



**Draft for Planning Commission Review on  
September 8, 2008**

**Council Meeting: September 30, 2008**

**SUBJECT: 2007-0800 Amendments to Title 19 and Title 9 to Implement the City-wide Solar Energy Plan Policies. These Changes Implement the New Solar Energy Policies Adopted by the City Council on December 11, 2007**

**REPORT IN BRIEF**

On December 11, 2007, the City Council made a series of policy decisions to encourage solar energy systems within the City. Also, subsequent to that hearing, new state law was passed regarding solar panel placement (especially in relation to existing trees). The proposed code changes implement the new state law and the adopted policies (See Attachment B for proposed ordinance language).

**BACKGROUND**

The subject study issue focused on opportunities to promote the use of solar energy on private property. After a year of study, the City Council adopted a series of policies that included municipal code changes, legislative advocacy positions, and reduced permitting fees to encourage solar energy within the City (See Attachment A, Minutes from City Council Meeting of December 11, 2007). The attached proposed ordinance changes reflect the approved modifications to the zoning code.

On July 22, 2008 the Governor signed into law SB 1399 (Simitian). This bill makes changes to state law regarding solar collectors and the potential conflict with vegetation (see Attachment C for the language of this bill).

**EXISTING POLICY**

***Council Policy – 3.5.1 Energy***

Adopted in 2000, the City of Sunnyvale's Energy Policy purpose states that the "*preservation of natural resources through the use of energy efficient activities is of great importance to the citizens and businesses of Sunnyvale.*"

**DISCUSSION**

**New Solar Energy System Requirements:** The following is a brief description of the changes made to Title 19 in response to the decisions by Council on December 11, 2007.

- **Definitions** – Language was added to describe electrical equipment associated with active solar collectors (solar devices) and the system as a whole (solar energy system). The definition for solar easement was deleted as it is not regulated or described anywhere else in the code.
- **References to allowed deviations** – Footnotes were added in the lot coverage, FAR and building height tables as well as the setback tables to refer to possible deviations (incentives and accommodations respectively) to these requirements for solar energy system installation. These deviations are described in Chapter 19.56 (See Attachment B).

Since the December 2007 direction on solar energy systems from City Council, there has been increasing interest around energy-efficient, sustainable practices. Energy-efficiency and sustainability have become primary values in the community. As such, the Planning Commission and City Council may wish to consider increasing the FAR and lot coverage incentives to 5%, creating greater incentives for solar energy systems. These increases could impact other requirements such as level of review for industrial buildings and single family homes, TDM requirements and stormwater management plans, as well as other code requirements. If there is a desire to further increase these incentives, SMC 19.56.070 could be amended accordingly or staff could return with additional information and/or changes.

- **Allowance for solar collectors in lieu of parking lot shading** – Language was added that allows the Director of Community Development to approve up to 25% of the parking lot shading requirement to be met by solar collectors.
- **Process to consider the deviations** – A line item was added to the Miscellaneous Plan Permit (MPP) section to allow staff to consider deviations from development standards through a MPP process.
- **Nuisance language** – Language in Title 19 regarding conflict of existing trees with solar collectors was originally planned to be moved to Title 9. However, since reviewing the Solar Shade Act, staff is recommending a different action for the nuisance language. Please see the discussion of the Solar Shade Act.

**Solar Shade Act:** On July 22, 2008, the Governor approved SB 1399 regarding solar shading. This new bill made several changes to old law (See Attachment C).

The previous Solar Shade Act defined tree shade interference with solar devices to be a “public nuisance” and designated the City Attorney or County District Attorney to prosecute solar shade violations. Such violations did not require that the solar collector be installed before the trees were planted so that a neighbor could be compelled to trim or cut his or her trees even if the trees existed before the solar device was installed. The previous Act allowed a public agency to exempt itself from its provisions if it passed an ordinance.

The current Sunnyvale Municipal Code Section 19.56.030 was enacted under the previous Solar Shade Act. The ordinance is consistent with prior law by prohibiting property owners from having trees interfering with neighboring solar access with two unique exceptions: 1) trees of significant size (38” in diameter) are not required to be removed; and 2) vegetation which has been deemed by the City Council to have “cultural, horticultural or heritage significance” are also not required to be removed, regardless of when they were planted.

The new Solar Shade Act addresses two main issues: whether interference with solar devices is a “public” or “private” nuisance, and what should be done when there is a conflict between a collector and vegetation. The new law declares that solar shade interferences are “private nuisances,” not public nuisances. The effect of this change is that shade disputes become private matters between adjoining landowners, thereby “decriminalizing” solar shade violations that would otherwise be prosecuted by a city attorney or district attorney.

Secondly, the new law declares that after the installation of a solar collector, a property owner (or one in control of property) shall not allow a tree or shrub to be placed, or if placed, to grow so as to cast a shadow which interferes with a solar collector. It also authorizes a property owner to send a 60-day notice to neighbors advising them that a solar collector will be installed.

The law still allows public agencies to exempt themselves from the Solar Shade Act and clarifies that existing city or county ordinances, which specify requirements for tree preservation or solar shade control, are still in effect. These provisions allow Cities to determine whether they want to be more restrictive than the recently passed Solar Shade Act.

By removing SMC 19.56.030, solar shade violation issues would be regulated by the current state law. By deeming solar shade violations a “private”

nuisance, this could simplify the City's review process for solar energy systems and solar collectors.

### **FISCAL IMPACT**

Staff could streamline the review process for solar energy collectors. The current process of requiring a ministerial planning review with a Solar Review fee of \$50 could be removed, and all requirements could be looked at through the building permit process. Requests to deviate from the zoning standards to take advantage of incentives or accommodate solar facility installations would be subject to a Miscellaneous Plan Permit (MPP) with associated fees. The fiscal impacts of these processes will be evaluated through the Fee Study, which is currently underway for both Planning and Building fees.

### **PUBLIC CONTACT**

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

### **ALTERNATIVES**

1. Repeal SMC 19.56.030 and adopt the ordinance language (Attachment B) as proposed by staff.
2. Make no change to the current nuisance provisions of the code addressing solar shading and adopt the remainder of the ordinance language as proposed by staff.
3. Make changes to the ordinance language, including increasing the FAR and lot coverage incentives for solar energy systems.
4. Do not adopt the ordinance language and direct staff to return with additional information and/or changes.

**RECOMMENDATION**

Alternative 1. The proposed language is consistent with Council direction and recent modifications to state law. Removing the requirement for a separate solar review for solar energy installations will streamline the process, further facilitating installation of solar energy systems.

Reviewed by:

Hanson Hom, Director, Community Development  
Reviewed by: Trudi Ryan, Planning Officer  
Prepared by: Diana O'Dell, Senior Planner

Approved by:

Amy Chan  
City Manager

**Attachments**

- A. City Council meeting minutes of December 11, 2007
- B. Draft Code Amendments to Title 19.
- C. SB 1399 Solar Shading, Approved by the Governor July 22, 2008

**PUBLIC HEARINGS/GENERAL BUSINESS****2. RTC 07-409 2007-0800 Citywide Solar Energy Plan (Study Issue)**

Planning Officer Trudi Ryan presented the staff report.

Councilmember Howe inquired what the discretionary portion of the regulations for a solar permit would a homeowner association (HOA) have that would be different from a single family residence. Planning Officer Ryan stated as an owner of a single family residence, the owner has full discretion on what the solar installation will look like, whereas with a community property such as a condominium, the HOA or governing body has authority to require modifications to meet esthetic standards. Planning Officer Ryan stated the City cannot request any modifications when reviewing an application for solar facilities. Director Hom added that HOAs also have the authority to review the structural integrity of an installation of solar panels.

Councilmember Howe inquired if the City's permit process would look into the structural aspects for a single family home and Planning Officer Ryan stated in all cases (such as a single family home, condominium, apartment, or commercial property) the building permit would look at the structural integrity of any solar installation.

Councilmember Howe confirmed that Director Hom's understanding of the authority of an association regarding solar panel installation is allowable only if the HOA has additional provisions in their Covenants, Conditions, and Restrictions (CC&R) that governs improvements such as a solar panel installation. Councilmember Howe confirmed the review authority for the HOA would be allowable if within the CC&Rs; the association was required to maintain the roof.

Councilmember Howe inquired if the City has the ability to override an HOA in order to streamline things so that there are not two classes of permits (single family homes and HOA developments). Planning Officer Ryan referred to City Attorney Kahn but Councilmember Howe stated this could be addressed during the motion.

Councilmember Moylan confirmed with Planning Officer Ryan that the proposed fees for solar installation would offer approximately a 40 percent discount from the current fees.

Councilmember Moylan asked if staff could provide feedback regarding incentives that the City might be able to offer because many homeowners have pointed out that solar systems take quite some time to pay for themselves. Planning Officer Ryan stated staff is not aware of any particular resources available in the City; however, staff has suggested Council ask staff to explore the model that the City of Berkeley is using where bonds are issued allowing residents to obtain a loan for solar installation. Payments are then made back to the City over time through property taxes.

Councilmember Swegles confirmed that modifying the current fee schedule for solar installation planning permits would result in an approximate cost to the City of at least \$25,000 per year, depending on demand. Councilmember Swegles confirmed this deficit would affect the Community Development's revenue, which goes into the City's general fund.

Councilmember Hamilton asked how easy is it to achieve a 1.5 kilowatt (kW) and Planning Officer Ryan stated that although 2 kW might be average, 1.5 kW is more

than adequate for a smaller home or for someone more frugal in their use of electricity; therefore, the Planning Commission and staff recommended the smaller system.

Mayor Lee inquired what the cost would be per year if Council were to waive all fees related to solar installation and Planning Officer Ryan estimated a cost of \$67,500 per year. Mayor Lee stated if the fees were reduced, more residents would possibly install solar panels. Planning Officer Ryan stated that the permit fees are a small part of the overall expense of solar installation.

Councilmember Swegles inquired if the reduction in fees would go to the contractor or homeowner. Planning Officer Ryan stated that would depend on who pulled the permits. Councilmember Swegles inquired if there is a way staff could make sure that the discount is passed on to the resident. Planning Officer Ryan stated staff does not monitor the relationship between the contractor and the property owner. Director Hom added that what staff can do is educate homeowners so they are aware that this fee is discounted.

Public hearing opened at 8:08 p.m.

James Tuleya, member of Sunnyvale Cool Cities Team, stated that Cool Cities endorses the staff recommendation (as modified by the Planning Commission) with minor exceptions. The team did not receive consensus on the tree issue (2a) so they have no position on this issue. On recommendation 3a, the team would like the total permit fees to be \$299 instead of a maximum of \$300 because there is at least one solar vendor in existence that will pay the permit fees if they are under \$300.

Tuleya stated the team has started a new educational effort for solar power within Sunnyvale called "The Solar Sunnyvale Effort" which has a Web site and is offering educational workshops. Tuleya stated the Cool Cities team is attempting to do their part with outreach efforts to promote solar use.

Councilmember Swegles inquired if Council approves the staff recommendation, then would Cool Cities be agreeable to include information about the City's reduction in permit fees within their educational seminars. Tuleya agreed they would include that information.

Werner Gans stated staff provided an excellent and thorough staff report. Gans explained that Pacific Gas and Electricity (PG&E) has issued two different contracts for facilities that will use the sun to generate electricity. Gans stated it is important to note that solar cell efficiency drops off in the winter time. Gans stated there are less expensive alternative systems also available.

Caroline Vissers and representatives from the Global Warming Awareness Club at Homestead High School stated their support of the staff recommendation.

Arthur Schwartz stated he supports the City of Berkeley's plan which offers loans for solar installation. Schwartz stated the plan guarantees repayment of the loan regardless if the owner sells their home or not. Schwartz stated this is a great plan that would encourage residents to buy a system they might not otherwise be able to afford. Schwartz stated he would recommend that the City pass an ordinance stating that the permit fees for solar installation would be returned to the owner.

Councilmember Swegles confirmed with Planning Officer Ryan that the City of Berkeley plan would be looked at if Alternative 4 was approved by Council.

Amit Saivastava, member of Sunnyvale Cool Cities Team, stated they support the staff recommendation and also support Council directing staff to further investigate the City of Berkeley's plan for possible adoption. Saivastava stated PG&E rebates will run out soon.

Jim Griffith, President of Sutton Place Homeowners Association, urged Council to use extreme caution when tampering with the ability of HOAs to enforce their CC&Rs because they are written for specific reasons.

Barbara Fukumoto, Cool Cities member, stated support of the proposed reduction in total fees for solar installation to no more than \$299. Fukumoto stated that reduction will send a signal to the community that City leadership wants to encourage adoption of solar electrical systems.

Public hearing closed at 8:23 p.m.

Councilmember Hamilton inquired if staff views the City of Berkeley plan as being a viable option for the City. Planning Officer Ryan stated the City of Berkeley has not actually established the program at this point; rather it is the concept that has been approved. City Manager Chan added that the Berkeley model is an assessment type of model, which the City of Sunnyvale has used in many different forms. City Manager Chan stated the question at hand is how the bond is structured and that would be researched further if the staff recommendation is approved.

MOTION: Councilmember Swegles moved and Councilmember Hamilton seconded to approve Alternatives 1, 2, 3 and refer Alternative 4 to the Sustainable Green Building Practices study issues and the FY 2008-2009 budget process for further consideration **with** emphasis on looking at the City of Berkeley program and the ability to offer a zero cost loan.

Alternative 1: Council approves reducing information barriers by participating in joint efforts with partner agencies, volunteers, developers and solar-focused businesses to provide community education and promote existing opportunities to utilize alternative energy, including solar. Council approves incorporating efforts into existing staff duties, as work load permits, and refer the cost of a full-time staff coordinator and the cost for workshops to the FY 2008-09 budget review process.

Alternative 2: Council approves reducing institutional barriers and directs staff to return with a proposed ordinance, subject to further review and analysis by the Office of the City Attorney, (to address the number of complex legal issues and ensure compliance with State Law), that provides the following zoning code provisions to accommodate and encourage installation of solar equipment:

- a) clarify the process of reviewing solar permits with regard to tree preservation:
  - i.) Confirm the solar permit decision matrix process provided in Attachment C (e.g. if a protected tree restricts solar access, relocate solar system to another viable location);
  - ii.) If a protected tree located on the applicant's property restricts solar access, require the applicant to apply for a Tree Removal Permit (TRP) for any tree(s) that conflict with the desired solar access (note: the TRP may be denied if other viable solar access options exist, and may be approved if no other viable options exist for solar equipment, and the typical replacement tree requirements applies), and

- iii.) If a protected tree located on a neighboring property restricts solar access, refer the applicant to discuss the issue with their neighbor and ask their neighbor to apply for a TRP, and staff will review the application if submitted. (The City is not required to compel the neighbor to remove their tree if the tree's shading pre-dated the solar equipment.)
  - b) Modify the permitting process to develop a specialized planning permit for solar equipment.
  - c) Allow staff flexibility to consider allowing a portion of the parking lot shading requirement, such as 25 percent to be met by the installation of solar panels rather than trees.
  - d) Clarify Sunnyvale Municipal Code to waive any screening of electrical equipment requirement for solar PV panels.
  - e) Develop a Legislative Advocacy Position that supports making investor owned utilities (IOU) certification of solar installations a higher priority than at present.
  - f) Develop a Legislative Advocacy Position that supports expanding net metering to larger alternative/distributed energy projects and more types of such projects
- 3) Council approves reducing financial barriers and providing the following incentives for installation of solar equipment:
- a) adopt a resolution to modify the current fee schedule for a revised planning permit fee of \$50 and a related building permit fee of not more than \$250 for installation of solar equipment (for a total of not more than \$300). The approximate subsidy is anticipated to be at least \$25,000 per year, depending on demand.
  - b) Allow staff discretion to consider minor Municipal Code deviations to specifically accommodate solar installation applications including on top of parking structures:
    - i) Allow a deviation of up to one (1) foot for setbacks, and/or
    - ii) Allow a deviation of up to two (2) feet in height.
  - c) Allow staff discretion to consider minor Municipal Code deviations to provide an incentive to install solar equipment:
    - i) allow up to 1% in additional lot coverage, and/or
    - ii) allow up to 1% in additional Floor Area Ratio.

For single-family residential, the incentive allowance shall be based on providing a minimum system size of 1.5 kW for PV systems or a minimum of 50 gallons for hot water system. For all other uses, the incentive shall be based on a minimum system size of 10 percent of the anticipated or average electrical energy use.

4. Council refers adoption of a conceptual outline of a Citywide Solar plan to the Sustainable Green Building Practices study issue and the FY 2008-2009 budget process for further consideration **with** emphasis on looking at the City of Berkeley program and the ability to offer a zero cost loan.

Councilmember Hamilton offered a friendly amendment to reduce the building

permit fee listed in Alternative 3a by \$1 to a cost of \$249.00.

Councilmember Swegles accepted the friendly amendment.

Councilmember Howe offered a friendly amendment to add options for HOAs such as allowing input from the association as to what is put on the roof should the roof be maintained by the HOA. Councilmember Howe stated the intent of his amendment is to (whenever possible) reduce the amount of discrepancy between single family homes and HOAs.

Councilmember Hamilton accepted the friendly amendment.

FINAL  
MOTION

Restated MOTION: Councilmember Swegles moved and Councilmember Hamilton seconded to approve Alternatives 1, 2, 3 and refer Alternative 4 to the Sustainable Green Building Practices study issues and the FY 2008/09 budget process for further consideration

**with** emphasis on looking at the City of Berkeley program and the ability to offer a zero cost loan.

Alternative 1: Council approves reducing information barriers by participating in joint efforts with partner agencies, volunteers, developers and solar-focused businesses to provide community education and promote existing opportunities to utilize alternative energy, including solar. Council approves incorporating efforts into existing staff duties, as work load permits, and refer the cost of a full-time staff coordinator and the cost for workshops to the FY 2008/09 budget review process.

Alternative 2: Council approves reducing institutional barriers and directs staff to return with a proposed ordinance, subject to further review and analysis by the office of the City Attorney, (to address the number of complex legal issues and ensure compliance with State Law), that provides the following zoning code provisions to accommodate and encourage installation of solar equipment:

- a) clarify the process of reviewing solar permits with regard to tree preservation:
  - i.) Confirm the solar permit decision matrix process provided in Attachment C (e.g. if a protected tree restricts solar access, relocate solar system to another viable location);
  - ii.) If a protected tree located on the applicant's property restricts solar access, require the applicant to apply for a Tree Removal Permit (TRP) for any tree(s) that conflict with the desired solar access (note: the TRP may be denied if other viable solar access options exist, and may be approved if no other viable options exist for solar equipment, and the typical replacement tree requirements applies), and
  - iii.) If a protected tree located on a neighboring property restricts solar access, refer the applicant to discuss the issue with their neighbor and ask their neighbor to apply for a TRP, and staff will review the application if submitted. (The City is not required to compel the neighbor to remove their tree if the tree's shading pre-dated the solar equipment.)
- b) Modify the permitting process to develop a specialized planning permit for solar equipment.
- c) Allow staff flexibility to consider allowing a portion of the parking lot shading requirement, such as 25 percent to be met by the installation of solar panels rather than trees.

- d) Clarify Sunnyvale Municipal Code to waive any screening of electrical equipment requirement for solar PV panels.
  - e) Develop a Legislative Advocacy Position that supports making investor owned utilities (IOU) certification of solar installations a higher priority than at present.
  - f) Develop a Legislative Advocacy Position that supports expanding net metering to larger alternative/distributed energy projects and more types of such projects **and** allow options for HOAs in order to reduce the amount of discrepancy between single family homes and HOAs.
- 3) Council approves reducing financial barriers and providing the following incentives for installation of solar equipment:
- a) Adopt a resolution to modify the current fee schedule for a revised planning permit fee of \$50 and a related building permit fee of not more than \$249 for installation of solar equipment (for a total of not more than \$299). The approximate subsidy is anticipated to be at least \$25,000 per year, depending on demand.
  - b) Allow staff discretion to consider minor Municipal Code deviations to specifically accommodate solar installation applications including on top of parking structures:
    - iii) Allow a deviation of up to one (1) foot for setbacks, and/or
    - iv) Allow a deviation of up to two (2) feet in height.
  - c) Allow staff discretion to consider minor Municipal Code deviations to provide an incentive to install solar equipment:
    - iii) allow up to 1 percent in additional lot coverage, and/or
    - iv) allow up to 1 percent in additional Floor Area Ratio.

For single-family residential, the incentive allowance shall be based on providing a minimum system size of 1.5 kW for PV systems or a minimum of 50 gallons for hot water system. For all other uses, the incentive shall be based on a minimum system size of 10 percent of the anticipated or average electrical energy use.

4. Council refers adoption of a conceptual outline of a Citywide Solar plan to the Sustainable Green Building Practices study issue and the FY 2008/09 budget process for further consideration **with** emphasis on looking at the City of Berkeley program and the ability to offer a zero cost loan.

VOTE: 7-0

ORDINANCE NO. \_\_\_\_\_

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SUNNYVALE AMENDING CERTAIN SECTIONS/TABLES OF CHAPTER 19.12 (Definitions); CHAPTERS 19.32 (BUILDING HEIGHTS, LOT COVERAGES AND FLOOR AREA RATIOS); AND 19.34 (FRONT, SIDE AND REAR YARDS) OF ARTICLE 3 (ZONING DISTRICTS, USES AND RELATED DEVELOPMENT REGULATIONS) AND CHAPTERS 19.38 (REQUIRED FACILITIES), 19.56 (SOLAR ACCESS) OF ARTICLE 4 (GENERAL DEVELOPMENT STANDARDS) AND 19.82 (MISC. PLAN PERMIT) OF ARTICLE 6 OF TITLE 19 (ZONING)**

THE CITY COUNCIL OF THE CITY OF SUNNYVALE DOES ORDAIN AS FOLLOWS:

SECTION 1. CHAPTER 19.12 AMENDED. Sections 19.12.020, 19.12.170 and 19.12.200 of Chapter 19.12 (Definitions) of Title 19 (Zoning) of the Sunnyvale Municipal Code are hereby amended to read, as follows:

**19.12.020. “A”**

~~(5) “Active solar collector” means a fixed device, structure or part of a device or structure which is used primarily to transform solar radiation into thermal, chemical or electrical energy, as part of a system which makes use of such energy for the purposes of water heating, space heating or cooling, or electrical power generation, by means of moving fluids, photo electric devices, chemical reactions, including chemical thermal storage solutions, or external power sources.~~

Remaining definitions under 19.12.020 shall be renumbered.

**19.12.2170. “P”**

~~1) “Passive solar collector” means any building feature or design, including shading elements, materials, mass, structural components, and solar orientation, which enhances a building’s inherent solar heating or cooling characteristics~~

Remaining definitions under 19.12.170 shall be renumbered.

**19.12.200. “S”**

(13) “Solar collector, active” means a fixed device, structure or part of a device or structure which is used primarily to transform solar radiation into thermal, chemical or electrical energy, as part of a system which makes use of such energy for the purposes of water heating, space heating or cooling, or electrical power generation, by means of moving fluids, photo electric devices, chemical reactions, including chemical thermal storage solutions, or external power sources.

(14) ~~“Solar easement” means a property right to receive sunlight across the real property of another, upon any active or passive solar collector as defined herein.~~

(14) “Solar collector, **passive**” means any building feature or design, including shading elements, materials, mass, structural components, and solar orientation, which enhances a building’s inherent solar heating or cooling characteristics

**(15) “Solar device” means the equipment associated with the collection, transfer, distribution, storage, and control of solar energy.**

**(16) “Solar energy system” means the integrated use of solar devices and solar collectors for the functions of collection, transfer, storage, and distribution of solar energy.**

Remaining definitions under 19.12.200 shall be renumbered.

**SECTION 3. TABLE 19.32.020 AMENDED.** Table 19.32.020 of Chapter 19.32 (Building Heights, Lot Coverages and Floor Area Ratios) of Article 3 (Zoning Districts, Uses and Related Development Regulations) of Title 19 (Zoning) of the Sunnyvale Municipal Code is hereby amended to read, as follows:

**19.32.020. Building height and lot coverages.**

Building height and lot coverages shall be according to the provisions set forth in Table 19.32.020, except that all lots located within the DSP district shall conform to provisions set forth in Chapter 19.28.

**TABLE 19.32.020  
Building Height, Lot Coverage and Floor Area Ratio**

Zoning District	Building Stories	Building Height (ft.) <sup>8,9</sup>	Lot Coverage (%) <sup>9</sup>	Floor Area Ratio (FAR) (%) <sup>9</sup>
R-0	2	30	45	45% FAR or 4,050 sq. ft. of gross floor area, whichever is less <sup>6</sup>
R-1	2	30	45	45% FAR or 4,050 sq. ft. of gross floor area, whichever is less <sup>6</sup>
R-1.5	2	30 <sup>1</sup>	40	50
R-1.7/PD	2	30	40	50
R-2 (single-family dwellings)	2	30	40	45% FAR or 4,050 sq. ft. of gross floor area, whichever is less <sup>6</sup>
R-2 (all uses other than single-family dwellings)	2	30	45	55 <sup>6</sup>
R-3 Townhomes	3	35	40	
R-3 (all other uses)	2	30	40	
R-4	4	55	40	
R-5	4	55	40	
R-MH	2	30	None	
O	2	30	40	
P-F	2			
DSP	See Table 19.28.170	See Table 19.28.170	See Table 19.28.170	See Table 19.28.170
C-1	2	40	35	
C-2	8	75 <sup>5</sup>	35	55 (Future Site D) as described in Section 19.32.070(c)(3)
C-3	8	75 <sup>4</sup>	35	
C-4	2	40	35	
M-S	8	75	45	35 <sup>5,7</sup>

M-3	8	75	45	35 <sup>5,7</sup>
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- <sup>1</sup> Walls facing the side yards cannot exceed twelve feet in height within twelve feet of the side property lines. Second story wall height is limited to twenty-one feet, exclusive of pitched roof structure.
- <sup>2</sup> One-half foot shall be added to the front, side and rear yard setbacks for each foot that the building exceeds the maximum height allowed in the most restrictive abutting district.
- <sup>3</sup> Coverage shall not exceed the maximum structural coverage in the most restrictive zoning district abutting this district.
- <sup>4</sup> Hotels and motels may exceed seventy-five feet if allowed by use permit.
- <sup>5</sup> Fifty percent FAR for commercial storage or warehousing, Section 19.32.070(d).  
One hundred percent FAR for Future Site B, as described in Section 19.32.070(c)(1).  
Seventy percent FAR for Future Site C, as described in Section 19.32.070(c)(2).  
Fifty percent FAR for Future Site E, as described in Section 19.32.070(c)(4).
- <sup>6</sup> Applications for residences which exceed the FAR set forth in this table shall be considered pursuant to Section 19.80.040(c).
- <sup>7</sup> 5% FAR bonus for green buildings may apply. See Section 19.32.075.
- <sup>8</sup> A five-foot height bonus is allowed when underground parking is included in the design. See Section 19.46.040.
- <sup>9</sup> Refer to Chapter 19.56 for deviations to height, lot coverage, and floor area ratio to accommodate and/or provide incentives for installation of solar energy systems.

**SECTION 4. TABLE 19.34.030 AMENDED.** Table 19.34.030 of Chapter 19.34 (Front, Side and Rear Yards) of Article 3 (Zoning Districts, Uses and Related Development Regulations) of Title 19 (Zoning) of the Sunnyvale Municipal Code is hereby amended to read, as follows:

**19.34.030. Required yards.**

Yards shall be required as set forth in Table 19.34.030, except that all lots located within the DSP district shall conform to provisions set forth in Chapter 19.28.

**TABLE 19.34.030  
Required Yards**

<b>Zoning District</b>	<b>Front Yard Minimum<sup>6</sup></b>	<b>Front Yard Average<sup>6</sup></b>	<b>Side Yards Total<sup>1, 5, 6</sup></b>	<b>Side Yards One Side<sup>5, 6</sup></b>	<b>Rear Yard<sup>6</sup></b>
R-0	15 <sup>2</sup>	20	12	4	20
R-1	15 <sup>2</sup>	20	15	6	20
R-1.5	20	20	12	4	20
R-1.7	15	20	12	4	20
R-2	15 <sup>2</sup>	20	12	4	20
R-3	15 <sup>2</sup>	20	15	6	20
R-4	20 <sup>2</sup>	None	20	9	20
R-5	20 <sup>2</sup>	None	20	9	20
R-MH	None	None	None	None	None
O	20	None	15	6	20
P-F	<sup>3</sup>	<sup>3</sup>	<sup>3</sup>		
C-1	70 <sup>4</sup>	None <sup>4</sup>	None <sup>4</sup>	None <sup>4</sup>	None <sup>4</sup>
C-2	70 <sup>4</sup>	None <sup>4</sup>	None <sup>4</sup>	None <sup>4</sup>	None <sup>4</sup>
C-3	70 <sup>4</sup>	None <sup>4</sup>	None <sup>4</sup>	None <sup>4</sup>	None <sup>4</sup>
C-4	20 <sup>4</sup>	None <sup>4</sup>	None <sup>4</sup>	None <sup>4</sup>	None <sup>4</sup>

Zoning District	Front Yard Minimum <sup>6</sup>	Front Yard Average <sup>6</sup>	Side Yards Total <sup>1, 5, 6</sup>	Side Yards One Side <sup>5, 6</sup>	Rear Yard <sup>6</sup>
M-S	25 <sup>4</sup>	None <sup>4</sup>	20 <sup>4</sup>	None <sup>4</sup>	None <sup>4</sup>
M-3	25 <sup>4</sup>	None <sup>4</sup>	20 <sup>4</sup>	None <sup>4</sup>	None <sup>4</sup>

- <sup>1</sup> Combined total of the two side yards added together.
- <sup>2</sup> For single lot development, including proposed additions, the minimum setback must meet the average figure.
- <sup>3</sup> The minimum front yard, side yards and rear yard required in this district shall be equal to those required in the most restrictive abutting zoning district. One-half foot shall be added to each yard for each foot that the building exceeds the maximum height allowed in the most restrictive abutting district.
- <sup>4</sup> Increased setbacks for commercial or industrial zoned properties may also be required by Sections 19.34.070 or 19.34.110.
- <sup>5</sup> Increased setbacks for multiple stories may also be required by Section 19.34.080.
- <sup>6</sup> [Refer to 19.56 for deviations to required setbacks to accommodate installation of solar energy systems.](#)

**SECTION 5. CHAPTER 19.38 AMENDED.** Section 19.38.020 of Chapter 19.38 (Required Facilities) of Article 4 (General Development Standards) of Title 19 (Zoning) of the Sunnyvale Municipal Code is hereby amended to read, as follows:

**19.38.020. Screening of equipment.**

(a) General requirements.

(1) All exterior mechanical, electrical or other type equipment whether installed on the ground, roof or walls shall be screened from view from adjoining streets or property.

(2) Such equipment shall not be located between the face of the building and the street.

(3) Screening shall be as high as the highest point of the item being screened. If higher than eighteen inches, shall meet the side and rear yard setbacks of the zoning district.

(4) Screening shall be architecturally compatible with the building upon or adjacent to where it is constructed.

(5) The director of community development shall review the architectural compatibility of proposed screening.

(b) Mechanical, electrical or other type equipment. All roof, wall or ground mounted mechanical, electrical or other type equipment which exceeds sixteen inches in any dimension shall be screened except:

(1) Equipment otherwise permitted by a miscellaneous plan permit.

(2) ~~Solar panels~~ [Solar energy systems, collectors or devices.](#)

~~(b)(3-9)– (c) [Text unchanged.]~~

**19.38.070. Landscaping, irrigation and usable open space.**

(a) – (c) [Text unchanged.]

(d) Minimum parking lot landscaping requirements.

(1) At least twenty percent of the parking lot area shall be landscaped.

(2) Trees shall be planted and maintained throughout the lot to ensure that at least fifty percent of the parking area will be shaded within fifteen years after

the establishment of the lot. Up to 25 percent of the 50 percent parking lot shading requirement (12.5 percent of the total parking lot area) may be met with installation of solar energy systems rather than trees. Shading shall be calculated by using the diameter of the tree crown at fifteen years or the dimensions of any roofed area supporting the solar energy system. All surfacing on which a vehicle can drive is subject to shade calculation, including all parking stalls; all drives within the property, regardless of length, and including drive-through lanes; and all maneuvering area, regardless of depth. The following surfaced areas are exempt from shade requirements:

- (A) Truck loading area in front of overhead doors;
- (B) Truck maneuvering and parking areas unconnected to and exclusive of any vehicle parking;
- (C) Surfaced areas not to be used for vehicle parking, driving or maneuvering, provided they are made inaccessible to vehicles by a barrier such as bollards or fencing;
- (D) Automobile dealerships, display/sales/service/vehicle storage areas (required parking for auto dealerships is still subject to shading);
- (E) Surfaced areas existing prior to January 1, 2002.

(d)(3) – (h) [Text unchanged]

**SECTION 6. CHAPTER 19.56 AMENDED.** Section 19.56.010 19.56.030 of Chapter 19.56 (Solar Access) is amended with certain provisions moved to Chapter 9.26, Section 19.56.050 is amended (Placement), and Section 19.56.070 (Deviations) is added to Article 4 (General Development Standards) of Title 19 (Zoning) of the Sunnyvale Municipal Code, as follows:

**19.56.010. Permitted use.**

The use of solar energy systems and active and passive solar collectors for the purpose of providing energy to the structure upon which they are placed, whether as a part of such a structure or incidental thereto, is a use which may be established without the necessity for any discretionary land use approval, within all zoning districts, notwithstanding any provision of this title to the contrary.

19.56.030. This section intentionally left blank.

**~~19.56.030. Impairment of solar access by vegetation—Public nuisance.~~**

~~(a) No person or entity owning or in control of real property shall allow any tree or shrub thereon to interfere with solar access to any rooftop or to any active solar collector located on a nearby or adjacent property. Vegetation interfering with solar access to any rooftop or active solar collector, including vegetation shading the area of nearby properties where rooftops or active solar collectors subsequently are placed, shall be trimmed or removed to the extent necessary to provide solar access thereto.~~

~~(b) The provisions of this section shall not apply so as to require the removal of vegetation determined by such procedure as the city council may specify, to have cultural, horticultural or heritage significance. Additionally, the provisions of this section shall not require the removal of any significant sized tree or tree required to be preserved as a condition of~~

~~approval of a land use permit. Reasonable trimming of any vegetation otherwise exempted by this section may be allowed if no harm occurs to the vegetation and the trimming does not endanger its cultural, horticultural or heritage significance.~~

~~————(c) Violations of this section comprise a public nuisance, and whenever any enforcement officer of the city of Sunnyvale determines that any such condition exists upon any premises, he or she may require or provide for the abatement thereof pursuant to the procedures set forth in Chapter 9.26 of this code, and may make the costs of abatement of the nuisance a lien upon the property.~~

**19.56.050. Placement of active solar collectors. Installation of solar devices, solar collectors and/or solar energy systems.**

~~Prior to issuance of any building permit for construction or placement of an active solar collector, the director of community development shall require the applicant to provide a written analysis or graphic survey of shading patterns on the subject parcel and the shading of patterns on the subject parcel. The director is authorized to disapprove any proposed location for such a collector which would be within the existing shade pattern of vegetation growing on adjoining properties. If there is no feasible location for the collector outside of existing shade patterns, the director shall specify a location with minimizes the adverse effects upon such adjoining vegetation.~~

A letter from the Owners Association approving the application shall be submitted for installation of solar energy systems in condominium or other common interest developments.

**19.56.060 Variances** [This ordinance provision remains unchanged.]

**19.56.070. Incentives for Installation of Solar Energy Systems.**

(a) To provide incentives for the installation of solar energy systems, lot coverage may be exceeded by up to one percent, and/or floor area ratio or the threshold triggering design review may be exceeded by up to one percent, as the case may be, upon approval of a Miscellaneous Plan Permit granted at the discretion of the Director of Community Development and subject to paragraph (b) below.

(b) For single-family residential, the incentives provided in paragraph (a) above for solar energy system installations shall be based on providing a minimum solar energy system size of 1.5 kW or a minimum of 50 gallons for hot water systems. For all other uses, the incentive shall be based on a minimum system size of ten percent of the anticipated or average electrical energy use.

**19.56.80 Accommodation for Solar Energy Systems**

To accommodate the installation of solar energy systems, including systems located on top of parking structures, the maximum height may be increased by two feet, and required setbacks for front, side and rear yards may be

reduced by up to one foot upon application and approval of a Miscellaneous Plan Permit granted at the discretion of the Director of Community Development pursuant to Chapter 19.82.

**SECTION 7.** CHAPTER 19.82 concerning requirements for Miscellaneous Plan Permits is partially REPEALED. Section 19.82.020 (20) is repealed as follows:

**19.82.010 When Required [Miscellaneous Plan Permits]**

(a) General Reviews

(20) ~~Solar heating/cooling facilities and appurtenances:~~ Solar energy system incentives and accommodations as provided for in Chapter 19.56.

SECTION 8. CEQA EXEMPTION. The City Council finds, pursuant to Title 14 of the California Code of Regulations, Section 15307 that this ordinance is exempt from the requirements of the California Environmental Quality Act (CEQA) in that it is an action by a regulatory agency for the protection of natural resources.

SECTION 9. EFFECTIVE DATE. This ordinance shall be in full force and effect thirty (30) days from and after the date of its adoption.

SECTION 10. POSTING AND PUBLICATION. The City Clerk is directed to cause copies of this ordinance to be posted in three (3) prominent places in the City of Sunnyvale and to cause publication once in The Sun, the official newspaper for publication of legal notices of the City of Sunnyvale, of a notice setting forth the date of adoption, the title of this ordinance, and a list of places where copies of this ordinance are posted, within fifteen (15) days after adoption of this ordinance.

Introduced at a regular meeting of the City Council held on \_\_\_\_\_, 2008, and adopted as an ordinance of the City of Sunnyvale at a regular meeting of the City Council held on \_\_\_\_\_, 2008, by the following vote:

AYES:  
NOES:  
ABSTAIN:  
ABSENT:

ATTEST:

APPROVED:

\_\_\_\_\_  
City Clerk  
SEAL

\_\_\_\_\_  
Mayor

APPROVED AS TO FORM AND LEGALITY:

\_\_\_\_\_  
David E. Kahn, City Attorney

BILL NUMBER: SB 1399 CHAPTERED  
BILL TEXT

CHAPTER 176  
FILED WITH SECRETARY OF STATE JULY 22, 2008  
APPROVED BY GOVERNOR JULY 22, 2008  
PASSED THE SENATE JULY 2, 2008  
PASSED THE ASSEMBLY JUNE 23, 2008  
AMENDED IN ASSEMBLY JUNE 11, 2008  
AMENDED IN SENATE APRIL 9, 2008  
AMENDED IN SENATE MARCH 24, 2008

INTRODUCED BY Senators Simitian and McClintock

FEBRUARY 21, 2008

An act to amend Sections 25981, 25982, 25984, and 25985 of, to add Section 25982.1 to, and to repeal and add Section 25983 of, the Public Resources Code, relating to public resources.

LEGISLATIVE COUNSEL'S DIGEST

SB 1399, Simitian. Public resources: solar shading.

Existing law prohibits a person owning or in control of a property from allowing a tree or shrub to be placed or to grow on the property subsequent to the installation of a solar collector on the property of another if the tree or shrub casts a shadow of a specified size on the collector absorption area during specified times. A person who violates this prohibition and who fails to remove or alter the tree or shrub after receiving reasonable notice is guilty of an infraction for maintaining a public nuisance and subject to a criminal fine not to exceed \$1,000 for each violation. Existing law exempts trees and shrubs under specified conditions. Existing law authorizes a city, county, or city and county to adopt an ordinance exempting its jurisdiction from the above prohibition. Existing law defines "solar collector" for these purposes as a device or structure used primarily to transform solar energy into thermal, chemical, or electrical energy.

This bill would authorize the owner of property where the solar collector is to be installed to provide, prior to its installation, a written notice by certified mail containing specified information to owners of affected property. The bill would, further, exempt trees and shrubs planted prior to the time of the installation of a solar collector, trees and shrubs that are subject to a local ordinance, or

the replacement of trees or shrubs that have been growing before the installation of a solar collector and that are subsequently removed for the protection of public health, safety, or the environment. The bill would redefine "solar collector" to be the above described device or structure on the roof of a building, except it would include the device or structure installed on the ground if it cannot be installed on the roof of the building due to specified conditions, and would exclude a device or structure that is designed and intended to offset more than the building's electricity demand. The bill would repeal the public nuisance violation of the above requirement, and would provide that a tree or shrub maintained in violation of the above requirement is instead a private nuisance if the person who maintains or permits the maintenance of the tree or shrub receives a written notice from the owner of the affected solar collector requesting compliance. The bill would provide that a local ordinance specifying the requirements for tree preservation or solar shade control would govern within the jurisdiction that adopted the ordinance. The bill would also make technical nonsubstantive changes.

THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Section 25981 of the Public Resources Code is amended to read:

25981. (a) As used in this chapter, "solar collector" means a fixed device, structure, or part of a device or structure, on the roof of a building, that is used primarily to transform solar energy into thermal, chemical, or electrical energy. The solar collector shall be used as part of a system that makes use of solar energy for any or all of the following purposes:

- (1) Water heating.
- (2) Space heating or cooling.
- (3) Power generation.

(b) Notwithstanding subdivision (a), for the purpose of this chapter, "solar collector" includes a fixed device, structure, or part of a device or structure that is used primarily to transform solar energy into thermal, chemical, or electrical energy and that is installed on the ground because a solar collector cannot be installed on the roof of the building receiving the energy due to inappropriate roofing material, slope of the roof, structural shading, or orientation of the building.

(c) For the purposes of this chapter, "solar collector" does not include a solar collector that is designed and intended to offset more than the building's electricity demand.

(d) For purposes of this chapter, the location of a solar

collector is required to comply with the local building and setback regulations, and to be set back not less than five feet from the property line, and not less than 10 feet above the ground. A solar collector may be less than 10 feet in height only if, in addition to the five-foot setback, the solar collector is set back three times the amount lowered.

SEC. 2. Section 25982 of the Public Resources Code is amended to read:

25982. After the installation of a solar collector, a person owning or in control of another property shall not allow a tree or shrub to be placed or, if placed, to grow on that property so as to cast a shadow greater than 10 percent of the collector absorption area upon that solar collector surface at any one time between the hours of 10 a.m. and 2 p.m., local standard time.

SEC. 3. Section 25982.1 is added to the Public Resources Code, to read:

25982.1. (a) An owner of a building where a solar collector is proposed to be installed may provide written notice by certified mail to a person owning property that may be affected by the requirements of this chapter prior to the installation of the solar collector. If a notice is mailed, the notice shall be mailed no more than 60 days prior to installation of the solar collector and shall read as follows:

**SOLAR SHADE CONTROL NOTICE**  
Under the Solar Shade Control Act (California Public Resources Code a725980 et seq.) a tree or shrub cannot cast a shadow greater than 10 percent of a solar collector absorption area upon that solar collector surface at any one time between the hours of 10 a.m. and 2 p.m. local standard time if the tree or shrub is placed after installation of a solar collector. The owner of the building where a solar collector is proposed to be installed is providing this written notice to persons owning property that may be affected by the requirements of the act no more than 60 days prior to the installation of a solar collector. The building owner is providing the following information:

Name and address of building owner:

Telephone number of building owner:

Address of building and specific location where a solar collector will be installed (including street number and name, city/county, ZIP Code, and assessor's book, page, and parcel number):

Installation date of solar collector:

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Building Owner, Date

(b) If the owner of the building where a solar collector is proposed to be installed provided the notice pursuant to subdivision (a), and the installation date is later than the date specified in that notice, the later date shall be specified in a subsequent notice to persons receiving the initial notice.

(c) (1) A transferor of the building where the solar collector is installed may provide a record of persons receiving the notice pursuant to subdivision (a) to a transferee of the building.

(2) A transferor receiving a notice pursuant to subdivision (a) may provide the notice to a transferee of the property.

SEC. 4. Section 25983 of the Public Resources Code is repealed.

SEC. 5. Section 25983 is added to the Public Resources Code, to read:

25983. A tree or shrub that is maintained in violation of Section 25982 is a private nuisance, as defined in Section 3481 of the Civil Code, if the person who maintains or permits the tree or shrub to be maintained fails to remove or alter the tree or shrub after receiving a written notice from the owner or agent of the affected solar collector requesting compliance with the requirements of Section 25982.

SEC. 6. Section 25984 of the Public Resources Code is amended to read:

25984. This chapter does not apply to any of the following:

(a) A tree or shrub planted prior to the installation of a solar collector.

(b) A tree planted, grown, or harvested on timberland as defined in Section 4526 or on land devoted to the production of commercial agricultural crops.

(c) The replacement of a tree or shrub that had been growing prior to the installation of a solar collector and that, subsequent to the installation of the solar collector, dies, or is removed for the protection of public health, safety, or the environment.

(d) A tree or shrub that is subject to a city or county ordinance.

SEC. 7. Section 25985 of the Public Resources Code is amended to read:

25985. (a) A city, or for unincorporated areas, a county, may adopt, by majority vote of the governing body, an ordinance exempting their jurisdiction from the provisions of this chapter. The adoption of the ordinance shall not be subject to the California Environmental Quality Act (commencing with Section 21000).

(b) Notwithstanding the requirements of this chapter, a city or a county ordinance specifying requirements for tree preservation or solar shade control shall govern within the jurisdiction of the city or county that adopted the ordinance.