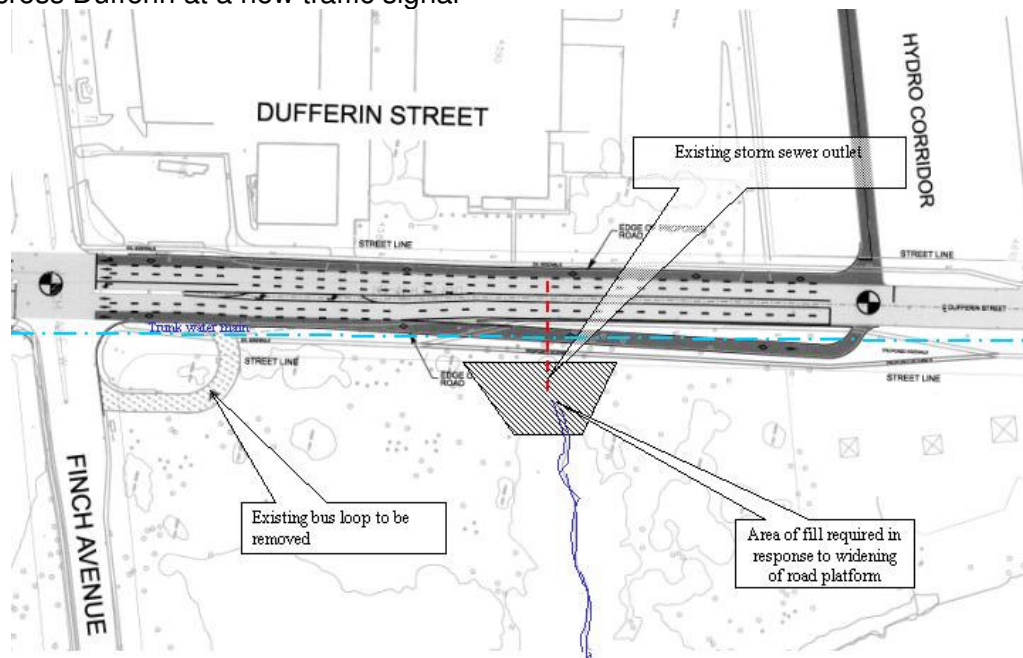


## CHOOSING A RECOMMENDED DESIGN ON DUFFERIN STREET

Staff evaluated three design concepts for bus-only lanes on Dufferin Street.

### **Curb Lanes and Hybrid Options**

- These options are identical in the northbound direction:
- in the peak hours, buses exit Downsview Station via the signalised intersection onto Sheppard Avenue
- buses make the left turn into a lengthened westbound right turn lane
- buses turn right onto Old Dufferin and the left onto a new, bus-only connection to the Allen. (Note: the existing right-turn “slip-off” that allows northbound traffic on Allen to connect directly to Old Dufferin would be closed.)
- at the point where buses enter the northbound curb lane, now designated as bus-only, northbound traffic there would be only two lanes for general traffic
- the bus-only lane would continue through the Finch intersection to a “jug-handle” design (see plans) on the east side of Keele at the hydro corridor where buses would cross Dufferin at a new traffic signal



- right turning motorists would be permitted to enter the bus-only lane
- a separate northbound right-turn lane would be constructed at Finch Avenue

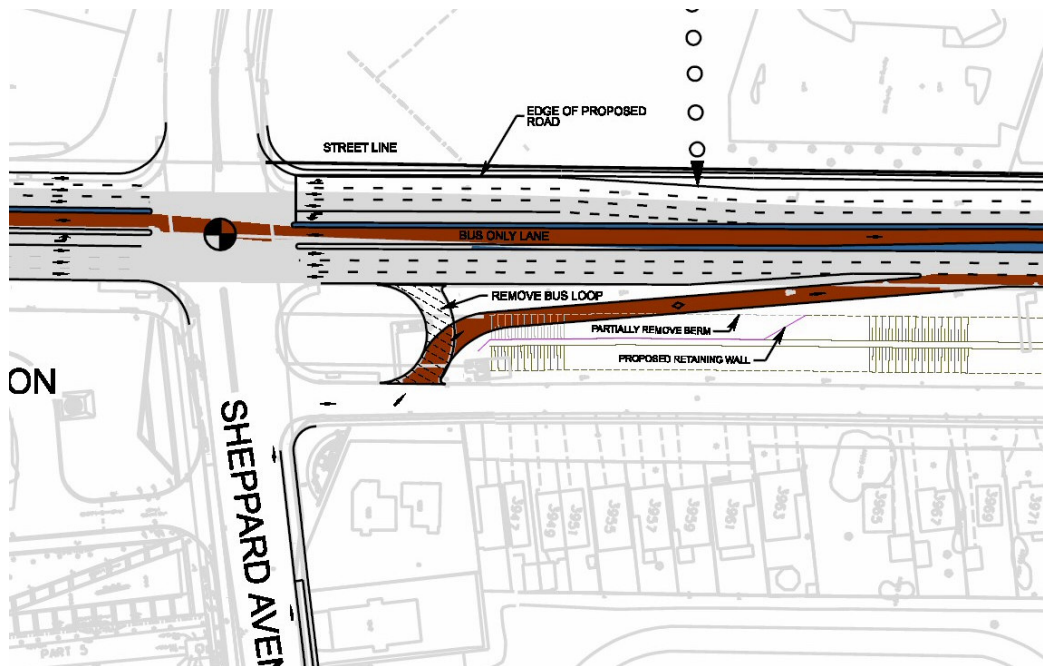
These two options are also identical in the southbound direction, through the Finch intersection. The southbound right turn lane at Finch would be lengthened to the hydro corridor and be designated for bus-only and right turns. The bus-only lane would continue in the curb lane south of Finch.

### **The Curb Lane Option:**

- Would continue southbound through Sheppard to a right turn “loop-the-loop”, across the Allen, and into the bus terminal.

### **The Hybrid Option:**

- The curb bus-only lane would end north of Rimrock and buses would merge to the left, in mixed traffic, then into a new southbound median bus-only lane, straight through the Sheppard intersection, and into the station at a new traffic signal.



### **Median Option**

Although Allen Road—Dufferin Street have three traffic lanes in each direction, bus-only lanes in the middle of the road would require a major widening through the Sheppard intersection as traffic volumes require three lanes in each direction for general traffic

- From north of Sheppard, to south of Finch Avenue, two lanes for traffic are sufficient so only a minor widening would be required.
- From Finch to the hydro corridor, there are only two lanes in each direction. A major widening would be required to build the median lanes

### **Evaluation**

The Curb Lane option was ranked the lowest of the three. It is the slowest and “sterilizes” the immediate south-west corner of the Allen/Sheppard intersection.

The Median option is only marginally faster than the Hybrid. The principal advantage of the median is added reliability because it, unlike the Hybrid, provides physical separation from traffic.

Conversely, motorists may illegally enter those sections of the Hybrid that are not physically separated from traffic during severe traffic congestion resulting from accidents or snowstorm.

However, those special situations are not common enough to justify the significantly greater road widening through the Finch intersection, nor the \$7 million extra cost of the Median option.

The extra cost of the Median is also more difficult to justify as the facility on Dufferin is no longer needed when the subway is extended.

**CONCLUSION**      Staff recommend the Hybrid option.