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Item No. 12.1.3
Transportation Standing Committee
January 21, 2016

TO: Chair and Members of Transportation Standing Committee

Original Signed

SUBMITTED BY:

Bob Bjerke, Chief Planner and Director, Planning and Development

DATE: January 7, 2016

SUBJECT: Mitigation of Development and Construction Impacts

SUPPLEMENTARY REPORT

ORIGIN

June 25, 2015 motion of the Transportation Standing Committee:

MOVED by Councillor Mason, seconded by Councillor Walker that the Transportation Standing Committee requests a staff report or reports that considers the merit of implementation of the following items related to mitigation of development and construction impacts:

- 1. Establishing new requirements for requiring plywood or similarly impermeable hoardings around construction in urban situated sites in the Regional Centre and other appropriate commercial areas.*
- 2. Revising the Transportation Control Manual (TCM) supplement to require the narrowing of travel lanes and installation of temporary accessible sidewalks wherever and whenever physically possible in the urban core.*
- 3. Establishing high standards for ensuring a presentable and cleaned street resulting from construction dirt and debris to support Section 43 of By-Law S-300 Respecting Streets;*
- 4. Requiring the display of signs containing development details which shall include but not be limited to an illustration of the completed project, a brief description of project, permit number, as well as contact information for the Developer and Construction Project Manager. MOTION PUT AND PASSED"*

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter, Part VII and Part XII:

- clauses 188 (1) (a) through (d) – Council may make by-laws, for municipal purposes, respecting the safety and protection of persons and property, activities in, on or near public places and nuisances or activities that may cause nuisances...*
- subsection 324 (2) The Council may, by by-law, regulate encroachments upon, under or over streets...*

- *section 332 – The Engineer may permit the use of a portion of a street for construction and temporarily close a street or part thereof, for the protection of the public, to allow work to be done on the street or on lands and buildings adjacent to the street...*

RECOMMENDATION

It is recommended that the Transportation Standing Committee recommend that Halifax Regional Council direct staff to:

1. Develop Construction Mitigation Guidelines, as well as the appropriate by-law provisions necessary to implement the guidelines; and
2. Amend By-law S-300, the Streets By-law to include clear definitions of “Applicant” and “Contractor” as well as improved enforcement provisions, as outlined in this report.

BACKGROUND

Due to increased development and construction-related activities observed in Halifax and surrounding areas, and as a response to queries from members of Council and local business communities, the Transportation Standing Committee (TSC) requested an information report outlining current HRM practices and protocols that regulate construction activities and the impact on surrounding communities. That report¹, dated June 8, 2015 was discussed at the June 25, 2015 meeting of the TSC. Further to discussion at that meeting, the Committee requested a further staff report with recommendations relating to hoarding and site signage, options for maintaining better sidewalks connections around construction sites, and minimizing dirt and debris on the street.

Construction activities result from private development, work carried out by utilities such as power, gas, and water, or from work carried out by the Municipality. This report deals with construction activities that arise from private development, and has been prepared to identify improvements to current practices to mitigate the impacts of construction on surrounding properties as well as pedestrian and vehicular traffic patterns.

DISCUSSION

For discussion purposes, construction impacts generally fall into one of two broad categories:

1. Impacts that arise from activities on private property, such as hoarding, construction signs, temporary encroachments; and,
2. Impacts related to activities in the street, such as temporary sidewalks, street closures, dust control, etc.

Each category is discussed separately in this report and organized in according to each item of the TSC motion.

For the reasons discussed in this report, to establish and clarify the Municipality’s expectations as to how construction sites are to be operated to mitigate impacts on citizens and the public realm, staff advise that it is appropriate to develop Construction Mitigation Guidelines along with supporting by-law provisions as may be necessary to enforce the guidelines.

Activities on Private Property

Items 1. and 4. of the June 25, 2015 TSC motion relate to private property:

¹ See report at: <http://www.halifax.ca/boardscom/SCtransp/documents/150625i1.pdf>

1. **Establishing new requirements for requiring plywood or similarly impermeable hoardings around construction in urban situated sites in the Regional Centre and other appropriate commercial areas.**
4. **Requiring the display of signs containing development details which shall include but not be limited to an illustration of the completed project, a brief description of project, permit number, as well as contact information for the Developer and Construction Project Manager.**

Hoarding

Current standards for construction hoarding are based on safety considerations and must comply with the Nova Scotia Building Code. The Code standards do not consider aesthetics, noise, or dust control; nor do these standards specifically require the use of solid hoarding materials versus mesh-type fencing materials. There are several examples of other large cities in Canada that have programs that either require solid hoarding or use incentive-based programs to visually enhance construction sites.

The style and placement of construction hoarding has an impact on the interactions and overall public perception of a construction site. Hoarding is a barrier alongside a public right-of-way that provides protection and screening between the public and the ongoing construction activity. It acts as the buffer between the machinery, blasting, debris, hoisting and movement on site and the neighbouring properties helping to mitigate the impacts of disruptive construction activities on the immediate area.

Imposing standards that will generate high quality and creative construction hoarding through co-ordination with community members, private sector and the Municipality can significantly benefit the public realm during extended construction projects. Well-designed construction hoarding should be built of solid material and not impede travel paths or sight lines. Similar to all other aspects of the construction site, hoarding should be well maintained during the length of the project.

Other Canadian cities have found that high quality hoarding can contribute creative value to construction sites, help cultivate community pride and engagement, encourage artists to contribute to the urban environment, and provide an opportunity for businesses or developers to post information of the building project and future tenants. When done well, hoarding can protect the public from the hazards and unnecessary exposure to ongoing construction, while also providing space for community art projects and information displays that notify the public of the project at hand.

Staff advise that it is appropriate to develop a Construction Mitigation Guidelines document that outlines best practices for materials, products, and techniques for hoardings around the perimeter of construction sites depending upon their location. For example, urban settings would have different standards than suburban or rural locations where construction sites are less constrained. In undertaking this work, staff will consider the merits of developing both by-law requirements and an incentive-based program which is used in other jurisdictions. The City of Calgary, for example, reduces fees where developers 'beautify' hoardings or engage citizens to create murals on them. The space could also be used for advertising and way-finding information, if deemed appropriate.

Construction Signs

Large scale construction projects can cause detours and delays for those traveling in the area and can disrupt the natural flow and urban form of the city streetscape. Signage located at the construction site can act as a way to inform and guide the public and provide key contact information. Appropriate signage can help to mitigate public concern by providing information on project timelines, developer and project manager contact information, and way-finding guidance for temporary routes.

Displaying a construction information sign is also consistent with best practice elsewhere in Canada, but is currently not required in the Municipality. These types of signs inform the public of the nature and form of development under construction, and also provide direct contact information in the event of damage or hazards that may arise during construction. The signs inform the public of the nature and form of

development under construction, and also provide direct contact information in the event of damage or hazards that may arise during construction. Best practice construction signage guidelines include the following elements:

- The posting by the developer or contractor of an information sign on the site where a new building or demolition permit has been issued. The sign is to be legible and include a clearly identifiable company name, phone number and e-mail address for those responsible for the construction site;
- Pedestrian detour wayfinding signs should be used to efficiently and seamlessly direct pedestrians and cyclists as they navigate the detour route. A typical sign for a temporary pedestrian detour should include information on the duration of the walkway, restrictions (beginning and/or end dates) and a project contact number for questions or complaints; and
- Advance signage should be placed on site before construction begins to ensure the public has adequate time to adjust their travel patterns and usage of the street(s).

The inclusion of an information sign on the hoarding fence will be incorporated into the by-law and Guidelines document. While signs “incidental to construction” are permitted under most land use by-laws, they are subject to maximum size provisions. As a result, housekeeping amendments may be needed to various land use by-laws to enable the appropriate size of an information sign.

Overhead Loads

Temporary encroachments in the public right of way, including construction cranes also result from private construction activities. Current practice is to approve a temporary encroachment for a crane base in the right of way, but there are no clearances or limitations on overhead movements. Cranes are a crucial and important piece of equipment for many construction sites throughout the Municipality. However, their presence brings about a level of risk that should be addressed. Although lifting heavy loads over highways, railways, or public space should generally be avoided, there are times when such a lift is necessary. A number of best practice principles help guide and regulate crane usage, especially the lifting of heavy loads over the public realm. Best practice regulations typically include the following provisions:

- Tower cranes must be sited so that there is at least 3m clearance between the end of the boom and the nearest obstacle or building and as much as possible, tower cranes should be sited to avoid loads being handled over occupied areas;
- Measures for ensuring that people are not placed at risk from the operation of the crane;
- No loads should be moved or suspended over people;
- At no time should a load be left suspended over the public realm;
- Routines for requiring continuous and thorough checks for area specific hazards;
- If a heavy load must be transferred over a busy public space or right of way, the area should be closed to access during the move; and
- When loads have to be handled in the vicinity of persons, extreme care should be exercised and adequate clearances allowed.

Staff advise that standards and best practices regarding crane usage should also be adopted.

Activities in the Public Right of Way

Items 2. and 3. of the June 25, 2015 TSC motion relate to the public right of way:

2. **Revising the Transportation Control Manual (TCM) supplement to require the narrowing of travel lanes and installation of temporary accessible sidewalks wherever and whenever physically possible in the urban core.**

3. Establishing high standards for ensuring a presentable and cleaned street resulting from construction dirt and debris to support Section 43 of By-Law S-300 Respecting Streets;

Activities in the Street are regulated by the By-law S-300, the Streets By-law.

Temporary Sidewalks

Current regulations allow sidewalks to be closed on local streets where pedestrians can be directed to a sidewalk on the other side of the street. This condition can be problematic for visually impaired persons who approach the work area closure barricades and are unable to read the signage or locate an appropriate crosswalk or detour.

For collector or arterial streets, temporary sidewalks must be constructed around the construction site if there is no safe alternative (e.g. if the detour is too long, if there are no crosswalks available, or if there is no sidewalk on the opposite side). It is not uncommon to encounter construction work on either side of a street, adding to the complexity.

Ease of pedestrian flow, connectivity and movement is vital to the vibrancy and operation of communities throughout HRM. To ensure construction projects do not disproportionately disrupt the movement of people throughout the region, provisions should be made at all times to ensure the safe passage of pedestrians in and around construction sites. A pedestrian management plan should aim to guide pedestrians around construction sites in a straightforward and efficient manner. A pedestrian management plan should consider a number of key principles:

- A walkway should be provided for pedestrian travel in front of every construction and demolition site. The developer should work to ensure sidewalk closures are a last resort and only used in unique situations where no practical solution is available.
- A pedestrian construction route should take precedent over on-street parking and all but one through motor vehicle lane in each direction.
- A temporary pedestrian detour should consist of clear, well-maintained pathways and way finding signage. If the pedestrian detour consists of built material, it should be high quality and durable.
- HRM and the developer should work to guarantee new routes are accessible, well-lit and safe for all users at all times.
- When construction requires the relocation of a transit stop or interferes with access to transit in any manner, the developer and HRM should co-ordinate to ensure that safe and barrier free access is maintained.
- Pedestrian traffic should be protected by directional barricades where the walkway extends into the street. The barricade should be of sufficient size and material to direct vehicle traffic away from the pedestrian path.

The Traffic Control Manual Supplement already provides the authority for staff to request a pedestrian management plan for any substantial development project. The need for such a plan, in addition to a traffic management plan, will be assessed for each project. The impact of construction activities on pedestrian movements can be evaluated on a site-specific basis and the narrowing of travel lanes can be considered.

Additionally, temporary sidewalks or construction hoardings often impact on-street parking. Metered parking stalls are often taken out of service during the installation of temporary sidewalks and other temporary construction encroachments. These stalls will be accounted for in the traffic management plan and an appropriate fee will be charged for the duration of the encroachment.

Best Practice guidelines and by-law standards can clarify the Municipality's expectations for construction projects that impact the public realm and pedestrian travel routes, thus leading to improved pedestrian safety and ease of movement as the city continues to develop and grow.

Street Maintenance and Cleaning

Construction projects can often impact the public realm through increased noise, dust, debris and altered surface water flow, which impacts overall safety and attractiveness of the Municipality. Best Practice guidelines and by-laws regulating construction sites should ensure:

- Sidewalks, roads, and boulevards are maintained free of debris;
- Airborne dust or debris is minimized and measures employed to contain this within the site;
- Storm water flow does not enter adjacent property or the public realm;
- Construction materials are stored and covered;
- Odorous and obnoxious waste materials are removed as quickly as possible;
- Public travel ways are kept clear of ice and snow;
- Pathways are clear of tripping hazards; and
- Construction materials and equipment are not be placed or stored so as to obstruct access to fire hydrants, standpipes, fire or police alarm boxes, catch basins or manholes, nor should material or equipment be located within close proximity of a street intersection or placed so as to obstruct sightlines to traffic signals.

Adequate standards for street cleaning, which are consistent with similar municipalities elsewhere in Canada, already exist in the current Streets By-law. However, compliance and enforcement is problematic due to the by-law's lack of clarity as to the entity responsible (i.e. applicant, owner, or contractor) in the case of an offense. While this can be rectified through an amendment to the by-law, regular inspections by staff to ensure contractors are meeting by-law standards can help to mitigate the situation in most cases. In an effort to improve enforcement of the Streets By-law, a variety of methods will be reviewed including order, remedy, appeal and lien provisions as well as the ability to use summary offence tickets for by-law violations.

Conclusion

The issues and concerns presented in this report and discussed at TSC meetings stem from construction-related activities in dense urban and suburban environments. Poor site management, absence of regulations, problematic enforcement, and lack of project and contact information available to the general public has led to negative impacts on adjacent and surrounding communities from the effects of construction activities.

The recommendations presented in this report aim to create new regulations, reinforce existing legislation, improve enforcement, and increase public awareness of construction-related issues in an effort to mitigate potential problems and to ensure positive public experience with large scale urban development. With well-defined guidelines, stricter regulations, and diligent enforcement, staff can help to ensure safe, clean, and controlled passage for vehicles and pedestrians alike with minimal impact on surrounding areas.

FINANCIAL IMPLICATIONS

There are no specific financial implications of this report. However, as part of the by-law development process, a review will be undertaken of fees and charges appropriate to the services provided.

COMMUNITY ENGAGEMENT

While initial discussions among staff, the construction industry and business community stakeholders have recently taken place, no widespread community engagement has been conducted in the preparation of this report. In developing the regulations and by-laws discussed in this report, staff will consult with local businesses, the general public, the Canadian Federation of Independent Business and the development and construction industry.

ENVIRONMENTAL IMPLICATIONS

Implications not identified.

ATTACHMENTS

None.

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.php> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

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