

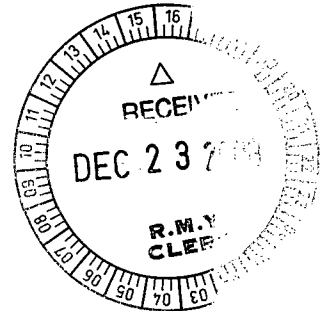


REGION OF YORK
CLERK'S OFFICE

FILE No. - 906

December 17, 2008

Mr. Denis Kelly
Regional Clerk
The Regional Municipality of York
17250 Yonge Street
Newmarket, ON L3Y 6Z1



**RE: HIGHWAY 7 CROSS SECTION BETWEEN
MONTGOMERY AVENUE AND SCIBERRAS ROAD (5.10)**

Dear Mr. Kelly:

This will confirm that at a meeting held on December 16, 2008, Town of Markham Council adopted the following resolution:

"That the correspondence from Mr. Paul W. Young, Unionville resident, be received; and,

That the staff report entitled "Highway 7 Cross Section Between Montgomery Court and Sciberras Road", dated December 9, 2008, be received; and,

That the six-lane cross-section from Montgomery Court to Sciberras Road be endorsed as outlined in the report; and,

That the Region of York be requested to incorporate segregated bicycle lanes within the Highway 7 right-of way from the property line to the curb; and,

That Town and Regional staff report back to Council on the detailed design of the cross-section, including upgraded medians and boulevards commensurate with the Regional Centre context; and further,

That a copy of this report and resolution be forwarded to the Region of York." (Item 4 of Report No. 65)

If you have any questions, please contact Prasenjit Roy, Senior Transportation Engineer at 905-477-7000 ext. 2625.

Yours sincerely,

Kimberley Kitteringham
Town Clerk

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The Corporation of the Town of Markham • Clerk's Department

101 Town Centre Boulevard, Markham, ON L3R 9W3 • tel. 905.475.4744 • fax. 905.479.7771 • www.markham.ca

SUBJECT: Highway 7 Cross Section Between Montgomery Avenue and Sciberras Road
PREPARED BY: Prasenjit Roy, Senior Transportation Engineer, ext. 2625

RECOMMENDATION:

That the staff report entitled "Highway 7 Cross Section Between Montgomery Court and Sciberras Road", dated December 9, 2008, be received;

And that the six-lane cross-section from Montgomery Court to Sciberras Road be endorsed as outlined in the report;

And that Town and Regional staff report back to Council on the detailed design of the cross-section, including upgraded medians and boulevards commensurate with the Regional Centre context;

And that a copy of this report and resolution be forwarded to the Region of York.

EXECUTIVE SUMMARY:

The Region of York completed an environmental assessment (EA) in 2005 for the Highway 7 corridor between Highway 50 (Region of Peel boundary) and York Durham Line. The EA was approved by the Ministry of Environment (MOE) in November 2006. The EA recommended that the increasing traffic demand, generated by continued growth in background traffic and development in and around the Highway 7 corridor, be accommodated by the widening of Highway 7 from four to six lanes from Woodbine Avenue to Sciberras Road, in combination with the implementation of a dedicated rapid transit facility on portions of Highway 7. Markham Council was kept abreast of the progress on the EA throughout the process and endorsed the EA on October 17, 2005. A copy of the associated resolution is enclosed as Attachment 1.

Subsequent to the EA approval, York Region proceeded with the detailed design and land acquisition for the Highway 7 Transitway and road widening. The design and engineering work has been completed and the Regional rapid transit office will be entering into contracts to construct the work in the early part of next year. The project is well positioned to receive priority provincial capital funding for transit, which is anticipated as part of the Provincial Spring budget. The rapidway construction from Richmond Hill to Kennedy is expected to be under way in the fall of 2009.

Recently, Markham Council expressed concern regarding the width of Highway 7 (four vs. six lanes) during two presentations made by York Region staff on May 27, 2008 and September 23, 2008, and requested a review of the need for six lanes. Staff were requested to report back in December 2008 on this matter.

Staff conducted a high level transportation demand assessment based on the future population and employment demand as derived from the on-going draft growth

management strategy exercise. Our assessment confirms the need for a six lane roadway on Highway 7 between Montgomery Court and Sciberras Road during peak periods. Staff also reviewed implications of the Region proceeding with construction of only the Transitway and urbanization of the existing four-lane roadway in 2009/2010, with widening the road to provide the additional two lanes at a later date. The implications include increased capital costs, traffic congestion during subsequent construction, ongoing resident/employee complaints regarding traffic congestion and constraints to economic development. Staff do not see the benefit of deferring the widening to a later date and recommend the ultimate cross-section be built with the transitway in 2009/2010.

PURPOSE:

The purpose of this report is to respond to the Council's request to review the cross section of Highway 7 (four vs. six vehicle lanes) from Montgomery Court to Sciberras Road.

BACKGROUND:

The Region of York completed an environmental assessment of the Highway 7 Corridor and Vaughan N-S Link Public Transit Improvements in 2005. The EA process included addressing the following key issues.

- Consideration of reasonable alternatives;
- Consultation with affected parties;
- Consideration of all aspects of the environment (i.e., natural, social, economic, cultural and technical);
- Systematic evaluation of net environmental effects; and
- Documentation of the planning process.

An extensive public involvement program was followed during this process. In addition to the regular updates to Markham Council on the EA process, York Region undertook several technical advisory committee meetings, preparation and distribution of fact sheets, development of a website to inform the public of the project process, general presentations to a wide variety of stakeholders, opinion makers and community groups; and four rounds of Public Consultation.

The recommendations of the EA pertinent to the subject area were the following:

- The rapid transit will run primarily on Highway 7 up to South Town Centre Boulevard, then along Enterprise Drive and Kennedy Road back to Highway 7.
- In combination with the implementation of a dedicated rapid transit facility on Highway 7, the traffic demand generated by the continuing developments in and around Markham Centre can be best addressed by the widening the cross-section of Highway 7 to six lanes.
- Between Montgomery Court to Town Centre Boulevard: the preferred alternative was to incorporate six through lanes, left turn lanes at the signalized intersections with a limited landscaped median along the strip where the future rapid transit system is proposed (Attachment 3).

- Between Town Centre Boulevard to Sciberras Road: the preferred alternative included a six lane cross section with raised landscaped median and bike lane in the boulevard. The design also includes left and right turn storage lengths at major intersections.

The Ministry of Environment approved York Region's Environmental Assessment (EA) in November 2006. Subsequent to the EA approval, York Region has proceeded with the design, and land acquisition for the Highway 7 Transitway and road widening. A contract for the construction of the rapidways and road widening is proposed to be issued in early spring 2009. Construction is scheduled to start in the fall of 2009 pending capitalization by the province as a transit initiative.

Markham Council at its October 17, 2005 General Committee meeting endorsed the findings of the Environmental Assessment Study Report for the Highway 7 Rapid Transit project. There have been periodic presentations/reports to Markham Council at various stages of the design stage including May 25, 2008 and September 23, 2008 when Council expressed concerns regarding the width of Highway 7 with the six vehicle lanes. Council requested that staff report back by December 2008 regarding the four lane versus six lane vehicle roadway along Highway 7. Relevant resolutions are enclosed in Attachment 2.

OPTIONS/ DISCUSSION:

Markham's Vision

The long-term vision for Highway 7 is for it to develop into a multi-use urban street that supports an integrated community where residents live, work, play, and learn. The Highway 7 corridor also links the three regional centres (Markham, Richmond Hill/Langstaff and Vaughan) that serve as compact mixed-use areas and are intended as focal points for business, government, and culture.

York Region has had the greatest proportional increase in population and employment among the four suburban regions of the Greater Toronto Area in the past 10 years. A significant amount of growth is anticipated over the next 25 years and beyond. Much of this anticipated growth in York Region is targeted to live and/or work in areas that surround the Highway 7 corridor. This growth will generate a proportionate increase in travel demand.

Existing Traffic Condition

Three out of the four regional centres identified in the Regional Official Plan are located along the Highway 7 corridor – Vaughan Corporate Centre, Richmond Hill/Langstaff Gateway, and Markham Centre.

Between Yonge Street and Kennedy Road, Highway 7 carries a heavy volume of traffic throughout the day, and sections of the roadway already are experiencing significant congestion in the A.M. and P.M. peak periods and operating with a level of service (F) generally referred to as gridlock. A 2007 average daily traffic data (AADT) and peak hour volume on Highway 7 provided by York Region is shown below.

Location	2007 AADT (Vehicles per day)	Morning peak hour volumes on Highway 7 (2004-2005)
East of East Beaver Creek Road	79,546	6,029
East of Highway 404 East Ramp	68,246	4,598
East of Allstate Parkway	65,234	3,947
East of Woodbine Avenue	63,578	3,080
East of Warden Avenue	42,275	2,420
East of Kennedy Road	40,223	2,673
East of McCowan Road	32,765	2,461
West of Highway 48	31,516	2,444
West of Ninth Line	20,133	1,430
East of Markham By-Pass	12,407	2,267

Generally 40,000 and 60,000 vehicles per day volume reflect congested four and six lane roadway operations respectively. The typical capacity of an arterial road near major signalized intersections is about 650-700 vehicles per lane per hour. The above shows generally congested conditions on Highway 7.

“Markham Centre” is an identified Urban Growth Centre

Markham Centre is identified as an Urban Growth Centre in the Provincial Growth Plan and a Regional Centre in the Region of York Official Plan. The Metrolinx Transportation Plan identifies the Unionville GO station in Markham Centre as a Mobility Hub. The Town’s Official Plan, as amended by OPA21 (Markham Centre Secondary Plan), plans for a concentration of population and employment in Markham Centre. Intensification within the existing urban settlement area, and transit oriented development in nodes and along corridors, are key principles guiding the Town’s current Growth Management Strategy exercise.

The population and employment forecasts specific to Markham Centre, and other Town nodes and corridors, are currently under consideration in the context of the Growth Management Strategy. Based on existing targets in the Markham Centre Secondary Plan (OPA 21), and more recent emerging forecasts for this area based on increasing intensification, a sustainable transportation system is required consisting of rapid transit, Travel Demand Management, road capacity, cycling and land use policy initiatives.

Current Town wide population and employment forecasts for Markham as established by the Region of York are as follows:

	2006	2031	Forecast Growth 2006 - 2031	% Increase 2006 - 2031
Households	77,200	139,300	62,100	80%
Population	272,500	423,500	151,000	55%
Employment	144,800	248,500	103,700	72%

* Region of York, July 2008

A significant component of the Town's future growth and development is expected to be accommodated in Markham Centre and along the Highway 7 corridor. The detailed distribution of forecast growth within the Highway 7 nodes and corridor is to be addressed in the Growth Management and Transportation exercises currently underway.

Proposed Transportation Network

Comprehensive infrastructure improvements need to be implemented to accommodate the future population and employment in the area. In the vicinity of Highway 7, a number of transit initiatives have been planned to address the projected population and employment growth. These multi-jurisdictional initiatives are as follows:

- VIVA dedicated ROW Rapid Transit between Yonge Street and Cornell
- GO full day two-way services between Union Station and Richmond Hill Centre
- GO full day two-way services between Union Station and Mount Joy Station via Markham Centre
- Yonge Subway extension to Richmond Hill Centre
- Don Mills rapid transit line from Bloor Danforth subway to Highway 7
- 407 Transitway between Vaughan Corporate Centre and Markham Centre, along the current Highway 407 by 2033
- Richmond Hill express rail (electrified high speed, high capacity railway by 2033)
- McCowan Road rapid transit between Markham Centre and Scarborough Centre by 2033
- Miscellaneous YRT service improvements across Markham

Road way system improvements planned by Town of Markham/Region of York/407 ETR in the area include the following:

- Birchmount Road extension from 14th Avenue to Highway 7
- Rodick Road extension from Miller Avenue to Esna Park
- Miller Avenue or Yorktech Drive extension to Warden Avenue/Birchmount Road
- Town-wide pathways, bike system
- TDM initiatives (staggered work hours, carpooling etc.)

- Hwy 407 widening from 3 to 4 lanes in each direction between Highway 404 and Markham Road by 2010.

Future Transportation Demand in the Area

A high level transportation assessment was conducted by staff along the Highway 7 corridor, between Montgomery Court and Kennedy Road. The assumptions and findings are as follows:

1. Significant new population and new jobs along Highway 7 between Montgomery Drive and Kennedy Road by 2031 (study area includes both sides of Hwy 7 corridor and extends beyond OPA 21 boundaries).
2. A forecast that 25% of the participating population would live and work in the area (and commute through walk, bike, or vehicle travel on internal roads other than Highway 7).
3. Significant new east west trips in the area during the morning peak period.
4. Assumed 35% transit mode split in the area. Compare this to the current transit modal split, which is less than 10% in the area.
5. Assumed 10% bicycle mode split for trips that have either a destination or origin in the study area.
6. Assumed 5% of the trips will be taken by school bus, taxis etc.
7. A total 50% non auto mode split has been assumed. Compare that to North York Centre, where with the presence of two subway lines has a non auto mode split close to 40%.
8. 20% of the in car trips are assumed to be carpool trips.
9. Even with the optimistic live-work and modal split assumptions, the estimated new vehicle trips in the area would be significant during the morning peak period in both east and west directions.
10. There is a forecast need for an additional 2 lanes of capacity in both the East and West direction.
11. This capacity is expected to be accommodated by widening of Hwy 7 from 4 to 6 lanes and the extension of Yorktech/Miller to at least Warden Avenue.

Again, it should be noted that the above is based on a preliminary analysis and is to be confirmed through the Growth Management and Transportation Studies currently underway. However, staff are satisfied that there is a technical transportation basis to support the widening of Hwy 7 to 6 lanes. If the transit modal split and live work targets are not fully achieved, this would create more pressure on the roadways in the area.

Implications of Not Widening Highway 7

Although the Town's Transportation Strategic Plan transportation model is not yet available for full analysis of the implications of not widening Highway 7 to 6 lanes, the following repercussions would likely be realized:

- A high level of congestion on Highway 7 during peak periods that would perform at a technically Failure Level of Service resulting in extensive delays at each intersection and cause gridlock

- Traffic utilizing other parallel roads (16th Avenue, 14th Avenue, midblock collectors), creating increasing congestion on these roads.
- Vehicle infiltration through residential areas (i.e. Apple Creek, Carlton etc.)
- Public complaints regarding the level of service
- Economic development constraints
- Constraints on intensification along Highway 7 due to congestion.

Implications of Deferring the Widening of Highway 7

Staff have also reviewed the implication of deferring the widening of Highway 7 for at least five years. In addition to the above concerns the following implications are expected:

- The Region has advised that the potential additional cost to phase this project would be approximately \$5 to \$7 million as a significant amount of the four lane road work would have to be replaced (i.e. curbs, catchbasin, intersections, boulevards, etc.)
- Missed opportunity, and future increased costs to Region of York for later road construction which would not qualify for current Provincial transit funding program
- A second round of construction related traffic delays lasting at least 1 construction season (May to December).

Regional road widening projects (as experienced on Major Mackenzie, Warden Avenue and 9th Line) cause significant delays in our residents commute and we should avoid incurring this twice on Hwy 7. Accordingly staff recommend Hwy 7 be constructed to its ultimate cross-section in 2009/2010.

FINANCIAL CONSIDERATIONS AND TEMPLATE:

There are no direct financial implications to the Town of Markham arising from Highway 7 capital improvements (Region of York jurisdiction).

ENVIRONMENTAL CONSIDERATIONS:

The approved Highway 7 Corridor public transit improvements EA took into account environmental impacts (i.e., natural, social, economic, cultural and technical). The Ministry of the Environment has approved York Region's Environmental Assessment.

ACCESSIBILITY CONSIDERATIONS:

Not applicable at this time

ENGAGE 21ST CONSIDERATIONS:

Highway 7 corridor is key to Council's Growth Management and Transportation/Transit Strategic initiatives.

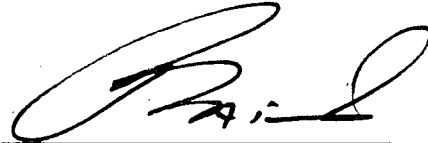
BUSINESS UNITS CONSULTED AND AFFECTED:

The Town's Planning and Urban Design Department and The Region of York's Transportation Planning Department have been consulted in preparation of this report.

RECOMMENDED BY:



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



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

ATTACHMENTS:

Attachment 1: Markham Council October 17, 2005 resolution

Attachment 2: Markham Council May 27, 2008 and September 23, 2008 resolutions

Attachment 3: VIVA Transitway and Road Cross-section Concepts

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EXTRACT CONTAINING ITEM #0006 OF THE GENERAL COMMITTEE OF MEETING NO. 16 (Oct 17, 2005)

6. HIGHWAY 7 RAPID TRANSIT ENVIRONMENTAL STUDY REPORT (5.10, 5.14)

Report

The Committee discussed the status and attire of special constables currently monitoring VIVA buses. Members posed questions regarding the potential traffic conditions created by the construction of a median and the potential for pedestrians to cross Highway 7 at various points. It was noted that subsequent meetings would be held to receive further input on the final design and implementation of the Transitway and associated structural elements.

There was considerable discussion with respect to the status and ownership of certain roadways within the Town of Markham's Official Plan which are put forward as preferred options for the Transitway. Members also discussed issues relating to the intended route and the suggested extensions used to connect the Transitway with various communities in the Town of Markham.

It was agreed that a staff report would come forward to General Committee acknowledging the status of roadways noted within the Official Plan but not within the latest Development Charges By-Law.

Moved by Regional Councillor J. Heath

Seconded by Deputy Mayor F. Scarpitti

That the October 17, 2005 report entitled "Highway 7 Rapid Transit Environmental Study Report" be received;

And that Council endorse the findings of the Environmental Assessment Study Report for the Highway 7 Rapid Transit project;

And that staff continue to work with Regional and YRTP staff to finalize the design for the rapid transit facility;

And that Bruce Macgregor, Commissioner of Transportation and Works for the Region of York and Mary Frances Turner of YRTP be advised of Council's position.

And that staff report back on the location of stations East of Wooten Way.

CARRIED

EXTRACT CONTAINING ITEM #0004 OF THE DEVELOPMENT SERVICES COMMITTEE OF MEETING NO. 22 (Sep 23, 2008)**4. HIGHWAY 7 TRANSITWAY 4 TO 6 LANES UPDATE (5.10)**

Mr. David Clark, Chief Architect Infrastructure and Development, VIVA, delivered a PowerPoint presentation providing an update regarding the Highway 7 transitway.

The Committee suggested that the bike lanes be relocated to the other side of the curb for improved safety to the cyclists. There was discussion regarding the potential to reduce the widening of Highway 7 instead of the proposed 6 lanes. The Committee also suggested that a sustainable plan is necessary to handle the extra storm water run off.

The Committee enquired about sidewalk construction along Highway 7 (within the Markham Centre district). Staff agreed to report back to Committee with feasible interim alternatives (e.g. gravel sidewalks) that could potentially be put in place pending the Regions reconstruction of Highway 7.

Moved by Mayor F. Scarpitti

Seconded by Councillor D. Horchik

That the presentation by Mr. David Clark, Chief Architect Infrastructure and Development, Viva regarding Highway 7 Transitway 4 to 6 Lanes Update be received; and,

That the Region of York be requested to incorporate segregated bicycle lanes within the right-of-way from the property line to the curb; and,

That staff report back to the Development Services Committee by December 2008 regarding options and implications of the 4 lane verses 6 lane widening along the Highway 7 Transitway; and further,

That staff report back as to sidewalk options for Highway 7.

CARRIED

ADJOURNMENT

The Development Services Committee meeting adjourned at 11:05 AM.

EXTRACT CONTAINING ITEM #0003 OF THE DEVELOPMENT SERVICES COMMITTEE OF MEETING NO. 16 (May 27, 2008)**3. HIGHWAY 7/WARDEN AVENUE RAPID TRANSIT UPDATE AND YONGE SUBWAY UPDATE (10.0)**

Mr. Tom Middlebrook, McCormick Rankin Corporation, delivered a PowerPoint presentation regarding the Yonge Subway. The presentation included the proposed stations, various construction techniques, crossing of the East Don River, terminal requirements at Steeles Avenue and Richmond Hill Centre and project schedule.

Sam Balsamo, Condor Properties, addressed the Committee with respect to the proposed development by Condor Properties at Yonge Street and Highway 7. He advised that that they are committed to working with VIVA to ensure integrated goals are established between the proposed development and future transit.

There was discussion regarding the proposed subway station at Centre Street in Thornhill and whether it should be built, eliminated, or roughed in for a future station.

Ms. Marion Matthias, Markham resident, addressed the Committee regarding the Yonge Subway, indicating she feels the proposed Centre Street station should be eliminated. Ms. Matthias is concerned that the Yonge Street EA will not protect the Heritage Section of Thornhill. She enquired about the Hydro Poles and whether they will be buried and if Condor Properties will integrate the Munshaw Homestead Heritage House into their development?

The Committee requested that the Region provide additional information with respect to the proposed Centre Street station to assist in determining whether or not that station should be built.

Mr. David Clark, York Region Rapid Transit, delivered a PowerPoint presentation regarding the Highway 7 (H3) VIVA design elements, route and next steps.

The Committee discussed the proposed bike lanes along Highway 7 and suggested a physical barrier be installed between the bike lane and car lane to ensure safety for the riders or relocate the bike lane to the boulevard or a side street. Mr. Clark will report back to the Committee regarding this issue. The Committee also discussed the Cross Section of Highway 7 that includes 6 lanes for cars, two bus lanes and two bike lanes. The idea that the car lanes should be minimized to only 4 lanes was raised. Mr. Clark advised that the EA for this area is already approved with Markham Council's concurrence to such. It was noted by staff that Highway 7 is already 6 mixed traffic lanes therefore, width west of Woodbine Avenue, and that the EA proposes to continue the 6 lanes through Markham Centre, plus dedicated transit lanes from the west to Town Centre Blvd.

There was discussion surrounding how residents north of Highway 7 can conveniently get to the Highway 7 VIVA route without using their cars.

Moved by Councillor A. Chiu

Seconded by Regional Councillor J. Jones

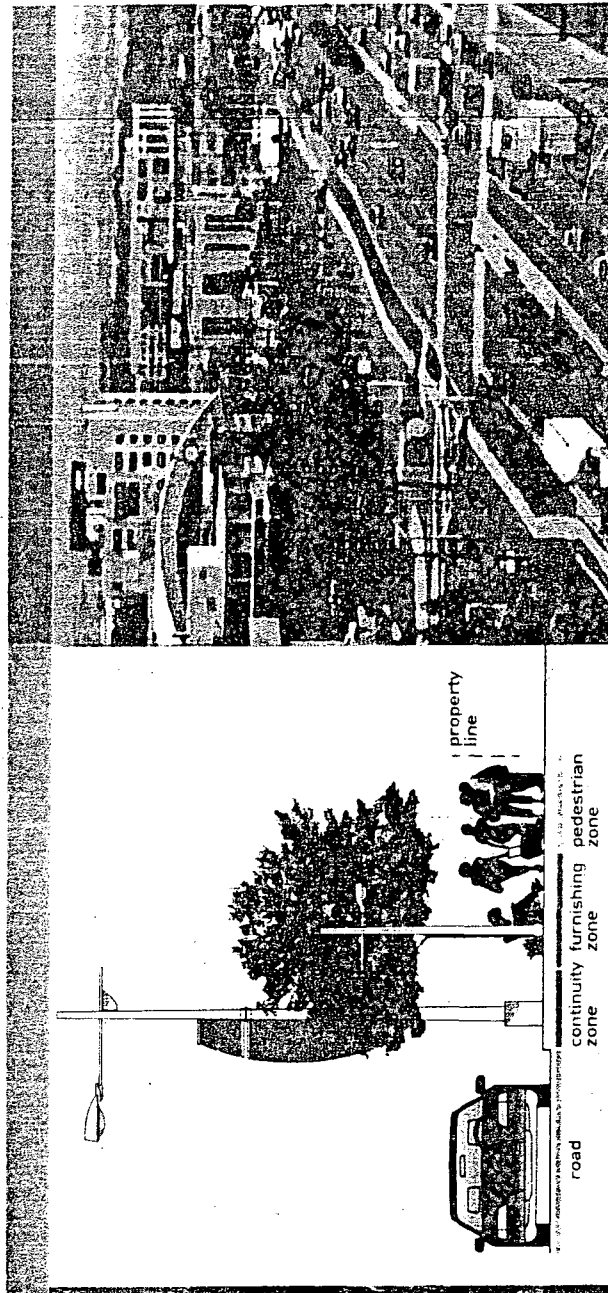
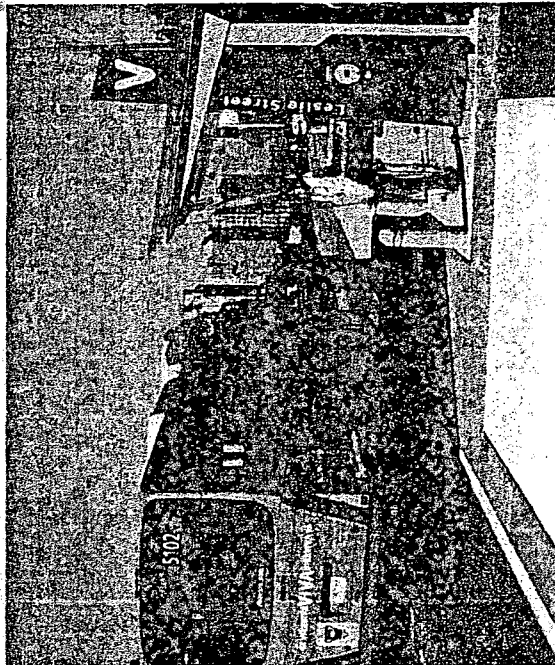
That the presentation by Mr. David Clark, York Region Rapid Transit, and Mr. Tom Middlebrook regarding Highway 7/Warden Avenue Rapid Transit Update and Yonge Subway Update be received.

VivaNext design elements – rapidways and intersections

VIVAnext



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rapidways

design and boulevard
standards

VivaNext

Design elements – stations & canopies

vivanext

