

## COMMITTEE OF THE WHOLE – NOVEMBER 29, 2004

### SANTA BARBARA PLACE REVIEW – (WESTON DOWNS)

#### Recommendation

The Commissioner of Engineering and Public Works recommends:

1. That this report on staff's findings regarding an assessment of traffic operations on Santa Barbara Place be received.
2. That a right turn prohibition be implemented at the intersection of Velmar Drive and Blackburn Boulevard, between the hours of 7:00 am to 9:00 am, Monday to Friday.
3. That a right turn prohibition be implemented at the intersection of Velmar Drive and Santa Barbara Place, between the hours of 7:00 am to 9:00 am, Monday to Friday.
4. That a right turn prohibition be implemented at the intersection of Velmar Drive and Radley Street, between the hours of 7:00 am to 9:00 am, Monday to Friday.
5. That a right turn prohibition be implemented at the intersection of Valeria Boulevard and Columbus Avenue, between the hours of 4:00 pm to 6:00 pm, Monday to Friday.
6. That a right turn prohibition be implemented at the intersection of Valeria Boulevard and Santa Barbara Place, between the hours of 4:00 pm to 6:00 pm, Monday to Friday.
7. That the above turn prohibitions be implemented only if there is community support of at least 66.6% and that a report be brought forward with the results of the survey, prior to enactment of the implanting by-law.

#### Purpose

To report on the feasibility of implementing various traffic control measures including road closures, traffic diverters, one-way street system or turn prohibitions in the Weston Downs Community (on Santa Barbara Place and on Blackburn Boulevard).

#### Background

At its meeting on May 17, 2004, Committee recommended:

**“That this matter be deferred to allow a meeting with the Ward 3 Sub-Committee, the ratepayers’ association, and staff.”**

At its meeting on May 25, 2004, Council amended:

**“By directing that the phrase ‘before the end of June 2004’ be added following the word ‘staff’ in the above clause.”**

Santa Barbara Place is a local residential street and the existing speed limit is posted at 40 km/h. Existing all-way stop controls are on Santa Barbara Place at the intersections of Velmar Place, Columbus Avenue, and Valeria Boulevard. There are three existing speed humps on Santa Barbara Place located between #19 and #25 Santa Barbara Place, at #79 Santa Barbara Place, and between #130 and #136 Santa Barbara Place. Refer to Attachment No. 1.

The collision history on Santa Barbara Place from 2001 to 2003 shows a total of three collisions.

Two turning movement collisions occurred at the intersection of Santa Barbara Place and Galloway Drive. The third collision occurred at #1 Santa Barbara Place when a driver lost control of a vehicle and struck a parked car.

Staff collected speed and volume data on Santa Barbara Place south of Galloway Drive and south of Kingsnorth Boulevard from March 24, 2004 to March 26, 2004. The collected speed and volume data covered a 24-hour time period and is summarized below.

DATE	TIME	LOCATION	DIRECTION	AVERAGE SPEED	24 HOUR VOLUME
March 24-26, 2004	24 hour	South of Galloway Drive	Northbound	42	2163
March 24-26, 2004	24 hour	South of Galloway Drive	Southbound	44	2046
March 24-26, 2004	24 hour	South of Kingsnorth Boulevard	Northbound	40	1944
March 24-26, 2004	24 hour	South of Kingsnorth Boulevard	Southbound	38	1816

The average speeds on Santa Barbara Place range from 38 to 44 km/h indicating a high level of compliance with the posted speed limit. With the existence of the three speed humps and an all-way stop control between Velmar Drive and Valeria Boulevard, speeding is virtually controlled along Santa Barbara Place.

However, as shown in the above table, the daily traffic volumes both directions are above that of a typical local road level of 3000 vehicles per day. Staff reviewed the length of time that the vehicles needed to back out of the driveways during the peak AM travel period. It was noted that the vehicles could back out of the driveways in a relatively timely fashion, recognizing the traffic volumes along Santa Barbara Place.

Staff conducted an infiltration study on Santa Barbara Place between Velmar Drive and Valeria Boulevard during the AM and PM peak periods on March 31, 2004 in order to determine the amount of "cut through traffic". The following table summarizes the results of this investigation.

Infiltration Pattern	AM Peak Period 7:30-9:00		PM Peak Period 3:00-5:30	
	Vehicles	% of Entering Traffic	Vehicles	% of Entering Traffic
Velmar Drive to Valeria Boulevard	212	62.2%	149	60.8%
Valeria Boulevard to Velmar Drive	56	41.5%	252	40.4%

Traffic infiltration is normally defined as "vehicular traffic passing through an area when the vehicle operator does not have a destination in the area". Generally, the threshold value above which through traffic is defined as infiltration is 30%. From the table above, the cut through traffic exceeds the threshold. Traffic volumes are much higher during school start and dismissal times due to parent pick-up and drop-off activities at St. Clare Catholic School located on Velmar Drive opposite Santa Barbara Place. The side streets off Santa Barbara Place such as Blackburn Boulevard, Galloway Drive, Columbus Avenue and Kingsnorth Boulevard would account for some of the volume on Santa Barbara Place. These roadways have secondary access points onto other roads within the subdivision.

Public Meeting

On June 29, 2004 a meeting was held with the Traffic Committee Chair, a Ratepayer's Association representative, several residents on Santa Barbara Place, three City of Vaughan Council members and Engineering Department Staff. The outcome from the meeting resulted in four possible solutions to improve the traffic concerns raised by the residents on Santa Barbara Place. The four possible solutions are:

1. Road Closure:

- At the intersection of Santa Barbara Place/Columbus Avenue and at the intersection of Blackburn Boulevard/Columbus Avenue. (Attachment #2 and #4)

2. Traffic Diverter:

- At the intersection of Santa Barbara Place/Columbus Avenue and at intersection of Blackburn Boulevard. (Attachment #2 and #3)

3. Implement a one-way street system:

- southbound direction only on Blackburn Boulevard starting at Radley Street, northbound direction only on Santa Barbara Place from Columbus Avenue to Velmar Drive, southbound direction only on Santa Barbara Place from Columbus Avenue to Blackburn Boulevard. (Attachment #5)

4. Turn Prohibitions:

- AM Peak Period 7:00am to 9:00am - Velmar Drive/Blackburn Boulevard and Velmar Drive/Santa Barbara Place.

- PM Peak Period 4:00pm to 6:00pm – Valeria Boulevard/Columbus Avenue and Valeria Boulevard/Santa Barbara Place.

Staff requested and received comments from the City's Fire and Rescue Service Department, Public Works Department and the York Catholic District School Board. The York Region Public School Board was contacted, however no response was received at the time of the preparation of the report.

York Catholic District School Board – Student Transportation Services

Student Transportation Services advised that all the proposed changes to Santa Barbara Place would have an impact on the route services. The following schools have routes that would be directly impacted: Father Bressani Catholic High School (2 routes), Blue Willow Public School, St. Gregory the Great Catholic School, Emily Carr High School, Woodbridge College, and Le Petit Prince (1 route at each school).

Fire and Rescue Service Department

Road Closures

- This option would reduce the ability of emergency services to respond in that area. If Emergency Services were to respond to the wrong side of the closure (e.g. a resident reporting a fight or a fire "a few houses down the street" or 'at the house behind me') then it will take several minutes to get to the right side of the street. Closing off streets greatly reduces the response flexibility that Emergency Services presently have within this neighbourhood.

#### Traffic Diverters

- The same comments apply as the road closures.

#### One-Way Street System

- This option also would reduce response times by having the emergency vehicle drive all the way around the block to reach a particular address. In many cases, it will add minutes to the emergency response. Emergency vehicles are not permitted to drive the wrong way on one-streets.

#### Turn Prohibitions

- The by-law would exempt emergency vehicles from turn prohibitions and therefore there are no concerns regarding this option.

#### Public Works Department

##### Road Closures

- Public Works would require a residential cul-de-sac to be constructed on both Blackburn Blvd and Santa Barbara Pl. This would be the only way to accommodate the winter snow plowing and residential garbage pick-up if adequate right-of-way is provided.

##### Traffic Diverters

- Since these roads were not originally designed to accommodate traffic diverters within the intersections, this option may not be able to allow the movement of snow plows, garbage trucks and fire emergency vehicles.

##### One-Way Street System

- The Public Works Department does not support this option.

##### Turn Prohibitions

- This option would be acceptable by the Public Works Department.

Regarding Option 4 – the implementation of turning prohibitions at the four noted intersections during specific time periods would require resident support since residents both on Santa Barbara and the connecting side streets would be adversely affected. With the implementation of turning prohibitions, traffic would be diverted to other neighbouring streets such as Kingsnorth Boulevard, Blackburn Boulevard and Columbus Avenue. Should Council wish to pursue this option, a survey would need to be sent to **all** area residents requesting their support of the proposed restrictions. Support of 66.6% of the community should be achieved prior to implementing any prohibition. The two-thirds support level is the threshold value used in assessing the viability of discretionary traffic regulation both in Vaughan and in other jurisdictions.

This option may address the concerns of the residents in an effort to reduce the number of vehicles on Santa Barbara Place and it would be an inexpensive option as only traffic signs are required.

Regarding Option 1 the road closure or Option 2 the traffic diverters, residents both on Santa Barbara Place and the connecting streets would be adversely affected. Prior to the implementation of either option, a survey would need to be sent to all area residents requesting

their support. Similarly, support of 66.6% of the community should be achieved prior to implementing either option. Also, either option would be required to follow the Municipal Act and the Environmental Assessment Act.

The change of several streets within the subdivision to become a one-way street system Option 3 - can not be supported as the community would be required to travel further distances to and from their homes. In addition, a change in the road network would increase response times for emergency services vehicles, impact the Public Works Department operational services, impact the route services of Student Transportation Services, cause confusion for visitors and delivery services to this subdivision. The subdivision was not designed to accommodate one-way type traffic movement on its existing street network.

### Design Issues

The right-of-way width for both Santa Barbara Place and Blackburn Boulevard is 20 metres. The design of the road closure cul-de-sac bulb will be substantially below City Standards and would not accommodate the movement of snow plows and garbage vehicles. The movement for fire emergency, snow plow and garbage vehicles will be difficult with the construction of a traffic diverter at both subject intersections. The intersections were not built to have a traffic diverter constructed where the available pavement width is reduced.

### Costs

The estimated costs for the construction of the road closure cul-de-sac bulbs and the traffic diverters include all road work and relocation of existing street furniture and utility facilities.

Santa Barbara Pl/Columbus Ave road closure (Attach. #4)	-	\$120,000.00
Santa Barbara Pl/Columbus Ave traffic diverter (Attach. #3)	-	\$50,000.00
Blackburn Blvd/Columbus Ave road closure/traffic diverter (Attach. #2)	-	\$130,000.00

The matter of implementing road closures/traffic diverters on Santa Barbara Place and on Blackburn Boulevard have been dealt with in the past and are not recommended based on an overall traffic flow analysis. Road closures/traffic diverters would transfer traffic to the neighbouring local streets including Kingsnorth Boulevard, Blackburn Boulevard, Columbus Avenue and Galloway Drive. Residents of the Weston Downs community would be required to travel further distances to and from their homes. Furthermore, school buses would not have direct access to the schools and this would result in additional time for the buses to travel distances through the neighbourhood. Any type of road closure along Santa Barbara Place would increase the response times for the emergency services (fire, police, ambulance).

With the implementation of a one-way street network, there will be an additional cost to construct curb bump-outs at three noted intersections (as shown on Attachment #5): Blackburn Boulevard/Columbus Avenue on the northeast corner, Santa Barbara Place/Blackburn Boulevard on the northeast corner and Santa Barbara Place/Velmar Drive on the southwest corner. The curb bump-outs are required to direct traffic movement at the intersections to ensure motorists do not travel in the wrong directions on the roadways. The estimated cost (includes all labour, material, traffic signs) for the three curb bump-outs is \$12,000.

The cost estimate for the installation of the necessary traffic signs for any of the four above options would be \$3,000.

### **Relationship to Vaughan Vision 2007**

This traffic study is consistent with Vaughan Vision 2007 as to ensure enhanced safety standards are incorporated in community designs (1.1.2).

This report is consistent with the priorities previously set by Council and the necessary resources have been allocated and approved.

### **Conclusion**

This report details staff's findings regarding a further assessment of traffic operations on Santa Barbara Place. While traffic volumes on Santa Barbara place exceed that expected on a local road, traffic speeds are not excessive and access from driveways on the street was observed to occur with relative ease. Although Santa Barbara was originally designed as a local roadway, it is functioning as a feeder road and is a critical component of the road network in the Weston Downs community. A road closure or a traffic diverter should not be considered, as they would adversely affect the community, the residents of the connecting streets and on Santa Barbara itself. Santa Barbara Place is a critical component of the Weston Downs roadway network providing connectivity and continuity of access.

Accordingly, staff recommends that the recommended turning prohibitions be implemented.

### **Attachments**

1. Location Map
2. Santa Barbara Place/Blackburn Boulevard – Road Closure/Diverter
3. Santa Barbara Place/Columbus Avenue - Diverter
4. Santa Barbara Place/Columbus Avenue – Road Closure
5. One-Way Street System Proposal

### **Report prepared by**

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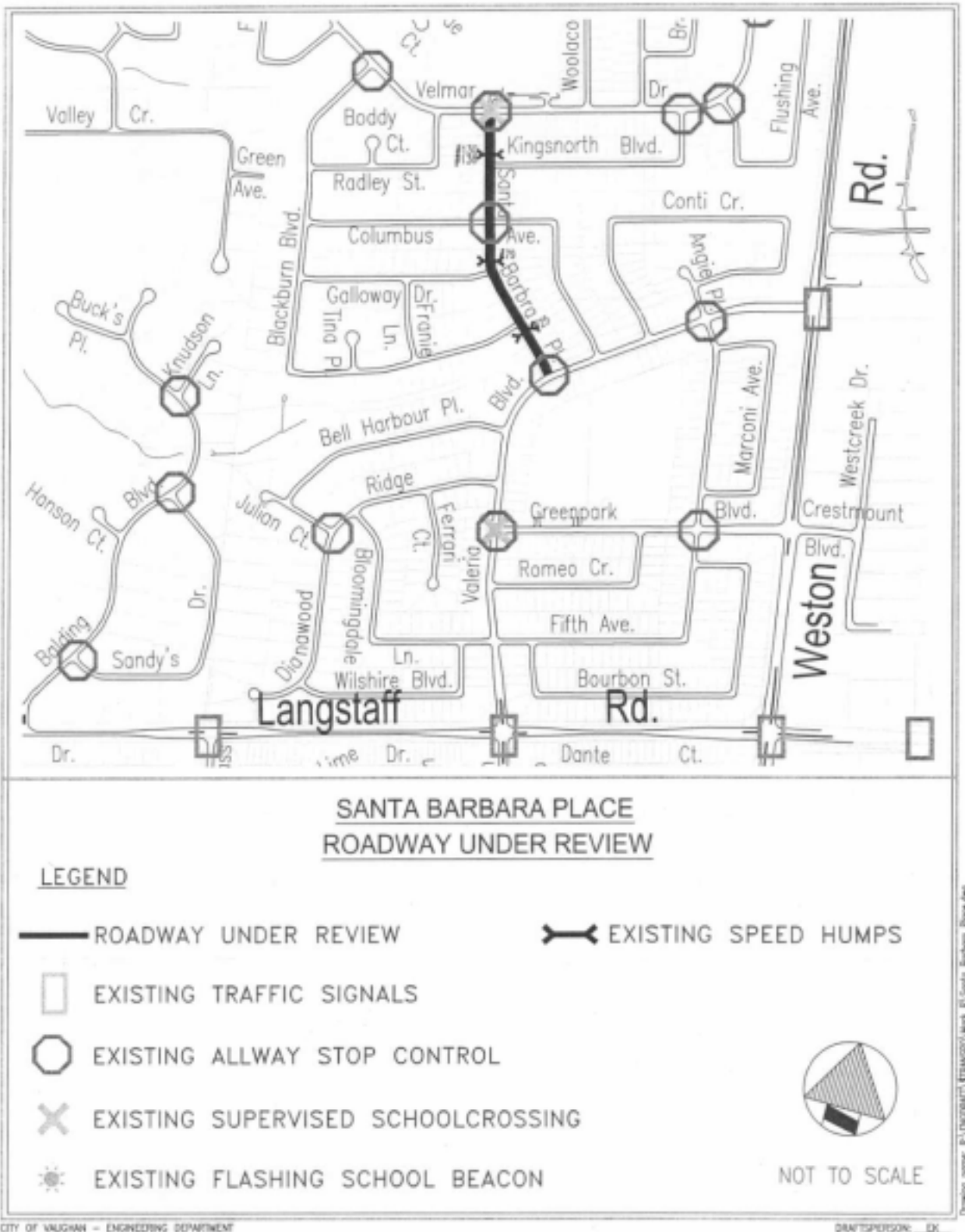
Respectfully submitted,

Bill Robinson, P. Eng.,  
Commissioner of Engineering and Public Works

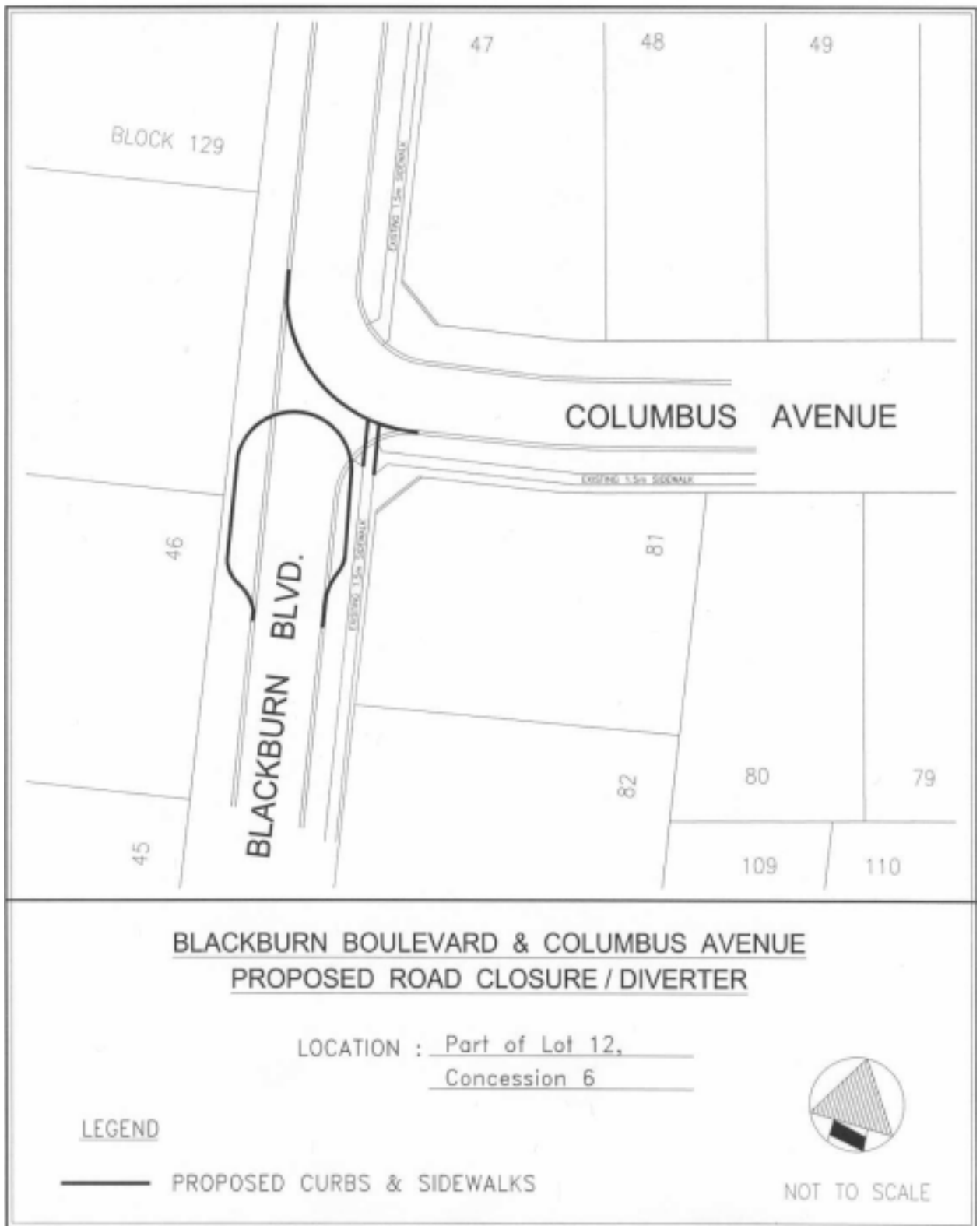
Gary Carroll, P. Eng.,  
Director of Engineering Services

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# ATTACHMENT No. 1

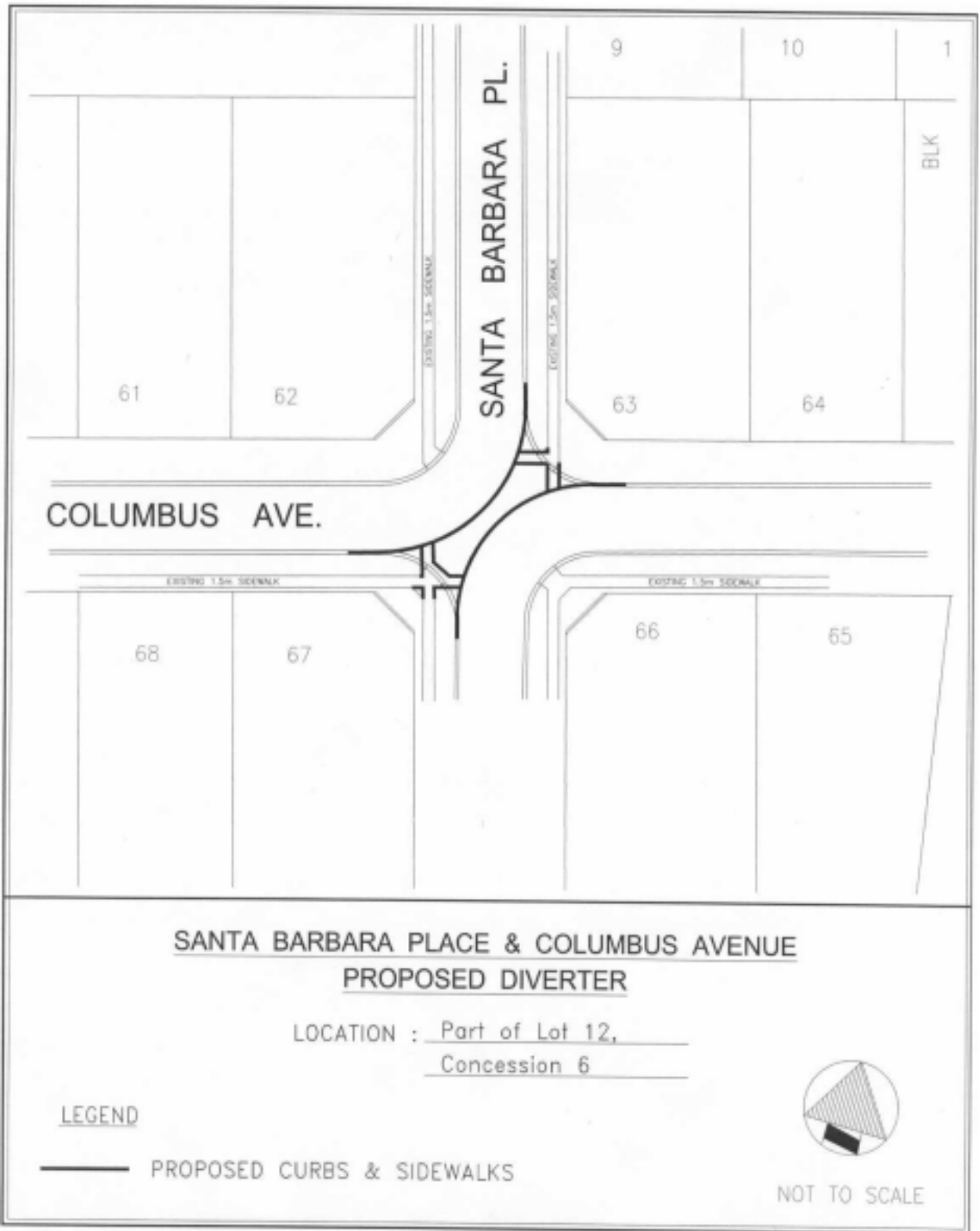


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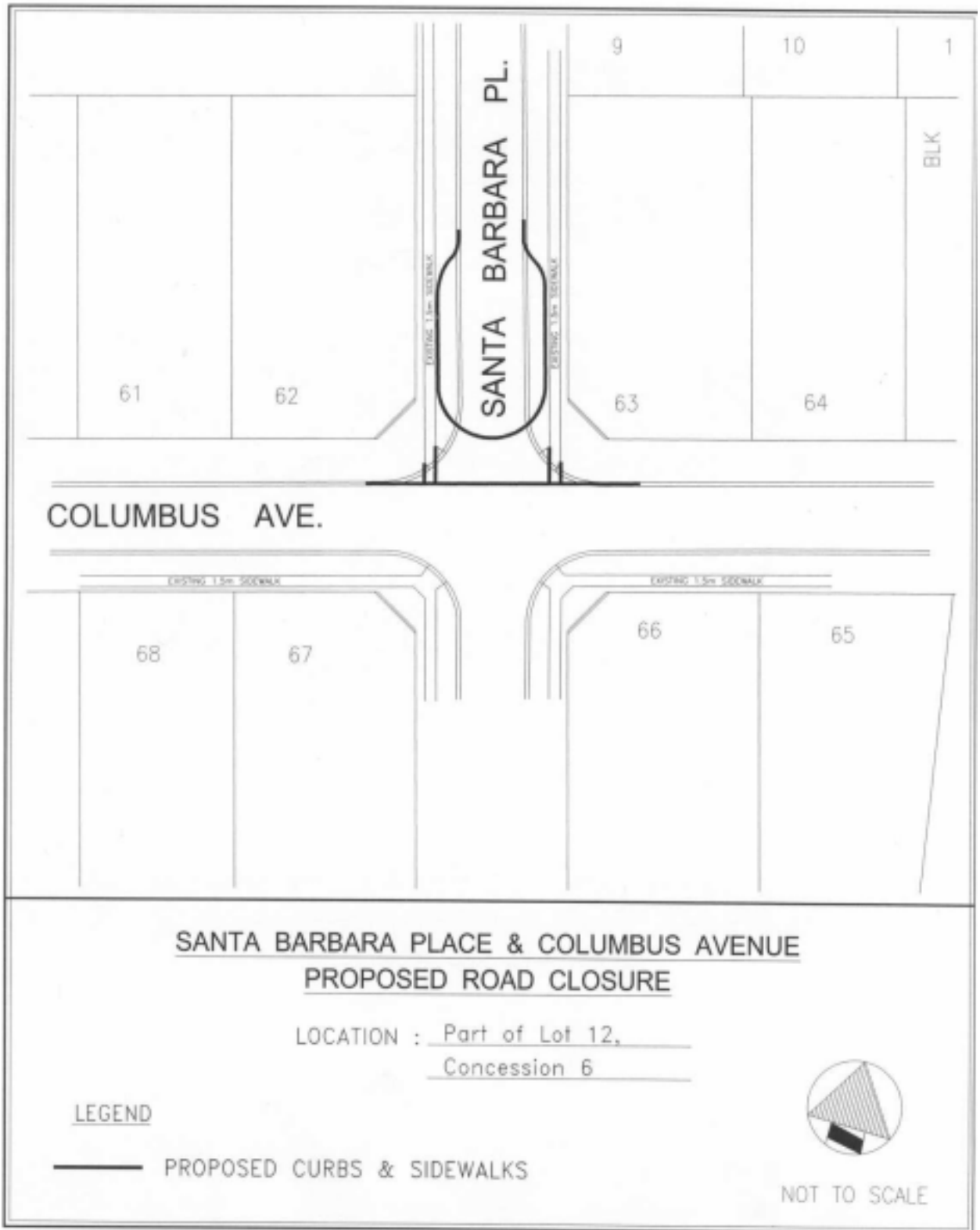




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# ATTACHMENT No. 4



# ATTACHMENT No. 5

