



**Council Meeting: December 6, 2011**

**SUBJECT: Update/Review Corner Vision Triangle Municipal Code Ordinance – STUDY ISSUE**

**REPORT IN BRIEF**

The City Council approved a 2011 study issue to review the vision triangle regulations (Attachment A). This issue was raised by the Bicycle and Pedestrian Advisory Commission (BPAC). The study intends to review the relevance and adequacy of the existing vision triangle provisions of the Sunnyvale Municipal Code (SMC). It also examines the possibility of introducing mechanisms to increase the flexibility of vision triangle requirements in response to specific special circumstances.

Staff has completed an investigation that researched various standards and applications of vision triangle requirements. Staff believes that improvements can be made to the current vision triangle requirements that will address issues raised by the BPAC and improve vehicle sight distance at major intersections. Staff recommends adopting more stringent recommendations for land uses that generate a greater number of trips. The study also includes recommendations for allowable exceptions to vision triangle standards. Staff also recommends adding clarifying language for driveway sight triangles to address locations without sidewalks.

**BACKGROUND**

The SMC contains provisions for defining corner and driveway vision triangles as well as establishing roadway design standards. Per the current SMC, at an intersection, the corner vision triangle is formed by measuring 40 feet from the property line of each of the intersecting streets (Attachment B). The driveway vision triangle is created by measuring 10 feet along the outer edge of the driveway and 10 feet along the back edge of the public sidewalk (Attachment C). For both corners and driveways, obstructions such as fences, hedges or other objects were prohibited to exceed 3 feet in height until recent code revisions inadvertently removed the language.

**EXISTING POLICY**

Land Use and Transportation Element LT-5.4g, Conduct periodic analyses of roadway facilities and collision data in order to assure traffic safety.

## **DISCUSSION**

Sunnyvale’s current code has the following provisions related to vision triangles and private property obstructions to streets:

1) 19.12.17

“Corner vision triangle” means the triangular area created by a line connecting points along the two front lot lines which points are established forty feet in distance from the intersection of the extension of such front lot lines within the street right-of-way.

2) 19.12.050 “D” (13)

“Driveway vision triangle” means the triangle area created by a line connecting points along the back edge of a public sidewalk and the outer edge of a driveway, which points are established ten feet distant from the intersection of the back edge of the sidewalk and the outer edge of the driveway. Where a driveway has been widened without a corresponding widening of the curb approach, the driveway vision triangle shall be based on the original driveway edge.

3) 19.34.060

The minimum front yards of each corner lot in every zoning district shall include the triangular area created by a line connecting points along the front lot lines which are established forty feet in distance from the intersection of such front lot lines within the street right-of-way. Provided, however, that a canopy may project into the triangular area for a distance of five feet if the height of the canopy is at least ten feet above the established curb grade, and none of the supporting members of the canopy are affixed in the ground within the triangular area. (Ord. 2623-99 § 1 (part): prior zoning code § 19.44.040). See diagram, Attachment B.

4) 13.16.100. Public nuisance.

The following are hereby declared public nuisances:

(e) The existence of any branches or foliage on private property which interferes with the visibility on, or free use of, or access to, any portion of any street improved for vehicular, bicycle or pedestrian travel;

(g) Any shrubs or plants more than twenty-four inches in height in the tree easement, or portion thereof, measured above top of curb grade;

(h) Any tree, shrub or other plant on private property which dangerously obstructs the view in the triangular area described in Chapter 19.44, commonly known as the “visibility triangle.”

5) 19.44.020 (17)

Corner Vision Triangle or Driveway Vision Triangle Sign. Any sign displayed within the corner vision triangle as defined in Section 19.12.040 or the driveway vision triangle as defined within Section 19.12.050. A sign within a vision triangle is prohibited if the sign is:

- (a) Greater than three feet in height; or
- (b) A temporary commercial sign.

6) 19.46.160

Side yard, rear yard and forty-foot corner triangle regulations are not applicable within the boundaries of any off-street public parking district...formed pursuant to the Sunnyvale Municipal Code...).

The BPAC requested to review the adequacy of the corner vision triangle in the SMC. The BPAC believes that visibility at street intersections and driveways is important for the safety of pedestrians and bicyclists, and that the current SMC may not sufficiently ensure that adequate visibility is provided. For example, the current vision triangle ordinance does not take into consideration street curvature, intersection angle and type of control, or consistency with the Highway Design Manual. This issue was initiated because of a vision problem at a driveway that was constructed on Mathilda Avenue for the Cherry Orchard retail center.

Sunnyvale’s regulations also do not presently allow for a sliding scale, reduction or other exceptions for certain objects in the required vision triangles. Some cities, but not Sunnyvale, allow sight triangle encroachments for fences based on the fence design. An open decorative type fence design would allow for the greatest visibility, and two prime examples of this style are wrought iron and post and rail wood fences. In 2008, City Council decided to broaden the BPAC-initiated study issue to examine the benefits of modifying the SMC by taking into account the openness or transparency of the fence in conjunction with the height of the fence.

Staff reviewed a one-year detailed history of collisions Citywide involving auto right-of-way violations, including bicycle and pedestrian involved collisions, to gauge whether corner or driveway sight distance was a significant cause of collisions. Of 111 collisions reviewed, only one involved obscured vision. This

was an auto versus auto collision that was due to a large parked vehicle obstructing sight distance and insufficient caution when entering a roadway.

The City's current regulations provide a good foundation for improving sight lines for drivers and cyclists. However, some improvement can be made to address the expressed concerns of the BPAC and Council. Staff considered those situations that might warrant a more stringent application or other revision of vision triangle standards and concluded that five areas could be addressed to improve the current regulations.

#### *Improved Standard for Higher Trip Generation and Traffic Volume Locations*

Land uses that generate a significant number of trips and intersections with higher levels of traffic and potential conflicts, and land uses that are proposed to have curb return-style driveways (typically higher volume, higher speed roads and higher trip generation land uses) could be the focus for improved sight triangle standards. High trip generation locations have a higher potential for conflict between exiting vehicles and street traffic. Staff believes application of a rule related to the number of parking spaces on a site can be relatively easily applied to determine if increased vision triangle requirements should be necessary. Staff proposes that sites that have 100 or more parking spaces would be subject to the 40 foot vision triangle at driveways.

#### *Application of Caltrans Parking Restrictions at Signalized Intersections*

Signalized intersections represent locations with a higher amount of conflicting traffic. The California Manual of Uniform Traffic Control Devices (MUTCD), which is a Caltrans traffic control standard, provides guidance for improving signalized intersection sight distance by providing no parking zones 20 feet from the curb return of an intersection. Staff recommends utilizing this standard and confirming that it is in place at all signalized intersections.

#### *Restoration of SMC Definition of Vision Triangle Obstruction*

In recent code revisions, initiated by the Planning Division meant to streamline the process of application and proposals in the City, the code language relating to the height of fences, hedges or other objects in the vision triangle was inadvertently removed. The prior code required that fences, hedges or any other obstructions more than 3 feet in height are prohibited in the vision triangles, and staff still follows this as standard practice. It is intended that a specific standard be placed back into the Code. Staff believes that the SMC should be revised to restate the height limitations for fences, shrubs and other objects in the vision triangle. The previous requirement included standards for multi-trunk trees.

*Codify Exceptions to Vision Triangle Code Requirements*

In the past, any part of a fence greater than three feet tall has been prohibited in the vision triangle. This includes post and rail-type and wrought iron fences where the fence is see-through, and the posts of three foot tall fences that may extend above the fence and includes a cap on the post. Several requests have been made to allow picket fences or taller posts in the vision triangles, but the code does not allow it.

Also, in certain areas (such as along El Camino Real), property owners are encouraged to locate new buildings closer to the street to encourage a more pleasing pedestrian feel for the street. Deviations may be appropriate in cases where a building is at a signalized intersection, where traffic is better controlled, to encourage good design to allow the building closer to the corner. The Downtown Parking District already is not subject to vision triangle requirements (SMC 19.46.160, Side yard, rear yard and forty-foot corner triangle regulations are not applicable within the boundaries of any off-street public parking district...formed pursuant to the Sunnyvale Municipal Code...).

Currently, outside of the downtown, deviations to the code are not allowed and any request to vary from the code requires a Variance. In most cases, it is difficult to grant a variance for these requests because of the difficulty in meeting the required findings.

One option to address this issue could include codifying items that would not be subject to the requirements, such as open fencing or posts with a size or frequency of a certain amount. Deviations could be allowed for specific type of objects typically found in vision triangles that may not impede visibility. These could include open fencing with specific guidelines, types of trees, and buildings in specific locations. Staff proposes to provide the following exceptions to vision triangle requirements:

- See through fences with fence posts spaced eight (8) feet apart and not higher than 4.5 feet
- One tree with a typical trunk circumference of less than thirty-eight inches and a tree canopy higher than ten feet above the curb grade at maturity.
- Buildings at all-way stop controlled or signalized intersections located in the Precise Plan for El Camino Real area.

Staff considered defining specific open fencing dimension criteria to allow for other types of fencing such as picket fences. However, it was determined that practical application of a standard for amount of opening or width of pickets would be difficult to administer. Staff considered an exception for wrought iron fencing, which typically features a high degree of open space that would allow

for drivers to see through. The BPAC does not support an exception for wrought iron fencing, and based on the Commission's objections staff is not recommending an exception for wrought iron open fencing.

Staff also believes that the previous three (3) foot limitation can be revised to 3.5 feet, which is consistent with highway design guidance on vision triangles. This will reduce the amount of step-down required for front yard fences in vision triangles. Currently front yard fences up to 4 feet tall are allowed outside of the corner vision triangle, but must comply with vision triangle requirements (3 foot maximum height) within the vision triangle. This de facto requires any portion of fences in the vision triangle to be "stepped down" to three (3) feet. Raising the allowable height to 3.5 feet will provide greater consistency with State standards and national guidance, as well as create a less dramatic step down of front yard fences.

#### *Clarify Driveway Triangle Standard*

The current driveway vision triangle as defined by the SMC is measured from the edge of driveway to the back edge of the sidewalk. Sidewalks are not present in many locations. Staff proposes adding language to state that the driveway vision triangle shall be measured from the back of sidewalk or from the property line where no sidewalk exists.

#### *Account for Street Curvature, Intersection Angle, Type of Control, and Compliance with the Highway Design Manual*

Staff reviewed various design standards and guidance on vision triangles, including guidance from the Caltrans Highway Design Manual (HDM), the American Association of State Highway Transportation Officials (AASHTO), the Institute of Transportation Engineers, and other local and statewide jurisdictions. Engineering guidance is available to account for sight distance for skewed intersections, grades, and intersection traffic controls. Application of guidance or recommended standards would mean that applicants for improvements in corner or vision triangles would need to provide detailed, scaled sight information, and a traffic or civil engineer would need to review each application. Currently, corner and vision triangle standards for private development including signs and fences is performed by Planning staff. Many vision triangle-related permits are issued over the counter. Engineering staff does not conduct vision triangle reviews.

In the case of engineering guidance for sight distance at signal or stop controlled intersections, application of standards could result in a reduction of vision triangle requirements from the current SMC standards.

Staff evaluated Caltrans HDM guidance, as requested by the BPAC and because the SMC directs the City Traffic Engineer to utilize Caltrans standards for traffic controls. The HDM standards are primarily speed related and make uniform assumptions about vehicle gap times. They do not consider physical conditions of a site, and are intended for application on major roadways. As a Caltrans-prepared document, it appears to be more germane to State highways versus urban/suburban settings. As a design guidance document, it applies more to new “greenfield” design and construction rather than for determining obstructions at existing locations. The HDM does recognize that obtaining recommended corner sight distance in some instances may not be possible due to physical conditions and unacceptable costs for achieving ideal sight distance. It does not address private driveways.

Examples of application of the HDM standards on certain Sunnyvale streets is diagrammed in Attachment D. In the examples provided, for an intersection on Evelyn Avenue having a 35 miles per hour (MPH) posted speed, approximately 15 parking spaces would need to be removed, and theoretically all objects with a height greater than 3.5 to 4 feet that obstruct a clear line of sight for drivers would need to be removed, including street trees, utility poles, utility boxes, or other objects. The example cited on Grape Avenue at Bennington would essentially result in removal of an entire block of parking, plus street trees.

#### Proposed Regulatory Modifications

Corner and driveway vision triangles are currently regulated in the SMC to ensure those areas do not reduce the visibility for pedestrians and bicycles from vehicles. Staff proposes to modify the existing code in the following manner to enhance regulation of corner and driveway sight triangles:

- a. New land developments with 100 or more parking spaces shall be required to adhere to the 40-foot vision triangle standard at primary entries and exits.
- b. Signalized intersections shall provide no parking zones of 20 feet from curb returns, consistent with the parking restriction standards of the California MUTCD.
- c. Fences, hedges, or any other obstructions more than 3.5 feet in height shall be prohibited in vision triangles.
- d. Provide exceptions to vision triangle requirements for see through fences with fence posts spaced 8 feet apart and not higher than 4.5 feet, one tree with a typical trunk circumference of no more than thirty eight inches and canopy higher than 10 feet at maturity, and buildings at all-way stop controlled or signalized intersections located in the El Camino Precise Plan area.
- e. The driveway vision triangle shall be measured from the back of sidewalk or from the property line where no sidewalk exists.

Should the Council support revision of the corner sight distance provisions of the SMC, staff will return to Council with a proposed ordinance.

### Planning Commission and Bicycle and Pedestrian Advisory Commission Recommendations

The Planning Commission heard this item at its November 14, 2011 meeting. The Planning Commission voted 6-0, Commissioner Dohadwala absent, to support the staff recommendation for Alternative 1 as presented below. Planning Commission draft minutes are provided in Attachment E.

The BPAC heard this item at its November 17, 2011 meeting. The BPAC voted 7-0 to recommend a modified Alternative 1, which would not increase the maximum height to 3.5 feet, would not exempt wrought iron fences, and would require parking restrictions 20' from the curb return at all stop controlled intersections. The BPAC also voted 7-0 to recommend that the City Council consider as a future study issue an examination of requiring parking restrictions adjacent to corner and driveway vision triangles, and at bicycle and pedestrian pathway intersections with roadways. BPAC draft minutes are provided in Attachment F.

### **FISCAL IMPACT**

There may be an operating impact to the City if more stringent sight distance standards are applied and there is a corresponding increase in modifications to roadway features, such as increased parking restrictions. There will also be an increased level of effort in studying and making sight distance recommendations. Staff believes these procedural changes can be accommodated within existing operating budgets.

### **PUBLIC CONTACT**

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall, at the Sunnyvale Senior Center, Community Center and Department of Public Safety; and by making the agenda and report available at the Sunnyvale Public Library, the Office of the City Clerk and on the City's Web site.

In addition, this study issue was brought forward for review and discussion at two public hearings; one with the Planning Commission on November 14, 2011 and the other with the Bicycle and Pedestrian Advisory Commission on November 17, 2011.

**ALTERNATIVES**

1. Direct staff to prepare a revision to the SMC to include the following provisions related to intersection and driveway sight triangles:
  - a. New land developments with 100 or more parking spaces shall be required to adhere to a 40 foot driveway vision triangle standard.
  - b. Signalized intersections shall provide no parking zones of 20 feet from curb returns, consistent with the parking restriction standards of the California MUTCD.
  - c. Fences, hedges or any other obstructions more than 3.5 feet in height shall be prohibited in vision triangles.
  - d. Exceptions to vision triangle requirements shall be allowed for see through fences with fence posts spaced 8 feet apart and not higher than 4.5 feet, one tree with a typical trunk circumference of thirty eight inches and canopy higher than 10 feet at maturity, and buildings at all way stop controlled or signalized intersections located in the El Camino Precise Plan area.
  - e. The driveway vision triangle shall be measured from the back of sidewalk or from the property line where no sidewalk exists.
2. Direct staff to make other modifications to the Code regarding corner vision triangles.
3. Do not direct staff to make any changes to the SMC regarding corner vision triangles at this time.

## **RECOMMENDATION**

Staff recommends Alternative No. 1: Direct staff to prepare a revision to the Sunnyvale Municipal Code to include provisions related to intersection and driveway sight triangles identified in Alternative 1, items a-e.

These recommendations improve application of vision triangle requirements at higher volume locations and restore and clarify prohibited and allowable features in vision triangles.

The Planning Commission considered Alternative 1 including an exception to vision triangle requirements for wrought iron fencing. The Planning Commission supported Alternative 1 with an exemption for wrought iron fencing.

The BPAC recommends a modified Alternative 1, which would not increase the maximum height to 3.5 feet, would not exempt wrought iron fences, and would require parking restrictions 20' from the curb return at all stop controlled intersections. Staff believes that the revised maximum height is justified by its use in Federal and State guidance on sight distance, and will improve fence aesthetics. Staff believes that while the proposed parking restrictions would improve sight distance at stop controlled intersections, the magnitude of parking removal required to implement a regulation would be significant. There are over 400 stop controlled intersections in the City, and placing parking restrictions (signs) would be costly, on the order of approximately \$85,000. The City does not have funds budgeted to conduct this work. Staff does not support an exemption for wrought iron fencing.

The BPAC also voted 7-0 to recommend that the City Council consider as a future study issue an examination of requiring parking restrictions adjacent to corner and driveway vision triangles, and at bicycle and pedestrian pathway intersections with roadways.

Staff does not recommend adopting any new standards to address skewed intersections, grades, and/or traffic controls. Information required from permit applicants would be significantly greater than what is currently required, and would likely result in increased permit review times and added costs to applicants. Also, there are not sufficient staff resources to conduct engineering reviews of all vision-triangle permits.

Staff is not recommending use of HDM guidance. Staff believes it is not applicable and would be impractical to implement the HDM standard in Sunnyvale. The HDM guidance cannot practically be implemented in many Sunnyvale settings without extremely high costs, environmental disruption,

significant loss of on-street parking, and potentially infeasible removal of many existing obstructions.

Reviewed by:

Kent Steffens, Director, Public Works

Prepared by: Jack Witthaus, Transportation and Traffic Manager

Approved by:

Gary M. Luebbers

City Manager

**ATTACHMENTS:**

- A. Study Issue paper DPW 09-02 Update/Review Corner Vision Triangle Municipal Code Ordinance
- B. 40 Foot Intersection Vision Triangle Diagram
- C. 10 Foot Driveway Vision Triangle Diagram
- D. Visual Study of Application of Highway Design Manual Sight Distance Standards
- E. November 14, 2011 Draft Planning Commission Minutes
- F. November 17, 2011 Draft BPAC Minutes

## 2011 Council Study Issue

## DPW 09-02 Update/Review Corner Vision Triangle Municipal Code Ordinance

**Lead Department** Public Works

**History**                    1 year ago Below the line                    2 years ago Deferred

### 1. What are the key elements of the issue? What precipitated it?

At an intersection, the corner vision triangle is formed by measuring 40 feet from the property line of each of the intersecting streets, according to current City policy. The driveway vision triangle is created by measuring 10 feet along the outer edge of a driveway and 10 feet along the back edge of a public sidewalk. Fences, hedges or any other obstructions more than 3 feet in height are prohibited in the vision triangles.

The Bicycle and Pedestrian Advisory Commission would like to review the relevance and adequacy of the corner vision triangle in the Sunnyvale Municipal Code (SMC). The Commission believes that visibility at street intersections and driveways is extremely important for the safety of pedestrians and bicyclists, and that the current ordinance may not adequately ensure that adequate visibility is provided. For example, the current vision triangle ordinance does not take into consideration street curvature, intersection angle and type of control, and consistency with the Highway Design Manual. This issue was initiated because of a vision problem at the driveway that was constructed on Mathilda Avenue for the Cherry Orchard retail center.

Sunnyvale's policy does not presently allow for a sliding scale or reduction in the required vision triangles. Some cities, but not Sunnyvale, allow sight triangle encroachments based on the fence design. An open decorative type fence design would allow for the greatest visibility, and two prime examples of this style are wrought iron and open-type wood fences. In 2008, City Council decided to broaden the BPAC initiated study issue to examine the benefits of modifying the SMC by taking into account the openness or transparency of the fence in conjunction with the height of the fence.

### 2. How does this relate to the General Plan or existing City Policy?

C3 – Attain a transportation system that is effective, safe, pleasant, and convenient.

### 3. Origin of issue

**Board or Commission** Bicycle and Pedestrian Advisory Committee

### 4. Staff effort required to conduct study Major

### 5. Multiple Year Project? No Planned Completion Year 2011

### 6. Expected participation involved in the study issue process?

<b>Does Council need to approve a work plan?</b>	No
<b>Does this issue require review by a Board/Commission?</b>	Yes
<b>If so, which?</b>	Bicycle and Pedestrian Advisory Committee, Planning Commission
<b>Is a Council Study Session anticipated?</b>	No

### 7. Briefly explain cost of study, including consultant hours, impacted budget program, required budget modifications, etc. and amounts if known.

ATTACHMENT A

The study would be conducted by Public Works and Community Development staff. Costs would be minor and would be absorbed by operating budgets.

**8. Briefly explain potential fiscal impact of implementing study results (consider capital and operating costs, as well as potential revenue).**

There would be no fiscal impact related to the recommendations of the Study.

**9. Staff Recommendation**

**Staff Recommendation** Against Study

**If 'For Study' or 'Against Study', explain**

Staff believes the current policy is adequate. The current process allows for property owners to request a variance from vision triangle requirements, which provides some flexibility. Also, staff can condition projects during the design review process to provide differing sight distance, based upon unique site characteristics.

Reviewed by

*Mario A. Rose*  
\_\_\_\_\_  
Date 11/1/2010

Department Director

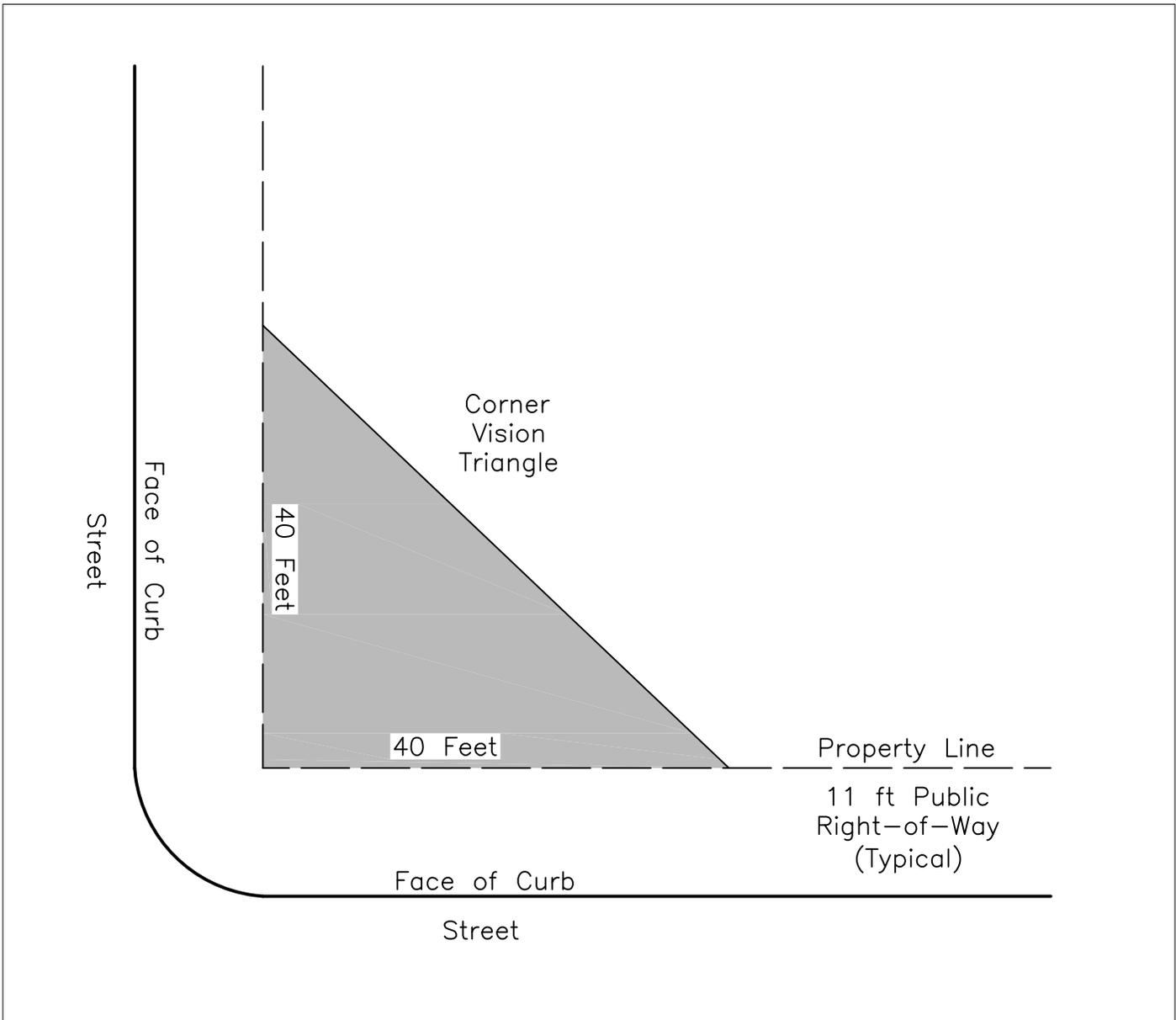
Approved by

*Debra J. ...*  
\_\_\_\_\_  
Date 11-2-10

City Manager

# Attachment "B"

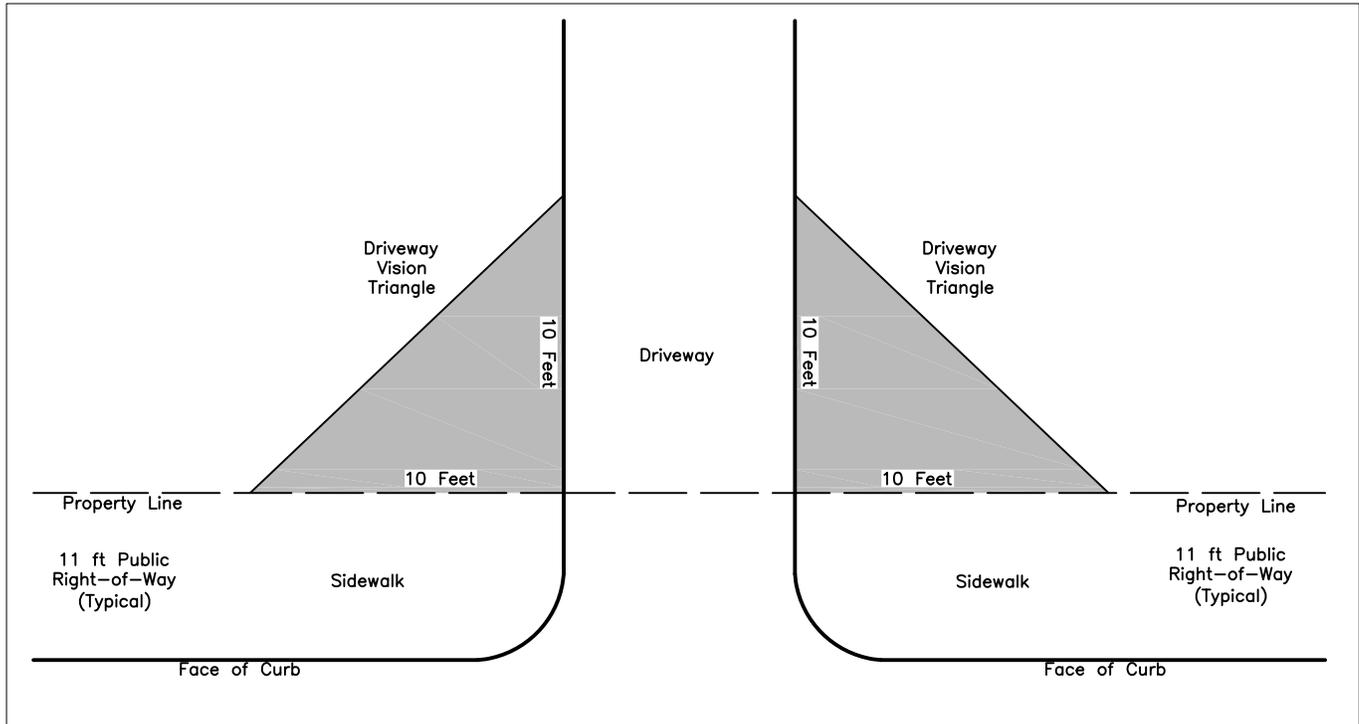
## 40 ft Corner Vision Triangle



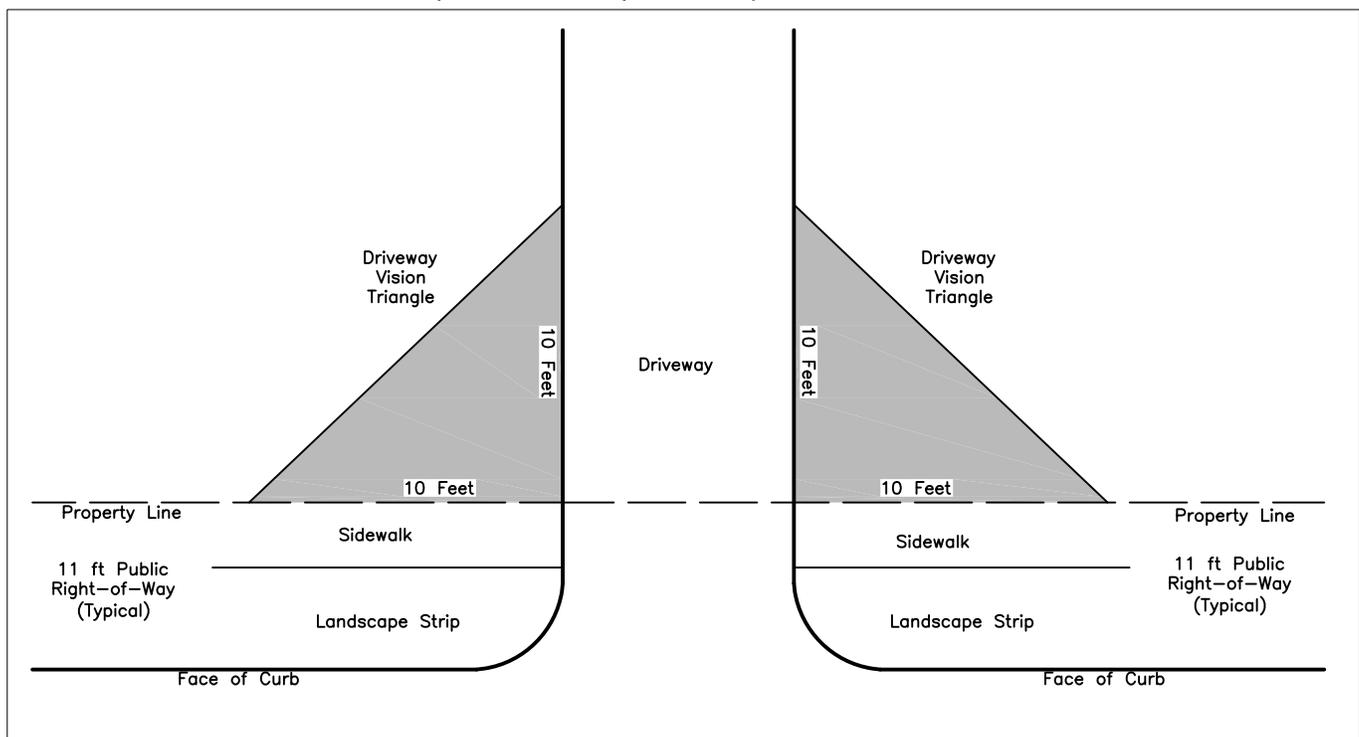
# Attachment "C"

## 10 ft Driveway Vision Triangle

### Landscape Strip Adjacent to Property Line



### Landscape Strip Adjacent to Curb



ATTACHMENT D  
DEPARTMENT OF PUBLIC WORKS

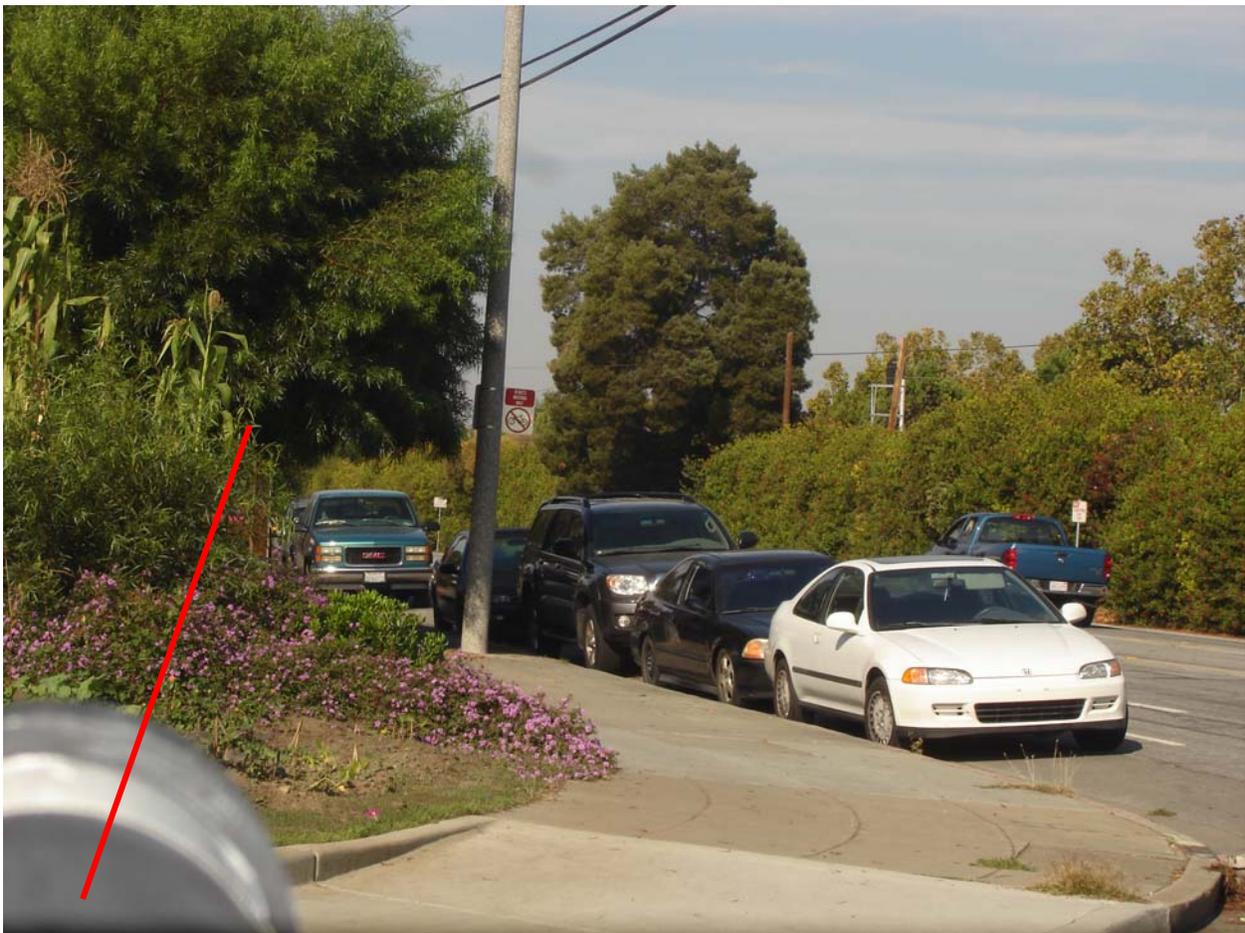
DIVISION OF TRANSPORTATION AND TRAFFIC

Corner Sight Distance Field Demonstration

Location: Evelyn Avenue at Sunset Avenue

Assumptions:

1. Evelyn Avenue speed limit 35 mph
2. Sunset Avenue speed limit 25 mph
3. Highway Design Manual Corner Sight Distance for Evelyn is 385 ft
4. Offset measured in field is 29 ft (parking along Evelyn on south side of street)



Location from where driver on northbound Sunset would be to see vehicle approaching from eastbound Evelyn.

Red line represents line of sight  
Northbound Sunset looking to the left

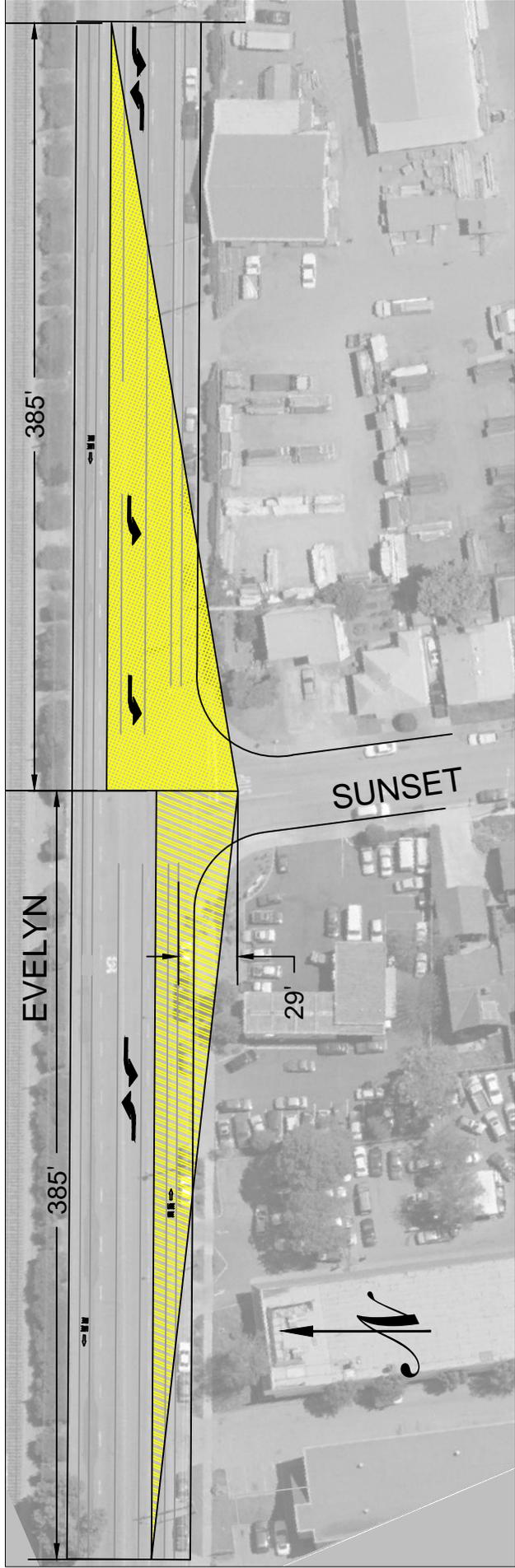


# CITY OF SUNNYVALE

## DIVISION OF TRANSPORTATION AND TRAFFIC

### AERIAL VIEW

### EVELYN AND SUNSET





Corner Vision Triangle points on northbound Sunset and on eastbound Evelyn for vehicles approaching from the left

Location: Grape Avenue at Bennington Drive

Assumptions:

5. Grape Avenue speed limit 25 mph
6. Bennington Drive speed limit 25 mph
7. Highway Design Manual Corner Sight Distance for Grape is 275 ft
8. Offset measured in field is 26 ft (parking on both sides of Grape)



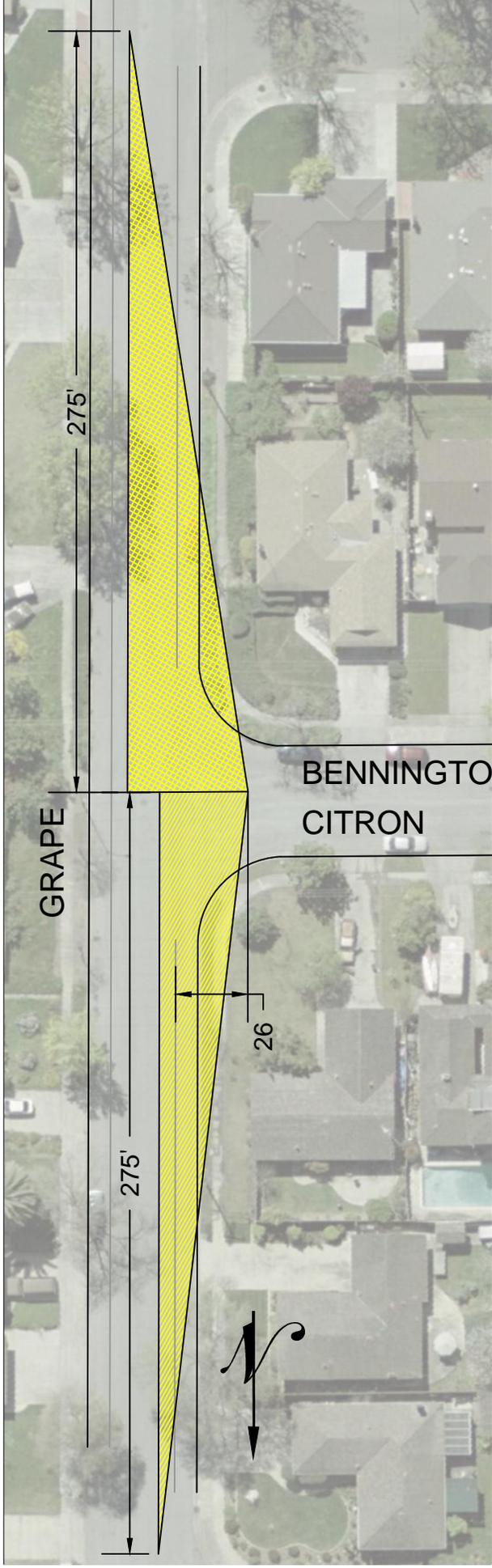
Location from where driver on eastbound Bennington would be to see vehicle approaching from southbound Grape

Red line represents line of sight  
Eastbound Bennington looking to the left

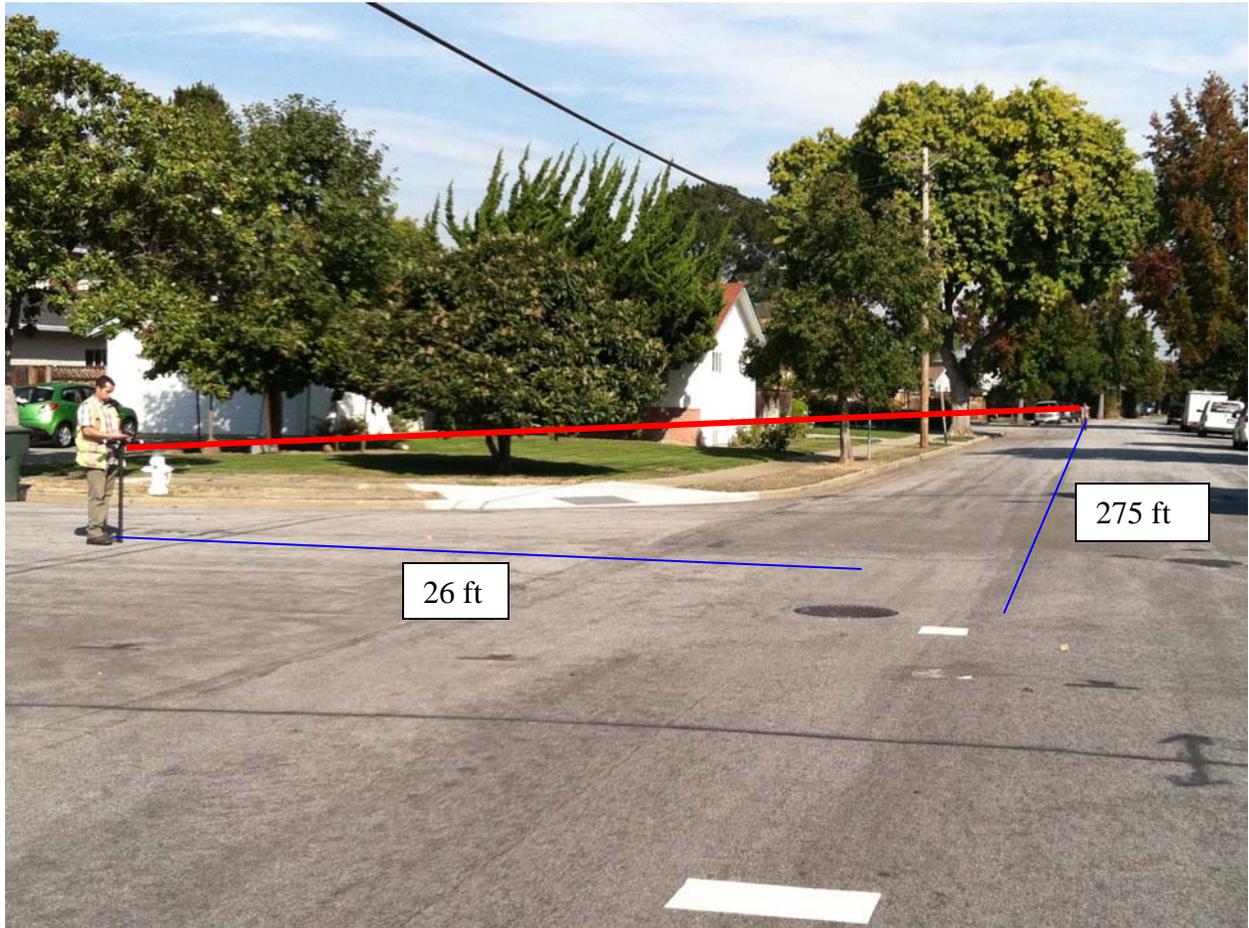


# CITY OF SUNNYVALE DIVISION OF TRANSPORTATION AND TRAFFIC

## AERIAL VIEW GRAPE AND BENNINGTON-CITRON



N.T.S.



Corner Vision Triangle points on eastbound Bennington and on southbound Grape for vehicles approaching from the left

4. **Subject:** **Update/Review Corner Vision Triangle Municipal Code Ordinance (Study Issue)**  
**Staff Contact:** Jack Witthaus 408-730-7330, [jwitthaus@ci.sunnyvale.ca.us](mailto:jwitthaus@ci.sunnyvale.ca.us)

**Jack Witthaus**, Transportation and Traffic Manager, presented the staff report.

**Vice Chair Larsson** discussed with staff all-way, stop-controlled intersections, the history of measuring corner vision triangles, and the parking of Recreational Vehicles (RVs) near intersections and in driveway vision triangles. Vice Chair Larsson expressed concern that even if an RV is moveable it can be a sight obstruction and he would like to see this concern considered.

**Comm. Chang** discussed with staff the vision triangle exemption for certain trees.

**Chair Hendricks** discussed with staff the proposed changes and whether any parking would be eliminated. Mr. Witthaus said parking would be lost at signalized intersections. They discussed the photo simulations and how staff arrived at the recommendations.

**Chair Hendricks opened and closed the public hearing.**

**Chair Hendricks** asked staff about Alternative 1.c that “obstructions more than 3.5 feet in height shall be prohibited in vision triangles”, specifically how this height was determined. Staff discussed the recommendation from a safety standpoint and from aesthetics with Chair Hendricks commenting he preferred this subject be based more on science than aesthetics.

**Vice Chair Larsson** asked further about driveway vision triangles and obstructions with staff clarifying that the triangle does cross property lines.

**Vice Chair Larsson moved for Alternative 1, to recommend to City Council to Direct staff to prepare a revision to the Sunnyvale Municipal Code to include the provisions related to intersection and driveway sight triangles identified, items a-e. Comm. Chang seconded the motion.**

**Vice Chair Larsson** said these recommendations are good steps forward, as far as safety is concerned. He said he was surprised at the challenges of coming up with a set of requirements, and he thinks these are a good, implementable set of requirements.

**Comm. Chang** said this is a good set of rules that we can abide by and they address both safety standards and aesthetics.

**Comm. Hendricks** said he would be supporting the motion. He said this is good example of how the Study Issue process works.

**Comm. Kolchak** said the report provides good details and this is an important public safety issue.

**ACTION:** Vice Chair Larsson made a motion to recommend to City Council to Direct staff to prepare a revision to the Sunnyvale Municipal Code to include the provisions related to intersection and driveway sight triangles identified in Alternative 1, items a-e. Comm. Chang seconded. Motion carried 6-0, with Comm. Dohadwala absent.

**APPEAL OPTIONS:** This recommendation will be provided to City Council for consideration of this item at the December 6, 2011 City Council meeting.



**DRAFT**

**SUNNYVALE BICYCLE AND PEDESTRIAN ADVISORY COMMISSION  
Meeting Minutes – November 17, 2011**

The Sunnyvale Bicycle and Pedestrian Advisory Commission met at 6:30 p.m. on November 17, 2011 with Commission Chair Ralph Durham presiding. The meeting was held in the West Conference Room, City Hall, 456 West Olive Avenue, Sunnyvale.

**ROLL CALL/CONSIDERATION OF ABSENCES**

**Members Present:** Andrea Stawitcke  
Angela Rausch  
Cathy Switzer  
David Gandrud  
James Manidakos  
Patrick Walz  
Ralph Durham

**Members Absent:** None

**Staff Present:** Heba El-Guendy, BPAC staff liaison/Senior Transportation Planner, Department of Public Works  
Jack Witthaus, Transportation and Traffic Division Manager, Department of Public Works  
Officer Ava Phillips, Department of Public Safety

**Visitors:** Kevin Jackson, Horizon 2035 Committee member  
Arthur Schwartz, Sunnyvale resident

**SCHEDULED PRESENTATION**

Chair Durham noted his observation of a cyclist riding a bicycle equipped with a small two stroke engine (believes sub 50cc) using the bike lane, and inquired if such bicycles are allowed legally to use the bike lanes.

Vice Chair Manidakos believes that such motorized bicycles (with internal combustion rather than electric motor) are not allowed in the bike lanes and are considered motorized vehicles, and that they would still be licensed as bicycles.

Officer Philips will check all applicable code sections in this regard for follow-up feedback.

Kevin Jackson indicated that having DPS officers attend the school safety planning meetings was useful and appreciated.

**PUBLIC ANNOUNCEMENTS**

Kevin Jackson noted that the "Bicycles may use full lane width" sign is part of the CA Manual on Uniform Traffic Control Devices (MUTCD) update which is expected to be officially adopted in January 2012. With regards to the safe routes to schools program, indicated that all planning

meetings for this year have been completed and that the team started conducting workshops for training parents and schools representatives on the different initiatives that could increase walking and cycling. The Horizon 2035 Committee's work on the Land Use and Transportation Element (LUTE) update and Climate Action Plan (CAP) was carried out with the intention to be transformational, and the work will be reviewed in the study session scheduled for November 29<sup>th</sup> and encouraged participation of all BPAC members. A couple of articles noted that the City of San Jose is implementing the 15 miles/hour speed limit in school zones, and hopes that the City of Sunnyvale would proceed with the same.

### **CONSENT CALENDAR**

- 1.A) Approval of Draft Minutes of the October 20, 2011 Meeting
- 1.B) Approval of the 2011 BPAC Calendar Update

Public member Kevin Jackson pulled item 1.A).

**Vice Chair Manidakos moved and Commissioner Switzer seconded the motion to approve Consent Calendar item 1.B).**

**Motion passed: 7-0.**

Commissioner Switzer inquired about the rationale of setting the BPAC Work Plan based on a calendar year rather than fiscal year and the possibility of changing it to be consistent with timing of some projects and members' terms.

Heba El-Guendy, staff liaison, noted that all calendars for Council, Commissions and Boards are consistently set based on calendar year. The study issue process is also set based on calendar year. Indicated that she will pass on the Commissioner's inquiry and request to the City Clerk's Office.

Kevin Jackson requested revising last paragraph of the first page to indicate: "Kevin Jackson noted that the officer who attended the meeting at Braly Elementary school *inaccurately* falsely indicated that cycling is not allowed on the sidewalks in Sunnyvale, and requested that officers be informed of the City's municipal code in this regard".

**Commissioner Rausch moved and Commissioner Stawitcke seconded the motion to approve Consent Calendar item 1.A) as amended.**

**Motion passed: 7-0.**

### **PUBLIC COMMENTS**

None.

### **PUBLIC HEARINGS/GENERAL BUSINESS**

- 2. ACTION: Update/Review Corner Vision Triangle Municipal Code Ordinance – Study Issue DPW 09-02 (Draft RTC)

Jack Witthaus provided the staff report in light of the Draft Report to Council (RTC) included as part of the agenda packet and explained the rationale behind the staff recommendations. Noted that

the Draft RTC was reviewed by the Planning Commission and was voted 6-0 (With one of the Planning Commission members being absent) in favor of the staff recommendation.

Commissioner Walz inquired if City Planning would want exceptions to fencing, possibility of lengthening the no parking zones when there are no sidewalks, and consideration of including other multi-use/higher density areas in addition to the El Camino Precise Plan. Also inquired how prohibiting parking could impact the City's resources and communities, and if there would be a need for environmental analysis associated with such change.

Commissioner Gandrud inquired about the City's process with regard to code enforcement of vision triangle violations. Recommended against the increase in object height in the vision triangle from 3.0 feet to 3.5 feet due to safety consideration such as the ability to see toddlers. Also recommended that the triangle lines be extended out to the street edges, thereby identifying limits of the no parking zones. Also to consider prohibiting parking at driveways, not just intersections, due to safety concerns and suggested that the driveway vision triangle be measured at 8 feet from and parallel to the curb.

Commissioner Rausch recommended adding language to cover parking prohibition at the corners of uncontrolled, as well as yield and stop controlled intersections.

Commissioner Stawitcke emphasized Commissioner Rausch's above comment especially in school areas. Inquired about the approximate percentage of streets within Sunnyvale that presently lack sidewalks.

Commissioner Switzer inquired about the types of new developments that would be impacted by the proposed ordinance. Requested not to increase the obstruction height to 3.5 feet.

Vice Chair Manitakos asked how the vision triangles are measured at T-intersections. Also inquired about the application and enforcement of the ordinance, and noted that there may not be corrective measures if buildings are located within the vision triangles.

Chair Durham inquired about measurements from the edge of street relative to the property line, and whether or not some fences located within the vision triangles were permitted or grand fathered. Recommended that parking prohibition be a priority on roadways with higher speeds such as arterials and collectors.

Arthur Schwartz noted his agreement with the need for prohibiting parking at driveways and intersections, and added alleyways. Noted that since he started using a tricycle, he has not been harassed by drivers.

Kevin Jackson noted that debris bins should not be allowed in the vision triangles similar to vehicular parking. In commenting on components of the Draft RTC, noted that the reported collisions do not capture close calls which could be more frequent. With regard to vision triangles at driveways of larger development sites, requested researching additional factors besides the 100 on-site parking stalls. Noted that the 20 feet parking prohibition at signalized intersections was probably based on the motorists need only, and requested adding non-signalized intersections. Noted that allowing buildings within the vision triangles could adversely impact safety for right turns on red signal. With regard to Alternative 1: requested adding redevelopment projects not just new developments, adding intersections with stop and yield control and base the associated parking prohibitions on vehicular speeds and volumes, keeping the height of obstruction at 3 feet, and requiring that BPAC review requested exceptions to fencing and such in the vision triangles.

Commissioner Walz moved and Vice Chair Manitakos seconded the motion to approve Alternative 1 with the amendments shown in *Italic* font and strikethrough:

1. Direct staff to prepare a revision to the SMC to include the following provisions related to intersection and driveway sight triangles:
  - a. ~~New land d~~Developments *projects requiring a permit with having* 100 or more parking spaces shall be required to adhere to a 40 foot driveway vision triangle standard.
  - b. Signalized intersections shall provide no parking zones of 20 feet from curb returns, consistent with the parking restriction standards of the California MUTCD. *Add non-signalized intersections.*
  - c. Fences, hedges or any other obstructions more than ~~3.5~~ 3.0 feet in height shall be prohibited in vision triangles.
  - d. Exceptions to vision triangle requirements shall be allowed for ~~wrought iron open fencing~~, fence posts spaced 8 feet apart and not higher than 4.5 feet, one tree with a typical trunk circumference of thirty eight inches at maturity, and buildings at all way stop controlled or signalized intersections located in the El Camino Precise Plan area.
  - e. The driveway vision triangle shall be measured from the back of sidewalk or from the property line where no sidewalk exists.

Motion passed: 7-0.

Vice Chair Manitakos moved and Commissioner Walz seconded a follow on motion to recommend that Council consider a study issue that assesses establishing parking prohibition at driveways, alleyways and intersections.

Motion passed: 7-0.

### 3. ACTION: Ranking of Study Issues

The following comments and recommendations were provided on some of the study issues:

DPW 09-07: Vice Chair Manitakos questioned the applicability of Cyclovia within Sunnyvale and its practicality in light of current economic conditions. Commissioner Switzer requested combining Cyclovia with an event such as the City's centennial celebration next year.

DPW 12-01: Vice Chair Manitakos and Chair Durham emphasized the importance of developing a Bicyclist Anti-Harassment Ordinance in order to address ongoing safety concerns, and referenced their e-mailed comments which were included as part of the agenda packet. Vice Chair Manitakos noted that the burden of proof is on the plaintiff with possible award of monetary damages, thereby reducing the need for DPS reporting.

Kevin Jackson noted that the value is not only in the punitive damage, but also in the deterrence effect. Disagrees with the staff recommendation and requested that the study issue write-up be reviewed by the City Attorney. Recommended ranking this issue highly.

DPW 12-02: Commissioner Walz recommended eliminating the referenced installation of flashing beacons to reduce the cost of implementing the 15 miles per hour speed limit reduction in school zones. Commissioner Gandrud noted that this is a policy issue not an operational issue.

Kevin Jackson disagrees with the staff recommendation that it is an operational issue since the City would need to enact an ordinance or resolution which would have to be approved by Council. Recommended ranking this study issue highly to address school safety concerns.

DPW 12-03: Vice Chair Manidakos recommended implementing colored bike lanes as part of road resurfacing projects to reduce their implementation costs. Also recommended utilizing colored pavement rather than painting the bike lanes, since painting would have lower friction and require more frequent maintenance. Chair Durham noted its applicability mainly at conflict locations, rather than all along bicycle lanes throughout the City.

Kevin Jackson disagrees with the staff recommendation, and recommended funding its application through grants. Noted the need for changing the title to Green Bike Lanes because the National Association for the Advancement of Colored People may object to the title Colored Bike Lanes.

DPW 12-04: Commissioner Gandrud requested changing the title to "Establish a Bicycle Violation Diversion Program for Adults" to clarify the process differences in the adults versus juvenile programs.

Study Issue	Score	Rank	BPAC Recommendation
DPW 09-01: Comprehensive School Traffic Study	32	4	Forward for Council consideration
DPW 09-04: Impacts of Traffic Calming Devices on Cyclists	35	5	Defer to a future year
DPW 09-07: Sunnyvale Cyclovia Event	44	7	Defer to a future year
DPW 12-01: Bicyclist Anti-Harassment Ordinance	12	1	Forward for Council consideration
DPW 12-02: Establishment of 15 Miles Per Hour School Zones and Flashing Warning Signs	12	1	Forward for Council consideration
DPW 12-03: Conditions for the Installation of Colored Bicycle Lanes	26	3	Forward for Council consideration
DPS 12-04: Expansion of Bicycle Violation Diversion Classes	35	5	Defer to a future year

**Commissioner Walz moved and Vice Chair Manidakos seconded the motion to recommend moving only the top four ranked study issues (i.e. DPW 12-01, DPW 12-02, DPW 12-03 and DPW 09-01) for Council consideration.** This is with the understanding that study issues previously deferred by Council (i.e. DPW 09-04 and DPW 09-07) will have to return for Council consideration as per process. Also in consideration of their aforementioned recommended measures to reduce the cost of implementing DPW 12-02 and DPW 12-03.

**Motion passed: 7-0.**

#### 4. DISCUSSION: BPAC's Review Schedule of Study and Budget Issues

Following a brief discussion among the BPAC members, it was agreed that the brainstorming of study and budget issues be regularly conducted during the April and June meetings, followed by BPAC review of the issue papers in August, the finalization of all draft issues would be in September, and the ranking of study issues would be in November.

The staff liaison will prepare the 2012 Work Plan according to the aforementioned schedule.

**NON-AGENDA ITEMS AND COMMENTS**

• BOARD MEMBERS OR COMMISSIONERS ORAL COMMENTS

Commissioner Switzer provided copies of the Bicycle Friendly America (A League of American Bicyclists publication) and requested that they would be forwarded to City Council. The publication references the City of Sunnyvale as one of the communities that received a "Bronze" Bicycle Friendly Award from 2008 to 2012. The Commissioner requested that the City strive for a "Silver" award in the coming year.

Commissioner Stawitcke inquired about the need for holding the December BPAC meeting in light of the limited number of agenda items. All BPAC members chose to cancel the December 15<sup>th</sup>, 2011 meeting.

Chair Durham and Commissioner Rausch noted their inability to attend the Council study session on November 29<sup>th</sup> due to other schedule commitments.

• STAFF ORAL COMMENTS

Heba El-Guendy, staff liaison, requested that all public requests be submitted through the BPAC web page rather than e-mailing the BPAC members directly.

**INFORMATION ONLY ITEMS**

3. Walk and Roll – Safe Routes to Schools training session. Accepted as submitted.
4. BPAC E-mail messages and/or letters since circulation of the agenda packet of the October 20<sup>th</sup> meeting. Accepted as submitted.
5. BPAC Active Items List. Accepted as submitted.

**ADJOURNMENT**

Meeting adjourned at 9:05 p.m.

---

Respectfully submitted by:

---

Heba El-Guendy  
Senior Transportation Planner