City of Imperial Beach Curb Marking Policy

Introduction

Each year, the City of Imperial Beach Public Works Department receives many requests to install red, yellow, green, white, and blue curbs in front of residences and businesses. This policy and procedures document discusses the issues that are involved in reviewing such requests, defines the various types of curb markings, and identifies the conditions and locations that are appropriate for such marking. The procedures for reviewing curb marking requests are also discussed.

Policy

Objective: It is the objective of this policy to identify the procedures and approval criteria associated with installing curb markings. These procedures were developed in an effort to meet the needs of the community while following the standards of practice for installation of curb markings. Additionally, this policy establishes the standards and procedures by which curb marking requests are reviewed and implemented.

Need: This policy and procedure document is necessary to outline the steps taken and issues involved when reviewing curb marking requests. The Public Works Department is responsible for maintaining all infrastructures in the public right-of-way. This includes streets, gutters, and curbs. As such, the Public Works Department installs and maintains all curb markings in the City. This includes evaluating, in conjunction with the Parking Enforcement program, when and where curb markings are installed and ensuring that all curb markings are installed in accordance with accepted engineering standards. Residents and business owners are not permitted to install curb markings in the right-of-way in any area of the city. Illegal curb markings are declared to be a public nuisance and are removed by the City at the property owner's expense. Additionally, it is unlawful to remove or modify any City-approved and City-installed curb marking. Doing so may lead to liability for those responsible and such modification will be corrected at the property owner's expense.

Curb Marking Definitions and Typical Installations

The City of Imperial Beach identifies four general types of parking zones. These are: (1) no-parking zones, (2) time-limited parking zones, (3) loading zones, and (4) disabled-parking zones for the physically challenged.

Under some circumstances, special parking zones may be established by: (1) placement of signs only, as opposed to installing curb markings so long as at least two signs are visible from any portion of the parking area, (2) by curb markings only – without signs, or (3) by signs and curb markings.

The definitions of each curb marking are discussed below, along with the locations where such curb markings are appropriate.

No-Parking (Red Zones)

Red Curb

Red zones are no-parking zones, where parking is not allowed at any time. Red means no stopping, standing or parking at any time, except that a bus may stop in a red zone marked or signed as a bus zone.

In lieu of red zones, or in some cases to supplement those zones, no-parking signage may be installed and enforced so long as at least two signs are visible from any portion of the parking area.

No-parking zones can be installed in any area of the City where the presence of parked vehicles at the curb creates an unsafe situation for vehicular or pedestrian traffic or reduces operational efficiency at a particular location to unacceptable levels. Thus, when it is warranted by engineering review, red curbing can be installed on any intersection corner to maintain safe and efficient vehicular maneuverability, or on certain segments of streets where narrow street widths cause vehicular operations to degrade to unacceptable conditions. The red curb installations discussed above are considered critical red zones, where parking restrictions are necessary to maintain safe roadway and traffic conditions. Other non-critical red zones could include the curb space in front of fire hydrants, United States Post Office mailboxes, and appropriately signed and marked public transit bus stops.

Driveway Red Tipping

Driveway red tipping is a special type of red zone that is installed at driveways. Short sections of red curbing, typically requested by property owners, can be installed on either side of a driveway to promote better maneuverability into and out of the driveway and to improve visibility from the driveway. Driveway red tipping can be installed to eliminate non-standard parking spaces (less than 18 feet) between driveways; a condition that sometimes leads to one or both driveways being partially blocked by parked vehicles. However, if there is a possibility to park motorcycles or micro-vehicles, those locations shall be preserved and striped appropriately. A typical driveway red-tipping installation would include 1.5 feet of red curbing on either side of the driveway. There are limited situations where the length of red curb installed at a location could be adjusted on a case-by-case basis depending on other factors, such as adjacent parking and operations at adjacent driveways. Parking restrictions for driveway red tipping is enforceable, just as any other no-parking zone in the City (i.e., any vehicle can be cited for parking in a driveway red tipping zone).

Time-Limited Parking (Green Zones)

Green Curb

Time-limited parking zones are areas where the length of time that a vehicle can remain parked in a particular space is limited to a specified duration. Time-restricted parking zones typically are installed in commercial areas. Green zones can be installed where unrestricted curb space in front of a particular business is used for long-term parking during the majority of the day, such that short-term parking is not available for customers of the businesses in the area. Appropriately marked green zones will have the parking time limit painted on the curb to supplement the parking signage.

Loading (Yellow and White Zones)

Loading zones are special parking zones that allow for temporary parking for the sole purpose of loading and unloading freight and/or passengers. Loading zones may be marked at any place in the central traffic district or business district, in front of the entrance to any place of business, or in front of any hall or place used for the purpose of public assembly.

Yellow Curb

A yellow zone indicates an area that has been designated solely for freight and passenger loading activities. Yellow means no stopping, standing, or parking at any time between seven a.m. and six p.m. of any day except Sunday for any purpose other than the loading or unloading of passengers or materials; provided that the loading or unloading of passengers shall not consume more than three minutes, nor the loading or unloading of materials more than twenty minutes.

Loading zones typically are installed in commercial areas and near high-density residential developments. Yellow zones can be installed in areas where frequent material loading and/or passenger loading occur, but where the majority of the unrestricted curb space in front of the subject business or residential complex is used for long-term parking during most of the day, such that there is no usable curb space for loading activities.

White Curb

White zones designate areas where only passenger loading activities are permitted. White means no stopping, standing or parking for any purpose other than loading or unloading of passengers, which shall not exceed three minutes. These restrictions typically apply between seven a.m. and six p.m. of any day except Sunday and except as follows:

- 1. When such zone is in front of a hotel, the restrictions shall apply at all times.
- 2. When such zone is in front of a theater, the restrictions shall apply at all times except when the theater is closed.
- 3. When such zone is in front of a school, the restrictions may be modified to apply to drop-off and pick-up times only, as determined necessary by Public Works staff and school officials.

Passenger loading zones typically are found in commercial areas, near schools, senior care facilities, senior housing, hospitals, restaurants, hotels, apartment buildings, theaters, churches, and other large places of assembly. White zones can be installed in areas where it is desirable to permanently reserve curb-space to facilitate passenger loading.

Physically Challenged (Disabled) Parking (Blue Zones) Blue Curb

Blue zones are areas reserved for parking by disabled persons. Blue means no standing or parking except by vehicles which display a distinguishing license plate or a placard issued pursuant to Section 2251.5 ("Disabled Persons' Exemption") or Section 9105 ("Disabled or Blind Veterans") of the California Vehicle Code. To be enforceable, a disabled parking zone requires blue painted curb, a handicap pavement legend, and appropriate signage.

Disabled parking zones typically are installed in commercial areas and in front of residential developments where disabled persons reside, and where no off-street parking spaces will facilitate their needs.

When evaluating any new disabled parking space request, Public Works will evaluate the area in the general vicinity of the request to determine if the area has a substandard amount of disabled parking spaces available. If it is found that there are an insufficient number of disabled spaces available to meet the needs of the area, a new disabled parking space would be installed at a location that best serves the disabled parking needs of the area, and not necessarily the specific needs of the individual or business making the request.

Curb Marking and Driveway Red Tipping Requests

Business and property owners can request curb markings by filling out and returning the general curb marking request form below. A completed request form constitutes a complete application. Incomplete requests will be delayed while staff coordinates with the requestor to complete the application.

For driveway red tipping, business and property owners may simply submit their request either with an email including the address and reason for the request at publicworks@imperialbeachca.gov or by phoning in the request to Public Works at (619) 423-8311. No additional documentation or forms are required for a driveway red tipping request.

Curb Marking Evaluation Process

When the Public Works Department receives a completed curb marking application, City staff will process the request on a first-come first-serve basis along with other City business and citizen requests. Listed below are the steps involved in evaluating a curb marking request.

- 1. **Field Visit** After the completed application is received, City staff will conduct a field visit to assess the problem and identify possible solutions within two weeks of receipt of the completed curb marking application. Note that curb marking requests involving safety issues have priority over other requests. Therefore, when a safety request is received, City staff will conduct field visits and investigate the location within three working days of when the request is received to determine if immediate improvements are necessary.
- 2. **Data Collection (if necessary)** Additional data, such as parking survey information, may be necessary to review some curb marking requests. A parking survey may be needed to assess the impact on parking in the area when parking activity is high, or to determine if the parking activity in the area is high enough to warrant installation of the requested curb marking. An additional two weeks is needed when parking surveys are necessary to evaluate the need and feasibility of the requested curb marking.
- 3. Contact Adjacent Residence/Property Owners (if necessary) An additional step in the review process may be necessary when the requested curb marking will significantly affect locations other than that owned by the requestor. If the proposed curb markings would result in the loss of a legitimate parking space by reducing the curb space available from more than 18 feet of unmarked space to below 18 feet of unmarked space in front of neighboring property, the City will seek input from the affected property owners. In these cases, notices will be sent out to property owners when colored curbing, which was not requested by them, will be installed in front of their property. When the location of a requested curb marking is in a place other than the requestor's property frontage, the request will not be granted without the affected property owner's signature on the Curb Marking Request Form or a letter from the affected property owner consenting to the curb marking in cases where a significant reduction to available parking space would occur.
- 4. **Review and Evaluation** Following the field visit and data collection, staff will evaluate the circumstances of the particular request and make a determination regarding the feasibility of the requested curb marking. The review and evaluation process will be completed within two weeks of the time when the field visits and data collection are complete. If City staff determines that there is a conflict with this policy or that community input would be valuable, the City Council may be consulted for input on the matter.
- 5. **Notification** Upon completion of the review of the requested curb marking, City staff will send a letter to the requestor documenting the results of the analysis, the City's findings, and a preliminary schedule for any work that is determined to be necessary.
- **6. Curb Marking Installation** If City staff determines that the requested curb marking is feasible and justified, then a work order is issued within one week authorizing the City painting crew to complete the work. The work order is approved by the Public Works Director, or his designee. Any decision on curb markings made by the Public Works Director is appealable to the City Manager, and then to the City Council. The work will be complete within four weeks of when the work order was issued.

Evaluation Criteria

Every curb marking request involves a different set of circumstances. As such, each curb marking request will require a unique analysis that takes into account the particular set of circumstances involved. Some of the common issues involved in evaluating a curb marking request are discussed below.

How much parking is removed to accommodate the request? When a curb marking, including driveway red tipping, is requested, consideration is given to the preservation of adjacent parking spaces. It is undesirable to install sections of colored curbing that would leave a relatively long, but unusable portion of unpainted curb (less than 18 feet).

Would the requested curb marking affect other property owners? Occasionally, installing curb markings at one location causes drivers to park their cars closer to an adjacent driveway or property frontage, thereby creating a problem at that location. Under circumstances such as these, the feasibility of adjusting the length of the requested curb marking or installing red tipping at adjacent driveways is reviewed. If the proposed red zone would result in the loss of a legitimate parking space by reducing the curb space available from more than 18 feet of unmarked space to below 18 feet of unmarked space, the neighboring affected property owner's consent will be required.

How is parking in the area affected by adjacent land uses? Time-limited parking and loading zones may be warranted in areas where long-term parking regularly occupies the curb space that is needed for loading and short-term customer parking. A parking occupancy survey may be necessary to quantify the magnitude of the parking problem and the usage of curb space in the area.

Are there similar parking zones nearby that would serve the requestor? City staff will evaluate the neighborhood where the curb marking is requested to determine if existing colored curb zones (white, yellow, green, or blue) could serve the requested location.

How big does the requested zone need to be and how many deliveries are expected during peak times? For yellow and white zones, what size vehicle will be using the zone? Consideration will be given to providing the zone that is requested while maintaining as much parking in the area so as not to unfairly impact nearby property owners.

How does the requested curb marking impact surrounding properties? City staff will evaluate if the requested curb marking would remove parking spaces that nearby businesses rely on.

What is the impact on motorist safety? City staff will adhere to accepted engineering practice when determining whether the requested curb markings are feasible and appropriate.

Is the curb marking going to be installed in a location other than the requestor's property frontage? If so, then the Public Works Department will not grant the request without consent from the affected property owner allowing the curb on their frontage to be painted per the request. However, consent from the affected property owner is not required if a red zone proposed to be installed in front of their property on a segment of curb does not result in the loss of a legitimate parking space (i.e., it does not leave less than 18 feet of unmarked curb space).

For blue zones; is there a clear need? There must be a clear need for the disabled parking zone that is not met by any off-street parking spaces. City staff will consider such things as impact to adjacent parking spaces and the safety of the users of the disabled parking zone when determining the feasibility of such zones.

Special Considerations for Critical Red Zones

Evaluating the need for critical red zones involves the following criteria in addition to those described above. Establishing critical intersection and roadway red zones will be based primarily on evidence that could identify a particular location as a safety problem or high-accident location.

When evaluating the need for red zones at a particular location, the primary areas of investigation will be accident records at the location, the traffic volume at the location, and the street/intersection geometrics associated with the location.

Locations with multiple complaints of visibility problems and locations with many requests for red curbing will be considered candidates for safety improvements and will be evaluated further to assess the need for red curbing to improve sight distance and/or traffic operations.

When determining if an intersection is a safety problem, the accident rate at the subject location will be compared to a citywide rate to determine the relative safety of the subject location. A particular location will be considered a potential safety problem if the accident rate at the intersection is more than 1.5 accidents per million vehicles passing through the location. Note that when determining the accident rate at a location, only those accidents that could be corrected by installation of red zones will be considered.

To identify potential safety problems, the available sight distances at the subject location will be measured in the field and compared to required sight distances. The City's procedure for evaluating intersection sight distance is contained in Appendix A.

Obstructions on private property that are taller than 3 feet and within the sight triangle established by the intersection sight distance procedures should be removed or lowered. Such objects include walls, fences, landscaping, trees, and buildings. Similarly, any tree located within the sight triangle must be maintained such that its canopy provides seven feet of vertical sight clearance. Thus, within the sight triangle, objects must be lower than three feet and/or higher than seven feet.

Under some circumstances, vehicles parked at the curb can be considered sight obstructions. The accident history at an intersection will be the primary indicator of unsafe roadway conditions due to sight obstructions caused by parking. A sight obstruction at an intersection may exist when the curb near the intersection is continuously occupied by a parked vehicle for a significant portion of the day, or when large vehicles (trucks, RVs, buses, vans, SUVs) are often parked at the corner. Under such circumstances, when parking activity constitutes a sight obstruction, the owner of the vehicle will be contacted by the Public Works department and notified of the sight obstruction problem. If this does not correct the problem, then parking restrictions, no-parking signs and/or red curbing can be installed at the direction of the Public Works Director.

Maintenance of Existing Curb Markings

Existing curb markings that have become faded will be refreshed by Public Works Department as needed. Under no circumstances shall the property owner be permitted to paint or repaint any curb markings.

Removal of Curb Markings

Public Works will sometimes receive a request for the removal of an existing curb marking. Any such request would be reviewed using the same process and evaluation criteria as staff would be used for new curb marking requests. If it is determined that the existing curb marking serves no purpose, the curb marking will be removed at no cost to the individual making the removal request.

Approved:	
Approved:	



City of Imperial Beach

Attn: Public Works Department

825 Imperial Beach Blvd.

Imperial Beach, CA 91932

Public Works Director

General Curb Marking Request Form

The purpose of this form is to enable business/property owners to request the installation of curb markings in front of their business/residence.

INSTRUCTIONS TO THE APPLICANT: Fill out completely, sign, date and return this form to the Public Works Department to begin processing. If you have general questions regarding the City's curb marking policy, please refer to the City's *Policy and Procedures for Installation of Curb Markings*.

Contact Name:		Phone:		
Business Name:		_E-Mail:		
Address:				
1. Type of curb marking zone y	ou are applying for:			
☐ No Parking	☐ Time-Limited Parking	g 🗆 Load	ding 🗆 Disabled	l- Parking
If no, then please have the following information:	owner/resident of the prop	erty where the	curb marking will be	e installed fill out t
Name:				
Address:				
Phone Number:				
I consent to allow the req	uested curb marking in fron	t of my property		
Signature				
3. Length of Zone Requested: _				
4. Land-Use Type (check one)	\square Single Family Home	\square Restaurant	\square Medical Office	
	☐ Hotel/Multi-Family	□Retail	☐ Office	
5. Business hours and days:				

a.	Number of pick-ups/deliveries daily:	
b.	Typical size and type of truck:	
c.	Estimated times of highest usage:	
For Tin	ne-Limited parking zones:	
a.	Estimated number of customers/visitors daily:	
b.	Estimated times of highest usage:	
For Ph	ysically Challenged (Disabled) Zones:	
	Estimated number of disabled persons visiting premises daily:	
	Estimated time of highest usage:	
	e support from adjacent properties, including support from the Home Owners Association, for instal requested curb marking? Can you demonstrate this support if necessary?	
	ere any facilities (churches, schools, shopping malls, office complexes, etc.) in the areas that affectively of parking or lading at this location?	ct the
Sig	nature of Applicant Da	ite

6. For loading zones:



Intersection Sight Distance Evaluation Procedures

Intersection Sight Distance

Providing adequate sight distance at intersections is important so that drivers attempting to cross or enter the intersection can see sufficiently far in all directions to be able to safely execute the maneuver within visible gaps in cross-street traffic.

The City of Imperial Beach's procedure for measuring available sight distance and for determining the required sight distance at an intersection is based on the procedures and guidelines documented in *A Policy on Geometric Design of Highway and Streets - 2001* (American Association of State Highway and Transportation Officials, 2001) also known as the 2001 AASHTO Green Book.

The City identifies the minimum required sight distance at an intersection as the stopping sight distance that corresponds with the speed of traffic on the subject roadway. *Stopping sight distance* is defined as the distance traveled by a vehicle driving at the prevailing roadway speed from the moment the driver notices an obstruction in the road ahead and begins to apply the brakes to the point where the vehicle is brought to a stop. The prevailing roadway speed is defined as the 85th percentile speed or the speed that 85 percent of motorists drive at or below. The available sight distance on a roadway should be sufficiently long to allow a vehicle traveling at the prevailing roadway speed to stop before reaching an obstruction in its path.

Sight distance at an intersection is evaluated based on sight triangles at the intersection corners. A sight triangle is an area at the corner of each intersection that should be kept clear of obstructions. Sight triangles are primarily established so that drivers on the stop-controlled minor street can see far enough in each direction along the major street to safely execute the turning maneuver at the intersection. However, maintaining clear sight triangles also benefits the drivers on the major road as they will be able to see traffic pulling into the intersection far enough in advance to avoid a potential collision. Figure 1 illustrates a typical intersection sight triangle.

The required intersection sight triangles are established based on two parameters: (1) the speed of the vehicles on the major road and (2) the location of the vehicle attempting to enter the intersection from the minor road. The City of Imperial Beach uses the following procedures to establish sight triangles that would provide the required sight distance at an intersection.

- 1. The critical component for determining stopping-sight distance and the corresponding size of the sight triangles is the speed of cars on the major road. The posted speed will be used for determining stopping-sight distance, unless speed data indicate that the prevailing (85th percentile) speed is five or more miles per hour higher than the posted speed, in which case the prevailing speed will be used. The length of the side of the triangle that is parallel to the major street should be equal to the stopping sight distance based on the speed of traffic on the major road.
- 2. The decision point of the triangle, or driver position, is located 14.4 feet back from the nearest edge of the major-road traveled way. Based on information contained in the 2001 Green Book, field observations indicate that this setback represents the typical positioning of the minor-road driver's eye when a vehicle is stopped relatively close to the major road. According to research results discussed in the 2001 Green Book, when necessary, drivers will stop with the front of their vehicle 6.5 feet or less from the edge of the major-road traveled way. Additionally, based on the current US passenger car population, the location of the driver's eye is 8 feet or less from the front of the vehicle. The location of the decision point on the minor road is established as follows:
 - a. When curbside parking is allowed on the major road, the decision point should be located 14.4 feet back from the shoulder stripe or boundary separating the travel lane and the parking lane. Because many roadways do not have shoulder stripes delineating the parking lane, the general rule of thumb will be used that establish the travel lane as 12 feet wide, so that the decision point will be located 26.4 feet back from

the center line on the major road. The sight triangles for conditions with curbside parking are shown on Figure 2a.

- b. When curbside parking is not allowed on the major road, the decision point should be located 14.4 feet back from the curb line of the major road. The sight triangles for conditions without curbside parking are shown on Figure 2b.
- 3. The location of the conflicting vehicle on the major street is assumed to be in the center of the major street travel lane. When the major street has more than one lane in a particular direction, the location of the conflicting vehicle traveling in that direction is assumed to be in the center of the lane closest to the minor street vehicle for that direction of travel. Figure 3 illustrates intersection sight triangles when a minor street crosses a multi-lane major street.

When evaluating the line of sight at an intersection, the height of the driver's eye is assumed to be 3.5 feet above the minor road surface. The height above the roadway surface along the major street that must be visible is 3.5 feet (object height). This object height is based on a vehicle 4.35 feet in height (the 15th percentile in passenger car heights in the current passenger car population) less a 10-inch allowance for safety so that the vehicle will be recognized as it approaches the intersection.

City of Imperial Beach

Curb Marking Policy and Procedures

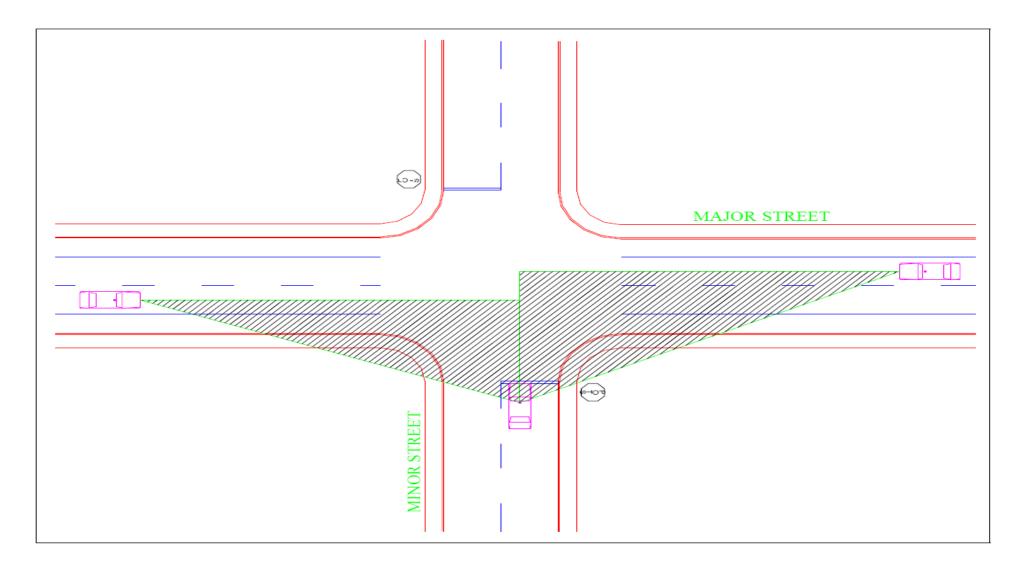


Figure 1
Typical Intersection Sight Triangle

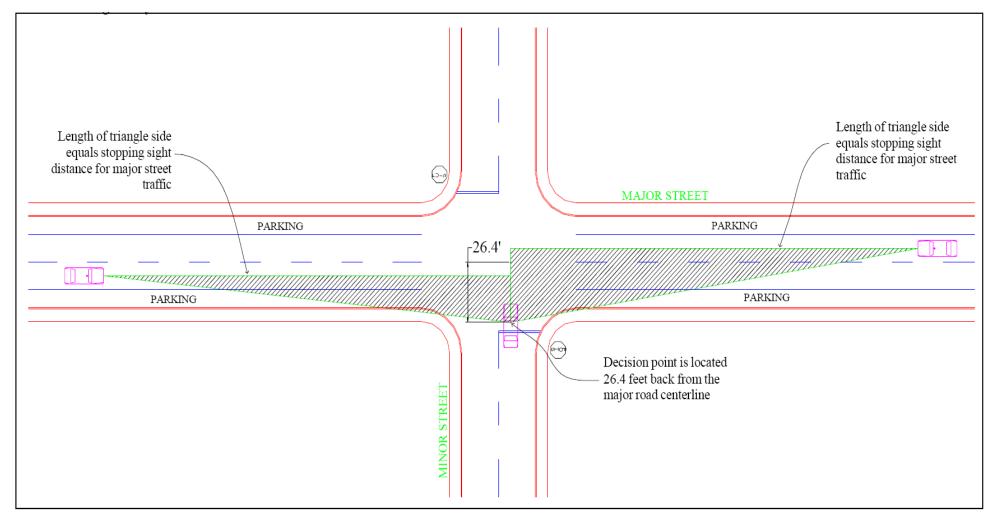


Figure 2a
Intersection Sight Triangle with Curbside Parking

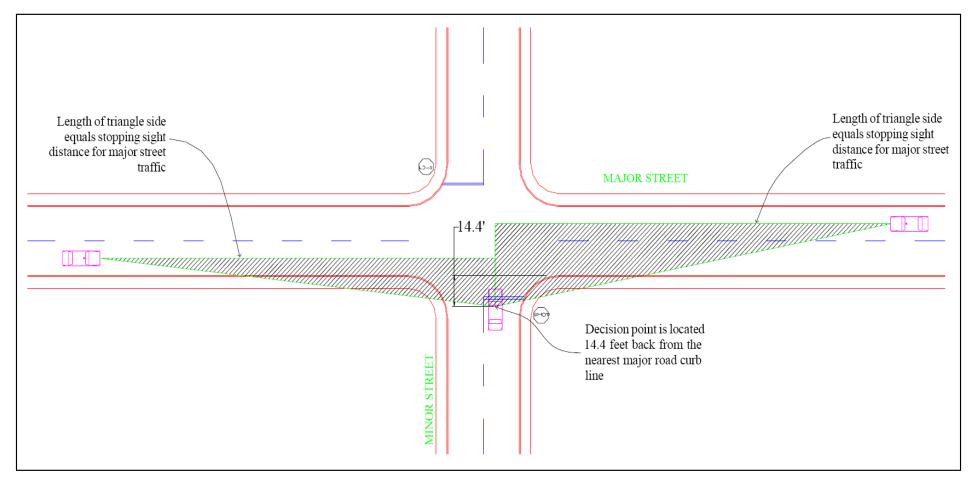


Figure 2b
Intersection Sight Triangle without Curbside Parking

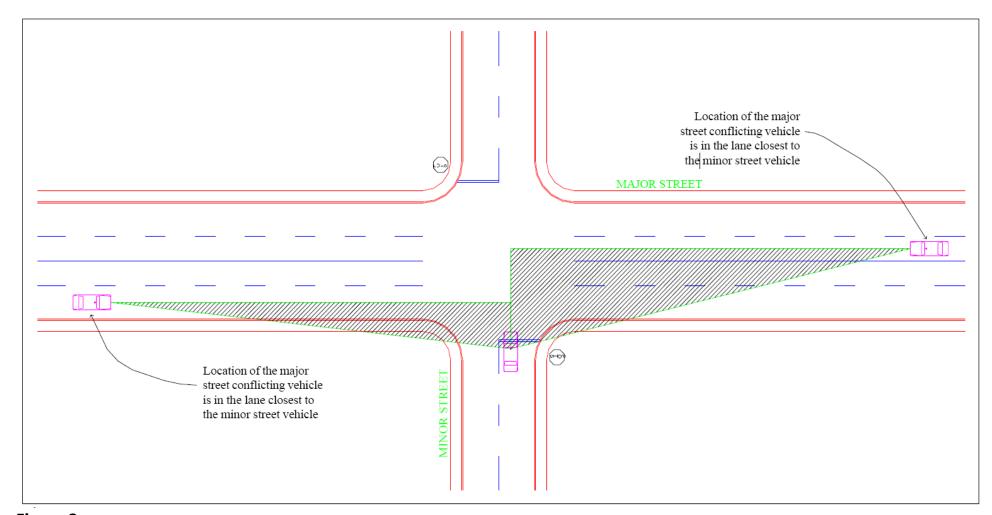


Figure 3
Intersection Sight Triangles with a Multilane Major Street