



# Briefing for Historic Landmark Commission

Planning Division  
Community & Economic Development Department

**To:** Historic Landmark Commission Members  
**From:** Casey Stewart, Principal Planner  
**Date:** April 7, 2010  
**Re:** April 12<sup>th</sup> briefing on proposed code amendments for accessory structures related to urban farming and small renewable energy systems.

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**Petition: PLNPCM20090-01338**

## ***Background***

The Planning Division is currently working on amending the SLC zoning ordinance to specifically allow for urban farming uses and equipment relating to renewable energy including solar and wind. The zoning ordinance is also fairly restrictive when it comes to where accessory uses and/or structures that support alternative energy generation and urban farming can be located on a lot. Proposed regulations specifically acknowledge these types of uses and necessary accessory structures, provide more areas in the City where they are allowed, and provide more flexibility on the lot as to where they can be located. At the same time, regulations are proposed to mitigate impacts and ensure compatibility with surrounding uses, especially when they are located in single-family and / or historic neighborhoods.

Planning staff will brief the commission on the proposed amendments related to structures associated with urban farming and solar and wind collection, specifically, greenhouses; hoop houses, cold frames, solar collection equipment and small wind turbines/towers. Staff also seeks input from the commission members on the proposed amendments. Specifically, what provisions, if any, does the Historic Landmark Commission suggest for ensuring compatibility with the Historic Preservation Overlay zone.

## ***Issues***

Following are definitions of the accessory structures mentioned above and a brief list of the issues typically associated with the accessory structures in question:

### **Urban Farming – greenhouse, hoop house, cold frame**

*“Cold frame” means an unheated outdoor structure typically consisting of, but not limited to, a wooden or concrete frame and a top of glass or clear plastic, used for protecting seedlings and plants from the cold.*

*“Greenhouse” means a temporary or permanent structure typically made of, but not limited to, glass, plastic, or fiberglass in which plants are cultivated.*

*“Hoop house” means a temporary or permanent structure typically made of, but not limited to, piping or other material covered with translucent plastic, constructed in a “half-round” or “hoop” shape, for the purposes of growing plants. A hoop house is considered more temporary than a greenhouse.*

**Issues:**

1. **Size:** Floor area not limited
2. **Height:** Subject to zoning district height limit
3. **Location:** Prohibited in front yard; allowed in side and rear yards
4. **Materials:** Commonly made of either molded or thin sheet transparent plastic over a frame of wood, metal, or PVC piping.

**Small Renewable Energy Systems – solar collection system, wind energy system**

*“Small wind energy system” means an accessory structure defined as a wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics that has a rated capacity of not more than 100 kilowatts (kW) and that is intended to generate electricity primarily for buildings and/or uses on the same property, thereby reducing on-site consumption of utility power.*

*“Small solar energy collection system” shall mean an accessory structure that is roof-mounted or wall-mounted panel, the primary purpose of which is to provide for the collection, inversion, storage, and distribution of solar energy for electricity generation, space heating, space cooling, or water heating of buildings located on the same property. A small solar energy collection system shall not exceed a capacity of 100 kilowatts (kW).*

**Issues (Solar):** In addition to meeting the standards set forth in the proposed ordinance, all applications to install a small solar collection system within the Historic Preservation Overlay District shall obtain a Certificate of Appropriateness prior to installation. On an historic structure, a lot upon which an historic structure is located, or a lot within a designated historic district shall be approved by the historic landmark commission.

1. **Size:** No limit proposed
2. **Height:** Shall not exceed by more than three feet the maximum height permitted in the zoning district in which it is located or shall not extend more than 12 feet above the roofline of the structure upon which it is mounted, whichever is less. However, the system may exceed these maximums if the system is not visible from any adjacent property or public right of way.
3. **Location:** Can be located on both the primary and/or accessory buildings, or as a separate structure. Location priorities for structures:
  - (1) Back yard of an historic structure in a location not readily visible from public right-of-way (except an alley).
  - (2) An accessory building or structure (such as a garage), in a location not readily visible from a public right-of-way (except an alley).
  - (3) In a side yard of an historic structure in a location not readily visible from a public right-of-way (except an alley).
  - (4) On the historic structure, in a location not readily visible from a public right-of-way (except an alley).

- (5) On the historic structure, in a location that may be visible from a public right-of-way, but not on the structure's front façade.

**Issues (Wind):**

1. **Setback:** Shall be setback from property lines a distance equal to the total height plus five feet
2. **Height:** No height limit other than Federal Aviation Administration when compliance with setback provisions is achieved.
3. **Location:** Subject to compliance with setback provisions.
4. **Color:** Original factory color cannot be changed.
5. **Sound:** Cannot exceed 55dBA for any period of time and measured at adjacent property line. The sound level may be exceeded during short-term events out of owner's control, such as severe storms or utility outages.

The full text of the proposed amendments is also attached your review.

**Add following new definitions to Section 62 Definitions:**

“Cold frame” means an unheated outdoor structure typically consisting of, but not limited to, a wooden or concrete frame and a top of glass or clear plastic, used for protecting seedlings and plants from the cold.

“Greenhouse” means a temporary or permanent structure typically made of, but not limited to, glass, plastic, or fiberglass in which plants are cultivated.

“Hoop house” means a temporary or permanent structure typically made of, but not limited to, piping or other material covered with translucent plastic, constructed in a “half-round” or “hoop” shape, for the purposes of growing plants. A hoop house is considered more temporary than a greenhouse.

“Urban agriculture” is a general term meaning the growing of plants, including food products, and the raising of animals in and around cities. Community gardens and their accessory structures, farm stands, farmers markets, and garden stands are components of urban agriculture.

“Small wind energy system” means an accessory structure defined as a wind energy conversion system consisting of a wind turbine, a tower, and associated control or conversion electronics that has a rated capacity of not more than 100 kilowatts (kW) and that is intended to generate electricity primarily for buildings and/or uses on the same property, thereby reducing on-site consumption of utility power.

“Small solar energy collection system” shall mean an accessory structure that is roof-mounted or wall-mounted panel, the primary purpose of which is to provide for the collection, inversion, storage, and distribution of solar energy for electricity generation, space heating, space cooling, or water heating of buildings located on the same property. A small solar energy collection system shall not exceed a capacity of 100 kilowatts (kW).

## **Chapter 21A.40**

# **ACCESSORY USES, BUILDINGS AND STRUCTURES**

### **21A.40.010: PURPOSE STATEMENT:**

This chapter is intended to provide general regulations, applicable to all zoning districts, for accessory uses, buildings and structures which are customarily incidental and subordinate to the principal use and which are located on the same lot. It is further intended to provide specific standards for certain accessory uses, buildings and structures. (Ord. 26-95 § 2(20-0), 1995)

### **21A.40.020: GENERAL AUTHORIZATION:**

Except as otherwise expressly provided or limited in this chapter, accessory uses, buildings and structures, as defined in chapter 21A.62 of this title, are permitted in any zoning district in connection with any principal use lawfully existing within such district; provided, that such accessory uses and structures conform to all applicable requirements of this title. Any accessory use, building or structure may be approved in conjunction with the approval of the principal use. (Ord. 26-95 § 2(20-1), 1995)

### **21A.40.030: ZONING COMPLIANCE REQUIRED:**

No accessory use, building or structure, excluding hoop houses, greenhouses, and cold frames associated solely with growing food and/or plants, shall be established or constructed unless a zoning certificate has been issued. Accessory buildings associated with keeping animals, bees, livestock and poultry are subject to the provisions of the City Code Chapter 8 Animals (Ord. 26-95 § 2(20-2), 1995)

### 21A.40.040: USE LIMITATIONS:

In addition to the applicable use limitations of the district regulations, no accessory use, building or structure shall be permitted unless it complies with the restrictions set forth below:

- A. An accessory use, building or structure shall be incidental and subordinate to the principal use or structure in area, extent and purpose;
- B. An accessory use, building or structure shall be under the same ownership or control as the principal use or structure, and shall be, except as otherwise expressly authorized by the provisions of this title, located on the same lot as the principal use or structure;
- C. No accessory use, building or structure shall be established or constructed before the principal use is in operation or the structure is under construction in accordance with these regulations; and
- D. No sign, except as expressly authorized by this chapter or by the provisions of chapter 21A.46 of this title, shall be maintained in connection with an accessory use or structure. (Ord. 26-95 § 2(20-3), 1995)

### 21A.40.050: GENERAL YARD, BULK AND HEIGHT LIMITATIONS:

All accessory buildings permitted by this chapter shall be subject to the following general requirements:

#### A. Location Of Accessory Buildings In Required Yards:

1. ~~Front Yards: Accessory buildings are prohibited in any required front, side or corner side yard. If an addition to residential buildings results in an existing accessory building being located in a side yard, the existing accessory building shall be permitted to remain, subject to maintaining a four foot (4') separation from the side of the accessory building to the side of the residential building, as required in subsection A3b of this section. (This section was moved to the new "side yards" section below.)~~
2. ~~Corner Lots: No accessory building on a corner lot shall be closer to the street than the distance required for corner side yards. At no time, however, shall an accessory building be closer than twenty feet (20') to a public sidewalk or public pedestrian way and the accessory building shall be set back at least as far as the principal building.~~
3. ~~Side Yards: Accessory buildings are prohibited in any required interior side or corner side yard; however, hoop houses, greenhouses, and cold frame structures associated solely with growing food and/or plants are allowed in an interior side yard but no closer than one foot (1') to the corresponding lot line. If an addition to residential buildings results in an existing accessory building being located in a side yard, the existing accessory building shall be permitted to remain, subject to maintaining a four foot (4') separation from the side of the accessory building to the side of the residential building, as required in subsection A3b of this section.~~

#### 43. Rear Yards: Location of accessory buildings in a rear yard shall be as follows:

- a. In residential districts, no accessory building shall be closer than one foot (1') to a side or rear lot line except when sharing a common wall with an accessory building on an adjacent lot. In nonresidential districts, buildings may be built to side or rear lot lines in rear yards, provided the building complies with all applicable requirements of the adopted building code.

- b. No portion of the accessory building shall be built closer than four feet (4') to any portion of the principal building; excluding coldframes associated solely with growing food and/or plants.
- c. Garages on two (2) or more properties that are intended to provide accessory building use for the primary occupants of the properties, in which the garage is located, may be constructed in the rear yards, as a single structure subject to compliance with adopted building code regulations and the size limits for accessory buildings on each property as indicated herein.
- d. In the R-1 districts, R-2 district and SR districts accessory structures shall be located a maximum of five feet (5') from the rear property line subject to the following exceptions:

(1) The building or structure is a hoop house, greenhouse, or cold frame associated solely with growing food and/or plants.

(2+) The maximum setback from the rear property line may be increased to meet the transportation division minimum required turning radius and other maneuvering standards.

(32) The planning director or designee may authorize the issuance of building permits for an accessory structure with a maximum setback of more than five feet (5') from the rear property line if the property owner demonstrates that fifty percent (50%) or more of the properties on the block face have accessory structures located more than five feet (5') from the rear property line. In this case, the accessory structure may be set back from the rear property line a distance equal to the average setback of the other accessory structures on the block face. An appeal of this administrative decision shall be heard by an administrative hearing officer subject to the provision of chapter 21A.52 of this title.

(43) The board of adjustment may approve an alternate location for an accessory structure as a special exception based on hardships created by topography or the location of mature vegetation.

5. Accessory Or Principal Lot: No portion of an accessory building on either an accessory or principal lot may be built closer than ten feet (10') to any portion of a principal residential building on an adjacent lot when that adjacent lot is in a residential zoning district; excluding hoop houses, greenhouses, and cold frames associated solely with growing food and/or plants.

#### B. Maximum Coverage:

- 1. Yard Coverage: In residential districts, any portion of an accessory building shall occupy not more than fifty percent (50%) of the total area located between the rear facade of the principal building and the rear lot line.
- 2. Building Coverage: In the FR, R-1, R-2 and SR residential districts the maximum building coverage of all accessory buildings, excluding hoop houses, greenhouses, and cold frames associated solely with growing food and/or plants, shall not exceed fifty percent (50%) of the building footprint of the principal structure up to a maximum of seven hundred twenty (720) square feet for a single-family dwelling and one thousand (1,000) square feet for a two-family dwelling. The maximum footprint for a primary accessory structure within the SR-1A is limited to four hundred eighty (480) square feet with an additional one hundred twenty (120) square feet allowed for a secondary accessory structure. Notwithstanding the size of the footprint of the principal building, at least four hundred eighty (480) square feet of accessory building coverage shall be allowed subject to the compliance with subsection B1 of this section.

#### C. Maximum Height Of Accessory Buildings/ Structures:

1. Accessory To Residential Uses In The FP District, RMF Districts, RB, R-MU Districts, And The RO District: The height of accessory buildings/structures in residential districts shall conform to the following:
  - a. The height of accessory buildings with flat roofs shall not exceed twelve feet (12');
  - b. The height of accessory buildings with pitched roofs shall not exceed seventeen feet (17') measured to the midpoint of the roof; and
  - c. Accessory buildings with greater building height may be approved as a special exception, pursuant to chapter 21A.52 of this title.
2. Accessory To Residential Uses In The FR, R-1 Districts, R-2 District And SR Districts: The height of accessory buildings/structures in the FR districts, R-1 district, R-2 district and SR districts shall conform to the following:
  - a. The height of accessory buildings with flat roofs shall not exceed twelve feet (12'); nine feet (9') in the SR-1A;
  - b. The height of accessory buildings with pitched roofs shall not exceed seventeen feet (17') measured as the vertical distance between the top of the roof and the finished grade at any given point of building coverage. In the SR-1A the height of accessory buildings with pitched roofs shall not exceed fourteen feet (14'); and
  - c. Accessory buildings with greater building height may be approved as a special exception, pursuant to chapter 21A.52 of this title, if the proposed accessory building is in keeping with other accessory buildings on the block face. (Ord. 26-06 §§ 2, 3, 2006: Ord. 90-05 § 2 (Exh. B), 2005: Ord. 13-04 § 18, 2004: Ord. 35-99 § 57, 1999: Ord. 30-98 § 4, 1998: Ord. 88-95 § 1 (Exh. A), 1995: Ord. 26-95 § 2(20-4), 1995)

#### **21A.40.052: ACCESSORY USES ON ACCESSORY LOTS:**

Accessory uses may be located on all residential zoned accessory lots subject to the following circumstances:

- A. The accessory use is located on an accessory lot adjoining the principal residence and shall function and be regulated as an accessory structure and use.
- B. The accessory and principal residence lot are under common ownership.
- C. The accessory lot must be landscaped and properly maintained as part of the principal lot according to the established zoning requirements.
- D. Light standards shall be allowed as part of the conditional use pursuant to the provisions of chapter 21A.54 of this title in all zones (except for FR zones where lighting is not permitted). Glare shields or baffles shall be attached to all lighting fixtures to prevent lighting from being directed toward or impacting neighboring properties.
- E. Fences for accessory uses on accessory lots, to prevent the loss of recreational equipment, shall not exceed twelve feet (12') when they are located at least ten feet (10') from the closest property line. A maximum fence height of six feet (6') within ten feet (10') of side yard and rear yard property lines shall be permitted. Fences exceeding six feet (6') shall be made on a flexible nonopaque material, mesh, or netting.

F. When the accessory use is for parking on an existing accessory lot within the FR-1, FR-2, FR-3, R-1/5,000, R-1/7,000, R-1/12,000, R-2, SR-1 and SR-3 zones, the conditional use for accessory uses on accessory lots is not applicable for parking. Refer to section 21A.44.020 of this title regarding parking on adjacent residential lots. (Ord. 30-98 § 5, 1998)



## **21A.40.170: SMALL WIND ENERGY SYSTEMS:**

### **1. ~~Applicability~~ (Addressed under 21A.40.020 General Authorization)**

~~ADD REFERENCE TO REVISED USE TABLE SPECIFYING IN WHICH DISTRICTS SMALL WIND ENERGY SYSTEMS ALLOWED AS ACCESSORY OR PRINCIPAL USE. STAFF TO INDICATE APPROPRIATE DISTRICTS (e.g., commercial, special purpose, and manufacturing).~~

### **1. Standards**

All small wind energy systems shall comply with the following requirements. If there is any conflict between the provisions of this section and any other requirements of the zoning, site plan, and subdivision ordinances, ...*(The Planning Division is still working on an appropriate resolution process)*.

#### **a. Setback**

The base of the tower shall be set back from all property lines, public right-of-ways, and public utility lines a distance equal to the total extended height plus five feet. If the small wind energy system is on a roof, the total extended height is equal to the roof height and tower height. A tower may be allowed closer to a property line than its total extended height if the abutting property owner(s) grants written permission and the installation poses no interference with public utility lines or public road and rail right-of-ways. Guy wires and other support devices shall be setback at least five (5) feet from all property lines.

#### **b. Tower Height**

Where the total extended height meets the sound and setback requirements of this section (See 4a above.), there shall be no specific height limitation, except as imposed by Federal Aviation Administration (FAA) regulations per subsection (j), below.

#### **c. Sound**

Sound produced by the turbine under normal operating conditions, as measured at the property line of any adjacent property improved with a dwelling unit at the time of the issuance of the zoning certificate, shall not exceed 55 dBA for any period of time. The 55dBA sound level may be exceeded during short-term events out of the owner's control such as utility outages and/or severe wind storms.

#### **d. Appearance, Color, and Finish**

The turbine and tower shall remain painted or finished in the color that was originally applied by the manufacturer. Bright, luminescent, or neon colors as determined by the city are prohibited

#### **e. Clearance**

The blade tip or vane of any small wind energy system shall have a minimum ground clearance of 15 feet as measured at the lowest point of the arc of the blades. Blades on small wind energy systems in residential districts shall not exceed twenty (20) percent of tower height.

#### **f. Signage Prohibited**

All signs on a wind generator, tower, building, or other structure associated with a small wind energy system visible from any public road, other than the manufacturer's or installer's identification, appropriate warning signs, or owner identification, shall be prohibited.

#### **g. Lighting**

No illumination of the turbine or tower shall be allowed unless required by the Federal Aviation Administration (FAA).

**h. Access**

Any climbing foot pegs or rungs below 12 feet of a freestanding tower shall be removed to prevent unauthorized climbing. For lattice or guyed towers, sheets of metal or wood or similar barriers shall be fastened to the bottom tower section such that it cannot readily be climbed.

**i. Requirement for Engineered Drawings**

Building permit applications for small wind energy systems shall be accompanied by standard drawings of the wind turbine structure and stamped engineered drawings of the tower, base, footings, and/or foundation as provided by the manufacturer.

**j. Compliance with FAA Regulations**

No small wind energy system shall be constructed, altered, or maintained so as to project above any of the imaginary airspace surfaces described in FAR Part 77 of the FAA guidance on airspace protection or other current FAA regulations governing airspace protection.

**k. Compliance with Municipal Code**

Small wind energy systems and all associated components shall comply with all applicable building and electrical codes contained in the International Building Code as adopted by Salt Lake City.

**l. Utility Notification**

No small wind energy system shall be installed until evidence has been submitted to the city that the relevant electric utility company has been informed of the customer's intent to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.

**m. Abandonment**

If a wind turbine is inoperable for six consecutive months the owner shall be notified that they must, within six months of receiving the notice, restore their system to operating condition or remove the wind turbine from the tower. If the owner(s) fails to restore their system to operating condition within the six-month time frame, then the owner shall be required, at his expense, to remove the wind turbine from the tower for safety reasons.

**n. Off-Street Parking Or Loading Requirements**

A small wind energy system shall not remove or encroach upon required parking or loading areas for other uses on the site or access to such parking or loading areas.

## **21A.40.180: SMALL SOLAR ENERGY COLLECTION SYSTEMS:**

### **1. ~~Applicability (Addressed under 21A.40.020 General Authorization)~~**

~~ADD REFERENCE TO REVISED USE TABLE SPECIFYING IN WHICH DISTRICTS SMALL SOLAR ENERGY SYSTEMS ALLOWED AS ACCESSORY OR PRINCIPAL USE. STAFF TO INDICATE APPROPRIATE DISTRICTS.~~

### **1. Standards**

All small solar energy collection systems shall comply with the following requirements except as provided in Section 4 relating to small solar collection systems in historic districts. If there is any conflict between the provisions of this section and any other requirements of the zoning, site plan, and subdivision ordinances, the provisions of this section shall take precedence, except for small solar energy collection systems installed on structures subject to historic preservation commission review. Specifically, small solar energy collection systems are not subject to the requirements of Section 21A.40.050 (Accessory Uses, Buildings, and Structures) to the extent they conflict with this section.

#### **a. Setbacks, Location, and Height**

- (1) A small solar energy collection system shall be located a minimum of six feet from all property lines and other structures, except the structure on which it is mounted.
- (2) A small solar energy collection system shall not exceed by more than three feet the maximum height permitted in the zoning district in which it is located or shall not extend more than 12 feet above the roofline of the structure upon which it is mounted, whichever is less. However, the system may exceed these maximums if the system is not visible from any adjacent property or public right of way.
- (3) A small solar energy collection system may be located on an accessory structure, including legal accessory structures located less than six feet from a property line.
- (4) A development proposed to have a small solar energy collection system located on the roof or attached to a structure, or an application to establish a system on an existing structure, shall provide a structural certification as part of the building permit application.

#### **b. Code Compliance**

Small solar energy collection systems shall comply with all applicable building and electrical codes contained in the Salt Lake City International Building Code.

#### **c. Solar Easements**

A property owner who has installed or intends to install a small solar energy collection system shall be responsible for negotiating with other property owners in the vicinity for any desired solar easement to protect solar access for the system and shall record the easement with the Salt Lake County Recorder.

#### **d. Off-Street Parking And Loading Requirements**

Small solar energy collection systems shall not remove or encroach upon required parking or loading areas for other uses on the site or access to such parking or loading areas.

### **2. Small Solar Collection Systems And Historic Structures**

#### **a. General**

In addition to meeting the standards set forth in this ordinance, all applications to install a small solar collection system within the Historic Preservation Overlay District shall obtain a Certificate of Appropriateness prior to installation. on an historic structure, a lot upon which an historic structure is located, or a lot within a designated historic district shall be approved by the historic landmark commission. If there is any conflict between the provisions of this subsection and any other requirements of Section 21A.40.180, Small Solar Energy Collection System, the provisions of this subsection shall take precedence,

**b. Installation Standards**

- (1) The small solar energy collection system shall be installed in a location and manner on the building or lot that is least visible and obtrusive and in such a way that causes the least impact to the integrity of the historic resource while maintaining the efficient operation of the solar device.
- (2) In approving a specific location and method of installation of the small solar energy collection system, reasonable restrictions may be imposed to ensure the small solar energy collection system is compatible with the character-defining features of the historic structure. "Reasonable restrictions" are defined for purposes of this section as requirements that do not impose additional costs exceeding \$2,000 or decrease system performance by more than 20 percent. Consideration of an alternative energy system of comparable cost, efficiency, and energy conservation benefits that has a demonstrably lesser impact on the historic structure may also be required.

**c. Small Solar Collection System Location Priorities**

In approving appropriate locations and manner of installation, consideration shall include the following locations in the priority order they are set forth below. The method of installation approved shall be the least visible from a public right-of-way and most compatible with the character-defining features of the historic structure while providing efficient operation of the solar device.

- (1) Back yard of an historic structure in a location not readily visible from public right-of-way (except an alley).
- (2) An accessory building or structure (such as a garage), in a location not readily visible from a public right-of-way (except an alley).
- (3) In a side yard of an historic structure in a location not readily visible from a public right-of-way (except an alley).
- (4) On the historic structure, in a location not readily visible from a public right-of-way (except an alley).
- (5) On the historic structure, in a location that may be visible from a public right-of-way, but not on the structure's front façade.