

Re: Item No. 15.1.6

November 28, 2023



**2023-01495:**

Amendments to the Regional Centre  
Secondary Municipal Planning Strategy and  
Land Use By-law to Implement the Halifax  
Grain Elevator Land Use Risk Assessment  
Study Recommendations

# Halifax Grain Elevator

- Active industrial facility operating 24/7; built in phases beginning in the 1920's
- Stores wood pellets, wheat and soya beans
- Only facility of its type on Canada's east coast, critical logistics infrastructure with rail and sea connections
- Land owned by Halifax Port Authority(HPA)
- Facility managed by Halifax Grain Elevator Limited

# Halifax Grain Elevator

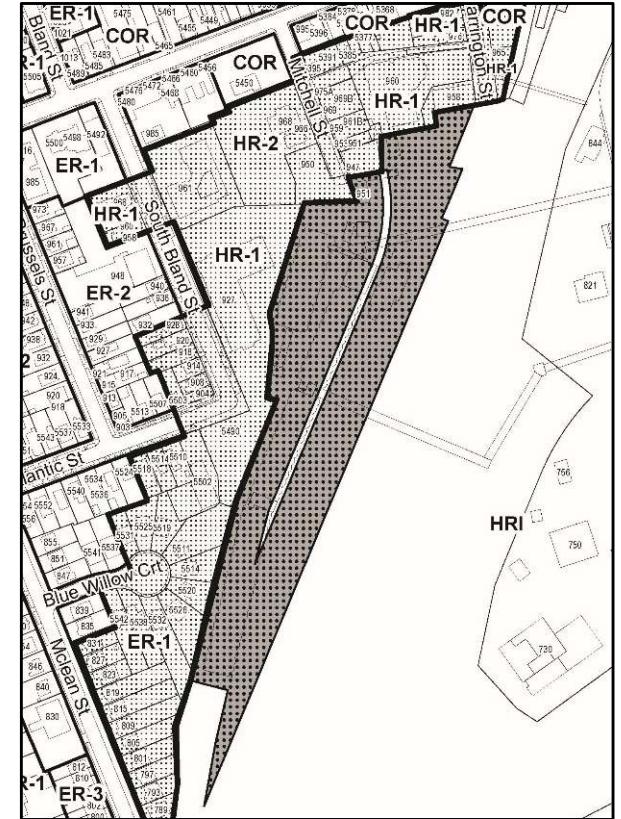


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# Plan and By-law Context

- Centre Plan Package A (2019) introduced Higher-Order Residential (HR) zoning to surrounding area
- Centre Plan Package B (2021) introduced Halifax Grain Elevator Special Area
- All new residential development only considered by development agreement



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# Risk Assessment Origin

- RCSMPS Policy ED-5

*The Municipality may partner with the Halifax Port Authority to carry out a study that assesses public safety risks associated with the Halifax Grain Elevator and its proximity to existing and future residential uses.*

- Study conducted in partnership with the Halifax Port Authority; completed in November 2022

# Halifax Grain Elevator Land Use Risk Assessment

- Risk-Based Approach
- “Individual Risk”
- Cumulative risk from
  1. probability of explosion; and
  2. explosion effects and consequences (lethality)

# Cumulative Risk Contours



# MIACC Guidelines

- Major Industrial Accidents Council of Canada (MIACC)
- “MIACC Risk-Based Land Use Planning Guidelines”
- Established by experts for land use planning risk assessments
- Sets out acceptable risk limits for certain land uses next to industrial hazards

# Halifax Grain Elevator Risk Precincts

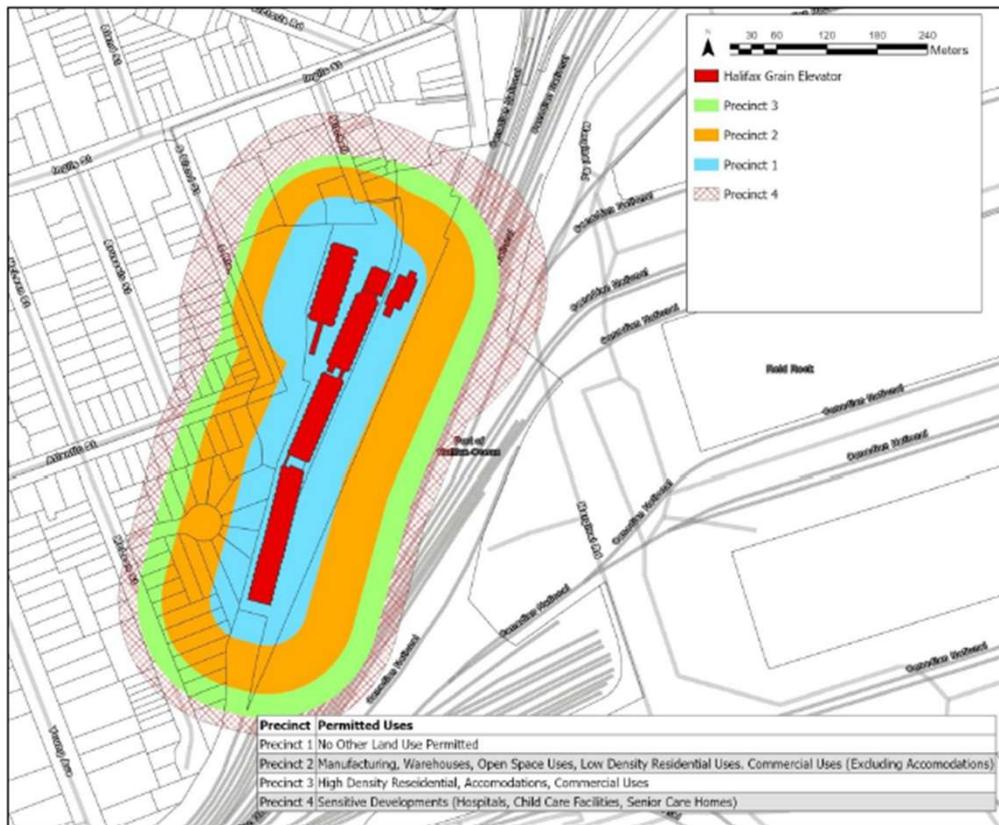


Figure 10.1: Halifax Grain Elevator risk precincts.

- Precinct 1- no other land uses
- Precinct 2 - manufacturing, low density residential, open space, most commercial uses
- Precinct 3 - high density residential
- Precinct 4 - hospitals, childcare, senior care facilities

# Study Recommendations

- Align permitted land uses in risk contours to match the MIACC risk acceptance criteria;
- Create risk-mitigation built-form requirements;
- Request the Province of Nova Scotia allow the municipality to regulate construction of buildings to control building materials; and
- Restrict non-conforming uses

# **Other Study Recommendations for HPA**

- Implement operational recommendations of another recently completed study for the HPA;
- Ensure ventilation can remove dust during regular operations;
- Perform regular inspections, testing and maintenance; and
- Additional building improvements to reduce explosion propagation and allow venting, should an explosion occur.

# Plan and By-law Amendments

- Amendments to the RCSMPS and RCLUB are needed to implement the study's land use recommendations including:
  - adopting the study's recommended risk-based precincts within RCSMPS policy and LUB regulations;
  - amendments to built-form and building design requirements; and
  - amendments to limit the relaxations usually afforded to non-conforming uses and structures.

# Development in HR Zones

- Study recommendations impact residential development on HR zoned lots on South Bland Street and Mitchell Street
- Review will investigate potential ways to mitigate impacts, including:
  - Changes to built form and design requirements; and
  - Development agreement policies

# Existing Development Agreement Policy

- Existing policy requires all residential development to proceed via development agreement
- This is an interim measure to control development
- Review will align permitted uses and permitting process with study recommendations

# Discharge of Development Agreements

- Multi-unit buildings on South Bland Street are under development agreement
- They are partially located within risk precincts that do not permit their use according to study recommendations
- The review will consider discharging these agreements
- Consultation with property owners will take place

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# Jurisdiction

- Halifax Grain Elevator is located on federal port lands
- The Municipality has no jurisdiction over land use
- In the event of an emergency, HRFE would respond in the same way as any land-based industrial emergency
- HRM will continue to engage with HPA on additional opportunities for cooperation

# Recommendation

It is recommended that Halifax Regional Council direct the Chief Administrative Officer to:

1. Initiate a process to amend the Regional Centre Secondary Municipal Planning Strategy and Regional Centre Land Use By-law to implement the land use and built form guidelines recommendations of the Halifax Grain Elevator Land Use Risk Assessment Study, consistent with the review items outlined in the Discussion section of this report;
2. Consider discharging existing development agreements as necessary to implement the recommendations of the Halifax Grain Elevator Land Use Risk Assessment Study; and
3. Follow the public participation program as outlined in the Community Engagement section of this report.

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