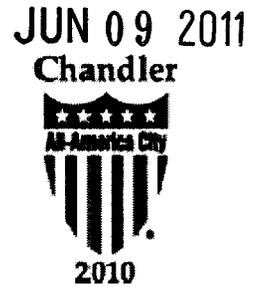




Chandler - Arizona
Where Values Make The Difference

#6



MEMORANDUM **Transportation & Development - CC Memo No. 11-055**

DATE: MAY 20, 2010

TO: MAYOR AND CITY COUNCIL

THRU: RICH DLUGAS, CITY MANAGER *RD*
 PATRICK MCDERMOTT, ASSISTANT CITY MANAGER *[Signature]*
 R.J. ZEDER, TRANSPORTATION & DEVELOPMENT DIRECTOR *[Signature]*
 JEFF KURTZ, PLANNING ADMINISTRATOR *[Signature]*
 KEVIN MAYO, PLANNING MANAGER *[Signature]*

FROM: DAVID DE LA TORRE, PRINCIPAL PLANNER *DDLT*

SUBJECT: ZCA11-0002 SOLAR ENERGY SYSTEMS
 Introduction and Tentative Adoption of Ordinance No. 4302

Request: Add section 35-2210 of Article XXII, Chapter 35 of the Chandler City Code (Zoning Code), establishing definitions and standards for solar energy systems

Applicant: City of Chandler

RECOMMENDATION

Upon finding consistency with General Plan policies to encourage the use of renewable energy in residential, commercial and industrial developments, Planning Commission and Staff recommend approval of the proposed Zoning Code amendment addressing solar energy systems.

BACKGROUND

One of the stated objectives in the Energy Element of the Chandler General Plan is to encourage the use of renewable energy in residential, commercial and industrial applications. The proposed Code amendment would implement this objective by recognizing solar systems in the Zoning Code and adopting standards that are less restrictive than how they are currently treated. At the same time, the proposed code amendment seeks to protect residential properties from any negative impacts potentially created by solar systems.

Currently, the Zoning Code does not recognize or provide standards specifically for solar energy systems. This silence in the Zoning Code has allowed rooftop solar installations to occur without any zoning related issues. It is important to note that all solar systems require building permits

and are inspected by Staff to ensure compliance with applicable building codes, regardless of zoning code requirements.

The issue that Staff has encountered has been with freestanding solar systems in residential areas. Within the last year, Staff has received a handful of requests to install freestanding solar systems in the rear yards of single-family zoned properties. Although the Zoning Code is silent regarding solar energy systems, freestanding solar systems meet the Zoning Code's definition of a structure, which according to the Zoning Code are to be considered the same as buildings. Consequently, freestanding solar systems are required to comply with building setbacks, height and lot coverage restrictions. In addition, single-family districts permit only 1 accessory building per lot, so a property that already contains an accessory building would not be permitted to install a freestanding solar system and vice versa.

To address this issue, the proposed code amendment excludes freestanding solar systems in residential zoning districts from building setbacks and lot coverage limits if they are completely screened from public view and adjoining properties. The idea being, if you can't see them, then there is no impact on adjacent properties, and therefore it doesn't really matter where in the rear yard they are located. Freestanding solar energy systems that are taller than the surrounding walls would be required to comply with the aforementioned standards, in order to continue the intent of preserving and protecting the residential character of the area.

The proposed code amendment would also exclude freestanding solar systems as being counted as the one accessory building allowed on the property regardless of whether the system is below or above the height of the property wall. This would allow residential properties to have a detached garage in the rear yard in addition to the freestanding solar system.

To encourage solar systems in commercial and industrial zoning districts, the proposed code amendment excludes freestanding solar systems from lot coverage limits, and building setbacks are also excluded if the solar system is not visible from the ground floor of a dwelling unit. Freestanding solar systems that are higher than the surrounding property wall and adjacent to residential would be required to comply with the same setbacks that are applicable to any commercial or industrial building.

Roof mounted solar systems on commercial or industrial buildings would not be required to be screened from view as the Zoning Code requires of all mechanical equipment, except when located within 600-feet of a residential property, the solar systems would be required to be screened so that they are not visible from the ground floor of the dwelling unit(s).

The final section of the proposed code amendment introduces standards for utility scale solar energy systems, those that are intended to provide energy primarily for off-site consumption. These standards address issues that were raised by Planning Commission during their review of the first utility scale solar energy system approved in Chandler, the RDR Solar Farm, near the intersection of Gilbert and Pecos Roads. Utility scale solar systems would be required to be screened from the ground floor of any dwelling unit. The remaining standards address landscape and property maintenance and property security and safety.

DISCUSSION

Staff has extensively researched other cities in Arizona and across the country and found that most municipal zoning codes are silent regarding solar systems. In addition, much like Chandler's current practice, most cities treat freestanding solar systems the same as accessory structures or buildings, which are required to meet setbacks and other applicable standards for accessory buildings.

In Arizona, Staff found only one jurisdiction, Pima County, that has different standards for freestanding solar systems that are below a certain height. Freestanding solar systems taller than 4-feet high in Pima County are treated as accessory buildings and are required to comply with building setbacks, those under 4-feet high are not required to meet setbacks. Across the nation, Staff found several examples of cities with similar provisions, but with different height thresholds. To name a couple, the City of Portland, Oregon, utilizes a 6-foot high threshold and Clay County, Missouri, utilizes an 8-foot high threshold.

In short, the City of Chandler would be the first municipality in Arizona to adopt an ordinance addressing solar systems in the zoning code. The proposed ordinance would encourage the installation of solar systems by creating more flexible standards for solar systems, while concurrently protecting residential properties from potential negative impacts.

PUBLIC/NEIGHBORHOOD NOTIFICATION

- As required by the Arizona Revised Statutes, 1/8 page ad was published at least 15 days prior to the first public hearing.
- A copy of the draft ordinance and a brief summary was distributed to more than 100 members of the Arizona Solar Energy Industries Association (AriSEIA).
- At the time of this writing, Staff has received constructive comments from one AriSEIA member, which led to some minor revisions to the code amendment. Staff is not aware of any opposition.

PLANNING COMMISSION VOTE REPORT

Motion to approve:

In Favor: 6 Opposed: 0 Absent: 1 (Baron)

RECOMMENDED ACTION

Upon finding consistency with the Chandler General Plan, Planning Commission and Staff recommend approval of the Zoning Code Amendment as set forth in the attached Ordinance No. 4302, pertaining to solar energy systems.

PROPOSED MOTION

Move to introduce and tentatively adopt Ordinance No. 4302 approving ZCA11-0002 CITY OF CHANDLER / SOLAR ENERGY SYSTEMS, as recommended by Planning Commission and Staff.

Attachments

Ordinance No. 4302

ORDINANCE NO. 4302

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CHANDLER, ARIZONA, ADDING SECTION 35-2210 OF ARTICLE XXII, CHAPTER 35, CODE OF THE CITY OF CHANDLER; BY ESTABLISHING DEFINITIONS AND STANDARDS FOR SOLAR ENERGY SYSTEMS.

WHEREAS, in accordance with A.R.S. 9-462, the legislative body may adopt by ordinance, any change or amendment to the regulations and provisions as set forth in the Chandler Zoning Code; and,

WHEREAS, this amendment, including the draft text, has been published as an 1/8-page display ad in a local newspaper with general circulation in the City of Chandler, giving fifteen (15) days notice of time, date and place of public hearing; and,

WHEREAS, a public hearing was held by the Planning and Zoning Commission as required by the Zoning Code, on May 18, 2011;

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Chandler, Arizona, as follows:

SECTION I. Article XXII, Additional Height and Area Regulations, Chapter 35, Chandler City Code, is hereby amended by adding Section 35-2210 to read as follows:

35-2210. SOLAR ENERGY SYSTEMS

(1) DEFINITIONS:

ANCILLARY SOLAR ENERGY SYSTEM: A SOLAR ENERGY SYSTEM THAT IS INTENDED TO MEET ALL OR PART OF A PROPERTY'S ON-SITE ENERGY REQUIREMENTS.

FREE-STANDING SOLAR ENERGY SYSTEM: A GROUND MOUNTED SOLAR ENERGY SYSTEM CONTAINING A SUPPORT STRUCTURE THAT IS DESIGNED SOLELY FOR THE PURPOSE OF SUPPORTING THE SYSTEM'S EQUIPMENT. A SOLAR ENERGY SYSTEM DESIGNED TO SHADE SITTING AREAS, RECREATIONAL ACTIVITIES, PARKING SPACES, WALKWAYS, OR DESIGNED TO BE UTILIZED FOR USES OTHER THAN A SOLAR ENERGY SYSTEM SHALL BE CONSIDERED AN ACCESSORY BUILDING AND SHALL BE EXCLUDED FROM THIS DEFINITION.

SOLAR ENERGY SYSTEM: AN ENERGY CONVERSION SYSTEM, INCLUDING APPURTENANCES, WHICH CONVERTS SOLAR ENERGY TO A USABLE FORM OF ENERGY.

UTILITY SCALE SOLAR ENERGY SYSTEM: A SOLAR ENERGY SYSTEM THAT GENERATES ENERGY PRIMARILY INTENDED FOR OFF-SITE CONSUMPTION.

(2) PROPERTY LOCATED IN AN AGRICULTURAL, SINGLE-FAMILY, OR MULTI-FAMILY ZONING DISTRICT, AND PROPERTY LOCATED IN AN AREA OF A PAD ZONING DISTRICT WHERE AGRICULTURAL, SINGLE-FAMILY OR MULTI-FAMILY USES ARE ALLOWED:

A. ANCILLARY SOLAR ENERGY SYSTEMS ARE PERMITTED ON THE PROPERTY AS AN ACCESSORY USE TO THE PRINCIPAL USE OF THE PROPERTY.

B. AN ANCILLARY SOLAR ENERGY SYSTEM SHALL BE PLACED SUCH THAT CONCENTRATED SOLAR RADIATION OR GLARE SHALL NOT BE DIRECTED ONTO NEARBY PROPERTIES OR ROADWAYS.

C. A FREE-STANDING ANCILLARY SOLAR ENERGY SYSTEM SHALL:

1. NOT BE LOCATED IN THE FRONT YARD.

2. NOT BE SUBJECT TO REAR AND SIDE YARD SETBACK REQUIREMENTS AND SHALL NOT CONSTITUTE AN INCREASE TO LOT COVERAGE IF SAID SYSTEM DOES NOT EXCEED THE HEIGHT OF THE SURROUNDING PERIMETER WALL AND IS NOT VISIBLE FROM ANY PUBLIC STREET OR FROM AN ADJOINING PROPERTY. A SOLAR ENERGY SYSTEM THAT EXCEEDS THE HEIGHT OF THE SURROUNDING PERIMETER WALL OR IS VISIBLE FROM A PUBLIC STREET OR AN ADJOINING PROPERTY SHALL BE SUBJECT TO THE *HEIGHT AND AREA REGULATIONS* FOR THE UNDERLYING ZONING DISTRICT AND ADDITIONAL HEIGHT AND AREA REGULATIONS FOR ACCESSORY BUILDINGS SET FORTH IN SECTION 35-2202.

3. NOT BE CONSIDERED AN ACCESSORY BUILDING FOR THE PURPOSE OF CALCULATING THE NUMBER OF ACCESSORY BUILDINGS PERMITTED BY THE UNDERLYING ZONING DISTRICT.

4.COMPLY WITH LIFE SAFETY REQUIREMENTS
DETERMINED BY ALL APPLICABLE BUILDING AND FIRE
CODES.

D. UTILITY SCALE SOLAR ENERGY SYSTEMS SHALL BE SUBJECT
TO APPROVAL OF A USE PERMIT.

(3) PROPERTY LOCATED IN A COMMERCIAL OR INDUSTRIAL ZONING
DISTRICT, AND PROPERTY LOCATED IN AN AREA OF A PAD ZONING
DISTRICTS WHERE COMMERCIAL AND/OR INDUSTRIAL USES ARE
ALLOWED:

- A. ANCILLARY SOLAR ENERGY SYSTEMS ARE PERMITTED ON
THE PROPERTY AS AN ACCESSORY USE TO THE PRINCIPAL
USE OF THE PROPERTY.
- B. AN ANCILLARY SOLAR ENERGY SYSTEM SHALL BE PLACED
SUCH THAT CONCENTRATED SOLAR RADIATION OR GLARE
SHALL NOT BE DIRECTED ONTO NEARBY PROPERTIES OR
ROADWAYS.
- C. AN ANCILLARY SOLAR ENERGY SYSTEM THAT IS MOUNTED
ON THE ROOF OF OR OTHERWISE ATTACHED TO A
COMMERCIAL BUILDING SHALL BE SUBJECT TO THE *HEIGHT
AND AREA REGULATIONS* FOR THE UNDERLYING ZONING
DISTRICT. SAID SOLAR ENERGY SYSTEMS SHALL NOT BE
REQUIRED TO BE CONCEALED AND/OR SCREENED FROM VIEW
AS SET FORTH IN SECTION 35-1902(5)(C) EXCEPT SAID SOLAR
ENERGY SYSTEM SHALL BE SCREENED SO THAT IT IS NOT
VISIBLE FROM THE GROUND FLOOR OF ANY DWELLING UNIT
LOCATED WITHIN SIX HUNDRED (600) FEET OF SAID SOLAR
ENERGY SYSTEM AS MEASURED FROM THE NEAREST
EXTERIOR WALL OF THE BUILDING TO THE NEAREST
PROPERTY LINE OF ANY RESIDENTIAL DEVELOPMENT.
- D. FREE-STANDING ANCILLARY SOLAR ENERGY SYSTEMS
SHALL:
 - 1. NOT BE REQUIRED TO BE CONCEALED AND/OR
SCREENED FROM STREET VIEW OR FROM A NON-
RESIDENTIAL ZONED PROPERTY.
 - 2. NOT BE SUBJECT TO FRONT, REAR AND SIDE YARD
SETBACK REQUIREMENTS IF SAID SYSTEM IS NOT
VISIBLE FROM THE GROUND FLOOR OF ANY DWELLING
UNIT. A SOLAR ENERGY SYSTEM THAT IS LOCATED ON
PROPERTY THAT IS NEXT TO OR ACROSS AN ALLEY

FROM A RESIDENTIAL DEVELOPMENT AND THAT EXCEEDS THE HEIGHT OF THE SURROUNDING PERIMETER WALL SHALL BE NO CLOSER THAN TWENTY-FIVE (25) FEET, PLUS ONE (1) ADDITIONAL FOOT FOR EACH FOOT OF HEIGHT OF SAID SOLAR ENERGY SYSTEM, AS MEASURED FROM THE NEAREST PROPERTY LINE OF ANY RESIDENTIAL DEVELOPMENT TO THE NEAREST POINT OF THE SOLAR ENERGY SYSTEM.

3. NOT CONSTITUTE AN INCREASE IN LOT COVERAGE.
4. COMPLY WITH LIFE SAFETY REQUIREMENTS. DETERMINED BY ALL APPLICABLE BUILDING AND FIRE CODES.

E. UTILITY SCALE SOLAR ENERGY SYSTEMS SHALL BE SUBJECT TO APPROVAL OF A USE PERMIT.

(4) UTILITY SCALE SOLAR ENERGY SYSTEM REQUIREMENTS. UTILITY SCALE SOLAR ENERGY SYSTEMS IN ANY ZONING DISTRICT SHALL COMPLY WITH THE FOLLOWING:

- A. NO PORTION OF A UTILITY SCALE SOLAR ENERGY SYSTEM SHALL BE VISIBLE FROM THE GROUND FLOOR OF ANY DWELLING UNIT. SAID SOLAR ENERGY SYSTEM SHALL NOT BE CONSIDERED TO BE IN VIOLATION IF SUBSEQUENT TO APPROVAL AND INSTALLATION OF SAID SOLAR ENERGY SYSTEMS, A DWELLING UNIT(S) IS CONSTRUCTED IN A MANNER OR LOCATION WHERE SAID SOLAR ENERGY SYSTEM IS VISIBLE FROM THE GROUND FLOOR OF SAID DWELLING UNIT(S). SAID SOLAR ENERGY SYSTEM SHALL NOT BE REQUIRED TO BE CONCEALED AND/OR SCREENED FROM STREET VIEW OR FROM A NON-RESIDENTIAL ZONED PROPERTY.
- B. ALL LANDSCAPING SHALL BE MAINTAINED AND KEPT IN A WEED FREE MANNER AT ALL TIMES AS SET FORTH IN SECTION 35-1903.6.H
- C. THE PROPERTY SHALL BE KEPT IN A TRASH AND DEBRIS FREE MANNER AT ALL TIMES.
- D. SOLAR ENERGY SYSTEMS SHALL BE PLACED SUCH THAT CONCENTRATED SOLAR RADIATION OR GLARE SHALL NOT BE DIRECTED ONTO NEARBY PROPERTIES OR ROADWAYS.

- E. THE PROPERTY SHALL BE KEPT UNDER REGULAR SURVEILLANCE BY PERSONNEL WORKING ON-SITE OR, IN THE ABSENCE OF ON-SITE PERSONNEL, BY A SECURITY CAMERA SYSTEM.
- F. THE SOLAR ENERGY SYSTEM SHALL NOT BE SUBJECT TO LOT COVERAGE LIMITS.
- G. THE SOLAR ENERGY SYSTEM SHALL COMPLY WITH ALL LIFE SAFETY REQUIREMENTS INCLUDING SETBACKS AS DETERMINED BY ALL APPLICABLE BUILDING AND FIRE CODES.
- H. ALL BUILDINGS AND STRUCTURES OTHER THAN THE UTILITY SCALE SOLAR ENERGY SYSTEM AND APPURTENANCES SHALL COMPLY WITH SETBACKS REQUIRED BY C-3 REGIONAL COMMERCIAL DISTRICT AND ADDITIONAL REQUIREMENTS FOR COMMERCIAL BUILDINGS WHEN ADJACENT TO RESIDENTIAL DEVELOPMENT AS SET FORTH IN SECTION 35-1902.8(A).

INTRODUCED AND TENTATIVELY APPROVED by the City Council of the City of Chandler, Arizona, this _____ day of _____, 2011.

ATTEST:

CITY CLERK

MAYOR

PASSED AND ADOPTED by the City Council of the City of Chandler, Arizona, this _____ day of _____, 2011.

ATTEST:

CITY CLERK

MAYOR

CERTIFICATION

I HEREBY CERTIFY that the above and foregoing Ordinance No. 4302 was duly passed and adopted by the City Council of the City of Chandler, Arizona, at a regular meeting held on the _____ day of _____, 2011, and that a quorum was present thereat.

CITY CLERK

APPROVED AS TO FORM:

CITY ATTORNEY *GAB*

Published: