

REGIONAL MUNICIPALITY OF OTTAWA CARLETON
MUNICIPALITÉ RÉGIONALE D'OTTAWA CARLETON

REPORT
RAPPORT

Our File/N/Réf. **25 23-97-R059, 23-97-R038**
Your File/V/Réf.

DATE 12 November 1997

TO/DEST. Co-ordinator Transportation Committee

FROM/EXP. Director Mobility Services and Corporate Fleet Services
 Environment and Transportation Department

SUBJECT/OBJET **NORTEL CARLING CAMPUS EXPANSION - ADDENDUM
REPORT**

DEPARTMENTAL RECOMMENDATIONS

That the Transportation Committee and Council receive this report for information.

BACKGROUND

In addition to approving Nortel's proposed southerly site access and the construction of the associated roadway modifications along Moodie Drive (Regional Road 59), and the modifications to the intersection of Carling Avenue (Regional Road 38) and Grandview Road, Regional Council, at its meeting on 8 October 1997, approved the following motions:

1. That the comments of the Regional Cycling Advisory Group be incorporated in the final report and that cyclist safety at the intersections of the Moodie Drive and Carling Avenue accesses and crossing the Queensway also be commented upon in the final report.
2. That the Regional site plan agreement include a plan for the decommissioning of parking spaces resulting in a final total of 4,200 spaces.
3. That the annual transportation demand management report be brought to the Transportation Committee.
4. That a report on the Queensway ramps at Moodie Drive be available prior to the Public Hearing on 19 November 1997.

a. Motion #1

On 31 October 1997 Regional staff met with members from the Regional Cycling Advisory Group (RCAG) and with a representative from the Ministry of Transportation of Ontario (MTO) to discuss the Regional Council-approved changes to the intersection of Carling Avenue and Grandview Road/Nortel Access and the section of Moodie Drive between the Crystal Bay Centre Access and Corkstown Road. The other major topic of discussion at this meeting centred on the proposed changes to the Moodie Drive - Highway 417 Interchange to accommodate the impending Nortel expansion and the roadway modifications necessary to maintain, promote and enhance cyclist safety and mobility.

At the conclusion of this meeting, there was general agreement with the Council-approved road designs and with the proposed interchange modifications; however, the members from RCAG had expressed a number of concerns and/or comments with the details of these functional designs. These concerns/comments are detailed in a 11 November 1997 letter from RCAG to the Planning and Development Approvals Department which is provided in Annex A.

The RCAG comments refer primarily to the functional designs for the approved road works on Carling Avenue at Grandview Drive/Nortel Access, and on Moodie Drive, and the proposed modifications to the interchange of Highway 417 and Moodie Drive. These designs are illustrated in Annexes B, C, and D respectively.

There appears to be no dispute with any of the 22 actionable comments from RCAG. There are, however, three comments relating to the proposed modifications to Moodie Drive and Highway 417 Interchange (indicated by an 'arrow head' symbol) which will require further study and consideration before they would receive MTO/staff acceptance for implementation. These are found on Pages 1 and 2 of Annex A.

b. Motion #2

Negotiations concerning the site plan agreement are ongoing. Staff are endeavouring to include this item as a condition in the agreement.

c. Motion #3

Regional Council has only recently adopted (July 1997) the Transportation Master Plan (TMP) which incorporates the precepts of Transportation Demand Management (TDM). The Planning and Development Approvals Department will prepare a report on TDM for the Committee on an annual basis until the targets have been achieved or failing that, until seven years have elapsed.

d. Motion #4

The modification of the Highway 417 - Moodie Drive Interchange is crucial to the success of any transportation plan to safely accommodate the expansion of the Nortel Carling Campus. Annex D illustrates the proposed modifications to this interchange which successfully addresses the needs of the following travel modes while adhering to the guidelines of the TMP.

i. Pedestrians

Currently no sidewalks that even remotely meet RMOC minimum standards exist on the Moodie Drive structure over Highway 417. It is proposed that a major portion of the current northbound curb lane on this overpass, which terminates at the entrance to the westbound Highway 417 on ramp, be converted to a sidewalk. Combined with the proposed sidewalk along the east side of Moodie Drive north of the interchange, this sidewalk will provide a safe and convenient linkage for pedestrians wishing to access the Nortel site from the existing bus stops located at the ramp junctions.

ii. Cyclists

This proposed design will enhance the safety of the existing bicycle facilities by significantly reducing the exposure of cyclists to turning motorists with the introduction of direct tapers at the ramp terminals. Direct tapers have the additional benefit of inducing motorists to further reduce their speed as they approach the ramp simply because of the increase in the angle of intersection. In view of the very significant increase in motor traffic that is projected with the Nortel expansion, this taper design becomes an especially important treatment for the southbound to eastbound ramp terminal.

iii. Transit

The existing transit facilities at this interchange will be improved with the proposed modifications. As mentioned earlier, the provision of sidewalks on the structure enhance the transit user's options to either walk or transfer buses to access the Nortel site. In addition to this, the proposed revised geometry (dual westbound right-turn lane) for the intersection of Moodie Drive and the Highway 417 westbound off-ramp provides westbound right-turning buses the opportunity to pick up or discharge riders near a transfer point which introduces greater flexibility in the transit option.

iv. Motor Vehicles

Current projections estimate a 30 to 35 percent increase in traffic by the year 2000 as a direct result of the Nortel site expansion. This volume increase will have the greatest impact at the intersection of Moodie Drive and the westbound off-ramp

from Highway 417 which will necessitate the removal of the existing free flow right-turn ramp and the introduction of dual westbound right-turn lanes. Since southbound traffic from Moodie Drive enters free-flow conditions, the on-ramp to Highway 417 eastbound has sufficient capacity to accommodate the projected year 2000 afternoon peak period volumes.

As previously mentioned, it is proposed that the northbound curb lane be removed from operation. This proposal will not greatly impact the other two northbound lanes ability to handle the inevitable increase in traffic (a maximum of 200 vehicles during the PM peak hour). Although this lane reduction adds traffic to the other two northbound lanes there is the benefit that it removes the possibility of undesirable movements from motorists who occasionally have become 'trapped' in this lane.

v. Nortel and Ministry of Transportation of Ontario Comments

A meeting was held on 6 November 1997 attended by Nortel staff and their consultants, a representative from MTO, and Regional staff to discuss the proposed functional design modifications for this interchange. All those at this meeting agreed that, on a general level, this interchange design appeared to be the most appropriate from the aspects of adherence to the TMP, traffic safety and efficiency, economy, and service to the Nortel Site.

*Approved by
Doug Brousseau*

WJ/sc

Attach. (4)

COMMENTS FROM RCAG

ANNEX A

From: Peter McNichol
To: lyonst@rmoc.on.ca
Cc: rcag@cfsc.ottawa.on.ca; HopeD@city.ottawa.on.ca; clarke@nortel.ca;
dormanha@rmoc.on.ca; fraserjo@rmoc.on.ca; hopean@rmoc.on.ca;
malinskygr@rmoc.on.ca; henry.starzynski@sympatico.ca
Subject: RCAG Comments - Nortel Moodie Drive - resent
Date: Tuesday, November 11, 1997 7:39AM

Mr. Steve Lyon
Planning and Development
Approvals Department - RMOC

Dear Mr. Lyon:

RE: RCAG Comments on Nortel Moodie Drive

Thank-you for our chance to meet with all parties on Nortel Moodie Drive on October 31. It was truly ground breaking meeting. All parties contributed to the proposal which resulted in a better concept plan.

Further to our meeting we have revised our comments and would ask that they be included in the staff report, to be brought forward at the public meeting on November 19.

RCAG Comments on Nortel Moodie Drive at 417 interchange preliminary concept plan

1. 417 W at Moodie Drive Intersection

- * change Moodie N to 417W right turn dual destination lane to right turn taper.
- * double right turn off 417W should be operated as no right turn on red.
- * chicken tracks should indicate 417W to Moodie S use two left most lanes.
- ▽ * right most lane Moodie S should be signed "417 E only" "busses and bicycles accepted".
- ▽ * timing of Moodie S green phase should be timed such that motor vehicles have cleared the 417E ramp before cyclists traffic arrives and the next phase begins. With 1200 vehicles entering the on-ramp and crossing straight-through bicycle traffic during peak hour. If the ramp entrance rate was uniform then one vehicle will cross the bike lane every 3-4 seconds, which would likely make it unpleasant, and/or impossible for cyclists to travel past the ramp, despite the fact that turning/crossing motorists should yield to through cyclist traffic.
- * HTA requires turning traffic to yield to straight through cycle

traffic (all ramps). All ramps must be dashed to indicate the change in lane. Also consider erecting signs to indicate turning traffic must yield to straight through cycle traffic (all ramps).

- ▷ * erect signs to indicate "cyclist crossing" on 417W and 417E off ramps.

2. Moodie N at Corkstown

- * provide cycle lane transition zone from shoulder to outside right turn lane.

3. General Comments

- * bike lanes should be designed to CTN and TAC guidelines.
- * existing pavement which has deteriorated must be reinstated.

RCAG Comments on Nortel Moodie/Carling plan

1. Carling at Grandview

- * provide bicycle pocket for straight through bicycle movements Carling E.

2. Moodie S at new Nortel Entrance

- * bike lane must continue through intersection as per TAC guidelines.
- * off-road path crossing at intersection should be signed "cyclist dismount"
- * off-road path should be signed to encourage cyclist to use Nortel internal east road.

3. General Comments

- * bike lanes should be designed to CTN and TAC guidelines.
- * On-road accommodations for bicycles are fully supported and required. The Nortel path is a not a suitable route for nighttime travel because of reduced personal security. Neither Nortel's nor Nepean's paths are cleared of snow, and are therefore unusable much of the year, including early spring when the snow has not yet melted.
- * existing pavement which has deteriorated must be reinstated.

Site Plan Comments

- * The preliminary plans circulated at the Nepean Planning Committee showed numerous potential conflicts and dangerous crossings. For example, there are potentially dangerous crossings of the path where it intersects the ring road, west of the western service road. We would greatly appreciate an opportunity to discuss these internal path and road connections with the Nortel planners before final RMOC site plan approval occurs. Injuries and "near misses" occurring to cyclists because of poor facility design will not lead to a successful TDM program.

Additional Comments

- * Add Moodie (School to Carling) in CTN project list (to be prioritized).
- * Carling (Moodie to March) bicycle facility to be included when Carling widened to 4 lanes.
- * The storm sewer grates at the southwest corner of the current signalized Nortel (Carling) Moodie entrance are oriented at an angle such that they may trap bicycle wheels and should be replaced with a grate with smaller slots. Compatibility of all iron works in the study area should be reviewed and ensured, especially where bicycle traffic is being moved to the outside of the overpass. Where possible, iron works should be moved out of the travel area for bicycles, as it frequently not at grade with the adjacent asphalt.
- * Moodie N crossing 417 E on ramp and Moodie S crossing 417 E off ramp. These ramps continue to be possibly the most significant barrier to encouraging more employees to cycle to Nortel in support of the TDM program. Cycling improvements made elsewhere will be of questionable value if these ramps remains unchanged. Work needs to be done to make these ramps support cycling traffic at an acceptable comfort level. This should be done within the scope of this project. Two measures that could be investigated include tightening the radius considerably, and adding a jug-handle perpendicular crossing of the ramp. The latter would likely have some type of conflict with the new sidewalk (on the east side), and this potential conflict should be investigated before further work is done on the sidewalk design.
- * Continue Moodie bike lanes (Tim to Fitzgerald) in CTN to be considered for 1998 CFIP program. Since the CPR bike path will be completed to Fitzgerald in 1998 as part of Nortel works at the new Fitzgerald site the section of Moodie (Tim to Fitzgerald) will be the only discontinuous portion of Stittsville to Corkstown link to Nortel and downtown.

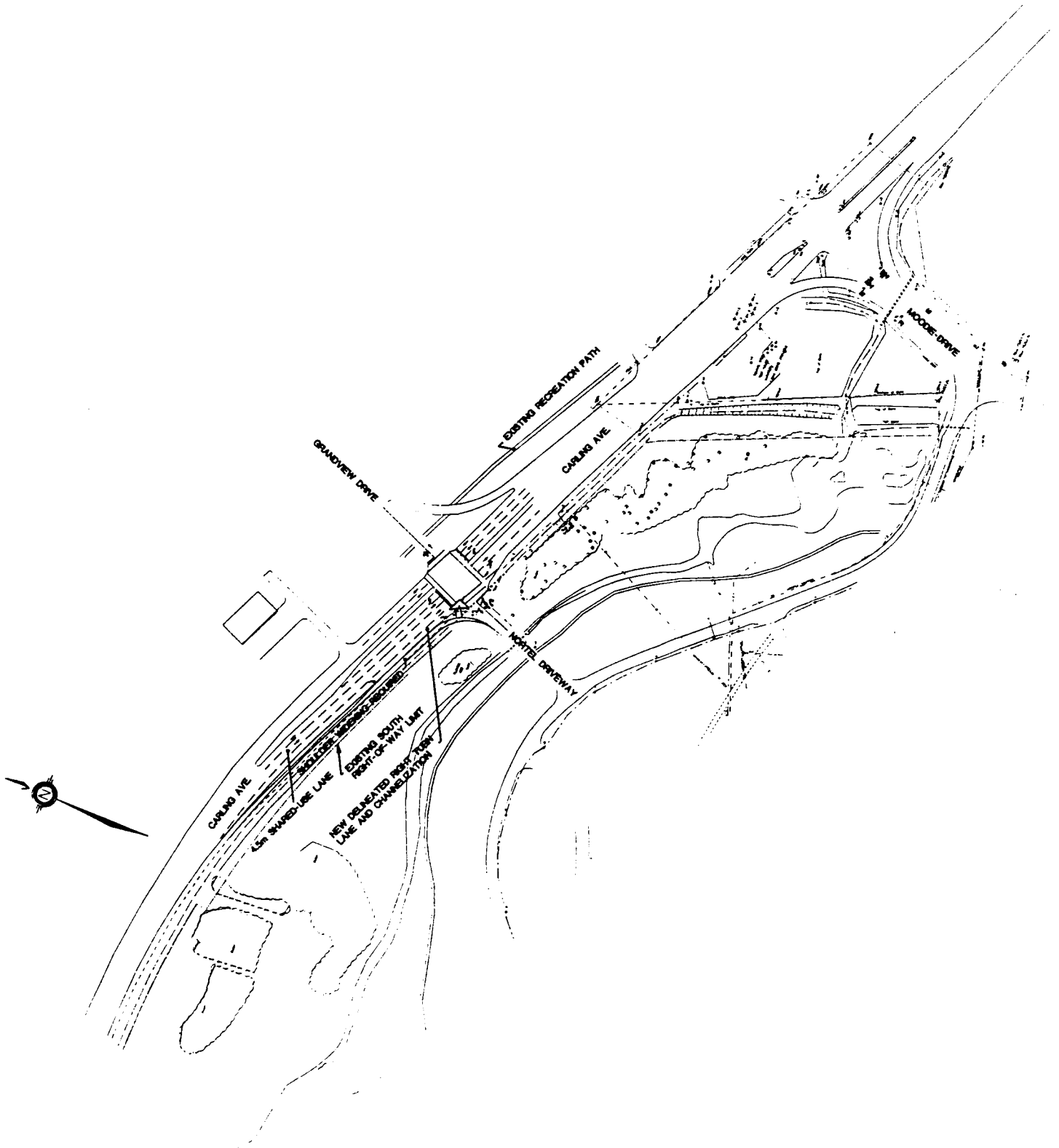
I wish to thank all parties for their efforts to resolve all concerns regarding the first large project and would hope that the ideas and precedence set here are used in other sites across the region and beyond.

Sincerely,

Peter McNichol
Planning Subcommittee
Regional Cycling Advisory Group

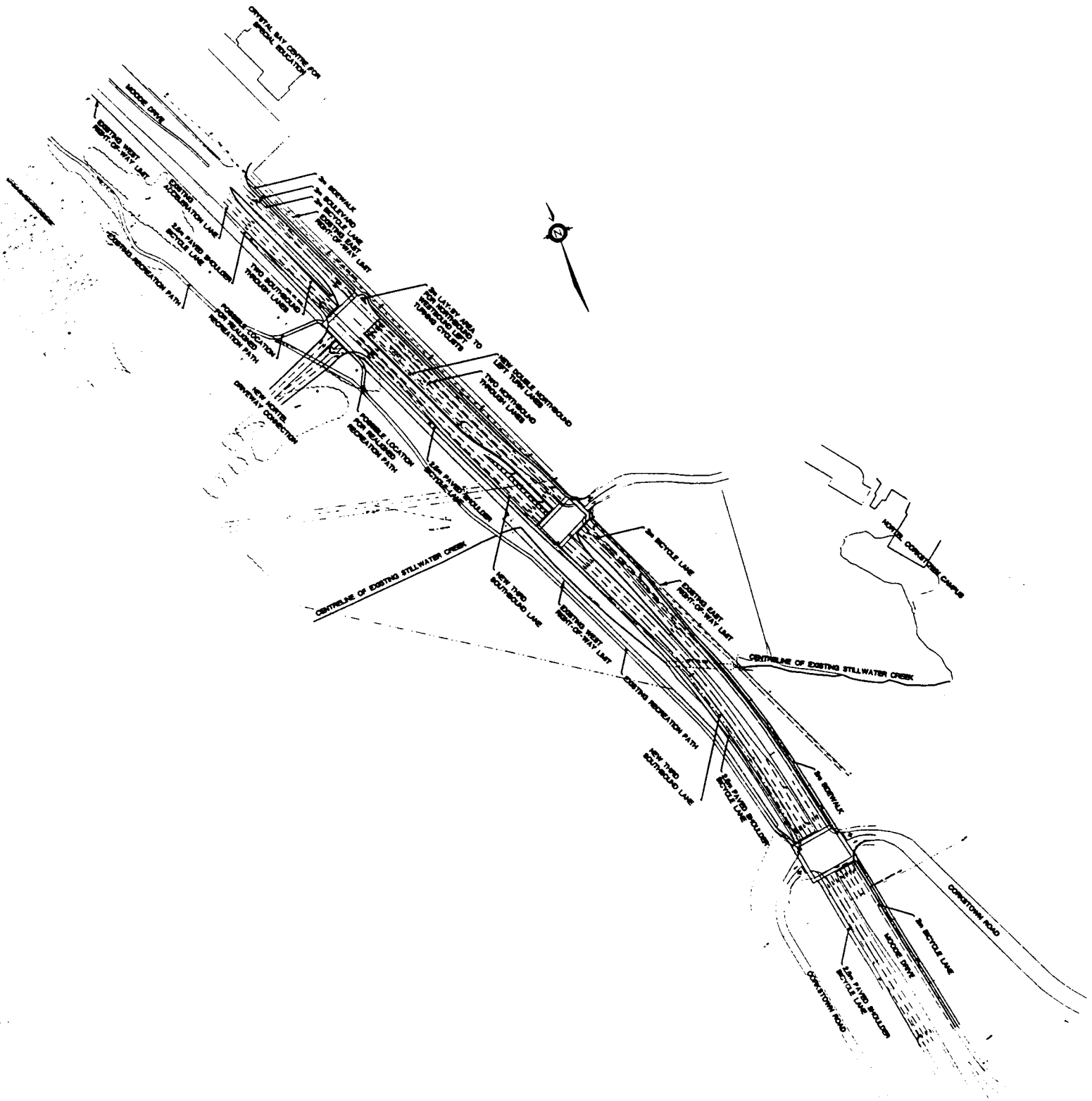
faxed with signature to 560-6069.

APPROVED MODIFICATIONS TO CARLING AVENUE AT GRANDVIEW DRIVE/NORTEL ACCESS



APPROVED MODIFICATIONS TO MOODIE DRIVE BETWEEN CRYSTAL BAY CENTRE ACCESS AND CORKSTOWN ROAD

ANNEX C



PROPOSED MODIFICATIONS TO MOODIE DRIVE/HWY 417 INTERCHANGE

ANNEX D

