc.

Planning Committee Resolution PL2024-46

This by-law authorizes the sale of a non-exclusive Easement in the nature of a right-of-way in perpetuity to provide access to and for the benefit of PIN 73592-0232(LT), being 745 Kirkwood Drive, Sudbury.

2024-64

A By-law of the City of Greater Sudbury to Authorize the Sale of a Hydro Line Easement over Land Described as Part PIN 73506-0263(LT) being Parcel 20299 SES, Part Lot 3, Concession 4 Hanmer as in LT118512 to Hydro One Network Inc.

Planning Committee Resolution PL2023-09

This by-law authorizes the sale of the City's private primary hydro line and an easement over that location to Hydro One Networks Inc.

2024-65

A By-law of the City of Greater Sudbury to Change the Name of Part of Sanitary Landfill Road to Northern Road

Planning Committee Resolution #PL2024-36

This by-law renames Sanitary Landfill Road to Northern Road to better reflect the mixed nature of the road. The new name is consistent with the Street Naming and Numbering Policy. This by-law replaces By-law 2024-47 to correct a typographical error.

2024-66

A By-Law of the City of Greater Sudbury to Authorize a Dedicated Gas Tax Letter Agreement with Her Majesty the Queen in Right of the Province of Ontario as Represented by the Minister of Transportation for the Province of Ontario for Funding under the Dedicated Gas Tax Funds for the Public Transportation Program

This by-law authorizes a letter agreement to set out the terms and conditions for the use of dedicated gas tax funds by municipalities for public transportation.

2024-67Z

A By-law of the City of Greater Sudbury to Amend By-law 2010-100Z being the Comprehensive Zoning By-law for the City of Greater Sudbury

Planning Committee Resolution #PL2023-119

This by-law rezones the subject lands in order to permit a third unit within the existing building and to provide exceptions to the zone standards related to the location of the existing building, yard setbacks, eave encroachments,

parking location and planting strip requirements - Kyle Tarlton and Andree-Michele D'Aoust-Messier, 519-521 Byng Street, Sudbury.

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| 19. | Members' Motions | |
| 20. | Correspondence for Information Only | |
| 20.1 | Lake Stewardship Grant Program - 2024 | 251 |
| | This report provides information regarding the Lake Stewardship Grant Program – 2024. | |
| 21. | Addendum | |
| 22. | Civic Petitions | |
| 23. | Question Period | |
| 24. | Adjournment | |

le mardi 16 avril 2024

Place Tom Davies
Maire Paul Lefebvre, Président

16 h 30 Séance à huis clos, Salle de réunion C-12 / participation électronique

18 h 00 Séance publique, Salle du Conseil / participation électronique

Les réunions du Conseil et des comités de la Ville du Grand Sudbury sont accessibles. Elles ont généralement lieu dans la Salle du Conseil de la Place Tom Davies, à moins d'avis contraire dans l'ordre du jour. Certaines d'entre elles sont diffusées par Eastlink, à sa discrétion. Sauf les réunions à huis clos, qui se déroulent conformément à la *Loi de 2001 sur les municipalités*, les réunions sont ouvertes au public qui peut y assister en personne. Si possible, elles sont diffusées en continu en direct et le public peut en visionner les enregistrements sur le site web de la Ville au <https://www.grandsudbury.ca/ordresdujour>.

Sachez que si vous faites une présentation, si vous prenez la parole ou si vous vous présentez sur les lieux d'une réunion pendant qu'elle a lieu, vous, vos commentaires ou votre présentation pourriez être enregistrés et diffusés.

En présentant des renseignements, y compris des renseignements imprimés ou électroniques, au Conseil municipal ou à un de ses comités, vous indiquez que vous avez obtenu le consentement des personnes dont les renseignements personnels sont inclus aux renseignements à communiquer au public.

Vos renseignements sont recueillis aux fins de prise de décisions éclairées et de transparence du Conseil municipal en vertu de diverses lois municipales et divers règlements municipaux, et conformément à la Loi de 2001 sur les municipalités, à la Loi sur l'aménagement du territoire, à la Loi sur l'accès à l'information municipale et la protection de la vie privée et au Règlement de procédure de la Ville du Grand Sudbury.

Pour obtenir plus de renseignements au sujet de l'accessibilité, de la consignation de vos renseignements personnels ou de la diffusion en continu en direct, veuillez communiquer avec le Bureau de la greffière municipale en composant le 3-1-1 ou en envoyant un courriel à l'adresse clerks@grandsudbury.ca.

1. **Ouverture**
2. **Appel nominal**
3. **Séance à huis clos**
Résolution visant à tenir une séance à huis clos pour traiter d'un point concernant la sécurité des biens de la municipalité ainsi que de l'information et la formation ayant trait aux protocoles de sécurité durant les réunions du Conseil et des comités, conformément à la Loi de 2001 sur les municipalités, alinéa 239 (2) a) et paragraphe 239 (3.1).
4. **Suspension de la séance**
5. **Séance publique**
6. **Moment de silence**
7. **Appel nominal**
8. **Déclaration d'intérêts pécuniaires et leur nature générales**
9. **Questions découlant de la séance à huis clos**
À ce point de la réunion, la présidente ou le président de la séance à huis clos fera un compte rendu. Le Conseil municipal considérera alors toute résolution émanant de la séance à huis clos.
10. **Questions découlant de la réunion du comité des opérations**
 - 10.1 **25 mars 2024**
Le conseil municipal étudiera, par voie d'une résolution, les résolutions du Comité des opérations qui seront affichées après la réunion. Toute question concernant ces résolutions devrait être adressée au Conseiller Signoretti, président du Comité des opérations.
11. **Questions découlant de la réunion du comité des services communautaires et d'urgence**
 - 11.1 **25 mars 2024**
Le Conseil municipal étudiera, par voie d'une résolution, les résolutions du Comité des services communautaires et d'urgence qui seront affichées après la réunion. Toute question concernant ces résolutions devrait être adressée au Conseiller Lapierre, président du Comité des services communautaires et d'urgence.
12. **Questions découlant de la réunion du comité de vérification**
 - 12.1 **26 mars 2024**

Le Conseil municipal étudiera, par voie d'une résolution, les résolutions du Comité de vérification qui seront affichées après la réunion. Toute question concernant ces résolutions devrait être adressée au Conseillère McIntosh, présidente du Comité de vérification.

13. Questions découlant de la réunion du comité des finances et de l'administration

13.1 26 mars 2024

Le Conseil municipal étudiera, par voie d'une résolution, les résolutions du Comité des finances et de l'administration qui seront affichées après la réunion. Toute question concernant ces résolutions devrait être adressée au Conseillère McIntosh, présidente du Comité des des finances et de l'administration.

14. Questions découlant de la réunion du comité de la planification

14.1 15 avril 2024

Le conseil municipal étudiera, par voie d'une résolution, les résolutions du Comité de planification qui seront affichées après la réunion. Toute question concernant ces résolutions devrait être adressée au Conseiller Cormier, président du Comité de la planification.

15. Ordre du jour des résolutions

Par souci de commodité et pour accélérer le déroulement des réunions, les questions d'affaires répétitives ou routinières sont incluses à l'ordre du jour des résolutions, et on vote collectivement pour toutes les questions de ce genre.

À la demande d'un conseiller, on pourra traiter isolément d'une question d'affaires de l'ordre du jour des résolutions par voie de débat ou par vote séparé. Dans le cas d'un vote séparé, la question d'affaires isolée est retirée de l'ordre du jour des résolutions et on ne vote collectivement qu'au sujet des questions à l'ordre du jour des résolutions.

Toutes les questions d'affaires à l'ordre du jour des résolutions sont inscrites séparément au procès-verbal de la réunion.

15.1 Adoption du procès verbaux

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| 15.1.1 | Procès Verbal du 16 janvier 2024 Conseil municipal | 15 |
| 15.1.2 | Procès Verbal du 30 janvier 2024 Conseil municipal | 28 |
| 15.1.3 | Procès Verbal du 13 février 2024 Conseil municipal | 35 |
| 15.1.4 | Procès Verbal du 26 février 2024 Comité de planification | 37 |

16. Présentations

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| 16.1 | Étude du renouvellement du Centre d'événements et de la nouvelle installation | 49 |
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Ce rapport et présentation formulent des recommandations comme demandés par le Conseil lors de sa réunion du 26 septembre 2023, enjoignant au personnel d'étudier les options de rénovation et d'une nouvelle installation concernant un centre d'événements dans le district sud du centre-ville du Grand Sudbury.

17. Rapports des gestionnaires

17.1 Nominations – Comités du Conseil municipal et conseils

248

Ce rapport décrit la procédure de nomination de membres par le Conseil au Comité d'audition, au Comité des opérations, au Conseil de santé de Santé publique Sudbury et districts et au Conseil de la Société de développement communautaire de l'aéroport de Sudbury.

18. Règlements

La version provisoire des règlements municipaux sera disponible pour consultation une semaine avant la réunion prévue à l'ordre du jour. Après leur adoption, les règlements approuvés sont affichés sur le site de la municipalité au <https://www.grandsudbury.ca/hotel-de-ville/reglements-municipaux/>.

Les règlements suivants seront lus et adoptés:

18.1 Règlements 2024-55 à 2024-67Z 2024-55

Règlement de la Ville du Grand Sudbury pour confirmer les délibérations du Conseil municipal lors de sa réunion tenue le 16 avril 2024

2024-56

Règlement de la Ville du Grand Sudbury modifiant le règlement 2018-121 étant un règlement de la Ville du Grand Sudbury sur la nomination d'officiels de la Ville du Grand Sudbury

Ce règlement municipal met à jour certaines nominations pour refléter des changements de personnel.

2024-57

Un règlement de la Ville du Grand Sudbury visant à modifier le Règlement municipal 2010-246F, soit un règlement de la Ville du Grand Sudbury afin d'adopter une politique d'investissement.

Résolution CC2024-52 du Conseil municipal

Ce règlement municipal modifie la Politique d'investissement afin d'augmenter la limite d'investissement à long terme à 250 millions de dollars.

2024-58

Règlement de la Ville du Grand Sudbury autorisant le paiement de subventions à diverses organisations communautaires sans but lucratif dans le secteur des services des loisirs

Ce règlement municipal autorise le paiement des subventions annuelles de 2024 autorisées dans le cadre du processus budgétaire. En général, ces subventions sont utilisées par les bénéficiaires pour les coûts de fonctionnement et les coûts de prestation de manifestations spéciales et de programmes.

2024-59

Un règlement de la Ville du Grand Sudbury visant à autoriser certaines subventions dans le cadre du Programme d'aide à l'intendance des lacs

Consulter le rapport sous Correspondance à titre de renseignement seulement

Ce règlement municipal autorise le versement des subventions aux candidats choisis dans le cadre du Programme d'aide à l'intendance des lacs en 2024.

2024-60

Règlement de la Ville du Grand Sudbury autorisant le paiement des subventions provenant du fonds de l'initiative communauté en santé, divers quartiers

Résolution numéro CES2024-07 du Comité des services communautaires et d'urgence

Ce règlement autorise des subventions financée par l'entremise du fonds de l'initiative communauté en santé pour divers quartiers.

2024-61

Règlement de la Ville du Grand Sudbury autorisant des subventions dans le cadre du Plan d'améliorations communautaires des zones stratégiques de développement

Résolution numéro PL2024-51 du Comité de planification

Ce règlement municipal autorise des subventions dans le cadre du Plan d'améliorations communautaires des zones stratégiques de développement et autorise le directeur général de la Croissance et de l'Infrastructure à signer des accords de subventions avec les bénéficiaires des subventions.

2024-62

Règlement de la Ville du Grand Sudbury autorisant l'achat de terrain à l'est de

la rue Dell à Sudbury décrit comme le NIP02245-0355(LT), une partie du lot 17 du plan M-7B de Loris Cecchetto Construction Limited

Résolution numéro PL2024-45 du Comité de planification

Ce règlement autorise l'acquisition de terrains vacants à l'ouest de la rue Dell à Sudbury pour le projet de restauration et de reprofilage du ruisseau Junction et afin de protéger l'infrastructure municipale qui y empiète.

2024-63

Un règlement de la Ville du Grand Sudbury visant à autoriser la vente d'une servitude sur un terrain de la rue Ramsey Lake à Sudbury au Third Amen Holdings Inc., décrit comme faisant partie du NIP 73592-0141(LT), soit les parties 4 à 6 du plan 53R-20429, et parties du NIP 73592-0280(LT), soit le partis 18 du plan 53R-20429, canton de McKim

Résolution numéro PL2024-46 du Comité de planification

Ce règlement autorise la vente d'une servitude non exclusive assimilable à un droit de passage à perpétuité afin de donner accès au NIP 73592-0232 (TBF) et au profit de celui-ci, soit le 745, promenade Kirkwood, Sudbury.

2024-64

Un règlement de la Ville du Grand Sudbury visant à autoriser la vente à Hydro One Network Inc. d'une servitude de ligne de transport d'électricité relative à un bien-fonds décrit comme faisant partie du NIP 73506-0263 (TBF), soit la parcelle 20299 S.-E.-S., partie du lot 3, concession 4, à Hanmer, sous le no LT118512.

Résolution numéro PL2023-09 du Comité de planification

Ce règlement municipal autorise la vente de la ligne principale privée de transport d'électricité de la municipalité et d'une servitude sur cet emplacement à Hydro One Networks Inc.

2024-65

Un règlement de la Ville du Grand Sudbury visant à changer le nom d'une partie du chemin Sanitary Landfill à chemin Northern

Résolutions numéro PL20224-36 du Comité de planification

Ce règlement municipal sert à renommer le chemin Sanitary Landfill afin de mieux refléter la nature mixte de cette route. Le nouveau nom est conforme à la Politique sur la désignation et la numérotation des rues. Ce règlement municipal remplace le Règlement 2024-47 pour corriger une erreur typographique.

2024-66

Règlement de la Ville du Grand Sudbury autorisant une entente sur les fonds réservés provenant de la taxe sur l'essence avec sa Majesté la Reine du chef de l'Ontario représentée par le Ministre des transports pour le financement provenant du fonds de la taxe sur l'essence pour le programme de transport en commun

Ce règlement municipal autorise une entente indique les conditions de l'utilisation des fonds réservés provenant de la taxe sur l'essence par les municipalités pour le transport en commun.

2024-67Z

Règlement de la Ville du Grand Sudbury modifiant le règlement municipal 2010-100Z étant le règlement général de zonage de la Ville du Grand Sudbury

Résolutions numéro PL2023-119 du Comité de planification

Ce règlement municipal change le zonage des terrains visés afin de permettre un troisième logement dans le bâtiment existant et prévoit des exceptions aux normes de zonage liées à l'emplacement du bâtiment existant, aux marges de reculement, aux empiétements de l'avant-toit, à l'emplacement du stationnement et aux exigences relatives à la bande de végétation.

19. Motions des membres

20. Correspondence à titre de renseignements seulement

20.1 Programme d'aide à l'intendance des lacs – 2024

251

Dans ce rapport, on fournit des renseignements sur le Programme d'aide à l'intendance des lacs – 2024.

21. Addenda

22. Pétitions civiques

23. Période de questions

24. Levée de la séance

Minutes

For the City Council Meeting

January 16, 2024
Tom Davies Square

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| Present (Mayor and Councillors) | Councillor Signoretti, Councillor Vagnini, Councillor Montpellier, Councillor Fortin, Councillor Parent, Councillor Lapierre, Councillor Labbée, Councillor Sizer, Councillor McIntosh, Councillor Cormier, Councillor Leduc, Councillor Landry-Altmann, Mayor Lefebvre |
| City Officials | Ed Archer, Chief Administrative Officer, Kevin Fowke, General Manager of Corporate Services, Tony Cecutti, General Manager of Growth and Infrastructure, Steve Jacques, General Manager of Community Development, Joseph Nicholls, General Manager of Community Safety, Marie Litalien, Director of Communications & Community Engagements, Meredith Armstrong, Director of Economic Development, Ron Foster, Auditor General, Kris Longston, Director of Planning Services, Melissa Riou, Senior Planner, Dawn Noel de Tilly, Chief of Staff, Eric Labelle, City Solicitor and Clerk, Christine Hodgins, Legislative Compliance Coordinator, Sarah Moore, Legislative Compliance Coordinator , Madison Pacey, Clerk's Services Assistant, Regina Sgueglia, Clerk's Services Assistant |

His Worship Mayor Paul Lefebvre, In the Chair

1. Open Session

At 6:00 p.m., Council commenced the Open Session.

2. Moment of Silent Reflection

Those present at the meeting observed a moment of silent reflection.

3. Roll Call

A roll call was conducted.

4. Declarations of Pecuniary Interest and the General Nature Thereof

None declared.

5. Matters Arising from Future-Ready Ad-Hoc Committee

5.1 December 7, 2023

Mayor Lefebvre, as Chair of the Future-Ready Development Services Ad-Hoc Committee, reported on the matters arising from the Future-Ready Development Services Ad-Hoc Committee meeting of December 7, 2023.

No resolutions emanated from this meeting.

6. Matters Arising from Operations Committee

6.1 December 11, 2023

Councillor Signoretti, as Chair of the Operations Committee, reported on the matters arising from the Operations Committee meeting of December 11, 2023.

The resolutions for the December 11, 2023 Operations Committee meeting can be found at: <https://www.greatersudbury.ca/agendas>

The following resolution was presented:

CC2024-1

Moved By Councillor Signoretti

Seconded By Councillor Parent

THAT the City of Greater Sudbury approves Operations Committee resolutions OP2023-36 to OP2023-39 from the meeting of December 11, 2023.

CARRIED

7. Matters Arising from Community and Emergency Services Committee

7.1 December 11, 2023

Councillor Lapierre, as Chair of the Community and Emergency Services Committee, reported on the matters arising from the Community and Emergency Services Committee meeting of December 11, 2023.

The resolutions for the December 11, 2023 Community and Emergency Services Committee meeting can be found at: <https://www.greatersudbury.ca/agendas>

The following resolution was presented:

CC2024-2

Moved By Councillor Lapierre

Seconded By Councillor Parent

THAT the City of Greater Sudbury approves Community and Emergency Services Committee resolutions CES2023-18 to CES2023-22 from the meeting of December 11, 2023.

CARRIED

8. Matters Arising from Audit Committee

8.1 December 12, 2023

Councillor McIntosh, as Chair of the Audit Committee, reported on the matters arising from the Audit Committee meeting of December 12, 2023.

The resolutions for the December 12, 2023 Audit Committee Meeting can be found at: <https://www.greatersudbury.ca/agendas>

The following resolution was presented:

CC2024-3

Moved By Councillor McIntosh

Seconded By Councillor Cormier

THAT the City of Greater Sudbury approves Audit Committee resolutions AC2023-09 to AC2023-12 from the meeting of December 12, 2023.

CARRIED

9. Matters Arising from Planning Committee

9.1 January 15, 2024

Councillor Cormier, as Chair of the Planning Committee, reported on the matters arising from the Planning Committee meeting of January 15, 2024.

The resolutions for the January 15, 2024 Planning Committee meeting can be found at: <https://www.greatersudbury.ca/agendas>

The following resolution was presented:

CC2024-4

Moved By Councillor Cormier

Seconded By Councillor Lapierre

THAT the City of Greater Sudbury approves Planning Committee resolutions PL2024-1 to PL2024-7 from the meeting of January 15, 2024.

CARRIED

10. Consent Agenda

The following are the Consent Agenda items:

CC2024-5

Moved By Councillor Sizer
Seconded By Councillor Lapierre

THAT the City of Greater Sudbury approves Consent Agenda items 10.1.1 to 10.1.12.

CARRIED

10.1 Adoption of Minutes

10.1.1 City Council Minutes of October 24, 2023

CC2024-6

Moved By Councillor Sizer
Seconded By Councillor Lapierre

THAT the City of Greater Sudbury adopts City Council meeting minutes of October 24, 2023.

CARRIED

10.1.2 Planning Committee Minutes of November 6, 2023

CC2024-7

Moved By Councillor Sizer
Seconded By Councillor Lapierre

THAT the City of Greater Sudbury adopts Planning Committee meeting minutes of November 6, 2023.

CARRIED

10.1.3 City Council Minutes of November 7, 2023

CC2024-8

Moved By Councillor Sizer
Seconded By Councillor Lapierre

THAT the City of Greater Sudbury adopts City Council meeting minutes of November 7, 2023.

CARRIED

**10.1.4 Future-Ready Development Services Ad-Hoc Committee
Minutes of November 9, 2023**

CC2024-9

Moved By Councillor Sizer
Seconded By Councillor Lapierre

THAT the City of Greater Sudbury adopts Future-Ready Development Services Ad-Hoc Committee meeting minutes of November 9, 2023.

CARRIED

10.1.5 Operations Committee Minutes of November 14, 2023

CC2024-10

Moved By Councillor Sizer

Seconded By Councillor Lapierre

THAT the City of Greater Sudbury adopts Operations Committee meeting minutes of November 14, 2023.

CARRIED

10.1.6 Finance and Administration Committee Minutes of November 15, 2023

CC2024-11

Moved By Councillor Sizer

Seconded By Councillor Lapierre

THAT the City of Greater Sudbury adopts Finance and Administration Committee meeting minutes of November 15, 2023.

CARRIED

10.1.7 Planning Committee Minutes of November 20, 2023

CC2024-12

Moved By Councillor Sizer

Seconded By Councillor Lapierre

THAT the City of Greater Sudbury adopts Planning Committee meeting minutes of November 20, 2023.

CARRIED

10.1.8 City Council Minutes of November 28, 2023

CC2024-13

Moved By Councillor Sizer

Seconded By Councillor Lapierre

THAT the City of Greater Sudbury adopts City Council meeting minutes of November 28, 2023.

CARRIED

**10.1.9 Future-Ready Development Services Ad-Hoc Committee
Minutes of November 29, 2023**

CC2024-14

Moved By Councillor Sizer

Seconded By Councillor Lapierre

THAT the City of Greater Sudbury adopts Future-Ready Development Services Ad-Hoc Committee meeting minutes of November 29, 2023.

CARRIED

10.1.10 Planning Committee Minutes of December 4, 2023

CC2024-15

Moved By Councillor Sizer

Seconded By Councillor Lapierre

THAT the City of Greater Sudbury adopts Planning Committee meeting minutes of December 4, 2023.

CARRIED

10.1.11 City Council Minutes of December 5, 2023

CC2024-16

Moved By Councillor Sizer

Seconded By Councillor Lapierre

THAT the City of Greater Sudbury adopts City Council meeting minutes of December 5, 2023.

CARRIED

**10.1.12 Future-Ready Development Services Ad-Hoc Committee
Minutes of December 7, 2023**

CC2024-17

Moved By Councillor Sizer

Seconded By Councillor Lapierre

THAT the City of Greater Sudbury adopts Future-Ready Development Services Ad-Hoc Committee meeting minutes of December 7, 2023.

CARRIED

11. Presentations

11.1 Draft Housing Supply Strategy

Melissa Riou, Senior Planner, Strategic and Environmental Planning, provided an electronic presentation regarding the Draft Housing Supply Strategy.

The following resolution was presented:

CC2024-18

Moved By Councillor Cormier

Seconded By Councillor Fortin

THAT the City of Greater Sudbury directs staff to initiate a second phase of consultation and prepare a final Housing Supply Strategy by the end of Q2, 2024, as outlined in the report entitled, "Draft Housing Supply Strategy", from the General Manager of Growth and Infrastructure, presented at the City Council meeting on January 16, 2024

CARRIED

12. By-laws

The following resolution was presented:

CC2024-19

Moved By Councillor Cormier

Seconded By Councillor Landry-Altmann

THAT the City of Greater Sudbury read and pass By-law 2023-138 and By-law 2024-01 to By-law 2024-21.

CARRIED

12.1 By-laws 2023-138 and 2024-01 to 2024-21

The following are the by-laws:

2023-138

A By-law of the City of Greater Sudbury to provide for the Valley Growers Municipal Drainage Works in the City of Greater Sudbury

Hearing Committee Resolution #HC2023-03

This by-law, originally before Council in September of 2023 for first and second reading is now before Council for third reading, to approve the

Valley Growers Drain Project. There were no appeals of assessments to the Court of Revision.

2024-01

A By-law of the City of Greater Sudbury to Confirm the Proceedings of Council at its Meetings of December 19, 2023 and January 16, 2024

2024-02

A By-law of the City of Greater Sudbury to set an Interim Tax Levy and Tax Billing Dates Prior to the Development of the 2024 Tax Policy

Section 317(1) of the Municipal Act, 2001, provides the authority for an interim tax levy prior to the adoption of the final estimates. For 2024 the interim due dates have been established as March 4, 2024 and April 4, 2024.

2024-03

A By-law of the City of Greater Sudbury to Levy and Collect Omitted and Supplementary Realty Taxes for the Year 2024

This by-law authorizes the 2024 omitted and supplementary tax billing and sets the due dates for omitted and supplementary assessments added before each of June 10, July 10, August 10, September 10, October 10, November 10 and December 10, 2024.

2024-04

A By-law of the City of Greater Sudbury to Authorize the Payment of a Grant (or Grants) from the Healthy Community Initiative Fund, Ward 4

Community and Emergency Services Committee Resolution #CES2023-19

This by-law authorizes a grant (or grants) funded through the Healthy Community Initiative Fund for Ward 4.

2024-05

A By-Law of the City of Greater Sudbury to Amend By-law 2018-45 being a By-law to Establish Water and Wastewater Policy and Water and Wastewater Rates and Charges in General and for Special Projects

Finance and Administration Committee Resolution #FA2023-68

This by-law amends By-law 2018-45 to incorporate fee changes.

2024-06

A By-law of the City of Greater Sudbury to Amend By-law 2015-217 being a By-law of the City of Greater Sudbury to Establish the Position and Duties of the Auditor General of the City of Greater Sudbury

Finance and Administration Committee Resolution #FA2023-75-A1

This by-law amends By-law 2015-217 to incorporate changes to the authorized budget for the Office of the Auditor General.

2024-07

A By-law of the City of Greater Sudbury to Amend By-law 2010-1 being a By-law of the City of Greater Sudbury to Regulate Traffic and Parking on Roads in the City of Greater Sudbury

Operations Resolution #OP2023-15

This By-law amends the Traffic and Parking By-law to incorporate the Community Safety Zone Provisions

2024-08

A By-law of the City of Greater Sudbury to Adopt an Emergency Management Program and Emergency Response Plan for the City of Greater Sudbury

Community and Emergency Services Committee Resolution #CES2023-21

This by-law incorporates the updates and amendments as approved by Council into a new by-law setting out the Emergency Management Program and Emergency Response Plan.

2024-09

A By-law of the City of Greater Sudbury to Amend By-law 2022-127 being a By-law of the City of Greater Sudbury to Designate Strategic Core Areas of the City of Greater Sudbury as a Community Improvement Plan

Planning Committee Resolution #PL2023-164

This by-law amends By-law 2022-127 to add additional areas of the City to the Strategic Core Areas.

2024-10

A By-law of the City of Greater Sudbury to Amend By-law 2022-128 being a By-law of the City of Greater Sudbury to Adopt the Strategic Core Areas Community Improvement Plan

Planning Committee Resolution #PL2023-164

This by-law amends By-law 2022-128 to update the Strategic Core Areas CIP with recently added areas, implement the TIEG Program for the City's corridors and makes housekeeping amendments.

2024-11

A By-law of the City of Greater Sudbury to Authorize a Grant to the Alzheimer's Society

This by-law authorizes the annual grant to Alzheimer's Society of \$11,000 as contribution toward their property taxes, which was confirmed in the budget process.

2024-12

A By-law of the City of Greater Sudbury to Authorize a Grant to the Art Gallery of Sudbury

This by-law authorizes the annual grant of \$200,000 to the Art Gallery of Sudbury, which was confirmed in the budget process.

2024-13

A By-law of the City of Greater Sudbury to Authorize a Grant to the City of Greater Sudbury Community Development Corporation for Promotion of Community Economic Development for the 2024 Calendar Year

This by-law authorizes the annual grant of \$1,000,000, which was confirmed in the budget process.

2024-14

A By-law of the City of Greater Sudbury to Authorize a Grant to the City of Greater Sudbury Community Development Corporation for Funding for Arts and Culture in the 2024 Calendar Year

This by-law authorizes the 2024 annual grant to the City of Greater Sudbury Community Development Corporation for funding of both the Operating Grants [\$489,368] and the Project Grants [\$86,550] in accordance with the Arts and Culture Grant Program Policy, which was confirmed in the budget process.

2024-15

A By-law of the City of Greater Sudbury to Authorize a Grant to the Junction Creek Stewardship Committee Inc. for the 2024 Calendar Year

This by-law authorizes the annual grant of \$40,000, which as confirmed in the budget process.

2024-16

A By-law of the City of Greater Sudbury to Authorize a Grant to the Nickel District Conservation Authority

This by-law authorizes the annual grant of \$350,000 to the Nickel District Conservation Authority as a contribution towards its capital budget.

2024-17

A By-law of the City of Greater Sudbury to Authorize a Grant to Health Sciences North in 2024 as a Contribution Towards the Costs to Acquire a PET Scanner

This by-law authorizes the ninth of ten annual grants of \$100,000 each, initially authorized in the 2016 budget process.

2024-18

A By-law of the City of Greater Sudbury to Authorize a Grant to La Place Des Arts du Grand Sudbury in Support of 2024 Operational Costs

This by-law authorizes the annual grant of \$260,000 to La place des arts du Grand Sudbury for 2024 operational costs.

2024-19

A By-law of the City of Greater Sudbury to Authorize a Grant to the Sudbury Finnish Rest Home Society Inc. Operating as Hoivakoti Nursing Home at 233 Fourth Avenue, Sudbury

This by-law authorizes the annual grant to the Sudbury Finnish Rest Home Society Inc. Operating as Hoivakoti Nursing Home of \$39,200 as a contribution towards the cost of the property taxes, which was confirmed in the budget process.

2024-20

A By-law of the City of Greater Sudbury to Authorize the Purchase of Vacant Land being Part of 250 Ste. Anne Road, Sudbury Described as Part PIN 02138-0032(LT), being Part 2 on Plan 53R-21608 from Regent North Properties Inc.

Planning Committee Resolution #PL2023-165

This By-law authorizes the purchase of a strip of vacant land as part of the Paris-Notre Dame Bikeway project.

2024-21

A By-law of the City of Greater Sudbury to Authorize the Purchase of Certain Easements over part of 1050 Notre Dame Avenue being Part of PIN 02123-0427(LT) being Part 9 on Plan 53R-21859 and Part of PIN 02123-0427(LT) being Parts 4, 5, 7, 11, 12, and 13 on Plan 53R-21859 from His Majesty the King in Right of Canada

Planning Committee Resolution #PL2023-166

This By-law authorizes the purchase of an easement for municipal purposes and an easement in the nature of a right of way over 1050 Notre Dame Avenue, to assist with developments on Pioneer Manor.

13. Members' Motions

No Motions were presented.

14. Addendum

Rules of Procedure

Mayor Lefebvre moved that the addenda be dealt with.

CARRIED BY TWO-THIRDS

ADD-1 French Language Services Policy Review

The following resolution was presented:

CC2024-20

Moved By Councillor Lapierre

Seconded By Councillor Landry-Altmann

THAT the City Council directs staff to undertake a second phase of engagement with Members of Council, staff, the community and partners on the revised French Services Policy;

AND that a final policy and associated action plan be presented to City Council by the end of April 2024 as outlined in the report entitled “French Language Services Policy Review” presented by the Chief Administrative Officer at the Finance and Administration Committee meeting on December 12, 2023.

CARRIED

ADD-2 By-laws

The following resolution was presented:

CC2024-21

Moved By Councillor Lapierre

Seconded By Councillor Labbée

THAT the City of Greater Sudbury read and pass By-law 2024-22Z.

CARRIED

15. Civic Petitions

Councillor Vagnini submitted a petition to the City Clerk which will be forwarded to the General Manager of Community Development. The petition is regarding parking at the Walden Kinsmen Hall.

16. Question Period

Rules of Procedure

Councillor Landry-Altmann moved that the notice provisions be waived and that the Motion be dealt with due to time constraints.

A recorded vote was held:

YEAS: (10) Councillor Vagnini, Councillor Montpellier, Councillor Lapierre, Councillor Labbée, Councillor Sizer, Councillor McIntosh, Councillor Cormier, Councillor Leduc, Councillor Landry-Altmann, Mayor Lefebvre

NAYS: (3) Councillor Signoretti, Councillor Fortin, Councillor Parent

CARRIED BY TWO-THIRDS (10 to 3)

CC2024-22

Moved By Councillor Landry-Altmann

Seconded By Councillor Cormier

THAT staff be directed to also include an estimate with ramp access for all floors together with information on feasibility and cost savings in the Class C estimate being prepared for the Cultural Hub project to be presented to Council by the end of the second quarter of 2024.

YEAS: (13): Councillor Signoretti, Councillor Vagnini, Councillor Montpellier, Councillor Fortin, Councillor Parent, Councillor Lapierre, Councillor Labbée, Councillor Sizer, Councillor McIntosh, Councillor Cormier, Councillor Leduc, Councillor Landry-Altmann, and Mayor Lefebvre

CARRIED (13 to 0)

Please visit: <https://www.greatersudbury.ca/agendas> to view questions asked.

17. Adjournment

Mayor Lefebvre moved to adjourn the meeting. Time: 8:19 p.m.

CARRIED

Minutes

For the City Council Meeting

January 30, 2024
Tom Davies Square

| | |
|---------------------------------|--|
| Present (Mayor and Councillors) | Councillor Signoretti, Councillor Fortin, Councillor Parent, Councillor Lapierre, Councillor Labbée, Councillor Sizer, Councillor McIntosh, Councillor Cormier, Councillor Landry-Altmann, Mayor Lefebvre |
| Absent | Councillor Vagnini, Councillor Montpellier, Councillor Leduc |
| City Officials | Ed Archer, Chief Administrative Officer, Marie Litalien, Director of Communications & Community Engagements, Meredith Armstrong, Director of Economic Development, Kevin Fowke, General Manager of Corporate Services, Tony Cecutti, General Manager of Growth and Infrastructure, Steve Jacques, General Manager of Community Development, Joseph Nicholls, General Manager of Community Safety, Kelly Gravelle, Deputy City Solicitor, Ron Foster, Auditor General, Dawn Noel de Tilly, Chief of Staff, Eric Labelle, City Solicitor and Clerk, Madison Pacey, Clerk's Services Assistant, Regina Sgueglia, Clerk's Services Assistant |

His Worship Mayor Paul Lefebvre, In the Chair

1. Call to Order

The meeting commenced at 4:02 p.m.

2. Roll Call

A roll call was conducted prior to the commencement of moving into closed session.

3. Closed Session

The following resolution was presented:

CC2024-23

Moved By Councillor Fortin

Seconded By Councillor Signoretti

THAT the City of Greater Sudbury moves to Closed Session to deal with one (1) Labour Relations / Employee Negotiations item regarding Sudbury Professional Fire Fighters Association and (1) Security of Property / Personal Matters (Identifiable individual(s)) / Solicitor-Client Privilege item regarding a construction project in accordance with the Municipal Act, 2001, par. 239(2)(a)(b)(d)(f).

CARRIED

At 4:04 p.m., Council moved into Closed Session.

4. Recess

At 5:15 p.m., Council recessed.

5. Open Session

At 6:00 p.m., Council commenced the Open Session.

6. Moment of Silent Reflection

Those present at the meeting observed a moment of silent reflection.

7. Roll Call

A roll call was conducted.

8. Declarations of Pecuniary Interest and the General Nature Thereof

None declared.

9. Matters Arising from the Closed Session

Deputy Mayor Sizer, Chair of the Closed Session, reported that Council met in Closed Session to deal with one (1) Labour Relations / Employee Negotiations item regarding Sudbury Professional Fire Fighters Association and (1) Security of Property / Personal Matters (Identifiable individual(s)) / Solicitor-Client Privilege item regarding a construction project in accordance with the Municipal Act, 2001, par. 239(2)(a)(b)(d)(f).

Direction was given to staff with respect to the first matter.

10. Matters Arising from Planning Committee

10.1 January 29, 2024

Councillor Cormier, as Chair of the Planning Committee, reported on the matters arising from the Planning Committee meeting of January 29, 2024.

The resolutions for the January 29, 2024 Planning Committee meeting can be found at: <https://www.greatersudbury.ca/agendas>

The following resolution was presented:

CC2024-24

Moved By Councillor Cormier
Seconded By Councillor Lapierre

THAT the City of Greater Sudbury approves Planning Committee resolutions PL2024-08 to PL2024-16 from the meeting of January 29, 2024.

CARRIED

11. Consent Agenda

The following resolution was presented:

CC2024-25

Moved By Councillor Signoretti
Seconded By Councillor Fortin

THAT the City of Greater Sudbury approves Consent Agenda items 11.1.1 to 11.1.7.

CARRIED

The following are the Consent Agenda items:

11.1 Adoption of Minutes

11.1.1 Operations Committee Minutes of December 11, 2023

CC2024-26

Moved By Councillor Signoretti
Seconded By Councillor Fortin

THAT the City of Greater Sudbury adopts Operations Committee meeting minutes of December 11, 2023.

CARRIED

11.1.2 Community and Emergency Services Minutes of December 11, 2023

CC2024-27

Moved By Councillor Signoretti
Seconded By Councillor Fortin

THAT the City of Greater Sudbury adopts Community and Emergency Services Committee meeting minutes of December 11, 2023.

CARRIED

11.1.3 Audit Committee Minutes of December 12, 2023

CC2024-28

Moved By Councillor Signoretti

Seconded By Councillor Fortin

THAT the City of Greater Sudbury adopts Audit Committee meeting minutes of December 12, 2023.

CARRIED

11.1.4 Finance and Administration Committee Minutes of December 12, 2023

CC2024-29

Moved By Councillor Signoretti

Seconded By Councillor Fortin

THAT the City of Greater Sudbury adopts Finance and Administration Committee meeting minutes of December 12, 2023.

CARRIED

11.1.5 Finance and Administration Committee Minutes of December 18, 2023

CC2024-30

Moved By Councillor Signoretti

Seconded By Councillor Fortin

THAT the City of Greater Sudbury adopts Finance and Administration Committee meeting minutes of December 18, 2023.

CARRIED

11.1.6 Finance and Administration Committee Minutes of December 19, 2023

CC2024-31

Moved By Councillor Signoretti

Seconded By Councillor Fortin

THAT the City of Greater Sudbury adopts Finance and Administration Committee meeting minutes of December 19, 2023.

CARRIED

11.1.7 City Council Minutes of December 19, 2023

CC2024-32

Moved By Councillor Signoretti

Seconded By Councillor Fortin

THAT the City of Greater Sudbury adopts City Council meeting minutes of December 19, 2023.

CARRIED

12. Presentations

12.1 Code of Conduct - Members of Council

Rules of Procedure

Mayor Lefebvre moved to defer item 12.1 to Q3.

CARRIED

13. By-laws

The following resolution was presented:

CC2024-33

Moved By Councillor Lapierre

Seconded By Councillor Sizer

THAT the City of Greater Sudbury read and pass By-law 2024-23 to By-law 2024-26Z.

CARRIED

13.1 By-laws 2024-23 to 2024-26Z

The following are the By-laws:

2024-23

A By-law of the City of Greater Sudbury to Confirm the Proceedings of Council at its Meeting of January 30th, 2024

2024-24

A By-law of the City of Greater Sudbury to Amend By-law 2003-209 being a By-law of the City of Greater Sudbury to Adopt an Alcohol Risk Management Policy

This by-law incorporates small housekeeping revisions to update references to boards and legislation and limit the number of tickets sold.

2024-25P

A By-law of the City of Greater Sudbury to Adopt Official Plan Amendment No. 127 to the Official Plan for the City of Greater Sudbury

Planning Committee Resolution #PL2023-156

This by-law authorizes an area specific mapping amendment that recognizes the improvements made by the Paquette-Whitson Municipal Drain, specifically as it relates to developable area being created by the removal of floodplain.

2024-26Z

A By-law of the City of Greater Sudbury to Amend By-law 2010-100Z being the Comprehensive Zoning By-law for the City of Greater Sudbury

Planning Committee Resolution #PL2023-121

This by-law rezones the subject lands to “M1(48)”, Mixed Light Industrial/Service Commercial Special in order to permit the continued operation of the existing business with an additional snow storage area - Joel Builders and Supplies Limited & Dryhill Investments Inc. – 257 Hill Street, Wahnapiatae.

14. Members' Motions

14.1 Request for Report Regarding Overtime

The following resolution was presented:

CC2024-34

Moved By Councillor Fortin

Seconded By Councillor Parent

WHEREAS the City of Greater Sudbury's budget documents provide total budget overtime hours of 33,212 in each of 2022, 2023, 2024 and 2025, including 6,958 for the Fires Services Department;

AND WHEREAS during recent budget deliberations, Council was advised that the actual overtime hours for 2022 and 2023 for the Fire Services Department alone were approximately 37,000 and 25,000 respectively, representing a substantial variance in actual versus budgeted amounts;

THEREFORE BE IT RESOLVED that the City of Greater Sudbury directs that staff publish a report for the May 22nd, Finance and Administration Committee meeting with analysis by service, detailing the actual vs. budget overtime hours and costs for each of 2019, 2020, 2021, 2022 and 2023;

AND BE IT FURTHER RESOLVED that the analysis of these variances includes the reasons overtime was worked, service level descriptions of why the work was necessary, where overtime budgets were insufficient and the source of funding for actual overtime worked.

AND BE IT FURTHER RESOLVED that the analysis should consider both paid and unpaid overtime, instances where overtime was banked and paid out at a later date, or taken as time off;

AND BE IT FURTHER RESOLVED that staff incorporate, as a part of quarterly variance reports, actual vs. budgeted year-to-date overtime hours and costs by service.

CARRIED

15. Correspondence for Information Only

15.1 2023 Q4 Report of Council and Committee Meeting Attendance

For Information Only.

15.2 2023 Attendance to Outside Board Meetings by Members of Council

For Information Only.

16. Addendum

No Addendum was presented.

17. Civic Petitions

No Petitions were submitted.

18. Question Period

No Questions were asked.

19. Adjournment

Mayor Lefebvre moved to adjourn the meeting. Time: 6:09 p.m.

CARRIED

Minutes

For the City Council Meeting

February 13, 2024
Tom Davies Square

| | |
|---------------------------------|--|
| Present (Mayor and Councillors) | Councillor Signoretti, Councillor Fortin, Councillor Parent, Councillor Lapierre, Councillor Sizer, Councillor McIntosh, Councillor Cormier, Councillor Leduc, Councillor Landry-Altmann, Mayor Lefebvre |
| Absent | Councillor Montpellier, Councillor Labbée |
| City Officials | Ed Archer, Chief Administrative Officer, Meredith Armstrong, Director of Economic Development, Marie Litalien, Director of Communications & Community Engagements, Kevin Fowke, General Manager of Corporate Services, Tony Cecutti, General Manager of Growth and Infrastructure, Steve Jacques, General Manager of Community Development, Joseph Nicholls, General Manager of Community Safety, Kelly Gravelle, Deputy City Solicitor, Ron Foster, Auditor General, Dawn Noel de Tilly, Chief of Staff, Eric Labelle, City Solicitor and Clerk, Madison Pacey, Clerk's Services Assistant, Regina Sgueglia, Clerk's Services Assistant |

His Worship Mayor Paul Lefebvre, In the Chair

1. Call to Order

The meeting commenced at 4:00 p.m.

2. Roll Call

A roll call was conducted prior to the commencement of moving into closed session.

3. Closed Session

The following resolution was presented:

CC2024-35

Moved By Councillor McIntosh

Seconded By Councillor Lapierre

THAT the City of Greater Sudbury moves to Closed Session to deal with one (1) Labour Relations/Employee Negotiations item regarding employee wages, and two (2) Acquisition or Disposition of Land matters the first regarding a property on Van Horne Street, Sudbury and the second regarding a property on Shaughnessy Street, Sudbury in accordance with the Municipal Act, 2001 par. 239 (2)(c)(d).

CARRIED

At 4:03 p.m., Council moved into Closed Session.

4. Recess

At 4:51 p.m., Council recessed.

5. Open Session

At 6:25 p.m., Council commenced the Open Session.

6. Moment of Silent Reflection

Those present at the meeting observed a moment of silent reflection.

17. Adjournment

Mayor Lefebvre moved to adjourn the meeting. Time: 6:28 p.m.

CARRIED

The following items were not addressed at the meeting:

8. Declarations of Pecuniary Interest and the General Nature Thereof

9. Matters Arising from the Closed Session

10. Matters Arising from Planning Committee

10.1 February 12, 2024

11. Managers' Reports

11.1 Public Art Master Plan

12. By-laws

12.1 By-laws 2024-27 to 2024-32Z

13. Members' Motions

13.1 Request for Report Regarding Renovictions

14. Addendum

15. Civic Petitions

16. Question Period

Minutes

For the Planning Committee Meeting

February 26, 2024
Tom Davies Square

| | |
|---------------------------------|---|
| Present (Mayor and Councillors) | Councillor Lapierre, Councillor Fortin, Councillor Cormier, Councillor Leduc, Councillor Landry-Altmann |
| City Officials | Kris Longston, Director of Planning Services, Robert Webb, Supervisor of Development Engineering, Wendy Kaufman, Senior Planner, Eric Taylor, Senior Planner, Ed Landry, Senior Planner, Community & Strategic Planning, Brigitte Sobush, Manager of Clerk's Services/Deputy City Clerk, Sarah Moore, Legislative Compliance Coordinator, Srijana Rasaily, Clerk's Services Assistant |

Councillor Cormier, In the Chair

1. Call to Order

The meeting commenced at 11:30 a.m.

2. Roll Call

A roll call was conducted prior to the commencement of moving into closed session.

3. Closed Session

The following resolution was provided:

PL2024-26

Moved By Councillor Landry-Altmann

Seconded By Councillor Fortin

THAT the City of Greater Sudbury moves to Closed Session to deal with one (1) Proposed or Pending Acquisition or Disposition of Land Matters regarding Carina Drive, Hanmer, in accordance with Municipal Act, 2001, par 239 (2)(c).

CARRIED

At 11:31 a.m., the Planning Committee moved into Closed Session.

4. Recess

At 11:51 a.m., the Planning Committee recessed.

5. Open Session

At 1:01 p.m., the Planning Committee commenced the Open Session.

6. Roll Call

A roll call was conducted.

7. Declarations of Pecuniary Interest and the General Nature Thereof

None declared.

8. Public Hearings

8.1 15 Levesque Street, Sudbury

The Planning Committee was adjourned and Public Hearing was opened to deal with the application:

Richard Diotte, the applicant was present.

Wendy Kaufman, Senior Planner, outlined the report.

The applicant responded to question from the Committee members.

The chair asked whether there was anyone who wished to speak in favor or against the application and hearing none:

The Public Hearing was closed, and the Planning Committee resumed to discuss and vote on the application.

The following resolution was presented:

PL2024-27

Moved By Councillor Leduc

Seconded By Councillor Fortin

THAT the City of Greater Sudbury approves the application by Barne Building and Construction Inc. to amend Zoning By-law 2010-100Z by changing the zoning classification from "R1-5", Low Density Residential One, to "R3(S)" Medium Density Residential Special, on lands described as PIN 73575-0152, Parcel 34438, Part 5, Plan SR 1772, Except Part 1, Plan 53R7534, Lot 9, Concession 3, Township of Neelon, as outlined in the report entitled "15 Levesque Street, Sudbury", from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting on February 26, 2024 subject to the following conditions:

1. That the amending zoning by-law include the following site-specific provision:
 - a. That a minimum lot depth of 25 m be permitted.

YEAS: (5): Councillor Lapierre, Councillor Fortin, Councillor Cormier, Councillor Leduc, and Councillor Landry-Altmann

CARRIED (5 to 0)

As no public comment, written or oral, has been received, there was no effect on the Planning Committee's decision.

8.2 3891 Hydro Road, Hanmer

The Planning Committee was adjourned and the Public Hearing was opened to deal with the application:

Nicole and Richard Doyon, the applicants were present.

Eric Taylor, Senior Planner, outlined the report.

The Planning Department staff responded to questions from the Committee members.

The applicant provided comments and responded to questions from the Committee members.

The Chair asked whether there was anyone who wished to speak in favour or against the application and hearing none:

The Public Hearing was closed and the Planning Committee resumed in order to discuss and vote on the application.

The following resolution was presented:

PL2024-28

Moved By Councillor Landry-Altmann

Seconded By Councillor Fortin

THAT the City of Greater Sudbury denies the application by Nicole Doyon to amend the City of Greater Sudbury Official Plan in order to provide site-specific exceptions to the rural lot creation policies of Section 5.2.2 on lands described as PIN 73508-1381, Lot 11, Concession 1, Township of Capreol as outlined in the report entitled "3891 Hydro Road, Hanmer", from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting on February 26, 2024.

A recorded vote was held:

NAYS: (5): Councillor Lapierre, Councillor Fortin, Councillor Cormier, Councillor Leduc, and Councillor Landry-Altmann

DEFEATED (0 to 5)

At 1:34 p.m., Committee recessed.

At 1:36 p.m., Committee reconvened.

The following alternate resolution was presented:

PL2024-29

Moved By Councillor Lapierre

Seconded By Councillor Fortin

Resolution regarding the Official Plan Amendment:

THAT the City of Greater Sudbury approves the application by Nicole Doyon to amend the City of Greater Sudbury Official Plan in order to provide site-specific exceptions to the rural lot creation policies of Section 5.2.2 on lands described as PIN 73508-1381, Lot 11, Concession 1, Township of Capreol as outlined in the report entitled “3891 Hydro Road, Hanmer”, from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting on February 26, 2024, subject to the following”

- i. Notwithstanding Section 5.2.2 of the Official Plan, the severance of two additional lot with a minimum area of 2 ha shall be permitted, where three (3) lots have already been severed from the parent parcel since June 14, 2006 being the adoption date of the Official Plan, and
- ii. That prior to the enactment of the by-law to adopt the official plan amendment, all buildings and structures including trailers shall have been removed from the proposed lots to be severed, to the satisfaction of the Chief Building Official and Director of Planning Services.

YEAS: (5): Councillor Lapierre, Councillor Fortin, Councillor Cormier, Councillor Leduc, and Councillor Landry-Altmann

CARRIED (5 to 0)

The following alternate resolution was presented:

PL2024-30

Moved By Councillor Lapierre

Seconded By Councillor Fortin

Resolution Regarding the Consent Referral:

THAT, the City of Greater Sudbury approves the request by Nicole Doyon to permit the creation of two (2) additional lots on lands described as PIN 73508-1381, Lot 11, Concession 1, Township of Capreol, to proceed by way of the consent process, as outlined in the report entitled “3891 Hydro Road, Hanmer”, from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting on February 26, 2024.

YEAS: (5): Councillor Lapierre, Councillor Fortin, Councillor Cormier, Councillor Leduc, and Councillor Landry-Altmann

CARRIED (5 to 0)

As no public comment, written or oral, has been received, there was no effect on the Planning Committee's decision.

Councillor Lapierre departed at 1:45 p.m.

8.3 250 Billiard's Way, Sudbury

The Planning Committee was adjourned and the Public Hearing was opened to deal with the application:

Kristi Arnold, the applicant was present.

Wendy Kaufman, Senior Planner, outlined the report.

The applicant provided comments.

The Chair asked whether there was anyone who wished to speak in favour or against the application and hearing none:

The Public Hearing was closed and the Planning Committee resumed in order to discuss and vote on the application.

The following resolution was presented:

PL2024-31

Moved By Councillor Fortin

Seconded By Councillor Landry-Altmann

THAT the City of Greater Sudbury approves the application by Dalron Construction Limited to amend Zoning By-law 2010-100Z by amending the "H40" – Holding Zone to permit an additional 19 units prior to construction of a public road connection to Maurice Street or Tuscany Trail, on lands described as PIN 73478-1214, 53R-20418, Parts 8, 9 & 11-13, Lot 4, Concession 5, Township of Broder, as outlined in the report entitled "250 Billiard's Way, Sudbury", from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting on February 26, 2024.

YEAS: (4): Councillor Fortin, Councillor Cormier, Councillor Leduc, and Councillor Landry-Altmann

Absent (1): Councillor Lapierre

CARRIED (4 to 0)

Public comment has been received and considered and had no effect on Planning Committee's decision as the application represents good planning.

9. Matters Arising from the Closed Session

Councillor Cormier, reported that the Committee met in Closed Session to deal with one (1) Proposed or Pending Acquisition or Disposition of Land Matters regarding Carina Drive, Hanmer, in accordance with Municipal Act, 2001, par 239 (2)(c). One (1) resolution emanated from the meeting.

The following resolution was presented:

PL2024-32

Moved By Councillor Cormier

Seconded By Councillor Landry-Altmann

THAT the City of Greater Sudbury authorize the sale of part of unopened Carina Drive, Hanmer, legally described as part of PIN 73508-1160(LT), Plan M-1006, City of Greater Sudbury;

AND THAT a by-law be prepared authorizing the sale and the execution of the documents required to complete the real estate transaction;

AND THAT the net proceeds of the sale be credited to the Capital Financing Reserve Fund – General.

CARRIED

10. Consent Agenda

The following resolution was presented:

PL2024-33

Moved By Councillor Landry-Altmann

Seconded By Councillor Leduc

THAT the City of Greater Sudbury approves Consent Agenda items 10.1.1 to 10.1.3.

CARRIED

The following are the Consent agenda items:

10.1 Routine Management Reports

10.1.1 Silver Hills Subdivision, Sudbury Extension of Draft Plan Approval

PL2024-34

Moved By Councillor Landry-Altmann

Seconded By Councillor Leduc

THAT the City of Greater Sudbury's delegated official be directed to amend the conditions of draft approval for a plan of subdivision on those lands described as PIN 73580-0576, Lot 1, Concession 4, Township of McKim, as outlined in the report entitled "Silver Hills

Subdivision, Sudbury Extension of Draft Plan Approval”, from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting on February 26, 2024 as follows:

1. Amending Condition 9 to:

“That this draft approval shall lapse on March 27, 2027”.

2. Deleting Condition 22 and replacing it with:

“A stormwater management report and associated plans must be submitted by the Owner’s Consulting Engineer for approval by the City. The report must address the following requirements:

- a. The underground storm sewer system within the plan of subdivision must be designed to accommodate and/or convey the minor storm flow, that is, the rainfall runoff resulting from the subject site and any external tributary areas using the City’s 2-year design storm. The permissible minor storm discharge from the subject development must be limited to the existing pre-development site runoff resulting from a 2-year design storm. Any resulting post development runoff in excess of this permissible discharge rate must be controlled and detained within the plan of subdivision;
- b. The underground storm sewer system within future Silver Hills Drive right-of-way, within the plan of subdivision must be designed to accommodate and/or convey the minor storm flow, that is, the rainfall runoff resulting from the subject site and any external tributary areas using the City’s 5 year design storm;
- c. The overland flow system within the plan of subdivision must be designed to accommodate and/or convey the major storm flow, that is, the rainfall runoff resulting from the subject site and any external tributary areas using the City’s 100 year design storm or Regional storm event, whichever is greater, without causing damage to proposed and adjacent public and private properties. The permissible major storm discharge from the subject development must be limited to the existing pre-development runoff resulting from a 100 year design storm or Regional storm event, whichever is greater;
- d. A hierarchical approach to stormwater management must be followed as described by the Ministry of the Environment, Conservation and Parks and as amended by City of Greater Sudbury most recent Stormwater Management Guide and Engineering Design Standards;

- e. “Enhanced” level must be used for the design of stormwater quality controls as defined by the Ministry of the Environment, Conservation and Parks;
- f. Stormwater management must further follow the recommendations of the Ramsey Lake Subwatershed Study;
- g. The drainage catchment boundary including external tributary catchments and their respective area must be clearly indicated with any stormwater management plan;
- h. The final grading of the lands shall be such that the surface water originating on or tributary to the said lands, including roof water from buildings and surface water from paved areas, will be discharged in a manner satisfactory to the General Manager of Growth and Infrastructure;
- i. Minor storm drainage from the plan of subdivision shall not be drained overland onto adjacent properties; and,

Existing drainage patterns on adjacent properties shall not be altered unless explicit permission is granted. The owner shall be responsible for the design and construction of any required stormwater management works to the satisfaction of the General Manager of Growth and Infrastructure as part of the servicing plans for the subdivision and the owner shall dedicate the lands for stormwater management works as a condition of this development.”

CARRIED

10.1.2 Failed Tax Sale Properties - Vesting

PL2024-35

Moved By Councillor Landry-Altmann

Seconded By Councillor Leduc

THAT the City of Greater Sudbury authorizes the vesting of a vacant property at 410 Municipal Road 10, Whitefish, legally described as PIN 73396-0186(LT), part of Lot 2, Concession 6, part 1 on plan SR3017, Township of Louise; and vacant property on Morgan Road, Chelmsford, legally described as PIN 73343-0043(LT), part of Lot 6, Concession 1, Township of Morgan;

AND THAT a by-law be prepared authorizing the vesting, in accordance with the *Municipal Act, 2001*, as outlined in the report entitled “Failed Tax Sale Properties - Vesting”, from the General Manager of Corporate Services, presented to the Planning Committee meeting on February 26, 2024.

CARRIED

10.1.3 Street Renaming – Sanitary Landfill Road to Northern Road

PL2024-36

Moved By Councillor Landry-Altmann

Seconded By Councillor Leduc

THAT the City of Greater Sudbury approves the request to rename Sanitary Landfill Road as shown on Plan 53R-21052 to Northern Road as outlined in the report entitled “Street Renaming – Sanitary Landfill Road to Northern Road”, from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting on February 26, 2024.

CARRIED

11. Managers' Reports

11.1 Strategic Core Areas Community Improvement Plan – 96 Larch Street

The following resolution was presented:

PL2024-37

Moved By Councillor Fortin

Seconded By Councillor Landry-Altmann

THAT The City of Greater Sudbury approves the Strategic Core Areas Community Improvement Plan application for 96 Larch Street, and directs staff to prepare a by-law to authorize staff to enter into the required agreements, as outlined in the report entitled “Strategic Core Areas Community Improvement Plan – 96 Larch Street”, from the General Manager of Growth and Infrastructure, presented at the Planning Committee meeting of February 26, 2024

CARRIED

12. Members' Motions

12.1 Request for Review of Community Improvement Plans Program

The following resolution was presented:

PL2024-38

Moved By Councillor Fortin

Seconded By Councillor Cormier

WHEREAS The City’s 2019-2027 Strategic Plan includes a goal to revitalize Greater Sudbury’s Downtown and Town Centres with public investment that supports private investment;

AND WHEREAS it is a goal of the Strategic Plan to demonstrate the creative use of Community Improvement Plans (CIPs) to incentivize economic growth;

AND WHEREAS the Strategic Plan seeks to evaluate the potential to partner with private sector developers through CIPs or directly to increase or accelerate mixed-use rental housing projects;

AND WHEREAS The City regularly conducts service reviews to examine options for improving service levels and/or reducing the City's net costs;

NOW THEREFORE BE IT RESOLVED that staff be directed to return with a report by the end of Q2, 2024 outlining policy options, including but not limited to, the following parameters of the Strategic Core Areas Community Improvement Plan:

- Non-Commercial Façade Improvements
- Concurrent applications per property (owner and tenant)
- Business Improvement Areas Tenant Attraction (Loan) program

AND BE IT FURTHER RESOLVED THAT effective March 1, 2024, those portions of new applications to CIP programs which include non-commercial façade improvements, the loan program, or concurrent applications involving both an owner and tenant on the same property, will not be accepted by the City pending further direction from Council;

AND BE IT FURTHER RESOLVED THAT all other applications or portions of applications which do not include the above elements will be considered by the City per established processes.

Rules of Procedure

Councillor Fortin moved to amend the resolution.

At 2:02 p.m., Committee recessed.

At 2:07 p.m., Committee reconvened.

The following amendment was presented:

PL2024-38-A1

Moved By Councillor Fortin

Seconded By Councillor Cormier

THAT the resolution be amended to include a fourth bullet point in the fifth paragraph as follows:

" • Program caps based on project value vs. set amounts".

AND THAT the first bullet point be changed to

" • All façade Improvements"

AND THAT "non-commercial" be replace with "all" in the sixth paragraph.

CARRIED

Rules of Procedure

Councillor Cormier moved to waive reading of the amended resolution.

CARRIED

The following resolution as amended was presented:

PL2024-38

Moved By Councillor Fortin

Seconded By Councillor Cormier

As Amended

WHEREAS The City's 2019-2027 Strategic Plan includes a goal to revitalize Greater Sudbury's Downtown and Town Centres with public investment that supports private investment;

AND WHEREAS it is a goal of the Strategic Plan to demonstrate the creative use of Community Improvement Plans (CIPs) to incentivize economic growth;

AND WHEREAS the Strategic Plan seeks to evaluate the potential to partner with private sector developers through CIPs or directly to increase or accelerate mixed-use rental housing projects;

AND WHEREAS The City regularly conducts service reviews to examine options for improving service levels and/or reducing the City's net costs;

NOW THEREFORE BE IT RESOLVED that staff be directed to return with a report by the end of Q2, 2024 outlining policy options, including but not limited to, the following parameters of the Strategic Core Areas Community Improvement Plan:

- All Façade Improvements
- Concurrent applications per property (owner and tenant)
- Business Improvement Areas Tenant Attraction (Loan) program
- Program caps based on project value vs. set amounts

AND BE IT FURTHER RESOLVED THAT effective March 1, 2024, those portions of new applications to CIP programs which include all façade improvements, the loan program, or concurrent applications involving both an owner and tenant on the same property, will not be accepted by the City pending further direction from Council;

AND BE IT FURTHER RESOLVED THAT all other applications or portions of applications which do not include the above elements will be considered by the City per established processes.

CARRIED

13. Addendum

No Addendum was presented.

14. Civic Petitions

No Petitions were submitted.

15. Question Period

No Questions were asked.

16. Adjournment

Councillor Cormier moved to adjourn the meeting. Time: 2:14 p.m.

CARRIED

Event Centre Renewal and New Build Review

| | |
|-----------------|------------------------------|
| Presented To: | City Council |
| Meeting Date: | April 16, 2024 |
| Type: | Presentations |
| Prepared by: | Ed Archer CAO's Office |
| Recommended by: | Chief Administrative Officer |

Report Summary

This report and presentation provides recommendations as requested by Council at its September 26, 2023 meeting directing staff to explore both the renovation and new build options for an event centre in Greater Sudbury's downtown South District.

Resolutions

Resolution 1:

THAT the City of Greater Sudbury selects the New Build Option as outlined in the report entitled "Downtown Event Centre Update Report", from the Chief Administrative Officer, presented to City Council on April 16th, 2024, with the following parameters:

- a) The new event centre shall include 5,800 fixed seats;
- b) The total budget shall be \$200 million that includes:
 - i. Cost estimates described in BBB's Report and described in previous reports referenced in this report;
 - ii. Enhanced accessibility features;
 - iii. Enhanced environmental sustainability features that support the Community Energy and Emissions Plan;
- c) The new event centre shall be constructed in the south district of the downtown core;

Resolution 2:

THAT the Mayor and Chief Administrative Officer, together, be delegated authority to negotiate, execute and subsequently amend or extend any agreements, including, without limitation, agreements for professional and consulting services and for non-competitive purchases, including instruments, assurances and any other documents as may be necessary to complete the Downtown Event Centre and South District Redevelopment, with reporting to Council on a quarterly basis.

AND THAT a by-law be presented to formalize the decisions and authorities delegated herein.

Resolution 3:

THAT the City of Greater Sudbury approves the Downtown Event Centre financing plan as outlined in the report entitled "Downtown Event Centre Update Report," from the Chief Administrative Officer, presented at the City Council meeting on April 16th, 2024.

Resolution 4:

THAT the City of Greater Sudbury delegates authority to the General Manager of Corporate Services to secure new debt of up to \$135 million, in addition to funds previously borrowed, to support Event Centre financing requirements.

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

This report responds to several elements of the 2019-2027 Strategic Plan including:

Objective 2.0 Economic Capacity and Investment Readiness

- 2.1 Build Economic Development Initiatives to Support Existing Businesses, Attract New Businesses and Promote Entrepreneurship,
- 2.4 Revitalize Greater Sudbury's Downtown and Town Centres with Public Investments that Support Private Investment
- 2.8 Invest in Transformative Facilities, Spaces and Infrastructure that Support Economic Activity

Objective 3.0 Climate Change

- 3.2 Develop and strengthen strategies and policies to mitigate and/or adapt to the impacts of climate change,
- 3.3 Build climate resiliency into existing programs

Objective 5.0 Create a Healthier and More Vibrant Community

- 5.2 Invest in Infrastructure to Support Community Recreation with Focus on Quality of Life
- 5.6 Align Initiatives with the Goal of Community Vibrancy

Financial Implications

The financial implications of the recommendations in this report include the following:

- a) Increase the budget for the Event Centre to \$200 million, reflecting expert assessments included with this report of the project's current anticipated cost;
- b) Delegate authority to the Mayor and Chief Administrative Officer to negotiate/execute/amend agreements necessary for completing the Event Centre and related South District redevelopment;
- c) Delegate authority for securing additional debt up to \$135 million to fund the Event Centre project. For illustrative purposes, the financing plan includes an assumed interest rate of 4% for a 30 year term representing a \$7.8 million annual debt repayment.

The debt recommended here is in addition to existing, approved debt secured in 2020 at an interest rate of 2.4%, of which \$65 million is available to support this project. The costs incurred to prepare this report were \$60,794. This includes costs for A2S Consulting Engineers' report of \$11,074 and costs for Brisbin Brook Beynon Architects' report of \$49,720.00. The staff time involved in this report was approximately 200 hours. These costs, and those that will be incurred to undertake the next steps in this report, will be funded from the Event Centre Project Capital Budget.

EXECUTIVE SUMMARY

Following Council's direction last September for further detailed analysis, staff retained third party experts and reviewed reports produced over the past several years. Staff conclude:

- A. A new event centre provides the best opportunity for meeting Council's service objectives with the least impact, the greatest opportunity for complimentary investment and the least risk during construction.
- B. A new building can be constructed using a conventional Design-Bid-Build public procurement with a reasonable target of the facility being operational by April 2028.
- C. The new building cost estimate is \$200 million; considering funds currently available, this estimate produces additional financing requirements of \$135 million.
- D. The financing plan includes debt at a level that stays within both Council's debt management policy and provincial limits on municipal debt levels. Options to repay the debt exist and include a combination of property tax, non-tax revenue and private contributions.
- E. A new event centre aligns with Council's South District redevelopment vision and directly provides capital investments that support community goals for downtown renewal, asset renewal, climate change leadership and economic development.
- F. A new event centre confirms Council's strategic priority to support community vibrancy by creating new opportunities for cultural activities, conferences and community events that enhance Greater Sudbury's profile as an attractive business location and lifestyle destination.
- G. Delegating authority to the Mayor and Chief Administrative Officer increases the assurance the project will be complete on time and follows a project schedule that aligns with potential neighboring private development.

BACKGROUND

At its September 26th, 2023, meeting, Council received a report entitled "*Greater Sudbury Event Centre Update and Future Direction*." This report was a companion to the "*Sudbury Community Arena Condition Update and Event Centre Options*" report presented to Council July 11, 2023. The September 26th report responded to Council's request for information regarding a facility renewal option and a broader district development with private sector participation.

"*Greater Sudbury Event Update and Future Direction*", provided Council with the following:

- An assessment to renovate the Sudbury Community Arena and examples of communities that pursued a renewal scenario,
- An analysis of a new or renewed facility as part of a larger redevelopment,
- A preliminary economic impact assessment using assumptions related to possible ancillary developments such as a conference centre, parking structure and hotel, and
- Appendices that describe a vision for the South District, including steps to engage the private sector

At its September meeting, Council passed the following resolution:

CC2023-237 THAT: the City of Greater Sudbury directs staff to further explore both the Renovation and the New Build Options described in the report entitled "Greater Sudbury Event Centre Update and Future Direction", presented by the CAO on September 26, 2023, with an estimated cost of up to \$200,000 and funding provided by the Event Centre Project budget, and

Further, that staff be directed to produce a report in March 2024 with the following components:

- 1. The results of the analysis on the current Sudbury Community Arena recommended in the September 26, 2023, report.*
- 2. A recommended process and timeline for the design and construction of a renovated facility as part of the redevelopment of the South District that mitigates any impact on current tenants.*
- 3. A recommended process to construct and open a new build facility in 2027/2028.*

4. *An initial evaluation of the potential of both options described in 2) and 3) to attract complementary investment as part of a larger redevelopment in the South District.*
5. *An estimated budget to complete each project option, based on City Council's 2017 list of required features for a new event centre, along with options for enhancements or reductions.*
6. *A potential financing plan for both options.*

This report responds to Council's September resolution. Staff engaged A2S Consulting Engineers to provide an updated structural condition assessment of the Sudbury Community Arena that includes recommendations for additional investigation, if necessary. Additionally, Brisbin Brook Beynon Architects (BBB) was hired to provide an analysis and recommendations that consider both the renewal of the Sudbury Community Arena and a new event centre while having regard for the work that has been previously completed of the same evaluation. Further, BBB evaluated the potential for private sector participation in each scenario. The findings of these two independent experts are reflected in this report. Staff prepared a financing plan that is also included in this report.

Late in 2023, Council directed staff to purchase several properties in the downtown South District to facilitate redevelopment and reiterate its support for economic development priorities and strategic goals. Staff also engaged J.L Richards & Associates to update the Downtown Master Plan to assist with the development of a new 10-year implementation plan. With an initial focus in the South District, these planning efforts support a shared understanding of the downtown's economic development potential.

Council should review this report together with staff reports presented at both the July 11th, 2023, and September 26th, 2023 City Council meetings. Taken together, these reports provide the most robust perspective available about the choice to renew or replace the 73-year-old Sudbury Community Arena. For convenience, the links below connect to these related reports:

City Council July 11th, 2023: [Sudbury Community Arena Condition Update and Event Centre Options \(escribemeetings.com\)](https://escribemeetings.com/Appendix%20A%20Updated%20Detailed%20Assessment%20of%20Sudbury%20Community%20Arena.docx); [Appendix A Updated Detailed Assessment of Sudbury Community Arena.docx \(escribemeetings.com\)](https://escribemeetings.com/Appendix%20A%20Updated%20Detailed%20Assessment%20of%20Sudbury%20Community%20Arena.docx)

City Council September 26th, 2023: ([City Council Meeting - September 26, 2023 \(escribemeetings.com\)](https://escribemeetings.com/City%20Council%20Meeting%20-%20September%2026%2C%202023)), [Sudbury Community Arena Condition Update and Event Centre Options \(escribemeetings.com\)](https://escribemeetings.com/Sudbury%20Community%20Arena%20Condition%20Update%20and%20Event%20Centre%20Options), [filestream.ashx \(escribemeetings.com\)](https://escribemeetings.com/filestream.ashx)([PowerPoint Presentation \(escribemeetings.com\)](https://escribemeetings.com/PowerPoint%20Presentation))

ANALYSIS

A2S Consulting Engineers Findings

A2S Consulting Engineers ("A2S") produced a structural condition assessment of the Sudbury Community Arena (Appendix A). A2S concluded, "the original arena structure is in fair condition with several deficiencies noted requiring repair, structural upgrades, and/or replacement to maintain the performance level of the structural elements."

The structural condition assessment included a description of additional investigation that could be undertaken by the City if a renewal option is to be pursued. Generally, the additional investigation is complex, involving significant additional costs estimated at \$500,000. It also requires the facility's closure while the investigation is underway. The facility closure would involve service interruptions and the removal of materials, including finishes, to perform exploratory analysis and the use of specialty equipment.

This supplemental investigation would be a component of a scenario where the existing facility would be redeveloped or relied upon for continued service. It would not be undertaken in a scenario where the building is to be replaced.

BBB's Findings

Brisbin Brook Beynon Architects (BBB) was hired to provide an analysis and recommendations that considers the renewal of the Sudbury Community Arena and a new event centre while having regard for the work that has been previously completed of the same evaluation. Further, BBB was to offer an opinion that assesses the appetite for private sector participation for each scenario (Appendix B).

As described in the attached report, BBB recommends the new build option for the following primary reasons¹:

- Increasing annual net revenue through more of the following: utilization, capacity, suites, events, sponsors, and operating efficiencies
- Significantly less construction risk and financial risk
- Larger private sector investment potential in the Event Centre
- More publicly accessible and welcoming with a higher service level
- Additional private sector development opportunities in the adjacent lands
- The expected life cycle for a new facility is over twice the remaining useful life of a renewed SCA

As outlined in BBB's report², the cost of an event centre renewal is approximately the same as a new build. **Table 1**, below, compares the options according to their ability to fulfill both the City's and the event industry's facility requirements. The following legend describes each option's fit with these requirements:

□ Full Compliance ▸ Partial Compliance ○ Not Compliant

¹ BBB Architects. Sudbury Community Arena Renewal & New Build Review. (Page. 2) 2024.

² Ibid (Page 24)

Table 1: Alignment of Renewal and New Build Options with Municipal/Industry Requirements

| Front of House | | |
|---|-----------------------|--------------------------|
| City's List of Required Features | Renewal | New Build |
| 5,800 Seats in hockey mode. | <input type="radio"/> | <input type="checkbox"/> |
| Includes 24 suites, 10 loges and 500 club seats in best locations to maximize revenues. | <input type="radio"/> | <input type="checkbox"/> |
| Uncongested access to and circulation around main concourse. | <input type="radio"/> | <input type="checkbox"/> |
| Meet City's 2019 Community Energy and Emissions Plan to be more sustainable. | <input type="radio"/> | <input type="checkbox"/> |
| Meet and exceed City's 2022-27 multiyear accessibility plans. | <input type="radio"/> | <input type="checkbox"/> |
| Meet City's Strategic Plan (revised 2023) objectives. | <input type="radio"/> | <input type="checkbox"/> |
| Maximize City's objective to follow success of other Canadian cities in attracting ancillary new investment. (See PwC June 2021 Update). | <input type="radio"/> | <input type="checkbox"/> |
| Event Industry's Additional Requirements | | |
| Maximum 8,000 (Seating & SRO) capacity in concert mode. ³ | <input type="radio"/> | <input type="checkbox"/> |
| Expandable to 6,000 seating to secure special events like International Ice Hockey Federation, Hockey Canada, and Curling Canada Championships. | <input type="radio"/> | <input type="checkbox"/> |
| Industry standard sightlines throughout. | <input type="radio"/> | <input type="checkbox"/> |
| Provide industry standard seat sizes and leg-room. | <input type="radio"/> | <input type="checkbox"/> |
| Create a bigger and longer honeymoon after opening to attract more events, guests, sponsors, etc. for the long term. | <input type="radio"/> | <input type="checkbox"/> |
| Create a bigger "WOW" factor | <input type="radio"/> | <input type="checkbox"/> |
| Back of House | | |
| City's List of Required Features | | |
| Provide "contemporary back of house amenities" to support a variety of sports and entertainment events. | <input type="radio"/> | <input type="checkbox"/> |
| Convenient truck access to event floor. | <input type="radio"/> | <input type="checkbox"/> |
| Event Industry's Additional Requirements | | |
| Fast, safe and least expensive event load-in/out to attract more events. | <input type="radio"/> | <input type="checkbox"/> |
| Efficient event centre on-going operations. | <input type="radio"/> | <input type="checkbox"/> |
| Efficient and optimal positioning of food and beverage operations. | <input type="radio"/> | <input type="checkbox"/> |
| Existing Sudbury Community Arena operates during event centre construction. | <input type="radio"/> | <input type="checkbox"/> |
| Financial / Business | | |
| Least risk due to unknown existing conditions like hazmat, foundations and other structures, mechanical / electrical/ plumbing. | <input type="radio"/> | <input type="checkbox"/> |
| More attendance and revenues. | <input type="radio"/> | <input type="checkbox"/> |
| More touring show events because of higher revenue potential | <input type="radio"/> | <input type="checkbox"/> |
| More revenues from third party sponsors and investors because of event centre quality certainty and potential for more special events. | <input type="radio"/> | <input type="checkbox"/> |
| Better contracts for City with tenants. | <input type="radio"/> | <input type="checkbox"/> |
| Less negative financial impact on Sudbury Community Arena operations during construction. | <input type="radio"/> | <input type="checkbox"/> |
| More efficient constructability and schedule to deliver more value for money spent. | <input type="radio"/> | <input type="checkbox"/> |

³ Recent event centre designs have moved to increase maximum capacity to attract larger popular events that do not require a seat for all guests. This is important in growing cities and reflects trends related to the spectator experience and event industry.

As this evaluation illustrates, the new build option allows for all desired outcomes to be achieved.

Further to Resolution 2023-237 and Council's direction for a completed project to be realized in 2027/2028, BBB recommends the use of a Design-Bid-Build approach with third party cost estimates to increase the assurance the project stays on budget through the design stages.

Design-Bid-Build projects are common in public sector procurement, and typically commence with construction documents prepared by a designer. After construction documents are complete, bids from qualified general contractors are solicited. Typically, the lowest compliant bid is awarded the contract for a fixed price. BBB's opinion is current market conditions support using a design bid build process to ensure maximum competition, project quality and to incorporate cost-effective design. Table 2, below, describes milestones and a related schedule:

Table 2: Project Milestones and Schedule

| Reports/Recommendations/Approvals | Schedule | |
|--|---------------------|---------------------|
| | Renewal | New Build |
| Council Direction on Renewal and New Build | Dec '23 to Apr '24 | Dec '23 to Apr '24 |
| RFQ / RFP Design-Bid-Build | May '24 to Aug '24 | May '24 to July '24 |
| Schematic Design and Class C Estimates | Sept '24 to Dec '24 | Aug '24 to Dec '24 |
| Design Development and Class B Estimates | Jan '25 to May '25 | Jan '25 to May '25 |
| Initiate process to secure operator | Mar'25 ⁴ | Mar'25 |
| Working Drawings and Class A Estimates | Jun '25 to Nov-25 | Jun '25 to Nov-25 |
| Initiate marketing and sales campaigns | n/a | Jun'25 |
| Building Permit | Dec '25 to Feb'26 | Dec '25 to Feb '26 |
| Construction Tender | Dec '25 to Feb '26 | Dec '25 to Feb '26 |
| Construction | Apr'26-Sep'28 | Apr'26-Apr'28 |
| Behind the scenes construction | Apr'26-May'27 | n/a |
| Summer Closure | May'27-Sept'27 | n/a |
| Behind the scenes construction | Sept'27-May'28 | n/a |
| Summer Closure | May'28-Sept'28 | n/a |
| Grand Opening | Sept'28 | Apr'28 |

It is important to note that this is an aggressive schedule. Unexpected items may arise during this process that produce schedule delays.

Budget Summary – Renewal of Existing Building

BBB's cost estimate for a renovated arena produces a facility that does not fully meet Council's desired service level. For a renovated facility to fully meet Council's service expectations, an additional investment of \$50M to \$100M⁵ would be required. The estimates provided below assume that the entire area of the existing facility will need renovations, along with an additional 87,000 square feet of new space to achieve as much of the list of required features as possible. It should be noted that this results in a total square footage estimate that exceeds that of a new build due to the planning inefficiencies associated with a renewal project. Table 3 provides a summary:

⁴ Council may or may not choose to pursue an operator for a renewal option

⁵ BBB Architects. SCA Renewal and New Build Review Report. (page 5). 2024.

Table 3: Existing Facility Renewal Cost Estimate

| Renewal | | \$ Millions |
|--|--------------------|--------------------|
| New Construction (incl. 20% contingency) | 87,000 sf. x \$800 | \$ 70 M |
| Renovated Construction (incl. 20% contingency) | 90,000 sf. x \$600 | \$54 M |
| Sudbury and Structural premium ⁶ | \$124 M x 14% | \$17 M |
| Sub-Total | | \$141 M |
| Soft Costs (industry standard 25%) | \$141 M x 25% | \$35 M |
| Site work (excluding parking) | | \$4 M |
| TOTAL RENEWAL | | \$180 M |

Furthermore, it is important to understand that there will be reduced revenues for a renewal compared to a new build over the first 25 years of operation. This reflects the different operating characteristics that would produce lower revenues from suite leases, reduced attendance and fewer shows. BBB estimated these reduced revenues over the next 25 years and included the amount when assessing the full cost of pursuing the event centre renewal option, as Table 4 describes:

Table 4: Reduced Revenue Attributable to the Event Centre Renewal Option

| | |
|---|----------------|
| 12 fewer suites (\$350k/yr. x 25 yr. x 90%) | \$7.9 M |
| 600 fewer capacities (\$1.7m x 5% x 25 yr. x 90%) | \$1.9 M |
| 2 fewer touring shows (\$900k x 5% x 25 yr. x 90%) and periodic special events such as Hockey Canada and Curling Canada championships | \$1.0 M |
| Subtotal | \$11 M |
| FULL COST OF RENEWAL | \$191 M |

Budget Summary – New Build

When compared to a new build option, the budget estimates below illustrate that a new build results in a lower cost while achieving all of Council's list of required features, the least impact on existing tenants and community programming and produces the greatest chance of the facility being operational in 2027/2028. Table 5 summarizes the estimated costs:

Table 5: New Build Cost Estimate

| New Build | \$ Millions |
|--|--------------------|
| New Event Centre (including contingencies) (170,000 sf ⁷ . x \$750/sf.) | \$128 M |
| Sudbury, Structural and Soils Premiums (14%) | \$18 M |
| Sub-total | \$146 M |
| Soft Costs (25%), including FF&E, Consultants, Building Permit Fee, etc. | \$37 M |
| Site work (not including parking) | \$4 M |
| Total New Build | \$187 M |

These estimates do not include costs that are unlikely to be required such as storm water management requirements or service relocations. These estimates also exclude costs required to address parking needs. Should Council wish to undertake the demolition of the existing arena, those costs, estimated to be approximately \$5.5M, are not included here.

The new event centre presents a unique opportunity for Greater Sudbury to build an inspiring facility that aligns with policy direction on climate change and showcases leading sustainability design solutions. Additionally, work to incorporate a high level of Community Energy and Emission Plan (CEEP) objectives would require an additional \$6M to \$8M. BBB noted these costs would typically be higher, but its benchmark costing includes sustainability investments that address CEEP outcomes.

⁶ The above Sudbury and structural premium of 14% is because of Sudbury's location and the need to import materials and labour from more distant locations. It was determined through key informant interview with local experts. The structural premium was determined after a review of soils reports previously commissioned by the City.

⁷ 170,000 is an approximate value based on the KED specifications and should be considered +/- 20% at this stage.

Similarly, a choice to exceed Accessibility for Ontarians with Disabilities Act (AODA) requirements would require an additional \$2M to \$3M. Further analysis would be required to confirm the specific design elements that would reflect this choice. Recommended Motion 1 b) ii) addresses this direction.

A Third Option – Do Nothing

A third option reflects a status quo approach, where the corporation continues to operate the existing Sudbury Community Arena and only completes repairs/replacements when absolutely necessary. This was not specifically addressed by BBB because Council's direction did not include this choice. With a 73- year-old building, doing nothing signals acceptance of a risk level that exceeds Council's expressed risk tolerance and increases the likelihood of unplanned service interruptions and/or high repair costs. For example:

1. Major components such as the ice floor could breakdown resulting in shutting down the Arena and its operations for an extended period;
2. The facility will not comply with contemporary standards and laws, including for safety and energy;
3. The costs to maintain and repair the Arena will continue to increase, especially as larger, more substantial building elements fail;
4. It will become even more difficult to attract entertainment artists and special events to the city; and,
5. The facility will increasingly be viewed as a second-class facility compared to similar Event Centres in Ontario and Canada, with services and visitor experiences that are much worse than the renewal option.

FINANCIAL PLAN

Debt Financing

Financing either a renovated or new build scenario would be accomplished by issuing debt. This is typical for publicly funded event centre projects. The corporation has the debt capacity to support this approach. Further, considering anticipated or planned capital projects over the next ten years, financing with debt can be integrated into existing plans and does not impair Council's ability to manage taxation levels so they remain affordable for the average taxpayer.

In 2020, \$90 million in debt was obtained to support the event centre project. Approximately \$65 million remains available to support the recommendations in this report. Additional debt will be required to fulfill either a renovated event centre or a new build. Table 6 illustrates this using the new build option:

Table 6: Event Centre Financing Requirement – New Build**Current Financing Requirement**

| | |
|---|-------------|
| New Build Estimated Cost | 187,000,000 |
| Cost not included in new build estimates such as enhanced CEEP and accessibility recommendations and site works | 13,000,000 |

| | |
|--|--------------------|
| A: Total Event Center Downtown New Construction | 200,000,000 |
|--|--------------------|

Available Funds

| | | |
|---|-------------------|--|
| Debt obtained for Event Centre in 2020 | 90,000,000 | |
| Less: Project costs to date | | |
| KED Project - cancelled | 4,380,000 | |
| Sudbury Arena Consultant costs | 200,000 | |
| South District Land Assembly including demolition costs | <u>20,420,000</u> | |
| Total Costs committed to date | <u>25,000,000</u> | |

| | |
|---|-------------------|
| B: Total Remaining Event Center Debt | 65,000,000 |
|---|-------------------|

| | |
|--|--------------------|
| C: Maximum Additional Debt Required (A-B) | 135,000,000 |
|--|--------------------|

Staff anticipate the additional debt would be secured when market conditions and the project's cash flow requirements indicate the funds should be obtained. For the purposes of this report, staff assume an interest rate of 4% and a 30-year repayment term. This would produce an annual repayment requirement of \$7.8 million, funded by a combination of property taxes, facility operating revenue and incremental revenue as described below.

Revenue Sources

As with previous reports, BBB's analysis notes a new event centre can produce a net revenue increase. This is due to increased utilization, higher capacity, more suite revenues, more event revenues, additional sponsors and by adopting operating efficiencies possible when new technology and work processes can be incorporated into the facility's operations.

Property Taxes

Property taxes need to be part of the revenue sources used to repay the debt obligation described here. There are two options:

Option 1: Redirect a portion of the funds generated from the four-year special capital levy for roads in 2028 after the current four-year plan is complete. This levy will generate \$28 million in 2028. Assuming the debt proceeds will be required by 2026, with annual repayments beginning in 2027, existing reserves could be used to address any 2027 payment.

Option 2: There could be an incremental increase in the tax levy of 0.4% per year beginning in 2025 for four years up to 2028. This increase, combined with the potential increase in the Municipal Accommodation Tax described below, provides sufficient funds for debt repayments that would begin in 2027.

Municipal Accommodation Tax

Considering the Event Centre's anticipated impact on the hospitality sector, it is reasonable to consider increasing the municipality's Municipal Accommodation Tax and applying the incremental revenue to repay the debt obligation recommended in this report. For example, an increase in the MAT to 6% would generate approximately \$600,000 in the municipal portion based on today's activity levels, producing an alternative funding source equivalent to approximately 0.2% of the tax levy to support the repayment obligation associated with the debt financing described in this report.

Ticket Surcharge

As described in the *2017 Proposed Sports and Entertainment Centre Feasibility and Business Case Assessment*, and reiterated in the *Sudbury Events Centre Update Report*, a ticket surcharge of \$2.50, added to the price of each ticket was anticipated. This is a typical revenue source for other comparable facilities and is generally used to fund a capital reserve account to "preserve the long-term maintenance and improvement of the arena" and to serve an additional revenue source to help pay for facility operations. Revenue projections are described in Table 7, below, and represent an amount approximately equivalent to 0.17% of the tax levy:

Table 7: Ticket Surcharge Annual Revenue Projections

| | Year One | Year Two | Year Three | Year Four | Year Five |
|-------------------|-----------|-----------|------------|-----------|-----------|
| 2021 ⁸ | \$574,800 | \$589,200 | \$603,900 | 619,000 | 634,500 |

Community Participation

While the municipality's commitment of the majority of capital funds is key to the project's success, BBB notes experience in other communities shows the potential exists to offset up to 15% of the capital costs (approximately \$30M) via private participation. Once the location and building type decisions have been made, the project can be viewed as a "Community Project" where all sectors of Greater Sudbury are encouraged to make the project as successful as possible.

Preliminary Economic Impact Assessment

Economic impact refers to the employment and the value-added GDP impacts experienced by residents of Greater Sudbury, and across the province. Employment impacts are measured in jobs. This includes full-time, part-time, seasonal employment, as well as those who are employed and self-employed. Value-added (also referred to as Gross Domestic Product) measures the economic value created through the production of goods and services and is one of the most used indicators of economic activity. Value-added impacts consist of the following:

- Labour income, which includes wages and salaries and supplementary labour income (benefits) to workers.
- Business income, which includes net before-tax income of unincorporated business and corporate business income before deductions for depreciation, interest, and corporate income taxes.
- Government income, which consists of indirect taxes as well as goods and services purchased from the government. Indirect taxes include taxes such as sales taxes and property taxes but exclude personal income taxes and corporate income taxes.

To understand the potential economic benefits that could be realized with new a event centre, staff used the Tourism Regional Economic Impact Model (TREIM), a data analysis simulation tool provided through the provincial government, to understand the economic development potential.

⁸ PwC. *Sudbury Event Centre Update Report*. June 2021.

GDP Impact of a New Event Centre

The value-added GDP impact associated with the initial \$200 million in capital investment into a new event centre is approximately \$53 million on a direct and indirect basis. As a result of re-spending of labour income and/or profits earned in the direct and indirect industries, a further \$22 million has been estimated for induced impacts. This results in an overall impact to Greater Sudbury's GDP of \$75 million. This includes an estimated \$53M in salaries and wages that would support 586 jobs in Greater Sudbury, and a further \$21M is estimated in total taxes payable to all orders of government.

Considering the expected redevelopment of the South District that includes a new event centre, a hotel, conference facility, and a parking structure with commercial space the opportunity has the potential to realize significant economic benefits. By realizing these projects, the value added associated with an assumed capital investment of \$265M is approximately \$100M to Greater Sudbury's GDP, which includes an estimated \$71M in salaries and wages that support approximately 785 jobs in Greater Sudbury.⁹

To further understand the potential economic impact of the South District, refer to, *Greater Sudbury Event Centre Update and Future Direction, Appendix B: Supporting Information*, of the September 26th, staff report to Council.

Event Marketing

As previously reported to Council in the September 26, 2023 staff report, Economic Development staff examined the potential for increased activity based on a new event centre. The opportunity of a new spectator facility located in the South District of Downtown Sudbury that includes increased seating capacity, increased rentable space and a new attendee experience, would be one of the largest in northern Ontario. With this facility, Greater Sudbury could attract larger national and international sporting events, trade shows and large convention groups producing a projected economic impact of \$13 million dollars.

Like the economic impacts outlined above, when considering the ability to attract new sporting, live performance and trade show events, without the enhanced features identified within the new build it may be more challenging to attract higher attendance events. The facility would be able to accommodate 48 events annually. This does not include the anchor sporting events of the Sudbury Wolves (36 games) or The Five (19 games without playoffs). This would also attract accommodation investment of 42,640 hotel room nights to complement attendee experiences.

A new facility would allow the City of Greater Sudbury, through sport tourism, to attract provincial, national, and international sporting events, trade shows and live performances. With increased seating capacities and the modular multi-use floor plan capabilities the city would attract new elite-level sporting events like volleyball, lacrosse, and floor hockey, which have not been showcased in the north and have a large fan base that travel to attend the events. Table 8, below, identifies a few of the potential sport, conference, and event opportunities that Greater Sudbury would be better positioned to attract:

⁹ Estimates assume New Event Centre-\$200M, Hotel Convention Centre - \$30M, and Parking Structure w/ commercial - \$35M for total investment \$265M

Table 8: Attendance at Selected National Events, 2023

| Event | Approximate Number of Attendees |
|-----------------------------|--|
| Hockey Canada World Juniors | 25,000 |
| Para Hockey Cup | 8,000 |
| Centennial Cup | 23,000 |
| Curling Canada Scotties | 51,255 |
| Curling Canada Brier | 95,338 |
| Basketball-Nationals | 40,092 |

Note: The above referenced attendance numbers were acquired from each organization's 2023 attendance figures

SOUTH DISTRICT PLANNING

Downtown Master Plan

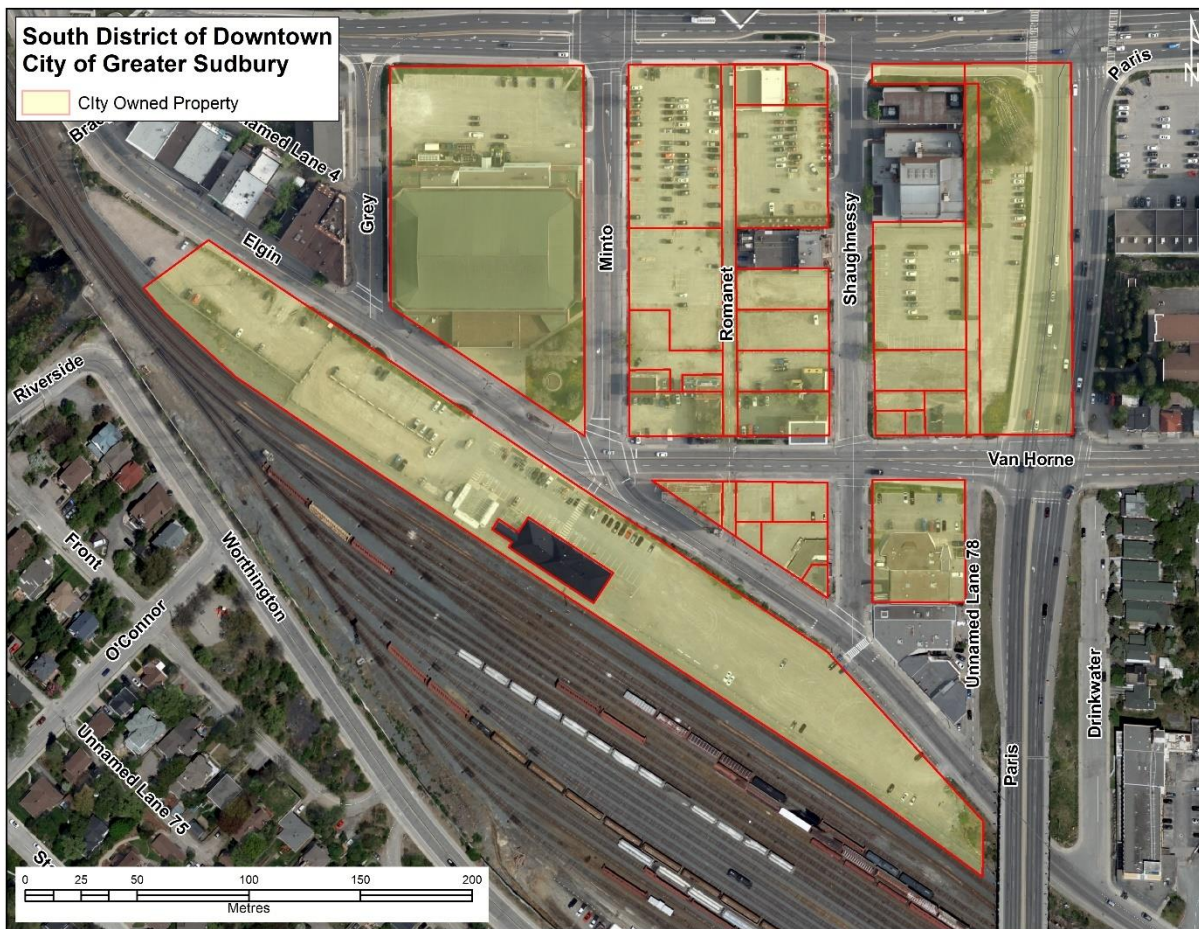
With support from JL Richards & Associates to update the Downtown Master Plan, the work requires approximately 24 months, finishing in late 2025. The next steps include the preparation of a communication plan, website, public engagement sessions, and the finalization of the update/10-year implementation plan. Staff will continue providing updates via Planning Committee at key milestones.

Land Assembly

To increase the feasibility of private development opportunities, industry experts recommend a new event centre with potential for ancillary private development. Council directed staff to assemble several properties to create a larger development site in the downtown South District. In late 2023, the city successfully acquired several sites and is using the expropriation process to acquire one property.

This significantly increases the potential to attract private sector investment, supported by a marketing strategy that will include the development of a compelling vision and value proposition and several development incentives that leverage existing programs.

Figure 1



Activation Plan

The buildings that occupy the recently acquired properties are being demolished to prepare for future development. An Activation Plan will identify temporary landscaping that will make the area attractive for the public and potential investors before and during their redevelopment. This work will be underway this fall in conjunction with the work being done by JL Richards & Associates to update the Downtown Master Plan. Council will receive updates as this work proceeds.

Private Sector Investment

As outlined in *Appendix B-Supporting Information* of the September 26 staff report to Council resulting from the work commissioned by KKR Advisors on precedent projects (Appendix C), BBB Architects reinforces KKR's findings. Both reports note that existing city lands and buildings can provide leverage to increase private sector interest and investment. This leverage is enhanced when the city is making a major capital investment, like a new event centre, in the same area.

BBB Architects acknowledges one thing private sector investors and developers avoid are increased risks and uncertainties, something that a renewal inherently is likely to encounter. Consultation with the private sector in the Spring of 2023 and findings from precedent examples have revealed that greater success can be realized if the City of Greater Sudbury tries to reduce risks for development. This can be achieved in several ways. However, primary to this is that the City undertakes development due diligence on individual sites to understand and quantify issues (and costs) which would impact development of a site (including environmental, geotechnical, site servicing and/or other constraints).

This information would then be provided to prospective purchasers/developers as part of the procurement process. Transparency in terms of development risks, outlining the City's plans to mitigate them and willingness to engage in an open and collaborative partnership with the private sector would further assure developers of the corporation's interest in collaborating to achieve shared desired outcomes.

To reflect both KKR's and BBB's expert advice and leading practices used in successful jurisdictions, a process to secure private development in the South District includes the following five components:

1. South District Preparatory Due Diligence
2. Request for Information (Expression of Interest)
3. Request for Qualifications
4. Request for Development Proposals
5. Contract Negotiations.

This process encourages private sector proposals for collaborative projects. More details on this process can be found on page 50 of the attached report, *City of Greater Sudbury Precedent Projects – Private Sector Entities Assisting in the Provision of Community Infrastructure* prepared by KKR Advisors (Appendix C).

Parking

A successful and vibrant downtown has an adequate parking supply to support local commercial / recreational activity, and residential land uses. However, the challenge for every city is defining and balancing what is needed vs. desired amounts of parking. If parking is over-supplied and easily accessible, most downtown travelers will elect to drive, which causes network congestion that leads to reduced air quality, noise, pollution, and increased safety risks to vulnerable road users. If parking is under-supplied and not easily accessible, downtown business may have difficulty flourishing, if the general population determines that it is too difficult to visit downtown. Therefore, a successful parking plan should be coupled with transportation demand management (TDM) strategies and high-quality infrastructure to encourage sustainable travel mode choices. These typically include walking, biking, and efficient use of public transit.

Staff continue to work with JL Richards on updating the downtown parking study as part of the background work for the Downtown Master Plan update. Early results found that if 271 spaces are removed because of the new event centre development then there will be a shortage of available parking. There is an opportunity to find a parking solution through efforts related to South District redevelopment. Furthermore, the current Community Improvement Plan for Downtown Sudbury includes programs incentivizing parking structures.

Delegated Authority to the Mayor and Chief Administrative Officer

Delegating authority for decisions typically made by City Council to the Mayor and Chief Administrative Officer offers several significant benefits, including the following:

- 1. Timely Decision-making:** By delegating authority to the Mayor and Chief Administrative Officer, decisions can reflect timely responses to the dynamic needs of a large-scale development project, ensuring that opportunities are seized and challenges are addressed in a timely manner.
- 2. Consistency and Accountability:** The Mayor and Chief Administrative Officer, working together, reflect a consistent approach in decision making and applying policies to the development. They can maintain a continuous and focused oversight on the project, ensuring that it aligns with the city's strategic goals and community needs. This also centralizes accountability, making it clearer who is responsible for the success or failure of the project, which can be beneficial for both governance and public trust.
- 3. Alignment with Strategic Priorities:** a large-scale development project like the Event Centre and the related South District developments have a significant impact on the city's future landscape, economy, and community. The mayor and Chief Administrative Officer are positioned to ensure resources are efficiently used to produce a development that contributes positively to the city's sustainable growth, economic development, and community welfare goals.
- 5. Enhanced Collaboration and Negotiation:** A focused leadership team consisting of the Mayor and Chief Administrative Officer can enhance collaboration with stakeholders, including developers, investors, senior governments, and the community. They can ensure stakeholder interests are balanced and integrated into the project. This can also streamline negotiations, as stakeholders would be dealing with decision-makers who have the authority to make commitments and resolve issues promptly.

Several mechanisms will be in place to support Council's oversight responsibilities, demonstrate transparency, and maintain stakeholder trust and accountability throughout the project. This includes routine quarterly project reporting to Council, regular website updates describing project status and progress and regular performance reporting on the project's financial and non-financial performance.

CONCLUSIONS

1. Results from the A2S report support previous conclusions that the existing Sudbury Community Arena will require significant cost to sustain operation and renovations must address both structural deficiencies and regular asset management needs.
2. Findings of the BBB report support previous conclusions that the renovated arena will not address Council's approved service level at a reasonable cost and will create operational challenges to meet programming requirements.
3. Furthermore, outcomes from the BBB report indicated that the new build option is the lowest cost choice that will achieve all of Council's 2017 list of required features, with the least impact to existing tenant and community programming. It also provides the longest-term sustainable model for programming and operations.
4. Design-Bid-Build is the best way to ensure maximum competition, the project's quality and to incorporate cost-effective design in the current market. A new building can be constructed using a conventional Design-Bid-Build public procurement with a reasonable prospect of the facility being open by April 2028.
5. A decision to build a new event centre, combined with recent land assembly within the downtown South District, removes significant constraints on the potential to allow for complementary private sector investment which aligns well with Council's commitment to South District redevelopment.

6. The estimated capital cost of a new building is \$200 million, which requires supplemental funding of \$135 million.
7. The financing plan includes debt at a level that stays within both Council's debt management policy and provincial limits on municipal debt levels. Options to repay the debt exist and include a combination of property tax, non-tax revenue and private contributions.
8. Early results indicate that a new build event centre will trigger the need for parking solutions in the South District which presents an opportunity for this to be addressed through the redevelopment processes.
9. Delegated authority to the Mayor and Chief Administrative Officer to approve documentation, negotiate terms and execute agreements ensures the aggressive schedule and the project's successful on-time completion. This increases the assurance the project schedule can align with the pace required to support potential neighboring private developments. Regular reporting to Council will continue throughout the project.

NEXT STEPS

1. With either a renovated / new build option, staff will prepare, issue, evaluate and award the necessary Request for Proposal to procure a lead architect and engineering team.
2. Should Council select a new build option, staff will advance with processes to identify a site for the new event centre within the South District.
 - a. Once a site has been selected, staff will prepare a Request for Expressions of Interest to begin to engage with the private sector toward realizing south district redevelopment.
3. A process to secure additional debt financing will be undertaken that reflects market conditions and project cash flow requirements.
4. Staff will report to Council on a regular basis and at key milestones with updates on the progress of the Event Centre project as well as the status of redevelopment of the South District.

REFERENCES

City Council September 26th, 2023: ([City Council Meeting - September 26, 2023 \(escribemeetings.com\)](#)), [Sudbury Community Arena Condition Update and Event Centre Options \(escribemeetings.com\)](#), [filestream.ashx \(escribemeetings.com\)](#)([PowerPoint Presentation \(escribemeetings.com\)](#))

City Council July 11th, 2023: [Sudbury Community Arena Condition Update and Event Centre Options \(escribemeetings.com\)](#); [Appendix A Updated Detailed Assessment of Sudbury Community Arena.docx \(escribemeetings.com\)](#)

[City Council August 9th, 2022: Greater Sudbury Event Centre Project Update \(escribemeetings.com\)](#)

Appendix A: A2S Consulting Engineers. Structural Condition Assessment Sudbury Community Arena. 2024.

Appendix B: Brisbin Brook Beynon Architects. Sudbury Community Arena Renewal & New Build Review. 2024

Appendix C: KKR Advisors Precedent Projects – Private Sector Entities Assisting in the Provision of Community Infrastructure. 2023.



STRUCTURAL CONDITION ASSESSMENT

**SUDBURY COMMUNITY ARENA
240 ELGIN ST
SUDBURY, ONTARIO**

Our Project No.: 23131A

October 16, 2023

Prepared for:
City of Greater Sudbury
200 Brady St
Sudbury, Ontario
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TABLE OF CONTENTS

| | | |
|-----|---|----|
| 1. | General Description | 2 |
| 2. | Executive Summary | 2 |
| 3. | Scope of Work | 2 |
| 3.1 | Authorization | 2 |
| 3.2 | Mandate | 3 |
| 3.3 | Survey Method | 3 |
| 3.4 | Information Provided | 3 |
| 4. | Observations and Discussion – Original Building c.1951 | 4 |
| 4.1 | High Roof | 4 |
| 4.2 | Low Roofs | 6 |
| 4.3 | Concourse Level and Grandstand Framing Systems | 7 |
| 4.4 | Foundations | 9 |
| 4.5 | Masonry | 11 |
| 4.6 | Steel Canopy | 13 |
| 4.7 | Lateral Force Resisting System (LFRS) | 13 |
| 5. | Observations and Discussion – Stair Additions c.2000 | 13 |
| 5.1 | Low Roofs | 13 |
| 5.2 | Concourse Level | 14 |
| 5.3 | Foundations | 15 |
| 5.4 | Masonry | 15 |
| 5.5 | Lateral Force Resisting System (LFRS) | 16 |
| 6. | Observations and Discussion – Club Seating and Lounge Addition c.2006 | 16 |
| 6.1 | Low Roof | 16 |
| 6.2 | Concourse Level | 16 |
| 6.3 | Foundations | 17 |
| 6.4 | Lateral Force Resisting System (LFRS) | 17 |
| 7. | Recommendations | 17 |
| 7.1 | Immediate | 17 |
| 7.2 | Short-Term | 19 |
| 7.3 | Long-Term | 22 |
| 7.4 | Optional | 22 |
| | Appendix A – Limitations | |
| | Appendix B – Photos | |
| | Appendix C – Previous Reports | |

1. GENERAL DESCRIPTION

The Sudbury Community Arena is a steel and reinforced concrete-framed, 2-storey building clad with uninsulated, composite masonry walls that was originally constructed c.1951. Significant additions were completed to the arena c.2000 (new stair additions in each corner) and c.2006 (club seating and lounge expansion). Numerous, relatively minor renovations and repairs have been completed throughout the building's history.

2. EXECUTIVE SUMMARY

The original arena structure is in fair condition with several deficiencies noted requiring repair, compensating construction, and/or replacement to maintain the performance level of the structural elements. Recommendations for additional investigation to better define some deficiencies, or to expose anticipated deficiencies, are outlined.

Structure associated with the additions was generally found to be in good condition where reviewed.

The original roof areas were designed and constructed to an older version of the National Building Code of Canada that did not require consideration of snow accumulation loads adjacent to high roofs and/or obstructions. Most of these areas are currently under snow watch (i.e., snow depths are regularly reviewed during the winter and snow is removed when depths exceed recommended safe limits) to defer the cost associated with the anticipated compensating construction.

Roof leakage is widespread and manifesting in staining at the underside of the wood deck at the high roof, deterioration at the northwest corner, and peeling paint on some of the perimeter masonry walls. Leaks should be identified and repaired in the short term with the understanding that wholesale replacement may be warranted.

Water infiltration through cracks and/or joints in the foundation walls was evident around the perimeter of the building and is anticipated to require extensive excavation, concrete repair, and waterproofing to mitigate continued water infiltration and structural deterioration.

Relatively minor brick repairs (i.e., replacement of cracked units and repointing of joints) is required at several locations on the building exterior to maintain the structural capacity of the wall and mitigate water infiltration and associated deterioration.

Further review and testing of the Main Entrance Lobby floor structure is recommended to address concerns regarding exposure to excessive levels of moisture and chlorides.

The precast panels at the Main Entrance are in poor condition and warrant replacement.

3. SCOPE OF WORK

3.1 Authorization

This report was prepared by Steve Cairns, P.Eng. of A2S Consulting Engineers at the request of Nick Zinger of the City of Greater Sudbury for the purpose of determining the general condition of the existing building structure.

3.2 Mandate

The purpose of our review is to complete a walkthrough of the existing building to facilitate a visual inspection of a rational sampling of building finishes, components (where applicable) and structural elements (where possible) so as to develop an opinion on the condition of the existing structural systems based on previous and current uses. This scope of work does not include an exhaustive review of observed conditions against all building code requirements, by-laws or other legislative requirements, all of which can change over time and may or may not retroactively apply to the building.

Our review does not include the removal of material (including finishes), exploratory probing or the use of specialty equipment unless specifically noted in our report.

Unless specifically noted, no structural analyses were performed on any component of the existing building structure. A2S Consulting Engineers assumes no responsibility or liability for the adequacy of the original structural design or the current capacity of the structural systems.

Only conditions observed and noted in our report can be assumed to have been reviewed during our walkthrough. All conclusions and/or recommendations pertaining to the condition of the building structure are based on extrapolations and interpolations of the conditions observed.

This report is intended to be read in its entirety, including the scope of work, limitations, and all appendices. No part of this report should be read in isolation or taken out of the context of the complete report.

3.3 Survey Method

The building was reviewed by Steve Cairns, P.Eng. of A2S Consulting Engineers on August 8, 2023. During our review, the weather was generally clear with an ambient air temperature of 19°C.

3.4 Information Provided

The following drawings were available for our review:

| DATE | DRAWING TITLE/DESCRIPTION | AUTHOR |
|-----------|---|---|
| 1950 | Sudbury Community Arena – Architectural (incomplete) | J. B. Sutton |
| 1974 | Sudbury Arena Renovations – Structural (incomplete) | Morrison, Hershfield, Burgess & Huggins, Ltd. |
| Feb 2000 | Stair Additions and Life Safety Retrofit – Structural | Halsall Associates Ltd. |
| Mar 2000 | Sudbury Arena Floor Replacement – Structural | Northland Engineering Ltd. |
| Sept 2006 | Event Enhancement Project – Structural (prelim or incomplete) | CDCD Engineering Ltd. |
| Sept 2006 | Catered Lounge Renovation – Structural | Northland Engineering Ltd. |
| Nov 2013 | Arena Ramp & Slab Repairs – Structural | J. L. Richards & Associates Ltd. |
| Dec 2015 | Sudbury Arena Platform Upgrades | A2S Consulting Engineers |
| Jul 2016 | 2016 Emergency Repairs (Northeast Stair Addition) | A2S Consulting Engineers |

| DATE | DRAWING TITLE/DESCRIPTION | AUTHOR |
|----------|---|--------------------------|
| Feb 2017 | Steel Framing Repairs (Northeast Stair Addition) | A2S Consulting Engineers |
| May 2018 | Sudbury Arena Entrance Repairs (Northwest Stair Addition) | A2S Consulting Engineers |
| Mar 2021 | Precast Cladding Restoration | A2S Consulting Engineers |

The following documents were available for our review:

| DATE | DOCUMENT | AUTHOR |
|----------|--|--------------------------|
| Mar 2016 | Zamboni Slab Surface Repairs | A2S Consulting Engineers |
| May 2016 | Review of Stair Additions | A2S Consulting Engineers |
| Nov 2018 | Structural Review for Partial Re-Roofing Project | A2S Consulting Engineers |
| Mar 2019 | Main Entrance Structural Review for Partial Re-Roofing | A2S Consulting Engineers |
| Apr 2019 | Main Entrance Precast Concrete Panel Review | A2S Consulting Engineers |
| Jun 2023 | CA Report | Asset Planner |

Building Staff accompanied us during our review and provided commentary on issues related to building maintenance and/or their observations of current building performance. We cannot attest to the integrity, knowledge or accuracy of the persons interviewed.

4. OBSERVATIONS AND DISCUSSION – ORIGINAL BUILDING C.1951

4.1 High Roof

The original, high roof structure above the ice, Grandstands, and Concourse Level generally consists of nailed-laminated timber (NLT) decking spanning between structural steel beams and custom, structural steel trusses that span the width of the arena in the north-south direction.

4.1.1 NLT Deck

Unless noted below, the NLT deck was generally found to be in good to fair condition where reviewed.

We noted several areas of apparent staining at the underside of the NLT deck on all sides of the building, closer to the low side of the roof, suggesting excessive exposure to water from above. Continued and prolonged exposure to moisture will lead to rot in the wood, reducing the performance level of the structure. Further investigation is recommended to identify if exposure has damaged the wood members, which could warrant localized replacement.

Building Staff indicated that the High Roof leaks persistently at the southwest corner, where we observed staining at the underside of the NLT deck and peeling paint on the masonry wall below. It is critical that active leaks be addressed in a timely manner to mitigate the risk of prolonged exposure and associated deterioration of structural elements.

Approximately eight (8) openings have been cut through the NLT decking around the perimeter of the high roof. The purpose of the openings is not immediately obvious but may have been intended to act as passive vents to help keep

the roof cooler in the winter and mitigate ice-damming. The size of the openings is such that new support beams around each opening, spanning between the steel roof trusses are warranted to reinstate the capacity of the NLT deck at these locations.

4.1.2 Structural Steel

The structural steel beams, trusses, and associated bracing members were generally observed to be in fair to good condition with no obvious signs of structurally significant deterioration or distress (i.e., excessive deflection, warping, buckling... etc.).

Light corrosion was observed on most structural steel members in the High Roof. None of the corrosion observed is indicative of an appreciable reduction in the performance level of the structure, in our opinion. Cleaning and repainting the steel structure, while not immediately or urgently required at this time, would improve the long-term durability of the members, and is recommended.

4.1.3 Steel Framing Embedded in Perimeter Walls

Steel columns around the perimeter of the building appear to have been encased within masonry pilasters, which are visible from Concourse Level on the interior (refer to *Figure 1*, below). Existing details describing the masonry wall assemblies are limited, but generally indicate that they are an uninsulated, composite masonry consisting of 90 mm clay brick and 140 mm and 190 mm concrete blocks.

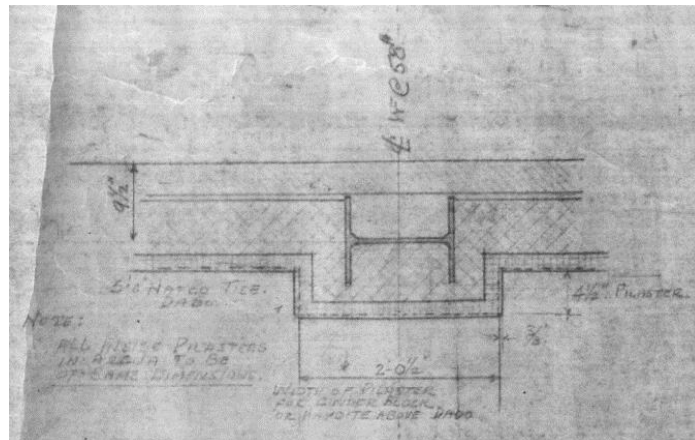


Figure 1: Anticipated masonry pilaster detail at perimeter steel columns (c.1951).

The lack of insulation in the walls and around the columns will allow the steel to cool as temperatures drop during the winter. Water vapour from the building interior that comes into contact with the steel will condense on the cold surface, creating an environment that could potentially promote accelerated deterioration of the steel and surrounding masonry.

Steel beams around the perimeter are similarly at risk. Where reviewed on the interior, we did not identify any obvious signs of deterioration or excessive condensation.

It would be prudent to expose several of these columns and beams by removing masonry on the interior (where applicable) and exterior of the building to determine the general condition of these members.

4.1.4 Snow Loads at Gable Ends

The National Building Code of Canada (NBC) first formalized the concept of increased snow loads due to drifting and blowing snow caused by higher roofs and obstructions in 1965. Our previous work on the lower roofs of the Sudbury Community Arena (refer to our reports of November 2018 and March 2019, attached in Appendix C) generally confirms that only the base, ground snow load was considered in the original design – as was typical of the period.

Building Codes are typically not retroactive, meaning that buildings designed to previous editions need not be upgraded to meet newer requirements. However, 'Commentary L: Application of National Building Code of Canada (NBC) Part 4 of Division B for the Structural Evaluation and Upgrading of Existing Buildings' of the Structural Commentaries (User's Guide – NBC 2015: Part 4 of Division B) identifies the NBC 1965 changes to drifting snow as a *benchmark change* that should be considered in the evaluation of all existing structures.

The gables at the east and west ends of the High Roof are large enough to meet the definition of a roof obstruction, resulting in increased, localized snow loads due to drifting snow that were unlikely to have been considered in the original design. The roof structures immediately adjacent to these gables are anticipated to be structurally deficient and in need of compensating construction to meet minimum Code requirements.

Policies and procedures should be developed to implement a *snow watch* protocol on the east and west ends of the High Roof. This entails regular monitoring of the depth of snow on the roof(s) in question with plans to remove then snow when depths reach 575 mm. As discussed in 4.2.3 below, a similar program is already in force at other roof locations.

Snow accumulation calculations considered in the Ontario Building Code (OBC) are inherently generic to accommodate a wide variety of conditions and often yield conservative snow load design values and extents. A wind-tunnel study of the building that considers prevailing winds, building geometry, thermal properties of the roof, and the surrounding landscape is likely to result in a net reduction to the extent of roof reinforcement required and is recommended.

4.2 Low Roofs

Original, low roof structures generally consist of a concrete slab (assumed to be 64 mm thick) and a metal pan deck spanning approximately 600 mm to 750 mm between open-web steel joists and structural steel beams.

4.2.1 Structural Steel

Building Staff have previously identified concerns regarding ongoing leakage in part of the 1951 Low Roof at the northwest corner of the arena, which does not yet appear to have been addressed. We noted evidence of excessive water infiltration and corrosion at the open-web steel joists and underside of the steel pan that appears to have worsened since our review in 2018 (refer to Appendix C). The continued and progressive deterioration of the structure is concerning but appears to be limited to a relatively small area nearest the northwest stair. Further review is recommended to confirm if the extent of deterioration observed is structurally significant and if it affects previously proposed reinforcing schemes to address snow loads as described in 4.2.3 below.

It is imperative that roof leaks be addressed in a timely manner to mitigate progressive deterioration of the structure. If left unaddressed, corrosion of the structural members could accelerate over time, eventually resulting in a reduction in the performance level requiring extensive compensating construction.

Our review of the roof structure over the Main Entrance Lobby in March 2019 was limited by the plaster ceiling finishes. Where reviewed, we noted generally light surface corrosion on the open-web steel joists, beams, and underside of the steel pan deck. We were able to access a small area of the west side of this roof during our current review and noted similar conditions, although our access and review was significantly restricted by existing mechanical systems.

We did not observe any obvious signs of excessive water infiltration in the ceiling finishes below the Low Roofs, nor were any known areas of ongoing leakage identified by Building Staff.

4.2.2 Steel Framing Embedded in Perimeter Walls

Steel members supporting the Low Roofs that are located in the perimeter walls are subject to the same risks as steel members supporting the High Roof as identified in 4.1.3 above. Although we did not identify any obvious evidence that may be associated with excessive corrosion or water infiltration at these conditions, exploratory openings are recommended at several locations to verify the condition of the steel structure.

4.2.3 Snow Loads

As discussed in 4.1.4 above, we have previously confirmed (refer to Appendix C) that the 1951 Low Roofs were not designed to accommodate increased snow loads due to drifting from the adjacent, higher roof. Extensive reinforcement is anticipated throughout all original Low Roofs to meet the minimum life-safety standards outlined in the OBC.

It is our understanding that these roofs currently remain under snow watch and that policies and procedures are in place to ensure that snow depths on the Low Roofs never exceed 400 mm. Active snow watch should continue until either the roof structures are reinforced, replaced, or the building is unoccupied but a slightly deeper snow limit is permissible as discussed in 7.1.1 below.

4.3 Concourse Level and Grandstand Framing Systems

The suspended Concourse and Grandstand Floor structure generally consists of cast-in-place concrete slabs (thickness unknown) and beams spanning between structural steel beams and columns.

4.3.1 Concrete

We did not observe any obvious signs of distress or deterioration in the Concourse and Grandstand Floor framing, where reviewed.

Cracking was observed on the surface of the concrete at several locations across the Concourse Level but did not appear to be consistent with that associated with structural distress, but rather due to initial shrinkage in the concrete during construction, in our opinion.

4.3.2 Structural Steel

Structural steel members below the Concourse Level and Grandstands were generally observed to be in fair to good condition with areas of light, surface corrosion observed throughout.

While beyond the scope of a typical Structural Condition Assessment, we noted that the structural steel members did not appear to have any fire protection applied (i.e., spray-applied fireproofing, rated enclosures, intumescent paint... etc.). Fire safety requirements should be reviewed and confirmed by a qualified Building Professional with the expectation that all steel members supporting floors be protected in accordance with the minimum requirements of the OBC.

4.3.3 Main Entrance

Concrete elements in buildings near entrances with high levels of traffic from outside are often at risk of accelerated deterioration due to elevated exposure to chloride-contaminated water from de-icing salts. Chloride ions will penetrate deeper into the concrete over time and with frequent exposure, eventually reaching a critical concentration at the depth of the embedded steel reinforcement, or supporting steel structure below, resulting in an accelerated cycle of deterioration. If left unaddressed, deterioration of this nature will eventually reduce the performance level of the structure, requiring remedial measures, compensating construction, and/or replacement. The concrete and steel structure at, and around, building entrances are at elevated risk of experiencing this type of deterioration. As most patrons enter the building from the Main Entrance on the south side, we would expect that the structure in this area is especially vulnerable.

We could not review the underside of the concrete slab at the Main Entrance Lobby during our walkthrough due to the ceilings below. However, we did not identify any obvious signs of excessive water infiltration in the finishes. Similarly, we did not identify (nor were we notified of) any obvious issues associated with debonding of the tile flooring on the top side, which could be an indicator of issues in the concrete below.

Chloride ion content in concrete can be determined by extracting concrete cores and testing for chlorides at various depths along the core to develop a profile of the concentration levels. Once the concentration reaches a critical level at the depth of the reinforcement, the structure is at risk of accelerated deterioration in the presence of sufficient moisture. Typical remediation strategies to mitigate the effects of chloride contaminated concrete include localized replacement of corroded reinforcing steel, regular application of concrete surface sealers to mitigate exposure to moisture, and/or the installation of sacrificial cathodic anodes. In severe cases, contaminated concrete is replaced. We recommend sampling the chloride ion content in the slab at the Main Entrance at a minimum of three (3) locations to determine the chloride ion profile in the concrete.

The Main Entrance Stair structure could not be reviewed during our walkthrough as it is above the finished ceiling within the team Dressing Rooms and associated showers. However, we anticipate that they are framed with structural steel.

Building Staff noted that the stairs require regular maintenance to address concerns associated with tripping due to the stair tread nosing plates separating from the terrazzo infill. We did not identify any locations where the nosing plate was not reasonably tight to the terrazzo during our walkthrough but did note some cracking in the terrazzo at several treads.

It is reasonable to expect that the stair structure is similarly exposed to elevated levels of moisture and chlorides, like the Main Entrance slab. Corrosion of steel elements in the stair treads could manifest in the deformation of the nosing plate and/or cause cracking in the terrazzo finish. Review of the stair structure from below is highly recommended. Openings in the ceilings below will be required to sufficiently expose the structure to facilitate further review.

4.3.4 East Entrance (Minto Street)

We noted evidence of excessive exposure to moisture and corrosion of the steel-framed stair members from below at this location. Exposed flanges of steel beams at the stair landing were showing signs of localized corrosion but we did not identify any obvious section loss that would constitute a reduction in the performance level of the structure.

The underside of the concrete landing slab showed signs of relatively minor water infiltration through small cracks but was not extensively cracked nor displaying surface delaminations that are often associated with accelerated deterioration of the reinforcing steel. Similar to the Main Entrance slab discussed above, we recommend a minimum of two (2) concrete samples for chloride ion testing at this location.

4.4 Foundations

The limited existing architectural drawings available indicate that the original building foundation generally consists of reinforced concrete basement walls supported on reinforced concrete footings spanning between a combination of timber and steel driven piles. A conventional, reinforced concrete slab-on-grade (of unknown thickness) is noted throughout.

4.4.1 Concrete

The slab-on-grade was generally found to be in fair condition with several uneven areas and/or cracks observed throughout unless noted. Cracking generally seemed consistent with relatively minor settlements in the building foundations and/or soils below the slab.

Deterioration of the slab-on-grade in the area adjacent to the snow melt pit and tunnel access to the ice surface (due to abrasion from the Zamboni tires) has been an issue since at least 2013 (refer also to our report of March 2016, attached in Appendix C). Building Staff confirmed that ongoing maintenance currently includes levelling the slab depressions with a pavement repair product (FastPatch DPR by WVC0), which is not an appropriate concrete repair material. Concrete deterioration will continue, and the base slab will progressively wear down, likely resulting in increased areas needing repair. Partial replacement is anticipated in this area to reinstate the concrete slab over the long term.

The slab that slopes from the Zamboni area up to the exterior of the building is not a slab-on-grade, but rather a reinforced concrete slab that spans over the Mechanical Room below. Topside deterioration of this slab is relatively minor in comparison to that observed at the adjacent floor at this time, but it is critical to note that all repairs to this slab must be completed under the supervision of a Professional Engineer. Inappropriate repair methods and/or materials may exacerbate damage to the slab, resulting in a reduction in the performance level of the structure and more invasive repairs or complete replacement.

Leakage into the Basement Level, likely through the concrete walls, was generally observed around the perimeter of the arena:

- Exposed walls in the Mechanical Room at the north end of the building were wet in locations and showing signs of corroded reinforcing steel (i.e., rust staining on the walls, apparent concrete delamination... etc.).
- Building Staff noted that leakage is an ongoing issue along the west wall.
- Parging in the washrooms on the south face of the building was cracked and delaminating.
- Staining in the exposed walls under the East Stair (Minto Street).

Cracks in the concrete walls were generally observed throughout where exposed and are likely the source of most leakage into the Basement. The cracking could be associated with shrinkage in the concrete shortly after construction and/or movement / flexure in the walls under load. Where reviewed, the cracks did not appear to be severe enough as to be associated with a failure in the foundation system and are reasonably typical of concrete work of this vintage.

If left unchecked, this deterioration will accelerate over time as cracks slowly widen and/or embedded reinforcing steel continues to corrode, eventually resulting in a substantial reduction in the performance level of the structure. We anticipate a comprehensive crack repair and waterproofing remedial program will be required throughout to mitigate continued water ingress and associated deterioration of the foundation elements.

The old Coal Storage room (north and west of the Mechanical Room) is showing signs of extensive water infiltration through both the concrete roof slab and the basement walls. Crack repairs and waterproofing should extend up the walls and over the roof slab to mitigate continued water infiltration and structural deterioration. Excavation and waterproofing above the roof slab will be complicated by the large air-handling units currently installed above the slab, which will have to be temporarily relocated to complete the work.

The rink slab was being prepared for the ice-surface installation and was therefore not available for review during our walkthrough. Building Staff did not identify any concerns with the rink slab.

4.4.2 Piles

Existing drawings indicate that the concrete foundations are supported on a combination of structural steel piles (below the steel trusses and Concourse Level at the Main Entrance) and timber piles (around the perimeter of the arena and below the Grandstands). Piles are typically used on sites where the soils near the surface are incapable of either safely supporting, or would settle excessively under, the weight of a building. Piles are driven through the weak soils until they achieve a set refusal criteria, either due to skin friction against deeper, competent soils or when they come into contact with bedrock or very stiff tills.

Specific pile details are not indicated on the available drawings (i.e., capacity, dimensions, refusal and cut-off elevations, materials... etc.) and therefore, we cannot confirm if the timber piles were coated with a preservative prior to installation. The code in force during construction (NBC 1941) did not require that timber piles be treated if they were cut-off below the permanent ground water level, relying on the assumption that no significant biodeterioration mechanism exists when piles are submerged. The challenge with this assumption is that groundwater elevations can change over time, potentially exposing parts of the piles to conditions that could sustain damaging fungal or bacterial growth and associated rot in the wood.

The slow deterioration of timber piles would eventually result in excessive deflections/settlements in the foundations causing cracks to form in concrete and masonry walls, or other similarly brittle elements. This damage would likely progress, possibly even accelerating, with time as deterioration continues.

Although it is often difficult to definitively verify the root cause of cracks in concrete elements, as there are many factors that can and will contribute, we did observe cracks in the foundations and perimeter masonry walls (refer to 4.5 below) that could potentially be associated with differential movement in the foundations. Some initial settlement is to be expected in the years immediately following construction but movement that continues or occurs decades aft

er construction can be an indicator of distress in the foundations. It is not possible to differentiate between new, existing, or worsening cracks during a single review.

In addition to ongoing monitoring to identify active cracks in the building, the Owner may wish to pre-emptively expose a representative sample of the timber piles for inspection and testing. This work should be completed by an individual or firm with extensive experience in the investigation and remediation of timber piles. The excavations necessary to sufficiently expose the piles will be intrusive and likely have to be completed during the summer months when building use is limited.

4.5 Masonry

As previously mentioned, the perimeter masonry walls generally appear to be an uninsulated, composite assembly consisting of 90 mm clay brick and a combination of 140 mm and 190 mm concrete masonry units (refer to Figure 2, below). The nature of a composite masonry wall is that both the brick and the concrete masonry are relied upon to work together to resist applied loads.

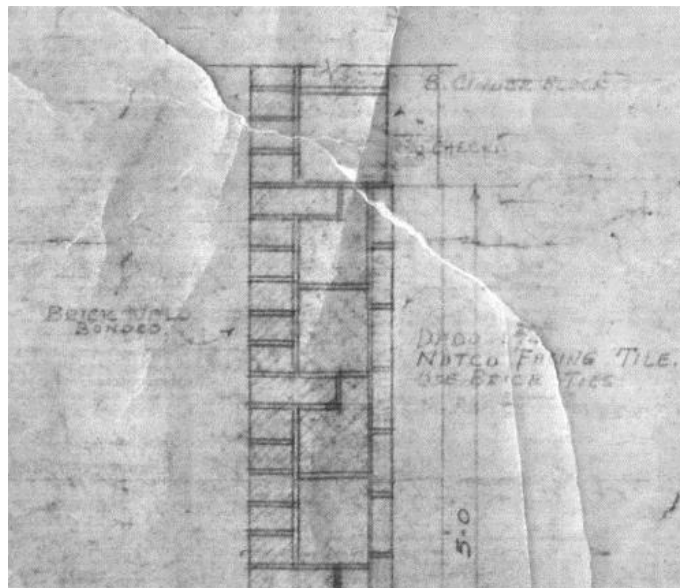


Figure 2: Typical composite masonry wall assembly c.1951.

Masonry walls on the interior of the building are, for the most part, partitions and not structural in nature. There will undoubtedly be walls throughout the building that were originally relied upon, or have since been modified, to carry some building loads.

4.5.1 Concrete Masonry Units

Exposed concrete masonry walls were observed to be in fair condition with predominantly vertical cracking noted throughout. Building Staff indicated that the walls are regularly repainted in all areas accessible to the public, which can make it more difficult to identify minor defects and/or evidence of recent movement.

Cracks can form in masonry walls in response to differential settlement in the foundations, a lack of control joints to control shrinkage shortly after construction, abrupt changes in wall geometry... etc. The severity and frequency of the cracking observed was not excessive or indicative of an immediate structural concern, in our opinion.

Peeling paint was observed at the tops of walls at several locations along the north and west walls, suggesting excessive water infiltration through the roof (most likely) and/or masonry cladding (less likely). Paint was peeling lower on the wall at the southwest corner, which was identified by Building Staff as being a known area of ongoing leakage.

We identified cracked and loose masonry over the opening to a Storage Room below the Grandstands at the northwest corner of the arena. Compensating construction is required to adequately support the remaining masonry over the opening and mitigate the risk of further damage and/or collapse.

4.5.2 Brick

Brick deterioration on the exterior of the building was generally minor, predominantly manifesting in spalled units near the tops of the walls due to water infiltration and subsequent freezing and thawing cycles. Cracks were observed on all sides of the building but did not appear to be excessive or indicative of an immediate structural concern. The most prominent cracks were observed on the north face of the arena, directly below the c.2006 Addition.

The original brick is a structural component of the composite wall assembly, which differs significantly from most modern masonry wall assemblies where the brick is a sacrificial veneer that does not contribute to the overall structural performance of the wall. Damaged and/or deteriorated brick masonry represents a reduction in the performance level of wall assembly and requires remedial intervention anticipated to consist of localized repairs or replacement as appropriate.

It is important to reiterate that the brick is a structural component on this building and cannot simply be removed and replaced to accommodate new insulation and/or waterproofing systems without compensating construction.

4.5.3 Precast Panels

Precast concrete fascia panels and accent trims adorn the south, east, and west elevations.

A2S attended the arena in February 2019 to complete a review of the precast panels at the Main Entrance in response to concerns raised by Building Staff (refer to our report of April 1, 2019, attached in Appendix C). We generally observed extensive panel cracking, concrete delamination, failed sealant between precast units and brick masonry, and damaged panel support elements. Immediate temporary supports were recommended and installed at two (2) locations, with further investigation and repairs recommended. It is our understanding that no further work has been done at this location. Precast panels at the Main Entrance continue to show signs of structural distress and generally poor performance. Complete replacement of the precast elements at the Main Entrance is recommended.

Precast elements on the east face of the building appear to be performing much better than those at the Main Entrance, with failed sealant between precast units and the brick masonry being the primary concern at this time. Failed sealant will promote water ingress and accelerate the deterioration of the backup and supporting elements. We identified two (2) locations where trim units were damaged on the east face and in need of repair.

4.6 Steel Canopy

A steel canopy structure addition has been installed over the Zamboni door on the south elevation of the arena. Existing documentation describing the canopy was not available for our review but is assumed to have been erected between 2009 - 2010.

The steel structure is supported on piled foundations at one end and bolted to the original concrete foundation wall at the other but is otherwise independent of the existing building.

All framing members are exhibiting light to moderate surface corrosion while the corrugated metal cladding was found to be in generally good condition. We did not identify any obvious deterioration consistent with a reduction in the performance level of the structure where reviewed. Deterioration will continue to progress, possibly at an accelerated rate, which will eventually compromise the structure if the steel is not cleaned and recoated.

4.7 Lateral Force Resisting System (LFRS)

Loads due to high winds and seismic events are resisted by a buildings lateral force resisting system (LFRS). The LFRS of the original arena generally consists of a combination of the steel trusses (in the north-south direction only) and unreinforced masonry shear walls between the structural steel columns around the building perimeter. We anticipate that the interior, masonry walls are generally non-loadbearing partitions that are not contributing significantly to the LFRS.

We note that there is distinct lack of masonry walls above the Concourse Level in the east-west direction. Numerous openings were made through the walls as part of the c.2000 additions and most of the original walls along the north side of the arena were removed as part of the c.2006 addition. We did not observe any obvious compensating construction that would reinstate the LFRS load path to accommodate the masonry wall removals.

LFRS design requirements in the NBC and OBC, specifically those associated with seismic events, have changed significantly since the design and construction of the original building. The code in force when the arena was originally constructed (NBC 1941) required that buildings be designed to resist forces due to earthquake only "in regions where destructive earthquakes are probable", which Sudbury was not. Any plans to significantly extend the useful life of the arena should include for a seismic retrofit and upgrade of the existing structure to meet current standards.

A seismic retrofit would generally involve the construction of new braces and/or walls around and throughout the building to transfer lateral forces from the roofs and floors to the foundations. These new components would be rigidly connected to the existing structure, necessitating compensating construction at all tie-in points, and bearing on new foundation elements, including new piles.

5. OBSERVATIONS AND DISCUSSION – STAIR ADDITIONS C.2000

5.1 Low Roofs

The roof structures associated with the Stair Additions generally consist of a 38 mm deep steel deck spanning between a combination of structural steel beams and loadbearing concrete masonry units.

5.1.1 Structural Steel

The roof structure was observed to be in good condition with no obvious signs of excessive water infiltration, deterioration, or distress identified where reviewed.

5.1.2 Snow Loads

Existing structural drawings indicate that the roof structures were designed for loads significantly greater than the minimum design snow load (apparently to accommodate future, vertical expansion) but are still theoretically less than the maximum anticipated snow accumulation loads due to drifting, at some locations. It is highly unlikely that snow loads will exceed the total design load of these roofs and an active snow watch is not warranted at this time.

5.2 Concourse Level

The structural floor system in the stair additions generally consist of an 89 mm thick, reinforced concrete slab on 38 mm deep, composite steel deck spanning between structural steel beams and loadbearing concrete masonry walls.

5.2.1 Structural Steel

We attended the building in February 2016 to review the condition of the suspended floor structure at these entrances in response to concerns raised by Building Staff due to the level of corrosion observed on the steel framing (refer to our report of May 2016, attached in Appendix C). Following our review, repairs and compensating construction were completed at the northeast and northwest entrances. Where reviewed as part of the current scope of work, we did not identify any obvious signs of excessive water infiltration and/or continued corrosion of the steel structure on the interior of the building.

Similar structures at the southeast and southwest corners of the arena were deemed to be within acceptable limits in 2016, with a recommendation to remove all corrosion product, recoat the steel, and waterproof the foundation wall to mitigate continued deterioration. During our current review, we noted these recommendations have not been implemented and that the level of corrosion has progressed noticeably since our last visit to site. Compensating construction similar to that completed at the northeast entrance may now be required (i.e., replacement of existing header connections to the steel columns, localized column reinforcement, waterproofing on the exterior, elastomeric coating on topside of the slabs, and reinstatement of the fireproofing). Further review is recommended to determine the current extent of deterioration.

The steel columns on the perimeter of the additions continue to corrode at the base as they remain exposed to the exterior of the building. Significant modifications to the windows, doors, and structure would be required to properly protect the columns from excessive exposure to moisture over the long term. Alternatively, regular and potentially increasingly frequent maintenance will be required to ensure that column deterioration does not progress to the point where the capacity of the columns is compromised.

Installation of an elastomeric coating over the concrete slabs, as previously recommended, will require regular resurfacing to keep the structure protected from excessive exposure to moisture. Should maintenance lapse, we anticipate that corrosion of the steel deck and beams, similar to that observed at the northeast corner, will manifest and require significantly more compensating construction to accommodate.

5.3 Foundations

The stair addition foundations consist of reinforced concrete basement walls supported on a 400 mm thick, reinforced concrete raft slab beneath the footprint of each addition. Raft slabs are commonly used on weak soils as they decrease the risk of differential settlements between elements bearing directly on the slab and their relatively large size minimizes the net increase in pressure on the bearing stratum.

Aside from the leakage at grade (discussed in 5.2.1 above), we did not identify any obvious signs of distress or excessive deterioration in the concrete elements. The foundations at the southwest and southeast additions should be waterproofed as previously recommended (refer to our report of May 2016, attached in Appendix C) to mitigate continued water ingress and associated deterioration.

5.4 Masonry

5.4.1 Concrete Masonry Units

Loadbearing masonry walls generally consist of unreinforced, 190 mm concrete masonry units. Where reviewed, the masonry walls were generally found to be in good condition unless otherwise noted.

Significant cracking was observed in the newer masonry of the southwest addition where it abuts, or straddles, the construction joint to the original building. We anticipate that the cracks are associated with differential settlement between the c.2000 Addition and original building foundations. Damaged masonry units should be replaced with new, cracks repaired, and proper expansion joints provided between the construction vintages to allow them to move independently. Periodic review of the masonry in this area by Building Staff is recommended to identify signs of continued cracking.

New cracking or worsening conditions may be indicative of continued movement in the foundations, which would warrant further investigation.

Step-cracking was observed in the parged masonry at grade, on the exterior of the southwest addition, which is further indication of excessive differential settlement in the addition foundations. All cracks should be repaired to mitigate water infiltration and associated deterioration and reviewed on a regular basis.

At the northwest stair addition, we observed gaps between the steel deck flutes and the masonry in the stair shaft at the Roof Level. Stair walls are typically fire-rated assemblies in which gaps would not be permitted. Unless otherwise confirmed by a qualified Building Professional, the gaps should be sealed with an appropriate firestop material to prevent fire spread from the building to the building exit stair.

5.4.2 Brick

Where reviewed, the brick on the additions was observed to generally be in good condition with no obvious signs of distress, movement, or deterioration.

Unlike the original building, the brick on the c.2000 Additions is a sacrificial veneer that can be removed and/or replaced without compromising the structural capacity of the wall assembly.

5.5 Lateral Force Resisting System (LFRS)

Each addition is independent of the original building above grade and relies on unreinforced masonry walls to resist lateral loads due to high winds and seismic events.

Future modifications to existing loadbearing walls in these areas will result in a reduction in performance level of the LFRS, requiring analysis with compensating construction anticipated.

6. OBSERVATIONS AND DISCUSSION – CLUB SEATING AND LOUNGE ADDITION C.2006

6.1 Low Roof

The roof structure of this addition consists of a 76 mm deep steel deck spanning between structural steel beams.

6.1.1 Structural Steel

The roof structure was observed to be in good condition with no obvious signs of excessive water infiltration, deterioration, or distress, where reviewed.

6.1.2 Snow Loads

Loads considered in the design of this addition are unknown as existing drawings were not available and the structure has not been verified and analysed as part of the current study. It should have been designed for snow loads, including those associated with drifting from the adjacent high roof, in accordance with the OBC 1997.

6.2 Concourse Level

Review of the newer floor structure was limited to that observed from the basement Mechanical Room as existing structural drawings were not available for our review. From this vantage point, the structure appears to consist of a cast-in-place concrete slab spanning between new and existing steel beams.

We did not observe any obvious signs of distress or deterioration, where reviewed.

This addition is far enough from a building entrance that we do not anticipate corrosion associated with excessive exposure to moisture and/or chlorides to be a risk to the structure. Exposure to moisture is still a potential concern at the building perimeter (as it is in any building), but no evidence of excessive water infiltration was noted during our review.

6.2.1 Structural Steel

Newer steel beams have been installed below the concrete slab in the area above the Zamboni ramp that exits on the north side of the building. We anticipate that these beams were installed as compensating construction to accommodate the change in occupancy above from a low roof to part of the Concourse Level. A Building Professional should be retained to confirm if the beams meet the minimum required fire-rating with the expectation that they be coated with new spray-applied fireproofing material.

6.3 Foundations

The limited existing information available suggests that this vertical expansion was constructed on the existing arena foundations. We did not identify any obvious signs of compensating construction at the foundation level.

6.4 Lateral Force Resisting System (LFRS)

Steel braces were visible in the north wall of the addition and are assumed to transfer lateral loads in the newer roof framing to the original perimeter masonry walls below.

As noted previously, we did not identify any obvious compensating construction to account for the removal of several existing masonry wall panels between the existing steel columns. This addition may require compensating construction in any seismic retrofit that may be implemented in the original structure, as discussed in 4.7 above.

7. RECOMMENDATIONS

Where noted, recommended timeframes for further investigation/remediation are provided. Timeframes provided are not to be construed as the definitive remaining lifespan of a particular system, but rather to help identify the urgency of a particular recommendation.

All compensating construction is to be designed by a Professional Engineer, installed by a qualified Contractor, and with the approval of the Chief Building Official.

7.1 Immediate

Immediate recommendations are generally associated with obvious deficiencies in the building or structural elements that are likely to affect the safety of building occupants and should be addressed by the Owner as soon as possible. Patently obvious structural deficiencies identified during our review that, in our opinion, pose an immediate threat to public safety, are noted and will be reported to the Chief Building Official or Authority Having Jurisdiction.

Deferral is not recommended for any of these recommendations.

7.1.1 Maintain Snow Watch

In addition to the low roofs that are currently under snow watch (refer our reports of November 2018 and March 2019 in Appendix C), the gable ends of the High Roof should be similarly monitored during the winter and snow removed once it reaches a depth of 575 mm. Refer to Figure 3 below for roof areas requiring snow watch policies and procedures.



Figure 3: Sudbury Community Arena roof areas requiring snow watch.

Recommendations included in our previous reports included removing snow once it reached a depth of 400 mm, which included an allowance for the weight of workers on the roof during snow clearing operations. The current, revised, recommendation does not include such an allowance but is within safe limits and will result in fewer snow removal events and can be used at all roofs where snow watch has been recommended.

Refer to sections 4.1.4 and 4.2.3 for discussion.

7.1.2 Confirm, Add, and/or Replace Fire Protection

Although some specific conditions have been identified, this report does not include an exhaustive list of all potential concerns associated with fire protection of the building structure. A qualified Building Professional should be retained to confirm the minimum fire protection requirements outlined in the OBC as they apply to the arena structure and to develop repair details to address any deficiencies, as appropriate.

Steel beams supporting the original concrete Grandstand structure and newer steel beams installed below the concrete slab over the Zamboni ramp do not appear to have any fire protection.

Spray-applied fireproofing material was removed from parts of the floor structure at grade in the southeast and southwest stair additions to facilitate review and repairs of the corroding steel in 2016. The fire-rating of this structure must be maintained to ensure that the building exits are serviceable in the event of a fire. Further review of these members is required as foundation leakage has not been addressed and the extent of corrosion appears to have worsened. As the addition of spray-applied fireproofing will hinder this review, the additional investigation should be carried out as soon as possible with the intent of replacing the fireproofing immediately following.

Gaps between the flutes in the steel deck and the masonry stair shaft were observed at the northwest stair addition. An appropriate firestop material should be installed between the flutes to prevent potential fire spread between the building and the exit stair.

Refer to sections 4.3.2, 5.2.1, 5.4.1, and 6.2.1 for discussion.

7.2 Short-Term

Short-term recommendations are generally associated with structural elements that are displaying some degree of deterioration or structural distress that may continue to worsen, possibly at an accelerated rate, and possibly resulting in an unacceptable reduction in the performance level of the structure if not properly addressed. These may also include items that are anticipated to require compensating construction but should continue to perform at their current level if conditions do not change.

Deferral may be possible by implementing regular monitoring, occupancy limits, temporary measures... etc. but must be discussed and considered on a case-by-case basis.

7.2.1 Address Roof Leakage

We observed evidence of leakage through the high roof (i.e., apparent staining on the underside of the NLT deck, peeling paint on the inside face of some perimeter masonry walls on the Concourse Level) and at a section of the low roof at the northwest corner.

A series of test cuts are recommended across the high roof, with a specific focus in the vicinity of masonry walls exhibiting peeling paint, to confirm areas of water leakage and to expose the top surface of the NLT deck in areas where staining was observed below. A thermal scan of the roofs will help to identify areas of leakage and to locate proposed test cuts.

Leaks should be addressed promptly to mitigate water infiltration and the associated risk of deterioration of the structural members. Continued exposure to moisture will eventually result in a reduction in performance level of the structure necessitating replacement and/or compensating construction.

Typical roofing systems have a useful life expectancy of approximately 20 years. We could not confirm the age of that currently installed but anticipate that reroofing is warranted throughout to ensure adequate protection of the building structure.

Refer to sections 4.1.1, 4.2.1, and 4.5.1 for discussion.

7.2.2 Review Corroded Low Roof Structure at Northwest Corner

Corrosion of the existing metal pan deck and open-web steel joists appears to have worsened since our review in 2018 (refer to Appendix C). Further review is recommended to determine the severity of the deterioration and develop compensating construction, which is anticipated.

Structural reinforcing details previously prepared to account for snow accumulation loads on this roof may no longer be appropriate.

Refer to section 4.2.1 for discussion.

7.2.3 Review Underside of NLT Deck

Areas of the NLT deck exhibiting evidence of exposure to moisture should be reviewed in more detail via lift from the Concourse Level. This review is anticipated to consist of a series of readings with a moisture meter and probing from below to identify areas experiencing rot.

This review will be limited in scope due to the access available from the Concourse. As noted in section 7.2.1 above, a thermal scan of the roofs will help to identify areas of leakage and to locate areas for up-close review. An expanded investigation may be warranted if the wood is found to be in distress beyond areas that are visibly water stained.

Refer to section 4.1.1 for discussion.

7.2.4 Reinforce Openings in NLT Deck

Compensating structure around each of the openings through the NLT deck at the High Roof is anticipated to consist of new steel beams connected to the existing steel frame.

Refer to section 4.1.1 for discussion.

7.2.5 Address Foundation Leakage

Evidence of water leakage through the perimeter foundation walls was observed during our review, and has been reported by Building Staff, throughout the arena (including at the southeast and southwest stair additions).

We anticipate that an extensive concrete repair and waterproofing program will be required to mitigate continued leakage and associated risk of deterioration to the building structure. This work will likely involve excavation around the building, crack repairs in the concrete elements, and the application of a waterproofing membrane.

Concrete repairs and waterproofing are similarly anticipated to the roof structure over the old Coal Storage room at the west end of the Mechanical Room. Excavation to expose the concrete slab will require the temporary removal of several, large air-handling units currently resting on grade, above the slab.

Refer to sections 4.4.1 and 5.3 for discussion.

7.2.6 Maintain Exposed Steel Columns at Stair Additions.

The bases of the steel columns at the c.2000 Additions will require frequent cleaning and reapplication of epoxy paint or zinc-rich primer to mitigate continued corrosion due to exposure to water and chlorides from de-icing salts. Columns that were repaired and recoated at the northeast addition in 2016 are already showing signs of continued corrosion at the base.

Refer to section 5.2.1 for discussion.

7.2.7 Install Lintel Over Storage Room Opening Below Grandstands

A steel lintel is required over the Storage Room door frame to support the masonry above. The remaining masonry will continue to crack and eventually shake loose with continued use of the door in its current condition.

Refer to section 4.5.1 for discussion.

7.2.8 Crack Monitoring

The cracks identified in the masonry walls of the southwest stair addition should be repaired and monitored for continued movement, which may be indicative of ongoing and excessive settlements in either the addition or original building foundations. Crack monitoring should be performed on a regular basis to help identify cracks that are worsening over time from those that cycle with temperature.

It may be worthwhile to expand the crack monitoring program to include some of the more pronounced cracks observed in the c.1951 structure in hopes of identifying those associated with initial building shrinkage and/or settlement as compared to those that are active and may be attributable to continued movement in the foundations.

Refer to sections 4.4.2, 4.5.1, and 5.4.1 for discussion.

7.2.9 Brick Repairs

Cracked and spalling brick masonry should be replaced, and joints repointed as necessary throughout to reinstate the structural capacity of the wall assembly and mitigate water infiltration and associated deterioration of the structure.

Refer to section 4.5.2 for discussion.

7.2.10 Expose and Review Structure Below Entrance Lobby

As evidenced by the condition of the structure visible below the East Entrance (Minto Street), and the ongoing maintenance required at the adjacent stairs, the Main Entrance floor structure is anticipated to have been exposed to high levels of chlorides and water brought into the arena by users during the winter months. The risk of accelerated deterioration of the structure below the Main Entrance is elevated due to these potentially severe exposure conditions.

The structure below this area was not readily available for review during our walkthrough due to the finished ceilings above the bathrooms and Wolves changeroom. Selective removals of the finishes will be required to facilitate a proper review.

Refer to section 4.3.3 for discussion.

7.2.11 Repair and/or Replace Precast Elements

The original precast column enclosures and soffit panels at the Main Entrance are exhibiting signs of excessive cracking and differential movement relative to the supporting structure and should be replaced.

Removal of the panels will allow for a preliminary condition assessment of the steel structure back-up, which is otherwise not readily accessible.

Remaining precast elements on the east and west elevations should be re-caulked to mitigate water ingress and associated deterioration. Regular maintenance will be required to ensure caulked joints remain watertight. Damaged trim pieces should be similarly repaired to help mitigate water infiltration through the cladding.

Refer to section 4.5.3 for discussion.

7.2.12 Clean and Repaint Exterior Steel Canopy

The steel structure should be cleaned of all corrosion product and the surface prepared to receive an epoxy paint system or zinc-rich primer to mitigate continued deterioration. If not protected from the elements, the steel structure will eventually experience a reduction in performance level due to excessive corrosion, requiring compensating construction and/or replacement. Regular maintenance will be required to properly maintain the steel structure.

Refer to section 4.6 for discussion.

7.3 Long-Term

Long-term recommendations are generally associated with structural elements that are displaying some signs of deterioration, possibly minor structural distress, which is not anticipated to worsen significantly in the near future or at an accelerated rate. These are typically minor deficiencies that have developed slowly over the life of the structure or are associated with elements in the building with generally known life expectancies (e.g., roofing systems).

7.3.1 Repair Concrete Slab-on-Grade at the Snow Melt Pit and Tunnel Access to the Ice Surface

Ongoing deterioration of the slab-on-grade in the area regularly accessed by the Zamboni continues to deteriorate, primarily due to abrasion from the studded tires, and is being frequently patched with an inappropriate material by Building Staff. While relatively cost-effective in the short term, we anticipate that the lack of a proper repair will result in continued and expanding damage to the slab surface, eventually requiring a much larger area of repair and/or replacement.

Refer to section 4.4.1 for discussion.

7.3.2 Clean and Paint High Roof Steel

Generally light surface corrosion was observed on the structural steel framing at the High Roof. Cleaning the steel and recoating with new paint will help to prolong the service life of the structure.

Refer to section 4.1.2 for discussion.

7.4 Optional

Optional recommendations generally include additional investigation, testing, and/or analyses that the Owner and/or Stakeholders may wish to undertake to further explore the building structure to better understand potential limitations or verify the condition of structural elements that were not exposed or manifesting in obvious signs of distress to building finishes.

7.4.1 Investigate Timber Pile Foundations

It may be prudent to investigate and confirm the condition of the existing timber piles if considering expansion and extending the useful life of the arena. We strongly recommend retaining the services of an individual or firm with extensive experience specific to the investigation and remediation of timber piles to develop a scope of work and lead the investigation.

While we did observe some cracking in the foundation walls, some of which may be associated with movement in the foundations, we did not observe any obvious signs of excessive or global distress that we would anticipate in the event of widespread deterioration of the piles.

Refer to section 4.4.2 for discussion.

7.4.2 Investigate Steel Elements in Perimeter Masonry Walls

Steel members in uninsulated walls are at increased risk of deterioration due to condensation on the steel surfaces in freezing temperatures. While no obvious signs of distress or excessive deterioration were noted during our review, it would be prudent to confirm at some locations. This investigation is anticipated to include a series of openings on the interior and exterior faces of the perimeter masonry walls.

Refer to section 4.1.3 for discussion.

7.4.3 Reinforce Roofs for Snow Accumulation Loads

In lieu of ongoing snow watch procedures during the winter months, the existing roof structures could be reinforced to accommodate increased snow accumulation loads due to adjacent high roofs and/or obstructions. Ensuring that the structure is capable of safely resisting the anticipated snow loads without intervention is preferred to a prolonged snow watch.

Refer to sections 4.1.4 and 4.2.3 for discussion.

7.4.4 Complete Wind Tunnel Study

A wind tunnel study is able to more accurately describe the anticipated snow accumulation loads on building roofs, typically resulting in lower peak accumulation loads over smaller areas. We anticipate that this would result in less compensating construction in the existing roofs, possibly eliminating the need in some areas.

While the study and subsequent modelling can accommodate some changes in the existing building (roof thermal properties, for example), significant changes to the building geometry would render the results irrelevant and require further study and/or analysis. As such, this approach may not be feasible at this time if significant additions and/or modifications are anticipated.

An individual or firm that specializes in the field of wind tunnel modelling and finite area analysis would have to be retained to complete this specific study.

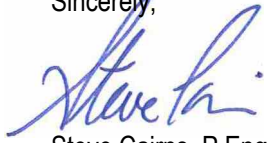
Refer to section 4.1.4 for discussion.

OCTOBER 16, 2023

STRUCTURAL CONDITION ASSESSMENT
SUDBURY COMMUNITY ARENA

We trust that the enclosed information is adequate for your current needs. Please do not hesitate to contact us with any further questions or comments.

Sincerely,



Steve Cairns, P.Eng.

A2S Consulting Engineers



Attachments: Appendix A – Limitations (2 pages)
 Appendix B – Photos (25 pages)
 Appendix C – Previous Reports (39 pages)

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APPENDIX A – LIMITATIONS

“Consultant” in the following document refers to A2S Consulting Engineers.

- The scope of our work and related responsibilities related to our work are defined in our proposal and Conditions of Assignment.
- Any user accepts that decisions made or actions taken based upon interpretation of our work are the responsibility of only the parties directly involved in the decisions or actions.
- No party other than the Client shall rely on the Consultant’s work without the express written consent of the Consultant, and then only to the extent of the specific terms in that consent. Any use which a third party makes of this work, or any reliance on or decisions made based on it, are the responsibility of such third parties. Any third-party user of this report specifically denies any right to any claims, whether in contract, tort and/or any other cause of action in law, against the Consultant (including sub-consultants, their officers, agents and employees). The work reflects the Consultant’s best judgement in light of the information reviewed by them at the time of preparation. It is not a certification of compliance with past or present regulations. Unless otherwise agreed in writing by the Consultant, it shall not be used to express or imply warranty as to the fitness of the property for a particular purpose. No portion of this report may be used as a separate entity; it is written to be read in its entirety.
- Only the specific information identified has been reviewed. No physical or destructive testing and no design calculations have been performed unless specifically recorded. Conditions existing but not recorded were not apparent given the level of study undertaken. Conditions may differ from those observed, which were relied upon to develop our recommendations. Only conditions actually seen during examination of representative samples can be said to have been appraised and comments on the balance of the conditions are assumptions based upon extrapolation. Therefore, this work does not eliminate uncertainty regarding the potential for existing or future costs, hazards or losses in connection with a property. We can perform further investigation on items of concern if so required.
- The Consultant is not responsible for, or obligated to identify, mistakes or insufficiencies in the information obtained from the various sources, or to verify the accuracy of the information.
- No statements by the Consultant are given as or shall be interpreted as opinions for legal, environmental or health findings. The Consultant is not investigating or providing advice about pollutants, contaminants or hazardous materials.
- The Client and other users of this report expressly deny any right to any claim against the Consultant, including claims arising from personal injury related to pollutants, contaminants or hazardous materials, including but not limited to asbestos, mould, mildew or other fungus.
- Applicable codes and design standards may have undergone revision since the subject property was designed and constructed. As an example, design loads (such as those for temperature, snow, wind, rain, seismic, etc.) and the specific methods of calculating the capacity of the systems to resist these loads may have changed significantly. Unless specifically included in our scope, no calculations or evaluations have been completed to verify compliance with current building codes and design standards.
- Timeframes given for undertaking work represent our opinion of when to budget for the work. Failure of the item, or the optimum repair/replacement process, may vary from our estimate. This opinion is therefore given as a reasonable average approximation rather than a specific prediction.

- Qualified design professionals are required to perform additional evaluation (as necessary), design and general review during construction when carrying out the recommendations included in this report. Ongoing monitoring is required to confirm that repair or renewal measures are successful and to identify for changing conditions that would require increased levels of intervention or different repair / renewal strategies.
- Qualified contractors are required to implement any recommendations included in this report.
- Failure to implement the recommendations included in this report and/or failure to maintain building components appropriately could lead to ongoing and accelerated deterioration that may lead to unsafe conditions developing.

APPENDIX B – PHOTOS



Photo 1: Sudbury Community Arena (c.1951).

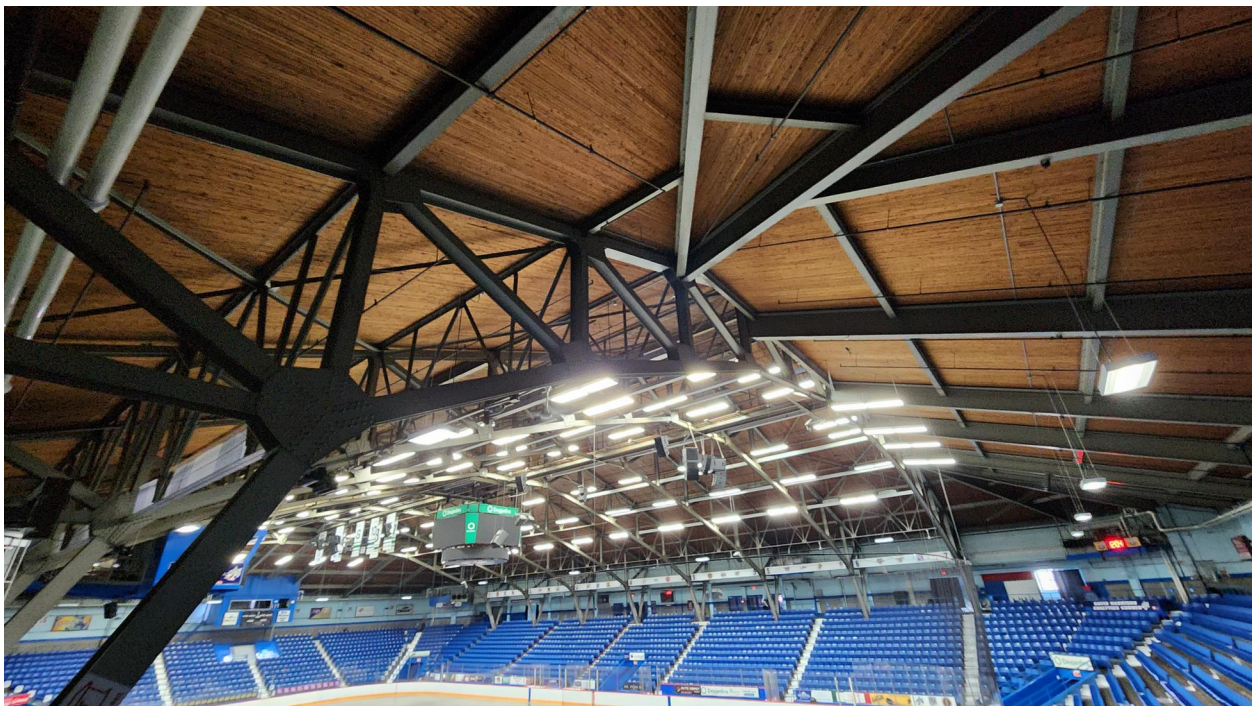


Photo 2: Typical High Roof structure (c.1951).



Photo 3: Typical High Roof structure exhibiting light surface corrosion (c.1951).



Photo 4: Water stains at underside of NLT deck (High Roof c.1951).

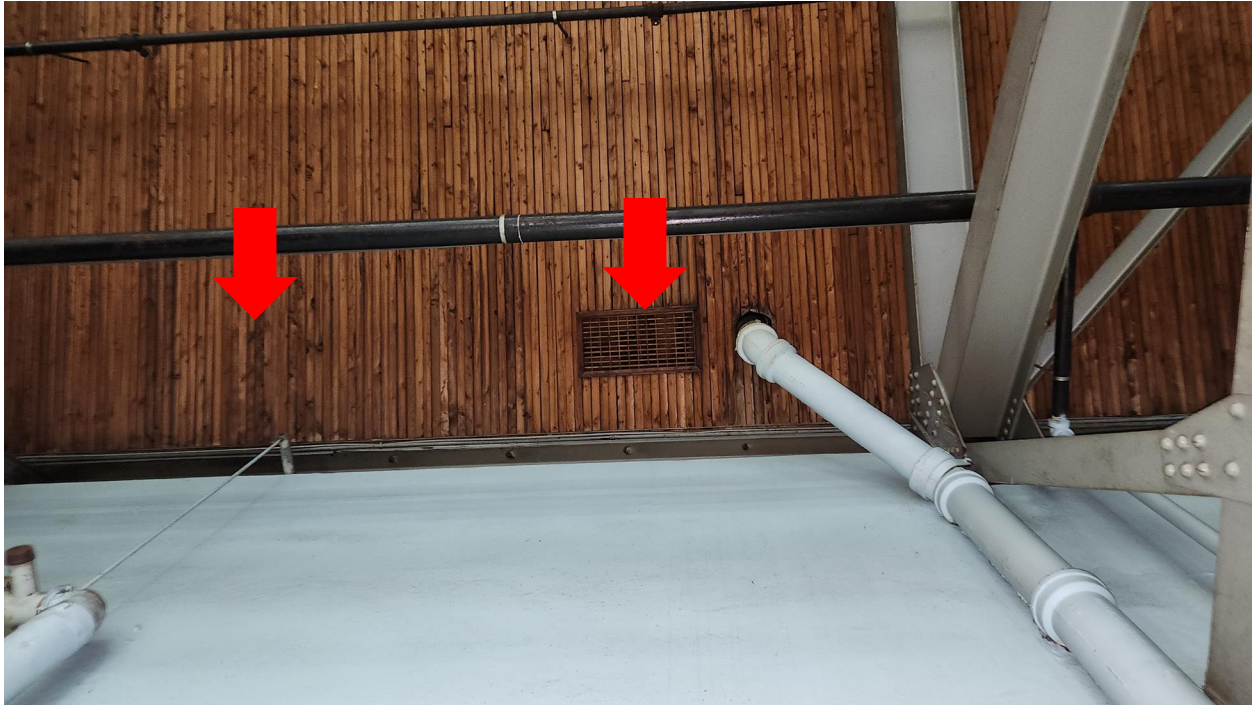


Photo 5: Water stains and typical opening through NLT deck (High Roof c.1951).



Photo 6: Typical High Roof structure exhibiting light surface corrosion (c.1951).



Photo 7: Deterioration of Low Roof structure at northwest corner (c.1951).



Photo 8: Typical Grandstand seating framing (c.1951).



Photo 9: Typical Grandstand seating framing (c.1951).



Photo 10: Main Entrance stairs (c.1951).



Photo 11: East Entrance (Minto Street) stairs (c.1951).



Photo 12: East Entrance (Minto Street) stairs from below (c.1951).



Photo 13: Area of ongoing slab-on-grade repairs (c.1951).



Photo 14: Suspended concrete slab over mechanical room (c.1951).



Photo 15: Evidence of leakage through concrete foundation wall in the Mechanical Room (c.1951).



Photo 16: Evidence of leakage through concrete foundation wall in the Mechanical Room (c.1951).



Photo 17: Typical crack in concrete foundation wall (c.1951).



Photo 18: Typical crack in concrete foundation wall (c.1951).



Photo 19: Typical crack in concrete foundation wall (c.1951).



Photo 20: Cracked and spalling parging on the foundation walls at the south side of the building (c.1951).



Photo 21: Evidence of water infiltration through roof slab in the old Coal Storage room (c.1951).



Photo 22: Water on the floor in old Coal Storage room (c.1951).



Photo 23: Crack in concrete foundation and masonry walls (c.1951).



Photo 24: Cracks in concrete foundation and masonry walls (c.1951).



Photo 25: Crack in masonry wall (c.1951).



Photo 26: Crack in masonry wall (c.1951).

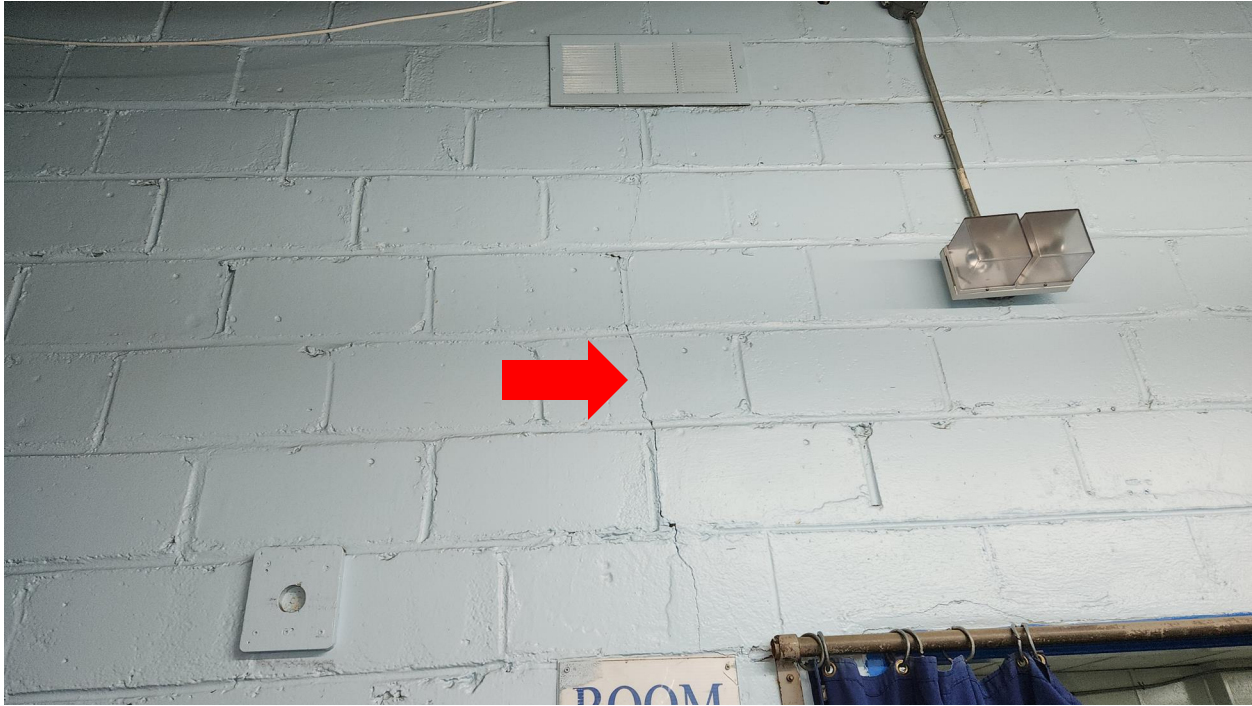


Photo 27: Crack in masonry wall (c.1951).



Photo 28: Peeling paint on masonry wall (c.1951).



Photo 29: Peeling paint on masonry wall (c.1951).



Photo 30: Missing lintel over Storage Room door (c.1951).



Photo 31: Damaged and cracked brick masonry (c.1951).

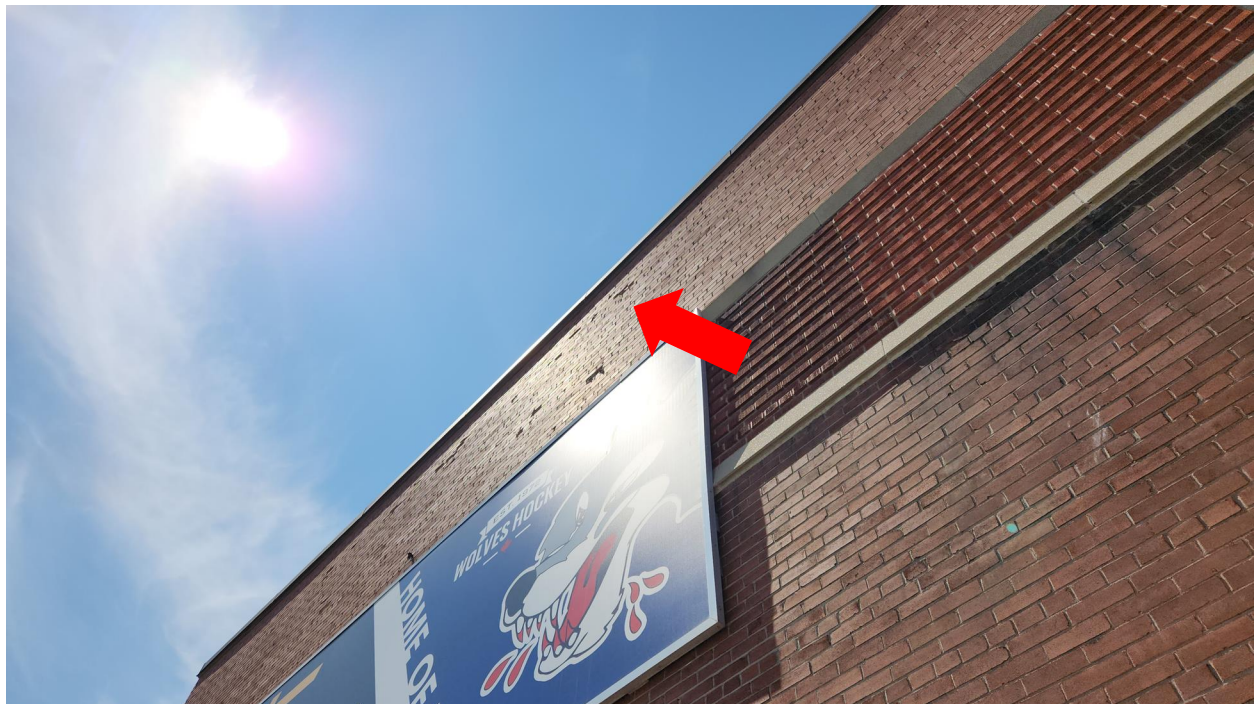


Photo 32: Damaged brick masonry (c.1951).

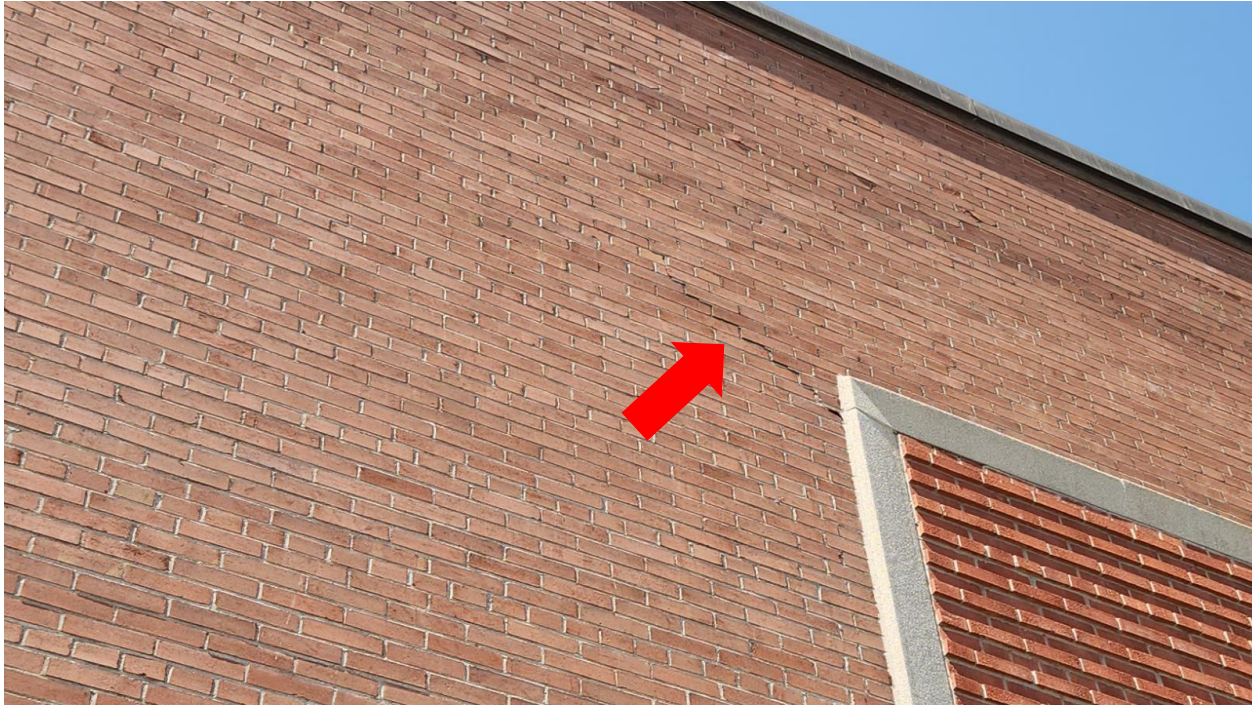


Photo 33: Cracked brick masonry (c.1951).

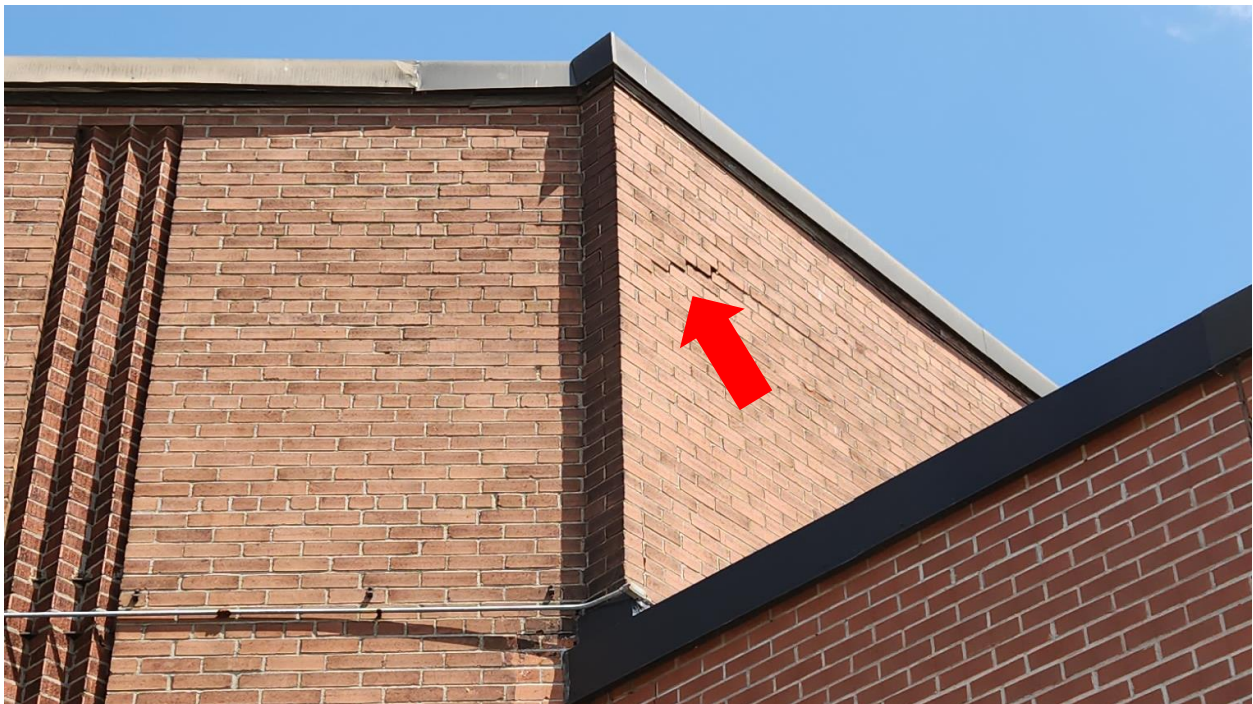


Photo 34: Cracked brick masonry (c.1951).



Photo 35: Cracked precast concrete at Main Entrance (c.1951).

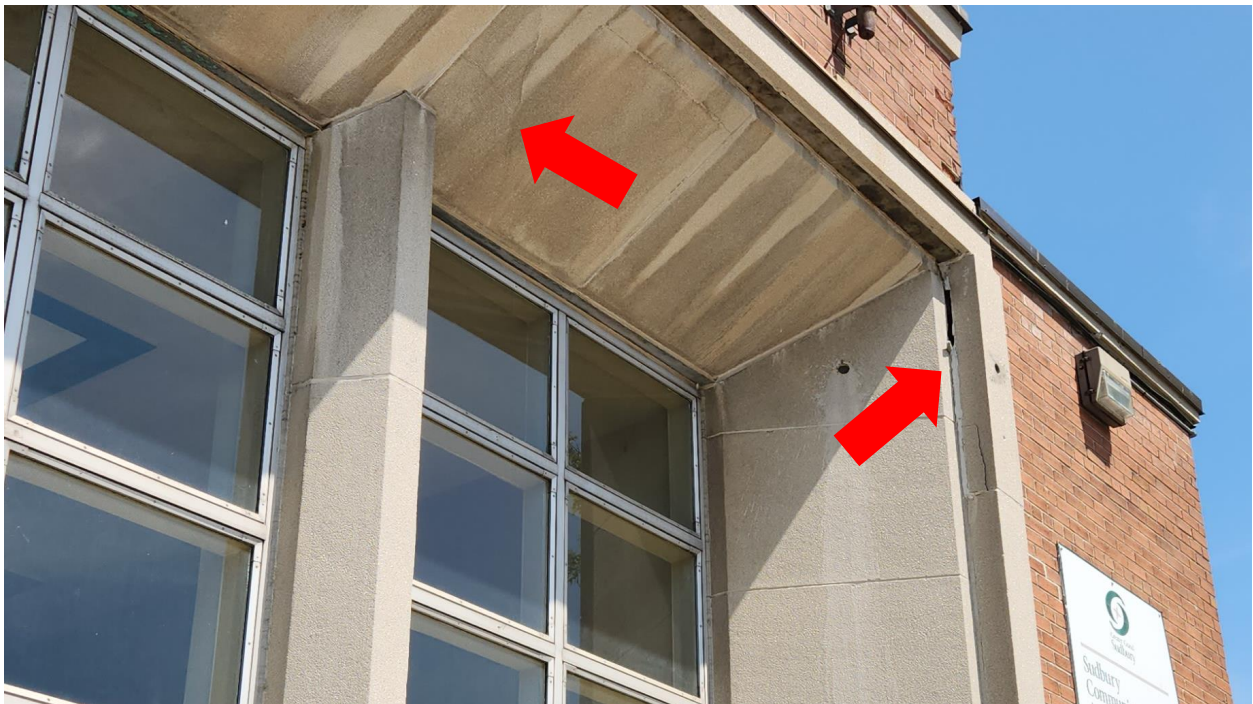


Photo 36: Cracked precast concrete at Main Entrance (c.1951).



Photo 37: Damaged precast concrete sill (c.1951).



Photo 38: Condition of steel canopy.



Photo 39: Typical floor framing (c.2000).



Photo 40: Ground Floor structure at the southwest stair addition (c.2000).



Photo 41: Corrosion of beam-to-column header connection at the southeast stair addition (c.2000).

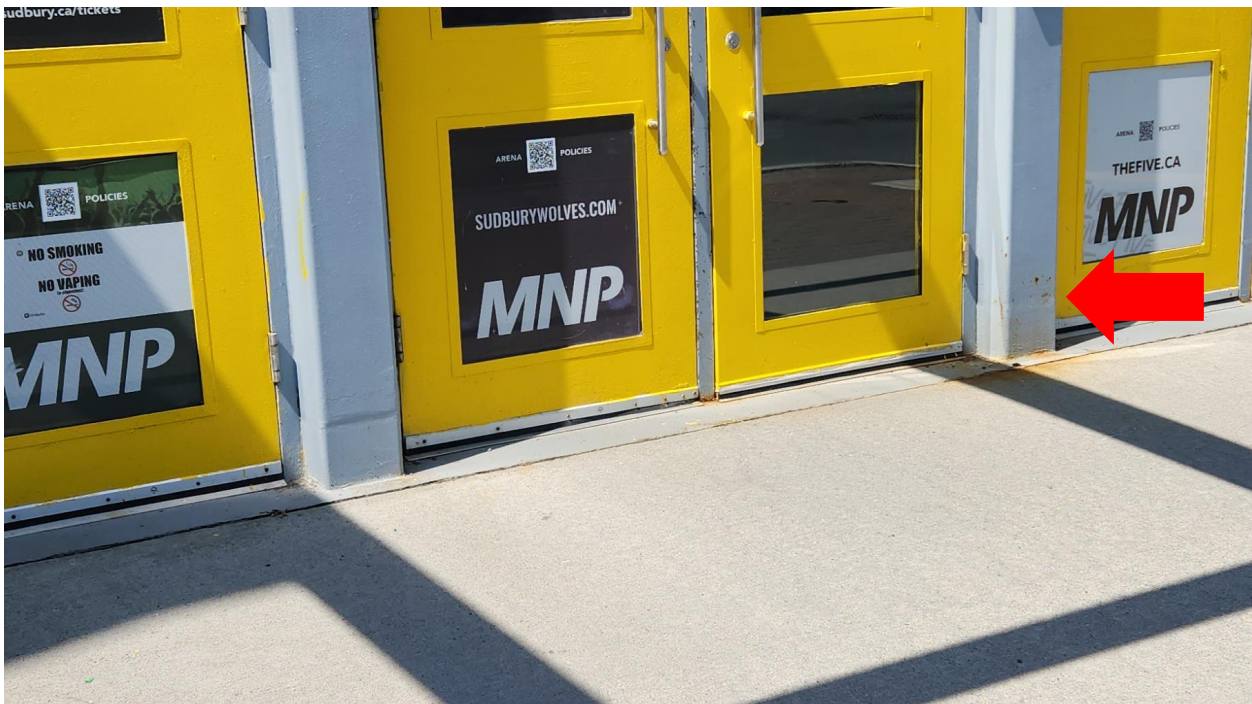


Photo 42: Evidence of continued corrosion to exposed steel columns at the northeast stair addition (c.2000).



Photo 43: Masonry wall cracks at the southwest stair addition (c.2000).

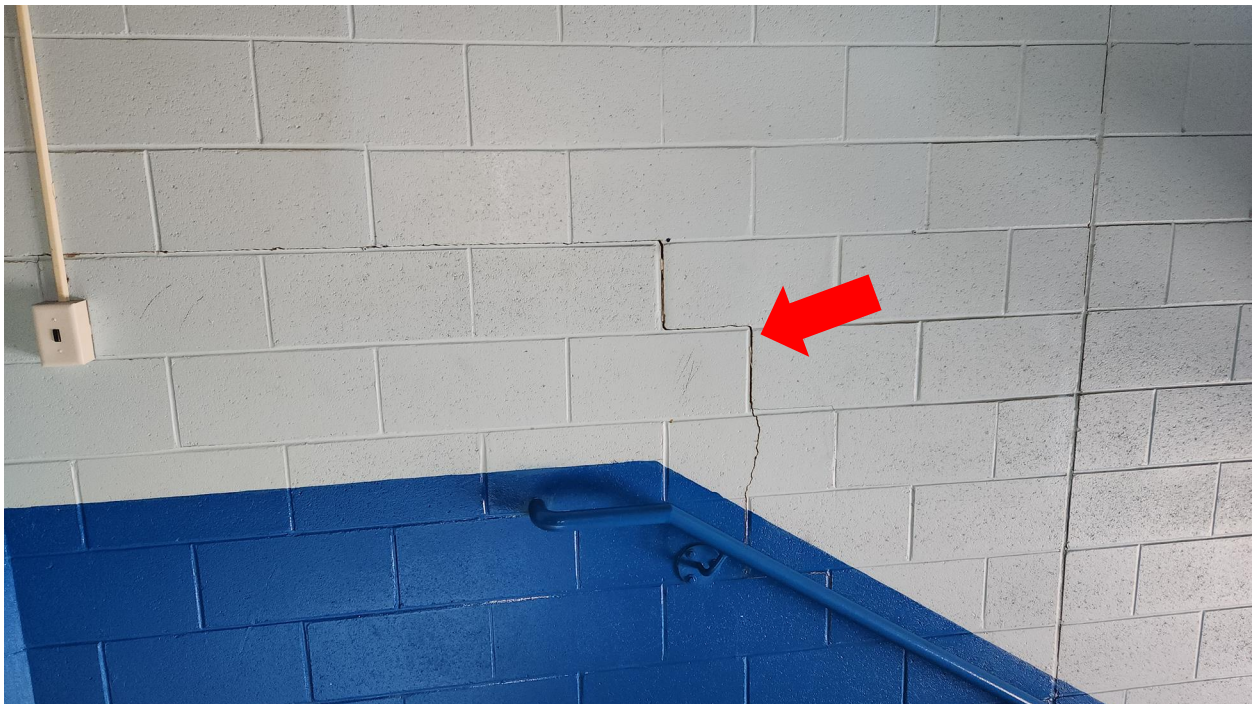


Photo 44: Masonry wall cracks at the southwest stair addition (c.2000).



Photo 45: Step-cracking in masonry wall at the southwest stair addition (c.2000).



Photo 46: Gaps between the steel deck flutes and top of wall at the northwest stair addition (c.2000).



Photo 47: Typical low roof framing (c.2006).



Photo 48: Typical floor framing (c.2006).



Photo 49: Steel beams below concrete slab believed to be installed as part of the c.2006 addition.

APPENDIX C – PREVIOUS REPORTS



March 4, 2016

CITY OF GREATER SUDBURY

200 Brady Street
Sudbury, Ontario
P3A 5P3
Attn: Nick Zinger

Dear Nick,

Re: **SUDBURY ARENA – 240 ELGIN STREET, SUDBURY, ON**
ZAMBONI SLAB SURFACE REPAIRS

As per your request and our proposal P15234, dated December 21, 2015, we have completed a visual review of the concrete Zamboni slab surface at Sudbury Arena to review the extent of concrete deterioration and provide recommendations for remedial measures.

1. OBSERVATIONS AND DISCUSSION

Although no original structural drawings of the building were available, the Structural Drawings associated with the 2013 slab repairs were made available to us. Based on these drawings, the existing slab surface consists of a 50mm bonded, reinforced concrete topping over the original concrete slab-on-grade (thickness and reinforcing unknown); however, it appears as though a thin, approximately 6 to 10mm thick, polymer modified mortar topping has been applied over, or in lieu of, the 2013 slab repair topping.

There is evidence of concrete wear/rutting and water ponding within the Zamboni wheel path depressions due to studded tire use. The mortar topping appears to be too thin and not adequately bonded to the substrate concrete to provide a durable driving surface for studded tires. Additionally, the substrate concrete does not have sufficient abrasion resistance to prevent ongoing degradation resulting in the observed wheel path depressions. In our opinion, the concrete deterioration is not currently structurally significant; however, we understand that the Owner would like to improve slab drainage, driveability and aesthetics.

In general, concrete abrasion and wear is mitigated by increasing concrete strength and nominal aggregate size, while decreasing water-to-cement ratio, permeability, and air content. It is also important to prevent overworking of the concrete during surface finishing to prevent fines and air voids from collecting at the concrete surface. Alternatively, ancillary protection can be applied at the surface to protect the underlying concrete.

2. REPAIR STRATEGIES

We present the following repair strategies with opinions of probable cost, which include a range of solutions to address the identified defects and promote adequate performance over the identified timeframe. All repair strategies presented require that the work be carried out by a qualified contractor under the review of a building professional. This process ensures that the building Owner will receive a high-quality repair, using high-quality, durable materials suited to the site-specific applications required.

Opinions of probable costs should only be considered preliminary, high-level budgets. Accurate budgeting can only be determined by a Cost Consultant and/or qualified Contractor based on a set of Contract Documents that clearly identify the scope of work for any further investigation and/or remedial repair details.

| OPTION 1 – SACRIFICIAL WEARING SURFACE | \$1,000 | | | | |
|--|---|-------------------|----------------------|---|---|
| <p>This strategy does not address existing deterioration but prevents further deterioration by applying a sacrificial wearing surface over the concrete slab surface. Heavy duty PVC or rubber mats could be laid under the Zamboni wheel paths to prevent ongoing concrete wear/rutting from the studded tires and conceal existing deterioration. The mats will likely move and be damaged by continual exposure to studded tires, particularly at the turning radius and will require ongoing adjustment, monitoring and maintenance/replacement.</p> <p>Since this approach is a relatively low-cost option, requiring readily available material, it may be possible to attempt this repair strategy on a trial basis before proceeding with Option 2, 3 or 4.</p> <p>Estimated Restoration Cycle: Annually</p> <table> <tr> <th><u>Advantages</u></th><th><u>Disadvantages</u></th></tr> <tr> <td> <ul style="list-style-type: none"> - Minimal disruption to building operations. - Lowest initial cost. - Some improvement to driveability. </td><td> <ul style="list-style-type: none"> - Requires ongoing mat adjustment, monitoring and maintenance/replacement. - Mats may be slippery when wet. - Does not address ponding water. </td></tr> </table> | | <u>Advantages</u> | <u>Disadvantages</u> | <ul style="list-style-type: none"> - Minimal disruption to building operations. - Lowest initial cost. - Some improvement to driveability. | <ul style="list-style-type: none"> - Requires ongoing mat adjustment, monitoring and maintenance/replacement. - Mats may be slippery when wet. - Does not address ponding water. |
| <u>Advantages</u> | <u>Disadvantages</u> | | | | |
| <ul style="list-style-type: none"> - Minimal disruption to building operations. - Lowest initial cost. - Some improvement to driveability. | <ul style="list-style-type: none"> - Requires ongoing mat adjustment, monitoring and maintenance/replacement. - Mats may be slippery when wet. - Does not address ponding water. | | | | |

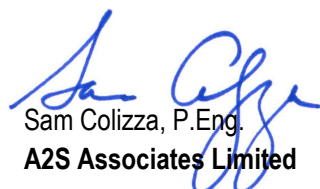
| OPTION 2 – ABRASION RESISTANT COATING | \$20,000 | | | | |
|---|---|-------------------|----------------------|---|---|
| <p>This strategy addresses existing deterioration by shotblasting to remove all loose and deteriorated concrete and applying a high-build, abrasion-resistant urethane or epoxy resin coating under the Zamboni wheel paths to prevent ongoing concrete wear/rutting from the studded tires. The wheel path depressions would be built-up with urethane/epoxy to help improve drainage.</p> <p>Estimated Restoration Cycle: 5-7 Years</p> <table> <tr> <th><u>Advantages</u></th><th><u>Disadvantages</u></th></tr> <tr> <td> <ul style="list-style-type: none"> - Lower initial cost compared to Options 3 and 4. - Improves drainage. - Improves driveability. </td><td> <ul style="list-style-type: none"> - Requires ongoing monitoring and maintenance. - Not as durable as Options 3 and 4. - Disruption to building operations. - May be difficult to source local expertise in shotblasting and specialized coating application. </td></tr> </table> | | <u>Advantages</u> | <u>Disadvantages</u> | <ul style="list-style-type: none"> - Lower initial cost compared to Options 3 and 4. - Improves drainage. - Improves driveability. | <ul style="list-style-type: none"> - Requires ongoing monitoring and maintenance. - Not as durable as Options 3 and 4. - Disruption to building operations. - May be difficult to source local expertise in shotblasting and specialized coating application. |
| <u>Advantages</u> | <u>Disadvantages</u> | | | | |
| <ul style="list-style-type: none"> - Lower initial cost compared to Options 3 and 4. - Improves drainage. - Improves driveability. | <ul style="list-style-type: none"> - Requires ongoing monitoring and maintenance. - Not as durable as Options 3 and 4. - Disruption to building operations. - May be difficult to source local expertise in shotblasting and specialized coating application. | | | | |

| OPTION 3 – PARTIAL SLAB REPLACEMENT WITH HIGH STRENGTH CONCRETE | \$50,000 |
|---|--|
| This strategy addresses existing deterioration by removing existing concrete (topping and original slab) and pouring a new concrete slab with abrasion-resistant surface hardener under the Zamboni wheel paths to prevent ongoing concrete wear/rutting from the studded tires. Concrete scanning would be required prior to concrete removal to identify embedded reinforcing and services. | |
| Estimated Restoration Cycle: 10-15 Years | |
| <u>Advantages</u> | <u>Disadvantages</u> |
| <ul style="list-style-type: none"> - Improves drainage. - Requires minimal ongoing maintenance. - Improves driveability. | <ul style="list-style-type: none"> - High capital cost. - Disruption to building operations. - Wheel path depressions will recur over time. |

| OPTION 4 – PARTIAL SLAB REPLACEMENT WITH STEEL GRATES/PLATES | \$70,000 |
|--|---|
| This strategy addresses existing deterioration by removing existing concrete (topping and original slab) and installing steel grates or plates under the Zamboni wheel paths to prevent ongoing concrete wear/rutting from the studded tires. Drainage trenches could also be installed beneath the steel grates/plates for snow melt collection. Concrete scanning would be required prior to concrete removal to identify embedded reinforcing and services. | |
| Estimated Restoration Cycle: 15-20 Years | |
| <u>Advantages</u> | <u>Disadvantages</u> |
| <ul style="list-style-type: none"> - Best performance, longest service life. - Significantly improves drainage. - Requires minimal ongoing maintenance. - Improves driveability. | <ul style="list-style-type: none"> - Highest capital cost. - Disruption to building operations. |

We trust that the enclosed information is adequate for your current needs. Please do not hesitate to contact us with any further questions or comments.

Sincerely,


 Sam Colizza, P.Eng.
 A2S Associates Limited



Attachments: Limitations

16023A.let01.docx//smc

LIMITATIONS

"Consultant" in the following document refers to A2S Associates Limited.

- The scope of our work and related responsibilities related to our work are defined in our proposal and Conditions of Assignment.
- Any user accepts that decisions made or actions taken based upon interpretation of our work are the responsibility of only the parties directly involved in the decisions or actions.
- No party other than the Client shall rely on the Consultant's work without the express written consent of the Consultant, and then only to the extent of the specific terms in that consent. Any use which a third party makes of this work, or any reliance on or decisions made based on it, are the responsibility of such third parties. Any third party user of this report specifically denies any right to any claims, whether in contract, tort and/or any other cause of action in law, against the Consultant (including sub-consultants, their officers, agents and employees). The work reflects the Consultant's best judgement in light of the information reviewed by them at the time of preparation. It is not a certification of compliance with past or present regulations. Unless otherwise agreed in writing by the Consultant, it shall not be used to express or imply warranty as to the fitness of the property for a particular purpose. No portion of this report may be used as a separate entity; it is written to be read in its entirety.
- Only the specific information identified has been reviewed. No physical or destructive testing and no design calculations have been performed unless specifically recorded. Conditions existing but not recorded were not apparent given the level of study undertaken. Conditions may differ from those observed, which were relied upon to develop our recommendations. Only conditions actually seen during examination of representative samples can be said to have been appraised and comments on the balance of the conditions are assumptions based upon extrapolation. Therefore, this work does not eliminate uncertainty regarding the potential for existing or future costs, hazards or losses in connection with a property. We can perform further investigation on items of concern if so required.
- The Consultant is not responsible for, or obligated to identify, mistakes or insufficiencies in the information obtained from the various sources, or to verify the accuracy of the information.
- No statements by the Consultant are given as or shall be interpreted as opinions for legal, environmental or health findings. The Consultant is not investigating or providing advice about pollutants, contaminants or hazardous materials.
- The Client and other users of this report expressly deny any right to any claim against the Consultant, including claims arising from personal injury related to pollutants, contaminants or hazardous materials, including but not limited to asbestos, mould, mildew or other fungus.
- Applicable codes and design standards may have undergone revision since the subject property was designed and constructed. As an example, design loads (such as those for temperature, snow, wind, rain, seismic, etc.) and the specific methods of calculating the capacity of the systems to resist these loads may have changed significantly. Unless specifically included in our scope, no calculations or evaluations have been completed to verify compliance with current building codes and design standards.
- Time frames given for undertaking work represent our opinion of when to budget for the work. Failure of the item, or the optimum repair/replacement process, may vary from our estimate. This opinion is therefore given as a reasonable average approximation rather than a specific prediction.
- Qualified design professionals are required to perform additional evaluation (as necessary), design and general review during construction when carrying out the recommendations included in this report. Ongoing

monitoring is required to confirm that repair or renewal measures are successful and to identify for changing conditions that would require increased levels of intervention or different repair / renewal strategies.

- Qualified contractors are required to implement any recommendations included in this report.
- Failure to implement the recommendations included in this report and/or failure to maintain building components appropriately could lead to ongoing and accelerated deterioration that may lead to unsafe conditions developing.
- Budget figures are our opinion of a probable current dollar value of the work and are provided for approximate budget purposes only. Accurate figures can only be obtained by establishing a scope of work and receiving quotes from appropriate contractors.

May 13, 2016

CITY OF GREATER SUDBURY

200 Brady Street
Sudbury, Ontario
P3A 5P3
Attn: Nick Zinger

Dear Nick,

Re: **SUDBURY ARENA – 240 ELGIN STREET, SUDBURY**
REVIEW OF STAIR ADDITIONS

As requested, we have completed our review of the structural steel framing at the Sudbury Arena Stair Additions to identify the extent of corrosion, analyse the remaining capacity of corroded structural members and provide recommendations for remedial measures.

1. BACKGROUND

The Sudbury Arena Stair Additions were constructed circa 2000 and consist of structural steel framing on reinforced concrete foundation walls and raft slabs. The 3-storey additions (including basement) include composite deck landings and a steel roof deck designed for future floor. The additions are enclosed with steel-framed curtainwall and doors between HSS columns. The HSS columns are partially exposed on the exterior.

At our site meeting on February 17, 2016, we observed evidence of leakage and steel corrosion at the basement level of the northeast stair addition. A Contractor was retained by the City to remove interior drywall and spray-applied fireproofing to expose the concealed structural steel members and the composite deck soffit. We returned to site on April 4, 2016 to review the exposed structure. Based on the extent of corrosion observed, temporary shoring was installed at the underside of the northeast stair ground floor landing immediately and steel inspection of all four stair additions was recommended to confirm the extent of cross-sectional area loss to corroding steel members, bolts and welds.

2. OBSERVATIONS

A summary of the items identified during the steel inspection on April 28, 2016 is provided below. Additional information is provided in the attached steel inspection report by Laabs Industries, dated May 4, 2016.

2.1 Northwest Stair (Gray & Brady)

Minor corrosion at the two (2) beam ends and their associated HSS columns and connections was observed. According to the steel inspection report, there was no appreciable section loss to the structural steel members and bolts and welds appeared to be intact with no sign of cracking. No significant corrosion to the composite deck soffit was observed. Steel should be cleaned with a wire brush and re-coated. Exterior remediation is required to improve waterproofing to prevent ongoing corrosion and deterioration.

2.2 Southwest Stair (Gray & Elgin)

Minor corrosion at the four (4) beam ends and their associated HSS columns and connections was observed. According to the steel inspection report, there was no appreciable section loss to the steel beams and bolts and welds appeared to be intact with no sign of cracking; however, the columns are corroded with evidence of section loss (i.e. approx. 20% section loss at HSS column flange). No significant corrosion to the composite deck soffit was observed. Steel should be cleaned with a wire brush and re-coated. Exterior remediation is required to improve waterproofing to prevent ongoing corrosion and deterioration.

We have confirmed the remaining column capacity to be adequate since they have been designed for future floor loading of 100psf; however, repairs are recommended prior to the next snow fall to mitigate further deterioration before the columns are subjected to roof snow loading.

2.3 Southeast Stair (Minto & Elgin)

Minor corrosion at the four (4) beam ends and their associated HSS columns and connections was observed. According to the steel inspection report, there was no appreciable section loss to the structural steel members and bolts and welds appeared to be intact with no sign of cracking. No significant corrosion to the composite deck soffit was observed. Steel should be cleaned with a wire brush and re-coated. Exterior remediation is required to improve waterproofing to prevent ongoing corrosion and deterioration.

2.4 Northeast Stair (Minto & Brady)

According to the steel inspection report, the cross-sectional area loss at the two (2) beam ends warrants partial beam replacement. The welds generally appeared to be intact with no sign of cracking; however, the bolts and columns are also extensively corroded with significant section loss (i.e. approx. 50% section loss at HSS column flange). The bottom of the column also appeared to show stress markings and bulging relating to the accumulation and subsequent freezing and expansion of trapped moisture. The source of moisture is likely leakage from rain, snow melt or groundwater through a crack or pinhole in the HSS column. Although the columns are uninsulated, condensation is unlikely since we did not observe significant evidence of moisture or corrosion of the column above-grade.

We expect that the base of the column will have to be removed and replaced with matching sections spliced to the existing. The beam ends could also be removed and replaced by introducing new steel columns supported by the raft slab. The composite deck span will need to be reduced by introducing new steel members running perpendicular to the deck, allowing the concrete slab to span between supports without relying on composite action from the corroded deck. Shoring has been installed to temporarily support the compromised structure; however, repairs are recommended prior to the next snow fall to mitigate further deterioration before the columns are subjected to roof snow loading.

2.5 Miscellaneous Items

The welds connecting the 'afterhours' sign to the steel framing at the northeast stair addition are too low to adequately support the sign, which is beginning to lean forward. The top of the sign should be welded to the frame to prevent further rotation.

3. RECOMMENDATIONS

We present the following repair strategies with opinions of probable costs, which include a range of solutions to address the identified defects and promote adequate performance over the identified timeframe. All repair strategies presented require that the work be carried out by a qualified contractor under the review of a building professional. This process ensures that the building Owner will receive a high-quality repair, using high-quality, durable materials suited to the site-specific applications required.

Opinions of probable costs should only be considered preliminary, high-level budgets. Accurate budgeting can only be determined by a Cost Consultant and/or qualified Contractor based on a set of Contract Documents that clearly identify the scope of work for any further investigation and/or remedial repair details.

| OPTION 1 – WATERPROOFING AND STRUCTURAL STEEL REPAIRS | \$250,000 |
|--|-----------|
| <p>Option 1 includes waterproofing of the below-grade structure, repair of compromised steel members and protection of remaining steel components. It is the minimum scope of work necessary to reinstate the structural integrity of the building and prevent ongoing deterioration. Repairs are recommended prior to the next snow fall to mitigate further deterioration before the columns are subjected to roof snow loading; however, we realize that due to budget and timing limitations, completing this strategy immediately at all 4 stair additions may not be feasible, therefore, we have also presented a 'phased approach' below.</p> <p><u>All four (4) stair additions:</u></p> <p>This option addresses moisture ingress by excavating the exterior foundation perimeter, including all landscaping and sidewalks and installing an elastomeric waterproofing membrane to the below grade structure. Exterior doors will require temporary removal and re-installation to facilitate proper termination of the membrane, approximately 12" above grade. Door frames will require replacement where deteriorated. Perimeter drainage would be improved by installing new sub-surface weeping tile and granular backfill with new sidewalks sloping away from the building. This strategy assumes the building has an existing sub-surface storm drainage system to tie-in to. Additional funds would be necessary if extensive civil work is required.</p> <p>As part of the repairs we would install sacrificial anodes at the basement level of the southwest and northeast stair and drill small holes through the HSS column flanges of each stair. This will allow ongoing monitoring of water ingress and rates of corrosion and prevent accumulation of trapped moisture. We recommend the anodes be checked on a semi-annual basis, before and after winter.</p> <p>All remaining above-grade structural steel on the exterior wall of the building would be wire brushed and re-coated with zinc-rich primer and epoxy paint. Following repairs, all exterior landscaping and sidewalks and interior finishes and fireproofing would be reinstated. Going forward, the use of de-icing salt at stair entrances should be limited by using non-corrosive salt alternatives and/or sand when possible.</p> <p><u>Northeast stair addition only:</u></p> <p>Replacement of deteriorated structural steel members is recommended as identified above. The base of HSS columns will be removed and replaced with matching sections spliced to existing; beam ends will be removed and replaced with new sections, and a new column will be installed on the existing raft slab. The existing beams will be re-connected to the new column. The existing composite deck span will need to be reduced by introducing new steel members running perpendicular to the deck, allowing the concrete slab to span between supports without relying on composite action from the corroded deck.</p> <p style="text-align: right;"><i>Continued on next page...</i></p> | |

Additional temporary shoring will be required to facilitate these additional repairs. At this time, we expect this scope is only required at the northeast stair addition; however, excavation of the other stair additions may uncover additional locations of significant section loss.

Phased approach:

Structural steel corrosion at the northeast stair addition is the most advanced and is therefore the highest priority. We highly recommend completing repairs in this area prior to the next snow fall. If repairs cannot be completed before winter, the stair would have to be cordoned off from public access and fully shored from the underside of the roof structure down to the basement level.

Based on the rate of corrosion over the past 15 years at the 3 other stair additions, we expect that deferral is possible provided the following measures are taken:

- a) Test pits are excavated on the exterior of the HSS columns to confirm there is no significant section loss on the exterior side of the columns, below grade;
- b) Sacrificial anodes and drilled holes are installed on the interior side of HSS columns to allow for monitoring of corrosion rates and moisture ingress;
- c) The use of de-icing salt at stair entrances is limited by using non-corrosive salt alternatives and/or sand; and
- d) These areas are monitored on a semi-annual basis, before and after winter.

Approximately \$100,000 should be made available to complete Phase 1 repairs only, at this time.

Estimated Restoration Cycle: Every 5-7 years

Advantages

- Minimizes disruption to building operations.
- Lowest initial cost.
- Can be completed in a phased approach to work with budget and timeline constraints.

Disadvantages

- Requires ongoing monitoring and maintenance.
- Difficult to provide a robust waterproofing detail at the landing-to-wall interface which may result in ongoing moisture ingress and membrane patching repairs.

OPTION 2 – RE-CLADDING, WATERPROOFING AND STRUCTURAL STEEL REPAIRS

\$1,000,000

All four (4) stair additions:

This option is similar in scope to Option 1; however, it includes re-cladding of the entire façade above grade and construction of a new concrete curb below-grade to conceal the structural steel members from exposure to the elements and provide a durable and robust water-shedding surface in front of the main structure.

This option requires the assistance of an Architect in developing cladding options for consideration.

The waterproofing scope will be similar to Option 1; however, the new below-grade waterproofing will be applied to the new concrete curb. Sacrificial anodes and scheduled monitoring would not be required. We assume the exterior doors could be retained and re-used; however, damaged frames will require replacement.

The scope for the required structural steel repairs at the northeast stair is the same as Option 1.

Estimated Restoration Cycle: 25+ years

Advantages

- Best performance, longest service life.
- Requires minimal ongoing maintenance.

Disadvantages

- High capital cost
- Significant disruption to building operations.

We trust that the enclosed information is adequate for your current needs. Please do not hesitate to contact us with any further questions or comments.

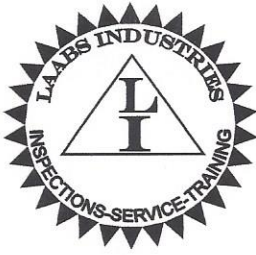
Sincerely,


Sam Colizza, P.Eng.
A2S Associates Limited



Attachments: Steel Inspection Report by Laabs Industries, dated May 4, 2016 (2 pages)
Limitations (2 pages)

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LAABS INDUSTRIES

Sudbury, Ontario
 Ph#: {705} 586-2553
 Fax: {705} 586-2553
 Cell: {705} 918- 5227
 Email: laabs@fibreop.ca

Contractor Survey Sheet – Site Report

Client: A2S Associates Ltd.

Site Report No.: 1

Address: 289 Cedar St., Suite 201
 Sudbury, Ont.

Work Order No.: 16-0870

Project: Sudbury Arena Stair Supports

Project Location: Sudbury, Ont.

Inspector: Ken Laabs

Date of Inspection: April 28, 2016

1. Governing Codes & Specifications: CSA W47.1/W59 & Client's

2. Survey of Welding Contractor(s):

- | | |
|---|-----|
| a) Contractor(s) Certification to CSA W47.1/59: | N/A |
| b) Staffing includes qualified: | |
| i) Engineers | N/A |
| ii) Welding Supervisors | N/A |
| iii) Welders | N/A |
| iv) Welding Procedures | N/A |
| c) Remarks: | |

3. Materials Verification: N/A

4. Consumables Verification: N/A

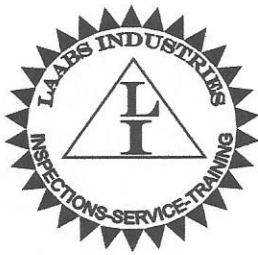
5. Consumables Storage: N/A

6. Additional Remarks:

N/A = not applicable

N/R = Not Requested

N/V = Not verified



LAABS INDUSTRIES

Sudbury, Ontario
Ph#: {705} 586-2553
Fax: {705} 586-2553
Cell: {705} 918- 5227
Email: laabs@fibreop.ca

Contractor Survey Sheet – Site Report

1. Scope of Work

- 1.1 Inspection of structural steel welds and members at four stairway locations within the building.

2. Inspection

- 2.1 Visual inspection was carried out on the welds and structural members.
2.2 Thickness testing was carried out on five spots to determine corrosion effect on the inside of the columns. (One in each corner of the building on the base and one in the North-East corner at the doors as per the engineers request.)

3. Result

- 3.1 The welds inspected appear to be intact with no sign of cracking.
3.2 In all but one stairwell the structural steel has minor rust that has not yet resulted any appreciable loss of section on the outside.
3.3 In the North-East stairwell the welds are intact but the structural members have corroded extensively as have the bolts in the connections.
3.4 Thickness readings of the main structural column coming from the upper floor are as follows..
- | | |
|----------------------------|-------|
| North-East corner (bottom) | .128" |
| South-East corner (bottom) | .240" |
| South-West corner (bottom) | .185" |
| North-West corner (bottom) | .220" |
| North-East corner (top) | .237" |
- 3.5 Thickness reading N-E (top) was taken approximately 1" above the floor corrosion.
All other readings were taken from approximately 3" above bottom plate.



Should any questions arise concerning this report, please do not hesitate to contact me.

LIMITATIONS

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- Only the specific information identified has been reviewed. No physical or destructive testing and no design calculations have been performed unless specifically recorded. Conditions existing but not recorded were not apparent given the level of study undertaken. Conditions may differ from those observed, which were relied upon to develop our recommendations. Only conditions actually seen during examination of representative samples can be said to have been appraised and comments on the balance of the conditions are assumptions based upon extrapolation. Therefore, this work does not eliminate uncertainty regarding the potential for existing or future costs, hazards or losses in connection with a property. We can perform further investigation on items of concern if so required.
- The Consultant is not responsible for, or obligated to identify, mistakes or insufficiencies in the information obtained from the various sources, or to verify the accuracy of the information.
- No statements by the Consultant are given as or shall be interpreted as opinions for legal, environmental or health findings. The Consultant is not investigating or providing advice about pollutants, contaminants or hazardous materials.
- The Client and other users of this report expressly deny any right to any claim against the Consultant, including claims arising from personal injury related to pollutants, contaminants or hazardous materials, including but not limited to asbestos, mould, mildew or other fungus.
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- Time frames given for undertaking work represent our opinion of when to budget for the work. Failure of the item, or the optimum repair/replacement process, may vary from our estimate. This opinion is therefore given as a reasonable average approximation rather than a specific prediction.
- Qualified design professionals are required to perform additional evaluation (as necessary), design and general review during construction when carrying out the recommendations included in this report. Ongoing

monitoring is required to confirm that repair or renewal measures are successful and to identify for changing conditions that would require increased levels of intervention or different repair / renewal strategies.

- Qualified contractors are required to implement any recommendations included in this report.
- Failure to implement the recommendations included in this report and/or failure to maintain building components appropriately could lead to ongoing and accelerated deterioration that may lead to unsafe conditions developing.
- Budget figures are our opinion of a probable current dollar value of the work and are provided for approximate budget purposes only. Accurate figures can only be obtained by establishing a scope of work and receiving quotes from appropriate contractors.



November 16, 2018

CITY OF GREATER SUDBURY

200 Brady Street
Sudbury, Ontario
P3A 5P3
Attn: Chad Kobyłka

Dear Chad,

Re: **SUDBURY ARENA – 240 ELGIN STREET, SUDBURY, ON**
STRUCTURAL REVIEW FOR PARTIAL RE-ROOFING PROJECT

As per your request and our proposal P18197, dated October 31, 2018, we have carried out a general structural review of the existing roof framing in the area scheduled for re-roofing in 2018. The purpose of our review is to:

- Confirm the general condition of the existing roof structure;
- Identify deficiencies in the original design;
- Identify changes that may have resulted in load not considered in the original design;
- Confirm that the weight of the proposed roofing assembly does not constitute a reduction in performance level;
- Assess the potential impact of changes to the thermal performance of the roofing assembly; and
- Identify older roof structures that were designed prior to specific benchmark editions of the Ontario Building Code (OBC) and/or National Building Code of Canada (NBC).

As part of our review we completed the following:

- Reviewed the proposed re-roofing quotation by Damisona Roofing Ltd., dated September 5, 2018.
- Visited the site on October 30 and November 1, 2018 to complete a visual review of the accessible structure and to obtain the necessary measurements to facilitate a structural analysis; and
- Analyzed a rational sampling of structural members to confirm their adequacy for the imposed roof loading.

The current re-roofing project encompasses the low roof area above the “Wolves Den” at the northwest corner of the building (refer to Appendix A).

The existing roofing assembly is scheduled to be removed down to the existing structural deck and replaced with the following proposed roofing assembly (top-to-bottom);

| Existing Roofing Assembly | Proposed Roofing Assembly |
|--|---|
| <ul style="list-style-type: none"> - Built-up roofing - Semi-rigid insulation (unknown type and thickness) - Vapour barrier | <ul style="list-style-type: none"> - Pea gravel in modified asphalt flood coat (5psf max) - 2-ply modified bitumen base sheet - 1/2" fiberboard sheathing - 3" polyiso insulation - Vapour barrier |
| Weight: approx. 5-7psf (assumed) | Weight: approx. 8.5psf |
| R-Value: 7 (assumed) | R-Value: 20 |

The OBC and NBC apply to the design of new buildings and are not retroactive. Our analysis considers guidelines for the review of existing structures as outlined in 'Commentary L: Application of NBC Part 4 of Division B for the Structural Evaluation and Upgrading of Existing Buildings' of the Structural Commentaries (User's Guide – NBC 2015: Part 4 of Division B). The approach outlined in Commentary L has been used to evaluate the impact of the proposed re-roofing operations on the existing roof structure. The addition of new loads or changes to the thermal properties of a roof constitutes an *upgrade* to the structure, which is to be evaluated using current versions of the OBC or NBC considering load factors prescribed in Commentary L. Alternatively, existing structures that are not being upgraded can be evaluated using the code in force when built except where benchmark editions of the NBC have been identified that introduced significant changes to either the magnitude or extent of loads on roofs. All existing structures built prior to a benchmark edition have been evaluated using current versions of the OBC or NBC considering load factors prescribed in Commentary L. The following benchmark editions generally apply to the evaluation of roof structures:

- **NBC 1965 – Snow drifts due to high roofs and roof obstructions;**
- NBC 1970 – Retained rain loads on roofs due to blocked drains;
- NBC 1990 – Ground snow load changes resulting in significant increases in some municipalities; and
- NBC 1995 – Snow accumulation on large roofs.

No existing drawings were made available for the low roof framing. Based on our site observations and measurements, low roof framing generally consists of concrete on steel pan deck spanning between 14" deep open web steel joists (OWSJ) at 2'-0" centres supported by structural steel beams and columns. The concrete deck thickness was not confirmed during our review. We have assumed a conventional concrete thickness of 2½" for this vintage of construction.

We understand that there is active water leakage in several locations. Our visual review of the generally exposed roof structure did not identify any evidence of structurally significant deterioration resulting from excessive exposure to moisture. The topside of the roof deck should be reviewed during re-roofing operations to confirm the condition of the existing concrete.

As the arena was designed and constructed c.1951 and prior to the NBC benchmark year for snow drifts, we are of the opinion that the snow loads in force during original construction are un-conservative and not appropriate for our review. We have analyzed the low roof area for snow accumulation loading using the current version of the Building Code with the load factors recommended by the NBCC Structural Commentaries. The following reliability index was considered in our analyses:

| Factor | Category | Index |
|------------------|---------------------------------|-------|
| System Behaviour | Failure likely to impact people | 2 |
| Risk Category | High | 2 |

| | | |
|-------------------|---|---|
| Past Performance | Record of satisfactory past performance | 0 |
| Reliability Index | | 4 |


A specified snow loading of up to 205psf was considered in our analysis based on the size and height difference to the upper roof. We have considered a design dead load of 60psf based on the self-weight of the roofing assembly, structure and electrical/mechanical equipment.

Our analysis indicates that the existing OWSJ and steel beams associated with the low roof area are significantly under-designed to accommodate snow accumulation loading due to snow drift. We recommend reinforcing the existing structure as required. Roof reinforcement would most likely involve the installation of new channels between the existing OWSJ. Beams supporting the existing OWSJ and new channels would also require reinforcing with WT-sections welded to their bottom flange. Reinforcing details for the compensating structure must be prepared by a Professional Engineer licenced in Ontario, with repairs completed by a qualified Contractor.

The Commentaries recommend meeting with the Authority Having Jurisdiction (Chief Building Official) to discuss the findings of the evaluation, and to establish a timetable for any reinforcing work to be done. In the interim, we recommend implementing an immediate snow watch program for the low roof to ensure that snow heights do not exceed 16".

We trust that the above-mentioned information meets your current needs. Should any additional defects or areas of concern be uncovered during the re-roofing, the Contractor must contact a Building Professional for further investigation and review. We recommend clearly noting this requirement on the Contract Documents.

Sincerely,


Sam Colizza, P.Eng.
A2S Consulting Engineers



Attachments: Appendix A – Photographs (1 page)
Appendix B – Limitations (2 pages)

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APPENDIX A – PHOTOGRAPHS

Figure 1: Low roof area scheduled for re-roofing in 2018 (photo courtesy of Google Maps).

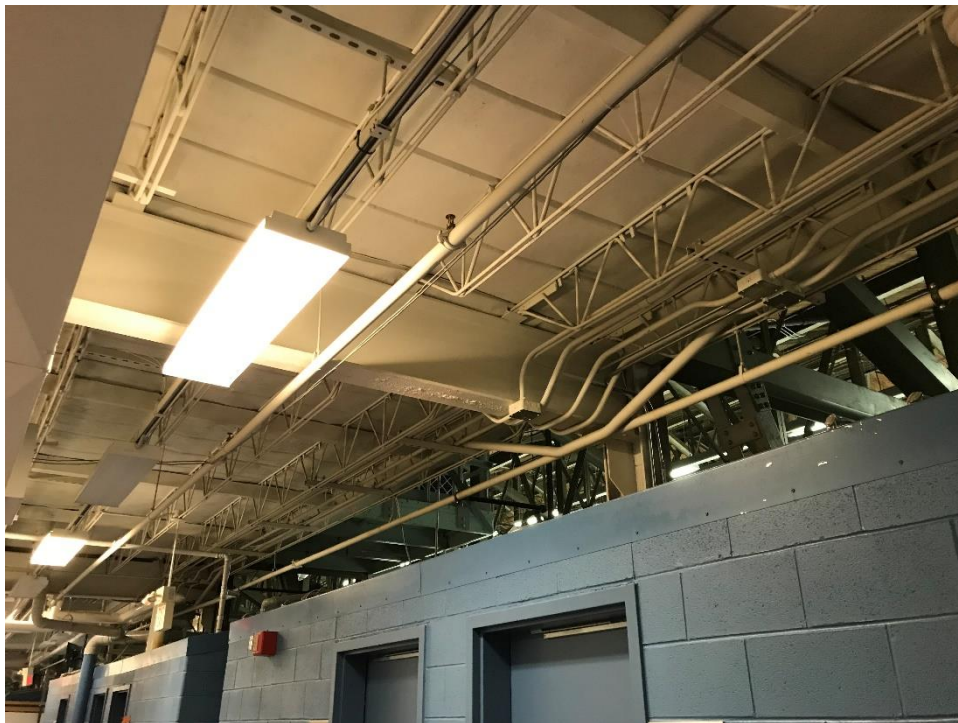


Figure 2: General view of low roof framing.

APPENDIX B – LIMITATIONS

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- The Consultant is not responsible for, or obligated to identify, mistakes or insufficiencies in the information obtained from the various sources, or to verify the accuracy of the information.
- No statements by the Consultant are given as or shall be interpreted as opinions for legal, environmental or health findings. The Consultant is not investigating or providing advice about pollutants, contaminants or hazardous materials.
- The Client and other users of this report expressly deny any right to any claim against the Consultant, including claims arising from personal injury related to pollutants, contaminants or hazardous materials, including but not limited to asbestos, mould, mildew or other fungus.
- Applicable codes and design standards may have undergone revision since the subject property was designed and constructed. As an example, design loads (such as those for temperature, snow, wind, rain, seismic, etc.) and the specific methods of calculating the capacity of the systems to resist these loads may have changed significantly. Unless specifically included in our scope, no calculations or evaluations have been completed to verify compliance with current building codes and design standards.
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March 27, 2019

CITY OF GREATER SUDBURY

200 Brady Street
Sudbury, Ontario
P3A 5P3
Attn: Chad Kobyłka

Dear Chad,

Re: **SUDBURY ARENA MAIN ENTRANCE – 240 ELGIN STREET, SUDBURY, ON**
STRUCTURAL REVIEW FOR PARTIAL RE-ROOFING PROJECT

As per your request and our proposal P19024, dated January 25, 2019, we have carried out a general structural review of the existing roof framing in the area scheduled for re-roofing in 2019. The purpose of our review is to:

- Confirm the general condition of the existing roof structure;
- Identify deficiencies in the original design;
- Identify changes that may have resulted in load not considered in the original design;
- Confirm that the weight of the proposed roofing assembly does not constitute a reduction in performance level;
- Assess the potential impact of changes to the thermal performance of the roofing assembly; and
- Identify older roof structures that were designed prior to specific benchmark editions of the Ontario Building Code (OBC) and/or National Building Code of Canada (NBC).

As part of our review we completed the following:

- Visited the site on February 22, 2019 to complete a visual review of the accessible structure and to obtain the necessary measurements to facilitate a structural analysis where exposed by a Contractor at four (4) locations; and
- Analyzed a rational sampling of structural members to confirm their adequacy for the imposed roof loading.

The current re-roofing project encompasses the low roof area above the main entrance at the south elevation of the building off Elgin Street (refer to Appendix B). This roof area is currently under snow watch protocol based on our previous findings relating to roof framing of similar vintage at the building.

The existing roofing assembly is scheduled to be removed down to the existing structural deck and replaced with the following proposed roofing assembly (top-to-bottom);

| Existing Roofing Assembly | Proposed Roofing Assembly |
|--|--|
| <ul style="list-style-type: none"> - Built-up roofing - Semi-rigid insulation (unknown type and thickness) - Vapour barrier | <ul style="list-style-type: none"> - Pea gravel in modified asphalt flood coat (5 psf max) - 2-ply modified bitumen base sheet - 1/2" fiberboard sheathing - 3" polyiso insulation - Vapour barrier |
| Weight: approx. 5-7 psf (assumed) | Weight: approx. 8.5 psf |
| R-Value: 7 (assumed) | R-Value: 20 |

The OBC and NBC apply to the design of new buildings and are not retroactive. Our analysis considers guidelines for the review of existing structures as outlined in 'Commentary L: Application of NBC Part 4 of Division B for the Structural Evaluation and Upgrading of Existing Buildings' of the Structural Commentaries (User's Guide – NBC 2015: Part 4 of Division B). The approach outlined in Commentary L has been used to evaluate the impact of the proposed re-roofing operations on the existing roof structure. The addition of new loads or changes to the thermal properties of a roof constitutes an *upgrade* to the structure, which is to be evaluated using current versions of the OBC or NBC considering load factors prescribed in Commentary L. Alternatively, existing structures that are not being upgraded can be evaluated using the code in force when built except where benchmark editions of the NBC have been identified that introduced significant changes to either the magnitude or extent of loads on roofs. All existing structures built prior to a benchmark edition have been evaluated using current versions of the OBC or NBC considering load factors prescribed in Commentary L. The following benchmark editions generally apply to the evaluation of roof structures:

- **NBC 1965 – Snow drifts due to high roofs and roof obstructions;**
- NBC 1970 – Retained rain loads on roofs due to blocked drains;
- NBC 1990 – Ground snow load changes resulting in significant increases in some municipalities; and
- NBC 1995 – Snow accumulation on large roofs.

No existing drawings were made available for the low roof framing. Based on our site observations and measurements, low roof framing generally consists of concrete on steel pan deck spanning between 8" deep open web steel joists (OWSJ) at 2'-6" centres supported by structural steel beams and columns. The concrete deck thickness was not confirmed during our review. We have assumed a conventional concrete thickness of 2½" for this vintage of construction.

As the arena was designed and constructed c.1951 and prior to the NBC benchmark year for snow drifts, we are of the opinion that the snow loads in force during original construction are un-conservative and not appropriate for our review. We have analyzed the low roof area for snow accumulation loading using the current version of the Building Code with the load factors recommended by the NBC Structural Commentaries. The following reliability index was considered in our analyses:

| Factor | Category | Index |
|--------------------------|---|----------|
| System Behaviour | Failure likely to impact people | 2 |
| Risk Category | High | 2 |
| Past Performance | Record of satisfactory past performance | 0 |
| Reliability Index | | 4 |

A specified snow loading of up to 205 psf was considered in our analysis based on the size and height difference to the upper roof. We have considered a design dead load of 50 psf based on the self-weight of the roofing assembly, structure, ceiling finishes and suspended electrical/mechanical equipment. Our analysis assumes a steel yield strength of 210 MPa based on the results of previous Leeb's hardness testing performed at the building.

Our analysis indicates that the existing OWSJ and steel beams associated with the low roof area are significantly under-designed to accommodate snow accumulation loading within the snow drift area (approximately 50% of the main entrance roof area – refer to Appendix B). We recommend reinforcing the existing structure as required (similar to the low roof area over the Wolves Den). Roof reinforcement would most likely involve local OWSJ reinforcement and the installation of new support beams at OWSJ midspan. Beams and girders supporting the existing OWSJ would also require reinforcing with WT-sections welded to their bottom flange. Additional investigation is required to confirm the extent of reinforcing. Reinforcing details for the compensating structure must be prepared by a Professional Engineer licenced in Ontario, with repairs completed by a qualified Contractor. While no access was provided to review the additional c.1951 low roof areas adjacent the main entrance, we expect that they are similarly designed for a base snow load of 40 psf and require reinforcement (refer to Appendix B).

Our visual review identified light surface corrosion to steel beams and OWSJ where exposed at ceiling opening locations. The current extent of deterioration does not appear to be structurally significant at this time. Additional up-close visual review and cleaning and recoating will be required in conjunction with roof reinforcing. The topside of the roof deck should also be reviewed during re-roofing operations to confirm the condition of the existing concrete.

The Commentaries recommend meeting with the Authority Having Jurisdiction (Chief Building Official) to discuss the findings of the evaluation, and to establish a timetable for any reinforcing work to be done. In the interim, we recommend continuing the current snow watch program for the low roof areas to ensure that snow heights do not exceed 16".

We trust that the above-mentioned information meets your current needs. Should any additional defects or areas of concern be uncovered during the re-roofing, the Contractor must contact a Building Professional for further investigation and review.

Sincerely,


Sam Colizza, P.Eng.
A2S Consulting Engineers



Attachments: Appendix A – Photographs (2 pages)
 Appendix B – Roof Plan (1 page)
 Appendix C – Limitations (2 pages)

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APPENDIX A – PHOTOGRAPHS

Figure 1: Low roof area scheduled for re-roofing in 2019 (photo courtesy of Google Maps).

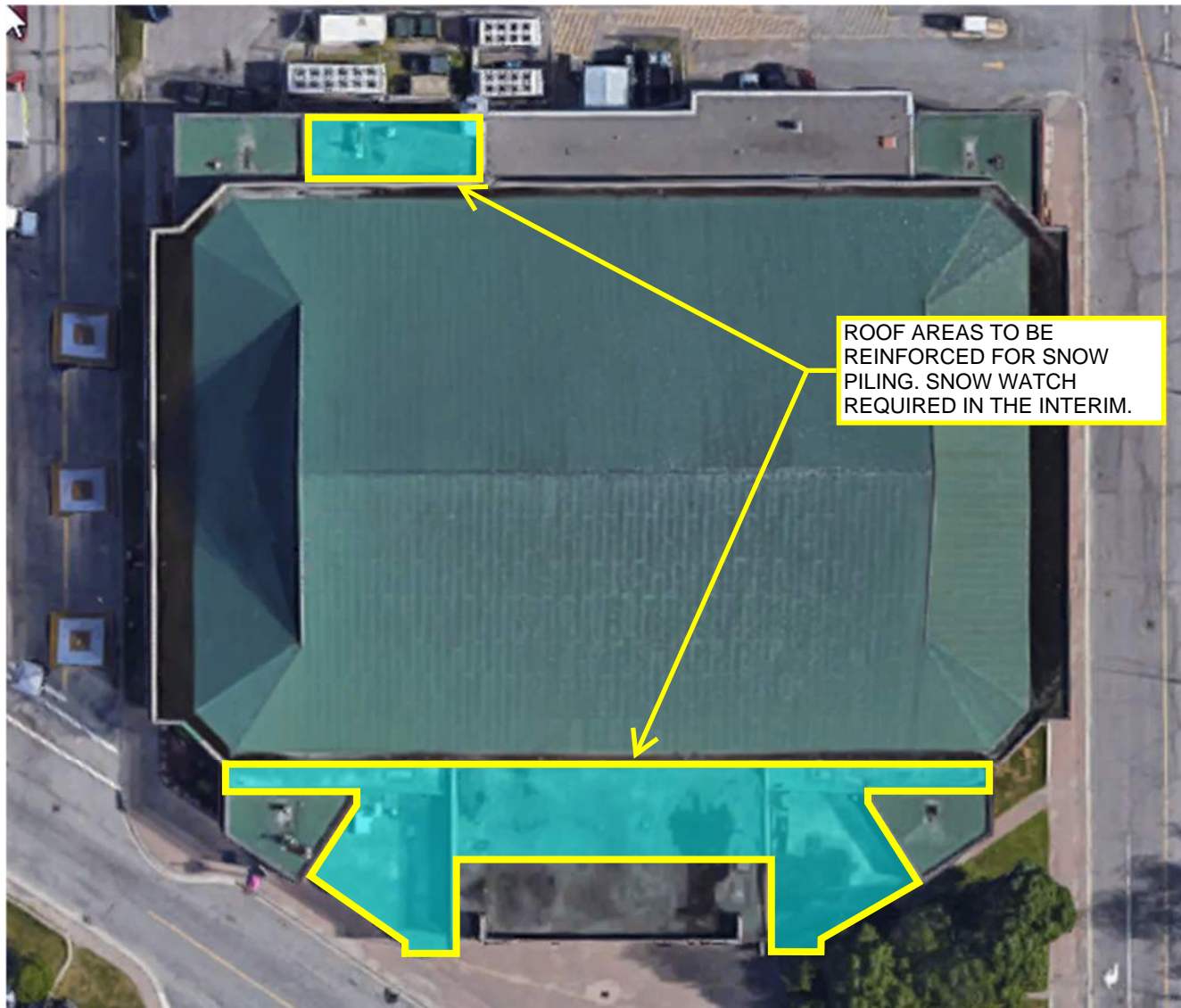


Figure 2: The roof structure is generally concealed by plaster finishes.



Figure 3: Typical OWSJ framing spanning between steel beams.

APPENDIX B – ROOF PLAN



APPENDIX C – LIMITATIONS

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April 1, 2019

CITY OF GREATER SUDBURY

200 Brady Street
Sudbury, Ontario
P3A 5P3
Attn: Chad Kobylka

Dear Chad,

Re: **SUDBURY ARENA – 240 ELGIN STREET, SUDBURY, ON**
MAIN ENTRANCE PRECAST CONCRETE PANEL REVIEW

As per your request and our proposal P19024, dated January 25, 2019, we have carried out a general review of the existing main entrance precast concrete panels. The purpose of our review is to evaluate the current condition of the existing support anchors and backup structure to determine potential causes and develop appropriate repair strategies for the identified panel cracking and apparent displacement.

As part of our review we completed the following:

- Visited the site on February 22, 2019 to complete a cursory visual review of the panels from grade and an up-close review of the upper wall areas via lift access from the exterior;
- Returned to site on March 7, 2019 to complete an up-close review of the concealed wall assembly where partially exposed by a Contractor at one (1) location; and
- Returned to site on March 25, 2019 to complete an up-close review of the existing anchors and support structure where exposed by a Contractor at one (1) location.

No existing drawings were available for our review. Based on our site observations, the main entrance precast concrete panels appear to be connected to the backup structural steel framing with masonry ties at regular spacings. Vertical panels appear to be connected using light gauge wire twist ties, while soffit panels appear to be supported in bearing by structural steel lintels and tied back using double j-bolt anchors embedded in the panel and drilled through the steel lintel flanges.

Vertical panel cracking was generally widespread at panel edges and the topmost panel at each column was noticeably displaced, particularly at the two (2) outer column locations. We also identified two (2) locations of concrete delamination at panel edges. Concrete cracking and delamination are likely the result of embedded reinforcing bar corrosion.

Our visual review identified corroded and snapped wire ties. The small cross-section of these ties is inherently prone to damage as a result of section loss resulting from water infiltration and the associated corrosion. We expect that panel securement is compromised by the failed ties and the panels are currently relying on a combination of friction and sealant for support. Immediately following our up-close review, a Contractor was engaged to install temporary support to the topmost panels at both outer column locations.

We also identified cracked soffit panels. Soffit panel cracking appears to be isolated to those panels over window jambs. We expect that cracking is the result of restricted panel movement over the vertical panels. The vertical panels should be cutback to provide a larger soft joint to allow for differential movement.

The soffit panel j-bolt anchors generally appear corroded; however, deterioration appears to be limited to light surface corrosion to the nuts and bolts. Anchors were not installed at all pre-drilled holes in the supporting beam flanges and nuts were not fully threaded. The anchors have no appreciable resistance to seismic forces and could result in a falling hazard under relatively minor earthquake forces.

As a result of the observed defects, we recommend that precast panel cracks be epoxy-injected, concrete delamination be patched and that retrofit panel securement be installed by using a series of helical ties drilled through the panels into the backup structure. The backside of the panels should be exposed from the interior by removing plaster wall finishes to allow for review of tie installation.

We identified light surface corrosion to the structural steel backup members and lintels. The current extent of deterioration does not appear to be structurally significant at this time. Inspection ports should be cored into the sides of vertical panels to confirm the extent of deterioration at column bases where prone to de-icing salt use and the associated chloride-induced corrosion.

Sealant joints between adjacent panels are generally cracked and debonded. Sealants are beyond the end of their service life. There is also excessive staining on the soffit panels due to inadequate water-shedding at the leading edge. Sealant replacement and new drip edge flashings are required to mitigate progressive freeze-thaw deterioration to precast panels due to prolonged exposure to moisture and subsequent moisture absorption. The existing staining can also be cleaned (and recoated), if desired.

We recommend that all repairs be completed prior to next winter to address the observed defects prior to another progression of free-thaw cycling.

The recommendations provided herein identify the minimum scope of work required to address the identified defects and to mitigate the risk of progressive deterioration and a potentially unsafe condition from developing. While it is the most cost-effective strategy, it will impact aesthetics. Alternative management strategies are also available, including panel replacement with new precast concrete or Exterior Insulation and Finish System (EIFS) cladding to improve aesthetics and renew the entrance appearance, but at a higher cost.

We trust that the above-mentioned information meets your current needs. Please do not hesitate to contact us with any questions or concerns.

Sincerely,


Sam Colizza, P.Eng.
A2S Consulting Engineers



Attachments: Appendix A – Photographs (5 pages)
 Appendix B – Limitations (2 pages)

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APPENDIX A – PHOTOGRAPHS



Figure 1: General view of main entrance precast concrete panels.

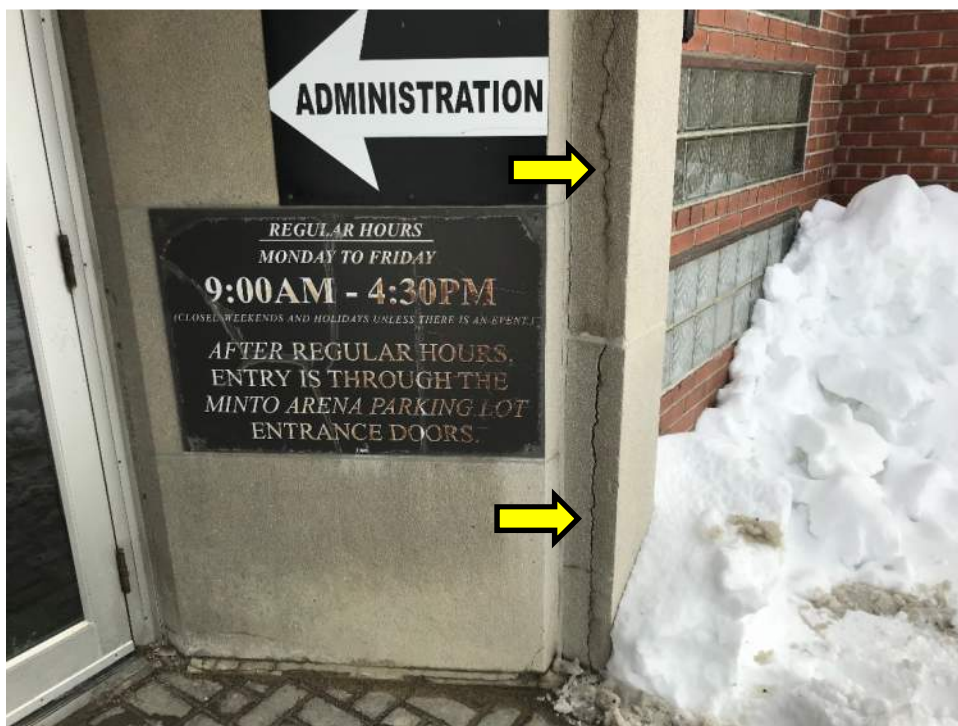


Figure 2: Typical vertical panel cracking.



Figure 3: Typical displacement of topmost panel on outer column.



Figure 4: Typical snapped wire tie.



Figure 5: Immediate temporary panel support.



Figure 6: Soffit panel cracks and staining.



Figure 7: General view of backside of soffit panels.



Figure 8: Surface corrosion and missing anchors at all pre-drilled holes.



Figure 9: Typical soffit anchor j-bolt. Surface corrosion and nut not fully threaded.



Figure 10: Typical sealant joint deterioration.

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SUDBURY COMMUNITY ARENA RENEWAL & NEW BUILD REVIEW

Prepared for the
City of Greater Sudbury

March 27, 2024

PREPARED BY

BRISBIN
BROOK
BEYNON
ARCHITECTS

**SUDBURY COMMUNITY ARENA
RENEWAL & NEW BUILD REVIEW**

TABLE OF CONTENTS

| | PAGE |
|------------------------------|----------------|
| INTRODUCTION | 1 |
| EXECUTIVE SUMMARY | 2 |
| 1. Document Review | 3 – 4 |
| 2. Renewal Option | 5 – 10 |
| 3. New Build Option | 11 – 16 |
| 4. Both Options | 17 – 18 |
| 5. Budget | 19 – 23 |
| 6. Options Evaluation | 24 |
| 7. Financial Plan | 25 – 26 |
| Exhibit A | 27 – 29 |
| Exhibit B | 30 |

SUDBURY COMMUNITY ARENA RENEWAL & NEW BUILD REVIEW

INTRODUCTION

Brisbin Brook Beynon Architects (BBB), based in Ontario for 40 years, and our wholly owned U.S. firm SCI Architects, have completed more renewal and new multi-use event centres than any other Canadian firm as evidenced in Exhibit A's list of some of our Projects. BBB is known internationally as an advocate of having saved numerous major arenas from demolition through excellence in renewal design. **With this experience, BBB can objectively articulate the reasons why existing arenas can be saved and when they are better to be replaced.**

In this REVIEW, we have used our methodology to identify the Pros, Cons and Risks of the RENEWAL and NEW BUILD options. BBB's database has allowed us to estimate the two options' capital cost differences.

Of equal importance, BBB has created many unique seating, hospitality, sponsor, artist, fan experience products and building configurations that have improved an arena's financial viability. We know the efficiencies in renovation and new arena designs that save construction dollars and deliver more efficient profitable event centre operations. These have been integrated into this REVIEW.

This report includes many recommendations that are based upon our firm's experience and professional judgement. Where appropriate, the opinions and recommendations are backed-up by narrative to establish trust in the experience and professional judgement of the authoring firm

In closing, this REVIEW has articulated the rationales that support our recommendations, all based on the benefits, challenges, process, timeline, budgets, financial plan, and evaluations for both the RENEWAL and the NEW BUILD options. We look forward to presenting our findings and recommendations to the City of Greater Sudbury Council.

SUDBURY COMMUNITY ARENA RENEWAL & NEW BUILD REVIEW

EXECUTIVE SUMMARY

As you will see in this review, a new build is significantly superior to a renewal even where a significant amount of space is added to the Sudbury Community Arena (“SCA”). But in fact you are not comparing “apples to apples,” you are comparing two very different products with the RENEWAL’s shortcomings thoroughly set out in Section 2 a) and Section 6. For comparative purposes, the capital and operating costs over the first 25 years of a RENEWAL or a NEW BUILD is approximately the same, in the range of \$185M and \$195M in Q2 2024 dollars.

Based on our review, evaluation and expertise we recommend the NEW BUILD option for the following primary reasons:

1. Increasing Annual Net Revenues through more of the following: utilization, capacity, suites, events, sponsors and operating efficiencies;
2. Significantly Less Construction and Financial Risk which could be considerable with RENEWAL resulting in significant additional costs;
3. Larger Private Sector Investment potential in the Event Centre;
4. More Publicly Accessible and Welcoming with a higher Service Level;
5. Additional Private Sector Investment in the Adjacent South District Lands; and,
6. A NEW BUILD will last approximately twice as long as a RENEWAL.

In summary, a NEW BUILD will deliver significantly more VALUE for the investment than RENEWAL. Articulated rationales that support the above are expressed in the following REVIEW.

A third option, which is not covered in this review, is to “Do Nothing” and to continue to operate the existing SCA and only complete repairs and replacements when absolutely required. With a 73-year-old building, this is not recommended for the following primary reasons:

1. Major components such as the ice floor could breakdown resulting in shutting down the Arena and its operations for an extended period;
2. The facility will then not be upgraded to comply with today’s standards and laws including for safety, accessibility and energy;
3. The costs to maintain and repair the Arena will continue to increase – probably dramatically;
4. It will become more difficult to attract higher quality entertainment artists and special events to the city; and,
5. The facility will more and more become a second-class facility in comparison to similar Event Centres in Ontario and Canada. Its Comparative Service Level will be second class and much worse than RENEWAL.

1. DOCUMENT REVIEW

We have read the following documents and their appendices and other available studies, and the existing plans referred to in the City's RFQ and we have utilized their relevant information to complete this Review.

1. Proposed Sports and Entertainment Centre Feasibility and Business Case Assessment, February 2017 (<https://pub-greatersudbury.escribemeetings.com/filestream.ashx?documentid=9299>)
2. Greater Sudbury Event Centre Site Evaluation, June 2017 (<https://pub-greatersudbury.escribemeetings.com/filestream.ashx?documentid=8338>)
3. ProjectNOW, Presentation to City Council, 3rd Line Studio, October 2020 (<https://pub-greatersudbury.escribemeetings.com/filestream.ashx?documentid=39007>)
4. Sudbury Community Arena Renovation & Expansion Program Cost Plan R1, May 2021 (<https://pub-greatersudbury.escribemeetings.com/FileStream.ashx?DocumentId=40191>)
5. Assessment Study for the Expansion of the Sudbury Community Arena, May 2021 (<https://pub-greatersudbury.escribemeetings.com/FileStream.ashx?DocumentId=40190>)
6. Sudbury Event Centre Update Report, June 2021 (<https://pub-greatersudbury.escribemeetings.com/FileStream.ashx?DocumentId=40189>)
7. Sudbury Community Arena Condition Update and Event Centre Options (<https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=50084>)
 - Appendix A (<https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=50085>)
8. Greater Sudbury Event Centre Update and Future Direction (<https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=51025>)
 - Appendix A (<https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=51026>)
 - Appendix B (<https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=51027>)
 - Appendix C (<https://pub-greatersudbury.escribemeetings.com/filestream.ashx?DocumentId=51028>)
9. 20231213 SCA Updated Building Condition Assessment
10. Event Centre Report and Presentation, July 2022(<https://pub-greatersudbury.escribemeetings.com/FileStream.ashx?DocumentId=47134>; <https://pub-greatersudbury.escribemeetings.com/FileStream.ashx?DocumentId=47382>)
11. Sudbury Community Arena Barrier-Free Accessibility Assessment
12. City of Greater Sudbury Event Centre Update Report (by PwC) dated June 2021.
13. City of Greater Sudbury STRATEGIC PLAN 2019-2027 (Revised 2023)
14. City of Greater Sudbury (South District) MARKET FINDINGS REPORT Updated September 2019.
15. KKR Precedent Projects, June 14, 2023.

Document #6 above is a summary compilation of documents 3 through 6, and therefore we often only refer to document 6 in this review.

We have had clarifying discussions with staff, regarding the "City Council's 2017 list of required features for a new Event Centre ("EC"), including what is possible with a renovated scenario" which was referred to in the RFQ's Section 2a) and 3a). Based on those discussions, we have used the information below as the **LIST OF REQUIRED FEATURES** and referred to it in this analysis as "**LRF**".

1. DOCUMENT REVIEW (CONT'D)

As outlined in PwC's report, there is a market in the Greater Sudbury area for approximately 550,000 people that could be served by a new arena / event centre. The optimal size of a new Greater Sudbury Sports and Entertainment Centre [in hockey mode] is estimated to be 5,800 fixed seats, with features that include:

- *Approximately 5,020 general admission seats;*
- *Approximately 10 loges boxes containing a total of 40 seats;*
- *Approximately 500 club seats;*
- *Approximately 24 private suites with 10 seats per box; and,*
- *Contemporary Back-of-House amenities to support a variety of sports & entertainment events.*

There are also the following additional features stated in previous reports and statements by the City:

Features to be included within the Project are to include "Front-of-House" components such as a main lobby offering uncongested access to a main concourse, "House" components such as comfortable seating and private suites, and "Back-of-House components including modern day dressing rooms and vehicle entry for trucks to access the event floor.

In summary, the City's statements and directives are to realize a quality event centre.

Refinement of the above LRF, based on EC entertainment industry representatives, City input and BBB's experience, additional objectives are:

- Achieve flexibility to be able to adjust capacity for special events such as concerts;
- By example, with 5,800 seating in hockey mode, a design that can be expanded to 6,000 for special events that require 6,000 such as Hockey Canada and Curling Canada championship events;
- Meeting the City's December 2019 Community Energy and Emissions Plan ("CEEP"), the City's enhanced Accessibility Policy, improved viewing, reduction of congestion and access to guest services and overall ability to attract more events than today;
- Meeting the applicable sections of the City's Strategic Plan 2019-2027 (Revised 2023); and,
- Operate more efficiently than today.

It is important to note that these recommendations are not a change in the previously approved features for a new event centre and nor does it impact the costs to achieve them. The recommendations related to capacity are a reflection of current trends in event centre designs that have moved to increase maximum capacity to attract larger popular events that do not require a seat for all guests. This is an important consideration in growing cities and echoes trends related to the spectator experience and event industry. These nuanced recommendations related the features defined above contribute to future proofing an event centre in Greater Sudbury. The most important aspect of future proofing is a design's flexibility to adapt to future changes in an evolving industry.

Before analyzing the comparative benefits and challenges of RENEWAL or NEW BUILD, it is important to emphasize that the present state of the Sudbury Community Arena ("SCA") is not good. Many existing structural, mechanical, electrical, plumbing ("MEP"), sightline problems must be corrected even before improving the SCA to today's standards. See the Proposed Sports and Entertainment Centre Feasibility and Business Case Assessment dated February 2017.

While not part of this REVIEW, a downtown RENEWAL or NEW BUILD has many advantages including sufficient available City controlled land, it is consistent with the City's strategic vision and building policies and greater ability to realize complementary benefits, all as stated in the PwC June 2017 report.

2. RENEWAL OPTION

a) Benefits and Challenges

As set out in this section 2a) for a RENEWAL and section 3a) for a NEW BUILD, a NEW BUILD is significantly superior to a RENEWAL. But you are not comparing “apples to apples,” you are comparing two (2) very different products, with the RENEWAL being an inferior product compared to the NEW BUILD. In fact, the RENEWAL will not even deliver Council’s **List of Required Features**. Most of these are listed on the next page under Challenges/Negatives/Risks. With the RENEWAL, there is a real risk that the City’s objective for a quality facility will not be achieved.

For this comparison we have generally used the same EC RENEWAL design as described in the City’s previous reports including a major addition to SCA. Based on our experience, we agree with this previous programming approach, especially as the following list of initiatives are not practicable or feasible from a cost or scheduling perspective:

1. Remove and replace the roof with new supporting columns to allow a 5,800 capacity;
2. Elevate the existing roof to add an additional floor to fulfill some LRF program requirements;
3. Tear out the entire seating bowl to get an industry standard seating tier depth of at least 33”;
4. Replace the existing foundations to eliminate the risk of failure in the future; and,
5. Close Grey Street and acquire additional lands to the immediate west to build a proper truck load-in/out area to the west side of the stage.

In our opinion, the total additional cost to complete the above changes would be between \$50m and \$100M above the RENEWAL’s \$190M estimated cost in Section 4d). This would make the NEW BUILD much less expensive and even more the preferred choice.

Therefore, the following Section 2 for the RENEWAL Option assumes that the above 5 initiatives are not included.

In the following pages, **FRONT OF HOUSE** means the areas that are normally open to the public such as entries, concourses and washrooms. **BACK OF HOUSE** means areas that are used to operate the EC and host events. These areas are normally not open to the public such as service and mechanical/electrical rooms, dressing and locker rooms, offices and storage.



2. RENEWAL OPTION (CONT'D)

The Benefits and Challenges of the RENEWAL Option versus the NEW BUILD Option are as follows:
(Many points below are facts while points marked at the end with an "R" are Risks.)

| BENEFITS | CHALLENGES/NEGATIVES/RISKS |
|--|--|
| FRONT OF HOUSE | |
| <ul style="list-style-type: none"> Many find older buildings more interesting. | <ul style="list-style-type: none"> Desired capacity cannot be achieved. See Report #3 on page 3 Overall circulation will be less open, clear and efficient, especially with the reduced areas for concourses and guest services adjacent to Grey and Minto Streets. Desired number and location of suites cannot be built. See Report #4 on page 3 RENEWAL will have less "wow" factor and a shorter "honeymoon" of support, attracting fewer events, people, sponsors, etc. Previously proposed increase of existing 31" deep Seating Tiers to 32" to improve comfort, is costly and risk prone with steel overlay which is untried to our knowledge. R Sightline compromises will continue in bowl's last rows. R See Report #5 on page 3 All of the above will elicit public disappointment. |
| BACK OF HOUSE | |
| | <ul style="list-style-type: none"> Will attract fewer events because: event load in/out not as fast or safe as today's touring show standards and expectations. Less efficient overall Food & Beverage operational layout. Less efficient overall EC operations. |
| FINANCIAL / BUSINESS | |
| <ul style="list-style-type: none"> The salvage value of structural steel and wood roof. | <ul style="list-style-type: none"> Much less capital cost certainty because of the existing Arena's many unknowns, especially foundations, other structures, hazmat, and hidden mechanical, electrical and plumbing infrastructure. R See Report #6 on page 3 Soils under existing SCA are a risk and a significant financial exposure. R More required construction contingency at outset. Less attendance resulting in reduced revenues. See #7 on page 3 EC Tenant contracts are less advantageous for the City. R Greater negative financial impact on existing EC operations during construction including closing SCA for 2 summers. Two very busy summer construction periods with two quiet/slow construction periods will be less efficient to build than a NEW BUILD's continuous construction resulting in less value received for the same capital expenditure. In summary, it is impossible to derisk a RENEWAL to the level of a NEW BUILD. |
| MISCELLANEOUS | |
| | <ul style="list-style-type: none"> All of the above will result in a lower Service Level. Ongoing operations will be less sustainable as overall building is not as efficient or sealed from the exterior elements. Little chance to meet CEEP as less sustainable and higher operating costs. *A Achieving or exceeding full AODA Compliance is highly unlikely even if the Arena is expanded over Grey & Minto. R *B Will not meet City's Strategic Plan 2019-2027 (Rev. 2023). *C Will not follow greater ancillary benefits from NEW BUILD as seen in other Canadian cities. *D See #9 on page 3. If a 'surprise problem' appears during construction, the Wolves & Sudbury Five will have to relocate possibly to a different City. R SCA not available for community and other events during construction. |

2. RENEWAL OPTION (CONT'D)

Notes from the preceding table:

***A** RENEWAL will not be able to fully achieve the general objectives and goals set out in the City's CEEP Report especially regarding the most important issues of space and water heating and cooling. CEEP recognizes this advantage of a NEW BUILD versus RENEWAL in their report. See Section 3 a) of this report for further narrative on this topic.

***B** Sudbury's 2022-27 Multi-Year Accessibility Plan proactively encourages greater mobility for all citizens throughout the City. A RENEWAL will not be able to achieve the Plan's objectives to the same extent of a NEW BUILD which will be able to incorporate even newer initiatives that are especially designed for EC's.

***C** RENEWAL will not meet the City's Strategic Plans (revised 2023) objectives such as maintaining sustainable infrastructure, retiring old costly uneconomic assets, a sustainable long term financial plan, pursuit of large inbound private sector investment, and ensuring competitiveness to retain and attract new businesses and workforce.

***D** RENEWAL will not maximize the ancillary investment benefits as seen with New Builds in London, Kingston, Oshawa, Guelph and Moncton.

The above identifies the main benefits and challenges of a RENEWAL in comparison to a NEW BUILD, however, there will also be many aspects where the quality of the RENEWAL will be similar to a NEW BUILD. These include:

- The different required areas (albeit many in the wrong locations as noted in Section 2 a) under the RENEWALS' CHALLENGES/NEGATIVES/RISKS);
- The general aesthetics and 'visual look' of the different areas;
- The number of washroom fixtures including accessible and gender-neutral washrooms;
- The number of food & beverage points of sale;
- The facilities for athletes, artists, support staff, media, etc;
- Mechanical, electrical, lighting, plumbing, technology, security, audio/visual, etc. infrastructure;
- The level of 'life safety';
- Acoustics; and,
- Media Facilities.

The issue/risk of poor soils for additions to the RENEWAL and for the NEW BUILD are about the same and are not seen to be significant because of thorough soils tests and the added contingencies listed in Section 5.

RENEWAL & NEW BUILD in the South District have the same challenge of providing enough convenient parking. This is emphasized in PwC's EC UPDATE REPORT (of June 2021) for the City which states: "we understand that parking remains an issue" and "based on the foregoing, a parking facility should be additionally pursued".

2. RENEWAL OPTION (CONT'D)

b) Process, Steps and Timelines for Design, and Construction and Decisions

With Council's objective to complete this project in 2027 or 2028, and to develop this project in a logical and cost-conscious manner, the following is recommended below. This is based on our recommended use of DESIGN BID BUILD procurement, which is to have architects and engineers complete construction documents for tender to qualified general contractors with the lowest compliant bid being awarded a fixed price contract. Third party cost estimates are completed through the design stages to ensure the project stays on budget. It is our opinion that with the present economic climate (versus 2 to 3 years ago when the Kingsway initiative was developed) design bid build is the best way to ensure maximum competition, the project's quality, and to incorporate cost-effective design. The schedule of Approvals below is consistent with recent CGS projects and BBB's experience with other municipalities. Informal Council briefings will be held as decided. Also included below are the consultants/contractors required at each stage

| PHASES | REPORTS/RECOMMENDATIONS/APPROVALS: | SCHEDULE |
|--------|--|---|
| 1. | Recommendation on RENEWAL & DESIGN BID BUILD (BBB Arch) Approval – APRIL 2024 | Dec '23 – Apr '24 |
| 2. | RFQ/RFP to Proponents & Decision on Preferred Proponent Schematic Design, Location of Additions and Class C Estimate Design Development and Class B Estimate (All Architectural/Engineering Team and all City Consultants including Cost Estimator) Approval – MAY 2025 | May '24 – Aug '24 Sept '24 – Dec '24 Jan '25 – May '25 |
| 3. | Working Drawings and Class A Estimate Building Permit Construction Tender (GC/CM and Trades) Award Construction Contract – FEB-MAR 2026 | Jun '25 – Nov '25 Dec '25 – Feb '26 Dec '25 – Feb '26 |
| 4. | 'Behind the Scenes' Construction Summer Closure 'Behind the Scenes' Construction Summer Closure | Apr '26 – May '27 May '27 – Sept '27 Sept '27 – May '28 May '28 – Sept '28 |
| 5. | Grand Opening – SEPTEMBER 2028 | |

Unfortunately starting construction in April 2026 does not leave enough time to mobilize (i.e. award; shop drawing submissions, review and approval; delivery of materials to site; etc.) to initiate a complete closure for the 2026 summer construction. Therefore the 2 required summer closures will still have to be in 2027 and 2028 for a September '28 opening.

Any unknowns that are identified during this process may extend this schedule. These include items such as very unusual and unknown existing conditions and slower than anticipated decision making.

The above 2 off season Summer Closures (instead of the previously recommended 3 closures) is based on our experience with major EC renovations that had 1, 2 and 3 Off Season Summer Closures. It is our opinion that this project can be done with 2 closures. This will save money versus 3 off-season closures.

The above assumes the site and existing arena will be ready to commence construction of the renovations and additions in Q3 2026.

2. RENEWAL OPTION (CONT'D)

c) Case Studies of Similar Facilities

| | |
|--------------------------------------|--|
| Facility Name & Location: | PETERBOROUGH MEMORIAL CENTRE (PETERBOROUGH, ON) |
| Owner: | City of Peterborough |
| Opening Date & Cost: | 1956, \$875K |
| Renovation Date & Cost: | 2003, \$13.3M |
| Total Post Reno Area: | 120,000sf (11,148sm). Note 'sf' means square feet and 'sm' means square meters |

The renovation included significant upgrades to the facility, including more accessible seating, updated concourses, washrooms, entrances, a Hall of Fame and various back-of-house areas. In 2003, there were people who wanted to build new, but the City decided not to undertake this. Today there have again been discussions and proposals to replace this arena.

| | |
|--------------------------------------|---|
| Facility Name & Location: | KITCHENER MEMORIAL AUDITORIUM (KITCHENER, ON) |
| Owner: | City of Kitchener |
| Opening Date & Cost: | 1950, \$1.25M |
| Renovation Dates & Costs: | 2002, \$6.5M and 2012, \$12M |
| Total Post Reno Area: | 70,000sf (6,503sm) (as stated by Facility but not confirmed). |

The renovations included the addition of 900 seats, 13 private suites, nine sport loges and two group sales suites along with a restaurant, which overlooks the event bowl. Three new major concession locations were added to the main concourse along with a raised lounge area. The existing media facilities were centralized and upgraded. The auditorium site also underwent a facelift with new parking lots, lighting and landscaping. The Kitchener Memorial Auditorium has approximately 2,000 more seats when built than the SCA and has a structure that was/is easier to renovate and expand. However, discussions continue in Kitchener about building a new EC.

| | |
|--------------------------------------|---|
| Facility Name & Location: | COCA-COLA COLISEUM (CCC) (TORONTO, ON) |
| Owner: | City of Toronto |
| Opening Date & Cost: | 1921, \$1M |
| Renovation Date & Cost: | 2003, \$38M |
| Pre Reno Area: | 155,000sf (14,399sm) |
| Increased Area in Reno: | 45,000sf (4,180sm) |

The roof was reconstructed to incorporate 45 private suites and a VIP concourse, the event floor was lowered to allow the addition of removable seating sections, increasing the seating capacity to 9,500 for hockey and up to 11,000 for concerts. New concourses and concessions, a club lounge, professional sport team locker rooms, renovated public washrooms and improved and expanded back-of-house service areas improved the overall efficiency of the CCC complex. The CCC was simpler to renew than in Sudbury because it was a much simpler 'building type'. The removal and replacement of its original roof with a totally new premium level and its integrated utilization with the adjoining Exhibition and Convention Centre has resulted in a high rate of utilization.

2. RENEWAL OPTION (CONT'D)

| | |
|--------------------------------------|--|
| Facility Name & Location: | THE FORUM (LOS ANGELES, CA-USA) |
| Owner: | Steve Ballmer |
| Opening Date & Cost: | 1967, \$16M USD |
| Renovation Date & Cost: | 2014, \$100M USD |
| Building Area: | 290,000sf (26,941sm) |

Innovative, revenue-focused renovations included viewing from a large event level club to the concert stage, the largest general event floor of any arena in America, and spacious, well-appointed, and state-of-the-art artist amenities. The interior bowl was completely modernized to provide seating for 17,500 and can be converted to a half-bowl to seat 7,000. These renovations saved this unique building from being demolished. It also started the regeneration of the City of Inglewood with significant new investment in adjacent properties over the next 10 years. Soon after opening it became the second busiest indoor concert venue in the USA.

Summary of Case Study Observations

The main 'take-aways' from the above are:

- With Peterborough and Kitchener, even after significant renewals, after 25 years, these communities are again talking about doing a new build;
- The Coca-Cola Coliseum was a much simpler building type than SCA with significant additional adjacent space that reduced its renewal cost; and,
- The Los Angeles FORUM found new uses without sports that provided a business model that worked for this simpler EC building.

d) Appetite of Investment/Developer Market to Support RENEWAL

KKR Advisors completed their Precedent Projects Report to the City on June 14, 2023, and reported in considerable detail 8 projects in Canada where private sector entities have been assisting municipalities in the provision of Community Infrastructure. BBB has been working on many of these and other similar projects in Ontario and Canada.

The conclusions are that existing city lands and buildings can be a point of leverage to increase private sector interest and investment; especially when the city is making a major capital investment. This is further accelerated with a 'front row centre' Community Centre. The other reality is that almost all these projects are New Builds for the reasons stated below. The only exception is Hamilton where a market niche opened to allow the renovation of the First Ontario Centre to be financially feasible.

One thing private sector investors and developers avoid are increased risks and uncertainties which is what the RENEWAL option has. Additionally, a NEW BUILD will be more attractive and acceptable to the public and project tenants/partners and therefore to investors/developers. Another concern will be that a RENEWAL will not have the public profile and impact to elevate the South District's projects to an enhanced level of recognition and success. These factors will decrease the market's support for RENEWAL versus NEW BUILD.

3. NEW BUILD OPTION

a) Benefits and Challenges

The Benefits and Challenges of the NEW BUILD Option versus the RENEWAL Option are as follows:
(Points marked with an “R” are Risks.)

| BENEFITS | CHALLENGES/NEGATIVES/RISKS |
|---|--|
| FRONT OF HOUSE | |
| <ul style="list-style-type: none"> Desired overall capacities can efficiently be achieved. See Report #12 on page 3. Overall circulation will be more open, clear and efficient. Required number of Suites and Loges can be built in best locations. See Report #12 on page 3. NEW BUILD will have a “Wow” factor with bigger and longer “honeymoon” attracting more events, people and sponsors. Seating tier depth will provide today’s standard of legroom comfort. Sightlines will be excellent because they are being designed that way. | <ul style="list-style-type: none"> Potential negative reaction to the demolition of a traditional community gathering place. Risk of poor soils, deep bedrock and contaminated soils although already identified in soil reports and a specifically added contingency. |
| BACK OF HOUSE | |
| <ul style="list-style-type: none"> Event load in/out is faster, less expensive, and safer attracting more events. More efficient overall positioning of Food & Beverage facilities. Overall EC operations will be more efficient. Existing Arena can continue normal operations during construction. | |
| FINANCIAL / BUSINESS | |
| <ul style="list-style-type: none"> Significantly less construction cost risk versus renovating a 1951 built building. See Report #13 on page 3. More average revenues per event because of greater attendance. A lot less construction contingency to try to cover unknowns. More revenue from 3rd party sponsors and investors because of product certainty, being new and potential to host more championship events. EC Tenant contracts are more advantageous for City. No negative impact on existing EC operations during construction. See Report #14 on page 3 A NEW BUILD is significantly less difficult to de-risk than a RENEWAL. | |
| MISCELLANEOUS | |
| <ul style="list-style-type: none"> All of the above will result in a high Service Level. Operations will be more sustainable and will be better able to meet CEEP. *A Detailed “accessibility design” will meet and likely exceed AODA requirements. *B Will meet City’s Strategic Plan 2019-2027 (Revised 2023) *C. Will realize ancillary investment benefits seen in other Canadian cities. *D See Report #15 on page 3. SCA will be available to continue operations and hosting community and other events during construction. | <ul style="list-style-type: none"> Construction phase will be less sustainable than RENEWAL if SCA is demolished. R |

3. NEW BUILD OPTION (CONT'D)

Notes from the preceding table:

- *A** EC's are unique from other building types and require unique solutions to work towards CEEP's goals. These range from compartmentalization and low temperature heating systems to population monitoring and large air circulation fans. However, most important at this stage is that a NEW BUILD will be able to achieve the majority of goals set out in the City's CEEP Report, especially re space and water heating and cooling. CEEP recognizes this advantage of a NEW BUILD versus a RENEWAL in their report.
- *B** Sudbury 2022-2027 Multi-Year Accessibility Plan proactively encourages greater mobility for all citizens throughout the City. A NEW BUILD will be able to achieve the Plan's objectives, including being able to incorporate even newer initiatives that are especially designed for EC's to a greater extent than a RENEWAL.
- *C** NEW BUILD will meet the Strategic Plans objectives such as maintaining sustainable infrastructure in Sudbury, retiring old costly uneconomic assets, a sustainable long term financial plan, pursuit of large inbound investment, and ensuring competitiveness to retain and attract new businesses and workforce.
- *D** NEW BUILD will result in similar ancillary benefits found in London, Kingston, Oshawa, Guelph and Moncton.

The issue/risk of poor soils for additions to the RENEWAL and the NEW BUILD are about the same and are not seen to be significant because of soils tests and the added financial exposure contingencies listed in Section 5.

RENEWAL & NEW BUILD in the South District have the same challenge of providing enough convenient parking. This is emphasized in PwC's EC UPDATE REPORT of June 2021 for the City.

New Build Examples of Similar Size



3. NEW BUILD OPTION (CONT'D)

b) Process, Steps and Timelines for Design, and Construction and Decisions

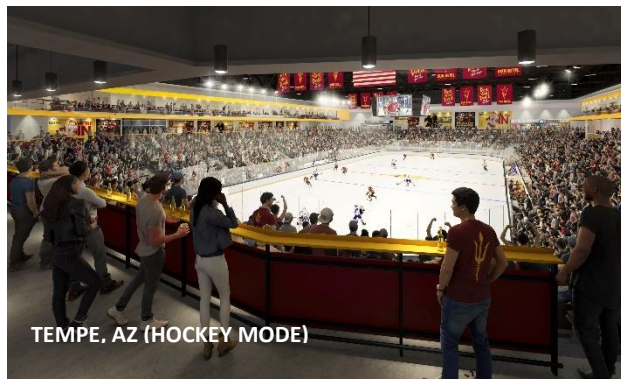
With Council's objective to complete this project in 2027 or 2028, and to develop this project in a logical and cost-conscious manner, the following is recommended. This is based on our recommended use of DESIGN BID BUILD procurement which is to have architects and engineers complete construction documents for tender to qualified general contractors with the lowest compliant bid being awarded a fixed price contract with third party cost estimates to complete through the design stages to ensure the project stays on budget. It is our opinion that with the present economic climate (versus 2 to 3 years ago) when the Kingsway initiative was developed) design bid build is the best way to ensure maximum competition, project's quality, and to incorporate cost-effective design.

The schedule of Council Approvals below is consistent with recent CGS projects and BBB's experience with other municipalities. More informal Council briefings will be held as decided. Also included below are the consultants/contractors required at each stage.

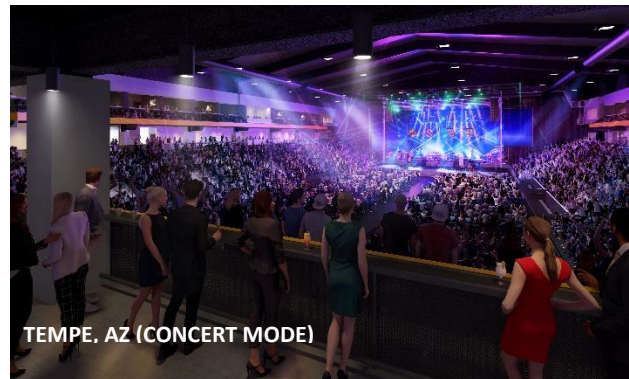
| PHASES | REPORTS/RECOMMENDATIONS/APPROVALS: | SCHEDULE |
|--------|---|--|
| 1. | Recommendation on NEW BUILD & DESIGN BID BUILD (BBB Arch) Approval – APRIL 2024 | Dec '23 – Apr '24 |
| 2. | RFQ/RFP to Proponents & Decision on Preferred Proponent Schematic Design, Exact Location and Class C Estimate Design Development and Class B Estimate (All Architectural/Engineering Team and all City Consultants including Cost Estimator) Approval – MAY 2025 | May '24 – July '24 Aug '24 – Dec '24 Jan '25 – May '25 |
| 3. | Working Drawings and Class A Estimate Building Permit Construction Tender (GC/CM and Trades) Award Construction Contract – FEB-MAR 2026 | June '25 – Nov '25 Dec '25 – Feb '26 Dec '25 – Feb '26 |
| 4. | Construction | Apr '26 – Apr '28 |
| 5. | Grand Opening – APRIL-MAY 2028 | |

Any unknowns that are identified during this process may extend this schedule such as delays in land acquisitions, soil testing, completion of transportation plans and decisions.

New Build Examples of Similar Size



TEMPE, AZ (HOCKEY MODE)



TEMPE, AZ (CONCERT MODE)

3. NEW BUILD OPTION (CONT'D)

c) Case Studies of Similar Facilities

| | |
|--------------------------------------|---|
| Facility Name & Location: | PRINCE ALBERT EVENT CENTRE (PRINCE ALBERT, SK) |
| Owner: | City of Prince Albert |
| Building Size: | 144,000sf (13,378sm) |
| Opening Date: | Fall 2026 |
| Building Cost: | \$83 million |

While there was an original EC amount of \$55m this was quickly revised by the City to \$71m and then to \$83m without parking, consultants, FFE, and miscellaneous items. Prince Albert Event Centre, with capacities of 4,700 in hockey mode and 6,000 in concert mode, includes private suites, loge seating, and club lounge and sports bar among other amenities. The arena is being developed for the City and will serve as the new home of the Western Hockey League's Prince Albert Raiders and be a state-of-the-art venue for concerts and events. It will also house the AAA Hockey League Mintos and Northern Bears. The Prince Albert Event Centre will be paired with the Aquatic Centre as a central community and sports hub.

| | |
|--------------------------------------|---|
| Facility Name & Location: | FISHERS EVENT CENTER (FISHERS, INDIANAPOLIS) |
| Owner: | City of Fishers |
| Building Size: | 200,000sf (18,580sm) |
| Opening Date & Cost: | 2024, \$130 million USD |

The Fishers Event Center in suburban Indianapolis is being developed by the City of Fishers and has 7,200 seats in hockey mode and up to 8,500 seats for concerts. It hosts hockey, basketball, concerts, shows, graduations, and other community events and features a stage-view club, loge club, VIP lounge, private suites, and retail and concession fronts among other amenities.

| | |
|--------------------------------------|----------------------------------|
| Facility Name & Location: | MULLETT ARENA (TEMPE, AZ) |
| Owner: | Arizona State University |
| Building Size: | 150,000sf (13,935sm) |
| Opening Date & Cost: | 2022, \$134 million USD |

Mullett Arena was developed by Arizona State University (ASU) & is operated by Oak View Group LLC ("OVG"). It offers collegiate university and NHL hockey programming as it services both the ASU Sun Devils and, the Arizona Coyotes of the NHL. The venue accommodates other sports such as wrestling and gymnastics, as well as music events, esports tournaments, and other forms of entertainment. The arena features premium suites, loge boxes, a club lounge, and a party deck. The facility includes Mountain America Community Iceplex, a second rink that serves as a venue for the University and community to host public skates, figure skating, and youth hockey programs in one of the fastest-growing states for youth hockey participation in the country. The arena was one of the first completed developments for the Novus Innovation Corridor, a 10 million square foot mixed-use urban ecosystem embedded in ASU's main campus in Tempe.

3. NEW BUILD OPTION (CONT'D)

Facility Name & Location: LANSDOWNE EVENT CENTRE (OTTAWA, ON)

Owner: City of Ottawa

Building Size: 165,000sf (15,329sm)

Opening Date & Cost: 2027, Confidential

Lansdowne Event Centre is a new 5,500-seat EC that will be the home of the Ottawa 67's and Ottawa BlackJacks and is capable of hosting world-class arts and entertainment concerts and events. Seating capacity will be 5,500 for hockey games and up to 7,000 for concert events. It features numerous food and beverage areas, a stage-view club and loge club, a sports bar, and private suites.

It is the catalyst for an adjacent major commercial complex with 2 high-rise residential towers.

Summary of Case Study Observations

The main 'take-aways' from the above are:

- Fishers and Mullett have been designed to deliver all user/owner requirements while obtaining significant construction savings; and,
- Most of the above were based on a Design Bid Build procurement with independent cost estimating input.

New Build Examples of Similar Size



3. NEW BUILD OPTION (CONT'D)

d) Appetite of Investors/Developer Market to Support this Option

As indicated in Section 2d), private sector investors/developers want certainty and minimal risk. The NEW BUILD option offers this reassurance. Additionally, a totally new project will be more attractive and acceptable to the public, the media, project tenants/partners, and therefore to investors / developers. Another advantage will be that a NEW BUILD will have a greater public profile and impact to elevate the South District's projects to an enhanced level of recognition and success. These factors will increase the market's support of NEW BUILD versus RENEWAL.

KKR Advisors completed their Precedent Projects Report to the City on June 14, 2023, and reported in considerable detail 8 projects in Canada where private sector entities have been assisting municipalities in the provision of Community Infrastructure. BBB has been working on many of these projects and other similar projects in Ontario and Canada. The conclusions which we agree with are that existing city lands and buildings can be a point of leverage to increase private sector interest and investment; especially when the city is making a major capital investment. This is further accelerated with a 'front row centre' Community Event Centre. The other reality is that almost all these projects are New Builds for the reasons stated below. The only exception is Hamilton where a market niche opened to allow the renovation of the First Ontario Centre to be financially feasible.

We have also reviewed the City's Market Findings Report, updated Sept 2019, which indicates that the City's investment in the Event Centre is critical to attracting private sector investment and development to the South District.

For this to succeed, it is our opinion that an important factor is to recognize that the Event Centre will be a super regional centre of entertainment where there's fun and excitement and lots of activity. Focusing on this will open up more understanding by the private sector of the best and most appropriate ancillary types of commercial and residential development. For example, if you want a dynamic exciting place to live, "move-in next door". Developed correctly a NEW BUILD can be the anchor of a new significant entertainment district for the region.

A NEW BUILD will operate successfully for the next 60 to 70 years. A RENEWAL will operate less successfully for the next 25 to 30 years prior to its shortcomings resulting in decreased revenues and new initiatives to again require to BUILD NEW. This is because of the RENEWAL's many post-renovation shortcomings and compromises. As well, the advancing building codes, aging systems, constrained footprint, enhanced design standards for Event Centres, and the event production industry continually improving. With the difficulties of renovating the SCA, it will fall further behind state-of-the-art ECs. In summary, the marketing and sales will be better, and the public excitement and support will be stronger with a NEW BUILD. It will also future-proof the City's investment in an Event Centre.

4. BOTH OPTIONS

a) Required Consulting Services

For either Option, many people are surprised by the number of consultants, however because of the project's complexities and size and the critical importance of life safety, this is now the norm and the usual consulting services under the coordination of the Architect are:

- Architect;
- Structural Engineer;
- Mechanical, Energy Modeling, Plumbing and Fire Protection;
- Electrical, Technology Data, Security, etc.;
- Civil Engineering and Site Servicing;
- Code and Life Safety;
- AV and Broadcast;
- Acoustic;
- Food and Beverage;
- Accessibility;
- Waste Management;
- Vertical Transportation;
- Exterior Envelope;
- Sustainability and High Performance; and,
- Commissioning.

The usual consulting services normally retained and coordinated by the Owner/Client are:

- Surveyor / Scanning;
- Geotechnical and Hydrological;
- Existing Environmental;
- Preliminary Constructability and Construction Management;
- Construction Cost Estimating;
- Environmental Impact Studies;
- Public Consultation Strategy;
- Transportation and Traffic;
- Heritage Impact (if any);
- Hyper (CT) Security;
- Legal and Accounting; and,
- Professional Arena Management.

Because of the larger site and civic issues with Event Centres and their adjacent developments, the Owner/Client often also retain the main planning consultant(s).

4. BOTH OPTIONS (CONT'D)

b) Process, Steps, and Timeline for Non-Design/Construction Issues

The sequential primary design, construction work program and stages to advance this project in a logical and cost-conscious manner is set out for RENEWAL & NEW BUILD in Sections 2b) and 3b) respectively. Therefore, this section only deals with non-design and non-construction issues: building public support, securing third-party financial commitments, finding expertise related to EC operations, and marketing and sales.

STAGE

SCHEDULE

- | | |
|--|---------------------------|
| <p>1. Decision on RENEWAL or NEW BUILD, site location and DESIGN BID BUILD procurement.</p> <p>News and public information releases to build media and public interest and excitement.</p> | <p>Dec '23 – Oct '24</p> |
| <p>2. Completion of Schematic Design, Class C Estimate, Design Development, and Class B Estimate.</p> <p>Release of design renderings, drawings, and communication campaign to further build public support and the belief that “this project is real”. This is important because of the challenges these projects present. The caution that many potential partners and supporters show early in the development process can result in reduced revenues. The same is true when the RFP is held for operators and other non-design/construction advisors and sales services to allow their integration and input into the design process. Therefore we recommend this in the middle of the Design Development process. The cost of these services are in the Soft Cost Pre-Opening Operating Expenses in Section 5 d).</p> | <p>Nov '24 – Sept '25</p> |
| <p>3. Completion of Working Drawings, Class A Estimate, Design and/or Construction Tenders, and Award of Construction Contract.</p> <p>With public belief that this project is real, the actual marketing and sales programs go into high gear for the programs set out in Section 7a).</p> | <p>Oct '25 – July '26</p> |
| <p>4. Construction and Grand Opening</p> <p>All financial commitments are confirmed and where required the recognition and benefits are put in place on site.</p> | <p>Aug '26 – Sept '28</p> |

5. BUDGET

a) Total Event Centre Construction Area

This section reviews, at a high level, the estimated costs for the design/construction of RENEWAL and of NEW BUILD with a premium added for RENEWAL. This premium is due to its additional operating costs above a NEW BUILD over the first 25 years of operations.

RENEWAL: 177,000sf (16,444sm) of renovations and additions, which is approximately 15,000sf (1,394sm) less than what has been outlined in previous reports related to an SCA renewal. Based on our renovation projects, it is our position that the best quality EC RENEWAL possible can be designed within 177,000sf (16,440sm).

NEW: 170,000sf (15,800sm) which is less than the RENEWAL area because of planning efficiencies. BBB's recent ECs of a similar size to Sudbury's include: a just completed 4,728-seat venue that hosts the NHL Coyotes; a 7,200-capacity venue that is over 60% built with a fixed price contract; a 5,000-capacity venue with 100% Construction Documents that is ready for construction in Saskatchewan; and a 5,500-capacity venue in Ottawa that is in detailed design. All of these projects have been adjusted to Sudbury, Q2 2024 dollars and Sudbury's EC LRF program. Another example that supports our recommendation of 170,000sf above is Kingston's EC of approximately 150,000sf for almost the same capacity as Sudbury and now that City is studying an expansion to the existing building. Based on all of this experience, we recommend a NEW BUILD of 170,000sf (16,800sm).

b) Room Finish Schedule

See Exhibit B.

c) Interior SF Cost Projections

This is for all in construction "hard cost amounts" but without soft costs and site work:

Based on the cost of BBB's recent RENEWAL & NEW BUILD EC projects converted to Sudbury in Q2 2024 dollars, we project these Interior gross square foot (sf) costs:

| | | |
|-------------------|-------------------------|----------|
| RENEWAL: | New Construction: | \$800/sf |
| | Renovated Construction: | \$600/sf |
| NEW BUILD: | New Construction: | \$750/sf |

The RENEWAL'S New Construction cost at \$800/sf is higher than the NEW BUILD's at \$750/sf because of the inefficiencies and higher costs to add new construction around an existing building and the inefficiencies and additional costs of building around an operating EC.

5. BUDGET (CONT'D)

*d) Budget Projections***RENEWAL BUDGET PROJECTION – BBB**

The following is BBB's RENEWAL Estimate to Q2 2024 completed independently from Sudbury's previous estimates and reports. For the purpose of this budgeting section, and based on our experience with other major renewals, we have assumed that the entire sf area of the existing arena will need renovations (some to a greater & others to a lesser extent) and we are recommending an additional 87,000sf (8,082sm) in new space to achieve as much of the LRF as possible. This results in a total sf. area estimate that exceeds that of new build due to the planning inefficiencies of renewal.

| | | \$ Millions |
|---|----------------------------|--------------------|
| RENEWAL – New Construction (incl. 20% Contingency) | 87,000sf (8,082sm) x \$800 | \$70m |
| – Renovated Construction (incl. 20% Contingency) | 90,000sf (8,361sm) x \$600 | \$54m |
| Sudbury & Structural (re soils) Premium. *1. | \$124m x 14% | \$17m |
| Subtotal | | \$141m |
| Soft Costs – An industry standard of 25% for such things as Furniture Fixtures Equipment, Consultants, Taxes, Building Permit Fees, Insurance, Pre-Opening Operating Expenses, Legal/Accounting and City's In-House Management. | \$141m x 25% | \$35m |
| TOTAL RENEWAL | | \$176m |
| Sitework (without Parking) | | \$4m |
| TOTAL RENEWAL | | \$180m |

*1. The above 'Sudbury and Structural Premium' of 14% is because of Sudbury's location and the need to import materials and labour from more distant locations than usual. It was determined through conversations with experts in Sudbury. The structural premium was determined after a review of soils report by 2 structural engineers.

Not included above are: Land Cost, Off-Site Services, and Parking. The above estimate assumes new Roofing, Refrigeration and Rink (but reuse of Chiller).

Below are the estimated reduced revenues of a RENEWAL compared to a NEW BUILD over their first 25 years of operation. They are added to the RENEWAL's capital costs to provide a more realistic financial comparison between the two options.

| | |
|--|---------------|
| 12 Fewer Suites (\$350k/yr. x 25yr x 90%) | \$7.9m |
| 600 Fewer Capacity (\$1.7m x 5% x 25yr x 90%) | \$1.9m |
| 2 Fewer Touring Shows (\$900k x 5% x 25yr x 90%) and periodic special events such as Hockey Canada and Curling Canada Championships. | \$1.0m |
| Subtotal | \$11m |
| TOTAL COST OF RENEWAL | \$191m |

No loss has been included for the reduced revenues and operating costs at the existing arena while it is under renovation and the additional required operating staff to relocate materials and operations during the different phases of construction, as the resultant credit or loss is not seen as significant.

To build the project stated in this REVIEW for the estimated costs requires a design and construction team that is experienced and knowledgeable with the design and construction of ECs as their problems are unique, especially when dealing with "scope creep" which is a primary reason for escalating costs.

5. BUDGET (CONT'D)

RENEWAL BUDGET PROJECTION – SUDBURY'S PAST REPORTS

Of all Sudbury's previous RENEWAL Costing information, the "4. WT Costing, Report, May 24, 2021" is the most thorough. Further info on this estimate in the "5. IMA Final Report, May 31, 2021", concludes with a total building and site cost of \$105m with one construction phase and \$108m with two phases. Both of these costs are without Consultant Fees. We assume two phases will be preferred because of the major negative impact on the Wolves' operations and revenues. For this exercise, we have used both the single-phase and two-phase construction costs. Note that in this estimate, the Consultant Fees have been included in Soft Costs.

| | \$ Millions | |
|---|---------------|---------------|
| | Phase 1 | Phase 2 |
| RENEWAL including a 192k sf EC & Site Work | \$105m | \$108m |
| Add Design/Construction Contingency (15% added by BBB)* ¹ . | \$16m | \$16m |
| Escalation (Q2 2021 to Q2 2024 – [14% by BBB]) | \$17m | \$17m |
| Sudbury & Structural Soils Premium (9% by BBB)* ² . | \$13m | \$13m |
| SUBTOTAL | \$151m | \$154m |
| Deduct 15,000sf (1,393sm) ÷ 192,000sf (17,837sm) of floor area = (7.8%) | (\$12m) | (\$12m) |
| TOTAL | \$139m | \$142m |
| Soft Costs – An industry standard of 25% for such things as Furniture Fixtures Equipment, Consultants, Taxes, Building Permit Fees, Insurance, Pre-Opening Operating Expenses, Legal/Accounting and City's In-House Management. | \$35m | \$36m |
| TOTAL | \$174m | \$178m |

*¹. An "estimating allowance" (i.e. contingency) of 15% was included in the 5 IMA Final Report but not this design/construction contingency.

*². The above 'Sudbury Premium' of 9% is because of Sudbury's location and the need to import materials and labour from more distant locations than usual. It is reduced from BBB's estimate of 14% for a NEW BUILD because in our opinion, some premiums were already in WT and IMF's estimates.

The WT estimate assumes new: Refrigeration and Rink (but reuse Chiller), Roofing, and Steel Seating Bowl Overlay (approvals and constructability TBD). Not included above are: Land Cost, Off-Site Services, Storm Water Management, and Parking.

Below are the estimated reduced revenues of a RENEWAL compared to a NEW BUILD over their first 25 years of operation. They are added to the RENEWAL's capital costs to provide a more realistic financial comparison between the two options.

| | | |
|--|---------------|---------------|
| 12 Fewer Suites (\$350k/yr. x 25yr x 90%) | \$7.9m | \$7.9m |
| 600 Fewer Capacity (\$1.7m x 5% x 25yr x 90%) | \$1.9m | \$1.9m |
| 2 Fewer Touring Shows (\$900k x 5% x 25yr x 90%) and periodic special events such as Memorial Cup and World Juniors. | \$1.0m | \$1.0m |
| Subtotal | \$11m | \$11m |
| TOTAL COST OF RENEWAL | \$185m | \$189m |

No loss has been included for the reduced revenues and operating costs at the existing arena while it is under renovation or the additional required operating staff to relocate materials and operations during the different phases of construction since the resultant credit or loss is not seen as significant.

Much of the PwC Update, June 2021 re costs is a validation of Reports 4 and 5 that are discussed above. However, it does exclude Land Costs and may exclude the impact of the sites' poor soils.

The above RENEWAL estimates DO NOT include the \$50m to \$100m premium to make the RENEWAL & NEW BUILD options more of an "apples to apples comparison as discussed in Section 2 a).

5. BUDGET (CONT'D)

NEW BUILD BUDGET PROJECTION – BBB

The following is BBB's NEW BUILD Estimate to Q2 2024 completed independently from Sudbury's previous estimates and reports. It is based on 4 recent BBB projects of a similar size and capacity all converted to Sudbury's EC specs, size, capacity, and location. This will bring greater reliability to the appropriate requirements and costs.

| | | |
|---|------------------------------|---------------|
| New EC Building (Including Contingencies) | 170,000sf (15,793sm) x \$750 | \$128m |
| Sudbury & Structural Soils Premiums (14%) | \$128 x 14% | \$18m |
| SUBTOTAL | | \$146m |
| Soft Costs – An industry standard of 25% for such things as Furniture Fixtures Equipment, Consultants, Taxes, Building Permit Fees, Insurance, Pre-Opening Operating Expenses, Legal/Accounting and City's In-House Management. | | \$37m |
| TOTAL NEW BUILD: | | \$183M |
| Site Work (without Parking) | | \$4m |
| TOTAL NEW BUILD | | \$187M |

Not included above are: Land Cost, Off-Site Services, Storm Water Management, Parking and Demo of Existing Arena. The above EC Costs do include an additional premium to build in Sudbury because of its location and the need to import materials and labour from more distant locations than usual.

The CEEP Report has many objectives, many of which are general and qualitative in nature which makes them difficult or impossible to estimate. If the City elects to incorporate a high level of CEEP objectives, based on the City's recent projects, we recommend adding an additional \$6m to \$8m to the above total cost of \$187m. This would normally be higher except that our benchmark costing includes a reasonable amount of sustainability improvements especially adding in the pending changes to the Ontario Building Code. If City elects to exceed Ontario's accessibility standards, we recommend an additional \$2m to \$3m allowance for additional accessibility improvements.

NEW BUILD BUDGET PROJECTION – Sudbury's Past Reports

The best publicly available information re a NEW BUILD in Sudbury is the Event Centre Update of July 12, 2022, for the Kingsway Site presented to Council on the same date. Its construction cost is \$129,000,000 without "Costs to date, Fees, Site Work, Allowance (Contingencies), etc." Additional escalation, allowances and structural soils premiums of \$32,000,000 has then been added for a total of \$161,000,000.

The resultant cost can be summarized as follows:

| | |
|---|-----------------|
| New EC Building | \$129.0m |
| Escalation, Allowances, Structural Soils Premiums (25%) | \$32.0m |
| Subtotal | \$161.0m |
| Soft Costs (20% - reduced because of some costs being included above) | \$32.0m |
| TOTAL NEW BUILD | \$193.0m |
| Site Work (without Parking) | \$4.0m |
| TOTAL NEW BUILD | \$197.0m |

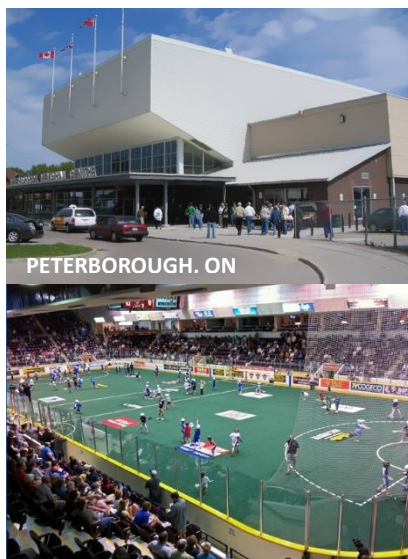
The extrapolation of known Kingsway costs for use with a Downtown New Build is very difficult because the two projects are so different with, by example, the Kingsway project having a much larger site area and additional infrastructure costs such as storm water management.

5. BUDGET (CONT'D)

City of Greater Sudbury staff have confirmed that the EC's GFA is approx. 226,000sf (21,000sm) and the City's RFP Part 6 had a total just under 182,986sf (17,000sm). This may account for the \$10,000,000 difference in the two different estimating methodologies.

Only publicly available information was provided from the City's new EC initiative on the Kingsway. Details of the submissions may be commercially confidential and were not shared. For the purposes of this review, the EC Options Reports in July 2023 stated a cost in the "\$200m range" to be appropriate for a downtown location. We have also reviewed the City's detailed requirements to the bidders for the Kingsway EC and it is apparent that there are objectives that reflect the criteria of that RFP to offer recommendations or value add items that may have led to a higher price than anticipated. If these were modified, it is our opinion that those cost proposals would be reduced.

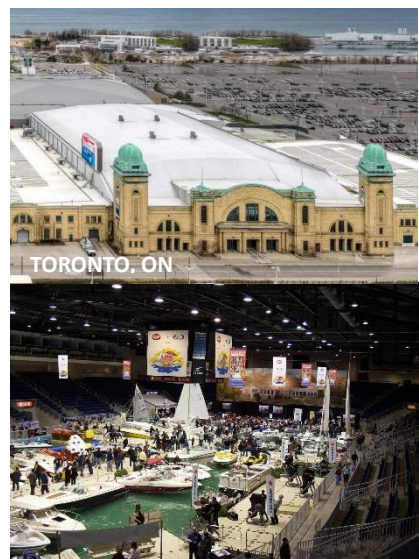
Renewal Examples



PETERBOROUGH. ON



KITCHENER. ON



TORONTO. ON

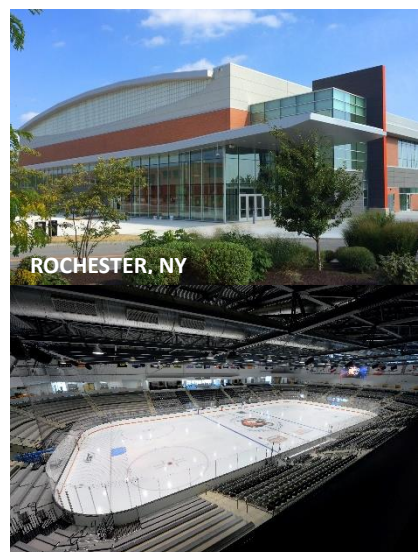
New Build Examples



FT. MYERS, FL



BLOOMINGTON. IN



ROCHESTER, NY

6. OPTIONS EVALUATION

From the previous pages, the cost of RENEWAL can be assumed to be approximately the same as a NEW BUILD. There is a variance between these two options but too small at this early stage to change this opinion and the decision of RENEWAL or NEW BUILD. Based on this, the following evaluation methodology compares the performance of the options in fulfilling the City's and event industry's requirements. As referenced in Section 2 Renewal Options, to achieve Full Compliance under the Renewal scenario in the following table, up to \$100M would be required to be added to the estimate.

● Full Compliance ◐ Partial Compliance ○ Not Compliant

| FRONT OF HOUSE | | |
|--|---------|-----------|
| CITY's REQUIREMENTS (See page 4 of this Report) | RENEWAL | NEW BUILD |
| 5,800 Seats in Hockey Mode. | ○ | ● |
| Includes 24 suites, 10 Loges and 500 Club Seats in best locations to Maximize Revenues. | ○ | ● |
| Uncongested Access to and Circulation Around Main Concourse. | ◐ | ● |
| Meet City's 2019 Energy and Emissions Plan to be More Sustainable. | ◐ | ● |
| Meet and exceed City's 2022-27 Multi Year Accessibility Plans. | ◐ | ● |
| Meet City's Strategic Plan (revised 2023) Objectives. | ◐ | ● |
| Maximize City's Objective to Follow Success of Other Canadian Cities in Attracting Ancillary New investment. (See PwC June 2021 Update). | ○ | ● |
| EVENT INDUSTRY's ADDITIONAL REQUIREMENTS (See page 4 of this Report) | | |
| Additional Seating & SRO Capacity in Concert Mode. *1 | ○ | ● |
| Expandable to 6,000 Seating to Secure Special Events like Hockey Canada and Curling Canada Championships. | ◐ | ● |
| Industry Standard Sightlines Throughout. | ◐ | ● |
| Provide Industry Standard Seat Sizes and Legroom. | ○ | ● |
| Create Bigger and Longer Honeymoon After Opening to Attract More Events, Guests, Sponsors, etc. for the Long Term. | ◐ | ● |
| Create a Bigger "WOW". | ◐ | ● |
| Deliver a high Service Level | ○ | ● |
| BACK OF HOUSE | | |
| CITY's REQUIREMENTS (See page 4 of this Report) | | |
| Provide "Contemporary Back of House Amenities" to Support a Variety of Sports & Entertainment Events. | ◐ | ● |
| Convenient Truck Access to Event Floor. | ◐ | ● |
| EVENT INDUSTRY's ADDITIONAL REQUIREMENTS (See pages 6 & 10 of this Report) | | |
| Fast, Safe & Least Expensive Event Load-in/out to Attract More Events. | ◐ | ● |
| Efficient Event Centre Ongoing Operations. | ◐ | ● |
| Efficient & Optimal Positioning of Food & Beverage Operations. | ◐ | ● |
| Existing SCA Operates During EC Construction. | ◐ | ● |
| FINANCIAL/BUSINESS | | |
| Least Risk Due to Unknown Existing Conditions like Hazmat, Foundations & Structures, MEP, etc. | ○ | ● |
| More Attendance & Revenues. | ○ | ● |
| More Touring Show Events Because of Higher Revenues. | ○ | ● |
| More Revenues from 3 rd Party Sponsors and Investors because of EC Quality Certainty and Potential for more Special Events. | ○ | ● |
| Better Contracts for City with Tenants. | ○ | ● |
| Less Negative Financial Impact on SCA Operations During Construction. | ○ | ● |
| More Efficient Constructability & Schedule to Deliver More Value for Money Spent. | ○ | ● |

*1 Recent EC designs have moved to increase maximum capacity to attract larger popular events that don't require a seat for all guests. This is important in growing cities and reflects trends related to spectator experience and industry trends.

Based on the above, the NEW BUILD Option would allow all desired outcomes to be achieved and therefore is the preferred option.

7. FINANCIAL PLAN

a) Direct EC Financial Support

City's capital has to be the starting point for the project's capital funding, and this has to be strongly stated at the outset along with a great presentation on why this NEW BUILD project is by far the best option going forward: with its many design advantages, the reduced financial risk, and the functional challenges of the existing Sudbury Community Arena.

In order to protect the quality of the finished project and secure the best financing rates, we recommend a Design-Bid-Build procurement versus a PPP or Design/Build/Operate. The future operating surpluses will not be sufficient and predictable enough to guarantee the servicing of enough capital from the private sector to make this attractive. As well, the City will still end up guaranteeing the vast majority of the debt without full control.

To maximize revenues, we recommend that the City consider seeking bids for the operation of the EC because of its entrepreneurial requirements that governments typically find challenging. Many cities across the country have adopted this form of operation.

As set out below, the EC operations tender would still include private sector capital contributions towards the cost of the EC. Therefore, once the location and building type decisions have been made, we recommend that the project should be turned into a "Community Project" where all sectors of Greater Sudbury should support to make the project as successful as possible. A key component of the project's Financial Plan will be based on this community support plan including the following:

- 1) Bigger successful companies for:
 - Suites
 - Naming Rights
 - Other Sponsorships
- 2) Smaller companies and well-off individuals:
 - Loges and/or Club Seats
- 3) Community Support & Fundraising:
 - Focused Initiatives by Service Organizations
 - Philanthropy
 - Buy Seats with Brass Family Plaques
- 4) Companies that have an interest in the future operation of the EC such as:
 - Building Operations
 - Food and Beverage Operations and Products
 - Retail Sales
- 5) Wolves & Other Sports Fans for:
 - Wolves Pack Club
 - Shoot Twice Goal Seats
 - Branded Seats
- 6) Segments of the Community Interest Groups for:
 - Smaller "Sudbury First" art and imprint projects

7. FINANCIAL PLAN (CONT'D)

The first four categories above will deliver the largest opportunity to secure additional capital funding and/or increased annual operating revenues by profiling support in becoming a founding partner to make the new EC a reality. Also, the above programs are also based on enhancing longer-term revenues by the desire to have first access to new seating, hospitality, and branding/recognition products in the new EC. The choice between capital funding and annual revenues varies from project to project as do the entities being approached.

We anticipate that should the City of Greater Sudbury pursue a Community Project approach and with our experience with similar event centre projects, you could realize up to 15% of additional capital to offset the municipal share.

From other recent projects, we understand that there is limited financial support from senior levels of government to contribute to an EC.

Further to a question in your RFQ for this Review, midsize Event Centres that have higher revenues to help increase their net revenues are: London's Budweiser Gardens, Fort Myers's Hertz Arena, St. Catharine's Meridiane Centre, and Erie Insurance Arena in Pennsylvania.

b) Accelerated Adjacent Downtown Investment with EC

Wherever we have completed RENEWED or NEW BUILD ECs in downtown areas; they have become catalysts for new investments in those downtown areas. Examples that are well described in KKR's June 2023 report include:

- London Ontario where these improvements are obvious;
- Kingston has had similar results;
- Oshawa;
- Guelph; and,
- Moncton.

While the following very successful examples may appear to not be applicable to Sudbury, they are important because they strongly indicate how even large cities use transformative projects to revitalize downtown with active vibrant entertainment zones:

- The Leafs/Raptors/Concert Venue created a real estate investment boom (after the railway lands sat dormant for 15 years). Today, condos adjacent to this EC sell for a significant premium to the same condo that is 5-10 blocks away.
- Vancouver's Canucks Arena was built in an empty field and today is surrounded by 30 to 40 story towers.
- Boston's Bruins/Celtics EC and ancillary development has become a central hub of the City's downtown.

The key elements to take advantage of this opportunity are:

- Available fairly priced land;
- Use of EC by existing and new stakeholders in the neighbourhood;
- Creation and promotion of community events at the EC to convey that this is the place to be in Sudbury;
- Strong Public Relations/Marketing program and support of local and national media; and,
- Profiling Downtown Sudbury as the entertainment hub for a 250,000 to 300,000 captive population that is within a 2-hour drive.

EXHIBIT A

LIST OF BRISBIN BROOK BEYNON ARCHITECTS ENTERTAINMENT CENTRE PROJECTS

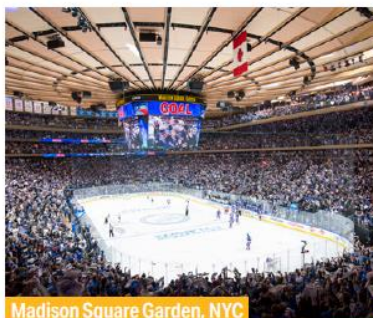
- BBB Architects has completed more renewal & new multi-use Event Centres than any other Canadian firm. See attached lists.
- We are known internationally as an advocate of renewal having saved numerous spectator facilities from demolition.
- BBB Architects has developed a clear methodology to identify the Pros and Cons and Risks of the renewal and new build options.
- BBB Architects' database allows us to effectively project the two options' capital cost differences.

EXHIBIT A

ARENA RENOVATIONS

BRISBIN
BROOK
BEYNON
ARCHITECTS

- Madison Square Garden, NYC
- Scotiabank Arena, Toronto
- Rogers Arena, Vancouver
- Wells Fargo Center, Philadelphia
- TD Garden, Boston
- The Forum, Los Angeles
- Delta Center, Salt Lake City
- CFG Bank Arena, Baltimore
- Scotiabank Saddledome, Calgary
- Mattamy Athletic Centre at Maple Leaf Gardens, Toronto
- Rexall Place, Edmonton
- XL Center, Hartford
- Coca-Cola Coliseum, Toronto
- Moda Center, Portland
- Peterborough Memorial Centre
- Charlotte Checkers Arena
- FirstOntario Centre, Hamilton
- Kitchener Memorial Auditorium
- Paramount Fine Food Centre, Mississauga



Madison Square Garden, NYC



Scotiabank Arena, Toronto



The Forum, Los Angeles



Delta Center, Salt Lake City



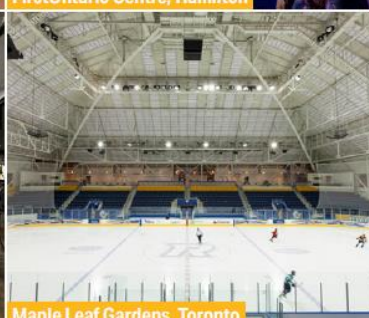
FirstOntario Centre, Hamilton



Coca-Cola Coliseum, Toronto



TD Garden, Boston



Maple Leaf Gardens, Toronto



Wells Fargo Center, Philadelphia

EXHIBIT A

NEW SPORTS & ENTERTAINMENT VENUES

BRISBIN
BROOK
BEYNON
ARCHITECTS

- Mullett Arena, Tempe, AZ
- The Gathering, Metro Atlanta
- Budweiser Gardens, London, ON
- Leon's Centre, Kingston
- Prince Albert Event Centre
- Windsor Credit Union Centre
- Lansdowne Event Centre, Ottawa
- Gene Polisseni Center, Rochester
- Arena Riga, Latvia
- Barclaycard Arena, Hamburg
- Barrie Molson Centre
- First Arena, Elmira, NY
- Hertz Arena, Ft. Myers
- Webster Bank Arena, Bridgeport
- Grossinger Motors Arena, Bloomington
- Hartwall Arena, Helsinki
- Malmo Arena, Sweden
- O'Brien Group Arena, Melbourne
- Powerade Centre, Brampton
- Siemens Arena, Vilnius
- Fishers Event Center, Indianapolis



The Gathering, Metro Atlanta



Budweiser Gardens, London



Leon's Centre, Kingston



Prince Albert Event Centre



Mullett Arena, Tempe



Lansdowne Event Centre, Ottawa

EXHIBIT B

OUTLINE ROOM FINISH SCHEDULE For Level of Quality Only

Order of Finishes: Floors; Walls; Ceilings

- GENERAL FRONT OF HOUSE:
 - epoxy & stone; painted high impact drywall; painted exposed ceiling areas.
- PREMIUM FRONT OF HOUSE:
 - carpet; painted high impact drywall; painted exposed ceiling areas.
- WASHROOMS FRONT OF HOUSE:
 - tile & epoxy; tile & epoxy on high impact drywall; painted exposed ceiling areas.
- FOOD & BEVERAGE FRONT OF HOUSE:
 - epoxy on concrete; tile & epoxy on high impact drywall; painted suspended ceilings.
- SPECTATOR VIEWING:
 - sealed concrete; epoxy on block & high impact drywall; painted exposed ceiling areas.
- TEAM/ARTIST BACK OF HOUSE AREAS:
 - polished or epoxy on concrete; painted block; painted exposed ceiling areas.
- STORAGE & SERVICE BACK OF HOUSE:
 - polished and sealed concrete; painted high impact drywall; exposed ceilings.
- FOOD & BEVERAGE BACK OF HOUSE:
 - epoxy concrete; epoxy high impact drywall; exposed ceiling areas.
- MEDIA BACK OF HOUSE:
 - carpet; painted drywall; painted exposed ceiling areas.
- OFFICES, CLASSROOM BACK OF HOUSE:
 - carpet; painted drywall, painted exposed ceiling areas.
- EXTERIOR FAÇADES:
 - 10% manufactured stone, 50% metal, 40% glass.
- LONG SPAN EXTERIOR ROOF:
 - single ply polyvinyl chloride or PVC.

City of Greater Sudbury

Precedent Projects - Private
Sector Entities Assisting in the
Provision of Community
Infrastructure

June 14, 2023



Contents

| | Slide |
|--|-----------|
| Purpose of the Report | 1 |
| About KKR Advisors Ltd. | 3 |
| Precedent Projects | 5 |
| 1. <i>LeBreton Flats (Ottawa, ON)</i> | 5 |
| 2. <i>Lansdowne Park (Ottawa, ON)</i> | 11 |
| 3. <i>Waterfront Redevelopment Project (Orillia, ON)</i> | 19 |
| 4. <i>Urban Entertainment Precinct (Hamilton, ON)</i> | 23 |
| 5. <i>Baker Street Redevelopment (Guelph, ON)</i> | 28 |
| 6. <i>Harry Jerome Community Recreation Centre (North Vancouver, BC)</i> | 32 |
| 7. <i>Slush Puppie Centre (Gatineau, QC)</i> | 35 |
| 8. <i>Brantford & District Civic Centre (Brantford, ON)</i> | 38 |
| Key Takeaways | 40 |
| Market Soundings | 43 |
| 2019 RSM Market Findings Report | 43 |
| 2023 Market Sounding Update | 46 |
| Recommended Market Solicitation Strategy | 50 |
| General Assumptions and Limiting Conditions | 54 |

Purpose of the Report (1 of 2)

Background

- Greater Sudbury City Council (“Council”) passed Motion C2022-226 which directed staff to produce a report, by the end of Q2 2023, assessing the existing Sudbury Community Arena (“SCA”) and comparing its renovation to a new downtown Events Centre (the “Project”). An important consideration in this report is to be the identification of options for engaging private sector partners, and the identification of methods through which the Project could be structured to have maximum appeal to the private sector, including through a broader land assembly.
- KKR Advisors Ltd. (“KKR Advisors”) was retained by the City of Greater Sudbury (the “City”) to:
 - Undertake research to identify and describe examples where municipalities have attracted the interest of private sector entities to assist in the provision of community infrastructure; and
 - Provide strategic advice pertaining to a potential market solicitation from private sector developers.

Scope of work

- Per its Engagement Letter dated March 30, 2023, KKR Advisors undertook the following scope of work:
 - Met with the City and identified six examples where municipalities have attracted the interest of private sector entities to assist in the provision of community infrastructure (the “Precedent Projects”). The Precedent Projects included:
 - Redevelopment of LeBreton Flats (Ottawa, ON);
 - Redevelopment of Lansdowne Park (Ottawa, ON);
 - Waterfront Redevelopment Project (Orillia, ON);
 - Urban Entertainment Precinct (Hamilton, ON);
 - Baker Street Redevelopment (Guelph, ON); and
 - Harry Jerome Community Recreation Centre redevelopment (North Vancouver, BC).
 - Following the selection of these Precedent Projects, the City asked KKR Advisors to additionally provide information on the following two projects:
 - Slush Puppie Centre (Gatineau, QC); and
 - Brantford & District Civic Centre (Brantford, ON).
 - Undertook research on each Precedent Project, including holding discussions with municipal and private sector representatives, to obtain insights and details into the nature

Purpose of the Report (2 of 2)

Scope of work (continued)

of the arrangements and deal structures between the public and private sectors, including with respect to land / land assembly, development incentives (for example, development charge waivers, property tax abatements, etc.), financial arrangements and procurement process.

- Obtained copies of the issued “Request for Proposals” document, if available.
- Prepared two- to three-page write-ups on each Precedent Project, summarizing the scope of the project, its financial arrangements, land assembly approach (if any) and procurement approach (to the extent such information was publicly disclosed).
- Reviewed the 2019 Market Sounding study prepared for the City by RSM Canada (“*City of Greater Sudbury: South District Market Findings Report Updated: September 2019*”). Based on this review, met with the City to discuss the currency of its findings and its application to a potential market solicitation to private developers.
- Undertook additional market soundings with a select group of Greater Sudbury-area developers to determine what conditions may have changed since 2019, and to gain insights

into a potential market solicitation to private developers, including potential development incentives that may be required.

- Based on the foregoing, identified, at a high level, key elements that may need to be included in a potential market solicitation to private sector developers.
- Met with the City to discuss these key elements.
- Prepared a draft document outlining key considerations, conditions and elements to include within a potential market solicitation to private sector developers.

Use of Report

- This report (“Report”) has been prepared for the exclusive use of the City of Greater Sudbury. KKR Advisors owe no duty of care to any other party or any party gaining access to this Report. KKR Advisors expressly accept no responsibility for any claims, losses, liabilities and damages, including, without limitation, any claims, losses, liabilities and damages in negligence or negligent misrepresentation, arising from any unauthorized or improper use of this Report.

About KKR Advisors Ltd. (1 of 2)

About KKR Advisors

- KKR Advisors Ltd. is a tactical consulting firm providing real property development advisory services with a focus on sports, recreation and entertainment facility development, financial and negotiation advisory services. Clients have included:
 - The Harbour Station Commission and the City of Saint John, NB (successfully negotiated a venue management agreement for TD Station, the City of Saint John's 6,300-seat sports and entertainment venue);
 - City of Brantford (successfully negotiated a facility lease and license agreement with the Hamilton Bulldogs to relocate the team to the City of Brantford); and
 - a high profile Eastern Canadian sports stadium / complex (providing advisory support relating to (a) negotiations with a prospective professional sports team tenant, (b) a prospective food and beverage concession, and (c) a corporate / building sponsorship strategies).
- Ronald Bidulka, Managing Partner of KKR Advisors, is a seasoned, experienced advisor on the development and financial structuring of sports, recreation and entertainment venues in Canada. Throughout his more than 25 years, Ron has advised on the development, financing, tenancy arrangements, operating arrangements and sponsorship arrangements of more than \$7.0 billion in sports, recreation and entertainment facilities, including:
 - 22 Canadian Hockey League arenas (3 QMJHL, 15 OHL, 4 WHL);
 - 2 American Hockey League arenas;
 - 3 National Hockey League arenas;
 - 1 US ECHL arena;
 - 4 CFL Stadiums;
 - 3 MSL Stadiums;
 - 6 Convention, Conference, Trade Show and Meeting Facilities;
 - 8 Canadian University sports facilities;
 - 10 National and International Sporting Events; and
 - 20+ municipal / community recreation facilities.

About KKR Advisors Ltd. (2 of 2)

About KKR Advisors

- In addition, Ron has successfully advised on the development, valuation, financial assessment, and structuring of more than \$45 billion in real property transactions and development projects. Ron's expertise spans a range of development projects and facilities, including land, mixed-use projects, residential projects, land value capture projects, office, retail, hotels, and seniors' residences, among numerous other assets classes and facility types.

Quebec Major Junior Hockey League

| | | |
|---------|------------|-------------|
| Moncton | Saint John | Quebec City |
|---------|------------|-------------|

Ontario Hockey League

| | | |
|------------------------------|---------------------------------|------------------|
| Ottawa | St. Catharines | Windsor |
| Kingston | Niagara Falls <i>(proposed)</i> | Owen Sound |
| Oshawa | Guelph | North Bay |
| Brampton | Kitchener | Greater Sudbury |
| Burlington <i>(proposed)</i> | London | Sault Ste. Marie |

Western Hockey League

| | | |
|---------------------------------|----------------------------------|--------------------------------|
| Fort McMurray <i>(proposed)</i> | Grande Prairie <i>(proposed)</i> | Dawson Creek <i>(proposed)</i> |
| Kelowna | | |

American Hockey League

| | |
|---------|-------------------------------|
| Toronto | Thunder Bay <i>(proposed)</i> |
|---------|-------------------------------|

National Hockey League

| | | |
|--------|---------|----------------------------|
| Ottawa | Toronto | Hamilton <i>(proposed)</i> |
|--------|---------|----------------------------|

Canadian Football League

| | | |
|----------|----------|---------|
| Winnipeg | Hamilton | Toronto |
| Ottawa | | |

Major League Soccer

| | | |
|---------|--------|----------|
| Toronto | Ottawa | Montreal |
|---------|--------|----------|

Assignments led by Ronald Bidulka while employed with Arthur Andersen LLP, Deloitte & Touche LLP, PricewaterhouseCoopers LLP and KKR Advisors Ltd.

Precedent Projects (1 of 38)

LeBreton Flats (Ottawa, ON)

Background

- LeBreton Flats is an approximate 29 hectare (71.7 acre) brownfield site located along the south side of the Ottawa River, immediately west of downtown Ottawa and 1.5 kilometres west of Parliament Hill. The LeBreton Flats property is a mostly vacant and undeveloped site, due in part to historical disputes over the use of the land, and soil contamination issues resulting from the site's previous industrial uses.
- The National Capital Commission¹ ("NCC") became custodian of the LeBreton Flats property through a combination of expropriation, acquisitions and land exchanges in the early 1960s. In the late 1980's and early 1990's, the NCC led a process which ultimately culminated in an agreement that consolidated land ownership of LeBreton Flats under the NCC.
- In 1997, the NCC prepared the "*LeBreton Flats Plan*" which identified amendments to the City of Ottawa's Official Plan and designated the LeBreton Flats site for cultural, mixed-use, residential and open space use.
- Between the late 1990's and early 2010's, the NCC undertook numerous planning studies and initiatives to evaluate and ready the site for its potential redevelopment, including the realignment of the Ottawa River Parkway (Sir John A. Macdonald Parkway), the construction of the Canadian War Museum, and the initiation of some residential development on the east side of the site.

LeBreton Flats, Ottawa, ON



Source: National Capital Commission

1. The National Capital Commission is the federal Crown corporation dedicated to ensuring that Canada's Capital is a dynamic and inspiring source of pride for all Canadians, and a legacy for generations to come. The NCC provides unique value in the Capital Region by fulfilling three specific roles: long-term planner of federal lands, principal steward of nationally significant public places, and creative partner committed to excellence in development and conservation.

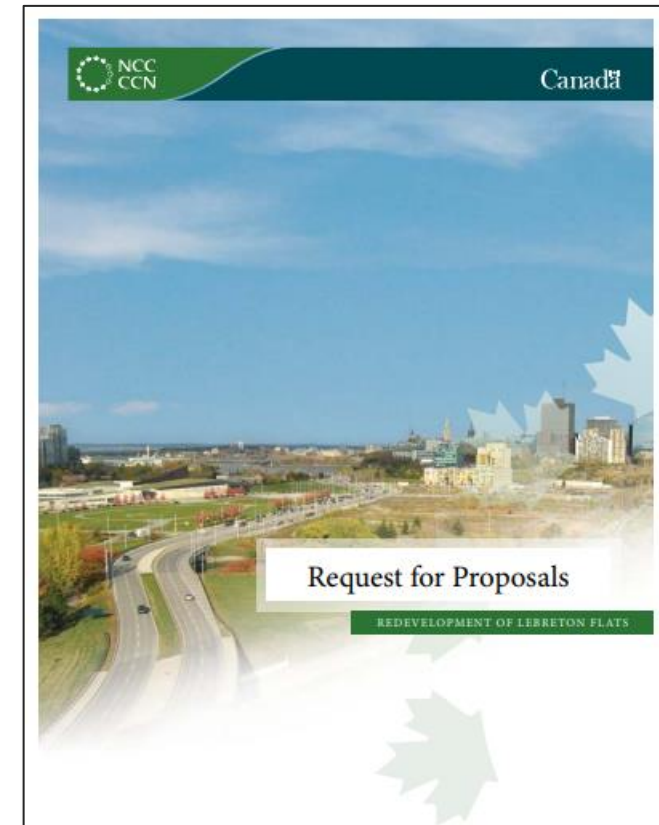
Precedent Projects (2 of 38)

LeBreton Flats (Ottawa, ON)

2014 / 2015 NCC Process to seek Redevelopment Proposals

- In 2014, the NCC initiated a two-stage competitive process to redevelop 21 hectares of the LeBreton Flats property. Four proponents were shortlisted from a Stage 1 Request for Qualifications / Request for Expressions of Interest process, designed to identify qualified proponents able to demonstrate development experience and design expertise.
- In April 2015, the NCC issued a Request for Proposals to redevelop the site from the four shortlisted proponents from Stage 1. The RFP had the primary objective of leveraging the LeBreton Flats site to enhance the attractiveness of the National Capital by *“attracting a new public anchor use(s) and bring back civic life back to this site”*. Proponents were required to submit a development proposal in the form of a business case structured in the following manner:
 - Market rationale (for both public and non-public anchor uses);
 - Development plan (highlighting design excellence, year-round animation, phasing approach and the viability of the development);
 - Site decommissioning and sustainability strategy;
 - Transportation strategy;
 - Servicing plan;
 - Delivery model (including ownership, management and financial capability, financial implementation plan and business terms); and
 - Risk assessment and mitigation strategies.

LeBreton Redevelopment Request for Proposals (2015)



Source: National Capital Commission

Precedent Projects (3 of 38)

LeBreton Flats (Ottawa, ON)

2014 / 2015 NCC Process to seek Redevelopment Proposals (continued)

- Two competing proposals were received by the NCC in late 2015. Following the NCC's review and assessment of the submitted proposals (a process which included a public consultation process staged in early 2016), the NCC selected RendezVous LeBreton Group ("RLG"), a consortium led by Capital Sports Management Inc. (associated with the NHL's Ottawa Senators) and Trinity Development Group Inc. (an Ottawa-based real estate development company), as its preferred respondent in April 2016. In November 2016, the NCC Board authorized the NCC to enter into formal negotiations with RLG.
- Between November 2016 and January 2018, the NCC and RLG negotiated and finalized a Term Sheet governing the main business terms and conditions that would form part of the master development agreement governing the redevelopment of LeBreton Flats.

RendezVous LeBreton Group Redevelopment Proposal

- The centerpiece of the RLG proposal was an 18,000-seat Event Centre and an adjacent public square. Once completed, the 18,000-seat Event Centre would become the home venue of the NHL's Ottawa Senators.
- Additional elements proposed by RLG included:
 - A community ice rink facility housing two NHL-sized hockey rinks ("Abilities Centre and Sensplex");
 - A new Ottawa Central Library;

Illustrative Site Plan and Redevelopment Images, LeBreton Flats (2015)



Source: National Capital Commission, RendezVous LeBreton Group

Precedent Projects (4 of 38)

LeBreton Flats (Ottawa, ON)

RendezVous LeBreton Group Redevelopment Proposal (continued)

- A hotel;
- Office and retail space; and
- An estimated 4,000 housing units, including affordable housing units.
- The redevelopment was initially proposed to be developed in three phases (later consolidated to two phases, starting in approximately 2018 (and estimated to be completed in the 2030's). The total cost of the project was reported as being in excess of \$3.5 billion (including site remediation).
- Per its proposal, the NCC would sell the property to RLG at fair market value; the final; the final price paid by RLG would not be determined until the site remediation costs had been established.

Current Status

- In response to internal partnership issues within RLG, the NCC terminated the Term Sheet with RLG, effective February 28, 2019. Shortly thereafter, the NCC cancelled the Request for Proposals process and the NCC Board directed the NCC to move forward with a new process.
- In March 2019, the NCC announced it would be undertaking a new process to govern the redevelopment of LeBreton Flats (termed “Building LeBreton”) and as an initial step, commenced a process to prepare a renewed vision for the property. In this regard, the NCC commenced the preparation of a Master Concept Plan governing the site’s redevelopment.

Redevelopment Images, LeBreton Flats (2015)



Source: National Capital Commission, RendezVous LeBreton Group

Precedent Projects (5 of 38)

LeBreton Flats (Ottawa, ON)

Current Status (continued)

- The Master Concept Plan, approved by the NCC in 2021, divided the LeBreton Flats site into four distinct zones:
 - The Aqueduct District: a cultural hub and entertainment district;
 - The Flats District: a residential community defined by intimate, pedestrian-oriented streets and a variety of housing types.
 - The Albert District: a mixed-use main street neighbourhood anchored by the Ottawa Public Library to the east and a potential Event Centre or major facility to the west; and
 - The Park District: a unique park and public realm area.
- In advancing the Master Concept Plan, the NCC has, to date, implemented separate procurement processes to:
 - Realize the redevelopment of the “Library Parcel” (a 1.1 hectare site located next to the new Ottawa Public Library). The project was awarded to Dream LeBreton, a partnership between Dream Asset Management Corporation and Dream Impact Master LP, with the Multifaith Housing Initiative serving as the group’s non-profit housing partner. Offered through a two-stage RFQ / RFP process, Dream LeBreton will purchase the property and build 601 residential units and approximately 790 square metres of retail and associated community space.

Master Concept Plan, Building LeBreton (2021)



Source: National Capital Commission

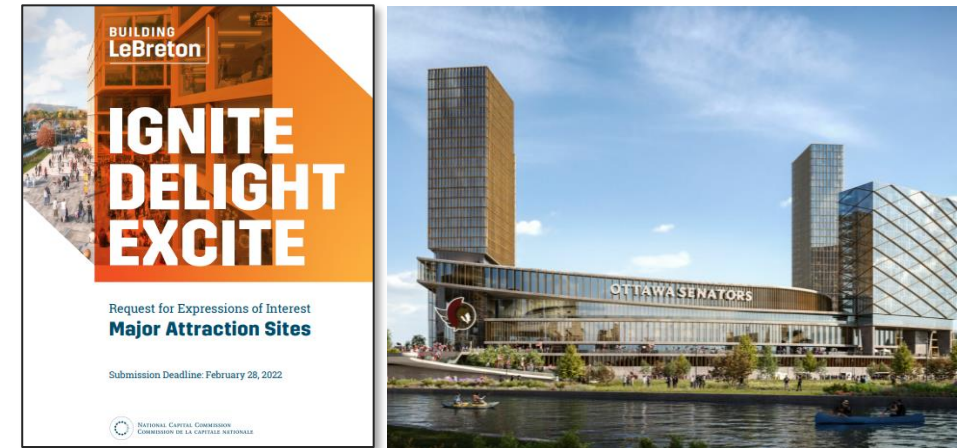
Precedent Projects (6 of 38)

LeBreton Flats (Ottawa, ON)

Current Status (continued)

- Realize the redevelopment of the Flats District (a 1.6 hectare site planned for 80,000 square metres of residential and commercial space). The NCC is offering this site through a “Request for Offers to Lease” process.
- Realize the development of a major attraction within the Albert District (two separate parcels, one measuring 2.5 hectares, the second measuring 0.5 hectares). Offered through a Request for Expressions of Interest (“RFEI”) process, the NCC selected a consortium led by Capital Sports Development Inc. (“CSDI”, an entity affiliated with the NHL’s Ottawa Senators) who will lease the property and on it construct an NHL hockey arena and events venue surrounded by mixed-use development. The RFEI process was launched in December 2021 and closed in February 2022.
- Following the NCC’s review of submissions, a Memorandum of Understanding was approved by the NCC Board in June 2022. In 2023, it is expected that CSDI will develop a detailed concept and implementation plan which will then be submitted for federal and municipal approval. It is expected that the NCC and CSDI will negotiate a long-term lease for the site (targeted for signing in fall 2023).

Building LeBreton – Major Event Centre (2021)



Source: National Capital Commission

Precedent Projects (7 of 38)

Lansdowne Park (Ottawa, ON)

Background

- Lansdowne Park is a 16-hectare urban park located in central Ottawa adjacent to the Rideau Canal. Owned by the City of Ottawa, Lansdowne Park contains a sports stadium (previously known as Frank Clair Stadium), a 9,300-seat arena (previously known as the Ottawa Civic Centre) located as part of and under the stadium's north grandstands, the Aberdeen Pavilion (an exhibition hall) and the Horticulture Building.
- In 2007, the City of Ottawa considered initiating a process to redevelop Lansdowne Park, a process which involved a design competition and public consultation. As part of this process, the City of Ottawa initiated an engineering study of Frank Clair Stadium which concluded that the south grandstands were structurally unfit while the north grandstands and associated Civic Centre arena were structurally sound; the south grandstand was demolished in 2008.
- In 2008, the Ottawa Sports and Entertainment Group ("OSEG") were awarded a conditional Canadian Football League franchise, contingent on the group securing a suitable stadium. OSEG is a consortium comprised of prominent Ottawa-based businessmen and property developers, along with the owner of the Ontario Hockey League's Ottawa 67's.
- In October 2008, OSEG prepared and forwarded an unsolicited proposal to the City of Ottawa. Called "*Lansdowne Live!*", the proposal sought to revitalize Lansdowne Park by redeveloping the entire site through a public-private partnership with the City of Ottawa.

Lansdowne Park, Ottawa, ON



Source: City of Ottawa

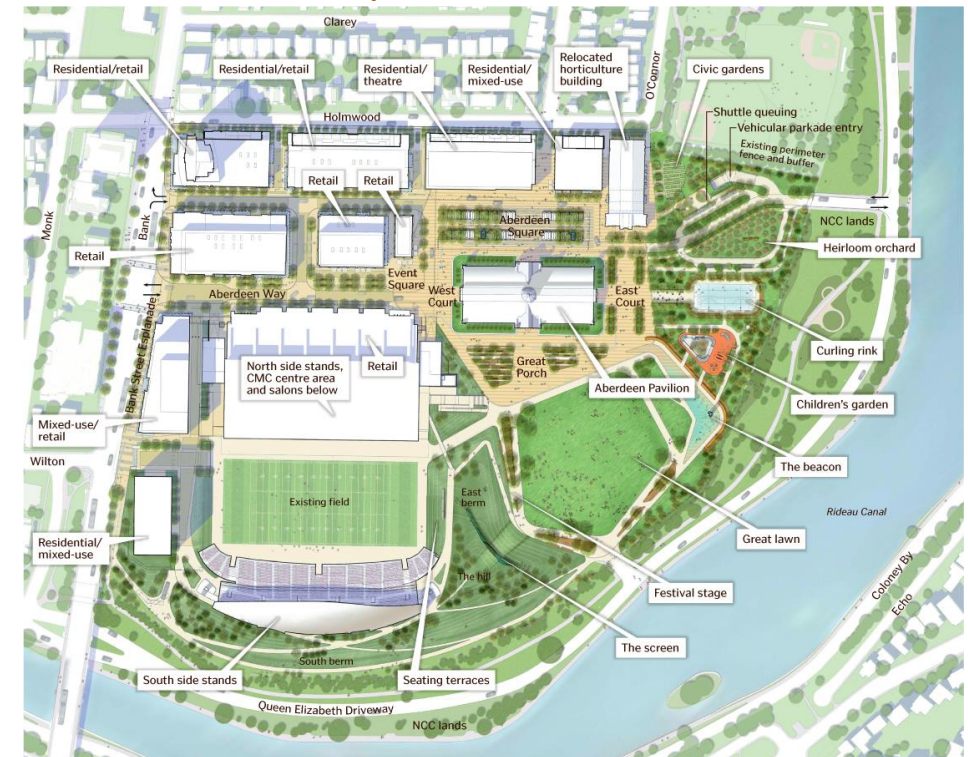
Precedent Projects (8 of 38)

Lansdowne Park (Ottawa, ON)

Background (continued)

- While the City of Ottawa was considering the unsolicited proposal from OSEG, a competing unsolicited proposal was received by the City of Ottawa from Senators Sports & Entertainment (an affiliate company of the NHL Ottawa Senators) to develop a 20,000-seat soccer-specific stadium on city-owned land near the Canadian Tire Centre in Kanata, ON (the home arena of the Ottawa Senators).
- Between January and April 2009, the City of Ottawa undertook a detailed review of both proposals (using external consultants and a fairness commissioner); commercially-confidential meetings were also held with each proponent. Using the City of Ottawa's approved approach for dealing with unsolicited proposals (a consensus scoring approach using evaluation criteria approved by Council in its "*Opportunity Assessment Framework*"), each unsolicited proposal was evaluated against the following criteria:
 - Overall need;
 - Business plan (including financing plan and financial implications to the City of Ottawa);
 - Site considerations;
 - Facility design and overall concept; and
 - Risk to the City of Ottawa.
- At its meeting on April 22, 2009, Council authorized staff to commence negotiations with OSEG, and in November 2009, the Lansdowne Live! proposal was approved in principle (subject to certain conditions).

Lansdowne Live! Redevelopment Plan



Source: City of Ottawa

Precedent Projects (9 of 38)

Lansdowne Park (Ottawa, ON)

Background (continued)

- The Lansdowne Live! development was opposed by some Ottawa residents, particularly those living near the Lansdowne site, and an Ontario Municipal Board appeal and Ontario Superior Court challenge was pursued, contending that the City of Ottawa illegally proceeded with the sole-source project. Opponents proposed opening-up the redevelopment to a public tender, while other opponents proposed building a football stadium in another location and undertaking the park's reconstruction as a public project.
- The appeal to the Ontario Municipal Board and subsequent challenge to the Ontario Superior Court were both rejected. An appeal to the Ontario Court of Appeal was launched in September 2011 and dismissed in April 2012.
- The project commenced construction in October 2012, with the stadium being completed in spring 2014; the entire site began full operations in spring 2015.

Lansdowne Live! Proposal

- The Lansdowne Live! proposal included the following elements:
 - rebuilding Frank Clair Stadium to accommodate CFL football (and professional soccer);
 - building a new south grandstand;
 - renovating the existing north grandstands and associated Civic Centre arena;
 - building approximately 340,000 square feet of retail space and 116,000 square feet of office space;

Lansdowne Live! Redevelopment Images



Source: City of Ottawa, Trinity Development Group Page 204 of 254

Precedent Projects (10 of 38)

Lansdowne Park (Ottawa, ON)

Lansdowne Live! Proposal (continued)

- building 280 residential units; and
- creating 1,430 underground parking spaces
- OSEG's original proposal additionally contemplated the construction of a hotel and additional residential space (pending confirmation of market demand).
- The term of the partnership agreement was originally for 30 years (ending December 31, 2044); in 2020, the 30-year partnership agreement was extended by an additional 10 years (to December 31, 2054).

Lansdowne Live! Financing

- From a project structuring perspective, the redevelopment of Lansdowne Park is premised on a proposed business transaction between the City of Ottawa and OSEG, a partnership (the "LLP") which includes contributions from both parties to select components of the project. In addition to the core transaction contemplated within the LLP and Master Limited Partnership, the City of Ottawa was responsible for rehabilitating the urban park that adjoins the Stadium site remediation costs.
- The City of Ottawa, as a partner in the LLP, contributed funds to rehabilitate the Stadium as well improve the lands upon which the retail, residential and office components were built. The City of Ottawa also paid for a portion of the cost of building new parking. As landlord, the City of Ottawa leased the stadium and the land upon which the retail and office developments were built to OSEG.

Lansdowne Live! Redevelopment Images



Source: City of Ottawa, Ottawa Sports and Entertainment Group

Precedent Projects (11 of 38)

Lansdowne Park (Ottawa, ON)

Lansdowne Live! Financing (continued)

- Per the 2012 “Completed Agreements”, the maximum hard and soft costs to the City of Ottawa relating to the stadium and its portion of the parking structure was \$135.8 million; OSEG was responsible for funding any cost overruns, should they occur, associated with redeveloping the stadium.
- OSEG, as the other partner in the LLP, contributed equity and took on debt to finance the construction of the retail and office components, as well as to acquire the CFL Team and OHL Team. OSEG is responsible for funding operating losses, to the extent they occur, from the stadium, sports teams, retail components, office component and parking components. OSEG is also responsible for funding the operations and maintenance of the stadium, and for making annual contributions to a major maintenance fund.
- Operationally, the LLP is based on a “closed financial system” (“CSF”) that combines the revenues and operating expenses from various components, to provide the basis for future distributions to the City of Ottawa and to OSEG (the “waterfall”):
 - Net cash flow from the operations of the stadium and arena are included in the CSF;
 - Net cash flow from the operations of the CFL Team and OHL Team are included in the CSF;
 - Net cash flow from the operations of the retail, office and commercial spaces is included in the CSF; and
 - Net cash flow from the operations of the parking lots are including in the CSF.

Lansdowne Live! Redevelopment Images



Source: Ottawa Sports and Entertainment Group Page 206 of 254

Precedent Projects (12 of 38)

Lansdowne Park (Ottawa, ON)

Lansdowne Live! Financing (continued)

- Net cash flow, in any year and to the extent it exists, is distributed as follows:
 - First, to reserve funds for the stadium and parking structure;
 - Second, to the City of Ottawa and to OSEG on each party's contributed equity at 8% per year (if insufficient net cash flow exists, proportionate payments would be made to each party);
 - Third, to the return on OSEG's additional contributed equity;
 - Fourth, following the third anniversary of the commencement of the operating term of the Stadium Lease, the return of OSEG's Equity, amounts paid in connection with OSEG's completion guarantee for the stadium (excluding the parking structure) and the City of Ottawa's equity funding (if there is sufficient net cash flow to make only a portion of such payment, proportionate payments will be made to each party):
 - in respect of OSEG's minimum equity and amounts paid in connection with its completion guarantee, such amounts are determined on a "straight-line amortized" basis over a period of 27 years;
 - in respect of the City of Ottawa's equity funding, such amounts are determined on a "straight-line amortized" basis over a period of 27 years;
 - Fifth, a return on the City of Ottawa's deemed equity at 8% per annum (on a cumulative, not compounded basis); and
 - Sixth, any remaining balance is shared equally by the City of Ottawa and OSEG.

Lansdowne Live! Redevelopment Images



Source: City of Ottawa, The Globe & Mail

Page 207 of 254

Precedent Projects (13 of 38)

Lansdowne Park (Ottawa, ON)

Lansdowne 2.0 Proposal

- In July 2021, the City of Ottawa developed a framework and principles for improving Lansdowne Park and directed staff to negotiate with OSEG on a commercially confidential basis on a proposal to revitalize Lansdowne Park to ensure it could achieve its potential.
- OSEG tabled “Lansdowne 2.0”, a proposal to replace the functionally obsolete Civic Centre and north grandstands with a new 5,500-seat Event Centre and new 11,200-seat grandstand. Supporting the replacement of these facilities was a mixed-use development with 1,200 residential housing units and 59,000 square feet of net new retail space.
- The total estimated capital cost of the redevelopment was estimated at \$332.6 million (excluding the cost of building the residential units and retail space but including soft costs, contingencies and escalations).
- The City of Ottawa would be responsible for funding the \$332.6 million in improvements, with OSEG responsible for cost overruns, purchasing the air rights within which to construct the residential and retail components (estimated at \$43.5 million). Per the staff report, the City of Ottawa’s cost would be funded from:
 - the aforementioned sale of air rights;
 - projected property tax uplift from the residential and commercial developments;
 - ticket surcharge revenue;

Lansdowne 2.0 - Redevelopment Images



Source: City of Ottawa, Ottawa Sports and Entertainment Group

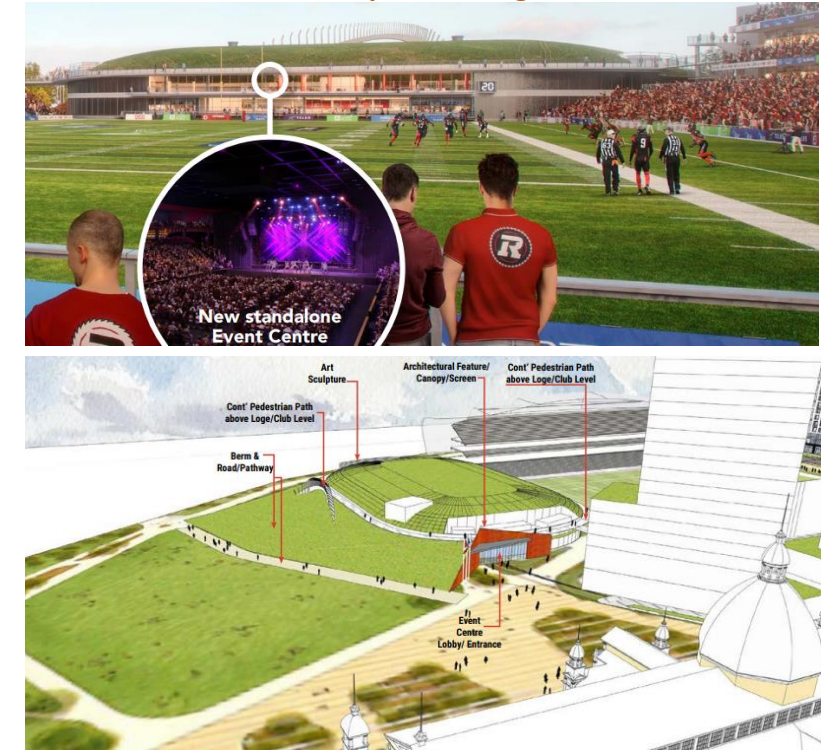
Precedent Projects (14 of 38)

Lansdowne Park (Ottawa, ON)

Lansdowne 2.0 Proposal (continued)

- the City of Ottawa's existing capital envelope;
- debenture premiums from the initial Lansdowne Live! proposal;
- return of the City of Ottawa's equity from the initial Lansdowne Live! proposal; and
- new debt funding.
- Operationally, Lansdowne 2.0 would fold into the existing LLP arrangement between the City of Ottawa and OSEG, with some adjustments / changes:
 - the term of the partnership arrangement would be extended until December 21, 2066 (from December 31, 2054); and
 - amendments to certain provisions in the closed financial system arrangement (i.e., the waterfall).
- At its meeting on May 25, 2022, Ottawa City Council approved the project in principle, pending, among other matters, finalized negotiations between the City of Ottawa and OSEG. Our understanding is that negotiations are progressing (in order to report back to Council in the first half of 2023).

Lansdowne 2.0 - Redevelopment Images



Source: City of Ottawa, Ottawa Sports and Entertainment Group

Precedent Projects (15 of 38)

Waterfront Redevelopment Project (Orillia, ON)

Background

- Since 2012, the City of Orillia has been engaged in transforming its downtown waterfront area, preparing an over-riding planning document to focus the future development of this area. The “2012 Downtown Tomorrow Plan: Linking Orillia’s Core to the Waterfront” (the “Downtown Tomorrow Plan”) outlined 33 strategic initiatives and provided 20 priority action items to improve and expand Orillia’s downtown waterfront from a shopping, dining, mobility, playing, gathering, learning, working, culture and heritage perspective.
- The Downtown Tomorrow Plan identified the 9.75-acre property located 70 Front Street (the “Property”) as a strategic parcel connecting the waterfront to the downtown. In 2016, the City of Orillia purchased the Property in order to facilitate the extension of Coldwater Street to the Lake Couchiching waterfront and to facilitate the redevelopment of the Property.
- The Downtown Tomorrow Plan additionally implemented a Community Improvement Plan (“CIP”) to increase land value and increase housing options, including providing grants to developers for certain development costs including façade improvements, signage, feasibility studies, building improvements and the creation of residential units.
- Following the purchase of the Property, the City of Orillia established the Waterfront Working Group (“WWG”) to oversee its redevelopment.

Location of the Orillia Waterfront Redevelopment Project



Precedent Projects (16 of 38)

Waterfront Redevelopment Project (Orillia, ON)

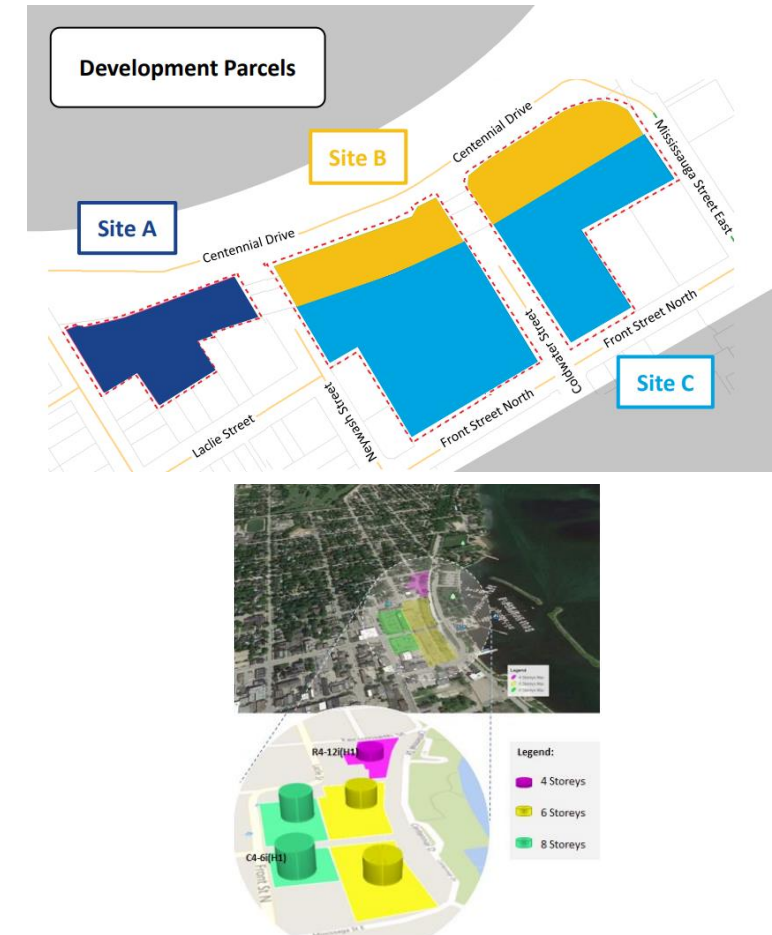
Background (continued)

- The WWG identified opportunities to prioritize various infrastructure improvements to the waterfront area to better position the Property for development, and additionally undertook a review of the development potential of the Property, including examining permitted uses to maximize the development appeal of the site.
- In 2018, the City of Orillia initiated a process to amend the City of Orillia's Zoning By-law ("ZBL") and Official Plan ("OP") to allow for increased development densities. The amended ZBL and OP increased development heights to between four and eight stories, and additionally increased permitted site coverages.
- The City of Orillia also approved three incentive programs designed to incentivize large and "catalytic" developments, including:
 - Brownfield Tax Assistance Grant Program;
 - Tax Increment Grant Program; and
 - Development Charge Grant Program.

RFQ / RFP Process

- In April 2019, the City of Orillia commenced a two-stage disposition process to market the sale and redevelopment of the Property. In guiding the process, the WWG established 12 development principles through which it would evaluate submissions, including:
 - Supporting the Downtown Tomorrow Plan and vision;
 - Optimizing the City of Orillia's financial return;
 - Demonstrating a sustainable / green approach;

Orillia Waterfront Redevelopment Project Development Densities



Source: City of Orillia

Precedent Projects (17 of 38)

Waterfront Redevelopment Project (Orillia, ON)

RFQ / RFP Process (continued)

- Enhancing resident and visitor experiences;
 - Responding to the surrounding built form;
 - Integrating the Site within Orillia's downtown and waterfront area;
 - Considering downtown food and grocery needs;
 - Consisting of simple and timeless design;
 - Consisting of a high-quality public realm;
 - Promoting a safe, comfortable and inviting pedestrian environment;
 - Integration of parking; and
 - Integration of servicing.
- The City of Orillia issued the RFQ in April 2019, and following a review and evaluation of submissions, three proponents were short-listed in June 2019 to respond to the Stage 2 Request for Proposals process.
 - The City of Orillia released its RFP in December 2020 (the timeframe for issuing the RFP was delayed due to a need to resolve certain legal issues associated with the Property), and two qualified proponents, FRAM Building Group and TPI Acquisitions (Tribal Partners), submitted proposals by the March 31, 2021 deadline.
 - After reviewing the technical and financial submission requirements defined in the RFP, and obtaining public feedback (obtained through a virtual open house held in April 2021), FRAM Building Group ("FRAM") was identified as the preferred respondent.

FRAM Building Group Concept Plan - Orillia Waterfront Redevelopment Project



Source: City of Orillia, FRAM Building Group

Precedent Projects (18 of 38)

Waterfront Redevelopment Project (Orillia, ON)

RFQ / RFP Process (continued)

- Between May and July 2021, the City of Orillia and FRAM negotiated an agreement of purchase and sale (“APS”), and in July 2021, the City of Orillia announced FRAM as the successful proponent and that the parties had signed a definitive APS for the sale and redevelopment of the Property (the purchase price was reported to be \$10.5 million).
- FRAM’s proposal features the development of 151 residential units (totalling 206,000 square feet), including:
 - 62 townhouse units;
 - 89 apartment suites; and
 - 3,000 square feet of commercial space.

FRAM Building Group Concept Plan - Orillia Waterfront Redevelopment Project



Source: City of Orillia, FRAM Building Group

Precedent Projects (19 of 38)

Urban Entertainment Precinct (Hamilton, ON)

Background

- In December 2017, Hamilton City Council approved a motion directing staff to:
 - a) investigate opportunities for the redevelopment of the FirstOntario Centre, the Hamilton Convention Centre and the FirstOntario Concert Hall (together, the “Entertainment Assets”), with the investigation to include:
 - an examination of developers’ interest in creating a sports and entertainment precinct; and
 - the potential for the precinct to include an arena, a convention centre, a concert hall, condominiums and retail;
 - b) the potential transfer of ownership of the Entertainment Assets, as the City of Hamilton’s financial contribution towards a future development;
 - c) input from community stakeholders, industry experts, and comparator municipalities;
 - d) appropriate due diligence should staff receive an unsolicited proposal outlining a development proposal for any or all of the Entertainment Assets in question;
 - e) that any discussion regarding the location of a new arena not be limited to the Hamilton downtown core; and
 - f) that an open, transparent and highly publicized process, aimed at engaging citizens across the City of Hamilton for their input, be implemented.

Hamilton Entertainment Venues



FirstOntario Centre



Hamilton Convention Centre



*FirstOntario Concert Hall
(formerly Hamilton Place Theatre)*

Precedent Projects (20 of 38)

Urban Entertainment Precinct (Hamilton, ON)

Background (continued)

- In October 2019, the City of Hamilton received an unsolicited proposal from the owner of the OHL's Hamilton Bulldogs (and Cadillac Fairview) to construct a 6,000-seat Event Centre and 1,800 stall parking garage at CF Lime Ridge Mall, a suburban shopping mall (the "Bulldogs' Proposal"). The Bulldogs Proposal had the following elements:
 - Total cost of \$126 million, allocated between the Event Centre (\$72 million; \$12,000 per seat) and the parking garage (\$54 million; \$30,000 per parking stall);
 - City of Hamilton to finance the construction of the Event Centre and parking garage, with the Bulldogs contributing up to \$30 million (net cost to City of Hamilton of \$96 million);
 - Bulldogs to operate the arena at no cost to the City of Hamilton (eliminating the City of Hamilton's ongoing operating subsidy, estimated in the Bulldogs' Proposal as being \$3 million per year); and
 - Cadillac Fairview leases the lands upon which the Event Centre and parking garage would be built to the City of Hamilton for \$1 per year.
- In January 2020, Hamilton City Council endorsed the staff recommendation that no further action be taken on the Bulldogs' Proposal.
- In late 2019 / early 2020, the City of Hamilton received two additional unsolicited expressions of interest to create an urban entertainment precinct in downtown Hamilton. Upon receipt of the unsolicited expressions of interest, the City of Hamilton established a process to obtain more detailed proposals and authorized staff to undertake concurrent "commercially confidential negotiations" with the two parties.

Hamilton Bulldogs / Cadillac Fairview Proposal Rendition



Source: City of Hamilton, Hamilton Bulldogs

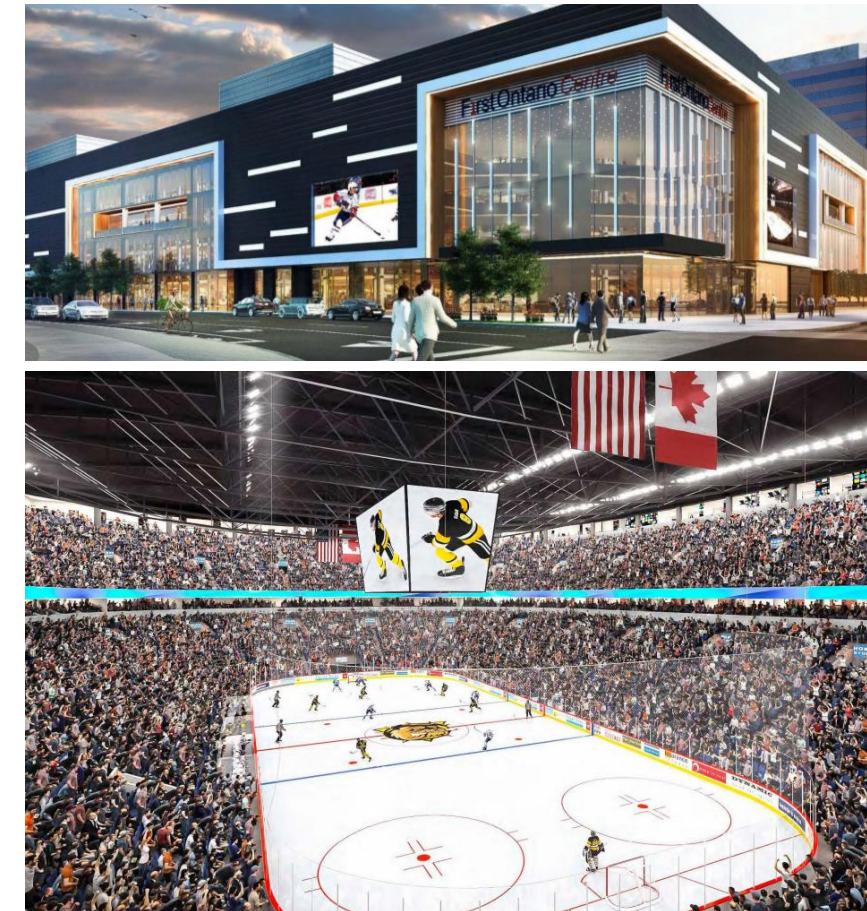
Precedent Projects (21 of 38)

Urban Entertainment Precinct (Hamilton, ON)

HUPEG Proposal

- In July 2020, the City of Hamilton announced the Hamilton Urban Precinct Entertainment Group (“HUPEG”) as the successful proponent.
- HUPEG is a consortium led by local, Hamilton-based entities, including:
 - Carmen’s Group (a Hamilton-based company that had the operating contract at the Hamilton Convention Centre);
 - Paletta Group, since rebranded as Alinea Group Holdings Inc. (a Burlington-based real estate development company);
 - Fengate Capital; and
 - LiUNA (Laborers' International Union of North America).
- Per their proposal, the City of Hamilton would transfer the Entertainment Assets to HUPEG. HUPEG would then take on all capital costs associated with each Entertainment Assets’ renewal; HUPEG would also take on responsibility for the operations and maintenance of each Entertainment Asset (estimated to result in a savings to the City of Hamilton of \$155 million over 30 years).
- Key features of the HUPEG Proposal included:
 - a \$50 million renovation to FirstOntario Centre (including a new building exterior, expanded concourse, installation of a curtaining system for the upper bowl and various premium amenity and hospital improvements);
 - a \$16 million renovation to the Hamilton Convention Centre, FirstOntario Concert Hall and Art Gallery of Hamilton; and

HUPEG Initial Proposal Renditions



Source: City of Hamilton, Hamilton Urban Precinct Entertainment Group

Page 216 of 254

Precedent Projects (22 of 38)

Urban Entertainment Precinct (Hamilton, ON)

HUPEG Proposal (continued)

- an estimated \$340 million mixed-use residential development.
- In June 2021, after substantial negotiations between the parties, the City of Hamilton and HUPEG announced it had agreed to a 49-year partnership agreement. The main elements of the agreement included the following:
 - HUPEG will take over management and operating responsibilities of the Entertainment Assets with no monetary contributions from the City of Hamilton;
 - HUPEG would undertake a \$50 million renovation of the FirstOntario Centre (including a new exterior façade, new video board, comprehensive transformation of the lower seating bowl, expanded concourse level, and the installation of a new, flexible curtaining system for the upper seating bowl);
 - HUPEG would additionally invest \$12.5 million in capital upgrades, expansion and aesthetic enhancements to the Hamilton Convention Centre and FirstOntario Concert Hall;
 - HUPEG would provide a one-time contribution of \$2 million to the Art Gallery of Hamilton;
 - The City of Hamilton would “transact” three properties (the “Transacted Properties”) to HUPEG for redevelopment (the Transacted Properties include a parkade, a surface parking lot and an office building; all three Transacted Properties are located less than 300 metres from FirstOntario Centre);

HUPEG Final Proposal Renditions



Source: City of Hamilton, Hamilton Urban Precinct Entertainment Group

Precedent Projects (23 of 38)

Urban Entertainment Precinct (Hamilton, ON)

HUPEG Proposal (continued)

- On the Transacted Properties, HUPEG would undertake a \$500 million mixed-use development (combined value), including providing 5% affordable housing in one of the residential developments;
- The City of Hamilton agreed to amend its “Commercial Districts Community Improvement Plan and Associated Financial Incentive Programs” to provide property tax abatements to HUPEG for a 30-year period. Per the revised program, the City of Hamilton created the Downtown Entertainment Precinct Advancement (“DEPA”) Program which provides grants as a percentage of the new municipal property taxes generated on each eligible property as follows:
 - Year 1: 100%;
 - Year 2: 80%;
 - Year 3: 60%;
 - Year 4: 40%;
 - Year 5: 20%;
 - Years 6-22: 39%;
 - Years 23-30: 35%; and
- The City of Hamilton executed Municipal Capital Facilities Agreements for each of the Entertainment Facilities, for the purpose of exempting each from taxation for municipal and school purposes.

Location of City of Hamilton Entertainment Assets and Transacted Properties



Source: City of Hamilton, Hamilton Urban Precinct Entertainment Group

- HUPEG assumed management and operating control of the Entertainment Venues on April 1, 2022; renovations to the FirstOntario Centre were to have commenced in fall 2022 (since delayed to fall 2023) and take approximately two years to complete.

Precedent Projects (24 of 38)

Baker Street Redevelopment (Guelph, ON)

Background

- The City of Guelph has, since approximately 2007, been interested in realizing the redevelopment of the “Baker Street Parking Lot”, (the “Site”) a 2.45-acre city-owned surface parking lot located in downtown Guelph. Among the preferred uses envisioned for the Site have been a new Central Library building (as endorsed by Council resolution in 2007, 2009, 2011 and 2017), as well as mixed-use development (as endorsed by Council resolution in 2009, 2011, 2014, 2015 and 2017).
- In 2015, the City of Guelph adopted a Downtown Secondary Plan (which specifically included the Site) and directed staff to develop an investment / market sounding package to gauge the public sector’s interest in redeveloping the Site and, where feasible, other downtown properties. In 2016, the City of Guelph subsequently issued a “Request for Information” (“RFI”) to gauge private sector interest in “downtown real estate investment opportunities”, including for the Site.
- It is noted that between 2007 and 2018, the City of Guelph invested \$7.3 million in the redevelopment of the Site, including expenditures on environmental assessment, archeological remediation and property acquisition, as well as in the development of a planning, policy and regulatory framework, and investments in supporting infrastructure and in the implementation of the RFP process.
- In July 2017, Guelph City Council endorsed the Site as the city’s priority Downtown project and directed staff to implement a two-stage process (three-stage process including the RFI stage) to seek out private sector developer interest, qualifications and proposals for the redevelopment of the Site. A Request for Qualifications (“RFQ”)

Map of Downtown Guelph showing the Baker Street Property



Source: City of Guelph

Precedent Projects (25 of 38)

Baker Street Redevelopment (Guelph, ON)

Background (continued)

process was initiated in November 2017, from which ten entities submitted qualifications and four were shortlisted to respond to a more detailed Request for Proposals process.

- In February 2018, Guelph City Council directed staff to include an 88,000 square foot new Central Library Building in the RFP for the redevelopment of the Site. The RFP was issued in April 2018 and closed in June 2018. In July 2018, the City of Guelph selected Windmill Development Group Ltd. (“Windmill”), an Ottawa-based development company, as its preferred proponent and directed staff to enter into a Letter of Intent (“LOI”) with Windmill.
- Windmill’s proposal involved the development of two mixed-use buildings, one incorporating the new Central Library with residential uses above (to the north end of the Site), and an institutional building (to the south end of the Site).
- In completing the redevelopment of the Site, the City of Guelph would be responsible for site remediation, servicing and archaeological works (estimated to cost \$15 million), pay for the construction of an urban square and related streetscape construction costs (estimated to cost \$2.6 million), and pay for the cost of creating 280 public parking stalls (estimated to cost \$21 million); these public works were to be funded from a combination of proceeds from land sales, from property taxes, development charges, parking revenue and debt.

Windmill Developments - Initial Redevelopment Images



Source: City of Guelph, Windmill Development Group Ltd.

Precedent Projects (26 of 38)

Baker Street Redevelopment (Guelph, ON)

Approved Redevelopment Plan

- Between 2018 and 2021, the City of Guelph and Windmill prepared an “Urban Development Master Plan” (“UDMP”) which further refined Windmill’s initial development proposal, a process which included additional public consultations and detailed redevelopment design.
- In 2020, a redesign of the Site was approved by Guelph City Council, with the new Central Library moving to the south end of the Site as a stand-alone building; residential uses would be located on the north and mid blocks (with commercial uses on the lower levels and with the possibility of institutional uses in the north block). The redesign was necessitated, in part, due to a lack of interest from institutional partners for space in the south lot building, and, in part because of increased costs and risks associated with acquiring additional properties originally included in the City of Guelph’s RFP.
- Based on the revised plan, the Site’s redevelopment would include the following features:
 - North Block: 15-storey building containing 4,800 square feet of commercial / retail and 175-185 residential apartment units (137,300 square feet in total) and 16 2-storey stacked-townhouse units (15,900 square feet in total)
 - Mid-block Tower: 15-story building containing 6,400 square feet of commercial / retail and 170-180 residential apartment units (133,700 square feet in total)
 - South Block: Central Library (88,000 square feet over three stories);
 - Two “urban squares”; and
 - Two levels of underground parking – 156 stalls in a parkade owned and operated by the City of Guelph and 260 private stalls for the two residential buildings.

Baker Street Redevelopment Images (revised per UDMP)



Precedent Projects (27 of 38)

Baker Street Redevelopment (Guelph, ON)

Current Status

- The Baker District Redevelopment project is a multi-year, multi-faceted project that will see the City of Guelph build the new Central Library, a parking garage (public component), public squares and new roadways. Phasing of the project includes redeveloping the Site from its current use (surface parking lot), site preparation activities, archaeological remediation, utility relocation and installation of hard services:

City of Guelph Works

- Road reconstruction is expected to be completed in Q4 2024;
- The Central Library is expected to commence construction in 2023 (and be completed by the end of 2025);
- The parkade is expected to commence construction in 2023 (and be completed by the end of 2025);
- Building commissioning and operational start up is expected to occur between late 2025 and the end of 2026; and
- The Public Squares are expected to commence construction in 2024 (and be completed in 2026).

Windmill

- It is anticipated that the residential towers may commence construction in 2024.

*Baker Street Redevelopment Images (revised per UDMP)
New Central Library*



Source: City of Guelph

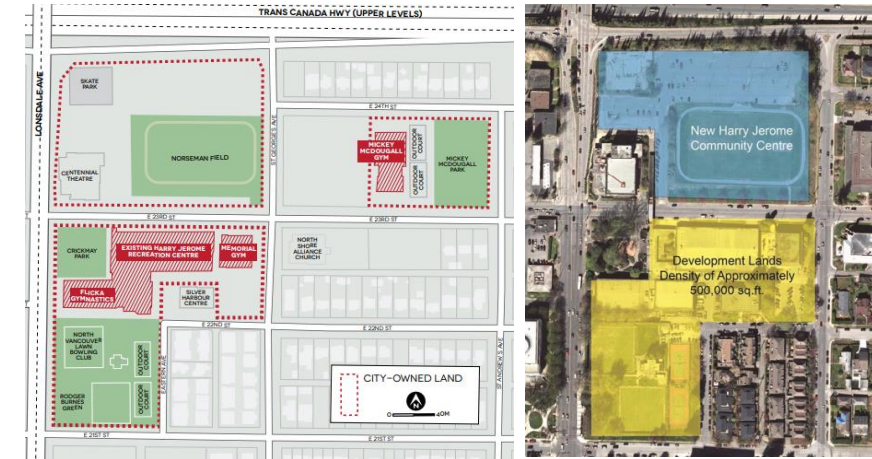
Precedent Projects (28 of 38)

Harry Jerome Community Recreation Centre (North Vancouver, BC)

Background

- In the mid to late 2000's, the City of North Vancouver began investigations for the potential renovation / modernization or replacement of the Harry Jerome Community Centre ("HJCC"), a community recreation centre comprised of an arena, 25-metre pool, fitness area, gymnasium and community rooms. Also located on block containing the HJCC was a lawn bowling facility, seniors' centre and tennis courts.
- While consideration was given to renovating / modernizing the 55+ year old facility (opened in 1965), North Vancouver City Council endorsed the \$200+ million replacement of the HJCC on the block located immediately north of the existing HJCC site. This project, comprising a 50-metre aquatics facility, arena, gymnasiums and seniors' centre (among other uses), was subsequently endorsed as a priority project within the city's multi-year capital plan.
- To support the cost of replacing the HJCC, the City of North Vancouver investigated the potential proceeds which could be generated from the sale of the block upon which the existing HJCC, lawn bowling club, seniors' centre and tennis courts were located (together, the Harry Jerome Neighbourhood Lands, "HJNL").
- During the early 2010's, the City of North Vancouver evaluated the development potential of the HJNL and in its 2014 Official Community Plan, designated the site as mixed-use, parks, recreation and open space, allowing for buildings from six- to 20-stories, with a base density of 2.0 floor space ratio ("FSR"), and a provision for a density bonus of 0.5 FSR (for a total FSR of 2.5). Under such provisions, a multi-family residential and mixed-use development in the range of 500,000 could be supported.

Layout and Aerial View of the Harry Jerome Community Centre Site (incl. site of the new Harry Jerome Community Centre)



Source: City of North Vancouver

Precedent Projects (29 of 38)

Harry Jerome Community Recreation Centre (North Vancouver, BC)

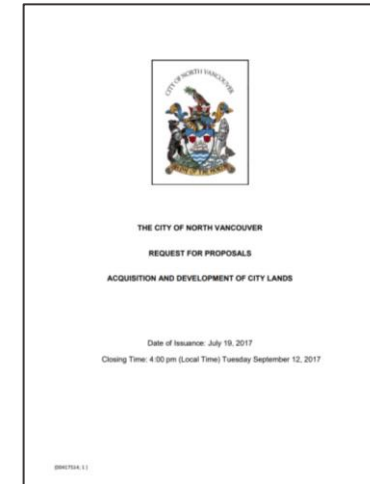
Background (continued)

- In July 2017, the City of North Vancouver launched a single-stage Request for Proposals process for the “Acquisition and Development of City Lands”. The RFP invited respondents to submit offers for the long-term lease of the HJNL’s (either 75 or 90 years), or for the purchase of the fee simple interest in the entire site.



Selected Development Concept

- Following the City of North Vancouver’s review of offers, Council adopted a resolution in March 2018 authorizing staff to negotiate a 99-year lease of the HJNL’s with its preferred proponent (Darwin Properties, “Darwin”). While the agreement was expected to generate approximately \$210 million in total proceeds for the City of North Vancouver, it was noted that the potential proceeds would be dependent upon the overall density approved for the site and potential market pricing adjustments.
- Per their proposal, Darwin intended to develop the HJNL’s with 786,600 square feet, comprising 700 residential units, (including 93 affordable rental units and non-profit housing), 100 seniors’ assisted living units and 100,000 square feet of commercial space, in three phases (spanning 2019 to 2021, 2021 to 2024 and 2023 to 2026).
- Between 2018 and 2020, Darwin took the HJNL’s through a public process to rezone the site, while concurrently negotiating with the City of North Vancouver on the terms of the 99-year land lease.

Harry Jerome Neighbourhood Lands Request for Proposals and Selected Development Concept



Site Plan

- T1/T2 = Market Condominium
- M1 = Non-Profit Housing + Childcare
- M2 = Rental Housing
- M3 = Seniors Rental Housing
- M4 = Retail, Medical/Dental Office
-  = Expanded City Park
-  = Integrated Green Necklace

Source: City of North Vancouver

Precedent Projects (30 of 38)

Harry Jerome Community Recreation Centre (North Vancouver, BC)

Land Lease Transaction

- In December 2020, the City of North Vancouver announced it had agreed to a 99-year land lease with Darwin for the first phase of the HJNL's redevelopment. The Phase 1 lands comprise approximately one-third of the HJNL site. In exchange for the 99-year lease of the site, Darwin paid the City of North Vancouver \$50.4 million.
- The Phase 1 development involves the construction of a 113-unit rental apartment building with 8,000 square feet of retail space, and a 100-unit seniors' assisted housing building.

Current Status

- Between 2020 and late 2021, the City of North Vancouver and Darwin attempted to negotiate terms for the lease of the remaining HJNL's. However, in November 2021, the City of North Vancouver terminated its offer to lease the remaining HJNL's as a result of Darwin not meeting a key contractual term of the agreement.
- The termination of the offer to lease the remaining lands to Darwin prompted the City of North Vancouver to develop a new financial strategy to pay for the cost of building the new HJCC; the revised strategy continues to be premised, in part, on the sale / pre-paid leasing of the remaining HJNL's. Per a January 2022 staff report, the disposition of the remaining HJNL's is anticipated to occur in 2025 and generate total proceeds to the City of North Vancouver of approximately \$167 million.

Harry Jerome Neighbourhood Lands – Phase 1 Redevelopment Rental Apartment Building



Source: City of North Vancouver, Darwin Properties

Page 225 of 254

Precedent Projects (31 of 38)

Slush Puppie Centre (Gatineau, QC)

Background

- Throughout the late 2000's and into the 2010's, the Ville de Gatineau had been considering options to replace the Robert Guertin Centre (the "RGC"). The RGC, located in downtown Gatineau, is a 4,000 capacity (3,200 fixed-seat) arena built in 1957 and home to the Gatineau Olympiques of the Quebec Major Junior Hockey League.

Project Description and Initial Financing Model

- In February 2017, Gatineau City Council agreed to an arrangement with Vision Multisports Outaouais ("VMSO"), a Gatineau-based not-for-profit entity whose objective is to improve the involvement of youth in society through enhanced participation in sport. The Ville de Gatineau and VSMO had previously entered into a 15-year partnership arrangement for the development of the \$33 million Branchaud-Brière Recreation Complex (the "BBRC"), a facility that includes two community arenas and an indoor soccer pad (the partnership arrangement involves the Ville de Gatineau renting time for ice and soccer at the BBRC).
- The Slush Puppie Centre ("SPC") is a four-pad arena complex featuring a 4,000-seat arena (with 36 corporate boxes accommodating 600 people) for the Gatineau Olympiques and three community ice pads (each with containing between 240 and 500 seats and having 15 change rooms in total).

Robert Guertin Centre



Source: Ville de Gatineau

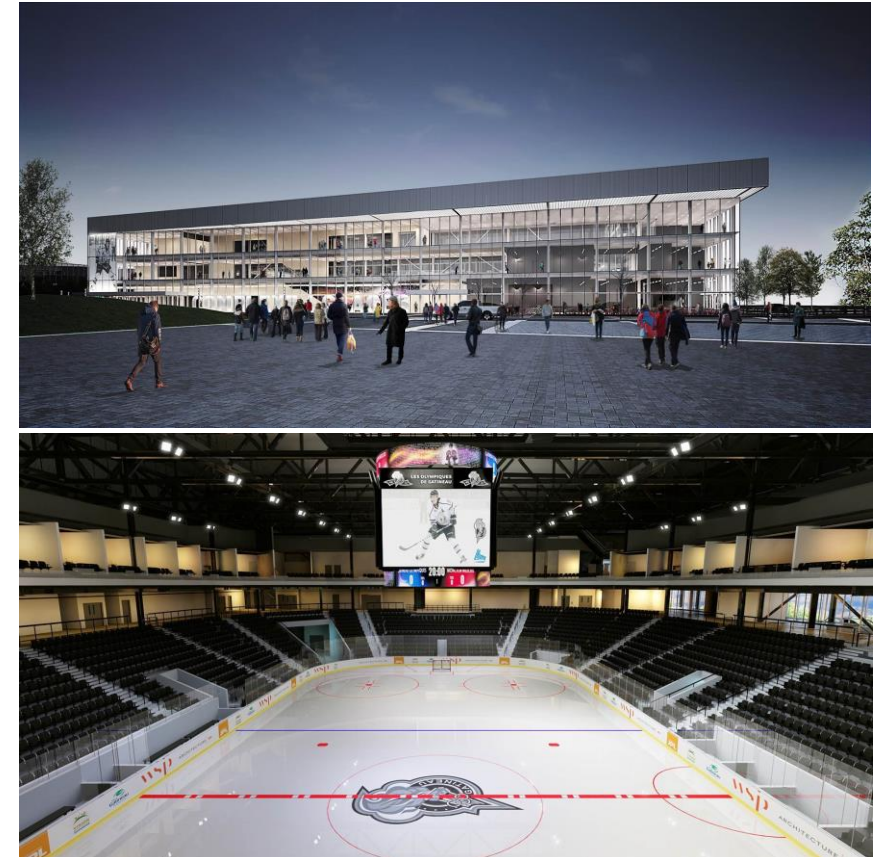
Precedent Projects (32 of 38)

Centre Slush Puppie (Gatineau, QC)

Project Description and Initial Financing Model (continued)

- Originally anticipated to cost \$78.5 million, the project was to be financed with:
 - \$36.5 million from the Ville de Gatineau;
 - \$26.0 million from the Province of Quebec; and
 - \$16.0 million from VSMO.
- VSMO also agreed to invest \$350,000 annually to a life-cycle reserve fund for the SPC.
- In addition to its capital contribution, the Ville de Gatineau was responsible for building a parking garage and for undertaking improvements to the street network around the site (estimated to cost \$25 million).
- The partnership arrangement involved the Ville de Gatineau leasing the facility to VSMO for a term of 25 years (with two 10-year renewal options) and additionally required the Ville de Gatineau to rent approximately 7,700 hours of ice time per year at the SPC at approximately \$260 per hour (an annual cost of roughly \$2.1 million); the Ville de Gatineau would then offer this ice time to user groups at no cost. The Ville de Gatineau also agreed to close some stand-alone arena facilities.
- The SPC was developed on a vacant suburban site in Gatineau, approximately eight kilometres from the RGC.
- By September 2018, the cost of the SPC increased to \$80.4 million, with the project being paid for by the Ville de Gatineau (\$37.9 million), the Government of Quebec (\$26.5 million) and VSMO (\$16.0 million).

Centre Slush Puppie



Source: Ville de Gatineau, Vision Multisports Outaouais

Precedent Projects (33 of 38)

Centre Slush Puppie (Gatineau, QC)

Finalized Financial Arrangements

- Due to the impact of COVID-19 (higher than anticipated construction tender results, higher professional fees and a temporary suspension of construction activities), the project budget increased to \$101.9 million and necessitated a revised financing structure.
- In August 2020, the Ville de Gatineau and VSMO agreed to an amended financing structure which involved the following:
 - Increased the length of the partnership arrangement to 45 years (from 25 years plus two 10-year renewal options);
 - Maintained the Ville de Gatineau's contribution at \$37.9 million;
 - Maintained the Province of Quebec's contribution at \$26.5 million;
 - Increased the Ville de Gatineau's cost of renting ice at the SPC to \$310 per hour (\$2.4 million annually) with annual adjustments of 1.9%;
 - Additionally increased the Ville de Gatineau's cost of renting ice at the BBRC to \$310 per hour;
 - VSMO increased their contribution to \$16.5 million by way of a loan from Desjardins; and
 - Investissement Québec made a \$21.0 million loan to VSMO.
- The SPC officially opened in August 2021.

Centre Slush Puppie



Source: Ville de Gatineau, Vision Multisports Outaouais

Precedent Projects (34 of 38)

Brantford & District Civic Centre (Brantford, ON)

Background

- In February 2023, due to planned renovations to the FirstOntario Centre which rendered the building unavailable for a 2+ year period, the Ontario Hockey League's Hamilton Bulldogs (the "Team") announced they would be temporarily relocating to the Brantford & District Civic Centre (the "BCC") beginning in September 2023 for the start of the 2023-24 OHL season.
- The BCC is a 2,950-seat arena built in 1967.

Financial Arrangements

- In order to accommodate OHL hockey, the BCC required an estimated \$7.0 million in renovations and improvements, including:
 - a new electronic scoreboard;
 - improvements to the BCC's lighting within the arena bowl / seating area;
 - improvements to the BCC's WIFI and sound system;
 - improvements to the BCC's concession areas and washrooms; and
 - improvements to dressing rooms and related areas needed for by an OHL Team (including home team and visiting team dressing rooms and hospitality areas).
- The cost of improving the BCC was estimated at approximately \$7.0 million.
- In March 2023, Brantford City Council approved a lease with the Hamilton Bulldogs, an arrangement which included the following features:
 - The lease is for three years, with three one-year renewal options (at the Team's discretion);

Brantford & District Civic Centre



Source: City of Brantford

Precedent Projects (35 of 38)

Brantford & District Civic Centre (Brantford, ON)

Financial Arrangements (continued)

- While playing in Brantford, the Team would be called the “Brantford Bulldogs”;
- The Team would undertake and pay for all improvements to the BCC;
- The City of Brantford would provide a leasehold improvement allowance to the Team of \$3.0 million;
- The City of Brantford’s leasehold improvement allowance would be repayable by the Team if it does not exercise its options to extend the lease (100% would be repayable if the original three-year term is not extended; 66.7% would be repayable if the lease is not extended after the first one-year renewal; and, 33.3% would be repayable if the lease is not extended after the second one-year renewal), or if another OHL does not commence play in the BCC with 12 months of the Team leaving;
- The Team is given the right to sell (at its cost) and retain all revenue from concessions, advertising and sponsorships;
- The Team pays rent of \$1.00 per ticket sold;
- The Team additionally pays rent for office and retail space;
- The City of Brantford pays the cost of ice preparation (including two Zamboni drivers) and pre- and post-event clean up; and
- The Team will provide, at its cost, all other personnel and services required for OHL game day operations (including security, EMS, ticket takers, ushers, game entertainment, in-game shovel crews, concession staff, etc.).

Brantford & District Civic Centre



Source: City of Brantford

Precedent Projects (36 of 38)

Key Takeaways

Project Scope

- ***The over-riding goal of each Precedent Project was to leverage publicly-owned lands and / or facilities to achieve broader public policy objectives***
 - The NCC was interested in “...leveraging public lands to enhance the attractiveness of the National Capital by attracting a new public anchor use(s) and bringing lively civic life back to this historic capital district”.
 - The City of Ottawa was interested in securing the revitalization Lansdowne Park and its facilities following the discovery of material defects in the site’s stadium facility.
 - The City of Orillia leveraged a 9.75-acre site to achieve some of the goals and objectives of its *Downtown Tomorrow Plan*.
 - The City of Hamilton sought to create a downtown entertainment precinct by leveraging three entertainment assets.
 - The City of Guelph sought to leverage a publicly-owned site to advance the economic development of its downtown.
 - The City of North Vancouver sought to leverage a publicly-owned site to support the financing of a major community recreation centre replacement.

- The Ville de Gatineau leveraged an existing arrangement with a non-profit sports facility partner to realize the development of a new Events Centre (and additional ice pads) to replace its existing facility.
- The City of Brantford reached an arrangement with a hockey team tenant wherein the City would realize the partial revitalization of its existing 3,000-seat arena.

Land Assembly Approach

- ***The common land assembly approach was to leverage a pre-identified site to achieve broader public policy goals***
 - Each of the NCC, the City of Orillia, the City of Guelph and the City of North Vancouver leveraged specific sites, taking each through a public process to identify a range of acceptable uses prior to offering these sites to prospective developers.
 - While the City of Hamilton sought to leverage its three entertainment assets, the City additionally contributed three land assets to effect an equitable arrangement with its selected private partner (identified through negotiations with its selected private partner).
 - Larger sites (as in the case of the NCC and the City of North Vancouver) and sites premised on future land assembly (as in

Precedent Projects (37 of 38)

Key Takeaways

Land Assembly Approach (continued)

the case of the City of Guelph) have greater complexity and therefore risk:

- while the cancellation of the NCC's original process was due to issues with its selected private partner, the NCC pivoted and offered smaller parcels in a phased approach in its reboot process of seeking development proposals for the LeBreton Flats site;
- While offering the entirety of the HJNL's site, the City of North Vancouver was only able to closed on one portion of the site, necessitating it implement a second process to lease / sell the remaining HJNL's;
- The City of Guelph abandoned its intention of assembling additional properties due to timing and cost issues, necessitating a site redesign pivot; and
- The Ville de Gatineau utilized a vacant suburban site to accommodate a larger complex (the replacement of their existing arena plus three additional ice pads).

Financial Arrangements

- ***Financial arrangements involved the sale / long-term leasing of land at market values. Incentives were also provided to (a) alter development economics to make the project commercially attractive / economically viable, and / or (b) allow a developer to match city expectations with development and operating risk(s) it was assuming***
 - Land transactions at market value were pursued in Ottawa (with the NCC at LeBreton Flats), Orillia, Guelph and North Vancouver.
 - Land transfers at market value were pursued in Hamilton (with the value of the properties included in the deal equating to the level of financial risk taken on by the private partner).
 - Financial incentives (TIF / TIG) were additionally offered in Ottawa (Lansdowne Park) and Hamilton.
 - The Ville de Gatineau offered a long-term lease of the facility (for a nominal amount) and agreed to purchase ice time at the facility plus another facility managed by their not-for-profit partner, in order to secure financing for the project.
 - The City of Brantford offered nominal lease terms to their hockey team tenant in order to secure the team's investment to upgrade the arena.

Precedent Projects (38 of 38)

Key Takeaways

Financial Arrangements (continued)

- Costs associated with readying a site for development, including site remediation, relocating existing uses / tenants, building parking and / or making road improvements, were directly (in the case of Ottawa, Guelph, North Vancouver and Gatineau) or indirectly (in the case of LeBreton Flats where the cost of site remediation was deducted from the market value paid for the land) assumed by the public sector.
- The City of Ottawa (Lansdowne Park) and City of Hamilton reviewed and evaluated unsolicited proposals; the City of Ottawa had a policy it followed to deal with and evaluate unsolicited proposals while the City of Hamilton established a process to obtain more detailed proposals).

Procurement Approach

- ***Two-stage procurement processes (involving Requests for Qualifications and Requests for Proposals) were preferred***
 - Each of the NCC, the City of Orillia and the City of Guelph implemented two-stage procurement approaches to solicit the interest of private developers and development proposals.
 - The City of North Vancouver implemented a single-stage approach involving a Request for Development Proposals (a process which included requesting details of the proponent's financial capacity and source of funding for acquiring the development lands).

Market Sounding Results (1 of 7)

2019 RSM Market Findings Report

Background

- In 2019, the City retained RSM Canada (“RSM”) to identify and assess, through a “market sounding” process, potential private sector interest and participation in various City-owned properties located within the area bounded by Paris Street, Brady Street East and Elgin Street, including the land and VIA rail train station abutting the CP rail line (the “South District”). RSM issued their updated report (*City of Greater Sudbury: South District – Market Findings Report*) in September 2019.
- The objective of RSM’s market engagement was to compile feedback on the development of the City-owned South District properties, and in particular to:
 - Identify potential market interest in the South District (and specifically in the Greater Sudbury Convention and Performance Centre (“GSCPC”));
 - Compile feedback on the development of the South District;
 - Identify specific opportunities and / or risk areas based on market feedback;
 - Identify potential mitigations to these risks and mutual opportunities for both the City and developers; and
 - Inform next steps for the development of the South District including subsequent procurement processes.

City-owned Property in the South District



Source: City of Greater Sudbury

Market Sounding Results (2 of 7)

2019 RSM Market Findings Report

Key Findings

- Among the key findings from RSM's Market Sounding were the following:
 - There was strong and significant interest in the South District from local developers.
 - The proposed Junction Projects were seen as being able to invigorate the downtown due to their potential to increase foot traffic (Market Sounding participants perceived that there was limited foot traffic in the downtown after the close of business on weeknights and on weekends).
 - Market Sounding participants from outside Sudbury acknowledged the potential of the GSCPC, the Library Art Gallery ("LAG"), and the City's commitment to downtown Sudbury, as being able to positively impact the downtown and the South District.
 - While acknowledging the foregoing, Market Sounding participants from outside Sudbury did not demonstrate interest in the City-owned properties. This was concluded by RSM to be due to a range of factors including their focus on other regions, their lack of local knowledge, and land development opportunities in other jurisdictions.
- Sudbury-based Market Sounding participants expressed interest in the South District as a whole, as well as in individual properties. It was noted that looking at the South District holistically and taking a phased approach to development would result in a more measured development process, providing more certainty to the overall project and creating greater interest from the private sector.
- It was also noted that undertaking the development of individual properties separately may not have the same concurrent, coordinated and comprehensive impact to the downtown; such an approach may not also create the same level of market interest because of the smaller size of the land development opportunity associated with individual sites.
- The Van Horne Fire Station site, Shaughnessy Street East Parking Lot and CP Parking Lot were mentioned most often as properties of interest.
- Types of development most frequently mentioned were institutional, a multi-storey parking structure, residential, hotel, commercial (office) and assisting living / social housing.
- Cost of construction was cited as an issue / risk impacting development.

Market Sounding Results (3 of 7)

2019 RSM Market Findings Report

Key Findings (continued)

- Local developers preferred to purchase and develop property independently (rather than in partnership with the City); non-local developers preferred a closer partnership with the City to reduce some of the risk.
- Municipal incentives were identified as critical to development within the South District, particularly given the Sudbury market's higher construction costs and less favourable market metrics (vacancy rates, rental rates, values and absorption rates) compared to other markets.
- A collaborative approach between the City and its selected developer was identified as being critical to ensuring a successful development.
- Concerns were raised regarding the availability of environmental and geotechnical information for each of the properties in the South District. Where individual sites have / are likely to have a higher probability of contamination and / or developability issues, specific incentives should be provided by the City.
- The availability of parking was identified as a significant challenge, particularly given that the existing use of some of the city-owned properties in the South District is surface parking.
- Market Sounding respondents expressed the need for clarity on any future procurement process, including Council's commitment to the process, in order to provide certainty regarding the future development of any individual site in the South District.
- RSM identified a four-stage procurement process to seek development proposals from private sector developers / investors, comprised of:
 - Stage 1: re-engaging with developers to gather further market input;
 - Stage 2: Request for Qualifications process to identify a short list of "qualified" teams which would allow the City time to work with potential partners and maximize the market opportunity for each site within the South District;
 - Stage 3: Request for Proposals process to solicit specific development proposals, inclusive of development concept designs and transaction terms; and
 - Stage 4: Contract stage to negotiate and finalize business and financial terms and legal arrangements.

Market Sounding Results (4 of 7)

2023 Market Sounding Update

Background

- Since the time the RSM Report was issued in 2019, the Canadian economy incurred significant change, including suffering through a global health pandemic, an increase in “work from home”, higher inflation rates, higher costs of borrowing, higher construction costs, supply chain issues, etc. KKR Advisors undertook market soundings with a select group of Greater Sudbury-area developers to determine what conditions may have changed since 2019 and to gain further insights into how the City could approach a potential market solicitation to private developers to maximize the attractiveness of city-owned properties in the South District.
- In completing this market sounding update, KKR Advisors contacted 11 Sudbury-based entities (the “Market Sounding participants”, comprising real estate developers, investors, lenders and brokers), and obtained insights and commentary from ten of these entities (representing nine distinct firms / organizations).
- Areas of enquiry pursued by KKR Advisors included:
 - Circumstances which have changed since 2019 which could impact private development in the South District;
 - Uses which private developers would be most likely to pursue;
 - Steps needed to be taken by the City prior to taking properties to market; and

- Strategic approaches to taking properties to market.

Key Observations

Changed Circumstances since 2019

- Market Sounding participants acknowledged the negative impact which higher construction costs (including supply chain issues and labour availability) and higher interest rates are currently having on real estate development both in general and specifically in Greater Sudbury.
- Despite somewhat more favourable market metrics for residential (vacancy rates are lower and market rents have increased since 2019), the combination of higher development costs (one respondent noted costs are up 30% to 40% and labour is hard to secure) and interest rates (which have increased from less than 2.00% to more than 6.00%) has significantly impacted the economics (and profitability) of building residential.
- The impact of COVID-19 and the rise in work from home has negatively impacted office use, resulting in higher vacancy rates, lower rents and, as a result, eliminating the profitability of developing office.

Market Sounding Results (5 of 7)

2023 Market Sounding Update

Key Observations

Changed Circumstances since 2019 (continued)

- Market Sounding participants referenced parking and the availability of parking in the downtown as an issue which will additionally impact the economics of development in the South District (as the redevelopment of existing parking lots sites will require the replacement of lost parking and the creation of new spaces to accommodate the new use).

Development Opportunity(ies)

- Market Sounding participants cited the need for increased foot traffic in the downtown core to facilitate favourable conditions for new development. Market Sounding participants noted the ability of an Events Centre (or another public use facility like the GSCPC and LAG) in being able to generate such foot traffic.
- However, given the current economic and development environment, Market Sounding participants questioned which end use(s) a developer could exploit. It was also noted that no developer would build “on spec” without a solid business case which would be supportive of an equity investment from investors and allow the developer to obtain construction and take-out financing.
- Market Sounding participants did not see office as feasible for new development (given current costs of development, high vacancy rates and rents which are not supportive of new development).
- A hotel development was thought to have some merit but would require a firm commitment from the City to build public facilities (Events Centre, GSPC and / or LAG) in order to support an investment thesis for a hotel.
- Residential was generally considered a preferred use but would require financial and development incentives to overcome current development economics. Marketing Sounding participants cautioned, however, that the success of building residential will be dependent on the ability of residents to feel safe and secure in the downtown core.
- Market Sounding participants saw an Event Centre, GSCPC or LAG as a stand-alone municipal projects (versus a mixed-development that would incorporate public and private uses) which would not likely attract private sector investment (and hence would need to be undertaken and financed solely by the municipality).

Market Sounding Results (6 of 7)

2023 Market Sounding Update

Key Observations

Steps Needed to be Taken by the City Prior to Taking Properties to Market

- In order to support potential private sector investment in city-owned properties in the South District, Market Sounding participants cited the need for the City to fully commit to building the Events Centre (whether a renovation to the SCA or a new building), GSCPC or LAG. It was felt that with the City providing 100% certainty that such a project would go forward, a developer / investor would prove more willing to consider a potential development in the South District (it was additionally noted that a developer would not build on spec in the hope that the EC / GSCPC / LAG could be built in the future).
- Market Sounding participants felt the City should identify what it wants to achieve through the development of city-owned lands in the South District. In this regard, it was felt that the City should undertake a planning study to identify acceptable uses, development densities, building heights, etc. As part of identifying “acceptable uses”, the City should consider evaluating the feasibility of such uses, including determining if, and how, such uses could be made financially viable.
- In addition, it was felt that the City should undertake development due diligence on individual sites to understand and quantify issues (and costs) which would impact the development of a site (including environment, geotechnical, site servicing and / or other constraints). Such information would then be provided to prospective purchasers / developers as part of the Request for Development Proposals process.
- Market Sounding participants felt incentives will be necessary to support development, including tax increment grants (“TIGs”), other financial incentives, and the City assuming the costs of addressing development constraints associated with a particular site (as the City of Guelph did on the Baker Street Redevelopment).
- Market Sounding participants felt the need to align such grants against the economics of development (for example, extending the period of time over which TIGs are provided, increasing the percentage of incremental taxes granted, etc.).
- Finally, Market Sounding participants felt the need for the City to create excitement and marketing “buzz” for the South District as

Market Sounding Results (7 of 7)

2023 Market Sounding Update

Key Observations

Steps Needed to be Taken by the City Prior to Taking Properties to Market (continued)

part of its commitment to construct the Event Centre / GSCPC / LAG and offer properties to private sector developers.

Strategic Approaches for Taking Properties to Market

- Market Sounding participants felt that the City should strategically prioritize individual parcels, offering firstly the site which it feels would provide a developer the greatest chance of development success. In so doing, it was acknowledged that the City may need to offer higher levels of incentives (in order to help offset development risk, including, for example, offering land at a low cost, assuming site remediation costs, ensuring that adequate in-ground services are available to the site, etc.).
- Market Sounding participants noted that in order to kick-start the redevelopment of the South District, the City may need to “entice” developers / investors to acquire a site (and develop that site), and that the City’s offering process should be both “simple and compelling” (Market Sounding participants felt the first project will have the greatest overall risk, and if / when success can be demonstrated, it could enhance the attractiveness of other sites / future site offerings).
- Market Sounding participants cautioned, however, that the City would need to fully commit to build the Events Centre / GSCPC / LAG prior to offering any site to the market for sale and development.
- The offering process should provide prospective purchasers / investors / developers with sufficient information in order for them to make an informed development and investment decision. In this regard, any offering process could provide detailed environmental, geotechnical, site servicing and related information describing the site.
- Marketing Sounding participants were mostly indifferent on the nature of the process used by the City (single RFP stage, multi-stage RFQ / RFP stage, etc.). Market Sounding participants noted that any process should be straight forward, clear, fair and transparent.

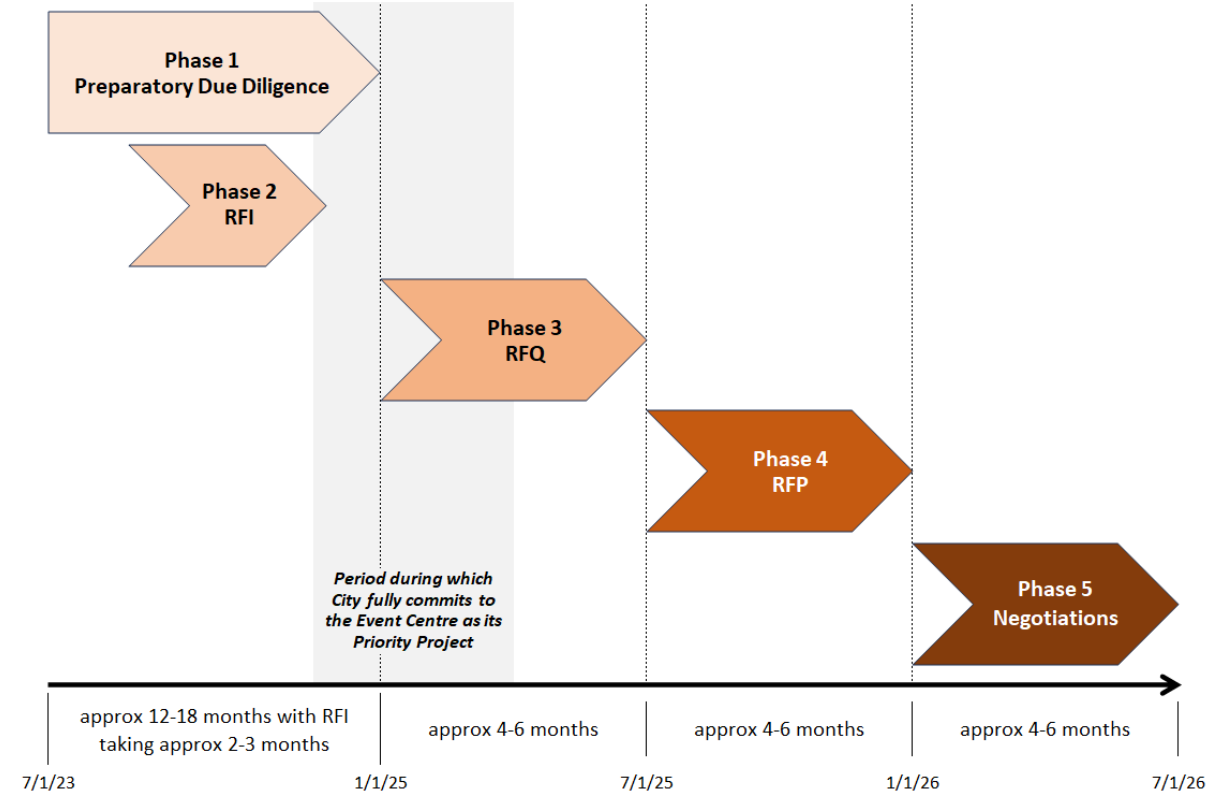
Recommended Market Solicitation Strategy (1 of 4)

Recommended Market Solicitation Strategy

Recommended Strategy

- Based on the above review of eight Precedent Projects, including leading practices from the processes implemented by each public sector entity, the findings from RSM's 2019 Market Findings Report and the key observations gleaned from KKR Advisors' 2023 Market Sounding with nine Sudbury-based real estate developers, investors, brokers and lenders, the following Market Solicitation Strategy ("MSS") is recommended.
- The recommended MSS builds on our prior market experiences with similar market solicitation "procurement" processes and our real estate development market experiences, and involves the following five components:
 1. South District Preparatory Due Diligence
 2. Request for Information ("RFI")
 3. Request for Qualifications ("RFQ")
 4. Request for Development Proposals ("RFP")
 5. Contract Negotiations

Recommended Market Solicitation Strategy



Recommended Market Solicitation Strategy (2 of 4)

Recommended Market Solicitation Strategy

Recommended Strategy

Phase 1 - South District Preparatory Due Diligence

- The purpose of Phase 1 - South District Preparatory Due Diligence is for the City to undertake research and gather sufficient information to educate both the City and prospective site purchasers / investors / developers on the development potential of each site. It helps to:
 - define the range of uses which the City would deem acceptable for each site (a public process which could be undertaken in conjunction with the City's planned update to its Downtown Master Plan);
 - provide insights into the feasibility of such uses, including if, and how, such uses could be made financially viable;
 - outline broad parameters governing the potential reuse and development of each (including site coverages, development densities, building heights, etc.);
 - detail the nature of, cost and process to rectify any constraints to the development of each site, including environmental, geotechnical, site servicing, parking availability or other constraints to development; and
 - detail the nature of specific tax incentives that would be provided to support development, including the provision of enhanced incentives that may be required to kick start development.
- Concurrent with Phase 1, the City would formally engage with the broader development community, issuing a Request for Information to obtain specific market input and feedback on the development of individual properties in the South District (see below). The information received through the RFI would be used to supplement input received through a community consultation process.
- Following the completion of preparatory due diligence, the City would identify and prioritize sites which it would take to market (and the anticipated timing of when it would offer individual sites to the market). The City would also outline any additional process(es) required to rectify development constraints.
- Finally, the City would provide clarity and certainty regarding the development of an Event Centre (or GSCPC or LAG), with the City formally committing to developing this project (whether a new facility on a specific site or a renovation to the SCA) as the priority project of the City. As part of the latter step, the City should consider implementing a marketing plan to create interest in the overall project (the Event Centre / GSCPC / LAG and the individual development sites it will offer to the market).

Recommended Market Solicitation Strategy (3 of 4)

Recommended Market Solicitation Strategy

Recommended Strategy

Phase 2 - Request for Information

- The purpose of Phase 2 - Request for Information (“RFI”) is for the City to formally engage with the broader development community and obtain specific market input and feedback on the development of individual properties in the South District. The RFI would additionally seek to identify potentially interested parties, confirm market interest in individual South District properties, and secure feedback on the potential redevelopment of these properties.
- The information received from the RFI would then be used to assist in prioritizing properties and allow the City to initiate a focused property redevelopment “procurement” process. Depending on the nature of information requested in the RFI, it could additionally provide insights into potentially required infrastructure projects (for inclusion into the City’s multi-year capital budget) to attract private sector investment.
- Specific areas which could be addressed in an RFI process may include:
 - Market opportunity assessment (ranking of sites);
 - Highest and best use of each site;
 - Conditions precedent influencing development (i.e., what needs to be done / occur to ensure that development occurs);
 - Factors that would inhibit development;
 - Assurances, commitments and pre-conditions needed to ensure development;
 - Market concerns and how these could be alleviated;
 - Specific factors that would negate development from occurring
 - Information requirements needed to prepare a bid to acquire a site;
 - Commitments from the City needed to make a potential bid process attractive; and
 - Development incentives.
- Phase 2 is viewed as a key step in the recommended MSS as it allows the City to engage with prospective developers (prior to requesting qualifications or development proposals) and conveys to the market a level of the commitment regarding the development of an Events Centre (or GSCPC / LAG) and a future solicitation of development proposals for sites in the South District.

Phase 3 - Request for Qualifications

- The purpose of Phase 3 - Request for Qualifications (“RFQ”) is to identify a short list of qualified developers interested in purchasing the City’s interest in a specific site located in the South District.

Recommended Market Solicitation Strategy (4 of 4)

Recommended Market Solicitation Strategy

Recommended Strategy

Phase 3 - Request for Qualifications (continued)

- Specific information which would be requested may include:
 - Financial capacity of the developer / development team;
 - Profile and history of the developer / development team;
 - Key personnel;
 - Understanding and approach; and
 - Comparable / reference developments.

Phase 4 - Request for Development Proposals

- The purpose of Phase 4 - Request for Development Proposals (“RFP”) is for the City to formally solicit development proposals and offers to purchase a specific development site from development consortia short listed from the Phase 3 - RFQ process.
- The RFP would include City-defined terms and conditions associated with the purchase of the property (for example, an obligation by the proponent to commence development of the site within a defined time period), detail obligations of the City (for example, to complete defined city-works, to provide defined development incentives, etc.) and could also include granting the selected purchaser an exclusive option to acquire additional property(ies) if certain pre-defined development milestones are achieved.

- Specific information that would be requested from proponents within the RFP could include:
 - Development concept(s);
 - Transaction terms, including price; and
 - Conditions precedent, including purchase / development agreement terms, conditions and expectations of the City from the developer.

Phase 5 - Contract Negotiations

- Phase 5 - Contract Negotiations would commence immediately following the selection and approval of the preferred / selected respondent from the Phase 4 - RFP stage and would culminate in the signing of a definitive agreement of Purchase and Sale.

General Assumptions and Limiting Conditions

1. The use of any projected information (“Projections”) made in conjunction with this Report may not be appropriate for use outside of their intended purpose. The Projections, if included, will not reflect actual development, economic, and / or financial / fiscal results. The inclusion of scenarios produced in conjunction with this analysis may contain hypotheses and assumptions which are based on a set of conditions or anticipated courses of action that may not be unreasonable, are consistent with the purpose of the Projections, but which will not materialize as set out therein. The hypotheses represent plausible circumstances, but need not be, and may not have been fully supported.

Since future events are not subject to precise projections, some assumptions will not materialize in the exact form presented in this Report. In addition, other unanticipated events and circumstances may occur which could influence future development conditions, private sector interest in such development conditions and / or the operations and costs of a new or renovated Events Centre in the City of Greater Sudbury. Therefore, actual results will vary from any Projections set out therein. While there is no recourse to predicting these matters with certainty apart from informed and reasoned judgments, it must be stated that future events will lead to variations which may materially alter the actual development and operating results. KKR Advisors Ltd. does not warrant that actual results achieved from prospective private sector development and / or the operations and financial performance of a new or renovated Events Centre will be the same, in whole or in part, as those shown in any Projections. The Projections are based on hypotheses and there is a significant risk that actual results will vary, perhaps materially, from the results projected.

2. Information furnished by others upon which all or portions of this report are based, including, among others, the City of Greater Sudbury, the National Capital Commission, the City of Ottawa, the City of Orillia, the City of Hamilton, the City of Guelph, the City of North Vancouver, the Ville de Gatineau and the City of Brantford is believed to be reliable, but has not been verified in all cases. No warranty is given as to the accuracy of such information.
3. Our report and work product cannot be included, or referred to, in any prospectus, securities and exchange commission filing or other public investment document.
4. The intended use of this report is to provide background and strategic advice to the City of Greater Sudbury re a potential future market solicitation from private sector developers for a proposed Sports and Entertainment Centre in Downtown Sudbury.

5. This document does not purport to provide legal advice and it should not be interpreted as providing legal advice. The reader is encouraged to seek independent legal advice.
6. It is assumed that all required licenses, certificates of occupancy, consents, or other legislative or administrative authority from any local, provincial, or national government or private entity or organization have been, or can readily be obtained, or renewed to support uses upon which this report is based.
7. No investigation has been made of, and no responsibility is assumed for, the legal description or for legal matters including title or encumbrances.
8. Full compliance with all applicable federal, provincial and local zoning, use, occupancy, environmental, and similar laws and regulations is assumed, unless otherwise stated.
9. No responsibility is taken for changes in market conditions and no obligation is assumed to revise this report to reflect events or conditions which occur subsequent to the date of this report.
10. Any financial structures contained or referred to within this report is predicated on the market conditions prevailing as of the date of this report.
11. Areas and dimensions of any property referenced in this report were obtained from sources believed to be reliable. Maps or sketches, if included in this report, are only to assist the reader in visualizing the property / site and no responsibility is assumed for their accuracy. No independent surveys were conducted.
12. It is assumed that there are no hidden or unapparent conditions of the site, subsoil, or structures that affect future use and / or value. No responsibility is assumed for such conditions or for arranging for engineering studies that may be required to discover them.
13. No soil analysis or geological studies were ordered or made in conjunction with this report, nor was an investigation made of any water, oil, gas, coal, or other subsurface mineral and use rights or conditions.
14. We have not been engaged nor are we qualified to detect the existence of hazardous material which may or may not be present on or near the property. The presence of potentially hazardous substances such as asbestos, urea-formaldehyde foam insulation,

General Assumptions and Limiting Conditions

industrial wastes, etc. may affect the value and future use of a property and the viability of using the property for its intended purpose. No responsibility is assumed for any such conditions or for any expertise or engineering knowledge required to discover them. The client should retain an expert in this field if further information is desired.

15. Neither KKR Advisors Ltd. nor any individuals signing or associated with this report shall be required by reason of this report to give further consultation, to provide testimony or appear in court or other legal proceedings, unless specific arrangements thereof have been made.
16. This report has been made only for the purpose stated and shall not be used for any other purpose. Neither this report nor any portions thereof (including without limitation any conclusions, the identity of KKR Advisors Ltd. or any individuals signing or associated with this report, or the professional associations or organizations with which they are affiliated) shall be disseminated to third parties by any means without the prior written consent and approval of KKR Advisors Ltd.



Appointment – Committees of Council and Boards

| | |
|-----------------|--|
| Presented To: | City Council |
| Meeting Date: | April 16, 2024 |
| Type: | Managers' Reports |
| Prepared by: | Brigitte Sobush Clerk's Services |
| Recommended by: | General Manager of Corporate Services |

Report Summary

This report sets out the procedure for Council to appoint members to the Hearing Committee, Operations Committee, Board of Health for Public Health Sudbury and Districts and the Sudbury Airport Community Development Board.

Resolutions

Resolution 1:

THAT the City of Greater Sudbury appoints Councillor _____ to the Hearing Committee for the term ending November 14, 2026, as outlined in the report entitled, "Appointment – Committees of Council and Boards" from the General Manager of Corporate Services, presented at the City Council meeting on April 16, 2024.

Resolution 2:

THAT the City of Greater Sudbury appoints Councillor _____ to the Operations Committee for the term ending November 14, 2026, as outlined in the report entitled, "Appointment – Committees of Council and Boards" from the General Manager of Corporate Services, presented at the City Council meeting on April 16, 2024.

Resolution 3:

THAT the City of Greater Sudbury appoints Councillor _____ to the Board of Health for Public Health Sudbury and Districts for the term ending November 14, 2026, or until their successor is appointed as outlined in the report entitled, "Appointment – Committees of Council and Boards" from the General Manager of Corporate Services, presented at the City Council meeting on April 16, 2024.

Resolution 4:

THAT the City of Greater Sudbury appoints Councillor _____ to the Sudbury Airport Community Development Board for the term ending November 14, 2026, or until their successor is appointed as outlined in the report entitled, "Appointment – Committees of Council and Boards" from the General Manager of Corporate Services, presented at the City Council meeting on April 16, 2024.

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

This report refers to operational matters.

Financial Implications

There are no financial implications associated with this report.

Background**Committees of Council (Hearing Committee and Operations Committee):**

In accordance with By-law 2019-51, regarding Committees of Council and Advisory Panels, the membership of the Hearing Committee is five Members of Council, and the Operations Committee is a minimum of five and a maximum of seven Members of Council. At this time, there is a need to replace the seat held by the late Councillor Vagnini on the two committees as the number of Members of Council on the Hearing Committee has been reduced to four while the Operations Committee has been reduced to six.

Board of Health for Public Health Sudbury and Districts:

At the November 29, 2022, City Council meeting, Councillors Lapierre, Parent, Signoretti, Sizer and Leduc were appointed to the Board of Health for Public Health Sudbury and Districts. Councillor Leduc has resigned from the board and Council may appoint another Member of Council to sit on the Board of Health. If a Member of Council does not wish to sit on the Board the seat may be filled by appointing a citizen.

Sudbury Airport Community Development Board:

At the November 29, 2022, City Council meeting, Councillor Parent and late Councillor Vagnini were appointed to the Sudbury Airport Community Development Board. At this time, there is a requirement to replace the vacant seat as two Members of Council are to be appointed to this board.

Selection

The selection of these positions is to be conducted in accordance with the City of Greater Sudbury's Procedure By-law. Council's procedure requires that in the event more candidates are nominated for the required position(s), those position(s) will be chosen by a simultaneous recorded vote. Requests for

simultaneous recorded votes are conducted by way of electronic vote however the electronic vote system does not have the required functionality for dealing with appointments. Paper ballots are to be used for members attending in person. Members participating virtually shall provide their vote to the Clerk in writing. The Clerk will announce the vote of each member and the results once voting has been concluded.

Once the candidates have been selected for the positions, a resolution will be introduced confirming the appointment of the successful candidates.

It is always in order for a Member of Council to nominate and vote for themselves.

Resources Cited

City of Greater Sudbury Procedure By-law 2019-50: <https://www.greatersudbury.ca/city-hall/by-laws/>

City of Greater Sudbury Procedure By-law 2019-51: <https://www.greatersudbury.ca/city-hall/by-laws/>

Lake Stewardship Grant Program - 2024

| | |
|-----------------|--|
| Presented To: | City Council |
| Meeting Date: | April 16, 2024 |
| Type: | Correspondence for Information Only |
| Prepared by: | Amanda Poulin Planning Services |
| Recommended by: | General Manager of Growth and Infrastructure |

Report Summary

This report provides information regarding the Lake Stewardship Grant Program – 2024

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

This report refers to supporting ecological sustainability, creating a healthier community (promote Greater Sudbury as a great northern lifestyle alternative) and strengthening community vibrancy (encourage the active engagement of formal and informal neighborhood groups) as identified in the Strategic Plan. The report also refers to increasing reforestation efforts to mitigate effects related to climate change.

Financial Implications

Eleven applications for lake stewardship grants are recommended for approval with the total amount allocated being \$5000 by way of cash grants. The funding for these grants is provided for in the 2024 operating budget and will be approved through this By-Law.

Summary

In 2024, the City's Lake Stewardship Grant program received eleven applications for funding from local lake stewardship groups. City staff reviewed the applications and recommends that eleven of the applicants be awarded funds through the Lake Stewardship Grant program with a total funding allocation of \$5000 by way of cash grants. A By-Law, presented at this meeting, must be approved for funding to be provided. The funding for these grants is provided for in the 2024 operating budget.

The Lake Stewardship Grant program was initiated in 2005 to support and encourage lake stewardship groups by providing them with additional resources. This is the 19th year of the Lake Stewardship Grant Program. Funding criteria and the application form were drafted by the former Watershed Advisory Panel. To receive funding, projects must benefit the water quality of the lake and/or watershed and demonstrate support and involvement of lake stewardship members, other lake residents or community members.

2024 Summary Report of Lake Stewardship Groups Recommended to Receive Funding Support.

FAIRBANK LAKE CAMP OWNERS' ASSOCIATION INC.

Project Name: Maps and Information Pamphlets

Project Details: The Fairbank Lake Camp Owners' Association Inc. would like to create and distribute 150 laminated 11x17 double sided pages to their members, MNRF, KGHM Mining, and Magna Mining. One side of the page will contain an outline of the lake with all property owners' names or addresses. The other side will contain addresses, lake facts, contour of the lake bottom, depth of the water along with the location of channel markers and hazard markers to aid in navigation. They are also planning to print and distribute pamphlets from FOCA on wake awareness and invasive species as well as from CGS on boating safety.

Use of Funds: Funds will be used to create and distribute 150 11x17 maps.

Amount Being Awarded: \$500 by way of a cash grant.

FOUR LAKES COMMUNITY ASSOCIATION

Project Name: Plant and Seed Swap Event

Project Details: The Four Lakes Community Association has been asked by residents to host another Plant and Seed Swap Event since last year's event was a huge success. They will host a focused event on local seeds, flowers, and plants that grow best in the area as well as appropriate plants for shoreline buffers. The event will be held in a central location to the four lakes: Frenchman, Hanmer, Joe and Dixon. Knowledgeable volunteers will be at the event to help promote and share knowledge on the plants.

Use of Funds: Funds will be used for tent/equipment rentals, signage, information pamphlets and refreshments.

Amount Being Awarded: \$480 by way of a cash grant.

IRONSIDE LAKE CAMPERS ASSOCIATION

Project Name: Ironside Lake Shoreline Cleanup

Project Details: The Ironside Lake Campers Association would like to ensure shoreline cleanups become a way of life for residents and visitors of Ironside Lake. Signs will be posted at the boat launches that reflect the initiative as well as host the annual meeting and BBQ.

Use of Funds: Funds will be used to purchase signs, garbage bags and items for the BBQ.

Amount Being Awarded: \$500 by way of a cash grant.

KUKAGAMI CAMPERS' ASSOCIATION

Project Name: Septic Pump-Out Rebate Program

Project Details: The Kukagami Campers' Association plans to provide a \$100 rebate to their members who pump-out their septic. Members must provide a receipt of a signed invoice from a licensed septic pump out contractor to qualify. The Septic Pump-Out Rebate Program has been in place for just over 10 years with 150 rebates issued to date. This encourages their members to pump their septic's every 3-5 years. The long-term goal is to get as many property owners as possible to pump out their systems on a 3-year rotation to reduce the chances of waste bi-products entering the lakes.

Use of Funds: Funds will be used for the septic pump-out program.

Amount Being Awarded: \$500 by way of a cash grant.

LAKE PANACHE CAMPERS ASSOCIATION INC. (LPCA)

Project Name: Lake Panache Clean Up

Project Details: The Lake Panache Campers Association Inc. wants to encourage campers to keep their properties clean and healthy to reduce the chance of hazards entering the lake. This is done by annually holding the hazardous waste/scrap metal clean up event in July. The LPCA collects the waste and disposes of it through the Toxic Taxi (hazardous waste) and a private vehicle (metal). This allows the LPCA to meet new and existing campers from around the lake to offer the membership as well as provide the stewardships initiatives. Water samples are also taken at 10 locations around the lake semiannually in May. The data is shared on the LPCA's website as well as with the City of Greater Sudbury.

Use of Funds: Funds will be used for the hazardous waste/metal collection, water sample testing and fuel for water sampling by boat.

Amount Being Awarded: \$320 by way of a cash grant.

LAKE WAHNAPITAE HOME AND CAMPERS ASSOCIATION (LWHCA)

Project Name: LWHCA Septic Pump-Out Rebate Program

Project Details: The LWHCA intends to support their "Healthy Lake" initiative by promoting the maintenance of septic systems through regularly scheduled septic pump-outs. Their goal is to reach a 50% compliance rate of septic pump-outs which would be approximately 52.5 pump-outs per year. From 2001-2022 they saw a 37% compliance to a 3-4-year cycle. Residents need to be a member of the LWHCA to apply for the \$100 rebate. They must either be in good standing for 2 years or buy a 3-year membership. Residents must also provide proof of their pump-outs to be eligible. The goal is to be able to provide a maximum of 30 rebates.

Use of Funds: Funds will be used for septic pump-out rebates.

Amount Being Awarded: \$500 by way of a cash grant.

LONG LAKE STEWARDSHIP (LLS)

Project Name: Septic Sense

Project Details: The LLS wants to continue to raise awareness on the watershed about proper septic maintenance. They use their contact list of over 500 individuals to share septic related information from sources such as FOCA, Watersheds Canada, and Government Agencies. The LLS also wants to attract members to the stewardship by making a paid membership part of the criteria to be entered in the septic pump-out draw. There will be one winner in May who will get a septic pump-out reimbursement of up to \$500 under the condition of providing the LLS with the invoice from the septic pump-out. The stewardship will also be sharing educational material throughout the summer, operating a display booth at Kivi Park, and will have a gift basket draw.

Use of Funds: Funds will be used for a septic pump-out reimbursement.

Amount Being Awarded: \$500 by way of a cash grant.

MCFARLANE LAKE STEWARDSHIP COMMITTEE (MLSC)

Project Name: Summer Water Quality Sampling Program

Project Details: The McFarlane Lake Stewardship intends to continue enhancing the monitoring the total phosphorus (TP) in McFarlane Lake throughout the ice-free season. This plan includes monitoring the quality of the major inflows to the lake, and the flow of those tributaries. This work should lead to a better understanding of "external" versus "internal" nutrient loadings. Monthly sampling will continue throughout the ice-free season at two sampling stations with the samples being sent to a local lab for analysis. Dissolved oxygen will also be monitored along with secchi depths. Additional TP samples will be taken 1m off the bottom if there is evidence of oxygen depletion along with samples collected for TP and total suspended solids (TSS) from Algonquin subwatershed inflow stream (the major inflow to the lake). The MLSC is requesting funding for the analytical services to support the sampling program

Use of Funds: Funding will be used for analytical support.

Amount Being Awarded: \$500 by way of a cash grant.

NEPAHWIN LAKE WATERSHED STEWARDSHIP GROUP (NLWSG)

Project Name: It Takes an Informed Watershed to Protect a Lake

Project Details: The NLWSG aims to revitalize engagement and capacity amongst watershed residents to mitigate the declining Nepahwin Lake water quality. This will be done by NLWSG volunteers going door-to-door (D2D) throughout the watershed (~1000 homes) and providing 4"x9" cards highlighting current Nepahwin total phosphorus (P) and chloride (Cl) levels along with providing resource links for residents to guide their own best practice on their properties. Through the D2D campaign they also aim to increase active membership, promote their social media pages, and build awareness of how residents can involve commercial property owners and/or levels of government to adopt best practices to attenuate P and Cl contamination of storm-water run-off.

Use of Funds: Funds will be used to design and print 1000 4"x9" rack cards to be distributed in the Nepahwin Lake watershed.

Amount Being Awarded: \$500 by way of a cash grant.

RAMSEY LAKE STEWARDSHIP COMMITTEE

Project Name: Shoreline Cleanup/Boat Launch Information Blitz

Project Details: The Ramsey Lake Stewardship Committee is scheduling a cleanup the weekend of May 11th, 2024, around the boat launch. They plan to hand out pamphlets on good shoreline practices. This event also creates the opportunity to recruit members to help with the information blitz which is scheduled for the Victoria Day long weekend where they hand out pamphlets on good boating practices.

Use of Funds: Funds will be used for signage and pamphlets.

Amount Being Awarded: \$200 by way of a cash grant.

TRI-LAKES COMMUNITY STEWARDSHIP (SIMON LAKE STEWARDSHIP)

Project Name: Tri-Lakes Community Stewardship Community Events

Project Details: The Tri-Lakes Stewardship would like to host two summer events for the community with the purpose of creating awareness about: the water quality of the three lakes, the importance of Simon Lake Park and its beach, boat launch and natural surroundings, as well as volunteer recruitment (and their appreciation). This gives the opportunity for the Tri-Lakes Community Stewardship to bring the community together to learn and understand how the lake health affects the community including their friends and neighbours of the Anishinabek First Nation.

Use of Funds: Funds will be used for purchasing rental equipment, propane, food and supplies for the BBQ.

Amount Being Awarded: \$500 by way of a cash grant.