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ENGINEERING AND OPERATIONAL SERVICES

DATE: January 14, 2008

REPORT NO. EN2008-001

TO: CHAIR AND MEMBERS
COMMITTEE OF THE WHOLE – OPERATIONS & ADMINISTRATION

FROM: S. LAWSON, P.ENG., GENERAL MANAGER
ENGINEERING & OPERATIONAL SERVICES

1.0	TYPE OF REPORT	CONSENT ITEM <input checked="" type="checkbox"/>
		ITEM FOR COUNCIL CONSIDERATION <input type="checkbox"/>
		IN CAMERA ITEM <input type="checkbox"/>

2.0 TOPIC

RESULTS OF TRAFFIC CALMING SIGNS – SHELLARD LANE

3.0 RECOMMENDATION

THAT Report No. EN2008-001 titled "Results of Traffic Calming Signs – Shellard Lane," dated January 14, 2008, BE RECEIVED.

4.0 PURPOSE

To provide the results of speed studies conducted before and after the activation of Vehicle Activated Traffic Calming Signs (VATCS) on Shellard Lane.

5.0 BACKGROUND

The VATCS signs were installed on Shellard Lane on September 19, 2007. The signs operated in covert mode for a period of two weeks to gather background speed data. After the two weeks, the signs were placed into normal operation. Staff downloaded speed information collected by the radar contained within the VATCS for the two-week period that the sign operated in covert mode, and again after two weeks of normal operation to determine how effective the VATCS are at reducing the operating speed on Shellard Lane.

6.0 STRATEGIC PLAN CONTEXT

The following long term desired outcome from the Strategic Plan is addressed with the installation of the VATCS on Shellard Lane:

- Brantford will be supported by well-developed and maintained transportation and servicing infrastructure.

7.0 INPUT FROM OTHER SOURCES

Not applicable

8.0 ANALYSIS

Table 1 below details the result of the speed studies conducted before and after the VATCS in the westbound direction was placed in to normal operation. The calculations are based on a sample size of 3,000 vehicles per day in the westbound direction.

Table 1: Westbound VATCS Speed Study Results

Vehicle Speed Observed	Before	After	Change	Comments
Less than 50 kph	19%	32%	13%	390 more vehicles/day
51 to 60 kph	45%	49%	4%	120 more vehicles/day
61 to 70 kph	31%	16%	-15%	450 fewer vehicles/day
71 kph and over	5%	3%	-2%	60 fewer vehicles/day
Average Speed	58 kph	54 kph	-4 kph	7% reduction
85 th Percentile Speed	66 kph	62 kph	-4 kph	6% reduction

Table 2 below details the result of the speed studies conducted before and after the VATCS in the eastbound direction was placed in to normal operation. The calculations are based on a sample size of 3,000 vehicles per day in the eastbound direction.

Table 2: Eastbound VATCS Speed Study Results

Vehicle Speed Observed	Before	After	Change	Comments
Less than 50 kph	17%	24%	7%	210 more vehicles/day
51 to 60 kph	28%	40%	12%	360 more vehicles/day
61 to 70 kph	34%	25%	-9%	270 fewer vehicles/day
71 kph and over	21%	11%	-10%	300 fewer vehicles/day
Average Speed	62 kph	58 kph	-4 kph	6% reduction
85 th Percentile Speed	73 kph	68 kph	-5 kph	7% reduction

The results clearly show that the VATCS are effective at reducing the average and 85th percentile operating speed of vehicles traveling on Shellard Lane and increasing the number of vehicles traveling at or below the 50 kph speed limit.

9.0 FINANCIAL IMPLICATIONS

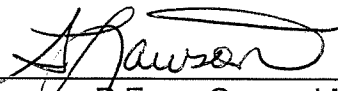
There are no financial implications resulting from the recommendations.

10.0 CONCLUSION

The vehicle activated traffic calming signs (VATCS) installed on Shellard Lane have been effective at reducing the average and 85th percentile speed at which vehicles travel on Shellard Lane by 6 to 7%, and increasing the number of vehicles travelling at or below the 50 kph posted speed limit by 200 to 400 vehicles per day.



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Director of Transportation Services



S. Lawson, P.Eng., General Manager
Engineering & Operational Services

In adopting this report, is a by-law or agreement required? If so, it should be referenced in the recommendation section.

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|--|------------------------------|--|
| By-law required | <input type="checkbox"/> yes | <input checked="" type="checkbox"/> no |
| Agreement(s) or other documents to be signed by Mayor and/or City Clerk | <input type="checkbox"/> yes | <input checked="" type="checkbox"/> no |
| Is the necessary by-law or agreement being sent concurrently to Council? | <input type="checkbox"/> yes | <input checked="" type="checkbox"/> no |

