



CITY OF KENT DEVELOPMENT ASSISTANCE BROCHURE

6-7

SIGHT DISTANCE REQUIREMENTS

These requirements are intended to provide guidance to property owners and design engineers on what sight distance criteria the City of Kent will require and accept as a result of specific development actions. This document combines the requirements of the City of Kent Construction Standards, the City of Kent Zoning Code, AASHTO's A Policy on Geometric Design of Highways and Streets; and the City of Kent Subdivision Code.

CRITERIA FOR MEASURING SIGHT DISTANCE

Sight distance is the distance along a roadway that an object of specified height is continuously visible to the driver. This distance is dependent upon the height of the driver's eye above the road surface, the specified object height above the road surface, and the height of obstructions within the line of sight.

For sight distance calculations for passenger vehicles, the height of the driver's eye is considered to be 3.50 feet above the road surface for both stopping sight distance and for passing sight distance. For stopping sight distance calculations, the height of the object that must be seen is considered to be 0.50 feet above the road surface. For passing sight distance calculations, the height of the object that must be seen is considered to be 4.25 feet above the road surface.

Generally speaking, the City of Kent has determined that when sight distance calculations are made for intersections; the stopping sight criteria and stopping sight distances are to be used. When sight distance calculations are made for driveways; the passing sight criteria for the height of the object shall be used, but the stopping sight distances are to be used.

SIGHT OBSTRUCTIONS

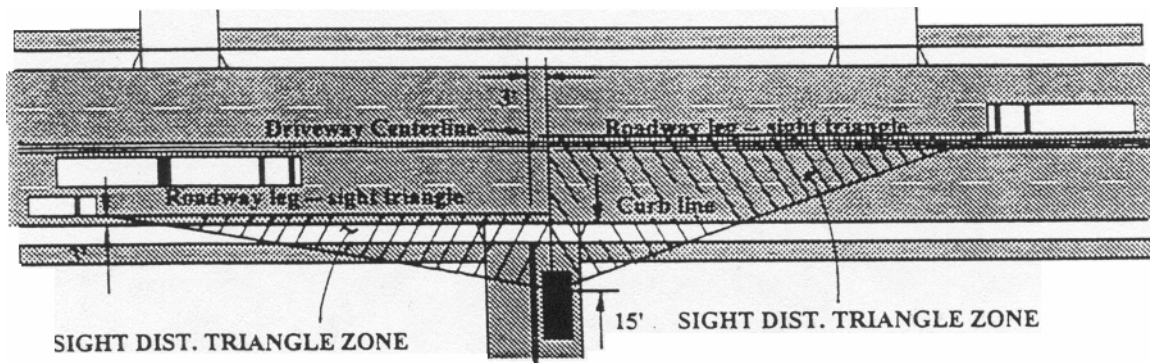
The obstruction that limits the driver's sight distance on tangents is usually the road surface at some point on a crest vertical curve. The obstruction that limits the driver's sight distance on horizontal curves may be the road surface at some point on a vertical curve, or it may be some physical feature outside of the traveled way, such as a longitudinal barrier, a bridge-approach fill slope, a tree, foliage, or the backslope of a cut section. Accordingly, all street and driveway plans must be checked in both the vertical and horizontal planes for sight distance obstructions.

DRIVEWAY ENTRANCE SIGHT DISTANCE TRIANGLES

In order to ensure that proper sight distance is maintained at all driveways, and across private property at intersections, no obstructions or landscaping materials exceeding 30 inches in height as measured at the flow line of the curb & gutter (or the edge of pavement where curbs are not constructed) will be permitted within the sight distance triangle for driveways and intersections.

The length of the roadway leg of the sight distance triangle is a function of the PREVAILING SPEED - NOT the Speed Limit - on the street. The prevailing speed is usually found by adding 5 MPH to the posted Speed Limit, unless otherwise determined by a Speed Study, or by the Transportation Engineer.

SPEED (MPH)	ROADWAY LEG DISTANCE	
	DISTANCE TO THE LEFT	DISTANCE TO THE RIGHT
25	250 feet	195 feet
30	350 feet	260 feet
35	440 feet	350 feet
40	530 feet	440 feet
45	635 feet	570 feet
50	740 feet	700 feet
> 50	Contact the City for Distance	Contact the City for Distance

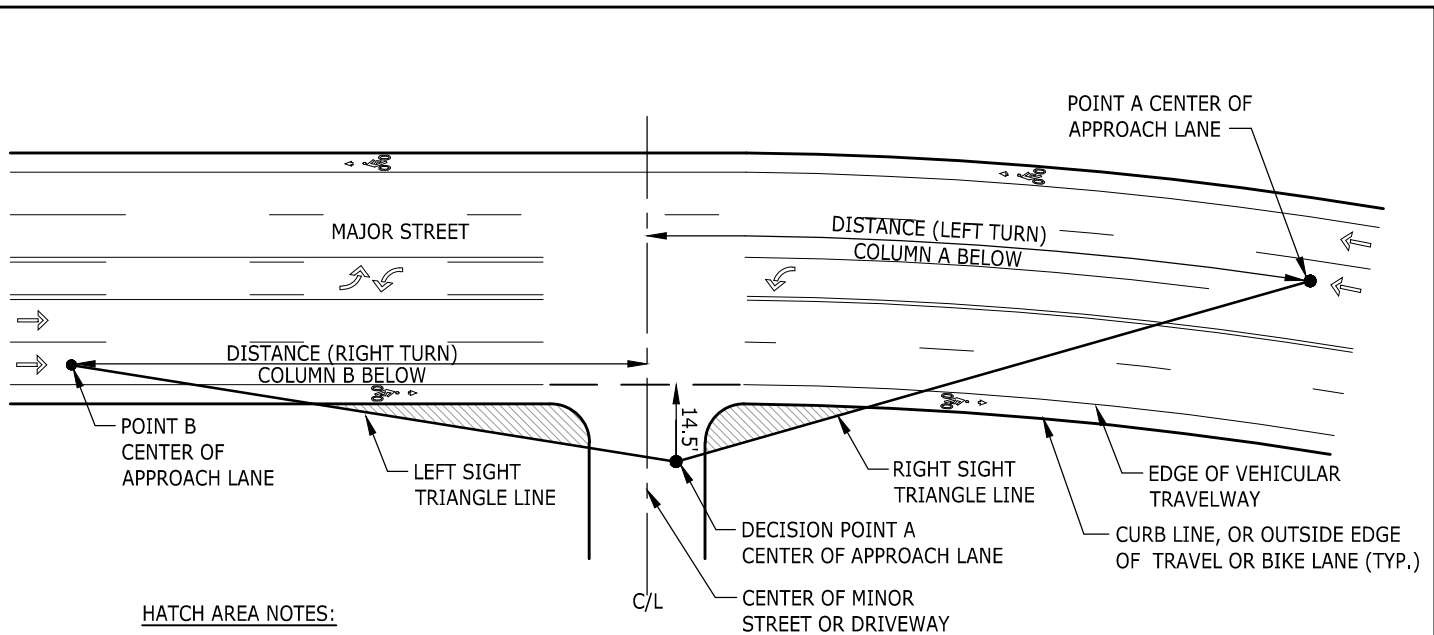


Typical Site Distance Triangle at a Driveway

When sight distance triangles for driveways are drawn on civil engineering plans, the roadway leg distances must be dimensioned as given in the table above.

Typical sight distance obstructions include: young trees; shrubbery; banners, A-frame or other temporary or portable signs; parked vehicles; or such permanent obstructions as monument signs, above-ground utility vaults / service points, buildings, earth berms with or without landscaping, retaining walls / rockeries, fences, etc. Street light poles, sign poles, and similar obstructions may be acceptable within the sight distance triangle PROVIDING that the width of such obstructions is not too large, and PROVIDING FURTHER that no other obstruction other than the pole is permitted between the heights of 2.5 feet and 9 feet. Similarly, mature trees may be permitted within the sight distance triangle, PROVIDING that the trunk diameter is not too large, and that the first spreading branch is located at least 9-feet above the flow line of the adjacent gutter, or above the edge of the street pavement where gutters do not exist.

Last revised October 17, 2000



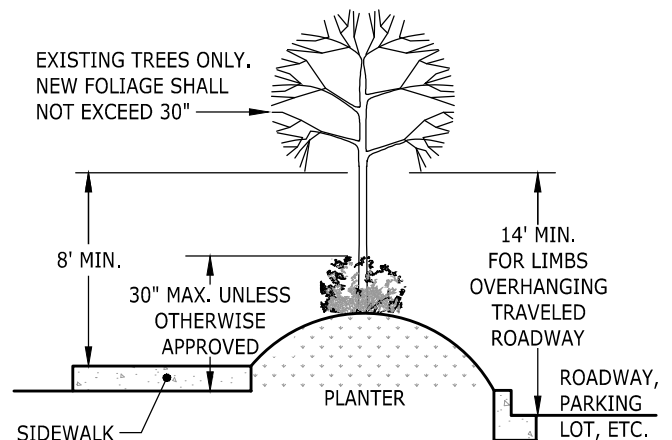
HATCH AREA NOTES:

VEGETATION, BERMS, AND PROJECT FEATURES WITHIN THE SIGHT DISTANCE TRIANGLE SHALL MEET THE FOLLOWING REQUIREMENTS:

1. FOLIAGE AT MATURITY, BERM, AND PROJECT FEATURES IF ANY SHALL NOT EXCEED 30" IN HEIGHT.
2. ALL EXISTING TREES AND OTHER OBSTRUCTION'S WITHIN THE SITE TRIANGLE SHALL BE MIN. 8' TO THE LOWEST BRANCH.

STOP CONTROL MINOR LEG ONLY
PASSENGER CAR ON A 4 LANE ROADWAY
WITH CENTER TURN LANE

POSTED SPEED LIMIT	DISTANCE (LEFT TURN) A	DISTANCE (RIGHT TURN AND CROSSING) B
50 MPH	690 FEET	530 FEET
45 MPH	625 FEET	480 FEET
40 MPH	565 FEET	430 FEET
35 MPH	500 FEET	385 FEET
30 MPH	440 FEET	335 FEET
25 MPH	375 FEET	290 FEET
20 MPH	315 FEET	240 FEET



NOTES:

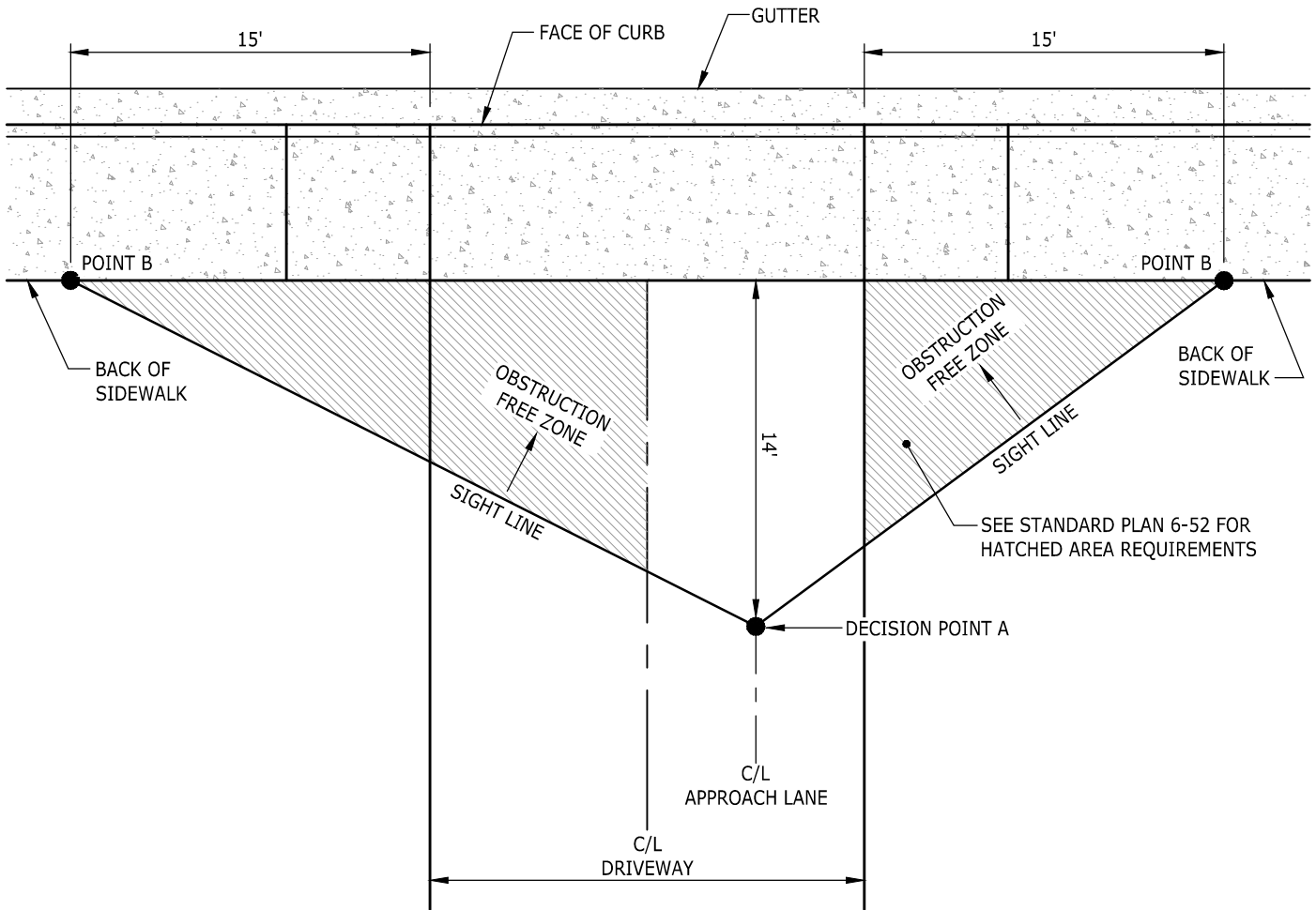
ADJUSTMENTS TO SIGHT DISTANCE SHALL BE PER AASHTO'S "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS & STREETS."

1. SIGHT DISTANCE FOR VEHICLES MAY BE REDUCED FOR NARROWER ROADWAYS.
2. SIGHT DISTANCE FOR TRUCKS SHALL BE INCREASED WHEN THE HEAVY VEHICLE PERCENTAGE IS OVER 10%.
3. SIGHT DISTANCE FOR APPROACH GRADES LARGER THAN +3% OR -3% SHALL BE ADJUSTED PER AASHTO.

NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION IS KEPT ON FILE AT THE CITY OF KENT. A COPY MAY BE OBTAINED UPON REQUEST.




		CITY OF KENT ENGINEERING DEPARTMENT	
		INTERSECTION/DRIVEWAY SIGHT TRIANGLE	
DESIGNED <u>COK</u>	SCALE <u>NONE</u>	STANDARD PLAN	
DRAWN <u>COK</u>	DATE <u>12/2019</u>	6-52	
CHECKED <u>COK</u>	ENGINEER		
APPROVED _____			



NOTE: THIS PLAN IS NOT A LEGAL ENGINEERING DOCUMENT BUT AN ELECTRONIC DUPLICATE. THE ORIGINAL, SIGNED BY THE ENGINEER AND APPROVED FOR PUBLICATION IS KEPT ON FILE AT THE CITY OF KENT. A COPY MAY BE OBTAINED UPON REQUEST.



	CITY OF KENT ENGINEERING DEPARTMENT	
	PEDESTRIAN SIGHT LINES	
DESIGNED: COK	SCALE: NONE	STANDARD PLAN
DRAWN: COK	DATE: 2/2020	6-53
CHECKED: COK	ENGINEER	
APPROVED:		