

SUBJECT: Thornhill Revitalization Area
Land Use Intensification Study
Terms of Reference
File PR 14 126187

PREPARED BY: Ron Blake, M.C.I.P., R.P.P.,
Acting Senior Development Manager, Extension 2600

RECOMMENDATION:

- 1) That the report titled “Thornhill Revitalization Area Land Use Intensification Study, Terms of Reference, File PR 14 126187” be received;
- 2) That the Terms of Reference attached as Appendix B to this report be endorsed as the basis for a 2015 Capital Budget submission and Request for Proposals for Consulting Services;
- 3) That funding for this project be considered under the 2015 Capital Budget process, with the funding source being Development Charges (Planning and Engineering Studies);
- 4) That staff and the selected consultant report to Development Services Committee regarding the Feasibility of the proposed GO Station/Mobility Hub, as a first phase of the study, before proceeding with the balance of the study;
- 5) And that staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

The purpose of this report is to obtain Council’s endorsement for a Terms of Reference and capital budget submission for a Land Use Intensification Study of the Thornhill Revitalization Area. The Land Use Intensification Study is intended to engage Metrolinx, CN Rail, the City, the Region of York, area residents, businesses and other stakeholders in a planning exercise to explore future opportunities for development of a new GO Station/Mobility Hub at John Street/Green Lane; introducing a wider range of uses (including residential uses) into the employment area; and the introduction of land use intensification and transit-oriented development patterns into the Thornhill Redevelopment Area.

BACKGROUND:

The Thornhill Revitalization Area is an older, mixed employment area located east of Bayview Avenue along Green Lane and John Street (See Attachment 1). The 34 hectare (84 acre) study area contains a mix of service, industrial, retail, auto-oriented repair, and institutional uses. The study area is surrounded by established low-density residential uses on the north, south and east, with medium and high density residential on the west side of the CN rail line forming the western boundary of the existing employment area.

In 2008, Markham Council directed staff to provide options for updated Official Plan, Secondary Plan and Zoning provisions to promote the gradual transition of the Area to a higher order Business Corridor; while addressing strategies to reduce incompatibilities with adjacent residential uses. This was prompted in part by a history of noise and odour impacts from a number of employment uses, in particular various manufacturing and auto repair uses.

In September 2009 a draft Policy Options report was prepared. The report recommended refining the range of employment uses permitted in the area and adding additional employment uses to the mix of permitted uses in the area. Further work on this study was deferred at that time as the City was undertaking a broader Employment Lands Strategy

In January 2011 Council directed staff to prepare terms of reference for a Working Group consisting of area residents, members of the local business community and members of Council to resume work on updating Official Plan and Zoning provisions for the area. During the fall of 2011 and winter/spring of 2012 the Working Group met monthly to discuss the future of the study area. In October 2012, staff prepared a report recommending that the area remain predominately an employment area with an expanded range of uses, including office, retail, commercial and restaurant uses which would serve both the local business community and the surrounding residential areas. At the same time the Working Group issued a separate report recommending more restrictions on manufacturing and auto-repair uses. Both reports endorsed the use of Community Improvement Policies and stricter by-law enforcement to upgrade the physical amenities of public and private lands in the study area.

The Working Group continued to meet during 2013, however agreement among area residents and employers was not achieved. In July 2013 Council directed that the Working Group be reconstituted with additional business and residential members; and that the recommendations of the first Working Group be referred back to the new Working Group for a further report.

In June 2014, Council directed staff to prepare terms of reference for a new secondary plan for the Study Area which would consider a wider range of land use options based on possible new transportation infrastructure including a new GO Station/Mobility Hub at John Street/Green Lane and possible conversion of the Richmond Hill GO Line to electric or High Efficiency Diesel locomotives. (See Appendix A – June 11, 2014 Council Resolution). This report and attachments are in response to the Council directive.

DISCUSSION:

Key Study Objectives

The key objectives for the Terms of Reference attached as Appendix B to this report include:

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- 1) Undertake a review of the opportunities, feasibility, costs, and timing of realizing a new GO Station at John Street/Green Lane within or adjacent to the Study Area;
 - 2) Prepare a conceptual development plan for the proposed station;
 - 3) Determine and assess the financial impacts, including capital and operating costs and funding strategies, for the new station;
 - 4) Develop and evaluate a range of future land use scenarios, including built form, massing, density and comprehensive road and block patterns for the study area that would support a station in this area;
 - 5) Evaluate the land use and built form scenarios in terms of their hard servicing infrastructure requirements (sewers, water, storm water and transportation impacts) and soft servicing requirements (parks, community services, schools) both within the Study Area and on adjacent residential and commercial areas and compatibility with York Region Official Plan and Provincial Growth Plan policies including conversion policies;
 - 6) Assess the economic and land use impacts of the conversion of all or part of the Study Area employment lands to residential, commercial or alternative employment uses;
 - 7) Develop a high-level, multi-year phasing and transition strategy to guide the future redevelopment of the Study Area from its current condition to the recommended land use and built form state, including strategies to minimize potential land use conflicts between employment and non-employment uses;
 - 8) Undertake a comprehensive public and stakeholder consultation process to review options, proposals and recommendations at key points in the study process, including a design charrette component;
 - 9) Prepare a recommended land use scenario for the study area and
 - 10) Prepare a draft secondary plan to implement the recommendations.

Schedule and timing

The Scope of Work identified in the terms of reference establishes seven major stages to the study including:

Stage A – Study Context and site review

Stage B – Feasibility Assessment of possible GO Station/Mobility Hub.

At this point staff and the consultant will report back to Council regarding the feasibility of a Station before proceeding with subsequent stages of the study.

Stage C – Conceptual Mobility Hub Station Plan

Stage D – Develop land use and built form scenarios for the Study Area

Stage E – Assess Land Use Scenarios and Recommended Option

Stage F – Implementation and Phasing Plan

Stage G – Preparation of draft Secondary Plan policies.

The study will incorporate a comprehensive stakeholder consultation program which will include regular meetings with stakeholder groups, a design charrette exercise to assist stakeholders and the community to identify a vision for the future of the study area, and additional meetings to review land use options and phasing strategies.

Staff anticipate that this study would require some 12 to 18 months to complete. The bidding consultant teams would need to identify time lines in their proposals.

Budget and potential financial resources

Staff anticipate that the scope of work for this study, as set out in the attached terms of reference, would require a budget in the range of \$400,000 to \$500,000, depending on the specific scope of work identified by the successful consulting team. Price is a major factor considered by the municipality in the review and selection of consultant proposals.

In regard to potential financial resources, Council would need to set aside sufficient funds to cover the above cost estimate through approval of a 2015 Capital Budget submission. Staff will also explore potential opportunities for funding contributions from outside agencies such as Metrolinx.

Next steps

If Development Services Committee and Council concur with the study scope and process and authorize the 2015 Capital Budget requirements outlined in this report and the attached terms of reference, staff would proceed to issue a Request For Proposal to be sent out to qualified consultants, which would serve as a basis for selecting a consulting team to undertake the study. Based on the anticipated schedule of Council approving the Capital Budget in March or April, 2015, the Request for Proposal could be released in Spring 2015. Staff also propose that this study be funded through Development Charges (Planning and Engineering Studies).

FINANCIAL CONSIDERATIONS AND TEMPLATE:

As noted, Council will need to set aside funds to cover the cost of this study during the 2015 budget approval process. The Planning and Engineering Departments will request a 2015 Capital Budget for this project. Staff propose to use Development Charges as a funding source for this study.

HUMAN RESOURCES CONSIDERATIONS

Not Applicable

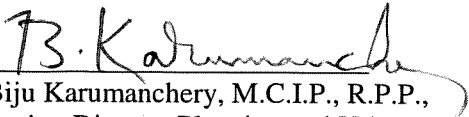
ALIGNMENT WITH STRATEGIC PRIORITIES:

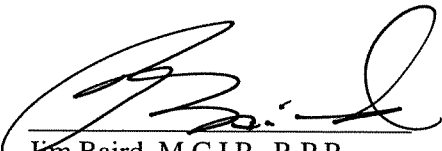
This study process aligns with the City's strategic priorities of Growth Management and Transportation/Transit.

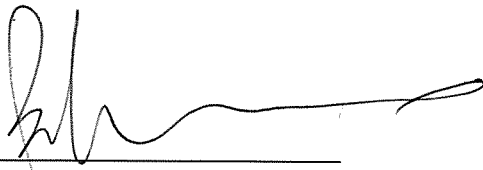
BUSINESS UNITS CONSULTED AND AFFECTED:

The Finance Department has reviewed the report and advised they have no comments at this time.

RECOMMENDED BY:


Biju Karumanchery, M.C.I.P., R.P.P.,
Acting Director Planning and Urban Design


Jim Baird, M.C.I.P., R.P.P.,
Commissioner, Development Services


for Alan Brown, C.E.T.,
Director, Engineering

ATTACHMENTS:

Figure 1: Aerial Photo – Thornhill Revitalization Area

Appendix A – June 11, 2014 Council Resolution

Appendix B – Thornhill Revitalization Area, Land Use Intensification Study, Terms of Reference

File path: Amanda\File 14 126187\Documents\Recommendation Report



FIGURE No. 1



RESOLUTION OF COUNCIL MEETING NO. 13 DATED JUNE 11, 2014

MOTIONS**(1) AREA OF THORNHILL COVERED BY BY-LAW 77-73 (10.0)**

Whereas this part of Thornhill is and has been in transition for a number of years and contains a wide range of low density employment lands with at least one landowner under contract to sell; and,

Whereas the ongoing and protracted process between local businesses and residents to reach a satisfactory agreement for land use has been unsuccessful and has caused a great deal of discord in the area; and,

Whereas there is the possibility that with a comprehensive and sophisticated level of urban planning, all stakeholders could see their land use priorities realized to their satisfaction; and,

Whereas these lands are in a very strategic location with frontage on Green Lane/John Street, and abutting two rail lines, one of which is the Go Line from Richmond Hill to Union Station, as well as being contiguous to, or a short distance from low and medium density residential uses; and,

Whereas the Go Line from Richmond Hill has been identified as a line to be converted into quiet Electric or High Efficiency Diesel Commuter Trains running at frequent intervals; and,

Whereas this line has the potential, with new drive train technology, to have a number of new stops added at Elgin Mill Road, Major Mackenzie Road, 16th Ave, Green Lane/John Street, Steeles Ave, Finch Ave, Eglinton Ave, Bloor Street and Queen Street; and,

Whereas this 85+ Acres is a strategic parcel for residential infill and intensification, as well as for a significant increase in non-industrial employment opportunities for the residents of Markham; and,

Whereas there are few locations of this size in the GTA available for both residential intensification and non-industrial employment opportunities, leading to the conclusion that these lands should be thoroughly studied with the intent of having a Comprehensive Secondary Plan; and,

Whereas for proper urban planning, it is extremely important that prior to any new development occurring a comprehensive road network and land use plan be established; and,

Whereas it is in the interest of the City, local businesses, and local residents to have this plan cover all of the relevant lands and have an interactive process involving landowners, ratepayers, GO, YRT and VIVA and professional world class urban design consultants;

Now therefore be it resolved:

- 1) That staff be directed to report back on an estimated cost for the studies, timing and potential financial resources; and,
- 2) That Staff engage consultants determined by Staff to be necessary, such as urban design architects, transportation planners and engineers, landscape architects to complete a secondary plan study for the lands shown on the attached Appendix."



Martha Pettit
Deputy Clerk

Copy to: Trinela Cane, Commissioner of Corporate Services
Joel Lustig, Treasurer
Jim Baird, Commissioner of Development Services
Catherine Conrad, City Solicitor
Alan Brown, Director, Engineering

Thornhill Revitalization Area
Land Use Intensification Study
Terms of Reference

1. Introduction

The Thornhill Revitalization Area (the Study Area) is an older, mixed employment area located east of Bayview Avenue along Green Lane and John Street. The area is bounded by the north/south CN Rail line to the west; the east/west CN Rail line to the south and the Aileen-Willowbrook neighbourhood to the north and east (see Figure 1).

The 34 hectare (84 acre) Study Area contains a mix of land uses. The southern portion, between the east-west rail line and John Street, is characterized by a mix of service, retail and commercial uses, including a large self-storage establishment at the extreme south west corner of the study area. The lands between John Street and the northern boundary of the Study Area contain a mix of service employment, auto repair and service uses, institutional and community-oriented uses, several day care facilities and a variety of ancillary commercial uses.

Raywall Kitchens is the largest employer in the area and is a significant manufacturing establishment. The former Canac Kitchens property is located on the east side of the Study Area and is currently vacant although applications for Official Plan and Zoning Amendments were recently approved to permit a medium density residential development with opportunities for mixed commercial and residential along the John Street frontage of the site. In addition, a property at the north end of the study area was approved for office development several years ago although to date construction of the proposed building has not begun.

The Study Area is surrounded by established low density residential neighbourhoods to the north, east, and south with medium and high density residential to the west. The employment area pre-dates these developments by many years.

2. Recent Planning Initiatives in the Study Area

Policy Options Report:

In 2008, the City of Markham Council directed staff to provide options for updated Official Plan, Secondary plan and Zoning By-law provisions to promote the transition of the Study Area to a higher order Business Corridor; while addressing issues of compatibility with surrounding residential areas. This was prompted by the closure of the Canac Kitchens plant (located at 360 John Street), and the history of noise and odour impacts on adjacent residential uses from a number of uses in the area, in particular manufacturing and auto-repair uses.

This study resulted in a draft Policy Options Report, which reviewed the then-current policy framework and zone provisions; provided an inventory of existing businesses

in the area; and reviewed the emerging Provincial, Regional and local planning policy frameworks to determine how the policy and regulatory framework could be designed to guide the Study Area's evolution into a higher order employment area.

The draft Policy Options Report was prepared in September 2009 to assess the following options:

1. Maintain the Status Quo
2. Refine use permissions and introduce special setbacks for obnoxious uses
3. Create a new designation in the Official Plan/Secondary Plan
4. Adopt an interim control by-law
5. Consider a new direction

The report recommended refining the employment land uses permitted in the area and adding additional employment-oriented uses to support intensification. However, since the City was also undertaking a broader Employment Lands Strategy at the time, the report acknowledged that it would be premature to add a new designation into the Official Plan prior to the conclusion of the Employment Lands Strategy.

Thornhill Revitalization Area Working Group:

Work on future land use policies in the Study Area resumed in 2011. In January 2011, Council directed staff to prepare terms of reference for a Working Group consisting of area residents, members of the business community, and members of Council. The Working Group was chaired by the Ward 2 Councillor. During the fall of 2011 and the first half of 2012, the Working Group met monthly to discuss various topics related to the future of the Study Area. During the course of the meetings members of the Working Group supported a variety of competing opinions about future land uses in the area. In October 2012, staff prepared a report recommending that the area remain predominantly an employment area with an expanded range of uses, including office, retail commercial and restaurant uses which would serve both the local business and residential communities and provide a basis for future transition of the Study Area into a higher order employment area. At the same time, Working Group members prepared a separate report, recommending more restrictive policies for manufacturing and auto-repair uses. Both reports endorsed the use of Community Improvement Policies and stricter by-law enforcement to upgrade the physical amenity of public and privately owned land in the area.

In March 2013, Council directed staff to prepare documents amending the Official Plan and Zoning By-law in effect in the Study Area that would provide for the following:

"In the Thornhill Revitalization Area, excluding the former Canac site, prohibit manufacturing, assembly and warehousing, other than where no Certificate of

Approval is required from the Ministry of the Environment, and prohibiting auto-body repair shops in the new Official Plan”;

In July 2013, Council further directed that the Thornhill Revitalization Area Working Group be reconstituted with additional residential, business and residential community members, and that:

“The following clauses in the City-initiated draft amendment to by-law 77-73 (the draft zoning by-law amendment for the Study Area) be referred back to the Revised Thornhill Area Revitalization Working Group for a report back to the Development Services Committee by October 2013:

- 3. Permits offices, personal services, financial institutions, commercial schools and retail and restaurant uses but restricts industrial uses to existing uses only;*
- 4. Prohibits all outdoor storage, auto body and auto repair, services stations and car washes, hotels, funeral homes, night clubs and new commercial storage uses;*
- 5. Permits day nurseries, places of worship, private schools, and motor vehicle sales establishments, veterinary clinics, and indoor storage of motor vehicles on a site-specific basis subject to previous zoning by-law amendments.”*

Meetings with the new Working Group resumed in January 2014 and continued until June 2014. During these meetings, a variety of land use options were considered, ranging from proposals to retain the Study Area as a predominantly employment area, generally in accordance with the March 2013 Council direction, to a complete reconsideration of future land uses in the Study Area.

In June 2014, Council directed staff to prepare terms of reference for a new secondary plan for the Study Area which would consider a wider range of land use options and build on key Study Area attributes as well as a number of possible new transportation infrastructure initiatives, including:

- The strategic location of the Study Area lands with frontage on Green Lane/John Street and abutting two rail lines, of which the north-south line is a GO Line from Richmond Hill to Union Station;
- The possibility of this GO Line being identified as a line to be converted into quiet Electric or High Efficiency Diesel Commuter Trains running at frequent intervals;
- The possibility that this new train technology will permit additional stops to be added including a new stop at Green Lane/John Street, within or adjacent to the Study Area;
- The potential to introduce residential infill and intensification and non-industrial employment opportunities into the study area, in conjunction with the introduction of new train technology and a new GO station at John Street/Green Lane.

3. Study Objectives

With the above considerations in mind, the Thornhill Revitalization Area Land Use Intensification Study must address the following main objectives:

- 1) Undertake a review of the opportunities, feasibility, costs, and timing of realizing a new GO Station at John Street/Green Lane within or adjacent to the Study Area;
- 2) Prepare a conceptual development plan for the proposed station;
- 3) Determine and assess the financial impacts, including capital and operating costs and funding strategies, for the new station;
- 4) Develop and evaluate a range of future land use scenarios, including built form, massing, density and comprehensive road and block patterns for the study area that would support a station in this area;
- 5) Evaluate the land use and built form scenarios in terms of their hard servicing infrastructure requirements (sewers, water, stormwater and transportation impacts) and soft servicing requirements (parks, community services, schools) both within the Study Area and on adjacent residential and commercial areas and compatibility with York Region Official Plan and Provincial Growth Plan policies including conversion policies;
- 6) Assess the fiscal, economic and land use impacts of the conversion of all or part of the Study Area employment lands to residential, commercial or alternative employment uses;
- 7) Develop a high-level, multi-year phasing and transition strategy to guide the future redevelopment of the Study Area from its current condition to the recommended land use and built form state, including strategies to minimize potential land use conflicts between employment and non-employment uses;
- 8) Undertake a comprehensive public and stakeholder consultation process to review options, proposals and recommendations at key points in the study process, including a design charrette component;
- 9) Prepare a recommended land use scenario for the study area; and
- 10) Prepare a draft secondary plan to implement the recommendations.

4. Metrolinx and Mobility Hubs

A key element in this study will be an assessment of the order of magnitude cost, feasibility and likely timing of a new GO Station at John Street/Green Lane. In addressing this, the study must build on the directions highlighted in the The Big Move and Mobility Hub Guidelines, as well as new and evolving strategies that may be under consideration by senior levels of government.

Future land use and built form intensification scenarios for the Study Area must be closely linked with the likelihood of realizing a new GO Station in or adjacent to the study area and an anticipated conceptual layout for the station. Another key element of the study will be to develop a realistic transition strategy, that will guide

the future phasing and timing of re-development within in the context of possible infrastructure and land use constraints including sewer, water and stormwater capacity constraints; possible site contamination issues; strategies to minimize potential land use conflicts where new residential uses are to be introduced into a traditional employment area; an assessment of the economic, fiscal and land use impacts of the possible conversion of employment lands to non-employment uses; and an assessment of the impacts of redevelopment scenarios on surrounding neighbourhoods.

Metrolinx

Metrolinx is the regional transportation authority for the Greater Toronto and Hamilton Area (GTHA) and was established in 2006 through the provincial Greater Toronto Transportation Authority (GTTA) Act. In May 2009 the GTTA Act was amended to merge Metrolinx with GO Transit, maximizing the two organizations' planning, implementation and operation expertise.

The Big Move and Mobility Hubs

The Big Move is a 25 year, multi billion dollar plan, prepared by Metrolinx, for coordinated and integrated transportation in the GTHA. The Big Move identifies the need to create a system of connected mobility hubs, located at key intersections in the GTHA's rapid transit network. Mobility Hubs vary in size, but generally comprise a transit station and surrounding area within an 800 metre radius or an area that can be comfortably accessed by foot within a 10 minute walk. The specific mobility hub planning area should be carefully determined based on the local context for individual hubs.

Mobility Hubs will provide travellers with seamless access to all modes of transportation and generate transit-supportive densities and urban forms that reinforce more compact and sustainable growth patterns. In addition, the achievement of the mobility hubs vision will influence the success of many other Metrolinx initiatives, including fare integration, and the active transportation network.

The Big Move identifies 51 mobility hubs along the GTHA rapid transit system. Metrolinx released Mobility Hub Guidelines, endorsed by the Metrolinx Board in September 2011. The Metrolinx Board directed Metrolinx staff to apply them to the planning of mobility hubs and GO stations as well as other major transit investments.

The Guidelines are available at this link:

http://www.metrolinx.com/en/projectsandprograms/mobilityhubs/mobility_hub_guidelines.aspx

At the present time The Big Move does not identify a Mobility Hub at John St/Green Lane within or adjacent to the Study Area.

4. The Assignment

Stage A – Study Context and site review

Stage B – Feasibility Assessment of possible GO Station/Mobility Hub

Stage C – Conceptual Mobility Hub Station Plan

Stage D – Develop land use and built form scenarios for the Study Area

Stage E – Assess Land Use Scenarios and Recommended Option

Stage F – Implementation and Phasing Plan

Stage G – Draft Secondary Plan policies.

Stage A – Study Context and Site Review

Data Collection and Stakeholder Identification

The Consultant will gain a strong understanding of the study context, site and adjacent lands, particularly as it relates to transit requirements, transportation demand and needs, Provincial, Regional and City planning policies, development trends, and existing community character. This work will include a review of existing studies, plans and data to develop an overview of the study area context and key trends. Site visits and meetings with major stakeholders will also play an important role in gaining an understanding of the context.

Public and Stakeholder Consultation Plan

The Consultant's work will include a stakeholder consultation plan for stakeholder agencies/Study Area businesses and landowners, and surrounding residents and other members of the public.

Confirm Study Area

Mobility Hubs vary in size, but generally comprise the transit station and surrounding area that can be comfortably accessed by foot, typically an 800 m radius. At an early stage in the study, the Consultant will confirm the Study Area boundaries for a concentrated zone of influence (Primary Zone) and Secondary and Tertiary Zones and Catchment Area in consultation with Metrolinx and City staff and affected landowners. Metrolinx's Mobility Hub Guidelines defines each of these areas and provides step-by-step direction for determining the study area boundaries for each zone.

Stage B – Feasibility Assessment of Possible GoStation/Mobility Hub

Metrolinx's The Big Move does not currently identify a Go Station/Mobility Hub within or in the vicinity of the Study Area. Preliminary discussions between the City and Metrolinx have indicated that significant infrastructure improvements, along the length of the GO rail line and more locally to both the GO line and the East West CN freight line, as well as possible investment in new commuter train technology, would

be needed to support a Go Station/Mobility Hub at this location. The Consultant will consult with Metrolinx and CN Rail to assess constraints and opportunities associated with developing a GO Station/Mobility Hub at this location; identify infrastructure improvements (both to the north-south Richmond Hill rail line and the East-West line forming the southern boundary of the employment lands) that would be required to support a GO Station/Mobility Hub; identify financial implications including infrastructure and land costs; and a potential development scenario, including construction timing.

At the end of Stage B, staff and the consultant will report back to Council as to the feasibility of the proposed GO Station/Mobility Hub before proceeding with subsequent phases of the study.

Stage C – Conceptual Mobility Hub Station Plan

A conceptual station layout is to be developed for the Primary Zone to provide a basis for future detailed design work.

Prepare development concepts – The Consultant will prepare at least two preliminary development concepts for the station, with supporting graphics, taking into account all known constraints. Where applicable, the concepts shall include:

- Operating Requirements:
 - Station building size, location, configuration;
 - Waiting areas;
 - Platform and tunnels including access points
- Parking requirements:
 - Targeted mode split for station access
 - Optimal amount of parking, location and layout
 - Vehicle access and egress
- Overall Station Layout:
 - Optimal configuration to promote customer convenience and safety
 - Location of sidewalks, bicycle paths and parking, bus loops and platforms, PPUDO area, specialized parking and taxis
 - Access and egress points for all modes
 - Facilities for existing and future local transit services
 - Potential “Green” initiatives that could be incorporated into the station design
- Community Integration, Neighbourhood Context, and Development Potential
 - Integration with the surrounding community to complement and leverage planned land use changes and mixed-use development opportunities on adjacent properties.

Each concept may include the following drawings in the context of the Precinct Plan

- Master Plan or conceptual site plan

- Land ownership
- Figure and ground of existing and future conditions
- Transit alignments including major infrastructure enhancements
- 3-D rendered bird's eye view
- Phasing plan

Presentation materials depicting the options will be prepared for discussions with key stakeholders.

Stage D – Develop land use and built form scenarios for the Study Area

Vision, Planning and Design Principles

In consultation with key stakeholders, including the surrounding business and residential communities, the Consultant will identify guiding vision, planning and design principles for the Study Area. These principles will provide a framework for the land use and urban design scenarios to be articulated in subsequent stages. A design charrette would inform this component of the study to further assist in refining the community's vision and expectations for the future of the Study Area.

Land Use and Urban Design Scenarios

The Consultant will prepare at least two Land Use and Urban Design scenarios for the Study Area, building on the Vision, Planning and Design Principles developed above. Key matters to be addressed in each scenario include:

- Land Use and density
- Street and block patterns
- Built form recommendations, including building heights and massing, transitions, setbacks, shadowing and separation distances
- Streetscape design including right of way widths, provisions for on-street parking and bicycle lanes; sidewalk and boulevard widths
- Green space recommendations including provisions for parks, greenways, connectors
- Anticipated population and employment yields
- Assessment of community amenity needs including schools, parks, recreation facilities, community centres and strategies for meeting these needs
- Urban design guidelines that incorporate best practices for building and streetscape design

Stage E – Assess Land Use Scenarios and Recommended Option

The scenarios identified in Stage D will be evaluated in accordance with the following considerations:

- Impacts on surrounding low density residential neighbourhoods and how these impacts may be mitigated

- Impacts on the employment functions of the Study Area and, on a broader scale, Markham's ability to meet its employment targets and employment lands supply
- Impacts on community facilities serving the Study Area and provisions for additional facilities or upgrades to existing facilities resulting from anticipated development
- Transportation impacts and improvements to the road and transit networks serving the Study Area including TDM measures
- Impacts on sewer, water and storm water servicing infrastructure and available capacity
- Order of magnitude assessment of public capital infrastructure costs associated with the scenarios
- Compatibility with York Region Official Plan and Provincial Growth Plan policies including conversion policies
- Consultation with area residents and local employers regarding these scenarios and the technical assessment criteria

Based on these considerations, the Consultant will recommend a preferred land use scenario for the Study Area.

Stage F – Implementation and Phasing Plan

The Consultant will provide an implementation and phasing plan for the preferred land use option, which will provide the basis for associated policies in the draft secondary plan for the Study Area. This phasing plan should address key implementation issues, including:

- Timing and phasing of redevelopment to minimize land use conflicts between new uses and existing employment uses and residential neighbourhoods
- Coordination of development phasing with provision of a GO Station/Mobility Hub in or adjacent to the Study Area
- Coordination of development phasing with provision of other transportation infrastructure including roads, transit, sanitary and storm water, and water main services
- Coordination of development phasing with the provision of new or upgraded community services, parks, schools and other public and community amenities

Stage G – Draft Official Plan and Secondary Plan Amendment

The Consultant will prepare draft Official Plan and Secondary Plan Amendment documents that will set out a policy framework to implement the recommended land use strategy, urban design principles and guidelines and the implementation and phasing plan.

Stakeholder and Public Consultation

The Consultant will set out a comprehensive Stakeholder and Public Consultation Process for all phases of the study.

At a minimum, key stakeholders are expected to be comprised of representatives from Metrolinx, CN Rail, Markham, YRT, York Region Planning, and Transportation and Public Works, area residents and key employers and landowners in the Study Area.

The Consultant will be required to facilitate 8 to 10 meetings with key stakeholders through the course of the study.

Public Open Houses and Meetings

The Consultant will be responsible for organizing, hosting and facilitating public events for each of the following components of the study:

- Conceptual GO Station/Mobility Hub Concept
- Public Design Charette
- Land Use and Urban Design Options and Implementation Plan
- Draft Official Plan and Secondary Plan Amendment

In addition, the Consultant will be responsible for presenting the conceptual GO Station/Mobility Hub Concept, the Recommended Land Use and Urban Design Option and Implementation Plan and the draft OPA and Secondary Plan to the Thornhill Sub-Committee/Thornhill Revitalization Area Working Group; Development Services Committee and Markham Council at appropriate milestones in the study schedule.

Monthly meetings will be held with the Markham staff and other Key Stakeholders upon request of Markham's project coordinator.

Project Team

The Consultant team will be comprised of professionals experienced in the areas to be addressed during this study, including but not limited to planning, urban design, multi-modal transportation planning, transportation and civil engineering, real estate analysis and public and stakeholder consultation.

Anticipated Scheduling

It is anticipated that this study will be completed within one year of commencement. Staff anticipate that the Study will commence in February 2015 and will be completed by February 2016.