REGION OF OTTAWA-CARLETON RÉGION D'OTTAWA-CARLETON

REPORT RAPPORT

Our File/N/Réf. 48-95-0011

DATE 8 November 1999

TO/DEST. Co-ordinator

Transportation Committee

FROM/EXP. Planning and Development Approvals Commissioner

SUBJECT/OBJET FALLOWFIELD TRANSIT TERMINAL AND PARK AND RIDE

LOT - FUNCTIONAL DESIGN

DEPARTMENTAL RECOMMENDATION

That the Transportation Committee recommend that Council:

- 1. Approve the functional design of the Fallowfield Transit Terminal and Park and Ride lot.
- 2. Authorize the Environment and Transportation Department to undertake the detailed design of Phase 1 of the Fallowfield Transit Terminal and Park and Ride lot.

BACKGROUND

The Fallowfield Transit Terminal and Park and Ride lot is an integral component of the Southwest Transitway Extension Project (Baseline Station to Strandherd Drive). On 27 March 1996, Council approved the recommendations of the Southwest Transitway Extension Environmental Assessment (EA) Study and authorized staff to prepare and submit the EA report to the Ontario Ministry of the Environment (MOE) for approval. The EA report was submitted on 13 December 1997.

The Ministry review was completed in February 1999 following a 60-day public consultation period. No outstanding significant environmental issues were identified and on 24 February 1999, the MOE review was released for another 30-day public consultation period. The EA was approved by the Province on 6 October 1999.

As the extension of the Southwest Transitway will impact federally owned property, the EA was also submitted to the Ministry of Agriculture and Agrifood Canada (AAFC) for approval under the Canadian Environmental Assessment Act. AAFC, the Federal Regulatory Agency responsible for this project, approved the Fallowfield Park and Ride lot component of the Southwest Transitway Extension EA on 8 July 1999. This approval requires the Region to meet any conditions which may be imposed by the National Capital Commission (NCC).

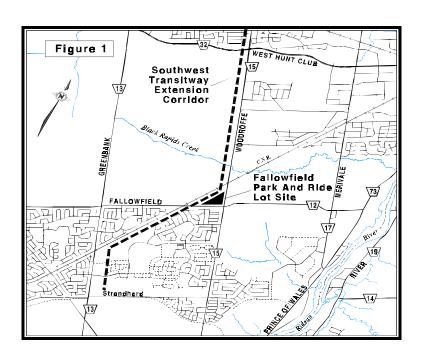
Noting that there is an immediate need to provide a "focus" for transit operations in the South Nepean Urban Community, the EA Study recommended that the Fallowfield Park and Ride lot be constructed as the first stage in the implementation of the Southwest Transitway Extension. The Regional Official Plan reflects this recommendation by identifying the Fallowfield Park and Ride lot as a "First Priority Project", to be implemented by 2001 with other sections of the Southwest Transitway identified for implementation by 2006.

On 1 December 1998, Corporate Services and Economic Development Committee approved the appointment of McCormick Rankin Engineering Consultants to undertake the functional design of the Fallowfield Park and Ride lot. The design which is documented in the consultant's report titled *Fallowfield Park and Ride Lot Functional Design*, dated 23 July 1999, and subsequent Addendum report dated November 1999, has been completed. (The consultant's reports are available in the Regional Clerks Department).

On 23 May 1999, Council approved the purchase of the Fallowfield Park and Ride lot site from AAFC.

DISCUSSION

Location



The 17.25 hectare Fallowfield Park and Ride site is located in the northwest quadrant of the Woodroffe Avenue/Fallowfield Road intersection (Figure 1). The site is part of the Greenbelt and includes a portion of the future Southwest Transitway corridor. The area is designated as "Greenbelt Institutional" in the Regional Official Plan and is identified as "Infrastructure Corridor, Park and Ride" in the NCC Greenbelt Master Plan. City of Nepean zoning permits a Park and Ride facility on the site.

The Southwest Transitway Extension EA Study examined four potential Park and Ride lot locations within South Nepean and concluded that the Fallowfield site is the preferred location.

Transit Operations

Current transit service to the South Nepean area consists of three all-day regular routes and six peak period routes, four of which provide express service to the downtown core area. During the peak hours, approximately 30 buses per hour travel in the peak direction along the Woodroffe corridor, past the Park and Ride site. Currently there is no major transit terminal or transfer point within the South Nepean area. The nearest transfer point is Baseline station, which is approximately 5.6 km north of Fallowfield Road.

In addition to reducing automobile travel demand through the Greenbelt, the principal benefits of the Park and Ride lot are derived through the associated transit terminal. Establishing a terminal within South Nepean will increase the efficiency of the transit service by enabling local bus routes to be concentrated within the community. The terminal will also provide the opportunity to extend (from Baseline Station) a high frequency, all day, "Transitway" service to the area. These changes will promote transit ridership and will reduce OC Transpo's annual operating costs.

To provide the frequency of service necessary to attract new transit riders, the existing peak hour express bus service will also pass though the Park and Ride lot. The integration of any new bus routes in South Nepean will also be examined as transit service is extended to serve newly developed areas.

Currently, approximately 40% of the Baseline Station Park and Ride lot users originate in the South Nepean area. The improvements to transit service in South Nepean brought about by the Fallowfield Terminal and Park and Ride facility, is anticipated to "free-up" capacity at the Baseline Station lot for other new transit riders. The Baseline Station Park and Ride lot is now operating at full capacity.

Design Considerations

The Fallowfield Park and Ride lot will evolve over the horizon of the Official Plan due to the future implementation of the Southwest Transitway. The objective of the current design exercise was to prepare the functional design for the facility, as it will operate over the next decade prior to construction of the Transitway. While undertaking this assignment, one of the fundamental design parameters was to ensure that the design of the Park and Ride lot is compatible with the future Southwest Transitway and the Transitway Station.

Several design considerations were identified during the EA Study and were used at that time to develop a preliminary concept plan of the facility. Subsequent to the EA Study, a second concept plan was developed to explore opportunities to increase the number of parking spaces and to maximize the area of land within the site to accommodate potential future development.

A Technical Advisory Committee (TAC), consisting of staff from the Region, OC Transpo, City of Nepean, NCC, Rideau Valley Conservation Authority and AAFC Canada provided input throughout the design exercise which, together with comments received from the public, were used to refine the concept plans into the recommended design.

Recommended Design

Figure A1 (Annex A), illustrates the recommended functional design and site development concept for the facility as it will evolve over the next decade. The highlights of this design are:

Parking Areas

A total of 725 car parking spaces are provided in two areas of the lot. The westerly parking area accommodates 277 vehicles while the easterly parking lot accommodates 448 vehicles. The parking areas, as well as the internal roadway system, will be provided with the appropriate level of illumination for security and safety with minimal light trespass to the immediate surroundings.

• Parking stalls to accommodate taxis and disabled persons are located in close proximity to the transit platforms. A Kiss and Ride area is also located near the platforms. Bicycle parking facilities will be located adjacent to the transit platforms.

• Transit Facilities

Transit platforms with shelters, located on either side of a "centre spine" bus-only roadway will accommodate all transit passenger loading and unloading.

A transit lay-by area is provided along a bus-only roadway located parallel to the rail line. A drivers' washroom is located adjacent to the lay-by area. The washroom structure also contains the site electrical room and a small storage room.

Access Roads

Two access roads connect the adjacent arterial roads to the Park and Ride facility. Based on traffic projections, the Fallowfield access road is anticipated to be the most used. This access will connect to a new signalized intersection located opposite the proposed driveway to the future retail development plaza (currently partially developed with a Tim Hortons) on the south side of Fallowfield Road. To accommodate access to the lot, a westbound right turn lane and an eastbound left turn lane will be provided at the intersection. A future westbound left turn lane can be accommodated to provide access to the retail development.

A two-lane road provides access to/from Woodroffe Avenue. A new signalized intersection will be provided on Woodroffe Avenue to ensure priority for buses exiting the lot, in particular those heading northbound on Woodroffe Avenue in the morning peak period. A northbound left turn lane will be provided on Woodroffe Avenue to accommodate vehicle access to the site. To reduce interference with the southbound traffic and queues (which frequently extend over the rail tracks) in the p.m. peak hour, a right turn lane with channelization will be provided to enable park and ride users to exit the site. This lane will be extended to connect with the southbound right turn lane at the Woodroffe/Fallowfield intersection, thereby improving vehicle storage at this intersection. This configuration and the integration with the proposed cycling facilities will be reviewed during detailed design.

Pedestrian and Cycling Facilities

The majority of pedestrian and cycling trips to the site will be from the community immediately to the south. A paved multi-use pathway presently exists along the south side of Fallowfield Road and is connected to the community by pathways leading to Montana Way and Woodgate Way. A future City of Nepean pathway, which will parallel the Transitway through the Longfields community, will also connect to the existing Fallowfield Road pathway. The Fallowfield and Woodgate Way pathways connect directly to the proposed signalized intersection at the Park and Ride access road. Within the site, a sidewalk on both sides of the Fallowfield access road lead from the signalized intersection to a pathway system which connects the transit platforms and the parking areas. The existing shoulder bike lanes along Fallowfield will be retained.

Modifications to Woodroffe Avenue, required to accommodate the Park and Ride access road, will include bike lanes. Bike lanes on the remainder of Woodroffe Avenue will be provided in conjunction with the future widening of the roadway. The roadways internal to the Park and Ride lot are similar to local roads and will provide adequate routing for cyclists.

• Integration with Rail Services

The Park and Ride lot is located adjacent to the VIA (previously CN) Smith Falls Rail Subdivision which is part of the main VIA Rail route to Toronto. The Southwest Transitway EA Study identified the potential for establishing a "satellite" VIA Rail station at this location and the Park and Ride lot has been designed so as not to preclude a future interconnection between the site and a rail platform/station. A multimodal terminal at this location would provide a very convenient service for residents in the southwest sector of the Region and could increase VIA's market share of interregional travel.

A rail terminal at this location could also accommodate Rail Rapid Transit service, should it be provided in this corridor at some point in the future.

Drainage

Perimeter ditches and subdrains in the parking areas convey stormwater into a vegetated ditch running east-west along the south side of the site. Stormwater is conveyed through this ditch to an extended detention wet pond which in turn outlets to Black Rapids Creek, a tributary of the Rideau River. This integrated stormwater management system is required to meet the water quality criteria for discharging stormwater into the Rideau River. If required, the retention pond can be expanded in the future to accommodate stormwater runoff from the future reconstruction (widening and railway grade separation) of Woodroffe Avenue and Fallowfield Road.

Landscaping

Based on input received during the EA process, and subsequent discussions with the NCC and other TAC members, a series of underlying landscape design parameters were formulated. The resulting landscape plan includes a mix of open meadow, woodlot, wetland and roadside elements designed to respect and adhere to the existing character of the Greenbelt in a manner such that the Park and Ride lot will not be the dominant feature within the viewshed.

The proposed woodlot, located in the southwest area of the site, will have adequate depth to provide the image of a dense woodlot from the nearby homes, while being sufficiently porous to allow sight lines to and from the adjacent roadways. The medians within the parking lot have been widened to accommodate bands of tree planting which will visually draw the woodlot into the site. Hedgerows link the parking areas and Woodroffe Avenue, and will act as a backdrop to any future development. Open meadows unify the various landscape elements within the site and create the connection with the adjacent lands.

• Integration with the Southwest Transitway

The functional design of the Park and Ride lot is compatible with the future Southwest Transitway to the extent that only minor modifications will be required to integrate the facility with the future long-term Transitway and Transitway Station. These modifications, which will be included as part of the future Southwest Transitway project, include changes to the bus lay-by area (it becomes part of the future station) and the relocation of the transit shelters and the bicycle parking from the interim local platforms to the Transitway Station area.

Figure A3 (Annex A) illustrates the conceptual design for the Park and Ride lot as it will be integrated with the Southwest Transitway. The future Transitway Station configuration is proposed to be a centre platform with clockwise bus movements around the station. This design will permit the integration of the local and Transitway services and will also reduce the pedestrian crossing from four lanes to two lanes, thereby accommodating an at-grade pedestrian crossing of the Transitway. Both a pedestrian overpass and underpass were considered; however, the TAC concluded that these alternatives were unacceptable, primarily due to concerns of security and visual impact. The station platform can accommodate four shelters as well as a retail kiosk and a small station services building which could be used for general storage, electrical/communications equipment and/or serve as a security/inspection centre.

When the Fallowfield Road/rail crossing/Southwest Transitway grade-separation is constructed, the future recreational pathway which will parallel the Transitway corridor through the Longfields community will be extended over Fallowfield Road, and directly into the Park and Ride lot. The pathway system internal to the Park and Ride site will also be expanded to provide a connection to the future NCC Greenbelt Spine Trail which is planned to extend along the Black Rapid Creek corridor.

According to the TMP, the section of the Southwest Transitway along the rail corridor, adjacent to the Park and Ride lot, will not be required until after 2006.

Construction Phasing

The design of the Park and Ride lot allows construction to be phased over a number of years to correlate with capital expenditure plans and demand for the facility. The initial phase of the facility, scheduled for construction in the year 2000, will focus on the establishment of the transit terminal. The initial phase is illustrated in Figure A2, (Annex A).

Three transit platforms with shelters will be provided as part of the initial phase. A turning circle, required for the internal circulation of buses and a bus lay-up area will be provided near the north end of the central roadway. A temporary OC Transpo driver's washroom facility will be installed near the lay-by area. Both the Fallowfield Road and Woodroffe Avenue access roadways will be constructed; however, the latter will operate as a bus-only access until the Park and Ride lot is expanded at a later date.

Approximately 75 Park and Ride spaces and a Kiss and Ride area will be provided as part of the initial phase. Bicycle parking racks and sidewalks leading from the terminal area to Fallowfield Road will also be provided. The initial phase of the landscape plan will be installed in the spring of 2001 and will focus on the area between the Park and Ride facility and Fallowfield Road in order to address concerns expressed by nearby residents. Stormwater will be accommodated through a linear ditch system as the stormwater management pond will not be required at the initial phase.

A comprehensive phasing strategy for the expansion of the facility beyond the initial phase will be examined as part of the detailed design exercise. This strategy will be used to establish a capital spending plan which will be reflected in future Regional budgets.

Project Budget

The functional design included the development of a project Baseline Budget. A Work Breakdown Structure (WBS) was used to scope and cost the elements of the project. The WBS technique is a powerful project management and monitoring tool that has been successfully applied to previous Transitway projects.

The preliminary Baseline Budget for the detailed design, construction, construction supervision, and project management of the entire 750 stall Park and Ride lot/Transit Terminal facility (Figure A1, Annex A) is \$7,350,000. This figure excludes the cost of property and the functional design which have already been encumbered.

The cost to implement the initial phase of the facility as discussed in the above section, is estimated to be \$3,100,000 (Figure A2, Annex A).

The Baseline Budget includes design elements that are unique to this facility. The location of the site within the Greenbelt requires that a comprehensive landscape plan be included in order to obtain the required design approval from the NCC. A comprehensive stormwater management system is also needed to treat and discharge runoff into the Rideau River and, due to the flat topography of the site, additional grading is required to facilitate drainage. As the facility will be a major Transit Terminal with a bus lay-by facility, sanitary services must also be brought in to accommodate a driver's washroom.

In order to develop the most cost-effective design and budget possible, all elements of the functional design will be re-examined at the detailed design phase of this project.

CONSULTATION

The Fallowfield Park and Ride lot is an integral component of the Southwest Transitway Extension, which was the subject of a Provincial Environmental Assessment Study initiated by the Region in 1993. An extensive public consultation process, which included four Public Information Centres, was undertaken as part of this EA Study. The public was informed of these meetings by means of newspaper advertisements, direct mailing, or by way of brochures and flyers distributed throughout the study area. The Fallowfield Park and Ride lot was presented and/or discussed at each of the Information Centres, with the exception of the first meeting, which focused on the broader issue of the potential Transitway corridors. The Park and Ride lot was also discussed and reviewed by the Study's Public Advisory Committee which consisted of representatives of 13 community organizations and special interest groups, including the Barrhaven and the Longfields/Davidson Heights Community Organizations.

Two Public Information Centres (PICs) were held as part of the Fallowfield Park and Ride Functional Design Project. The public was informed of these meetings by means of newspaper advertisements and by direct mailing to specific organizations and individuals identified as possibly having an interest in the project. At the first PIC, on 12 January 1999, the design alternatives and potential construction phasing options were presented to the public for comment. The second PIC was held on 16 February 1999, and provided the public with the opportunity to comment on the revised functional design. The second PIC also included a short presentation followed by a question and answer period.

During the course of the project, a group of residents (the Woodgate Way Residents Group) residing on a street located to the south of the site adjacent to Fallowfield Road, advised staff that they were "strictly opposed to the construction of this facility" and identified several concerns regarding the project. Staff and the consultant met with this group on 4 February 1999, in an attempt to address their concerns. Representatives of the group also attended both PIC meetings.

The key issues raised by the Woodgate Way Residents Group are: traffic congestion, air quality, noise and visual impact. These issues and others are summarised in the "Question and Answer" document attached as Annex B. This document was prepared for a meeting of the Longfields/Davidson Heights Community Association, primarily to address the concerns of the Woodgate Way Residents Group.

RCAG COMMENTS

The functional design drawings presented at the second PIC were circulated to RCAG for comment. RCAG's comments are summarized in the following:

1. Comment: Retain the existing bike lanes on Fallowfield Road.

Response: The existing facilities will be retained.

2. <u>Comment</u>: The intersection design for the Woodroffe/Fallowfield intersection is "unfriendly" for cyclists.

<u>Response</u>: The design of the Woodroffe/Fallowfield intersection is beyond the scope of the Park and Ride Project. However, given the intersection's proximity to the site, a conceptual layout of the intersection was shown on the drawings for completeness only. This concept was taken from the 1997 Fallowfield Road - Cedarview to Woodroffe EA Study.

3. <u>Comment</u>: The Region should implement a bike locker pilot project at the Fallowfield Park and Ride lot.

<u>Response</u>: The design identifies a bicycle parking area adjacent to the westerly transit platform which does not preclude the installation of bike lockers. Staff recommend that bike racks be installed during the initial phase. As the Park and Ride facility is expanded, the number and type (bike racks, sheltered bike racks, or bike lockers) of bike parking facilities will be reevaluated in consultation with RCAG and OC Transpo.

A bike locker pilot project would need to examine the costs and benefits associated with the various locker designs as well as maintenance, security and accessibility (i.e. rented to specific individuals or first come, first served) issues. Further, the location of a potential pilot project should be carefully selected and not necessarily be limited to the Fallowfield Park and Ride lot.

A copy of this report has been forwarded to RCAG. Any additional comment received from RCAG will be made available at the Committee and Council meeting.

COMPATIBILITY WITH REGIONAL OFFICIAL PLAN AND TMP

One of the fundamental principles of the Transportation Master Plan (TMP) and Official Plan is to provide an integrated transportation system and programs that promote an increase in walking, cycling and the use of public transit and to minimize reliance on the private automobile. The Fallowfield Park and Ride lot is consistent with this objective as it will promote the use of public transit while serving as a focal point for transit services in the South Nepean area.

Specifically, the TMP (page 36) states that "to achieve the transit modal share objective from the Nepean South Urban Centre, it will be necessary to extend the Southwest Transitway from its existing terminus at Baseline Station to the heart of this community". The Fallowfield Park and Ride lot is an integral component of the Southwest Transitway and is identified in the EA as the logical first stage in implementing the Transitway Extension. The TMP states that Council shall implement Park and Ride lots along the Southwest Transitway corridor in the vicinity of Fallowfield Road, and in the vicinity of Strandherd Drive (Policy 3, page 43).

Based on the TMP, the Regional Official Plan (Table 6, page 23) identifies the Fallowfield Park and Ride lot as a "first priority" transportation infrastructure project which is required to be implemented before 2001.

FINANCIAL IMPLICATIONS

Funding for the Fallowfield Park and Ride lot is made available through The Transitway Program budget (900270 Park and Ride Facilities).

There are funds currently available in this year's budget to complete the detailed design for the initial phase of the Park and Ride lot and a portion of the construction cost for the initial phase.

\$1,000,000 of new capital authority will be required in the 2000 capital budget in order to complete the construction of the initial phase (\$3,100,000, illustrated on Figure A2, Annex A) of the facility in the year 2000. This requirement will be reflected in the draft capital budget, to be considered by Council early next year. Adjustments have been made so that the proposed increase in authority in this account does <u>not</u> result in an increase in the 10 year capital budget net authority for ETD Transit Programs.

In order to develop the most cost-effective design and budget possible, all elements of the functional design will be re-examined as part of the future detailed design phases of this project.

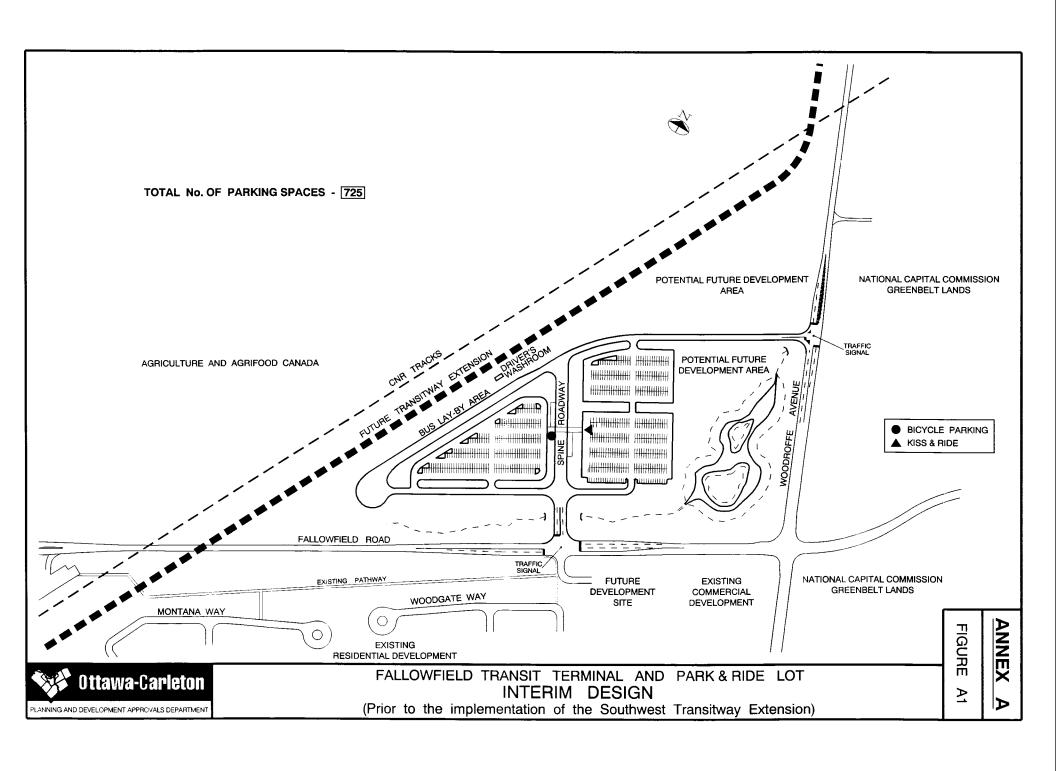
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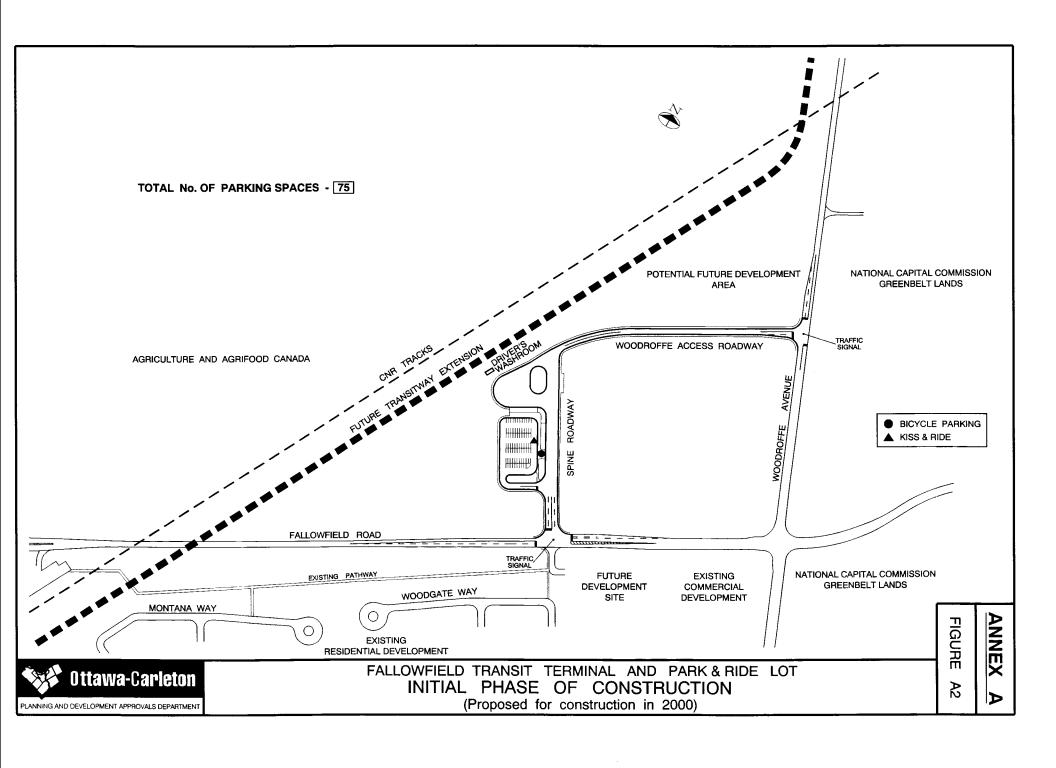
Subject to the approval of this report's recommendations, the detail design for the initial phase of construction will be initiated. Further reports will be presented to Council prior to the expenditure of funds. (i.e. appointment of design consultant, award of construction contracts).

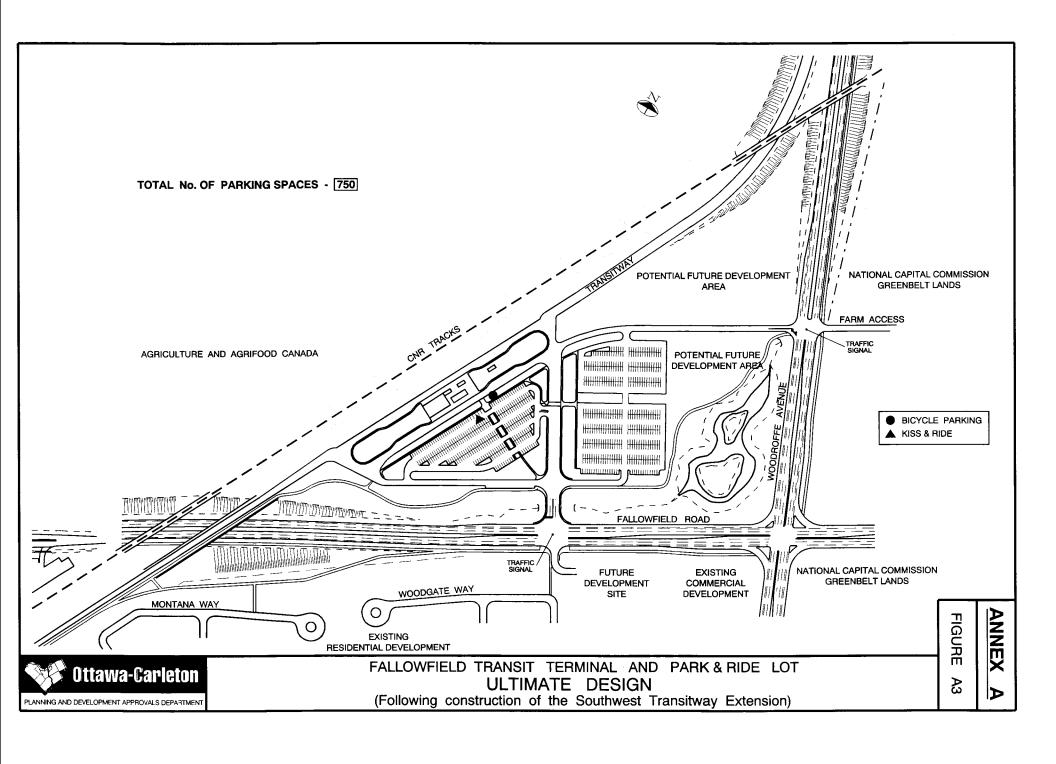
Subject to Council approval of the draft 2000 Capital Budget, construction of the initial phase could begin in the Spring of 2000, with the facility operational by the end of that year.

Approved by Nick Tunnacliffe, MCIP, RPP

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Fallowfield Park and Ride Lot - Questions and Answers

The following is a series of questions/comments and answers regarding the proposed Fallowfield Park and Ride lot. The questions have been compiled from comments and questions raised at the 12 January 1999, and the 16 February 1999 Public Information Centres, as well as from correspondence received by the Region of Ottawa-Carleton. The questions have been grouped, as best as possible, by subject for ease of reference.

General

1. We were not informed about the Region's intentions to construct a Park and Ride facility at this location. When and how was the public advised about the Fallowfield Park and Ride lot?

The Fallowfield Park and Ride lot is an integral component of the Southwest Transitway. Between 1993 and 1996 the Region conducted an Environmental Assessment (EA) Study of the Southwest Transitway Extension from Baseline Station to Strandherd Drive. During the course of this study, four Public Information Centres were held. The public was informed of these meetings by means of newspaper advertisements, direct mailing, or by way of brochures and flyers distributed throughout the study area. The Fallowfield Park and Ride lot was presented and/or discussed at each of the Information Centres, with the exception of the first meeting, which focused on the broader issue of the potential Transitway corridors. The Park and Ride lot was also discussed and reviewed by the project's Public Advisory Committee. This Committee consisted of representatives of 13 community organizations and special interest groups, including the Barrhaven Community Organization and the Longfields Community Organization.

The Fallowfield Park and Ride lot is identified in the Regional Official Plan (adopted by Council in July 1997) as a "first priority" transportation infrastructure project which is required to be implemented before 2001. An extensive public consultation process was undertaken during the development of the Region's Official Plan.

Further, the 1996 National Capital Commission Greenbelt Master Plan specifically identifies the Fallowfield Park and Ride lot and the infrastructure corridor along Woodroffe Avenue needed to accommodate the Southwest Transitway.

2. How and when will the Southwest Transitway be implemented?

The Southwest Transitway is to be built in stages over the period of the Region's Official Plan (1997-2021). Subject to the availability of funds, the implementation of the Southwest Transitway, as outlined in the Southwest Transitway EA, will most likely be staged as follows:

Stage 1 - Within the period 1997-2001

- Construct the Fallowfield Park and Ride lot
- Construct bus lanes on Woodroffe Avenue from Norice Street to Knoxdale Road

Stage 2 - Within the period 2002-2006

- Extend the Southwest Transitway from Baseline Station to Norice Street
- Construct bus lanes on Woodroffe Avenue from Knoxdale Road to West Hunt Club Road
- Construct bus lanes on Woodroffe Avenue from Slack Road to Fallowfield Road
- Construct the Transitway from the Fallowfield Park and Ride lot to the Activity Centre

Stage 3- Within the period 2007-2021

• Extend the Transitway from Norice Street to the Fallowfield Park and Ride lot

The extension of the Transitway south of Berrigan Drive will depend on the rate of development within the South Nepean Activity Centre and the availability of funding. Also, the Region is examining the implementation of transit priority measures along Woodroffe Avenue to proceed the implementation of "full" bus lanes.

3. Will the Park and Ride Facility or the Southwest Transitway be near any major shopping malls in the future?

The Southwest Transitway will be extended directly into the South Nepean Activity Centre which will include a mix of land uses including a significant retail component.

The Fallowfield Park and Ride lot is located within the Greenbelt. Existing NCC, Regional and City policies stipulate the type of development which can occur on these lands. Although general commercial and retail uses do not conform to these policies, we can provide a small convenience kiosk (similar to the one at the Baseline Transitway Station) within the lot. Although the potential for a convenience kiosk has been accommodated in the design, there are no plans to provide one at this time. The Park and Ride lot will include sidewalks which will accommodate access to the Gates of Longfield retail plaza (the Tim Hortons site) on the south side of Fallowfield Road.

4. The Region's Transportation Master Plan identifies a Park and Ride facility to be located South of Strandherd Drive in the area of the South Nepean Activity Centre. Why does the Region not implement this facility as opposed to the Fallowfield facility?

Four potential Park and Ride sites were evaluated as part of the Southwest Transitway EA Study. The sites were evaluated against a number of factors including the potential frequency of bus service, their location in relation to commuting corridors, ease of access from nearby villages and compatibility with intercity rail. The analysis concluded that the Fallowfield at Woodroffe site is the most desirable.

In addition to the Fallowfield lot, the Region's 1996 Transportation Master Plan reflects the need to provide a second Park and Ride facility within South Nepean by 2021. Although a

specific location has not been identified, it would be interconnected with the future extension of the Transitway as it passes through the South Nepean Activity Centre. This second Park and Ride facility has been included in the Region's plans in order to accommodate the future growth in South Nepean; projected to reach a population of 79,000 persons by 2021 (a 260% increase above the 1995 population of 29,500). Until such time as development in the South Nepean Activity Centre is established and Transitway services are extended to this area, a Park and Ride lot located south of Strandherd Drive would not intercept a significant number of automobile commuters. A key feature of the Fallowfield site is that the location will enable OC Transpo to utilize existing local and express bus routes to provide the frequent transit service necessary to make a Park and Ride successful.

5. Has any consideration been given to connections between the facility and other forms of transportation – light rail for example?

The Region is presently studying the feasibility of implementing a light rail pilot project on the existing rail line between the Bayview/Scott Street area and South Keys Community in the year 2000. Several other rail corridors, including the rail line (CN Smiths Falls Subdivision) which runs through South Nepean, were also considered for this pilot project.

The CN Smiths Falls Subdivision is part of the main VIA Rail route to Toronto. The Region is currently exploring opportunities to establish a VIA Rail station at the Park and Ride lot. The design of the lot will accommodate this interconnection.

The existing shoulder bike lanes on Fallowfield Road and the future on-road cycling facilities along Woodroffe Avenue will facilitate access to the site by commuter cyclists.

The majority of pedestrians trips to the site will originate from the residential area immediately to the south of Fallowfield Road. To accommodate these trips, the walkway system within the Park and Ride lot will be connected to the existing recreational path on the south side of Fallowfield Road as well as to the existing pathway which extends from Woodgate Way to Fallowfield Road.

A proposed City of Nepean recreational path along the Transitway corridor, south of Fallowfield Road, will also facilitate access to the lot by cyclists and pedestrians.

6. Was there a survey done for OC Transpo users to determine what the people in the community want and what services are needed?

OC Transpo receives regular feedback from transit users and residents. Many requests to provide better service to South Nepean have been received by OC Transpo and the Regional Councillor. Similar comments were also expressed at the two Fallowfield Park and Ride Public Information Centres.

The implementation of the Fallowfield Park and Ride lot will help OC Transpo improve transit service to South Nepean. One of the key features of the lot is the associated transit terminal which OC Transpo will use as a "focal point" for South Nepean transit service. The

nearest transfer point is Baseline station, which is approximately 5.4 km to the north of Fallowfield Road.

Establishing a transit terminal closer to the community will greatly increase the efficiency of the service by enabling local bus routes to be concentrated within the community and providing the opportunity to introduce the high frequency all day Transitway Route 95 service to the area.

7. Is a Park and Ride lot an appropriate use for Greenbelt land?

The location of the Park and Ride lot is supported by the policies contained in the 1996 National Capital Commission Greenbelt Master Plan. The Region's Eva James Park and Ride lot, located in Kanata at the intersection of Highway 417 and Eagleson Road, is also located within the Greenbelt.

8. Why are you building the Park and Ride facility as it does not currently enjoy the support of the neighbourhood or the City of Nepean?

The Fallowfield Park and Ride lot is an integral component of the Southwest Transitway. The City of Nepean was represented on the Southwest Transitway EA Technical Advisory Committee (TAC) and is currently represented on the Park and Ride lot functional design TAC. The City of Nepean has been, and to our knowledge, remains in full support of this project.

With regard to the community, we are addressing where feasible, specific concerns expressed by a group of residents that live on a street adjacent to Fallowfield Road. We do not have any evidence that the community as a whole is not in support of this facility. No significant concerns regarding the Park and Ride facility were raised by the public during the extensive consultation process undertaken during the Southwest Transitway EA Study. Comments expressed by the public at the first Park and Ride Open House support the need for this facility and the associated increase in transit service.

9. Constructing the Park and Ride lot is a misallocation of resources.

The Region's Official Plan includes the policies and objectives which are intended to implement the goals of Council. Regional Council determines the allocation of resources through the budgeting process. With regard to transportation services, it is Council's objective to provide an integrated transportation system and programs that promote an increase in walking, cycling and the use of public transit and to minimize reliance on the private automobile. The Fallowfield Park and Ride lot is consistent with this objective as it will promote the use of public transit while serving as a focal point for transit services in the South Nepean area. Furthermore, the Region's Official Plan identifies this specific facility as a key infrastructure project to be implemented prior to 2001.

10. The Park and Ride lot does not provide currently needed or future benefits to the community.

The community of South Nepean has been planned with consideration to all modes of travel, consistent with our Council's objective of providing an integrated transportation system which promotes an increase in walking, cycling and the use of public transit and minimizes reliance on the private automobile.

The Fallowfield Park and Ride lot is only one element of the public transit system designed to serve the future needs of the rapidly growing community of South Nepean. In turn, the public transit network is one component of the overall transportation infrastructure requirements of the community. Over the time horizon of our Official Plan, and in a manner consistent with the growth of the community, walking, cycling and road infrastructure will also be required in South Nepean and is included in our current plans. Fundamental to this integrated approach, is the premise that all of the required system elements must be implemented in order for the community to develop as planned.

Traffic and Bus Service

11. There is presently a lot of traffic congestion in the area of the Fallowfield/Woodroffe intersection. Won't the Park and Ride lot exacerbate this existing problem?

The Park and Ride lot will not lead to increased traffic congestion in South Nepean. A traffic analysis conducted as part of the Functional Design Project concluded that the Park and Ride lot is not a significant generator of new traffic and that 70% of the vehicles which will access the facility are currently on the adjacent roads. Although there may be a slight increase, or decrease, in certain traffic movements in the area of the site, the major impact of the Park and Ride lot will be a significant reduction in the number of automobile trips through the Greenbelt and a corresponding increase in transit trips. Peak hour traffic at the nearby Woodroffe/Fallowfield intersection will, in fact decrease (albeit not significantly) with the implementation of the Park and Ride lot.

Woodroffe Avenue is currently congested during both the morning and afternoon peak periods. In particular, the Woodroffe/Fallowfield intersection is operating at Level of Service E' during both peak hours and is often operating at failure during portions of the peak hours. In the p.m. peak, southbound traffic queues of up to 700m are not uncommon and create a potential safety problem at the at-grade rail crossing located approximately 530m to the north of the intersection. Although flashing lights and gates are provided at the rail crossing, Transport Canada staff have expressed concern regarding current traffic conditions in the area of the crossing. Regional staff are investigating potential measures to address these concerns; however, no acceptable solution has been identified to date. This issue will continue to be examined during the detailed design phase of the Fallowfield Park and Ride Project. If however, current conditions continue to prevail, the design and/or operation of the proposed access road leading from the Park and Ride lot to Woodroffe Avenue may need to be modified so as not to exacerbate the existing situation.

Regardless of the current safety issue created by congestion at the Woodroffe/Fallowfield intersection, the pending failure of this intersection combined with the rapid growth projected

in South Nepean over the next several years suggests that, if the Region is to maintain a Quality of Service Standard for roadway operations, intersection and roadway modifications will be required at the Woodroffe/Fallowfield intersection in the very near future. Further It is likely that the only real solution to the safety problem at the railway crossing is the reconstruction of this intersection to reduce the queue length.

12. Woodroffe Avenue and Fallowfield Road need to be widened.

The Region's Transportation Master Plan identifies the need to widen both of these roads in the future. Fallowfield Road is currently planned to be widened to four lanes between the years 2005 and 2021.

Woodroffe Avenue, north of Fallowfield Road is planned to be widened to four lanes between 2001 and 2005; however, this widening will be used to accommodate bus lanes along the corridor. The bus lanes will be converted to general traffic use when the Southwest Transitway is extended through the Greenbelt. Woodroffe Avenue, south of Fallowfield Road is planned to be widened to four lanes between 2005 and 2021. In recognition of the rapid growth in South Nepean, the Region will be re-examining the phasing and scheduling of any potential widening along the Woodroffe corridor south of Fallowfield Road as part of an environmental assessment study to be initiated later this year.

13. Will the traffic on Woodgate Way increase due to persons using the street to drop of passengers wishing to walk over to the Park and Ride facility?

We do not anticipate any significant increase in traffic along Woodgate Way as there will be a convenient Kiss and Ride drop-off/pickup area within in the Park and Ride lot.

14. The increase in traffic resulting from the Park and Ride lot will increase the accident rate.

In general, there is a downward trend in the number of reportable vehicle collisions per 1000 registered vehicles in Ottawa Carleton. Although the access roads to the Park and Ride lot will create conflict points in the street system due to crossing and turning traffic flows, as with any intersection design, safety considerations will be the dominant criteria in the design of the Park and Ride intersections.

15. The Park and Ride facility will increase traffic in the area leading to an increase in pollution (chemical, environmental, noise and visual).

Both Fallowfield Road and Woodroffe Avenue are major Regional arterial roads and as South Nepean develops, traffic on these roads will undoubtedly increase.

Through the implementation of transit infrastructure and associated transit supportive programs the impacts of this growth in automobile traffic can be minimized. The 1997 South Nepean Urban Area Master Transportation Study indicates that if the Southwest Transitway and other transit supportive measures are not implemented, an additional 8 traffic lanes (over

the 6 lanes currently planned by 2021) across the Greenbelt will be required to service growth in South Nepean. Obviously, any environmental impacts associated with these additional traffic lanes will not occur if the Region is successful in meeting our public transit ridership objectives. The environmental benefits of the reduction in vehicle emissions through the use of public transit, as opposed to the private automobile, are well documented.

With regard to localized environmental concerns, the Southwest Transitway EA Study included an assessment of noise and air quality impacts. The results of these studies, which are documented in the EA report, did not identify any requirements for noise mitigation measures and concluded that within South Nepean there will not be a local air quality impact from the Southwest Transitway between the Park and Ride lot and .Berrigan Station.

16. The extension of bus lanes south of the Baseline Transitway Station should be included.

The Region is proposing to construct bus lanes along Woodroffe Avenue, between Norice Street and Knoxdale Road, in the year 2000. Bus lanes between West Hunt Club and the Park and Ride lot are planned to be implemented between 2001 and 2005.

17. What buses will use the Park and Ride facility?

The existing local buses will have a terminus (beginning and/or end of the route) at the facility. The existing South Nepean express bus service will also pass though the Park and Ride lot and the Transitway Route 95 service will be extended south from its present terminus at Baseline Station to the lot. The Route 95 service will likely run with a 10 minute frequency during peak hours and a 20 minute frequency in off-peak hours. The level of service now provided at Baseline Station is not expected to change.

The integration of the Park and Ride facility into any new bus routes in South Nepean will also be examined as transit service is extended to serve newly developed areas.

18. Will this Park and Ride facility do anything to increase transit ridership along the Merivale Road Corridor?

OC Transpo is examining the feasibility of using the Park and Ride lot as a terminus for a route which will service the Merivale corridor.

19. How many buses will be in lay-up at any one time and where will they be parked?

The main lay-up area is located adjacent to the rail track. There may be as many as 6 buses in the lay-up area at one time. There may also be one Transitway Route 95 bus in the turn around loop located at the southwest corner of the parking lot.

Noise

20. The noise analysis conducted for the Southwest Transitway EA and the Fallowfield Road EA did not examine the increased noise levels which will be experienced by the residents of Woodgate Way. Why was a noise analysis not done for the Woodgate Way properties?

A professional engineering consulting firm conducted a noise analysis as a component of the 1997 Southwest Transitway Extension - Baseline Station to Strandherd Drive Environmental Assessment and as part of the 1997 Fallowfield Road - Cedarview to Woodroffe Environmental Assessment. The consultant which completed both studies is the same consultant retained by the Region to complete the functional design of the Fallowfield Park and Ride lot.

The noise analysis concluded that there was no requirement to provide a noise barrier for the homes along Fallowfield Road that do not currently have one. Therefore, there was no need to carry out the noise analysis for the Woodgate Way properties as these homes already have a noise barrier.

21. The noise analysis conducted for the Southwest Transitway EA did not take into account the noise generated by the widening of Fallowfield Road. Similarly, the noise analysis conducted for the Fallowfield Road EA did not include the additional noise generated by the extension of the Southwest Transitway. Why did the EA Studies not address all potential noise sources concurrently?

The two noise analyses were carried out at the same time by the same engineering consulting firm; however, they were documented in the two different reports.

22. Can you do further noise testing for the homes on Woodgate Way backing onto Fallowfield Road?

A noise analysis was conducted recently to verify the work previously undertaken. Specifically, conditions were examined for those properties along Woodgate Way which back onto Fallowfield Road.

The ground level elevation of the back yards of the Woodgate Way properties is generally 92.25 m, with a high point of 93.0 m. Fallowfield Road is at an elevation of 92.25 m. The existing noise barrier was measured to be 2.27 m above the elevation of Fallowfield Road. In accordance with Regional, Ministry of Transportation and Ministry of the Environment requirements for noise analysis, the noise receiver location was set at a point 3.0 m from the

back of the property, at a height of 1.25 m above the ground. Using these conditions, the following scenarios were examined for two representative locations along Woodgate Way:

- a) existing conditions;
- b) existing conditions with the Park-and-Ride lot added; and
- c) future conditions with the Park-and-Ride lot, Fallowfield widened to 4 lanes (and operating at capacity) and the Transitway constructed.

The results of the analysis are outlined in the following Table:

Scenario	Leq(16), dBA
Existing conditions	56
Existing with Park-and-Ride lot	58
Future with widened Fallowfield and Transitway	60

The analysis also determined that the existing noise barrier provides a 6 dBA attenuation at the receiver locations.

As illustrated in the above Table, the addition of the Park-and-Ride lot will increase the sound level by a maximum of 2 dBA. The widening of Fallowfield Road to a four lane urban roadway plus the implementation of the Transitway will result in a 4 dBA increase above existing conditions. It should be noted that the Transitway would contribute a very small component of this increase. The resulting noise increase when considering the widening of Fallowfield Road, the Park-and-Ride lot and the Transitway together is less than 5 dBA, which is the level where further noise mitigation measures are required. This analysis confirms the results of the previous studies.

As indicated in the EA Study, the elevation of Fallowfield Road will be lowered in the future to accommodate a grade separation at the railroad tracks. This will increase the effectiveness of the existing noise barrier and result in a reduction in the sound levels for those homes closest to the tracks.

23. Can the proposed traffic lights at the entrance of the facility along Fallowfield Road, be situated closer to the rail tracks so that buses will not be idling continuously behind the homes on Woodgate Way?

The traffic lights are located at the access to the lot. As indicated in the EA Study, the profile of Fallowfield Road will be lowered in the future to accommodate a grade separation at the railway tracks. This grade separation cannot accommodate the relocation of the Park and Ride access to the west. Also, to reduce the number of intersections along Fallowfield Road, it is desirable to "tie in" the Park and Ride access road into the future intersection at the Gates of Longfields retail development (current Tim Hortons Site).

24. It is quite noisy in the backyards of our homes on Woodgate Way. Can you increase the height of the noise barrier along the rear of our homes to reduce the noise that will be generated by the Park and Ride Facility?

The implementation of the Park and Ride lot will not increase the existing noise levels significantly and no change in the noise barrier is warranted.

Air Quality

25. We are concerned about the impact of the bus fumes on our property on Woodgate Way. What impact will the Park and Ride lot buses have on air quality in the area?

An Air Quality Study was carried out as part of the Southwest Transitway EA Study to determine the worst-case impacts on nearby residential areas. The potential impacts of bus emissions were assessed in relation to existing background air quality levels and applicable provincial standards. At the Longfields/Knollsbrook test station, which is the Transitway Station in closest proximity to the community, the analysis determined that the impact of bus emissions will be negligible beyond 40 m from the station and any odour will only be detectable within 25 m of the station. Based on the analysis, the conclusion reached by the consultant is that, in the South Nepean area, air quality and odour would not be a concern along the Southwest Transitway between the Park and Ride lot and Berrigan.

26. Various weather patterns (e.g. hot days) seem to extenuate odour. Did the air quality modelling examine the impact of weather conditions?

The Air Quality Study examined the effects on air quality for worst case conditions. The micro-climate specialists that carried out the air quality modelling exercise did consider the impact of weather conditions in order to determine the worst case scenario.

27. It appears the Route 95 buses will lay-up along the internal roadway which runs parallel to Fallowfield Road. We are concerned that this will result in noise and air quality problems. Can these buses lay-up in another area further away from the residential area?

The Transitway Route 95 buses will lay-up in the turn around area located in the southwest corner of the lot. Although the analysis reveals that there will be no air quality or noise problems associated with the lay-up area we will investigate any opportunities to relocate the Route 95 lay-up area at the detailed design phase.

Aesthetics and Phasing

28. The lot will be located next to an open field and it may be very cold. Was wind chill or wind exposure considered in the design of the lot? Can trees be provided in the area to the northwest of the lot to provide shelter from the wind?

Many factors (i.e. personal safety and security issues, maintenance issues, screening of the lot) were considered in the development of the plan. Landscape elements to "shelter" patrons from wind and sun exposure were also considered and applied where feasible, particularly in the area of the transit platforms where people will be waiting for a bus. Based on the projected bus frequency (buses to Ottawa) of 10 minutes in the peak hours and 20 minutes in the off-peak hours, the average waiting time will be approximately 5 minutes and 10 minutes respectively.

The Park and Ride lot is configured in three separate parking areas. The two easterly parking areas are surrounded by trees on all sides. The east and south sides of the westerly parking area is sheltered by trees provided along the perimeter of the lot. On the northwest side, the landscaping plan proposes a combination of trees and shrubs (possibly a lilac hedge). This has been done in consideration of the longer term use of this area as the location of the future Transitway platform. This proposed planting, in combination with the existing hedgerow (which may be enhanced) along the rail line, will help reduce direct exposure to the northwest wind in this parking area.

Most importantly, transit shelters will be provided in the station area to enable passengers to wait out of the wind. As noted above, the passenger waiting areas will also be sheltered by trees in the immediate area.

29. Can you ensure that the design of the lot is such that residents of Woodgate Way are unable to see any vehicles within the Park and Ride facility?

The landscape plan proposed for the Park and Ride lot was designed by a landscape architect firm. Based on the comments received during the EA process and discussions with the NCC and the project's Technical Advisory Committee, underlying design parameters were formulated to guide the landscape design. In applying these parameters, several factors including personal safety and security issues, maintenance, and screening of the lot were considered.

To address the screening of the lot, a 50m "buffer strip" along Fallowfield Road has been provided within which an extensive landscape treatment, including a section of reforestation, is proposed. The design of this area, including the selection of tree species and the treatment of the understory, was carried out with consideration to the specific concerns of the residents of Woodgate Way.

To verify the design, the consultant prepared a computer generated simulation of the Park and Ride lot to illustrate the view of the lot from a typical bedroom window of one of the homes along Woodgate Way. This illustration, which was presented at the 16 February 1999 Open House, demonstrates that the proposed landscaping will provide a very effective screen for the Woodgate Way residents.

30. Can the stormwater management pond be moved to the area opposite the homes on Woodgate Way as opposed to its proposed location near the Woodroffe/Fallowfield Intersection?

The stormwater management pond cannot be moved to the west corner of the property due to hydrological constraints associated with the site.

There were two technically feasible options considered for the location of the pond. Locating the pond to the north was the one of the options considered. However, the preferred location near the Fallowfield/Woodroffe intersection was chosen as it:

- a) is more compatible with the drainage pattern for the parking area;
- b) allows for more developable land;
- c) will ensure that any development access is accommodated from the Park and Ride lot's internal roadway system rather that from Fallowfield Road or Woodroffe Avenue; and
- d) eliminates the potential for development to occur in the area of the intersection thereby supporting the landscape design principle of the preserving the agrarian landscape along Fallowfield Road and Woodroffe Avenue.

31. Can the parking area proposed opposite the Woodgate Way homes be located elsewhere on the site, either where the stormwater management pond is being proposed or to the north of the Woodroffe Avenue access road?

As stated above, the area near the Fallowfield/Woodroffe intersection is the preferred location for the stormwater management pond.

Locating the parking area to the north side of the Woodroffe access road is not desirable as it would increase the walking distance from the parked vehicles to the transit station (both interim and ultimate) area.

32. Can the triangle parking lot be moved further upward towards Woodroffe Avenue since at this time further expansion of the facility is yet to be deemed necessary? Would it be possible to change the proposed staging so that the parking area located across for Woodgate Way is implemented last?

The location of the parking areas, the stormwater management pond, the protection for future development and the desire to preserve the agrarian landscape are all intertwined. The

proposed design is a careful balance of all these components. The "triangle parking area" has been located to service both the interim and future transit stations. Moving the parking area to the north would remove it from the station area and thereby increase the walking distance for the users.

As indicated at the 16 February 1999 Open House, we are proposing to implement the lot in phases. However, the exact phasing sequence will not be finalized until we undertake the detailed design. Construction costs, infrastructure redundancy, stormwater issues and transit servicing are among the many issues which will be taken into consideration in establishing the phasing. Regardless of which phasing plan is established, based on the popularity of our other Park and Ride facilities, we anticipate that the lot will be need to be expanded to its full size sooner than later.

33. Can the location of the "ultimate" station be moved, either further northeast along the rail line or to the east where the "interim" station is proposed?

The future Southwest Transitway will be located on the east side of the CN rail line and will run parallel to the tracks. When the Transitway is constructed, the interim station will be moved to its ultimate location which is to be integrated with the Transitway. The location of the station along the rail line, is dictated by constraints associated with the profile of the Southwest Transitway. Essentially, the future Transitway will pass under the tracks at Woodroffe Avenue and must rise back to grade level before the station.

The selected location will also accommodate a future connection to any rail service which may be provided on the CN rail line.

34. Can the "ultimate" station platform be shortened?

The station platform length is based on the projected number of buses using the facility.

35. Can you construct a berm on site so that the residents of Woodgate Way are unable to view the site from their homes?

As previously noted, the proposed landscape design, in particular the treatment along the south edge of the Park and Ride facility, provides an effective screen for the residents of Woodgate Way. A berm would not enhance this screening. It would however, screen the view of the lot from persons travelling along Fallowfield Road, resulting in the perception of isolation for people using the facility in the off-peak hours.

Furthermore, the inclusion of a berm in this area is not consistent with the design parameters adopted for the landscape plan. This plan seeks to integrate all the Park and Ride lot requirements within the current agrarian landscape of this portion of the Greenbelt. To achieve this, the ground plane (essentially flat) is retained as a dominant element in the

landscape with the landscape features acting as cohesive elements within it. The open meadows within the site unify the elements, and create the connection with the adjacent lands. Specifically, the design of the woodlot proposed within the Fallowfield Road buffer area was studied to ensure the image of a woodlot when viewed from Woodgate Way, while retaining the foreground as open meadow to provide the necessary cohesiveness throughout the overall landscape plan.

36. Can you install fast growing trees and/or bushes around the Park and Ride lot so our view of the parking area is screened sooner?

The landscape plan includes a mix of trees, including "faster" growing species.

37. Can you install coniferous trees so that the view of the parking area is screened in the winter?

In response to this question, which was raised at the 16 February Public Information Centre, the landscape design was reviewed and additional coniferous trees have been incorporated in the Fallowfield Road buffer strip area.

38. To screen the Park and Ride from the residents of Woodgate Way, can you plant fast growing coniferous trees on the south side of Fallowfield Road along the noise barrier?

The proposed landscape plan provides an effective screen of the parking area for the residents of Woodgate Way. The planting of trees on the north side of the noise barrier for screening would therefore be redundant. However, landscaping along the south side of Fallowfield Road would provide a benefit for the residents of Woodgate Way by helping to screen the traffic along Fallowfield Road. The Region will investigate the opportunity to provide this landscaping through the Region's Urban Greening Programme.

Miscellaneous

39. Can you ensure that any lighting installed on the site will not affect the homes on Woodgate Way which back onto the facility?

The lighting design for the Park and Ride lot is to be finalized at the detail design stage. The illumination for the internal roadways and the parking areas will be designed to minimize the impact of light trespass on the surrounding areas while providing the appropriate level of illumination for the safety and security of the Park and Ride lot users.

40. Can electrical outlets be provided to enable persons to plug in their cars?

We have looked into this and do not recommend it for two reasons. First, OC Transpo currently operates four Park and Ride lots and none of these lots provide electrical block heater outlets. OC Transpo staff advised us that they have not received any complaints or inquires regarding the lack of electrical outlets or the need to install them. They also noted that, as far as they are aware, cars being left in the Park and Ride lots due to starting failure brought on by cold weather, is not a common occurrence. These observations appear reasonable to us considering the current state of vehicle technology (batteries with high cold cranking amps, low viscosity and synthetic oil) which facilitate vehicles starting in cold weather.

The second reason is simply the cost. Not-with-standing the capital cost to provide the outlets, there is the on-going operating cost. If block heater outlets are provided and if we assume that only 50% of these outlets are used, the amount of energy consumed would be equal to that consumed by approximately 3,100 light bulbs (60 watt). Further, block heaters generally need to be turned on only one-half hour to one hour prior to vehicle start-up. As most of the vehicles in the lot would remain plugged in throughout the day, most of the energy consumed would be wasted.

41. Can heated shelters be provided?

Heated shelters are currently not proposed for the "interim" facility. The need to provide heated shelters will be reviewed at the detailed design stage.

42. Will bicycle racks will be provided?

Yes, bicycle parking will be provided adjacent to the transit station. The number and type of bike parking facilities will be determined at the detailed design stage.