

## What's the Plan for Northeast False Creek?

### Vision Statement for NEFC

NEFC presents a unique opportunity to extend downtown Vancouver to the waterfront.

It will:

- have a mix of uses that is a place to play, work and live
- create a great place to be -- an urban, high-energy and fun hub for the city and the region
- be visually distinctive from other waterfront areas
- be an active waterfront with a series of public open spaces for public celebration and opportunities for everyday use
- advance sustainability in the city through mixed-use, high density development in a highly suitable location





# Northeast False Creek



policy changes to manage event noise impacts on livability in Northeast False Creek

## Council - Approved Directions for NEFC

### NEFC Will Include:

- 1.8 million square feet of job space (5000 jobs)
- up to 4 million square feet of residential development (7200 people)
- an open space network that includes:
  - a major pedestrian, bike and barrier-free connection to downtown via
  - the "Georgia Street Pedestrian Link" on the east side of BC Place
  - a Civic Plaza
  - the extension and completion of Creekside Park
  - completion of the waterfront walkway along False Creek

NEFC: Directions for the Future - Approved by Vancouver City Council in November, 2009





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## What's the Purpose of this Open House?

In 2010 and 2011, Council will be considering a series of rezonings for residential and commercial development in Northeast False Creek.

Staff are proposing a series of recommendations regarding event noise. The recommendations seek to find a balance between supporting the role of the area as an event district and the livability of the housing in the area.

### ? FEEDBACK

A comment form has been provided. Please return it to staff before you leave or mail it to us. We are also collecting email addresses if you wish to receive project updates.





## Residential Liveability in the Event Zone

Residential development in this area will appeal to a segment of the market that is attracted to the energy, vibrancy and public activity unique to the entertainment role of NEFC.

It is anticipated that up to 1/3 of the 200 events a year in NEFC (football, soccer, hockey, concerts, festivals etc) at the three venues; BC Place Stadium, Rogers Arena and the Civic Plaza, will produce noise levels above the by-law.

New buildings will need to respond to the unique acoustic challenges of the area and new residents will need to accept that NEFC is and will remain a busy, noisy area with a large number of events.

### What regulations and policies has Council has approved to date regarding noise related to events:

November 2008 : False Creek North Official Development Plan Amendments to Permit Residential Use on the BC Place Stadium Site

Residential floor space must not exceed 65,000 square metres but no residential floor space is permissible except in compliance with the following requirements:

- Proposals for a sub-area zoning must consider the special acoustic conditions of the area.
- Residential buildings must meet the Canada Mortgage and Housing Corporation standards used in the Zoning and Development By-law which sets maximum decibel levels for interior rooms based on the 24-hour equivalent (Leq) A-weighted (dBA) sound level.
- Building orientation and construction must mitigate as much as possible events in major facilities and outdoor spaces which will produce high levels of noise, particularly bass noise (dBC), on a regular basis, and for significant periods of time.
- The developer must take measures, including covenants on title, notices in rental agreements, inclusion in marketing and disclosure documents, and signage on buildings, to advise initial and future purchasers and residents of anticipated noise levels.
- The preceding requirements must be satisfactory to Council when it considers the sub-area zoning proposal.

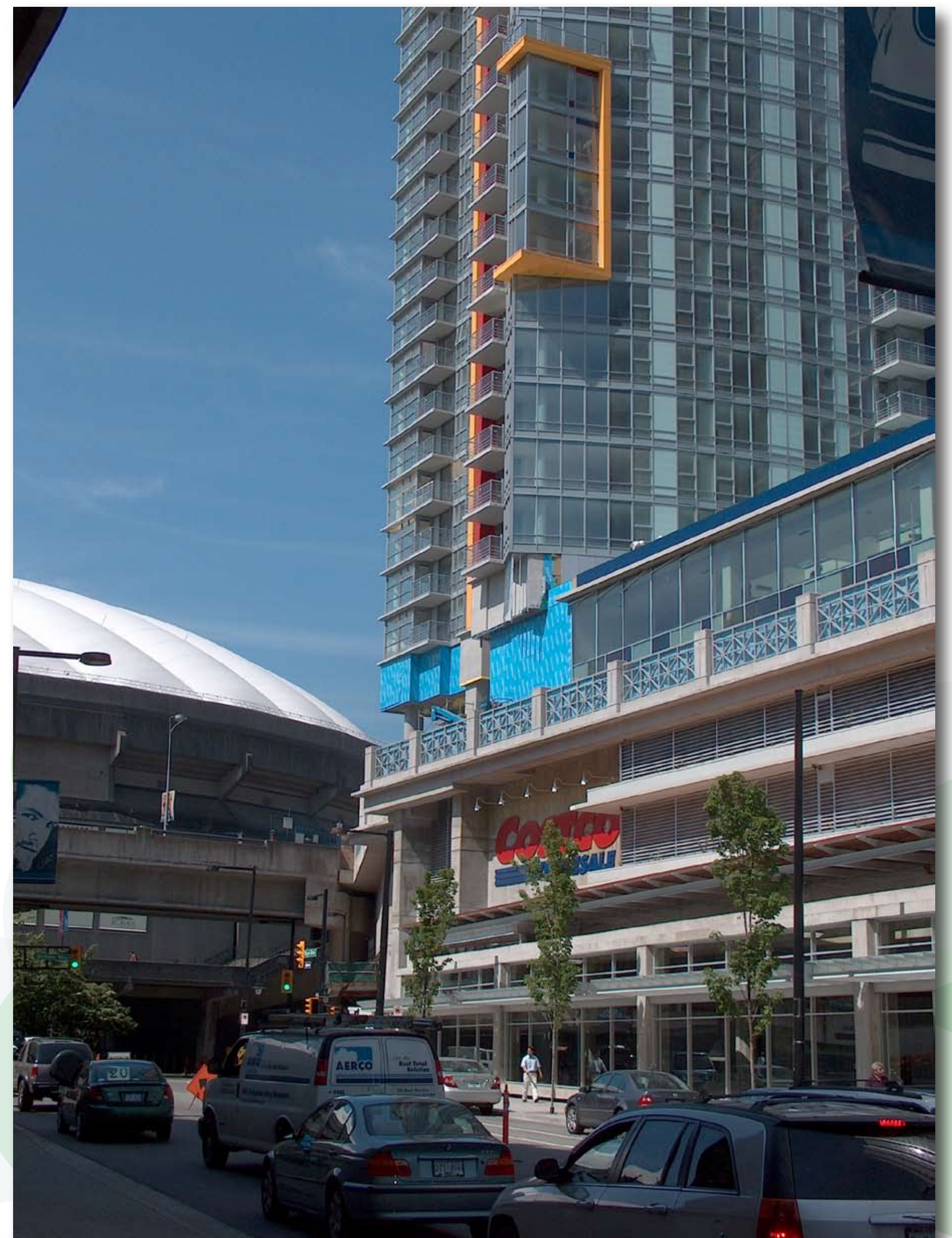
### November 2009 – Extract from Council Minutes

“At a minimum the following will be considered when determining the appropriate amount of residential floor space to be permitted in an area:

- Environmental performance;
- Urban design and architectural excellence;
- The provision of ample amenities that strengthen the liveability of the area and the role of Northeast False Creek as an area for hosting events;
- The compatibility of housing adjacent to event venues.

### November 2009 – NEFC Directions

3.5.1 – In consideration of the events, noise and congestion, pursue a series of measures including building design requirements, resident notification and communication and event noise standards to address the compatibility of residential use and events.





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## How Does the City Regulate to Address the Liveability of Housing?

Typically in our daily lives we encounter noise levels between about 20 and 30 dBA (a faint whisper or night-time background noise in a quiet suburban bedroom) and 100 dBA (unmuffled motorcycle or jackhammer operating nearby).

Typical noise levels experienced include:

- 40 to 50 dBA in a general office situation.
- 60 dBA when talking normally to someone 1 to 2 m away.
- 65 to 75 dBA when riding in a car at highway speeds.
- 85 to 95 dBA while cutting the grass with power mower.

### City Standard for Indoor Noise Levels

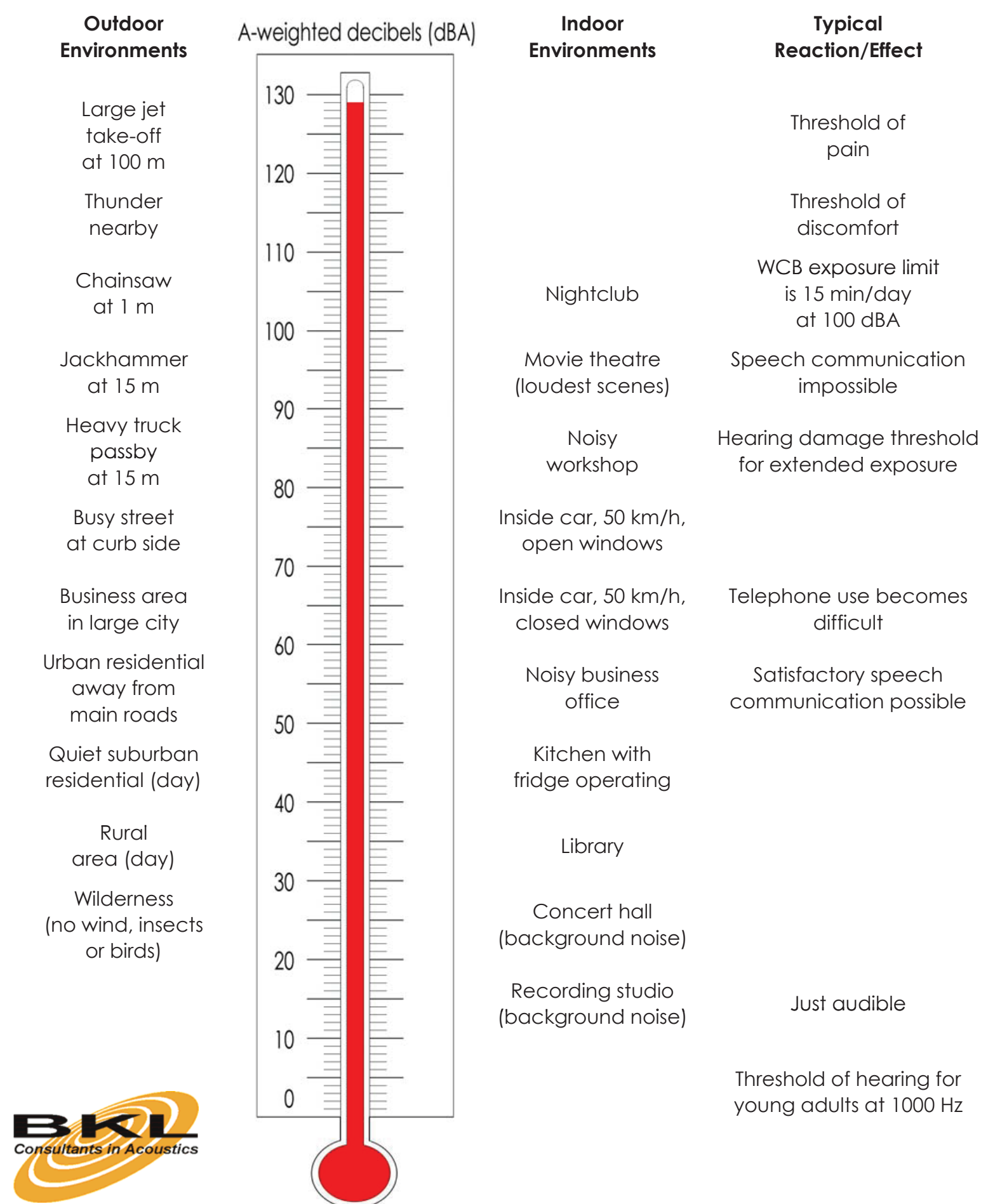
Residential bedrooms: Max 35 dBA with the windows closed  
 Living and Dining Rooms: Max 40 dBA  
*Zoning and Development By-Law*

### City Standard for Maximum Outdoor Noise Levels

Measure at outside wall/ balcony: Max 70 decibels (65 after 10pm).  
*Noise Control By-Law*

### Noise Thermometer

Common Noise Levels and Typical Reactions



Note: The sound levels shown are intended as a guide to allow the lay person to gauge the loudness, in a very approximate manner, of a particular noise level. The information provided is not intended to be used, and should not be used, to judge noise levels for the purpose of establishing compliance with standards or regulations, or in any legal proceedings.





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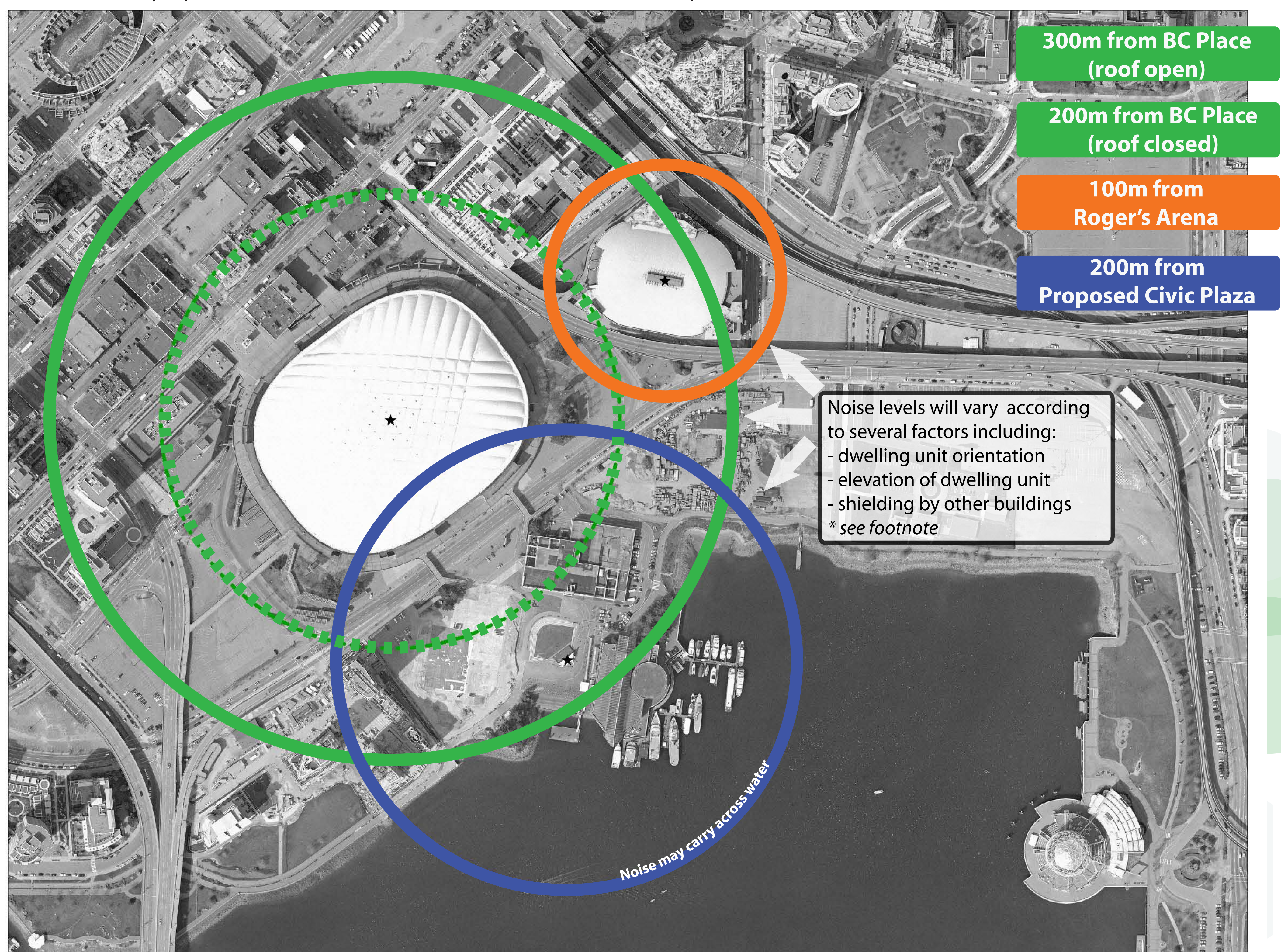
## Why is the City Pursuing New Measures to Deal with Event Noise in NEFC?

### More Residential Buildings in Close Proximity to the Event Venues

Staff estimate that up to 18 new residential towers could be built in areas that could experience outdoor noise levels that exceed the Noise Control by-law limits.

#### Map 1: Approximate Event Venue Noise Footprints

Locations that may Experience Outdoor Noise Levels that Exceed the Noise Control By-Law Limits



FOOTNOTE: Map 1 shows the locations in Northeast False Creek that are most impacted by noise from the event venues. In general, only those units that face the noise source and are not shielded by other buildings will experience noise levels that exceed the noise control by-law limits outside of each suite. In the case of BC Place Stadium, units that might experience outdoor noise levels above the by-law limit will generally be located above the elevation of the concrete ring at the base of the roof. With the roof closed, the noise impact area for BC Place is reduced to 200m for sporting events (concert events remain at 300m). All distances are approximate



## What is Proposed As Requirements for New Residential Buildings in NEFC?

At the rezoning stage of development approval, proposals for new residential buildings will need to:

- Demonstrate that appropriate indoor sound levels can be achieved with “windows closed” during events. This requirement is anticipated to be in addition to the zoning and development by-law standard requirement to address traffic noise.
- Demonstrate that units can maintain comfortable indoor living temperatures with a frequent “windows closed” situation during summer months.
- Commit to place notices (covenants or easements) on title alerting the 1st and all subsequent purchasers to the unique role of the area and potential noise impacts.





## What is Proposed?

### Rogers Arena

#### Current Regulations

- Rogers Arena is currently in a noise area zone, which permits up to 70 dBA until 10pm and after 10pm no louder than 65 dBA

#### Facts on Noise

- Currently few buildings are significantly impacted by concert noise at Rogers Arena
- However, it is likely that some dwellings in the proposed residential buildings on the Rogers Arena site may experience noise levels above the by-law limits
- The noise from GM Place is primarily generated by concerts and in particular deep bass levels (dBC), the impact of this noise is significantly reduced by the roof on the arena
- Concert noise at the closest residential building ("Spectrum" – 651 Expo Blvd.) could sometimes exceed by-law limits when concerts continue past 10 pm when the "night time limit" on noise levels is in effect.

#### Number of Events at Rogers Arena

Noise Potential Events: (e.g. Concerts): 25-30

Other Events:

NHL Hockey Games: up to 60 (incl pre-season and playoffs)

Other "Non-Noise Potential" Events (e.g. Stars on Ice): 20-25

Estimated Number of Events per Year: 115

### Proposed Approach

It is proposed that:

#### The Noise Control By-Law;

The Noise By-Law be adjusted so that the onset of night time hours in NEFC to 11pm. Rogers Arena has advised that concert events very rarely continue past 11pm.

#### Building Design;

Regarding new buildings on the Rogers Arena site, the developer will be required to demonstrate that appropriate indoor noise levels and interior living temperatures can be maintained during event times.

This requirement will be in addition to the Zoning and Development By-law standard requirement to mitigate traffic and SkyTrain Noise.

#### Noise Monitoring & Management Protocol;

Rogers Arena will work with the City to develop a noise monitoring and management protocol regarding arena operations and event staging, inside and outside the stadium, to address impacts on adjacent residential.

It is also proposed to monitor noise levels inside and outside Rogers Arena to determine whether concert volume reductions are a feasible noise mitigation option





## What is Proposed?

### BC Place Stadium

#### Current Regulations

- BC Place stadium is currently in a noise zone, which permits up to 70 dBA until 10pm and after 10pm no louder than 65 dBA
- 10 exemptions per year are allowed for concerts and motor vehicle events

#### Facts on Noise

- Sports events usually occur within the limits of the noise control by-law, except for crowd cheering at sports events which can sometimes exceed by-law limits after 10pm when the lower night time limit is in effect



#### Proposed Approach

- Maintain the existing Noise Control By-Law provision that allows for up to 10 concerts per year at BC Place.

#### Building Design;

See proposed approach for new buildings on Rogers Arena. These requirements will apply to all of the proposed new residential buildings in Northeast False Creek

#### Noise Monitoring and Management Protocol;

- BC Place will work with the City to develop a noise monitoring and management protocol regarding stadium operations and event staging, inside and outside the stadium.
- Until the roof is complete it is difficult to assess the specific noise impacts of events. The management at BC Place has agreed to work with the City to monitor noise levels during events and establish the level of noise that is to be expected both inside and outside the building.

- In the interim, in order to clarify expectations and improve communications between venue operators and the community, the City will amend the Noise Control By-Law to:

- Exempt crowd cheering noise at BC Place Stadium.
- Adjust the onset of maximum noise levels for night time hours in NEFC from 10pm to 11pm.

The maximum permitted noise level for the night time noise limits will remain at 65 dBA. BC Place Stadium has advised that sporting events will typically end by 11pm

#### Potential Impacts

Beginning in 2011, buildings around BC Place will be exposed to crowd cheering noise on a more frequent basis given the operable roof and the addition of the Vancouver Whitecaps Major League Soccer games.

There will be between 35 and 45 major sports events at BC Place each year.

The potential for several large concerts per year will also remain as a possibility.

When the roof is in the closed position, noise from crowd cheering at sporting events is not expected to exceed the daytime limits in the current Noise Control By-Law. BC Place has advised that the roof will generally be kept in the closed position from November 1st to March 31st. However, the roof may be opened for special events such as the Grey Cup



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## What is Proposed?

### Civic Plaza

- The Council approved Directions for NEFC envisioned a new Civic Plaza be located on the Northeast False Creek waterfront to replace the Plaza of Nations Event Space.
- The Civic Plaza will also provide open space for the neighbourhood
- The NEFC Directions identified the Plaza of Nations site as the preferred location for the Civic Plaza
- The number, size and extent of events is the subject of a current demand analysis study that will inform the exact location, detailed design and programming of the Civic Plaza

### Current Regulations

- The Plaza of Nations is currently in a noise area zone which permits up to 70 dBA until 10pm and after 10pm no louder than 65dBA

Between 1986 and 2010, the Plaza of Nations hosted a wide variety of events. In general, large events at the PoN were granted exemptions to the Noise Control By-Law by way of an annual report to City Council specifying the number, type and location of events seeking exemptions in this and other locations in the City for that year.

### Facts on Noise

- Traffic and background noise is above 50dBA at the Plaza of Nations



### Proposed Approach

It is Proposed that:

#### Civic Plaza Design;

- High ambient noise levels need to be considered as part of the decision on the future use and program for the Civic Plaza.
- The design of the Civic Plaza will need to include detailed acoustical design work to provide acceptable sound quality and minimize noise impacts.

#### Building Design

See proposed approach for new buildings on Rogers Arena. These requirements will apply to all of the proposed new residential buildings in Northeast False Creek.

#### Noise Monitoring and Management Protocol;

- Develop a noise monitoring and management protocol (including number, type and duration of events) to manage impacts, similar to that applying to BC Place Stadium and Rogers Arena.



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## What Else Can the City Do?

### Clarify Expectations and Facilitating Improved Communications between Venue Operators and the Community

- Venue operators will be asked to partner with the city in establishing and maintaining an on-line calendar of NEFC events.



**We Want Your Feedback. Please Fill Out a Comment Form**