

STAFF REPORT ACTION REQUIRED

Redlea Avenue and Silver Star Boulevard Class Environmental Assessment Study

Date:	October 17, 2007
То:	Public Works and Infrastructure Committee
From:	General Manager, Transportation Services
Wards:	Ward 39, Scarborough-Agincourt; Ward 41, Scarborough-Rouge River
Reference Number:	p:\2007\ClusterB\tra\tim\pw07035tim

SUMMARY

A Municipal Class Environmental Assessment Study was undertaken to develop, assess and recommend transportation improvements to support planned development in the former Milliken Employment District. The evaluation of a reasonable number of alternative solutions, which included consultation with the public and review agencies, resulted in the following Recommended Design:

Redlea Avenue Extension

- The extension of Redlea Avenue from its current terminus south of Steeles Avenue East to connect with Milliken Boulevard, which is a north-south dead end street extending north from Finch Avenue East, resulting in a continuous north-south street between Finch Avenue East and Steeles Avenue East;
- A right-of -way width of 23 metres for the Redlea Avenue extension, in keeping with property previously protected by the former City of Scarborough for this facility;
- A 12-metre wide pavement, consisting of a 4.0-metre through lane in each direction and a 4.0-metre wide continuous centre left-turn lane; and
- A northbound approach to the Steeles Avenue East/Redlea Avenue intersection to include two left-turn lanes, one through lane and one shared through/right-turn lane.

Silver Star Boulevard Extensions

• The completion of two missing sections of Silver Star Boulevard, from Passmore Avenue to a point 335 metres south thereof, and from McNicoll Avenue to a point 200 metres south thereof, resulting in a continuous Silver Star Boulevard extending westerly from Midland Avenue, north of Finch Avenue East, thence northerly to connect with Steeles Avenue East;

- A right-of-way width of 23 metres for the Silver Star Boulevard extensions, in keeping with property previously protected by the former City of Scarborough; and
- A 12-metre wide pavement, including a 4.0 metre through lane in each direction and a 4.0 metre continuous centre left-turn lane.

A Notice of Completion must now be issued and the Environmental Study Report filed in the public record for a 30-day review period in accordance with the requirements of the Municipal Class Environmental Assessment.

RECOMMENDATION

The Transportation Services Division recommends that:

1. authority be granted to the General Manager, Transportation Services to issue a Notice of Completion and to file the Environmental Study Report for the Redlea Avenue and Silver Star Boulevard Class Environmental Assessment Study in the public record for a minimum 30 days in accordance with the requirements of the Municipal Class Environmental Assessment.

Financial Impact

There is no immediate financial impact resulting from the recommendations contained in this report. However, the funds required for the land acquisition, construction costs and any other costs related to the Redlea Avenue and Silver Star Boulevard extensions are not currently available and have not been included in the Transportation Services 2008 Capital Budget submission or in the 2009 to 2012 Capital Plan.

Should the construction of the Redlea Avenue and/or Silver Star Boulevard extensions be required in the short term, funds would have to be provided through Development Charges or contributions by developers specifically for this facility. The General Manager, Transportation Services would be required to report to the appropriate Committee(s) to outline total project costs, required cash flows and any other associated financial implications.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

ISSUE BACKGROUND

The first Official Plan for the Scarborough Planning Area was approved in 1957. Along with the written policies it had four Schedules, of which Schedule A was the Land Use Plan for the entire Borough, and Schedule C was the Roads Plan.

Schedule A was gradually replaced by smaller maps as Secondary Plans were adopted for the various communities and industrial (now employment) districts. The first Milliken Industrial District Secondary Plan was adopted in 1968. Redlea Avenue and Silver Star Boulevard were shown on the Roads Plan with 23 metre rights-of-way.

In 1985 the Secondary Plan went through major amendments, and the two roads were removed from Schedule C but remained on the land use map. To encourage development in the area, around 1986 the City of Scarborough acquired most of the lands for the Redlea Avenue right-of-way from Steeles Avenue to Passmore Avenue for pre-servicing. More recently, as development occurred elsewhere in the area, the City of Toronto protected for or acquired property for the proposed road extensions though the development review process based upon 23 metre rights-of-way. Some sections of Silver Star Boulevard have been built by developers through the subdivision process.

In November 2002 City Council adopted the new Toronto Official Plan. Subsequently, the Ontario Municipal Board (OMB), on July 6, 2006, ordered that most of the new Plan would come into effect immediately. At the same time, the Official Plans of the former municipalities, which were amalgamated in 1998, were repealed for the most part. As a result, the Milliken Employment District Secondary Plan is no longer in force and effect, however, the two roads are listed as Planned but Unbuilt Roads on Schedule 2 of the Official Plan.

In the fall of 2006, a Schedule "C" Municipal Class Environmental Assessment (EA) Study was initiated to develop, assess and recommend transportation improvements to support planned development in the area and to improve access into the former Milliken Employment District.

COMMENTS

The Redlea Avenue and Silver Star Boulevard Class Environmental Assessment Study has been completed in accordance with the requirements for a Schedule "C" project under the Municipal Class Environmental Assessment (the Class EA). As a requirement of Schedule "C" projects, if City Council endorses the recommendations of the Study, the Environmental Study Report (ESR) will be filed in the public record for a minimum 30day review period. During this period, members of the public, and any other interested individuals, interest groups, or government agencies, may request that a Part II Order be issued. A Part II Order, if granted by the Minister of Environmental Assessment. If this occurs, the project cannot proceed until the proponent completes an Individual Environmental Assessment Study and receives approval from the Minister. If a Part II Order is not granted or if no requests or objections are received during the filing period, the project is approved under the Environmental Assessment Act and may proceed.

The ESR describes in detail the first three phases of the five-phase environmental planning process set out by the Class EA:

- Phase 1 identification of the problem or opportunity;
- Phase 2 identification and evaluation of alternative solutions; and
- Phase 3 identification and evaluation of alternative design concepts for the preferred solution.

The preparation of the ESR and the filing of the document in the public record, which is the subject of this report, constitute Phase 4 of the environmental planning process. Phase 5 is the construction and operation or implementation of the project, and monitoring of impacts, in accordance with the terms of the EA approval.

The Class EA Study was carried out with the assistance of technical consultants and supported by a Technical Advisory Committee comprised of staff from Transportation Services, City Planning, Toronto Water, and Technical Services.

Public Consultation

Public involvement is an integral and ongoing part of the study process for the Redlea Avenue and Silver Star Boulevard Class Environmental Assessment Study. The minimum public consultation requirements of the Class EA were exceeded. In addition to two Public Meetings, individual meetings were held with affected property owners.

Details of the public consultation process and the primary concerns expressed by the public and affected agencies are documented in Attachment 3.

Environmental Assessment Findings

(1) Identification of the Problem or Opportunity

The study area is bounded by Brimley Road to the east, Finch Avenue to the south, Birchmount Road to the west and generally Denison Avenue, in the Town of Markham, to the north. The study area was selected to include the major areas of new development especially in the Town of Markham just north of Steeles Avenue, as well as proposed developments that will impact traffic volumes in the area.

The former Milliken Employment District is contained within the study area and is bounded by Steeles Avenue East to the north, Finch Avenue to the south, Kennedy Road to the west and Midland Avenue to the east. The Stouffville GO Transit railway runs north /south through the middle of the former Milliken Employment District. The new Milliken GO Station is located west of the railway just south of Steeles Avenue. Figure 1.1 of the ESR, shows the Study Area and former Milliken Employment District with dashed lines representing the proposed extensions of Redlea Avenue and Silver Star Boulevard in accordance with the former Secondary Plan. An analysis of the existing and projected future conditions and access concerns in the former Milliken Employment District was undertaken. It determined that the existing transportation network is insufficient to support the expected traffic increase resulting from population/employment growth and area development and that there is insufficient access in the former Milliken Employment District to support the planning objectives for the District.

A full description of the analysis of the existing and projected future conditions and access concerns in the former Milliken Employment District can be found in Chapter 3 of the ESR.

(2) Evaluation of Alternative Solutions and Alternative Designs for the Preferred Solution.

To address the problems described above, five alternative solutions were generated and evaluated. Criteria used to evaluate these alternatives consisted of the following:

- Transportation: traffic operations, transit operations and pedestrian/cycling operations;
- Social & Economic Environment: Official Plan objectives, impacts on existing businesses, impacts on existing adjacent communities, aesthetics (urban design), and noise;
- Natural Environment: vegetation, wildlife habitat, air quality, and ability to accommodate the City's Storm Water Management (SWM) principles;
- Cultural Environment: built heritage features/cultural and archaeological resources; and
- Costs: construction costs and property acquisition costs.

A brief description of the alternatives and the results of the evaluation are provided in Attachment 2. The evaluation included consideration of the public and agency comments which were provided throughout the study process, particularly the primary concerns, which are documented in Attachment 3.

(3) Recommended Design

The Recommended Design, illustrated in Attachment 1 and on Figure 6.1 of the ESR, includes the following elements:

Redlea Avenue Extension

- The extension of Redlea Avenue from its current terminus south of Steeles Avenue East to connect with Milliken Boulevard, which is a north-south dead end street extending north from Finch Avenue East, resulting in a continuous north-south street between Finch Avenue East and Steeles Avenue East;
- A right-of -way width of 23 metres for the Redlea Avenue extension, in keeping with property previously protected by the former City of Scarborough for this facility;

- A 12-metre wide pavement, consisting of a 4.0-metre through lane in each direction and a 4.0-metre wide continuous centre left-turn lane; and
- A northbound approach to the Steeles Avenue East/Redlea Avenue intersection to include two left-turn lanes, one through lane and one shared through/right-turn lane.

Silver Star Boulevard Extensions

- The completion of two missing sections of Silver Star Boulevard, from Passmore Avenue to a point 335 metres south thereof, and from McNicoll Avenue to a point 200 metres south thereof, resulting in a continuous Silver Star Boulevard extending westerly from Midland Avenue, north of Finch Avenue East, thence northerly to connect with Steeles Avenue East;
- A right-of-way width of 23 metres for the Silver Star Boulevard extensions, in keeping with property previously protected by the former City of Scarborough; and
- A 12-metre wide pavement, including a 4.0 metre through lane in each direction and a 4.0 metre continuous centre left-turn lane.

Project Cost / Staging

The estimated construction cost of the extension of Redlea Avenue and Silver Star Boulevard is approximately \$10.2 million. The estimated cost of land acquisition, which is discussed further below, is \$5.6 million.

While the Silver Star Boulevard extension is required to improve access into the area referred to as the former Milliken Employment District, the relatively short missing sections are not required to service any properties actively being developed. As such, it is recommended that the City continue to protect for and acquire property for the extensions of Silver Star Boulevard through the redevelopment process. The construction of the extensions can be scheduled as development warrants.

Regarding the staging of the proposed Redlea Avenue extension, there are more opportunities to implement the Redlea Avenue extension in stages due to the fact that it is a much longer extension with multiple intersection points, including Passmore Avenue, McNicoll Avenue, and the current northerly limit of Milliken Boulevard. At the request of the Heathwood Residents Association, the City conducted a review of the traffic impacts resulting from various staging options. The results of this analysis indicated that if the City was unable to implement the entire extension at once, at a minimum the City should construct the portion from Steeles Avenue East to McNicoll Avenue. A shorter first stage to Passmore Avenue could result in traffic infiltration in the Heathwood Community and is, therefore, not recommended.

Property Impacts

The consideration of property requirements played a major role in the selection of the preferred option. A plan showing the required property for the preferred option is shown in Figure 6.1 of the ESR. The Recommended Design minimizes the amount of property

the City is required to purchase, since the route makes use of every property the City currently owns, or has protected through the site planning process.

Temporary easements or permission to enter will be required along much of the proposed rights-of-way in order to re-grade the adjoining land to accommodate the new roadway. Retaining walls will also be required at several locations along the proposed rights-of-way to minimize impacts to adjacent properties. The exact limits of the required temporary construction easements and locations for retaining walls will be determined during detailed design.

Since the roads were designated in the Official Plan, the City has protected for or acquired property for the proposed roads through the development review process. However, there are some sections that still need to be acquired for the project to proceed. As stated above, the estimated land acquisition cost is \$5.6 million. However, this estimate does not include any allowance for injurious affection, disturbance, business loss, or legal fees and it is assumed there is no taking of any physical structures.

It would be fiscally advantageous to continue to acquire land as redevelopment occurs, since this could result in significantly lower property costs for the City. However, there is currently a zoning by-law amendment application before the City from an existing retail mall in the area. In order to support the proposed level of intensification proposed by the applicant, City staff identified a number of transportation improvements that will be required. Chief among these is the extension of Redlea Avenue to Passmore Avenue.

The City currently owns the majority of the land that would be required to extend Redlea Avenue to Passmore Avenue. However, there are two sections of the proposed alignment for which the City currently only owns an easement for underground services. As a result, there exists the potential for the need to expropriate land, with applicable additional costs, to enable the extension to proceed. These expropriation costs can only be determined through detailed negotiations with affected property owners. Should the re-zoning proceed, requiring the construction of the Redlea Avenue Extension in the short-term, a further report will be prepared to provide updated property acquisition costs and a proposed capital budget submission.

Next Steps

Following approval of this report by City Council, the ESR will be filed in the public record for a minimum 30-day period. Once EA approval is received, design and construction of the Recommended Design may proceed. However, the actual timing of implementation will be dependent upon the needs and timing of the redevelopment of adjacent lands. Should either roadway need to be extended in the short-term, further reports will be submitted to provide a more comprehensive estimate of the total property acquisition costs and a proposed capital budget submission.

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SIGNATURE

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JPK/UM/cs

ATTACHMENTS

- Attachment 1: Figure No. 1 Proposed Redlea Avenue and Silver Star Boulevard Extensions
- Attachment 2: Results of the Evaluation of Alternative Solutions and Alternative Designs for the Preferred Solution

Attachment 3: Public Consultation and Public/Agency Concerns

Attachment 4: Redlea Avenue and Silver Star Boulevard Road Environmental Study Report

ATTACHMENT 2

Results of the Evaluation of Alternative Solutions and Alternative Designs for the Preferred Solution

1. Identification and Evaluation of Alternative Solutions

Five Alternative Solutions to address the transportation problems were developed and evaluated as summarized below.

Alternative 1 - "Do Nothing"

The "Do Nothing" alternative was included as a benchmark for the assessment of the other planning alternatives. As the name suggests, the "Do Nothing" alternative involves no significant changes in the study area.

Alternative 2 - Limit Development

This alternative solution limits development to less than that permitted under the approved zoning. This alternative does not meet the development objectives of the Official Plan would remove development rights from existing land owners, which would not address traffic congestion due to background traffic growth.

Alternative 3 - Transportation Demand Management

This alternative solution refers to adopting methods of reducing travel demands by promoting more efficient use of transportation infrastructure and reducing the growth of single-occupant vehicular travel during peak periods. This includes measures such as designating High Occupancy Vehicle (HOV) lanes, carpooling, improving transit service, and accommodating pedestrians and cyclists.

Transportation demand management initiatives will contribute to reduced auto use, but on their own it will not address capacity or traffic operation deficiencies due to background traffic growth. No access improvements are provided in the former Milliken Employment District and, therefore, this alternative does not support the objectives of the Official Plan. Nevertheless, transportation demand management is an overall objective of the City of Toronto, and City staff will continue to pursue transportation demand management opportunities where feasible.

Alternative 4 - Extend Redlea Avenue and Silver Star Boulevard

This alternative solution involves:

- a) The extension of Redlea Avenue from south of Steeles Avenue East to Milliken Boulevard, providing a continuous north/south link from Steeles Avenue to Finch Avenue; and
- b) The extension of Silver Star Boulevard, for 335 metres south of Passmore Avenue and for 200 metres south of McNicoll Avenue, thereby providing a continuous link from Steeles Avenue East to Midland Avenue.

These road extensions address traffic congestion by providing new continuous road links and therefore additional road capacity. The new roads also provide additional access to the former Milliken Employment District and improved access to the Milliken GO Transit station, therefore supporting the development objectives of the Official Plan. The City can also take advantage of redevelopment activity in the area to potentially lower road construction and property acquisition costs.

Alternative 5 - Develop New East/West Roads

This alternative solution involves constructing new east/west roads from Kennedy Road to Midland Avenue through the former Milliken Employment District. While this alternative provides additional east-west road capacity, it provides limited additional access to the former Milliken Employment District and therefore only partly supports the development objectives of the Official Plan. This option does provide potential improvement to the Milliken GO Transit station access, and opportunities for the City to take advantage of redevelopment activity to potentially lower road construction and property acquisition costs.

Alternative 6 - Widen Adjacent North/South Roads

This alternative solution involves the widening of Kennedy Road and Midland Avenue, providing more traffic lanes along the boundary of the former Milliken Employment District. This alternative provides additional road capacity, but does not provide any access improvement into the former Milliken Employment District and therefore does not support the development objectives of the Official Plan. It also provides no access improvements to the Milliken GO Transit station, creates significant potential impacts on Kennedy Road and Midland Avenue, and has a high capital cost.

Based upon the results of the analysis and evaluation, Alternative 4 - Extend Redlea Avenue and Silver Star Boulevard, is the preferred alternative. This solution will improve existing and future traffic conditions by providing additional road capacity and alternate road routes, it provides improved access to the former Milliken Employment District and assists in supporting planning objectives of the Official Plan, and it improves the connection to the Milliken GO Transit Station. A full description of the evaluation of the alternative solutions can be found in Chapter 4 and Table 4.1 of the ESR.

2. Identification and Evaluation of Alternative Design Concepts for the Preferred Solution

The development and evaluation of alternative design concepts for the extensions of Redlea Avenue and Silver Star Boulevard was undertaken in two stages. The design options evaluated for both roadways included two main elements: road alignment; and lane configurations.

In relation to Redlea Avenue specifically, alternative designs for intersection improvements to the Steeles Avenue and Redlea Avenue intersection were also evaluated. The criteria used to evaluate the alternative design options were the same as those developed to evaluate the alternative solutions.

A brief description of the design options developed and the results of the evaluation are described below.

Redlea Avenue Road Alignment Design Concepts

The former City of Scarborough, and more recently the City of Toronto, has been protecting or acquiring property for the proposed Redlea Avenue and Silver Star Boulevard extensions based upon 23 metre right-of-way widths. Figures 5.1 and 5.4 in the ESR show the current property status with respect to City ownership along the potential road alignments.

Aside from the existing road sections that have already been constructed, the City owns portions of the properties in the proposed road extension corridor as well as easements for existing storm and sanitary sewers. As well, provisions have been made for the potential road extension, through the Planning Act process, in several recent development plans in the area.

After reviewing the property already owned by or under easements to the City, together with agreements obtained through the site planning process, it was concluded that while alternative road alignments can be established, this would result in significant additional impacts on private properties where an alignment has already been protected. As a result, it was concluded to be more reasonable to fill in the gaps and follow the road alignment established by the existing City owned lands and easements, as shown on Figure 5.1 in the ESR.

Silver Star Boulevard Road Alignment Design Concepts

The missing road link in the area of the Hydro Corridor is only 200 metres in length and the alignment is directly impacted by the adjacent hydro towers. While alternative road

alignments can be established, it is more reasonable to fill in the missing short gap south of the Hydro Corridor for this section of Silver Star Boulevard.

For the missing road link immediately south of Passmore Avenue, the City does not own any property or easements. Three alignment options were developed and evaluated for Silver Star Boulevard, shown in Figure Nos. 5.5, 5.6, and 5.7 of the ESR. The following is a brief description of these options and their potential impacts:

- Option 1: This alternative shares the property requirements as equally as possible between the properties of 85 Passmore Avenue, and 65 Passmore Avenue. However, it directly impacts an existing asphalt processing building on the 85 Passmore Avenue property, which would effectively shut down the business activities on the property.
- Option 2: This alternative avoids the property on 85 Passmore Avenue, and therefore does not affect their operation. However, more property is required from 65 Passmore for the proposed right-of-way. The "S" curve on the property to the south meets the City's road design criteria but would not be an ideal design.
- Option 3: This alternative avoids the asphalt plant building, and provides for a smoother road alignment. However, like the previous option, it requires a significant amount of property from 65 Passmore Avenue but less than Option 2.

At the second Public Information Centre (PIC), a property owner along the proposed Silver Star Boulevard extension forwarded five additional alignment options for analysis as the property owner was concerned about the impacts of the three options presented at the meeting. The five additional options are shown in Appendix 8 of the ESR, referred to as Options 4 to 8. These were evaluated using the same evaluation criteria as the first three options. The property owner's Options 4 to 7 were not carried forward because the road alignment did not meet the minimum centerline road radius for a 50 km/hr design speed, while the Option 8 alignment is very close to Option 3.

On the basis of this assessment, Option 3 was chosen as the preferred alignment for Silver Star Boulevard south of Passmore Avenue. A full description of this assessment is provided in Section 5.2.1 and Table 5.1 of the ESR.

Lane Configuration Design Concepts

Five typical lane configuration options were developed and analyzed. Since the land uses and access requirements for both Redlea Avenue and Silver Star Boulevard are similar, the typical lane configuration options apply to both roadways. A brief description and assessment of each option is provided below.

Option 1, shown in Figure 5.8 of the ESR, consists of 2 through lanes in each direction. The lane widths can accommodate cyclists in the roadway. It provides adequate boulevards for utilities, sidewalks, and tree plantings. The lack of a centre left-turn lane will potentially create mid-block traffic delays and safety concerns, as vehicles turn into

the many driveways of the developments along Redlea Avenue and Silver Star Boulevard.

Option 2, shown in Figure 5.9 of the ESR, consists of 2 through lanes and 2 bike lanes in each direction. It provides adequate boulevards for utilities, sidewalks, and tree plantings. The lack of a centre left-turn lane will potentially create mid-block traffic delays and safety concerns, as vehicles turn into the many driveways of the developments along Redlea Avenue and Silver Star Boulevard.

Option 3, shown in Figure 5.10 of the ESR, consists of 2 through lanes in each direction and a continuous centre left-turn lane. It provides adequate boulevards for utilities, sidewalks, and tree plantings. The through lane widths are insufficient to accommodate cyclists and this lack of provision for bicycles conflicts with the City's policy to incorporate bicycle-friendly designs in roadways whenever possible.

Option 4, shown in Figure 5.11 of the ESR, consists of 2 through lanes and 2 bike lanes in each direction, and a centre left-turn lane. The narrow boulevard in this option precludes the possibility of planting boulevard trees, and provides an inadequate boulevard width for utilities.

Option 5, shown in Figure 5.12 of the ESR, provides 2 through lanes in each direction and a centre left-turn lane. It provides adequate boulevards for utilities, sidewalks, and tree plantings, and lane widths sufficiently wide to accommodate cyclists in the roadway.

On the basis of this assessment, Option 5 was chosen as the preferred lane configuration for Redlea Avenue and Silver Star Boulevard. A full description of the evaluation is provided in Section 5.2.2 and Table 5.2 in the ESR.

Steeles Avenue / Redlea Avenue Intersection Design Concepts

Traffic analysis determined that additional improvements will be required for the section of Redlea Avenue from Steeles Avenue East to the south end of the Milliken GO Transit station. Northbound left-turning traffic is significant here and will require dual northbound left-turn lanes at Steeles Avenue East, one northbound through lane and one shared through/right-turn lane on Redlea Avenue. A separate southbound left-turning lane will be required at each of the two entrances to the Milliken GO Transit station. Three options were developed, which are described as follows.

- Option 1: This option provides two short northbound left-turn lanes, one northbound through lane, one shared northbound through/right-turn lane at Steeles Avenue and one southbound through lane and one southbound exclusive left-turn lane at the GO Transit driveways.
- Option 2: This option provides longer northbound left-turn lanes at Steeles Avenue and therefore, more capacity and operational efficiency than Option 1. Construction costs will be slightly higher than Option 1 and more property is required.

Option 3: This option has the same length of northbound left-turn lanes at Steeles Avenue as Option 2, but the road alignment is shifted to the west to balance the property requirements on both sides of Redlea Avenue.

These options are shown in Figure Nos. 5.13, 5.14 and 5.15 of the ESR.

Option 2 was selected as the preferred design, since it provides a desirable storage length for left-turn traffic, while requiring less property acquisition from a fewer number of property owners than Option 3.

A detailed description of the evaluation of alternative designs for Steeles Avenue East/Redlea Avenue intersection is provided in Section 5.2.3 and Table 5.3 of the ESR.

ATTACHMENT 3

Public Consultation and Public/Agency Concerns

Two Public Meetings, as well as individual meetings with the affected property owners, were conducted during the course of the study.

At the study initiation phase, and for each of the two Public Meetings, approximately 9,100 notices were distributed by Canada Post to residences and businesses in the area bounded by Steeles Avenue East, Birchmount Road, Brimley Road and Finch Avenue East. In addition, for the two Public Meetings, interested stakeholders who were placed on the study mailing list were sent a notice of the Public Meeting and advertisements were placed in the Scarborough Mirror. For the second Public Meeting, advertisements were also placed in the Markham Economist and Sun.

The first Public Meeting was held on January 30, 2006 to review the problem statement, the preliminary development of alternatives, and the proposed factors for analysis. Approximately 15 members of the public attended this meeting and, in general, were supportive of the project. Existing and potential future traffic concerns were raised by representatives of the Heathwood Residents Association, who represent the area bounded by Birchmount Road, Kennedy Road, Steeles Avenue East and McNicoll Avenue.

The second Public Meeting was held on June 5, 2006 to present the results of the evaluation of alternatives and the preliminary preferred design. Approximately 25 members of the public attended this meeting, and most were supportive of the project and the results presented, with the exception of several affected property owners that have property along the proposed Silver Star Boulevard extension. Specific traffic concerns regarding the construction phasing of the Redlea Avenue extension were also raised by representatives of the Heathwood Residents Association. Specifically, the Heathwood Residents Association enquired as to whether or not the City included potential development of the Pacific Mall and Market Village in the traffic analysis.

During the course of the study, individual meetings were held with property owners whose lands would be affected by the recommended design for the Redlea Avenue and Silver Star Boulevard extensions.

A full description of the public consultation program can be found in Sections 4.4 and 5.4 and Appendix Nos. 5 and 6 of the ESR. Throughout the public consultation process a wide variety of comments was received that assisted in the development and evaluation of the alternatives. The primary concerns identified through the consultation process and our responses are summarized below.

1. Insufficient understanding of traffic conditions at Steeles Avenue East and Kennedy Road Intersection

At the first Public Meeting, members of the Heathwod Residents Association indicated that the study had failed to recognize some major causes of traffic congestion at the Steeles Avenue East and Kennedy Road intersection and the resulting impacts of this congestion on the Heathwood Community.

To better understand the traffic congestion at the Steeles Avenue East and Kennedy Road intersection, additional traffic analysis was undertaken that included the impact on the Heathwood Community. As well, additional discussions were held with representatives of the Heathwood Residents Association to assist in understanding their concerns.

2. Traffic analysis underestimated the traffic growth at the Steeles Avenue East and Kennedy Road Intersection

The historical growth of background traffic and additional traffic from proposed new developments in the study area were included in the analysis of future traffic demands. While staff believed this was a fair representation of potential future conditions, additional traffic analyses were undertaken to provide a sensitivity analysis. For this additional work, assumptions for higher development levels of the Market Village, Pacific Mall and Kennedy Corners were developed. In addition, it assumed that a hotel would replace the medical building currently situated on Redlea Avenue. This sensitivity analysis supported the recommendation to extend Redlea Avenue and Silver Star Boulevard.

3. Traffic infiltration into the Heathwood Community

At the first Public Meeting members of the Heathwood Residents Association identified a number of causes of infiltration into their community resulting from increased traffic on Passmore Avenue. Residents cited the fact that when Silver Star Boulevard was extended from Steeles Avenue East to Passmore Avenue there was an increase in traffic infiltration into their community. They indicated that customers of businesses located on Steeles Avenue were travelling along Silver Star Boulevard to Passmore Avenue then travelling along Passmore Avenue and infiltrating their community solely for the sake of by-passing the Steeles Avenue East and Kennedy Road Intersection. They also cited that car traffic from Silver Star Boulevard to the north and Midland Avenue to the south is travelling west on Passmore Avenue and entering their community to avoid traffic congestion that is occurring at the Steeles Avenue East and Kennedy Road Intersection.

The proposed Redlea Avenue extension would provide more roadway capacity in the area and reduce the traffic congestion at the Kennedy Road and Steeles Avenue East intersection. In addition, it is recommended to extend Redlea Avenue to McNicoll Avenue as a single stage to alleviate traffic infiltration into the Heathwood Community. Extending Redlea Avenue to McNicoll Avenue would result in a higher lever of service for vehicular traffic travelling to or from destinations outside of the Heathwood Community compared to travelling through the Heathwood Community. As a result, it is expected that motorists would use this extension and bypass the circuitous route through the Heathwood Community neighbourhood.

4. Potential effects of road extensions on high pressure petroleum line

Subsequent to the first Public Meeting, Trans Northern Pipelines Inc. contacted the City and indicated that they operate a high pressure petroleum products pipeline within an easement running east/west on the north side of the Hydro corridor across both the proposed Redlea Avenue and Silver Star Boulevard alignments.

The City has obtained information on the location of this pipeline and will undertake appropriate measures to protect this high pressure petroleum line before and after construction of the road extensions.