

**MEMORANDUM**

March 4, 2014

TO: Planning, Housing, and Economic Development Committee  
FROM: Jeff Zyontz, <sup>JZ</sup>Legislative Attorney  
SUBJECT: ZTA 14-02, Exemptions - Solar Panels

Zoning Text Amendment (ZTA) 14-02, sponsored by Councilmembers Berliner and Navarro, was introduced on January 28, 2014. The sponsors believe that the public interest would be served by allowing solar panels to a greater degree than allowed by the current code. To that end, ZTA 14-02 would exempt solar panels from height limits and would allow solar panels to extend 2 feet into side and rear setbacks.

The Council conducted a hearing on February 25, 2014. The only speaker was Diane Schwartz Jones, representing the County Executive. The testimony suggested that the ZTA may be in conflict with fire safety codes. In particular, codes require an ability to lean a ladder against a roof and for firefighters to have enough space to walk on the roof. The Planning Board recommended allowing the same setback as a porch (3 feet) but maintaining a minimum 3 feet side yard setback where a setback has been established. Both the Executive and the Planning Board endorsed the height exemption for solar panels for 25 percent of the roof area.

**Issues**

***How can a violation of fire safety codes be avoided in ZTA 14-02?***

By allowing setback encroachment without restrictions, it is possible that a solar panel may extend beyond the roof and the exterior wall. Such a placement would not allow fire and rescue service access by a ladder or personnel. This problem can be avoided by the following amendment:

Solar panels may extend X feet into any side or rear setback, if the placement of the panels satisfies National Fire Protection Association (NFPA) 1, Fire Code 2012,

requirements for photovoltaic systems (Solar Panels) and future amendments approved by the County.

***How big should the side yard setback be?***

The Planning Board noted that a porch may extend 3 feet into the side yard and rear setbacks and had no problem with allowing the same latitude for solar panels. The Board did suggest clarifying that the setback intrusion only applied where a setback was established and recommended that the resulting setback be at least 3 feet.

***How will ZTA 14-02 be addressed after October 30, 2014?***

The Council approved the Zoning Ordinance Rewrite with an effective date of October 30, 2014. ZTA 14-02 would not amend that code without a specific action of the Council. Staff proposes to track all ZTAs from now until September 29 and ask for Council introduction of a corrective ZTA to incorporate all newly approved provisions, including ZTA 14-02. Planning Staff provided a way to incorporate their recommended ZTA 14-02 in the Zoning Rewrite (*see* © 14-15).

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Zoning Text Amendment No.: 14-02  
Concerning: Exemptions – Solar  
Panels  
Draft No. & Date: 1 – 1/10/14  
Introduced: January 28, 2014  
Public Hearing:  
Adopted:  
Effective:

**COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND  
SITTING AS THE DISTRICT COUNCIL FOR THAT PORTION OF  
THE MARYLAND-WASHINGTON REGIONAL DISTRICT WITHIN  
MONTGOMERY COUNTY, MARYLAND**

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By: Councilmembers Berliner and Navarro

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**AN AMENDMENT** to the Montgomery County Zoning Ordinance to:

- Exempt certain solar energy structures from height and setback

By amending the following sections of the Montgomery County Zoning Ordinance, Chapter 59 of the Montgomery County Code:

- DIVISION 59-B-1. “EXEMPTIONS FROM HEIGHT CONTROLS.”  
Section 59-B-1.1. “Belfries, chimneys, etc.”
- DIVISION 59-B-3. “EXEMPTIONS FOR PROJECTIONS.”  
Section 59-B-3.1. “Steps, terraces, and porches.”

**EXPLANATION:** ***Boldface** indicates a Heading or a defined term.*  
*Underlining indicates text that is added to existing law by the original text amendment.*  
*[Single boldface brackets] indicate that text is deleted from existing law by original text amendment.*  
*Double underlining indicates text that is added to the text amendment by amendment.*  
*[[Double boldface brackets]] indicate text that is deleted from the text amendment by amendment.*  
*\* \* \* indicates existing law unaffected by the text amendment.*

**ORDINANCE**

*The County Council for Montgomery County, Maryland, sitting as the District Council for that portion of the Maryland-Washington Regional District in Montgomery County, Maryland, approves the following ordinance*

1 **Sec. 1. DIVISION 59-B-1 is amended as follows:**

2 Division 59-B-1. EXEMPTIONS FROM HEIGHT CONTROLS.

3 **Sec. 59-B-1.1. Belfries, chimneys, etc.**

4 The building height limits under this chapter do not apply to belfries, chimneys,  
5 cupolas, domes, flagpoles, flues, monuments, television antennae or aerials, spires,  
6 tanks, water towers, water tanks, air conditioning units, solar energy panels, or  
7 similar roof structures, and mechanical appurtenances, or, if associated with an  
8 optional method development project and where recommended in an approved  
9 urban renewal plan, rooftop architectural features, except:

- 10 (a) Where such structures are located within an airport approach area, as  
11 designated on the zoning map; or
- 12 (b) In the case of air conditioning units or similar roof structures and mechanical  
13 appurtenances located on buildings in the RT-6.0, RT-8.0, RT-10.0, RT-12.5  
14 and R-30 Zones or constructed under the standard method of development  
15 procedures in the CBD-0.5, CBD-R, and CBD-1 Zones, this exemption is  
16 limited to 8 feet.

17 A roof structure must not have a total area greater than 25 percent of the roof area  
18 except that a larger area may be approved for buildings approved by the Planning  
19 Board under the optional method of development procedures in the central  
20 business district zones. A roof structure must not be used for any purpose other  
21 than a use incidental to the main use of the building. Exempt space must not be  
22 used for retail, general and professional offices, or similar uses.

23 \* \* \*

24 **Sec. 2. DIVISION 59-B-3 is amended as follows:**

25 Division 59-B-3. EXEMPTIONS FOR PROJECTIONS.

26 **Sec. 59-B-3.1. Steps, terraces, solar panels, and porches.**

- 27 (a) Open steps and stoops, exterior stairways, terraces, and porches may extend  
28 into any minimum front or rear yard not more than 9 feet.
- 29 (b) For side yards[;]:
- 30 [(i)] (1) except in the case of a corner lot, open steps, stoops, exterior  
31 stairways, terraces, and porches may extend into any minimum side  
32 yard not more than 3 feet;
- 33 [(ii)] (2) on a corner lot having a minimum side yard 25 feet or more in  
34 width, open steps, stoops, exterior stairways, terraces, and porches  
35 may extend into such minimum side yard not more than 9 feet; and
- 36 [(iii)] (3) on a corner lot having a minimum side yard of less than 25 feet  
37 in width, there must be no encroachment on the minimum side yard.
- 38 (c) Steps, stoops, and exterior stairways and terraces that extend into the  
39 minimum required yards may be roofed but must not be enclosed. Any roof  
40 covering steps, stoops, exterior stairways, and terraces may extend not more  
41 than 3 feet into the minimum required yard.
- 42 (d) Roofed, but not enclosed, porches may extend into the minimum required  
43 front or rear yard not more than 9 feet, including the roof. If any portion of a  
44 roofed, but not enclosed, porch extends into the required minimum front  
45 yard, the porch and its roof may extend not more than 9 feet from the face of  
46 the building parallel to the front lot line.
- 47 (e) Solar panels may extend 2 feet into any side or rear setback.

48 \* \* \*

49 **Sec. 3. Effective date.** This ordinance becomes effective 20 days after the  
50 date of Council adoption.

51

52 This is a correct copy of Council action.

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55 Linda M. Lauer, Clerk of the Council

**TESTIMONY ON BEHALF OF COUNTY EXECUTIVE ISIAH LEGGETT  
ON ZONING TEXT AMENDMENTS 14-01 AND 14-02**

**February 25, 2014**

Good afternoon Council President Rice and members of the District Council. My name is Diane Schwartz Jones and I am pleased to be here on behalf of County Executive Isiah Leggett to testify on Zoning Text Amendments 14-01, Parking Design – Charging Stations, and 14-02 Solar Panels introduced on January 28, 2014. As with the package of environmental bills introduced on the same day, Mr. Leggett supports the Council's efforts to address the need for more sustainable development in Montgomery County and steps to create both demand and place for sustainability measures.

ZTA 14-01 would require that new parking lots and garages with more than 50 parking spaces provide at least one parking space with an electric vehicle charging station for each 50 automobile spaces. Any space with a charging station must be reserved for the exclusive use of electric vehicles. Making it easy to ensure availability of energy sources is important for the emerging electric vehicles industry. According to recent Motor Vehicle Administration data, there are an estimated 2000 electric vehicles in the entire State of Maryland, only a portion of which are in Montgomery County. While the number of vehicles will continue to grow, this zoning text amendment, in its current form, may be premature. A parking garage with 1500 spaces would be required to have 30 spaces with charging stations which could only be used for electric vehicles. With structural costs at an estimated \$25,000 - \$50,000 per space, the costs of construction are significant. Until demand increases, such a restriction will likely have a serious impact on the financial feasibility of constructing such spaces as there would not be a ready source of revenues to cover the carry costs. Rather than mandate 1 charging station space for every 50 spaces, the County Executive recommends either requiring that 1 space per every 100 spaces be equipped with a charging station and that, for the time being, the spaces not be reserved for charging vehicles, or that the prohibition against use by non-electric vehicles be phased in so that revenue can be generated as demand builds. Alternatively, facilities could be constructed so that regular spaces are readily convertible to charging station spaces as demand increases. As the market for electric vehicles increases such that there is a dependable demand, additional regulatory requirements can be put in place.

ZTA 14-02 would exempt solar panels from height limits and allow them to extend 2 feet into any side or rear setback. The County Executive supports the height exemption. The 2 feet setback, however, conflicts with National Fire Protection Association code provisions because roofs require a clearance to allow access to fire department staff for combating fire, inspections and placement of ladders. The setback proposed in this zoning text amendment (extending 2 feet into any side or rear setback) is inconsistent with NFPA requirements on a rooftop and may impair access at ground level as well. The significance of this issue is a safety consideration for our emergency responders and those within a structure experiencing a fire emergency. While we want to facilitate solar power, it must be done safely. We would like to better understand the specific concern that is behind the setback proposal and explore whether other solutions might address the concern without implicating NFPA or interfere with the clearances needed by emergency responders.

County Executive Leggett thanks the Council for the opportunity to comment on these Zoning Text Amendments and looks forward to working with the Council to develop workable zoning provisions.



**MONTGOMERY COUNTY PLANNING BOARD**  
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

OFFICE OF THE CHAIR

February 28, 2014

**TO:** The County Council for Montgomery County, Maryland, sitting as the District Council for the Maryland-Washington Regional District in Montgomery County, Maryland

**FROM:** Montgomery County Planning Board

**SUBJECT:** Zoning Text Amendment No. 14-02

**BOARD RECOMMENDATION**

The Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission reviewed Zoning Text Amendment No. 14-02 at our regular meeting on February 27, 2014. By a vote of 4-0, the Planning Board recommends approval of the text amendment as modified by Staff to allow Solar Energy Structures to extend three feet into any side or rear yard instead of two feet as indicated in the ZTA as introduced. The text amendment language and technical staff report is included as an attachment to this memorandum (Attachment 1).

ZTA No. 14-02 would amend exemptions from height controls to exempt solar energy structures, and allow projections for solar energy structures into rear and side yard setbacks. Currently, the Zoning Ordinance does not allow for roof-mounted solar energy structures to exceed height limitations on either primary or accessory buildings or structures.

Testimony from Councilmember Berliner offered the intent of this zoning text amendment to support Montgomery County's move towards a sustainable community, which includes green infrastructure such as providing solar energy structures and allows flexibility in locating solar collection systems. No other testimony was taken during this public hearing.

Consideration was given to limit the height of solar energy structures to a maximum height allowed over the building height for the zone in which the primary or accessory building lies, such as 8-feet as proposed in the zoning code rewrite language for buildings in the Commercial/Residential, Employment and Industrial Zones. However, this was the minority opinion, and after discussion Planning Board members were in support of the

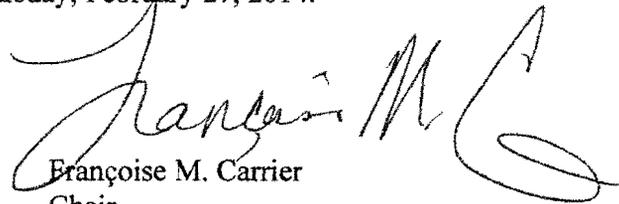
proposed zoning text language to allow solar energy systems to be exempt from height controls.

Planning Board members also discussed modifying rear and side yard setback encroachment from 2 foot to 3 foot, and agreed that since technology is improving, and solar energy structures can be mounted on porch roofs or used as shading, similar to porch roofs, that similar encroachments should be allowed for solar energy structures as currently allowed for porches. The Planning Board discussed staff's recommendation to not allow solar panels within 3 feet of any rear and side yard lot line for those non-residential zones with no setback provisions for principle or accessory buildings and agreed that a certain level of protection and compatibility should be considered when determining the appropriate setback.

Lastly, the Planning Board discussed the effect of the proposed language on the current zoning code rewrite draft, comparing the proposed language for the existing code to that of the Council's draft. In this instance, the exemption from any height limitation would remove the 8-foot restriction for roof-mounted structures in the Commercial/Residential, Employment, and Industrial zones as currently drafted (Attachment 2).

#### CERTIFICATION

This is to certify that the attached report is a true and correct copy of the technical staff report and the foregoing is the recommendation adopted by the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission, at its regular meeting held in Silver Spring, Maryland, on Thursday, February 27, 2014.

  
Françoise M. Carrier  
Chair

FC:RMK



MCPB  
Item No.: 11C  
Date: 2/20/14

**Zoning Text Amendment 14-02 – Solar Energy Structures-- Updated**

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Completed: 2/12/14

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**Description**

ZTA No. 14-02 amends exemptions from height controls, and exemptions for projections for solar energy structures. Specifically, this amendment will allow a two foot extension of the accessory structures in rear and side yard setbacks in all zones and exclude solar energy structures from building height limits.

**Summary**

**Staff supports the proposed text amendment to allow solar energy panels to be exempt from the height requirements. Staff also supports amending the encroachment into rear and side yard for accessory solar energy structures and clarifying language so that in those non-residential zones, which do not have accessory building or structures rear and side yard setbacks that the language refer to the building rear and side yard setbacks.**

Council members Berliner and Navarro sponsored Zoning Text Amendment 14-02 to exempt certain solar energy structures from height and setback standards in all zoning districts. The sponsors would require solar panels to extend two feet into the side or rear yard setbacks two feet. Additionally, solar energy panels would be exempt from building height limits in certain instances.

**Background/Analysis**

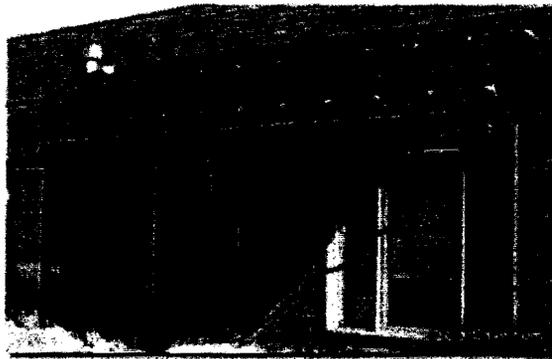
This ZTA would apply to all buildings (both accessory and main) in all current zoning districts. The Montgomery County Zoning Ordinance contains multiple building setbacks for all zones, and can range from three feet (for example the RMX-2C zone, if adjacent to another commercial zone) to 200 feet (for example, the C-6 Zone if the building is located adjacent to a master-planned limited access freeway). However, very few non-residential zones have side and rear yard setbacks for accessory structures. Setbacks for accessory buildings or structures,

if permitted in a non-residential zone, can be set through site plan review under §59-D-3, if required by the underlying zone. In one-family detached residential zones, and agricultural zones, side and rear yards are defined for accessory buildings or structures. This text amendment does not propose to alter rear or side yard setbacks for any residential or non-resident zone, rather it is to allow solar energy structures to extend 2 feet into side and rear yard setbacks (both primary and accessory buildings).

On July 7, 2008, Zoning Text Amendment 08-04 became effective allowing solar energy structures to be located in the side yard in any one-family residential zone if the main building is set back no less than 70 feet from the side lot line. Solar panels are required to be located no less than 50 feet from a side lot line, be less than 20 feet in height and satisfy the street line and rear lot line setbacks for an accessory structure (or building). This amendment would exempt solar energy structures from this provision, and allow an extension within the rear and side yards by two feet.

Staff reviewed multiple jurisdictions recommendations with regard to height and setback requirements for solar energy structures to establish a baseline for what is exempt and what is not, as well as how jurisdictions require setbacks from lot lines. For this particular accessory use, there are many different zoning ordinance standards. In general, there two different approaches: those jurisdictions that require that the solar energy structure not exceed the maximum principal building or accessory building heights of the zone in which it is located, and those jurisdictions that allow excess height. In some jurisdictions, roof-mounted solar panels were exempt from the inclusion for the calculations of building heights; however, those jurisdictions recommended maximum extensions from the allowable roof height. Height extensions for roof-mounted solar panels were as low as five feet (attached to the main building, San Diego, California) or as high as ten feet (Mesa and Tucson, Arizona).

There is also a wide range in rear and side yard setbacks for solar energy structures from 1.5 feet setbacks (all yards) in Wisconsin to four feet (Tucson), and 10 feet (Monroe County, PA). Staff believes that with modern advances in solar technology, coupled with the ability to mount solar panels as awnings, that it would be feasible to allow rear and side yard encroachments similar to those allowed porches in Montgomery County (three feet). This should not be allowed in areas where less than three-foot setbacks.



**Recommendation**

Staff supports the proposed text amendment to allow solar energy panels to be exempt from the height requirements. Staff also supports amending the encroachment into rear and side yard for accessory solar energy structures to 3 feet and modifying language so that in those non-residential zones, which do not have accessory building or structures rear and side yard setbacks that the language in those instances refer to the building rear and side yard setbacks (Attachment 1).

**Attachments**

1. ZTA 14-02, as amended by Planning Board Staff

1 **Sec. 1. DIVISION 59-B-1 is amended as follows:**

2 Division 59-B-1. EXEMPTIONS FROM HEIGHT CONTROLS.

3 **Sec. 59-B-1.1. Belfries, chimneys, etc.**

4 The building height limits under this chapter do not apply to belfries, chimneys,  
5 cupolas, domes, flagpoles, flues, monuments, television antennae or aerials, spires,  
6 tanks, water towers, water tanks, air conditioning units, solar energy panels, or  
7 similar roof structures, and mechanical appurtenances, or, if associated with an  
8 optional method development project and where recommended in an approved  
9 urban renewal plan, rooftop architectural features, except:

- 10 (a) Where such structures are located within an airport approach area, as  
11 designated on the zoning map; or  
12 (b) In the case of air conditioning units or similar roof structures and mechanical  
13 appurtenances located on buildings in the RT-6.0, RT-8.0, RT-10.0, RT-12.5  
14 and R-30 Zones or constructed under the standard method of development  
15 procedures in the CBD-0.5, CBD-R, and CBD-1 Zones, this exemption is  
16 limited to 8 feet.

17 A roof structure must not have a total area greater than 25 percent of the roof area  
18 except that a larger area may be approved for buildings approved by the Planning  
19 Board under the optional method of development procedures in the central  
20 business district zones. A roof structure must not be used for any purpose other  
21 than a use incidental to the main use of the building. Exempt space must not be  
22 used for retail, general and professional offices, or similar uses.

23 \* \* \*

24 **Sec. 2. DIVISION 59-B-3 is amended as follows:**

25 Division 59-B-3. EXEMPTIONS FOR PROJECTIONS.

26 **Sec. 59-B-3.1. Steps, terraces, solar panels, and porches.**

- 27 (a) Open steps and stoops, exterior stairways, terraces, and porches may extend  
28 into any minimum front or rear yard not more than 9 feet.
- 29 (b) For side yards[;]:
- 30 [(i)] (1) except in the case of a corner lot, open steps, stoops, exterior  
31 stairways, terraces, and porches may extend into any minimum side  
32 yard not more than 3 feet;
- 33 [(ii)] (2) on a corner lot having a minimum side yard 25 feet or more in  
34 width, open steps, stoops, exterior stairways, terraces, and porches  
35 may extend into such minimum side yard not more than 9 feet; and
- 36 [(iii)] (3) on a corner lot having a minimum side yard of less than 25 feet  
37 in width, there must be no encroachment on the minimum side yard.
- 38 (c) Steps, stoops, and exterior stairways and terraces that extend into the  
39 minimum required yards may be roofed but must not be enclosed. Any roof  
40 covering steps, stoops, exterior stairways, and terraces may extend not more  
41 than 3 feet into the minimum required yard.
- 42 (d) Roofed, but not enclosed, porches may extend into the minimum required  
43 front or rear yard not more than 9 feet, including the roof. If any portion of a  
44 roofed, but not enclosed, porch extends into the required minimum front  
45 yard, the porch and its roof may extend not more than 9 feet from the face of  
46 the building parallel to the front lot line.
- 47 (e) Solar panels may extend [2] 3 feet into any established side or rear setback  
48 for accessory buildings or structures; however, in those zones which do not  
49 establish rear and side yard setbacks for accessory buildings or structures the  
50 building rear and side yards setbacks shall be used, but no instance should  
51 the solar energy structure setback be no be less than three (3) feet.

52 \* \* \*

53           **Sec. 3. Effective date.** This ordinance becomes effective 20 days after the  
54 date of Council adoption.

55

56 This is a correct copy of Council action.

57

58 \_\_\_\_\_

59 Linda M. Lauer, Clerk of the Council

**Sec. 1. DIVISION 3.7 is modified as follows:**

Division 3.7 Miscellaneous Uses

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**Section 3.7.2. Solar Collection System**

**A. Defined**

Solar Collection System means an arrangement of panels or other solar energy devices that provide for the collection, inversion, storage, and distribution of solar energy for electricity generation, space heating, space cooling, or water heating. A Solar Collection System includes freestanding or mounted devices.

**B. Use Standards**

Where a Solar Collection System is allowed as a limited use, it must satisfy the following standards:

1. In the Agricultural, Rural Residential, Residential, Commercial/Residential, and Employment zones a Solar Collection System must be an accessory use as defined in Section 3.1.3.
2. Written authorization from the local utility company must be provided for a Solar Collection System that will be connected to the utility grid.
3. Removal of trees or landscaping otherwise required or attached as a condition of approval of any plan, application, or permit for the installation or operation of a Solar Collection System is prohibited.
4. [In the Commercial/Residential, Employment, and Industrial zones, a roof-mounted system may exceed the maximum height by 8 feet under Section 4.1.7.C.3.] A roof-mounted solar collection system may exceed the maximum height of the zone under Section 4.1.7.C.3.

**Sec. 2. DIVISION 4.1 is amended as follows:**

Division 4.1. Rules for All Zones

**Section 4.1.7.B. Placement**

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**6. Setback Encroachments**

Any building or structure must be located at or behind the required building setback line, except:

**a. Building Features**

- i. Any unenclosed porch, deck, terrace, steps, or stoop may project a maximum of 3 feet into any side street or side setback and may project a maximum of 9 feet into any front or rear setback. This encroachment includes an unenclosed roofed porch or terrace.
- ii. Any roofed and unenclosed steps or stoop may project a maximum of 3 feet into any side street or side setback and may project a maximum of 9 feet into any front or rear setback. Any roof covering unenclosed steps or a stoop may project a maximum of 3 feet into any setback.
- iii. An unenclosed balcony may project a maximum of 6 feet into a required setback, if such projection is a minimum of 2 feet from the vertical plane of any lot line.
- iv. A sill, leader, belt course, or similar ornamental feature may project a maximum of 6 inches into any setback. Where a wall is located on a lot line, any such projection may extend across a lot line under Chapter 50 (Section 50-20).
- v. A chimney or flue as part of a detached house, duplex, or townhouse may project a maximum of 2 feet into any setback.
- vi. A chimney or flue as part of an apartment may project a maximum of 4 feet into any setback, if such extension remains a minimum of 2 feet from the vertical plane of any lot line.
- vii. Any building eave, cornice, or light shelf may project a maximum of 2 ½ feet into any setback, if such extension remains a minimum of 2 feet from the vertical plane of any lot line. Where a wall is located on a lot line, any such projection may extend across a lot line under Chapter 50 (Section 50-20).
- viii. Any bay window, oriel, entrance, vestibule, or balcony, 10 feet in width or less, may project a maximum of 3 feet into any setback.
- ix. Any unenclosed fire escape or outside stairway may project a maximum of 5 feet into any side street, side, or rear setback.

**b. Mechanical Equipment and Utility Lines**

- i. Mechanical equipment associated with residential uses, such as an HVAC unit or security lighting, may project a maximum of 5 feet into any front or rear setback.
- ii. A permanent rainwater collection or harvesting system may project a maximum of 3 feet into any side street, side, or rear setback.

**c. Solar Collection System**

A solar panel may project a maximum of 3 feet into any side or rear setback, if such projection is a minimum of 3 feet from the vertical plane of any lot line.

**d. [c.] Other Encroachments**

The following features may encroach into any setback:

- iii. any fence or wall under Section 6.4.3.C;
- iv. a handicap facility to the extent necessary to meet the minimum standards of the Americans with Disabilities Act; and
- v. any sign under Division 6.7.

\* \* \*

**Section 4.1.7.C. Height**

\* \* \*

**3. Height Encroachments**

Any height encroachment not specifically listed is prohibited.

- a. The following roof structures may occupy a maximum of 25% of the roof area: a spire, belfry, cupola, dome not intended for human occupancy, chimney, flue or vent stack, flagpole, monument, water tank, television antenna or aerial, air conditioning unit, or similar structure or mechanical appurtenance (not including a rooftop renewable energy system). A larger area may be approved by the Planning Board under optional method development in the Commercial/Residential and Employment zones.

- b. The maximum height does not apply to a solar collection system, or any roof structure listed in Section 4.1.7.C.3.a, except that in the TLD, TMD, THD, and R-30 zones, an air conditioning unit or similar structure or mechanical appurtenance may exceed the established height limit by a maximum of 8 feet.
- c. In the CRT, CR, Employment, and Industrial zones, the following may exceed the established height limit by up to 8 feet, except when located within an airport approach area:
  - i. rooftop deck, patio, shade structure;
  - ii. rooftop garden, landscaping;
  - iii. parapet wall;
  - iv. rooftop rainwater collection or harvesting system; and
  - v. [rooftop renewable energy system, such as a solar panel or] wind turbine.
- d. An accessory structure located on the roof must not be used for any purpose other than a use incidental to the principal use of the building.

15