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DSC Meeting
June 15, 2010

Markham Built Form, Height and Massing Study

Built Form Principles

MARCH 2010

Consulting Team

Sweeny Sterling Finlayson & Company Architects Inc - "&Co Architects" + GHK International

www.andco.com

Study Purpose.

- We first presented to you on April 14, 2009, then May 26, 2009 and December 14, 2009
- We were hired to provide visual and policy tools to help Town Staff, Council and residents understand what built form could result from intensification objectives of the Growth Management Study.
- The study creates consistent, predictable, generic built form guidelines for areas that are not currently subject to other specific planning controls and to form the foundation for future area studies.

Context Discussion.

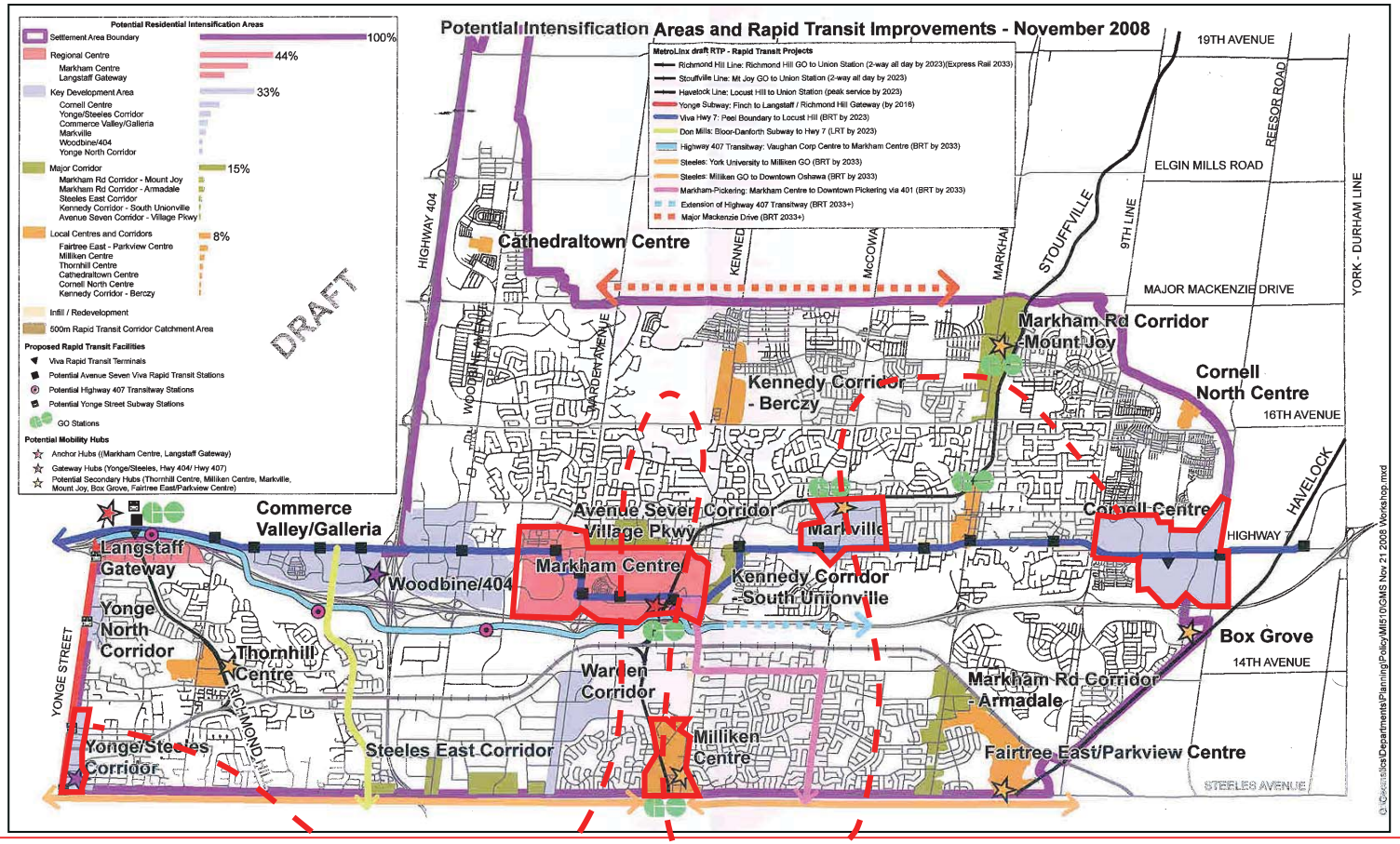
- Markham is undertaking a Growth Management Strategy (GMS)exercise. Part of the exercise is to create a better link between the overall GMS and a series of studies within a stronger policy context than currently exists.

- To accomplish this, Markham has to determine how it will grow over the next 25 years in order to determine what Future Markham will look like.

- This study assists in visualizing the intensification component of the Growth Management Strategy, and creates related built form guidelines that control and guide that growth using “best practices” and site testing.

- Markham will be revising their Official Plan, and area Secondary Plans and Zoning Bylaws in order to ensure conformity with the GMS

Appendix B
Intensification Areas



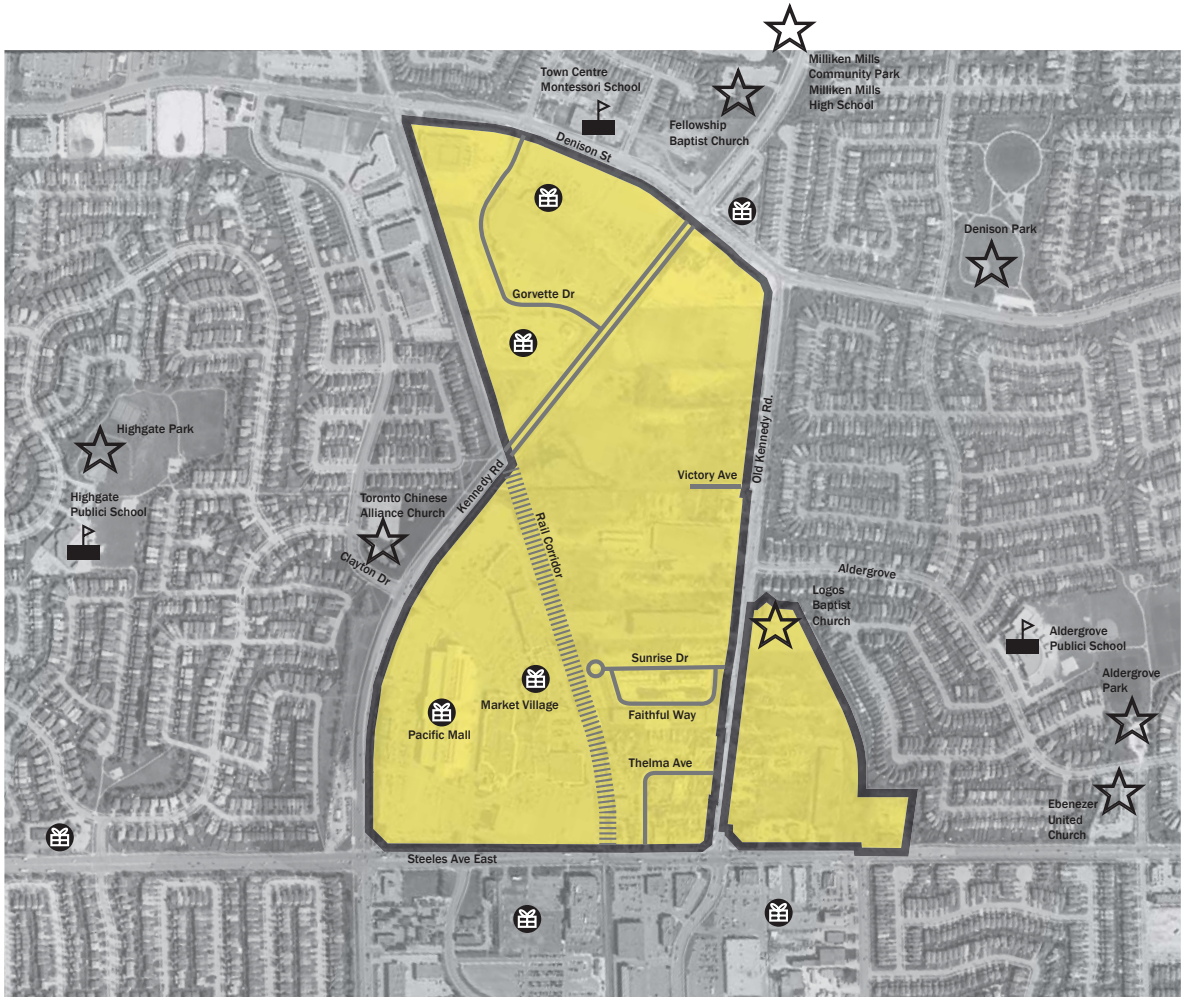
Study Outcome.

- As a “guideline”, this is a non-statutory document intended to inform the public and provide focused future amendments undertaken by the Town
- This study will inform the necessary and statutory Official Plan, Secondary Plans, and Zoning By-laws revisions that will occur as a result of intensification, and can also form the basis of detailed Urban Design Guidelines for different intensification areas.
- We have “jumped ahead” of these revision processes by using 5 test sites to determine likely and recommended layouts of these areas
- This work can also be used as a negotiation tool or discussion item for future applications until the statutory amendments are made

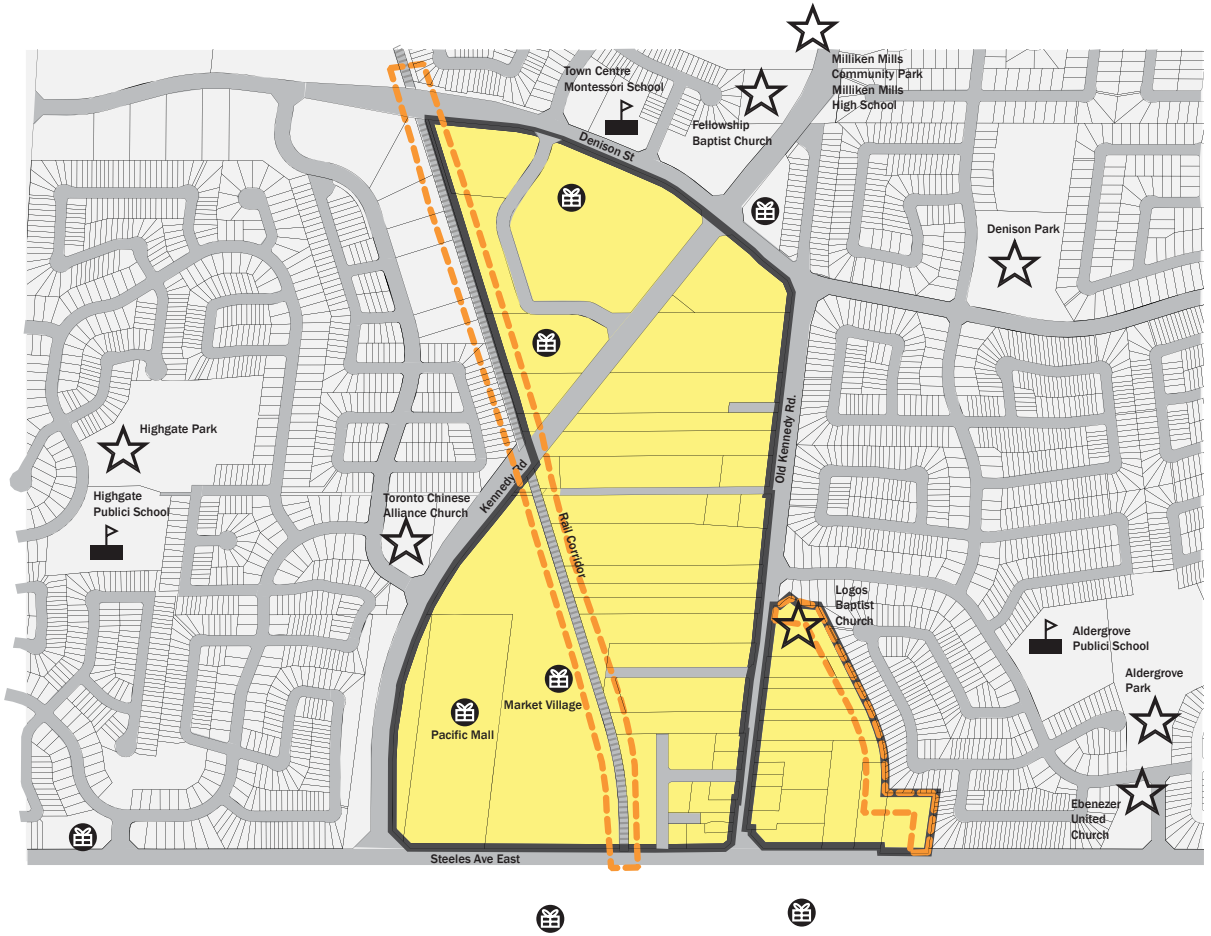
Demonstration Sites

We've used "Milliken" as a case study to present today in terms of applicability of the guidelines.

We will show how we conceptualized a plan for how the lands might develop when thought of comprehensively, and then how that informed the formulation of guidelines for general intensification.

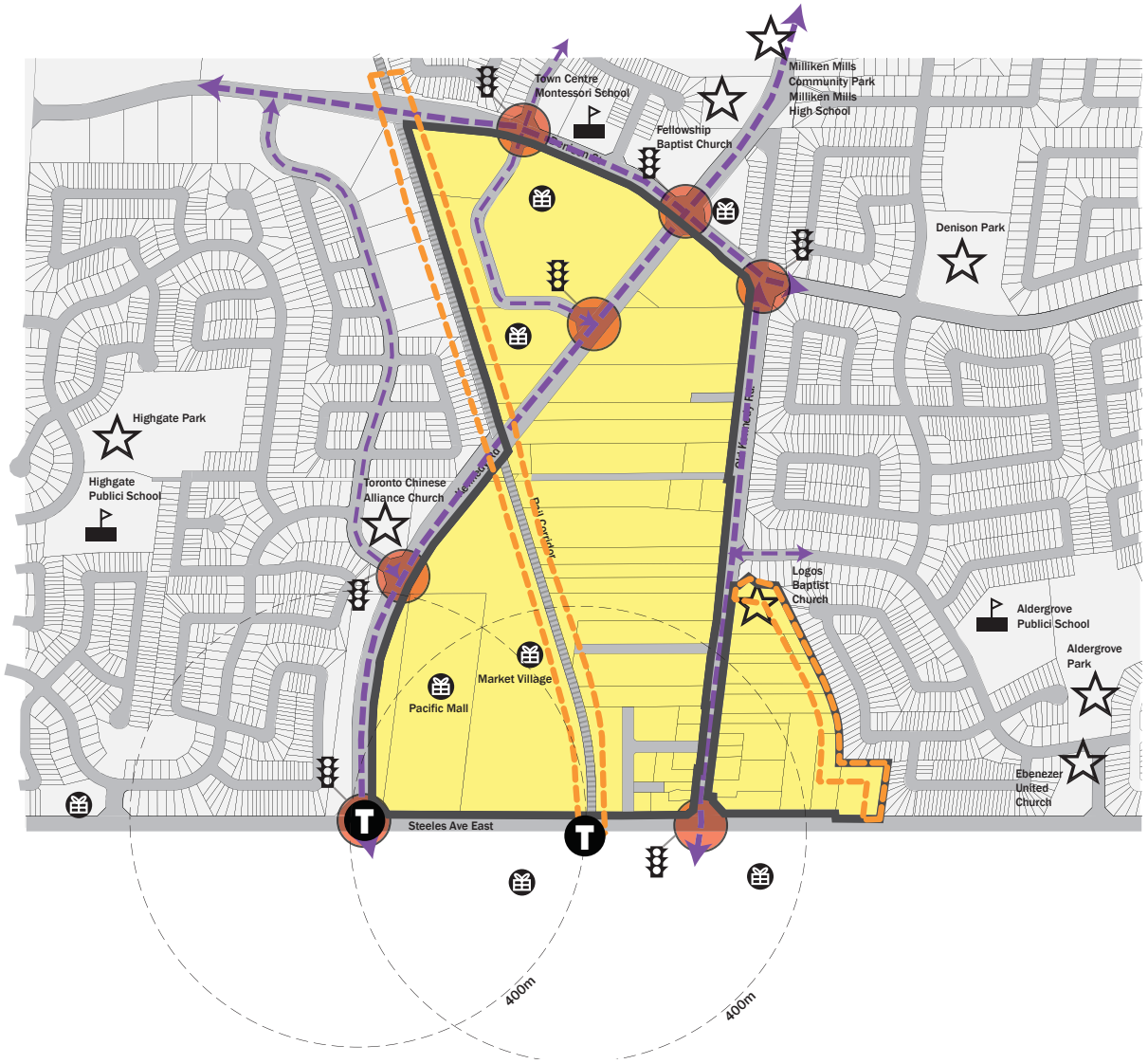


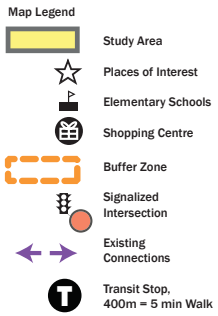
Milliken Centre



Buffer Zones

Milliken Centre





Intersections
Connections
Transit Stops

Understanding the Guidelines

how to read the guidelines.

We've set up the Guidelines so that they are visually compelling, easy to understand and helpful in describing the intended consequence.

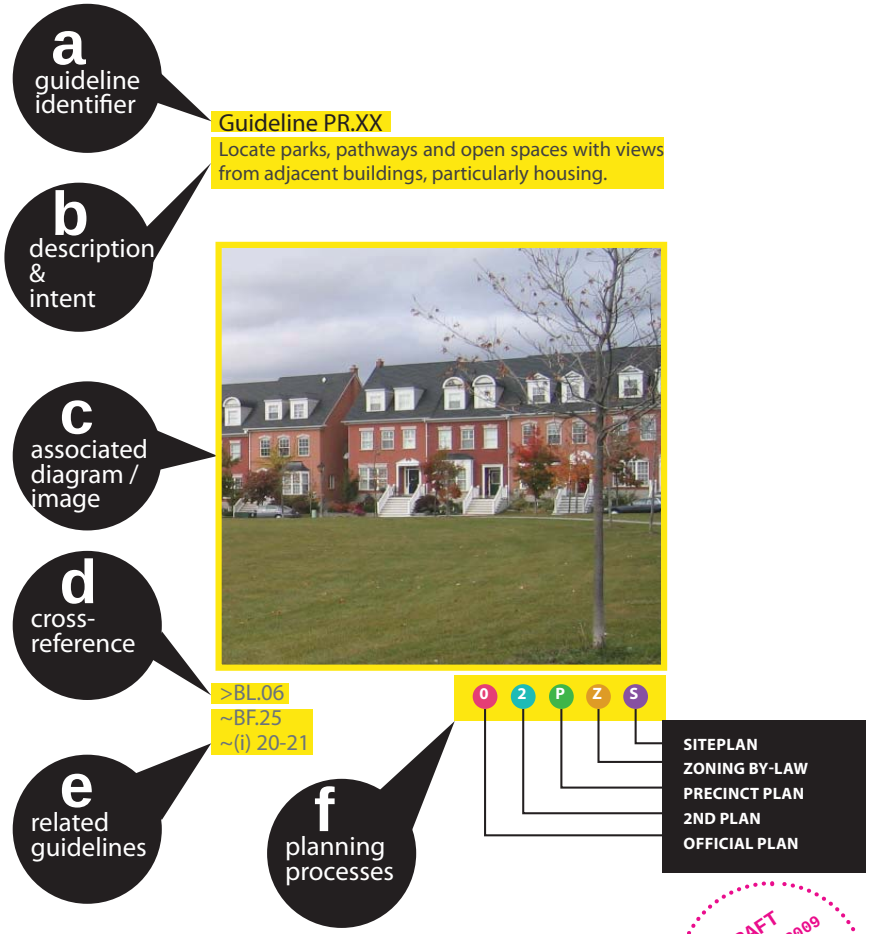
This document is non-statutory. It is not intended to be a zoning by-law. It is intended to inform developers, Town officials, staff and residents on the ways in which future intensification can best achieve community and municipal goals.

The Guideline document is meant to be read in its entirety (including Appendices). It explores a variety of scenarios that are anticipated within the Intensification Areas identified in Appendix B, and to provide guidance on how best to respond to specific conditions.

Each guideline has a section-specific identifier. The guidelines are usually accompanied with a photo or diagram which helps to clarify the intent.

Some guidelines are cross-referenced (see bullets d and e, right). These references are found beneath the photo or diagram, indicated with the symbol ">" (directly related) or "~" (indirectly related). Some guidelines are tagged with the symbol "(i) ", which points to sections in the document that describe certain issues in more detail. Each guideline is referenced with the applicable planning process(es).

In situations where there is conflict between applicable *Key Principles*, the more prescriptive guideline(s) should be followed.



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Study Content and Structure.

We have produced a draft report called “Markham Built Form, Height and Massing Study: Built Form Principles”. The report is structured around several key principles.

Each development area will be assessed with respect to these key principles.

1 - Public Realm

2 - Streets and Blocks

3 - Building Location

4 - Built Form

5 - Tall Buildings

6 - Transition

7 - Parking and Loading

8 - Implementation

9 - Next Steps

Public Realm

Public Realm

Guideline PR.01 - *Protect Microclimate*

New development can affect microclimate and impact human comfort in the public realm. To ensure favourable shade and/or wind conditions, locate tall buildings a minimum of 40m apart, and avoid tall slab buildings.

P Z S

~TB.02
~TB.03
~TB.05

Guideline PR.02 - *Connect to Open Space*

Connect new open space to existing natural resources such as existing park systems, trails, and natural systems (ravines, wetlands, and the Rouge River). Create a network of parks, pathways, and gathering spaces to promote active transport (walk, cycle, etc) and healthy living.

2 P Z S

Guideline PR.03 - *Open Space Hierarchy*

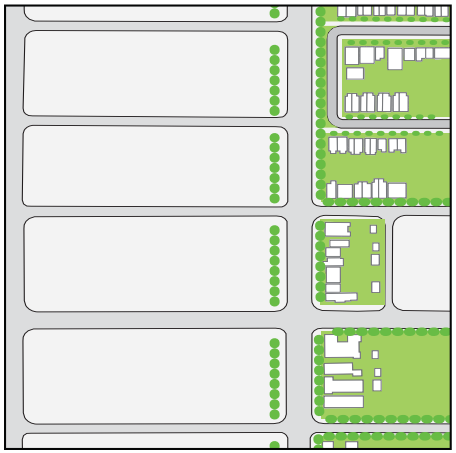
Create different types and sizes of parks and open spaces to support district, neighbourhood, and local activities that contribute to place-making and a legible public realm.

2 P Z S

Streets and Blocks

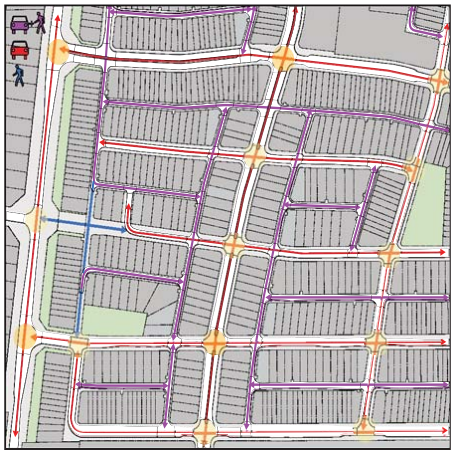
Key principles
Streets

Guideline SB.01
Align local streets on either side of major arterials to allow for future crossing points and connectivity between neighbourhoods. Avoid dead-end streets and culs-de-sac, which isolate parts of the neigbourhood and fragment pedestrian movement.



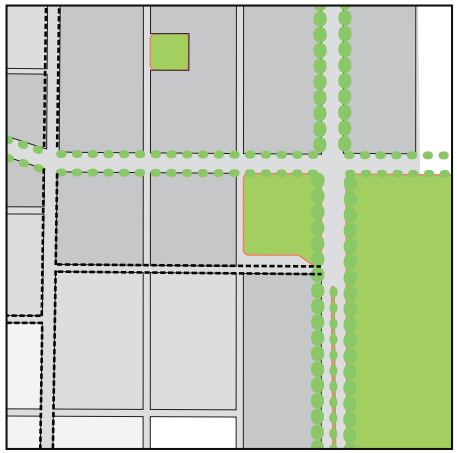
0 2 P S

Guideline SB.02
Develop a fine grain street grid, which offers choices for pedestrian and vehicular movements, and creates more intersections for passive traffic control.



2 P S

Guideline SB.03
Use streets to define parks and public open space. This stimulates public access and promotes security within the park.



2 P S

>PR.05
~BL.06

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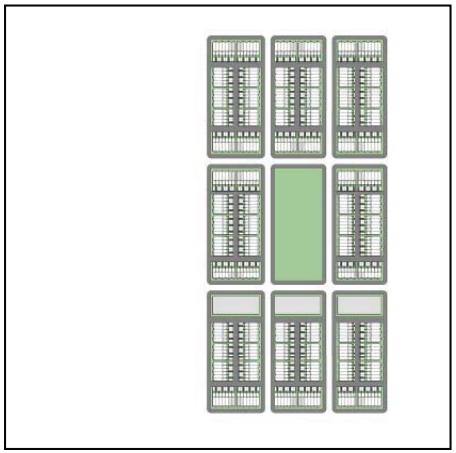
July 10, 2009

Streets and Blocks

Streets and blocks
Blocks

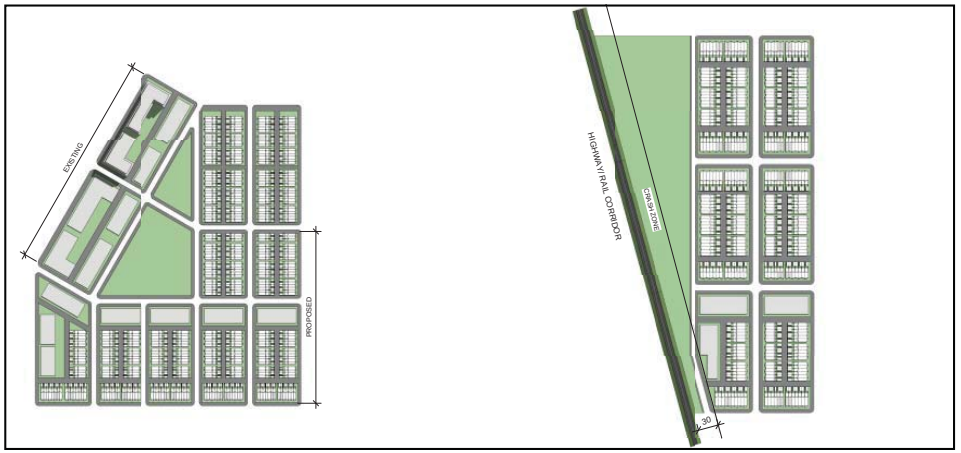
Guideline SB.14 - *Park Edges*
Surround new parks with streets to facilitate public access and surveillance. Avoid creating parks adjacent to the rear yards of existing or proposed development.



+PR.05
~PR.15

2 P S

Guideline SB.15 - *Park as Transition Tool*
Where appropriate, design functional park space as a transition zone in areas where there is a shift in the street and block grid, or where other irregular geometries are formed. Maintain street frontage for new park.



~PR.15

2 P S

Building Location

Building Location

Guideline BL.01 - *Uniform Street Edge*
Coordinate building setback with adjacent properties. Consistent setbacks will help create a uniform street edge. "Build to" lines can be incorporated to ensure the desired proportion of the street frontage is created with building(s). Variety can still be incorporated into buildings to create interest and identity.

~APPENDIX A -RETAIL

Guideline BL.02 - *Entrances at Street*
Locate functional primary building entrance(s) along street frontages to encourage security and public activity at street level. The number of entrances and spacing of entrances should be assessed based on successful neighbouring building articulation (if applicable).

+PR.10
+BL.04
~APPENDIX A -RETAIL

Guideline BL.03 - *Corner Frontages*
Design corner lot buildings with entries and articulation on both streets to maximize views and maintain an animated street edge.

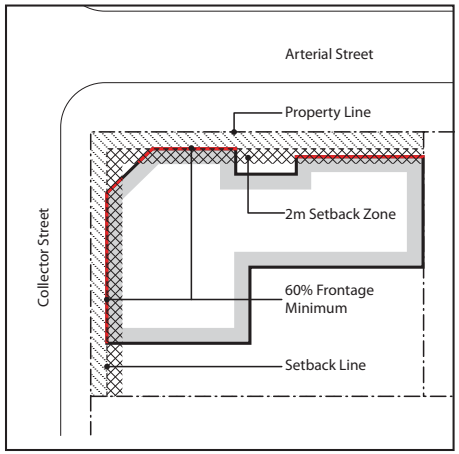
~APPENDIX A -RETAIL

Built Form

Built form

Guideline BF.04 -*Build-to Lines*

Establish build-to requirements for buildings facing arterial and collector streets. Build-to lines help create a cohesive streetscape.

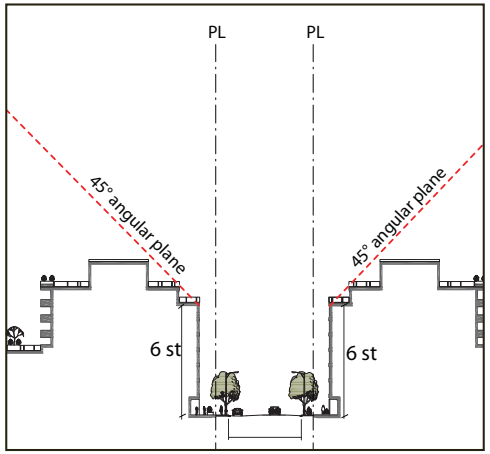


+PR.12

Z S

Guideline BF.05 - *Mid-Rise Street Scale*

As defined in "mid-rise". This scale creates a comfortable pedestrian environment in an urban neighbourhood, and allows for sunlight on the opposite sidewalk. In special conditions and subject to a specific public realm approach, other ratios may be appropriate.



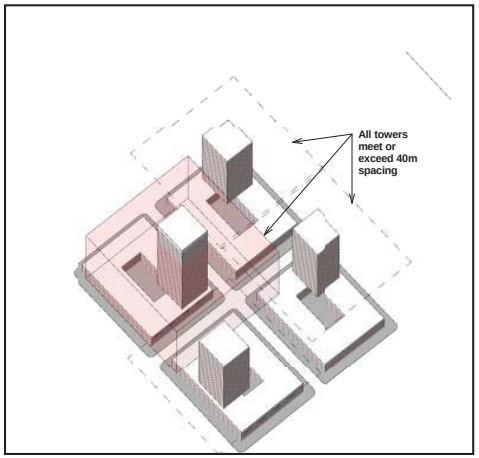
+TB.01

O 2 P Z S

Tall Buildings

Tall Buildings

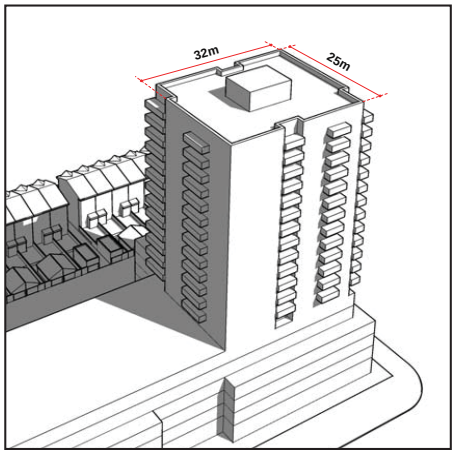
Guideline TB.04 - *Minimum Tower Spacing*
Tall buildings should be spaced sufficiently far apart to prevent overcrowding of skyviews and skylines. The separation distance between towers should be a minimum of 40m. This distance should also be considered where towers are located on adjacent blocks.



~PR.01

O Z S

Guideline TB.05 - *Maximum Floorplate*
Design tall residential buildings above any podium with a maximum floorplate of 800 m^2 to minimize shadow impacts on surrounding streets, sidewalks neighbouring buildings and private amenities.



O Z S

Transition

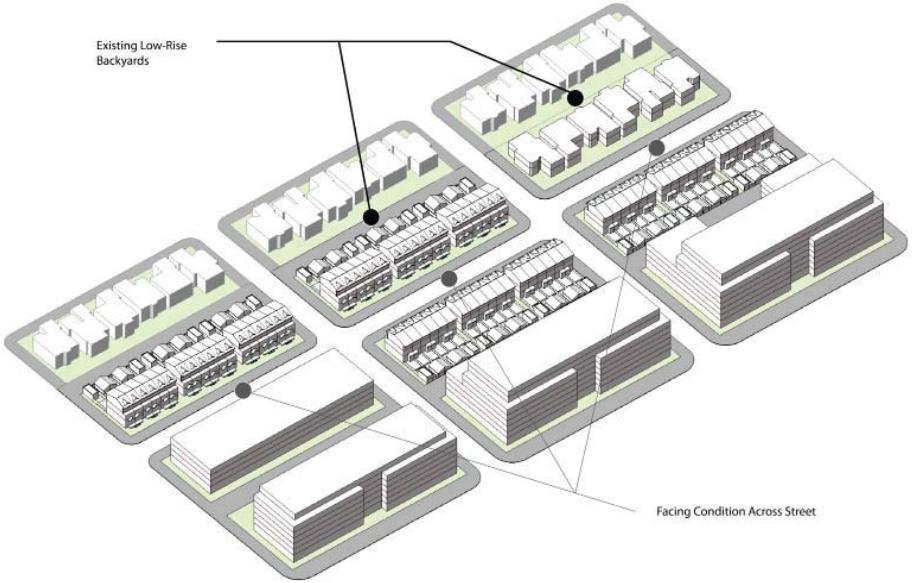
Key principles
Existing Low-Rise Residential

Guideline TR.01
Where new development is adjacent to the back yards and shared property lines of existing single-family or other low-rise residential neighbourhoods, provide a matching block depth that will accommodate a similar low-rise built form, ranging from 2 – 3 storeys where possible. This would allow for the creation of new single detached, semi-detached, duplexes, triplexes, and townhouses forms, and generate frontage on a new or existing street, such that a backyard – backyard relationship is created.

2 P S

Guideline TR.02
Where new development is proposed opposite an existing low-rise residential neighbourhood, provide a sympathetic low-rise built form, ranging from 2- 4 storeys. This allows for single detached, semi-detached, duplexes, triplexes, townhouses, stacked townhouses and 4-storey apartment forms to face the existing residential context across a street.

2 P S



Diagrams showing options for transition from new main street mid-rise forms to an existing low-rise neighbourhood.

>SB.04

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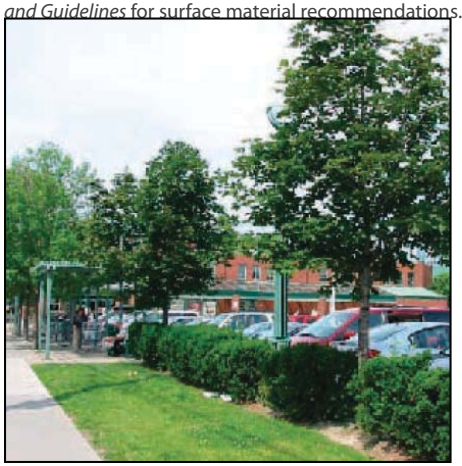
Parking and Loading

Guideline PL.01

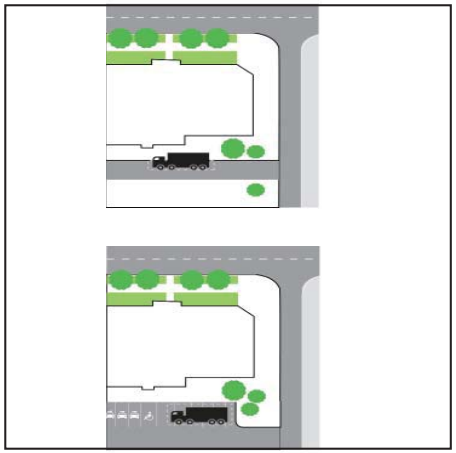
Where surface parking is permitted, locate lots to the rear of buildings to maintain consistent street frontage. Any surface lots should be adequately screened. Examples of permitted surface parking are visitor parking areas and lots associated with public facilities. Refer to *Markham Sustainable Development Standards and Guidelines* for surface material recommendations.



P Z S

Guideline PL.02

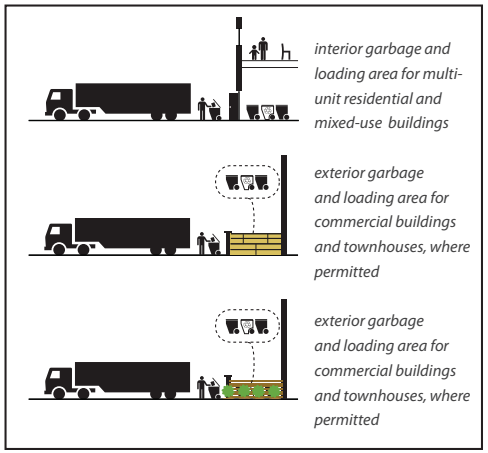
Do not locate access to loading areas directly off of primary streets.



P Z S

Guideline PL.03

Provide loading, garbage, and recycling areas within multi-unit residential and mixed use buildings. Commercial buildings and townhouse developments should incorporate screened exterior garbage and loading areas.



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Appendices

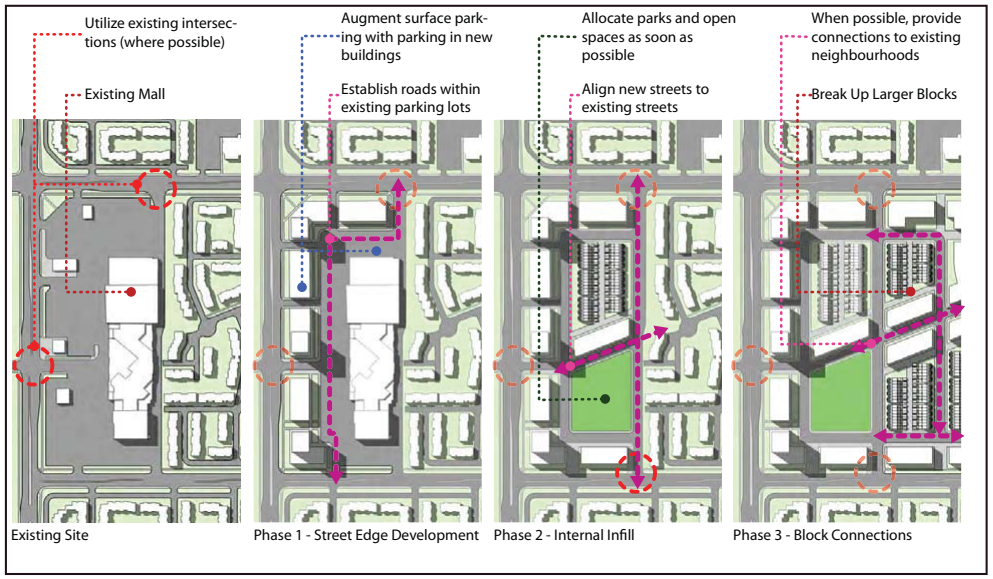
In addition to the chapter headings, there are appendices provided that give direction on responding to common design challenges

-utility and street elements

-phasing and interim conditions

-retail - new buildings, auto-oriented

Appendix A
Phasing & Interim Conditions

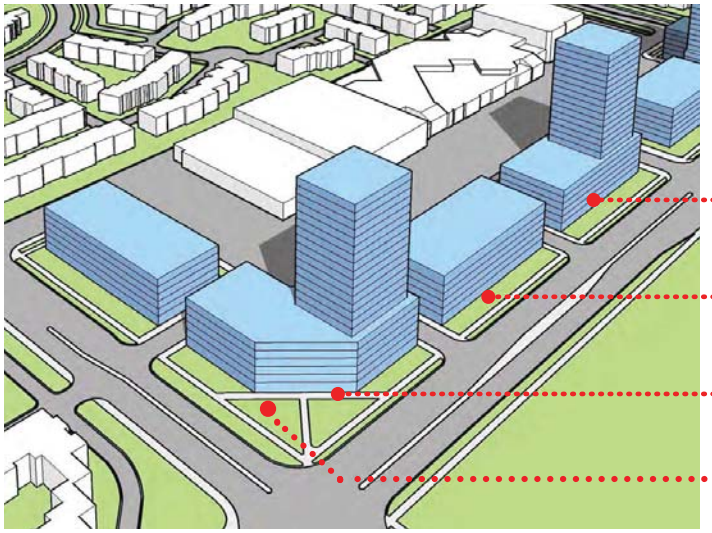


Phasing allows for the functioning of existing portions of a development site and the incremental inhabitation of new construction.

Key Concepts:

- Lands closest to the main street should be developed first.
- Where possible, existing buildings (ie. Shopping malls) can be retained as edges of sites are developed and reconfigured. These scenarios may produce temporary parking deficiencies as new parking facilities are being constructed, but should be supported wherever possible to allow for sites to be redeveloped and not sterilized as auto-oriented uses. However, reasonable total amounts of parking should be maintained on site to support existing buildings.
- Knock-out panels in underground parking should be provided to allow for future parking connections either on the same lot, or if agreed to, on adjacent lots.
- Streets should align with existing streets, and break up larger blocks.
- In order for future residents to benefit from amenity, open spaces, parks and sports fields should be constructed or allocated within the first few phases.

Appendix A
Retail - New Buildings

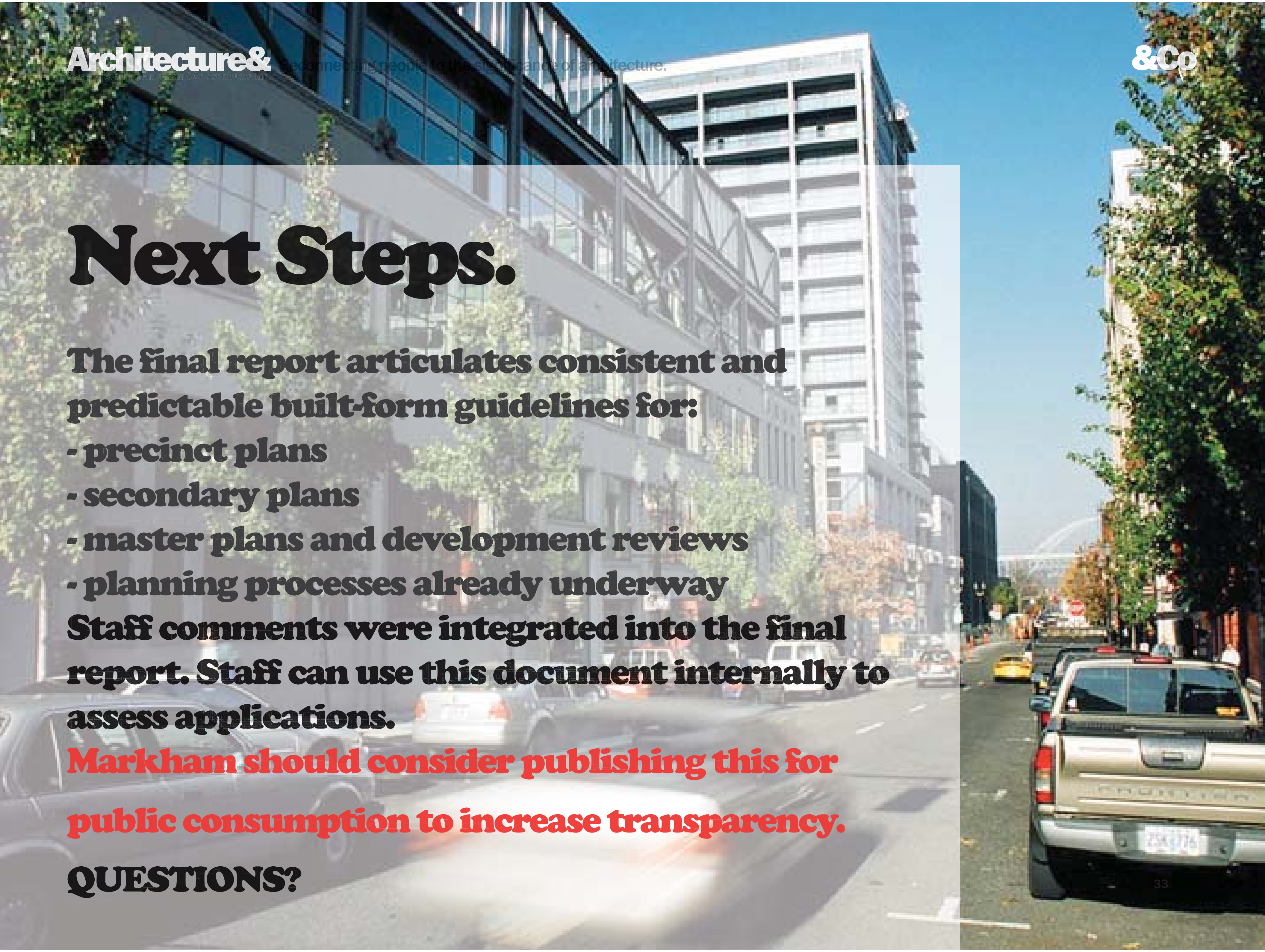


Rendering of new retail development that includes street-addressing facades, setbacks, and walkways.

P Z S

New buildings or additions to existing auto-oriented retail should be located parallel to main streets, whenever possible:

- Front facades that provide address, doors and windows onto the main street on which the lot is located in order to animate the street and provide access for pedestrians
- Pedestrian areas beside building fronts should be wide enough to accommodate and encourage outdoor uses (ie. small patios, space for signage and sales
- Provide pedestrian walkways that directly connect to sidewalks
- Provide bicycle parking in highly visible areas
- Encourage the combination of uses to generate multiple users throughout the day



Next Steps.

The final report articulates consistent and predictable built-form guidelines for:

- **precinct plans**
- **secondary plans**
- **master plans and development reviews**
- **planning processes already underway**

Staff comments were integrated into the final report. Staff can use this document internally to assess applications.

Markham should consider publishing this for public consumption to increase transparency.

QUESTIONS?