TORONTO CITY CLERK

Clause embodied in Report No. 2 of the Works Committee, as adopted by the Council of the City of Toronto at its meeting held on February 13, 14 and 15, 2002.

13

Finch Avenue/Morningside Avenue/ Canadian Pacific Railway (CPR) Grade Separation Class Environmental Assessment Study (Scarborough - Rouge River)

(City Council on February 13, 14 and 15, 2002, adopted this Clause, without amendment.)

The Works Committee recommends the adoption of the following report (December 20, 2001) from the Commissioner of Works and Emergency Services:

Purpose:

To report on the findings and recommendations of the Finch Avenue/Morningside Avenue/ Canadian Pacific Railway (CPR) Grade Separation Class Environmental Assessment (EA) Study, and request authority to file the Environmental Study Report (ESR) in the public record in accordance with the requirements of the Municipal Class Environmental Assessment.

Financial Implications and Impact Statement:

Currently no funds are identified for this project in the 2002-2006 Transportation Services Capital Budget submission. The project has tentatively been included in the preliminary 2007-2011 Capital Works Program. This project is eligible to receive partial funding through development charges, proportioned according to the provisions of the Development Charges By-Law approved by City Council in 1999. The Acting Chief Financial Officer and Treasurer has reviewed this report and concurs with the financial impact statement.

Recommendations:

It is recommended that:

(1) authority be granted to the Commissioner of Works and Emergency Services to file the Environmental Study Report (ESR) for the Finch Avenue/Morningside Avenue/Canadian Pacific Railway Class Environmental Assessment Study with the City Clerk, and to give public notification of such filing in accordance with the requirements of the Municipal Class Environmental Assessment process; and

(2) the appropriate City officials be authorized and directed to take the necessary action to give effect thereto.

Background:

Morningside Avenue is a major north-south arterial road extending from Lake Ontario to Finch Avenue. South of Old Finch Avenue, Morningside Avenue is four lanes wide. North of Old Finch Avenue, it narrows to two lanes before crossing under the Canadian Pacific Railway (CPR) Belleville Subdivision (mainline track). North of the CPR underpass, the road curves sharply to the west changing to an east-west orientation prior to crossing another CPR track (the Cross-connection track) at grade. At this point, the road becomes Finch Avenue and widens to a four-lane urban arterial road on the approach to Neilson Road. Traffic safety and operational concerns in the vicinity of the Finch Avenue/Morningside Avenue/CPR grade separation have been identified due to the restricted width and low vertical clearance of the existing Morningside Avenue/CPR grade separation structure and the tight curvature of the roadway alignment immediately to the north of the structure (see Figure 1).

In July 1997, the former City of Scarborough initiated a Class Environmental Assessment (EA) Study to address the traffic safety and operational concerns at this location. Planning alternatives were identified and presented to the community at a public meeting in October 1997. However, in January 1998, work on the study was suspended due to the uncertainty regarding the proposed future land use north of Finch Avenue. In February 1999, the Ontario Municipal Board approved Official Plan amendments which permitted the development of a new 2500 to 2700 unit residential community in the area, and the extension of Morningside Avenue north of Finch Avenue. With the approval of the land use plan, the Class EA Study for the Finch Avenue/Morningside Avenue/CPR improvements recommenced in April 2000.

Comments:

Study Process:

The Finch Avenue/Morningside Avenue/CPR Class EA Study has been completed according to the requirements for a Schedule 'C' project under the Municipal Class Environmental Assessment (the Class EA). As a requirement of Schedule C projects, if the City of Toronto Council endorses this Study, the ESR will be filed in the public record for a minimum 30-day review period. During this period, members of the public and any other interested individual, interest group, or government agency may request that a Part II Order be issued. A Part II Order, if granted by the Minister of Environment, elevates the status of the project from a Class EA Study to an Individual 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 itself and the filing of the document in the public record constitute Phase 4 of the environmental planning process. Phase 5 is the construction and operation of the project, and monitoring of impacts, in accordance with the terms of the EA approval.

The Finch Avenue/Morningside Avenue/CPR Class Environmental Assessment Study is currently at Phase 4 of the process. Subject to approval by City Council, the ESR would be filed for the minimum 30-day public review period, prior to proceeding to detailed design and construction.

The Class EA study was carried out with the assistance of technical consultants and supported by a Technical Advisory Committee comprised of staff from the Works and Emergency Services Department and the Urban Development Services Department.

Public Consultation:

Public involvement has been an integral and ongoing part of the study process for Finch/Morningside/CPR Class EA Study. The public contact requirements of the Class EA were met and surpassed. Two Public Information Centres (PIC) were held for this study. An additional meeting was organized by the area Councillor.

The first PIC was held on October 6, 1997, to review the problem statement, the preliminary development of alternatives and the proposed factors for analysis. Approximately 40 residents attended this meeting. Approximately 5,900 notices were mailed to residences and businesses in the Study Area notifying them of the PIC. Also, newspaper notices were placed in the Scarborough Mirror on September 24, 1997, and October 1, 1997. Overall, there was common recognition of the problem being addressed and the need to make improvements in the area. Concerns were expressed by the community about potential impacts on adjacent homes and vegetation in the area. Alternatives focused only on the connection of Finch Avenue and Morningside Avenue since the land use north of Finch Avenue was still subject to review.

The evaluation of alternatives and the preliminary preferred design were presented at the second PIC, which was held on May 23, 2001, and attended by approximately 40 members of the public. Notices were delivered to 6,000 to 8,000 residences and businesses in the surrounding area. In addition, newspaper notices were placed in the Scarborough Mirror on May 16, 2001, and May 20, 2001.

An additional public meeting was held on September 18, 2001, at the request of the area Councillor, to present the same information presented at the May 23, 2001 meeting.

A full description of the public consultation program can be found in Sections 4.2 and 4.5 of the ESR.

Environmental Assessment Findings:

(1) Identification of the Problem or Opportunity:

The Study Area, illustrated in Exhibit 1.3 of the ESR, includes the Finch/Morningside corridor from Neilson Road in the west to Sewells Road in the east.

A review of existing and projected future conditions in the Study Area identified a number of concerns with respect to traffic operations, capacity and safety in the immediate vicinity of Finch Avenue/Morningside Avenue and the CPR Belleville Subdivision. Specific concerns are:

(i) the low vertical clearance (3.7 m instead of the required 4.65 m) and restricted width (6.1 m as opposed to required 11.5± m) of the existing situation;

(ii) traffic safety and operational concerns due to the sharp bend in the road immediately northwest of the grade-separation;

(iii) the geometric design of Finch Avenue is critically deficient through the study area (i.e., roadway width, cross-section and horizontal alignment);

(iv) existing traffic volumes on Morningside Avenue/Finch Avenue meet or exceed the capacity of a two-lane roadway (approximately 1000 vehicles utilize the roadway in the peak direction/period) and there is no capacity for future growth;

(v) there are no provisions for pedestrians or cyclists; and

(vi) both police and fire services have identified the need for improvements in this area to improve emergency access and response.

Planning Context:

The Study Area borders and extends into the Morningside Heights area, which has been the subject of intense land use planning review for several years. The Morningside Heights area is shown in Exhibit 1.3 of the ESR, and is generally bounded by the CPR Belleville, Havelock and Cross-connection tracks, Steeles Avenue East and the Rouge River.

The Morningside Heights Secondary Plan was approved by the Ontario Municipal Board (OMB) in February 1999. Among the approved transportation components of the Plan is an extension of Morningside Avenue northerly from Finch Avenue to serve the new development. The Plan recognizes that the exact configuration of the Finch/Morningside/CPR grade separation and intersection will be determined through the completion of the Class EA study by the City of Toronto. However, the recommended EA option must include the connection of Morningside Avenue south of the CPR Belleville line. The OMB decision and Secondary Plan also set specific conditions and procedures on any future extension of Morningside Avenue to Steeles Avenue. This issue will be subject to a separate Class EA study, and is not included within the scope of this study.

In October 2000, a further OMB hearing took place regarding the draft plans of the subdivision for the Morningside Heights community. At that time, the Board ordered transportation improvements which included, among other things, the extension of Morningside Avenue to be constructed initially to intersect with an easterly extension of McNicoll Avenue from Tapscott Avenue (see Figure 2).

(2) Identification and Evaluation of Alternative Solutions:

Three alternative solutions to the problems described above were identified and assessed:

Alternative 1 - Do Nothing:

The "Do Nothing" alternative provides a benchmark against which the other alternatives are compared. This involves the continued operation of the existing transportation system.

Alternative 2 - Close the Connection:

This alternative involves closing Morningside Avenue south of the CPR crossing and Finch Avenue west of the CPR crossing. This would result in traffic using alternate roads.

Alternative 3 - Improve the Existing Connection:

This alternative includes improving or replacing the existing Morningside/CPR grade separation, and implementing road and intersection improvements on Morningside Avenue and Finch Avenue in the immediate area of the CPR crossing.

These alternative solutions were evaluated based on:

(i) their ability to address the problem;
(ii) the impact each solution would have on the natural environment;
(iii) the impact on the socio-economic environment; and
(iv) cost.

Based on this assessment it was concluded that Alternative 3 would best address the identified problem. Alternative 3 was supported by members of the Technical Advisory Committee and the community at the first PIC held in 1997.

A detailed description of the evaluation of the alternative solutions can be found in Chapter 4 of the ESR.

(3) Identification and Evaluation of Alternative Design Concepts for the Preferred Solution:

A number of different design concept options and combination of options were reviewed for each of the specific project components. These included:

(i) Morningside Avenue alignment options;
(ii) Finch Avenue alignment options;

(iii) Morningside Avenue/CPR grade separation options;
(iv) Finch Avenue/Morningside Avenue intersection options; and
(v) Finch Avenue/CPR Cross-connection crossing options.

After a preliminary screening and analysis of these options, four alternative design concepts were selected for further analysis and more detailed evaluation. These were labelled as Options M1, M2, M3 and M4. These are illustrated in Figure 3 and also as Exhibit 4.4 in the ESR.

Each option includes the following common elements:

(a) the reconstruction, widening and realignment of Morningside Avenue to four lanes with a new bridge at the CPR Belleville Subdivision, with protection to widen to six lanes in the future if warranted;

(b) the reconstruction, widening and realignment of Finch Avenue East to four lanes to intersect with Morningside Avenue; and

(c) a new grade separated crossing of Finch Avenue East or Morningside Avenue at the CPR Cross-connection.

The specific characteristics of each option are:

Option M1:

(i) a new Morningside Avenue/CPR grade separation built in approximately the same location as the existing structure;

(ii) a new Finch Avenue/Morningside Avenue intersection located north of the CPR Belleville line and away from the existing Malvern community to the south;

(iii) a new grade separated crossing of Finch Avenue East at the CPR Cross-connection; and

(iv) a continuous alignment of Morningside Avenue across Finch Avenue (four-legged intersection).

Option M2:

(i) a new Morningside Avenue/CPR grade separation built west of the existing grade separation;

(ii) a new Finch Avenue/Morningside Avenue intersection located south of the CPR Belleville line, closer to the existing Malvern community to the south;

(iii) a grade separated crossing of Finch Avenue East and the CPR Belleville line; and

(iv) a discontinuous alignment of Morningside Avenue across Finch Avenue (continuous Morningside Avenue and Finch Avenue connection).

Option M3:

Similar to Option M1 except Morningside Avenue has a discontinuous alignment across Finch Avenue (continuous Morningside Avenue and Finch Avenue connection).

Option M4:

Similar to M2 except a new grade separated crossing of Finch Avenue East at the CPR Cross-connection.

Each alternative was analyzed and evaluated in detail utilizing the following key criteria:

(i) Transportation: this criteria considered roadway design issues, compatibility to existing and planned area road network, and staging opportunities;

(ii) Social Environment: this criteria considered the effects on the surrounding community such as noise, construction and visual impacts;

(iii) Natural Environment: this included the effects on the Morningside Tributary Ecological Corridor and Wildlife Area, and on the conifer plantation located south of the CPR, west of Morningside Avenue;

(iv) Land Use Planning: this criteria included the relationship and compatibility with Morningside Heights Secondary Plan; and

(v) Technical Considerations: this included impacts on CPR plant and operations, construction staging considerations for rail and road traffic, property requirements and construction costs.

Based on the results of the analysis and evaluation of alternatives, potential environmental impacts, and input from technical agencies, the public, property owners and interest groups, the recommended design was identified as Option M1.

The benefits of this option are:

(i) it provides acceptable traffic conditions under existing conditions;

(ii) it provides adequate north-south traffic capacity to accommodate potential future growth in travel demands in the Morningside Avenue corridor;

(iii) it minimizes impacts on the existing residential area (Malvern Community);

(iv) it minimizes impacts on the Morningside Tributary Ecological corridor and a conifer plantation south of the CPR Belleville line; and

(v) it has the lowest estimated cost.

Full details of the evaluation can be found in Section 4.5 and Table 4.5 of the ESR.

Recommended Design:

The Recommended Design, illustrated in Figure 3 and Exhibit 1.1 of the ESR, includes the following features:

(i) a new Morningside Avenue/CPR grade separation built in approximately the same location as the existing structure;

(ii) the new Finch Avenue/Morningside Avenue intersection located north of the CPR Belleville line and away from the existing Malvern community to the south;

(iii) a new grade separated crossing of Finch Avenue East at the CPR Cross-connection;

(iv) a 36 metre right-of-way of Morningside Avenue across Finch Avenue comprised of:

- two lanes per direction;
- dual northbound left-turn lanes at Finch Avenue;
- one bicycle lane per direction;
- a centre median which provides for left-turn lanes at intersections and landscaping opportunities mid-block; and
- a boulevard on either side to provide sidewalks and landscaping; and

(v) a widened and realigned Finch Avenue, east of Blackbird Gate, consisting of:

- two lanes in each direction; and
- dual eastbound right-turn lanes at Morningside Avenue.

The estimated cost of the Recommended Design is $12.85 million. A detailed description of the Recommended Design and each of its components can be found in Section 5.1 of the ESR. Detailed plans are also provided in Section 5.1 of the ESR.
Resolution of Public Concerns:

Throughout the public consultation process a wide variety of comments were received from the general public and adjacent property owners which assisted in the development and evaluation of the alternatives. Two primary concerns identified during the May 23, 2001 PIC, and the resolution of these concerns, are summarized below:

(i) Ability to Accommodate Existing Traffic Flows between Finch Avenue and Morningside Avenue - Although future traffic flows are projected to be predominately north-south on Morningside Avenue, area residents raised concerns regarding the ability of the intersection to serve the existing flows between Finch Avenue and Morningside Avenue, specifically the capacity of the turn movements at the intersection. This concern was addressed by introducing double northbound left-turn lanes on Morningside Avenue and double right-turn lanes on eastbound Finch Avenue to accommodate existing traffic flows.

(ii) Impacts on the Morningside Heights Draft Plans of Subdivision – Concerns were raised during the study by representatives of the Morningside Heights Landowners Group regarding the impacts of the recommended design on their proposed subdivision plan. In response, additional more detailed investigations were undertaken to assess existing physical subsurface conditions at the existing Morningside/CPR structure. Further geotechnical field work, structure design, and discussions with CPR staff allowed the preliminary recommended EA plan to be refined, thereby minimizing impacts on the Morningside Heights proposed subdivision plan.

Next Steps:

Pending 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 as soon as funding is available. This project has tentatively been included in the preliminary 2007-2011 Transportation Services Division's Capital Works Program.

Conclusions:

A Class EA Study was undertaken to identify and evaluate alternative solutions for the traffic safety and operational concerns in the vicinity of the Finch Avenue/Morningside Avenue/CPR grade separation. These concerns are primarily due to the restricted width and low vertical clearance of the existing Morningside Avenue/CPR structure and the tight curvature of the roadway alignment immediately to the north of the structure.

Four alternative design concepts were developed and evaluated on their ability to solve the transportation problem and their environmental impacts. The recommended alternative, Option M1, includes the following improvements:

(i) a new Morningside Avenue/CPR grade separation built in approximately the same location as the existing structure, to accommodate four lanes of traffic with protection to allow six lanes if warranted in the future;

(ii) a new Finch Avenue/Morningside Avenue intersection located north of the CPR Belleville line (removed from the existing Malvern community to the south):

- two lanes in each direction on Morningside Avenue north of Old Finch Avenue, plus dual northbound left-turn lanes at Finch Avenue; and
- two lanes in each direction on Finch Avenue between Neilson Road and Morningside Avenue, plus dual eastbound right-turn lanes at Morningside Avenue;

(iii) a new grade separated crossing of Finch Avenue East at the CPR Cross-connection; and

(iv) a continuous alignment of Morningside Avenue across Finch Avenue (four-legged intersection).

A Notice of Completion and filing of this Environmental Study Report must now be issued on the public record in accordance with the requirements of the Class Environmental Assessment for Municipal Road Projects.

Contact

John P. Kelly, P.Eng.
Manager, Infrastructure Planning
Transportation Services Division
Telephone: (416) 392-8340
Fax: (416) 392-4426
e-mail: jkelly@city.toronto.on.ca

List of Attachments:

Figure 1:	Existing Conditions
Figure 2:	Key Plan – Morningside Heights Road Improvements
Figure 3:	Design Alternatives
Attachment 1:	Finch Avenue/Morningside Avenue/CPR Grade Separation and Related Road Improvements Class EA Study, Environmental Study Report

---

The Works Committee reports, for the information of Council, having had before it during consideration of the foregoing matter a communication (January 11, 2002) from Mrs. Cathy A. Swanton and Mr. William J. Swanton, commenting on the Finch Avenue/Morningside Avenue/Canadian Pacific Railway (CPR) Grade Separation Class Environmental Assessment Study.

(A copy of Figures 1, 2 and 3 attached to the foregoing report was forwarded to all Members of Council with the agenda for the Works Committee meeting of January 15, 22 and 25, 2002, and a copy thereof is on file in the office of the City Clerk, City Hall. A copy of the Environmental Study Report was provided to all Members of the Works Committee and the Ward Councillors, and is also on file in the office of the City Clerk, City Hall.)