

REGION OF OTTAWA-CARLETON
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REPORT
RAPPORT

Our File/N/Réf. **50 12-00-0026**
Your File/V/Réf.

DATE 17 March 2000

TO/DEST. Co-ordinator Transportation Committee

FROM/EXP. Director Engineering Division

SUBJECT/OBJET **FALLOWFIELD TRANSIT STATION
PRELIMINARY DESIGN
WOODROFFE AVENUE AND FALLOWFIELD ROAD
INTERSECTIONS & WOODROFFE AVENUE SAFETY
IMPROVEMENTS**

DEPARTMENTAL RECOMMENDATION

That the Transportation Committee recommend Council approve the preliminary design for the new intersections on Woodroffe Avenue and Fallowfield Road as required to serve the Fallowfield Transit Station, including associated Woodroffe Avenue Safety Improvements.

BACKGROUND

On 27 March 1996, Regional Council approved the recommendations of the Southwest Transitway Extension Environmental Assessment Study, which was subsequently approved by the Province of Ontario on 06 October 1999. The study recognized that a staged implementation of transit improvements may be necessary in the Woodroffe corridor and recommended that bus-only lanes be constructed as an interim option between Baseline Station and the Fallowfield Park and Ride (Transit Station).

The Fallowfield Transit Station will function as a terminus for the Southwest Transitway corridor until the future exclusive busway from Baseline Station to Strandherd Road via the Barrhaven Longfields development is completed.

This project will provide for the completion of Stage I of the Fallowfield Transit Station and associated operational and capacity improvements on Woodroffe Avenue (Figure 1). The implementation of this project will improve transit services to the residents of the South Urban Community, meet the objectives of the Transportation Master Plan and the Regional Official Plan and promote increased transit

ridership. OC Transpo has indicated that in combination with the proposed bus-only lanes on Woodroffe, the availability of the Fallowfield Transit Station will improve bus travel times, improve service reliability for transit users and reduce operating costs.

EXISTING CONDITIONS

Approaching the intersection with Fallowfield Road, Woodroffe Avenue crosses the Greenbelt as a two-lane rural arterial road. There is a single southbound through lane with nominal left and right turning lanes at the Fallowfield Road intersection. The Woodroffe northbound approach to Fallowfield also has a single through lane with nominal left and right turning lanes. Woodroffe Avenue continues south as a two-lane rural arterial for approximately 450 m. to Earl Mulligan Drive where there is a nominal right turn lane into the subdivision.

Fallowfield Road borders the southerly limit of Agriculture Canada lands as a two-lane rural arterial. Approaching the intersection with Woodroffe Avenue, there is a single eastbound through lane with an approximate 100 m. left turn lane and a nominal right turning lane.

There are three local bus routes, four express routes and two employment based routes which currently serve the Barrhaven community and feed to the Baseline Station.

With the implementation of the Fallowfield Transit Station, it is proposed that there will be four express routes and three employment based routes which feed through the Fallowfield Station en-route to the Baseline Station. The three existing local routes will terminate at the Fallowfield Station where they will interface with two frequent all-day routes connecting with the Baseline Station and beyond.

Recently, in the afternoon peak period, southbound through and right turning vehicular traffic on Woodroffe Avenue could not be accommodated by the existing geometry at the Fallowfield Road intersection. The effect was that each day the traffic backed up to a point north of the VIA rail high speed line resulting in vehicles stopped on the track crossing. Satisfactory resolution of this critically unsafe situation was a high priority for the Region. A combination of restricted green time at Slack Road and at Hunt Club Road and increased green time at Fallowfield Road has in the short term alleviated this problem.

PROPOSED DESIGN

The scope of the proposed work at the Fallowfield Transit Station includes a spine road connection from a signalized intersection on Fallowfield Road through the Station area to a similar signalized intersection on Woodroffe Avenue. The facility will include sidewalks, platforms, shelters, bicycle facilities, a washroom/mechanical/electrical building, Kiss & Ride and Park & Ride facilities as well as extensive lighting and landscaping. The initial Park & Ride facility will be nominal but will be phased in as dictated by funding and demand to a maximum capacity of approximately 750 spaces.

A new signalized intersection will be constructed on Fallowfield Road approximately 280 m. west of Woodroffe Avenue (Figure 2). The new intersection is for the use of buses entering and exiting the

transit station as well as for cars taking advantage of the Park & Ride facility. The intersection is also configured to accommodate cyclists locally on Fallowfield and along the station entrance road. The geometry includes a 100 m. eastbound left turn and 70 m. westbound right turn lanes. The northeast quadrant of the intersection is channelized to provide a safer roadway crossing condition for pedestrians as well as an appropriate location for new traffic plant.

This project also includes the construction of a new signalized intersection on Woodroffe Avenue approximately 260 m. north of Fallowfield Road (Figure 3). The new intersection is for the exclusive use of buses entering and exiting the transit station. A southbound right turn lane into the station access road will be developed immediately south of the VIA rail crossing which is approximately 300 m. further to the north. This long right turn lane will maximize the probability that buses will have direct, unhindered access to the station without the restriction of queued southbound traffic. There will not be any provision for a northbound left into the station at this time.

In conjunction with the work proposed for the Fallowfield Transit Station and the associated intersections, additional road widening work is proposed along the west side of Woodroffe Avenue. This work will augment the interim signal timing adjustments which have addressed the VIA rail track crossing issue and provide a higher level of confidence that this dangerous situation has been resolved.

As noted above, the original nominal southbound right turn lane into the Transit Station has been extended north to the VIA rail tracks. It is proposed that this southbound right turn lane, to be developed immediately south of the VIA tracks, be continued right through to Fallowfield Road for a total length of 500 m.. Since approximately 30% of the approach volume at the intersection turns right onto westbound Fallowfield Road, the effect is reduce the southbound queue at Fallowfield.

Considering existing volumes and a conservative five year growth index, staff have recommended that an additional 180 m. of approach through lane capacity be added to the proposal resulting in the geometry shown on Figure 3. This increment to the through capacity must be supplemented with a continuation of the two lane through capacity to Earl Mulligan Drive, some 450 m. south of Fallowfield (Figure 4). Currently, approximately 50% of the traffic approaching Earl Mulligan turns right into this subdivision, therefore in the short term, no further roadway development is required south of Earl Mulligan.

The new work on Woodroffe Avenue and Fallowfield Road will be accomplished by standard widening of the existing asphalt pavement, including shouldering, guide rails and appropriate ditching. Where possible, streetlighting will be installed on existing poles adjacent to, and in conjunction with, the new work. Some traffic signal plant in the main intersection will need to be reconfigured.

Since vehicle, pedestrian and bicycles will not be permitted to enter the station facility from Woodroffe Avenue, bicycle lanes have not been included in the work other than at the multi-modal entrance to the station at the Fallowfield Road intersection. Appropriate provision for bicycle lanes will be made in the impending design assignment for the major reconstruction of the Woodroffe/Fallowfield intersection.

PROPERTY REQUIREMENTS

The sale of the property for the Fallowfield Transit Station to the Region is scheduled to be finalized by 31 March 2000. In the event of a delay in this schedule, the existing 'Consent to Enter' will be extended to permit implementation of the proposed work. There are no further property requirements for this project.

STAGING/CONSTRUCTION SCHEDULE

The phasing of the Fallowfield Transit Station and associated works (See Figure 1) is as follows:

- Phase 1A, including the additional work on Woodroffe Avenue, is scheduled for construction in 2000.
- Landscaping for Phase 1A is scheduled for planting in Spring 2001.
- Phase 1B, including the Drivers' Washroom, is scheduled for construction in 2001.
- Landscaping for Phase 1B is scheduled for planting in Spring 2002.

COST ESTIMATE

FALLOWFIELD TRANSIT STATION

Including

FALLOWFIELD & WOODROFFE INTERSECTIONS AND ANCILLIARY WORKS

SUMMARY OF COSTS

	PHASE 1A	PHASE 1B	TOTAL
Construction	2,191,100	1,486,600	3,677,700
Utility relocations	85,500	0	85,500
Engineering & Project Management	700,600	570,300	1,270,900
Project Contingency & Taxes	367,700	254,000	621,700
TOTAL	3,344,900	2,310,900	5,655,800

Phase 1A totals reflect the approved 2000 Budget and does not include property costs. Phase 1B totals are pending approval of the 2001 Budget.

CONSULTATION

Extensive public and agency consultation was carried out as an integral part of the Environmental Assessment process for the Southwest Transitway Extension and the functional design process for the Fallowfield Transit Station.

Notice of the Public Hearing for the proposed intersections and widenings on Woodroffe Avenue and Fallowfield Road has been placed in Le Droit, the Ottawa Citizen and the Ottawa Sun for four consecutive weeks, commencing 10 March 2000.

Regional Cycling Advisory Group (RCAG)

The following (para-phrased) comments were received from RCAG following the design circulation.

The lack of cycling facilities on Woodroffe Avenue is acceptable because:

- (a) the proposed roadwork is temporary, and full cycling facilities will be provided with the reconstruction of the Woodroffe/Fallowfield intersection;
- (b) priority must be given to constructing additional lane capacity to alleviate the potential for traffic queued at the intersection to back up and block the railway crossing to the north. This results in inadequate width for a cycling facility between the travelled road edge and the guide rail protecting the existing hydro poles;
- (c) there is presently an absence of any existing cycling facilities along the development site and to the north as far as West Hunt Club Road.

Bicycle lane markings at the entrance to the transit station reinforce the presence of cyclists entering the station, but may not be necessary for cyclist operations. We recommend that the bicycle lane markings be eliminated in favour of widened curb lanes.

The bicycle parking lockers/stands should be situated as close as possible to the bus platforms. We recommend that the lockers be located on the east side of the access driveway, north of the future interior street. A depressed curb will permit direct access to the bicycle parking. The bike lockers should be visible from the main access driveway for security reasons.

Approved by
J. Miller, P.Eng.

JM/PSC/ln

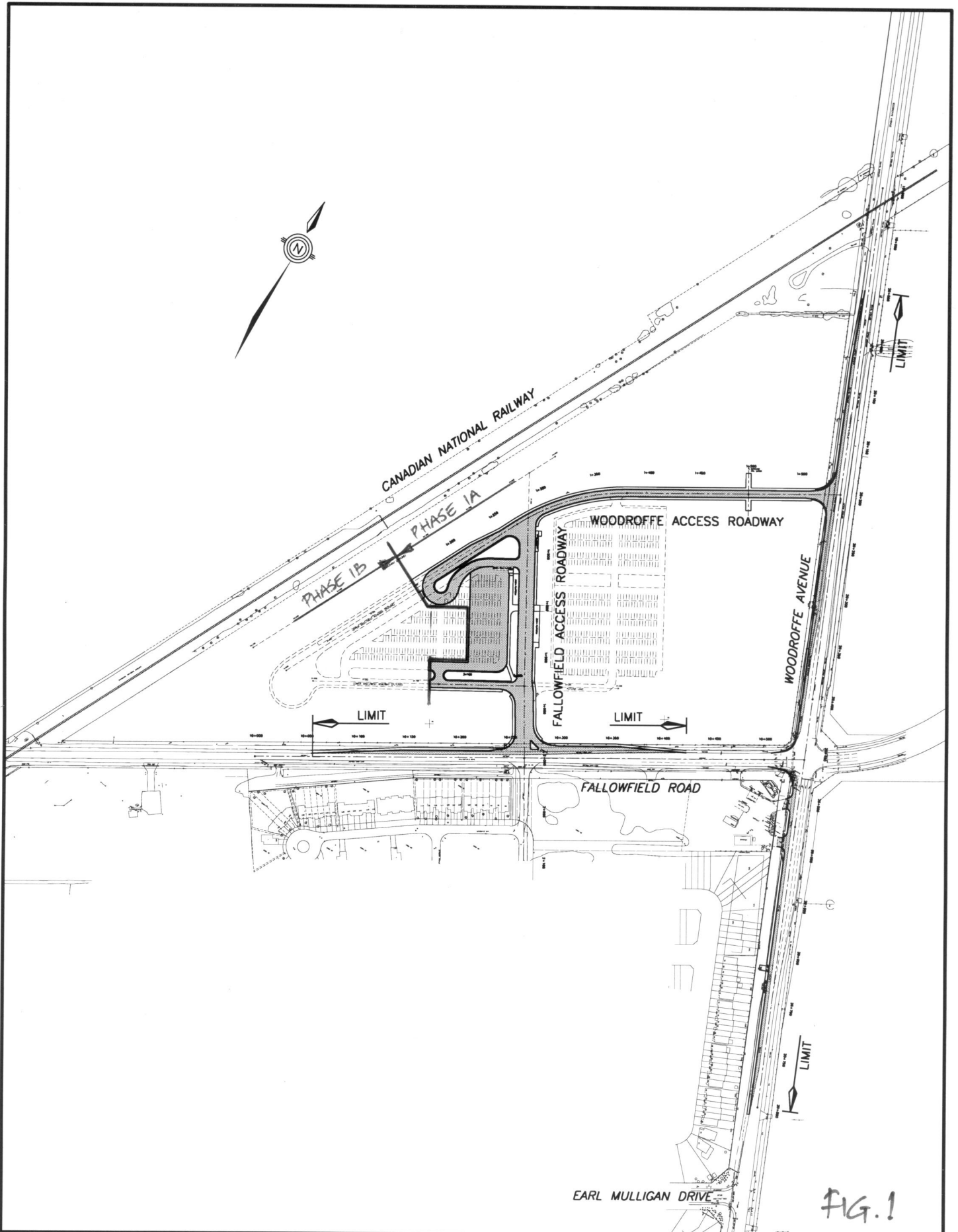


FIG. 1

FALLOWFIELD TRANSIT STATION
GENERAL LAYOUT

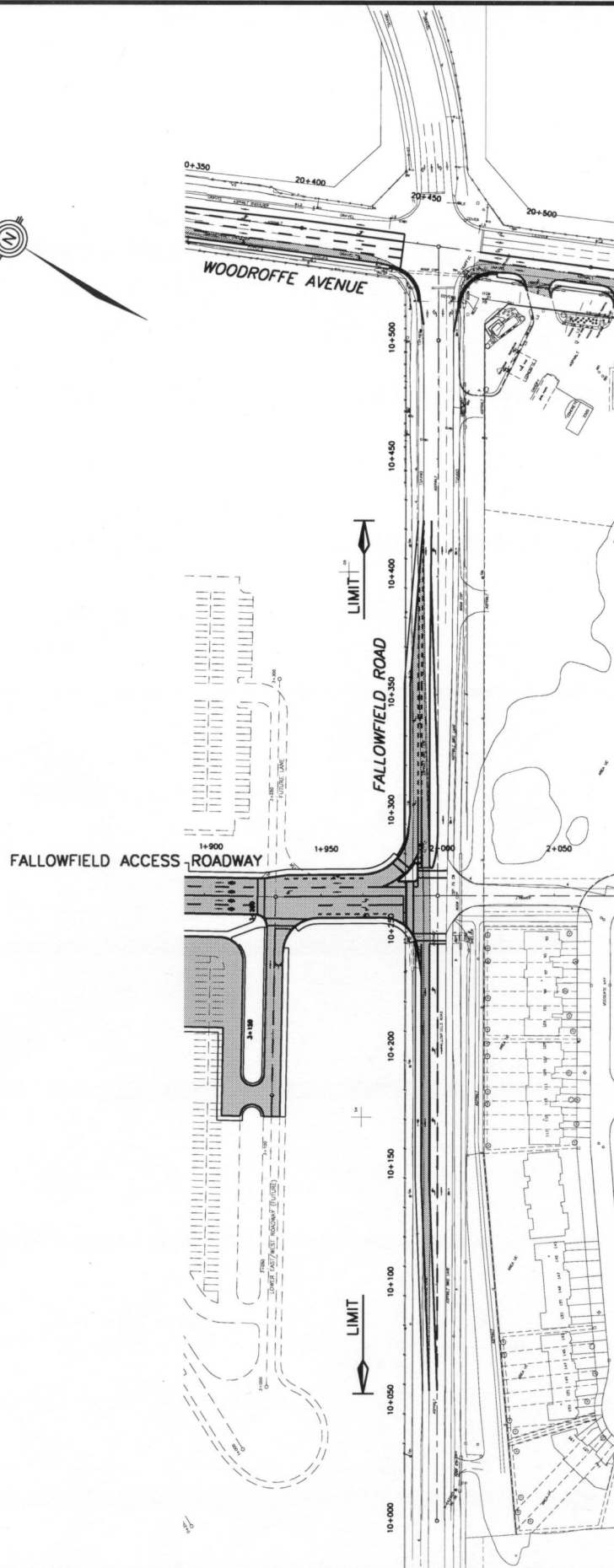
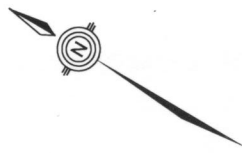


FIG. 2

FALLOWFIELD TRANSIT STATION
FALLOWFIELD ACCESS ROADWAY INTERSECTION

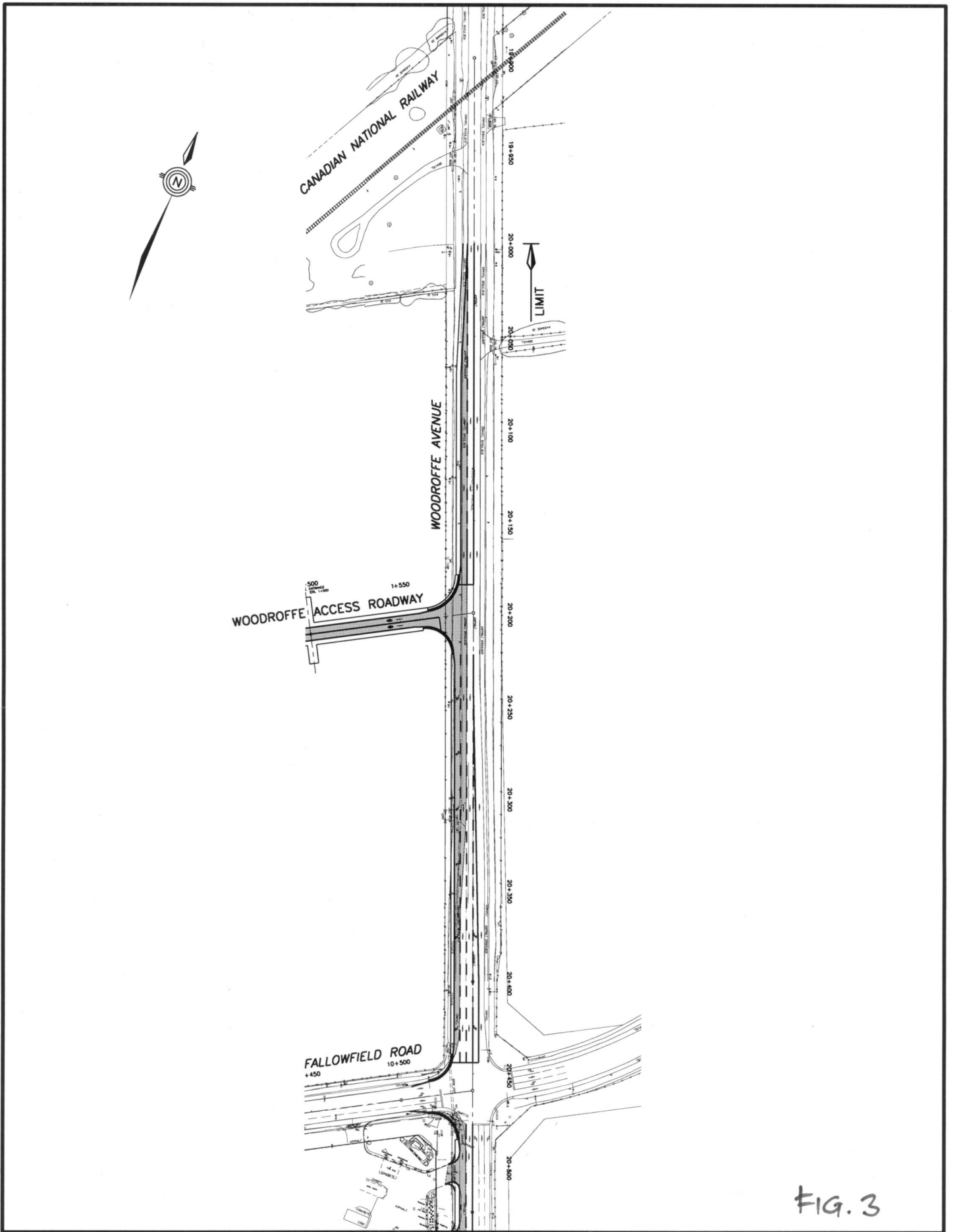


FIG. 3

FALLOWFIELD TRANSIT STATION
 WOODROFFE ACCESS ROADWAY INTERSECTION AND WIDENING

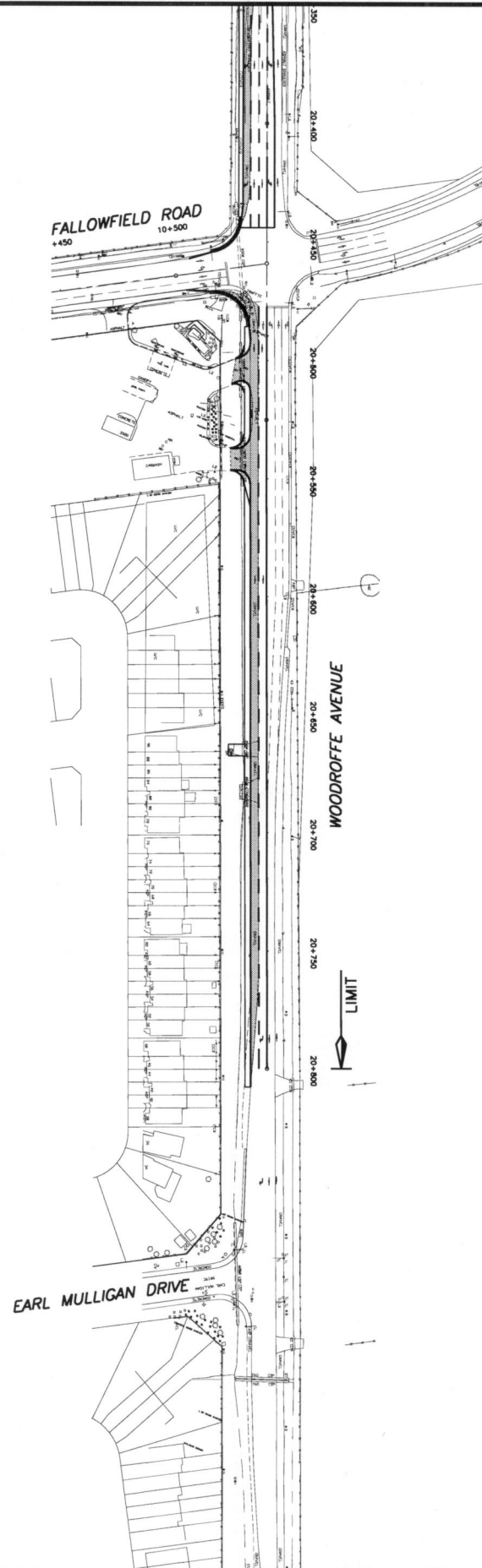


FIG. 4

FALLOWFIELD TRANSIT STATION
WOODROFFE AVE. WIDENING - FALLOWFIELD RD. TO EARL MULLIGAN DR.