

MEMORANDUM

Date: November 15, 2019

To: Heidi Rosenberg
Capital Programs Manager
Camas School District
1919 NE Lone Street
Camas WA 98607

From: Frank Charbonneau, PE, PTOE

Subject: School Speed Zone FL19111
NE Woodburn Drive
Woodburn Elementary School, Camas School District

This memorandum presents a recommendation to extend the existing school speed zone on NE Woodburn Drive in the City of Camas near Woodburn Elementary School. The speed limit review was requested by the School District with input provided by the City's Engineering Department. The resulting speed zone recommendation is supported by an engineering assessment conducted by Charbonneau Engineering in accordance with Section 7B.11 of the Manual on Uniform Traffic Control Devices (MUTCD) and the Clark County School Zone Traffic Control Policy. A signing plan illustrating the signing recommendations is included with this memorandum.

Currently Woodburn Drive adjacent to the elementary school is designated as a school speed 20 zone between SE Crown Road/283rd Avenue and the school driveway access located approximately 900 feet westerly of SE Crown Road/283rd Avenue. The school zone contains `School Speed Limit 20 When Flashing` signs in each direction. The non-school posted speed is 25 MPH.

The existing painted crosswalk on Woodburn Drive at NE Verbena Circle is used as a school crossing location on a regular basis by students within the neighborhood. The crosswalk is considered to be a designated school crossing point and is managed by adult crossing guards during the opening and closing school hours. The street's horizontal alignment in conjunction with several street trees along the street's west and south sides curtail the available stopping sight distance to less than 100 feet for vehicles approaching the crossing. For 25 MPH the AASHTO standard is 155 feet of stopping sight distance and for 20 MPH the standard is 115 feet. The sight distance standard can be met by pruning the trees and maintaining a vertical 10 foot clearance between the ground surface and the trees' lowest hanging branches. Extending the school speed zone to include the pedestrian crossing at the Verbena Circle intersection would further benefit the safety conditions and is therefore recommended.

To extend the school zone it will be necessary to implement additional traffic control signing. The attached signing plan illustrates the required details as summarized below.

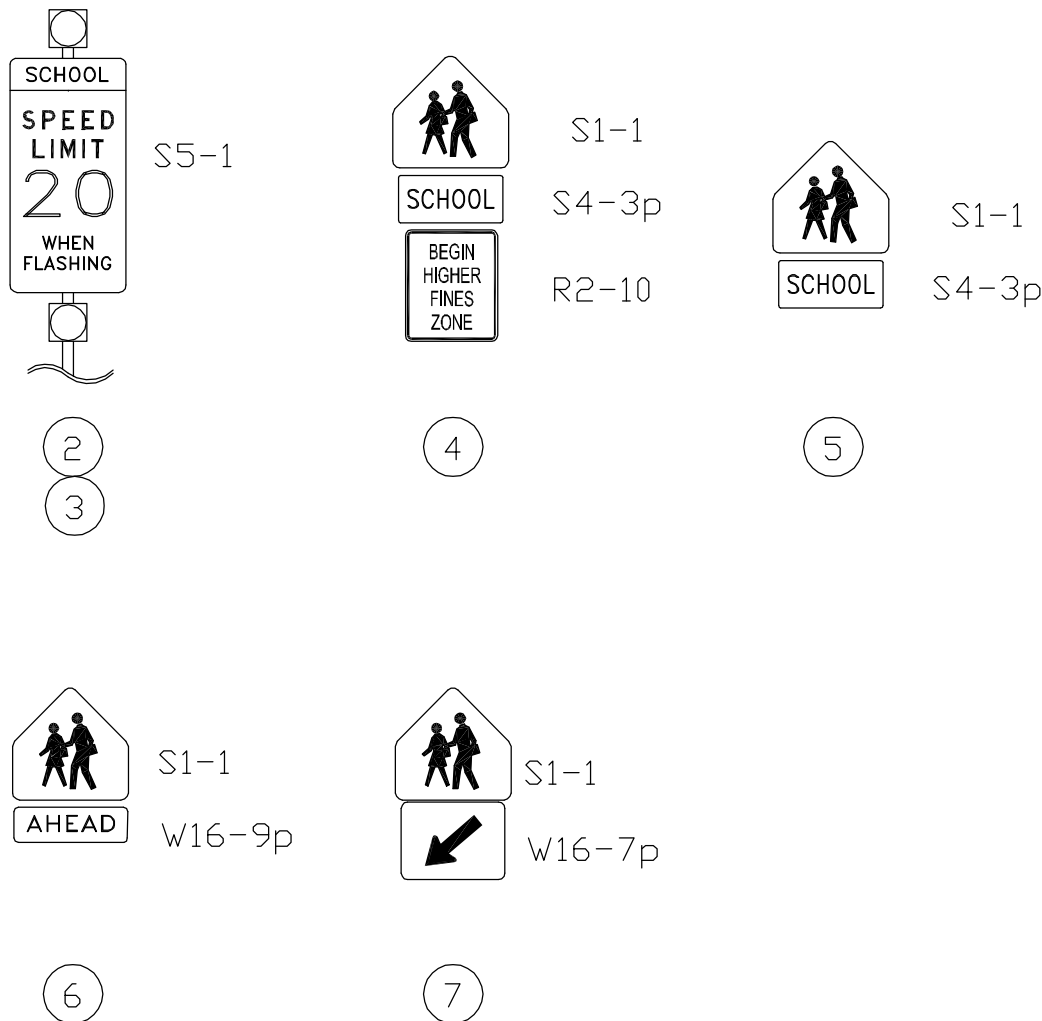
If you should have any questions, please contact Frank Charbonneau, PE, PTOE at 503.293.1118 or email Frank@CharbonneauEngineering.com.

Attachments

Figure 1 - Traffic Control Plan

Figure 2 - Sign Legend





Construction Notes (Reference Figure 1):

- ① Ten (10) street trees shall be pruned and maintained to provide 10 feet of vertical clearance between the ground surface and the lowest hanging branches to ensure that adequate sight distance is obtained for drivers approaching the crosswalk on Woodburn Drive at Verbena Circle. Reference attached traffic control plan for reference to tree locations.
- ② Existing solar powered "School Speed Limit 20 When Flashing" sign on steel sign pole. Relocate to location west of Verbena Circle intersection. See Note #3 for reference location.
- ③ Reinstall solar powered "School Speed Limit 20 When Flashing" sign and steel sign pole to south side of Woodburn Drive at a point approximately 300 feet west of Verbena Circle intersection. Installation requires construction of new 2'x2'x3' deep concrete foundation. Reference attached traffic control plan for location reference.
- ④ Existing school zone assembly sign with SCHOOL plaque legend sign and "BEGIN HIGHER FINES ZONE" sign on steel sign pole. Relocate at a point approximately 400 feet west of existing crosswalk location. Remove "BEGIN HIGHER FINES ZONE" sign. See Note #5 for reference location.
- ⑤ Reinstall school zone assembly sign with SCHOOL plaque legend sign to south side of Woodburn Drive at a point approximately 100 feet in advance of the relocated "School Speed Limit 20 When Flashing" sign. Reference attached traffic control plan for location reference.
- ⑥ At a distance of approximately 150 feet in advance of the existing crosswalk, install school zone assembly sign with AHEAD plaque legend sign. Steel sign poles are required. Reference attached traffic control plan for location reference.
- ⑦ At the crosswalk location, install school zone assembly sign with diagonal arrow symbol sign for both traffic flow directions. Steel sign poles are required. Reference attached traffic control plan for location reference.