



COUNCIL REPORT
Engineering / Public Works
For the January 28, 2020 Council Meeting

DATE: December 20, 2019
TO: Paul Gipps, CAO
FROM: Dana Graves, Design & Inspection Technologist
RE: Campbell Road Traffic Calming Review

RECOMMENDED MOTION:

THAT Council direct Staff to engage the Casa Loma Neighborhood for their input on the recommended Median Gateway Treatment for Campbell Road.

RATIONALE:

Engineering has completed a combined review of traffic conditions on Campbell Road to determine if further traffic calming measures are warranted within the study area at this time.

BACKGROUND:

The Casa Loma Neighbourhood Level Implementation study was completed in May 2015 in accordance with the Traffic Calming Policy originally adopted on July 26, 2011. It involved working groups with members of the neighbourhood resident association, two open houses with traffic calming presentations, opportunities for resident input and online questionnaires. The resident concerns were predominantly speeding and line marking improvements.

Traffic calming improvements in the neighbourhood were proposed in two phases, with the first phase including the installation of a driver awareness board and line marking improvements on Campbell Road. Consideration of a second phase was dependant on the effectiveness of the first. The recommended improvement options were based on public support, and Council input during the neighbourhood level Implementation study. The second phase of the works was not completed due to Council's direction not to proceed further with the Community Wide Traffic Calming Program.

In December 2018 a Traffic Calming Petition was received from residents on Campbell Road requesting traffic calming measures installed on Campbell Road from Casa Rio Drive to Lucinde Road. Of the 36 households within the petition's inclusion, 26 residents were confirmed as signed (72%) which met the 50% requirement in the Traffic Calming Policy. The City evaluated traffic conditions when street sweeping was completed, from April 11-23, 2019. Data was collected at two locations within the petition area, refer to Figure 1 for locations.

On June 6, 2019 Watt Consulting Group completed a Traffic Calming Review of Campbell Road based upon collected traffic volume and speed counts within the study area, refer to Appendix A.

Current Conditions:

Campbell Road is an Urban Minor Collector class of roadway in the West Kelowna Traffic Management Plan that provides current access to approximately 284 residential properties in the Casa Loma Neighborhood. A Driver Awareness Board is located on Campbell Road prior to Casa Grande Drive facing the southbound traffic lane with a regulatory 50km/h sign is on the board post and another located immediately exiting Casa Rio Drive facing the northbound lane.

The ICBC crash data from 2014 to and including 2018 a total of 36 incidents for the road corridor reports are on file. Of these, only two incidents causing property damage were reported on Campbell Road, one in November 2016 involving a collision with a deer and another when a vehicle collided with a snow clearing vehicle then a fire hydrant in December of 2017. The remainder of incidents are identified as located on Highway 97 and Campbell Road.

Figure 1: Traffic Monitoring Location Map



Table 1: Campbell Road – Speed Summary Chart April 11-23, 2019

	Posted Speed Limit	Mean Speed	85 th Percentile Speed
Campbell Rd North	50 km/h	53 km/h	62 km/h
Campbell Rd South	50 km/h	47 km/h	55 km/h

Note: The mean speed is defined as the average speed of vehicles observed to travel under free-flowing conditions past a nominated point. The 85% speed is defined as the speed at or below which 85 percent of all vehicles are observed to travel under free-flowing conditions past a nominated point providing an accurate estimation of traffic conditions and is also called “operating speed”.

Traffic Calming Device Comparisons

A speed hump gateway treatment was previously recommended in the neighbourhood level implementation study in 2015. The gateway features a vertical speed hump and two small curbs on each side with considerations for additional speed humps to the South of the gateway. The road grades are unsuitable within the petition area for speed hump install, as they are required to be located in a series prior to Casa Rio Drive with a 100 to 150 metre spacing between each. This configuration would also negate the effectiveness of the current speed reader board and movement to another location should be considered. It is noted that speed humps are the most effective means of slowing traffic but have impacts to emergency service response times.

A median gateway treatment is proposed by Watt Consulting Group as a landscaped median island with 50km/h pavement markings to influence driver behavior. This will slow traffic with the use of horizontal deflection, forcing vehicles to change their path to navigate the feature. A structure of this type would require a road widening prior to Casa Rio Drive but the existing speed reader board will compliment this location. Landscaping is considered to increase the effectiveness additional operating costs including maintenance and irrigation will be required.

Note: Water supply in Casa Loma is a privately owned water system.

Recommendations

Watt Consulting Group recommends that the City:

- Assess options with emergency services; and
- Gauge support from the neighborhood; and
- Pursue the Median Gateway Treatment with landscaped features.

Assessment of Options

West Kelowna Fire Rescue (WKFR), Royal Canadian Mounted Police (RCMP), BC Emergency Health Services (BCEHS), West Kelowna Parks and Public Works has reviewed the Watt Consulting Group Traffic Calming Review of Campbell Road. The concerns provided regarding the options are as follows:

1. WKFR comments are:
 - a. *“The area beyond the proposed gateway treatment is outside our designated 10 Minute response area, therefore we wouldn’t support the installation of the “Gateway Treatment with Speed Hump”. This would require a significant slow down for the truck as these bumps are very pronounced in the fire engine.”*
 - b. *“The median option is similar to traffic calming works on Mission Hill Rd and Gregory Rd. We haven’t received any negative feedback from our crews on these treatments. Therefore, these would be the more desirable alternative, if something was required at all.”*

2. RCMP comments are:
 - a. *"The RCMP vehicles are not significantly impacted by traffic calming measures as our vehicles are not large as fire department vehicles are."*
 - b. *"The RCMP should not be affected by this change aside from whatever positive traffic calming results from the changes."*
3. BCEHS comments are:
 - a. *"The SPEED HUMP GATEWAY TREATMENT is problematic for ambulances because at a normal driving speed of 50 km/h we would need to slow down to at least 5 km/h. This makes for a very rough ride for our stretcher patients and puts us at risk of being rear-ended."*
 - b. *"The MEDIAN GATEWAY TREATMENT is much more favorable for us so long as they are no more than 50 meters long with good sightlines and not one after another. Any longer and they have a profound effect on our ability to pass vehicles that have pulled over for us."*
 - c. *"Campbell Road area has never caused me concern for excessive speeding."*
4. Parks comments are:
 - a. *"Landscaping be minimal."*
 - b. *"Minor spot planting with point source irrigation."*
 - c. *"Heavy fabric weed barrier with larger chunky decorative rock (no fine granules) for ground cover."*
 - d. *"Plant very sparingly."*
5. Public Works comments are:
 - a. *"16' width is required to enable front plow setup between medians, this could be reduced to 14' clear width if only underbody plows are used."*
 - b. *"These would need to be well marked to mitigate damage during winter months"*
 - c. *"This area would be subject to significant salt and sand application so that should be considered if landscaped median is being contemplated."*
 - d. *"Drainage will need to be accommodated in/around medians, islands etc."*
 - e. *"Experience with other lane narrowing locations is that cyclists/pedestrians are impacted significantly and should be accommodated with either lane or enhanced signage and markings to share the travel lane."*
 - f. *"Bumps/humps (if supported) would need to be well marked/accommodate drainage. Road structure around the bumps may need to be enhanced as we are seeing asphalt failures at the exit of some of the bumps in other areas."*

COUNCIL REPORT/RESOLUTION HISTORY:

Date	Report Topic/Resolution	Resolution No.
July 26, 2011	THAT Council adopt the District of West Kelowna Traffic Calming Policy. <i>(moved and seconded)</i>	C230/11
March 10, 2015	THAT the Casa Loma Neighborhood Traffic Calming Program be amended to include that the speed limit on Campbell Road indicates a maximum of 60km/h to the residential boundary; and THAT the motion be deferred until the change in speed limit is evaluated by a traffic engineer and that the Casa Loma Neighborhood Traffic Calming Program be deferred pending resolution of the issues raised. <i>(moved and seconded)</i>	C130/15
May 12, 2015	THAT Council adopt the revised District of West Kelowna Traffic Calming Policy; and THAT Council direct staff not to proceed further with the Community Wide Traffic Calming Program initiated in 2011; and, THAT Council direct staff to undertake additional revisions to be brought back to Council. <i>(moved and seconded)</i>	C206/15
May 12, 2015	THAT Council direct staff to maintain the existing speed limit of 50km/h along Campbell Road between the DWK boundary and the urban area; and THAT Council direct staff to proceed with the detailed design and construction of the recommended Phase 1 Traffic Calming measures in Casa Loma; and THAT Council direct staff to bring back a report within eighteen months of implementation of Phase 1 with results of the project and recommendation on whether to proceed with Phase 2. <i>(moved and seconded)</i>	C207/15
June 6, 2017	That Council adopt the revised City of West Kelowna Traffic Calming Policy dated June 6, 2017. <i>(moved and seconded)</i>	C335/17

FINANCIAL IMPLICATIONS:

The raised median should be at least 2.0 meters wide and 7.0 meters long with a minimum lane width of 3.3m (no more than 3.5m) wide plus shoulder widening. If this gateway treatment is pursued, it is further recommended to be enhanced with a larger treed median and 50km/h pavement markings.

The estimated cost to construct the landscaped median gateway, including the 50km/h pavement marking is \$50,000, which does not include any provision for design or construction services.

ALTERNATE MOTIONS(S):

THAT Council direct Staff to proceed with the Median Gateway Treatment design and allocate budget to construct on Campbell Road; or

THAT Council does not support the Median Gateway Treatment at this time on Campbell Road and direct Staff to continue to monitor traffic conditions in accordance with the current City of West Kelowna Traffic Calming Policy.

REVIEWED AND APPROVED BY:

Allen Fillion, Director of Engineering & Public Works
Warren Everton, Director of Finance/CFO
Tracey Batten, Deputy CAO/Corporate Officer
Paul Gipps, CAO

Powerpoint: Yes ☒ No ☐

Attachments:

Appendix A – WATT Consulting Group MEMORANDUM 2019-06-06 Casa Loma Traffic Calming Review