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DEALS WITH THIS MATTER: MR K. MITCHELL/AB
Tel: (041) 506-2301; Fax: (041) 506-2231
Date: 7 July 2008

Pierre Joubert
PO Box 2884
NORTH END
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Dear Sir

SUBJECT : TRAFFIC PLANNING IN PORT ELIZABETH

Your submission, entitled "Traffic Planning in Port Elizabeth" presents, amongst other suggestions, suggestions for removing right turning movements at intersections. This idea certainly has merit as right turning movements do create delays at intersections. Indeed, a similar suggestion has been used in other countries particularly relating to intersections with one-way streets, but this is usually converting right-turn movements into less conflicting left-turn movements. This proposal, however, suggests that the right–turning movements still take place, but in between intersections. After discussions around this proposal, it was felt that this suggestion would not be appropriate for the NMBM for the following reasons:

1. Many of the routes will be BRT bus routes, meaning that the dedicated bus lanes will be in the centre lane. Movements across this lane are not encouraged, but where they must occur, these right–turning movements should be signalised, particularly for safety and operational issues. This implies that turning movements may only happen at intersections, and not in between them as recommended in the proposal.

2. The arrangement of full intersections and "right-turning intersections" creates very short distances over which weaving must occur. This is not promoted due to the conflict of traffic movements, and with possible conflicts from non-BRT vehicles (i.e. kerb-side stops require a vehicle to move into, or worst-case, across the traffic).

3. Traffic signals are an effective way of efficiently managing movements at an intersection, especially when linked to an optimising system, such as the NMBM's SCOOT system. Therefore, signals, and their appropriate spacing are effective for controlling intersections. The creation of other non-signalised intersections could be problematic as some movements may wish to weave from the 'intersection' where no signals exist into the passing traffic stream. Entering the traffic stream could become problematic if no gaps exist in the traffic in which to enter the traffic stream. This could lead to the need for signals at these 'in-between' intersections, reducing the efficiency of the entire route due to sub-optimal signal spacing.

4. The indirect turns (right-turns) would have been useful in accommodating right-turning movements where a BRT station was located in an intersection. However, this requires a substantial amount of space, often not available in the road reserve, and no BRT stations are located in this fashion in the foreseeable projects. This arrangement will be considered should such a situation arise in the future.

5. The Cottrell Street interchange (ref: peirre joubert 1207) is an good idea, and in fact is similar to the masterplan for that area, comprising of a fly-over from Diaz to Burt Drive, in order to remove some of the conflicting movements with Langenhoven Drive

6. The Walmer Park suggestion is noted. The disadvantage of the proposal is the additional road width required for the turning movements, space that is on prime, private land and crosses very sensitive services. This turning movement increases the distance that cars must travel, increasing fuel consumption and emissions. The reduction in speed necessary to facilitate the radius of the turning movements (especially where there is limited space) could be very dangerous. These slow moving, turning vehicles are required to weave, and should the traffic increase, this could block both lanes of traffic, reducing the capacity of the system further.

7. The suggestions for one-way streets in Harrower and Fettes, is well thought out. However, these are BRT routes requiring traffic in both directions, and with certain requirements for turning movements for the busses. Unfortunately the planning is too far along to put this suggestion into practice.

8. The Builder's Warehouse design is noted, however, BRT considerations, with a Modal interchange designed for this area, makes this suggestion unviable.

9. The Walmer one-way suggestions are noted, however, the impact of increased traffic flow on residential roads will require input from town-planners and residents and it is felt that this is unnecessary as the widening of Buffelsfontien will alleviate the traffic on Main Road, freeing up capacity and therefore reducing the need for a one-way system.

The dry lake route is a good suggestion, and is being used in accommodating traffic as an alternative to Kempston Road to alleviate private traffic during the construction of BRT lanes on Kempston Road and beyond. The limitation of this route is that is stops at the Commercial Road ramps and unfortunately the intersection arrangement suggested in the proposal will be problematic for higher volumes of traffic and for the reasons mentioned above.

You are commended on the thought and effort that has been put into the submission. Your interest in the project is greatly appreciated, and we will refer to this proposal should an opportunity arise in the future in which to make use of these suggestions.

Yours faithfully

AA SAID Pr Eng
EXECUTIVE DIRECTOR
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