SUBJECT: Improving the State of Infill Housing: A Work Plan
PREPARED BY: Chris Bird, Director of Building Standards, ext. 4716

RECOMMENDATION:

1) That the Development Services Committee receive this report titled “Improving the State of Infill Housing: A Work Plan” for information;
2) That the Chief Building Official, in consultation with all relevant departments work towards the development of a strategy to minimize the adverse effects of infill construction on existing residential neighbourhoods and that a report recommending such strategy be brought back to a future Development Services Committee meeting;
3) That the Chief Building Official in consultation with the City Solicitor evaluate the need for a new Demolition Control By-law as provided for in s. 33 of the Planning Act and report back to the Development Services Committee.
4) That Staff be authorized and directed to do all things necessary to give effect to this resolution

PURPOSE:
1. This report is provided as background information on the subject of infill housing and presents a work plan to develop a strategy for an effective, coordinated and proactive response to residential infill construction projects within existing neighbourhoods.
2. This report does not discuss or present recommendations on residential design matters or architectural control that may be regulated through zoning by-laws and other applicable laws.

BACKGROUND:
Residential infill generally refers to the process of constructing new buildings or substantial additions within existing residential neighbourhoods. It presents a distinct challenge for all involved; builders in business to build and sell new homes within the confined spaces of existing established neighbourhoods, owners wishing to build their dream home in those same neighbourhoods and longtime residents having their lives disrupted by ongoing construction activities. In some cases purchasers move into those new homes unaware of the tension the construction has created.
Markham has experienced a steady increase in these construction activities over the past 10 years, the majority being in Wards 1, 3 and 4 [Appendix A]. Since 2009, there have been 538 projects where the house has been demolished and replaced with new homes, almost 80% of those within Wards 1, 3 and 4. During that time there have also been 785 additions, with over 70% within those same three Wards.

While the City of Markham Building Standards Department is responsible for authorizing construction through the issuance of building permits, the majority of challenges with infill arise during the construction of those buildings. The challenges include:

1. Confirming compliance with the building code, zoning bylaw and permit plans; and
2. Controlling the many nuisance issues associated with construction activities.

Matters related to compliance with the Ontario Building Code and the permit documents can be addressed directly by the building inspector through verbal instructions, Field Inspection Reports and/or the issuance of Orders. The most common problems encountered by inspectors on infill homes include:

- Construction not in accordance with permit documents
- Construction not in accordance with the Building Code
- Owners/contractors not scheduling mandatory inspections
- Project completion taking excessive time
- Sewer and water service not installed as per approvals
- Construction fencing not being installed or maintained
- Demolition and excavation compromising adjacent properties
- Site safety; temporary stairs/guards not installed
- Occupancy prior to completion

Building inspectors conduct certain mandatory inspections prescribed by the Ontario Building Code. Typically, an inspector may visit a site 5 to 7 times throughout course of construction, sometimes more where deficiencies must be resolved. While it may be possible for the inspectors to achieve verbal compliance with contractors and/or owners on nuisance issues, the inspectors ultimately must carry out their duties of establishing Building Code compliance and refer them to other departments who have the means and enforcement tools to gain compliance.

The nuisance issues relate primarily to matters regulated by City by-laws administered by other departments [see Appendix B] and are typically beyond the regulatory control of the building inspector. Those issues include hours of construction, parking, material & equipment storage, road occupancy, noise, dust and debris, site safety, tree protection and drainage and lot grading.

Nuisance issues have been the source of ongoing complaints and frustrations for residents. City officials face challenges when trying to provide timely and effective response to those issues some of which occur outside of regular business hours and are addressed by different by-laws enforced by different departments.
OPTIONS/ DISCUSSION:
Building Standards has developed policies and procedures for the efficient processing of permit applications. Appendix C outlines the typical checklist for the processing of infill permits. In addition, departmental practices have evolved in an attempt to proactively address many of the concerns and complaints of infill. They include:

- Enhanced demolition procedures and inspections
- More detailed site plans showing construction fencing and proposed excavation lines;
- New shoring standards to control excavations and promote site safety;
- New safety fencing standards including screening to control blowing debris;
- As-built foundation surveys to confirm zoning compliance at the earliest opportunity;
- Zoning preliminary review reports to better inform Committee of Adjustment;
- Participating with Tarion in their application for a Letter of Confirmation for an ‘owner/builder’ who seeks a permit to build their own home;
- Regular production of Builder Tips to guide contractors
- Notifying By-law Enforcement of the issuance of every permit for such works
- Notifying Operations of the issuance of every permit for such works

Engineering and Operations Departments collaborate on approving lot grading and servicing plans that include:

- Improved site grading approval practices incorporating tree protection requirements
- Lot grading undertakings and posting of Letters of Credit
- Requiring construction access mud mats to minimize mud tracking
- Servicing plans
- Implementing more stringent tree protection by-laws and permitting procedures and incorporating them into approved lot grading plans
- Issuance of Road Occupancy permits

Improving the Response to Infill: Work Plan

While many policies and procedures have already been implemented, staff are recommending a work plan be established to develop a strategy to improve the response to infill construction. The challenge is to develop a strategy that best facilitates the orderly construction of buildings within these existing residential neighbourhoods that;

- Proactively minimizes disruptions to adjacent properties and neighbourhoods;
- Respects the rights of everyone;
- Encourages construction practices that are safe, compliant & organized;
- Provides an effective means of communication; and
- Provides an efficient complaints management and enforcement system;

The work plan would include the following actions:
• Carry out a review of current best practices in other jurisdictions;
• Carry out a review of City bylaws and identify gaps or areas for improvement;
• Establish an interdivisional working group consisting of representatives from all departments involved in or affected by infill construction. The interdivisional working group would be led by the Chief Building Official and consist of staff from Building, By-law Enforcement, Legal Services, Engineering, Operations and perhaps others;
• Consideration of all available enforcement mechanisms and the resources required for any enhanced enforcement;
• In conjunction with the City Solicitor, explore the implementation of a Demolition Control By-law provided for in section 33 of the Planning Act. Such a by-law would prevent demolition until plans to redevelop are in place and a demolition permit is issued with conditions, including the requirement for construction to be completed within a prescribed period of time;
• Consider best practices for communicating to residents about by-laws, expectations and the response mechanisms in place to address complaints including enhancement to the City web site;
• Consider the production of a construction guide that sets out expectations for good construction practices and site maintenance;
• Review current use of undertakings and securities and consider any improvements;
• Make builders more accountable for their actions through increased penalties
• Explore the authority and implementation of requiring owners/contractors to provide project notification boards to display permit cards, contact names, safety details, hours of work and perhaps limited building design drawings

The goal of the work plan would be to develop a defined strategy that would provide:

• An improved complaints management and response system
• Improved communications to and for residents and builders
• Expectations for Good Construction Practices

This work plan would be led by the Chief Building Official and a report would be brought forward in the near future to recommend a corporate strategy.

FINANCIAL CONSIDERATIONS
None in the preparation of the work plan

HUMAN RESOURCES CONSIDERATIONS
None for the development of this Infill Strategy.

ALIGNMENT WITH STRATEGIC PRIORITIES:
Exceptional Services by Exceptional People:
Leverage current technology to provide an improved complaints management system leading technologies to enable city building and evolution / transformation of our services;

**Engaged, Diverse, Thriving and Vibrant City:**
Improved quality of life for residents

**Safe, Sustainable and Complete Community:**
Develop a strategy that helps improve that safety and quality of life for residents and the community

**Stewardship of Money and Resources:**
Provides a communication strategy that is more transparent and informative

**BUSINESS UNITS CONSULTED AND AFFECTED:**
By-law Enforcement
Operations
Engineering

**RECOMMENDED BY:**

Chris Bird  
Director of Building Standards

**ATTACHMENTS:**
Appendix A – Infill Projects by Ward  
Appendix B – Issues Matrix  
Appendix C – Building Permit Processes
Appendix A: Infill Projects by Ward

[Map showing Infill Projects by Ward]
## Appendix B: Issues Matrix

### Infill Housing Enforcement Matrix

<table>
<thead>
<tr>
<th>Site Activity</th>
<th>Regulatory Mechanism</th>
<th>AHJ/Department</th>
<th>Issues</th>
<th>Enforcement Action</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demolition</td>
<td>Permits: BCA/OBC</td>
<td>Building Standards</td>
<td>Noise, Dust, Debris</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Design [Zoning]</td>
<td>Zoning By-law</td>
<td>Building Standards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architectural control [Massing/Materials]</td>
<td>None</td>
<td>Building Standards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction start/duration</td>
<td>Building Code Act</td>
<td>Building Standards</td>
<td>Revocation of permits under</td>
<td>Consider Demolition Control under sXX of the Planning Act</td>
<td></td>
</tr>
<tr>
<td>Public Safety [Fencing]</td>
<td>By-law 2019-148 (Building)</td>
<td>Building Standards</td>
<td>After Hours maintenance often dispatched and responded by Operations to secure the fence</td>
<td>Back charge the permit holder</td>
<td></td>
</tr>
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<td>Public Safety [Fencing]</td>
<td>By-law 2019-148 (Building)</td>
<td>By-law Enforcement/ Operations</td>
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<td>Back charge the permit holder</td>
<td></td>
</tr>
<tr>
<td>Construction Safety</td>
<td>O.Reg. 213/91 Construction Projects</td>
<td>Ministry of Labour</td>
<td>Building to refer to MOL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking of construction vehicles and workers</td>
<td>By-law 2005-188 (Parking Control)</td>
<td>By-laws</td>
<td>AMPs Penalty Notice (Parking)</td>
<td>Order to Discontinue/Work Order/Charges</td>
<td></td>
</tr>
<tr>
<td></td>
<td>By-law 2018-77 (Infill By-law)</td>
<td>Building Standards/By-laws</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tree Protection</td>
<td>By-law 2008-96 (Tree Preservation)</td>
<td>Operations</td>
<td>Tree Preservation Zone</td>
<td>Permits required Orders can be issued for contraventions of By-law</td>
<td></td>
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<tr>
<td></td>
<td>Tree Cutting/Permits</td>
<td>By-law 2008-96 (Tree Preservation)</td>
<td>Operations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replanting Condition Fulfillment</td>
<td>By-law 2008-96 (Tree Preservation)</td>
<td>Operations</td>
<td>Replanting obligations</td>
<td>By-law order</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lot Grading</td>
<td>Ontario Building Code By-law 2011-232 (Site Alteration)</td>
<td>Engineering</td>
<td>As per the terms of the lot grading undertaking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Site Servicing</td>
<td>By-law 2014-71 (Sewer Use By-law)</td>
<td>Engineering (RIGS)</td>
<td>Connection of private services to public services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Site Servicing</td>
<td>Water/Sanitary/Storm Engineering (RIGS)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Road Occupancy</td>
<td>By-law 2013-136 (Road Occupancy)</td>
<td>Operations / By-laws</td>
<td>Damages / obstructions to Right of Way (fouling roads, sidewalk, impeding winter maintenance)</td>
<td>1) (Retroactive) Issuance of ROP as most home owners do not apply until being told; ENG continue to retain securities 2) Require offender to conduct restorative actions 3) Revoke Road Occupancy permit 4) OPS to undertake emergency / corrective actions when offender fails to comply using security deposit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Road Occupancy</td>
<td>By-law 2013-136 (Road Occupancy)</td>
<td>Operations / By-laws</td>
<td>Damages / Obstructions to Right of Way (fouling of roads, 1) (Retroactive) Issuance of ROP as most home owners do not apply until being told; Non-City ROW assets includes: hydro poles, transformers, utility</td>
<td></td>
</tr>
</tbody>
</table>

Right of Way includes: boulevards, culverts, curbs, ditches, sidewalks and roadway

By-law allows OPS to draw from ENG deposit for any work required to meet compliance
<table>
<thead>
<tr>
<th>Fouling of Roads</th>
<th>By-law 2013-136 (Road Occupancy)</th>
<th>Operations / By-laws</th>
<th>(see above – Road Occupancy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>By-law 2018-77 (Infill By-law)</td>
<td>Operations/By-laws</td>
<td></td>
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</tr>
<tr>
<td>Noise</td>
<td>By-law 2003-137 (Noise)</td>
<td>By-laws</td>
<td>Penalties as per the Provincial Offences Act</td>
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<tr>
<td>By-law 2018-77 (Infill By-law)</td>
<td>Building Standards/By-laws</td>
<td></td>
<td>Order to Discontinue/Work</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Order/Charges</td>
</tr>
<tr>
<td>Storage of Construction Materials/Debris</td>
<td>By-law 248-1999, s10(4) Property Standards</td>
<td>Building Standards/By-laws</td>
<td>Order to Discontinue/Work</td>
</tr>
<tr>
<td>By-law 2018-77 (Infill By-law)</td>
<td>Building Standards/By-laws</td>
<td>Order/Charges</td>
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</tr>
<tr>
<td>Hours of Operation</td>
<td>By-law 2018-77 (Infill By-law)</td>
<td>Building Standards/By-laws</td>
<td>Order to Discontinue/Work</td>
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<td>Building Standards/By-laws</td>
<td>Order/Charges</td>
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<td>Dust, debris, garbage</td>
<td>By-law 2018-77 (Infill By-law)</td>
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</table>
Appendix C: Building Permit Processes

Zoning By-law:
- Review for compliance with the applicable zoning by-law.
- Where a minor variance is obtained;
  - ensure permit plans substantially conform to the approvals granted by the Committee of Adjustment, and
  - ensure all minor variance conditions are satisfied.

Ontario Building Code:
- Review permit plans for compliance with the Ontario Building Code.

Applicable Law Approvals have been obtained:
- Where applicable, includes Site Plan Approval, Heritage Approval, Toronto Region and Conservation Area (TRCA) Construction and Fill Permits.
- Verify that the building permit drawings are consistent with all Applicable Law Approval documents.

Approved Lot Grading Plan for all new custom homes and additions over 50 m²:
- Lot grading is reviewed by the Engineering Department through a Residential Infill Grading and Servicing (RIGS) application or, where applicable, through a Site Plan application (SPA). Both of these applications include reviews by Operations to address tree protection and curb modifications.

Tarion Warranty: When a permit application is made for a new custom home, the applicant must declare whether the home is being constructed by a builder registered with Tarion or whether the Owner is acting as the builder. For most infill projects in Markham, the property owner declares themselves as the Builder. The Building Standards Department works cooperatively with Tarion to ensure the Owner understands the terms of the Ontario New Home Warranties Act. Where that’s the case, the new home is not warranted and the owner is advised of such at permit issuance through a document issued by Building Standards.

Demolition Permits
- Demolition checklists are completed by the applicant
- Demolition plans are reviewed for extent of excavation, temporary shoring measures and location of construction fencing
- Pre-demolition inspections are conducted to review and approve the installation of construction fencing before the demolition permit can be issued
- Demolition permit is generally issued at the same time as the housing permit

Construction
Once building permits are issued, Building Inspectors conduct a series of mandatory inspections prescribed by the Building Code and requested and scheduled by the Owner or their authorized agent. Inspections verify that the construction is in accordance with the Ontario Building Code and the permit plans forming part of the permit.