Accessory Solar Energy Systems


- Hermosa Beach (California), City of. 2014. *Municipal Code*. Title 17, Zoning; Chapter 17.46, Yard, Height, and Area Restrictions; Section 17.46.220, Solar Energy Systems Can Exceed Height Limits.

- Huntsville (Alabama), City of. 2012. *Ordinance No. 12-466: To Amend the Zoning Ordinance of the City of Huntsville, Alabama*.


- Rock Hill (South Carolina), City of. 2014. *Zoning Ordinance*. Article 4, Use Regulations; Section 4-400, Accessory Uses and Structures; Table 4-400(B), Table of Permitted Accessory Uses. Part 4-400(D)(19), Accessory Uses and Structures Allowed – Ground-Mounted Solar Installations. Article 5, Density, Intensity, and Dimensional Standards; Table 5-200(A), Allowable Yard Encroachments. Article 6, Development and Design Standards; Section 6-800(B)(2)(e), Residential Design Standards – Roof Penetrations and Equipment. Section 6-800(C)(9)(c). Commercial and Institutional Design Standards - Roof Penetrations and Equipment. Article 10, Definitions.


- Troy (Michigan), City of. 2013. *Zoning Ordinance*. Article 2, Section 2.02, Definitions. Also see Article 12, Sustainable Design and Development Standards; Section 12.05, Solar Structures and Easements.
(b) For developments greater than two hundred (200) storage units, five (5) off-street parking spaces shall be provided on the property for the first two hundred (200) units, and one additional parking space is required for every one hundred (100) storage units thereafter.
(c) Except for purposes of loading and unloading, there shall be no parking or storage of trucks, trailers, and moving vans.

(8) **Prohibited Uses.**
   (a) The following uses and activities shall be prohibited:
   (i) Any business activity other than the rental of storage units, including miscellaneous or garage sales and transfer-storage enterprises that utilize vehicles as part of said business is prohibited.
   (ii) Servicing or repair of motor vehicles, boats, trailers, lawnmowers, or similar equipment is prohibited.
   (iii) Outdoor storage of boats, vehicles, or other materials is prohibited. All items stored on the property shall be located within buildings.
   (iv) Storage of hazardous, toxic, or volatile substances is prohibited.
   (v) Residential uses, other than one (1) unit for a 24-hour facility caretaker not to exceed 1,200 square feet.

(9) **Changes.** Minor changes to the approved Site Development Plan may occur after staff of the Department of Planning and Housing has determined that the proposed changes are minor in nature, and revised plans have been provided to the Department for the purposes of keeping the Site Development Plan current.
   (a) Minor changes are defined as changes that:
   (i) Do not constitute a change in land use of the project; or layout and design;
   (ii) Do not increase the density or intensity of use, the number of buildings, or change in number of storage units.
   (iv) Do not change the overall landscape design;
   (v) Do not change the height or placement of buildings, or other major features.

*Ord. No. 3794, 08-24-04*

**Sec. 29.1309 SOLAR ENERGY SYSTEMS.**

**Purpose.** Solar energy is a clean, readily available and renewable energy source. This section establishes regulations to facilitate the installation and construction of Solar Energy Systems so that systems are safe, effective, and efficient, as well as harmonious with the character of the adjacent area where located. The provisions of this Section apply to the placement, construction and use of “solar energy systems” as defined in this chapter.

The following standards shall apply to the development of Solar Energy Systems:

(1) **Allowed Use.** Solar Energy Conversion is an allowed accessory use in all zoning districts pursuant to the standards in this section.

(2) **District Classifications.**
   (a) Residential Properties. As used in this subsection residential properties include those zoned RL, RM, UCRM, RH, RLP, FS-RL, FS-RM, and also F-VR, F-PRD, and S-SMD.
   (b) Non-residential Properties. As used in this subsection, all properties not zoned in the residential classifications above shall be classified as non-residential property.

(3) **Freestanding Solar Energy Systems:**
   (a) **Setbacks**
      (i) Front. Solar Energy Systems shall not be located within any required front setback. They may be located in a front yard (beyond the required front setback line) subject to approval of a Solar Energy System Special Use Permit by the Zoning Board of Adjustment.
      (a) Front yard, as used in this section, is the space between the principal building on the lot and the front lot line. See definition and graphic in Section 29.406(7)(e).
      (ii) Side and Rear. Six (6) feet from all property lines and other structures.
(iii) Corner and Through Lots. The definition and requirements for a front yard in Section 29.406(7)(e) shall prevail when the subject lot is not an interior lot.

(iv) Easements, Utilities, Rights of Way. No portion of any solar energy system shall extend into any easement, right of way or public way, regardless of above stated exceptions and regulations for setback and yard requirements.

(b) Location. Systems shall be located on the same lot as the building being served.

Where there is no principal building, the system is not allowed.

(c) Height. Six (6) feet in height maximum in side and rear yards. Four (4) feet in height maximum in front yards. The height shall be measured from the grade at system base to the highest peak, including the highest position of any adjustable system.

(d) Freestanding System Size:

(i) Residential Properties. Systems shall not exceed one-tenth (1/10) the footprint of the principal building served or one hundred (100) square feet, whichever is greater.

(ii) Non-Residential Properties. Systems shall not exceed one-half (1/2) of the footprint of the principal building served.

(iii) Lot Coverage. Freestanding systems shall be included in the maximum lot coverage or minimum landscaped area calculations except that up to 40 square feet is allowed regardless of total lot coverage.

(iv) Measurement of the system shall be based upon the area of the solar receiving panel, regardless of the adjustment angle of the panel.

(v) A freestanding system, or portion thereof, not visible from abutting street rights of way at any time of the year is exempt from maximum size and coverage calculations.

(4) **Residential Attached Solar Energy Systems** are permitted to be located on the roof or attached to a building, subject to all of the following:

(a) In the case of wall mounting, no part of the system shall project more than five (5) feet from the building.

(b) In the case of front wall mounting, attached systems are only allowed subject to approval of a Solar Energy System Special Use Permit by the Zoning Board of Adjustment. The front wall, as used in this section is defined as any wall coincident with the front yard as defined in Section 29.406(7)(e).

(c) No part of the system shall extend more than 50 percent into any required side or rear setback. No part of the system shall extend into any required front setback.

(d) No portion of any solar energy system shall extend into any easement, right of way or public way, regardless of above stated exceptions and regulations for setback and yard requirements.

(e) Systems shall not exceed the maximum height in the zone, for the structure to which it is attached.

(f) The building must have a conforming principal use.

(g) Roof attached systems may be mounted on principal and accessory building roofs provided they conform to the maximum height standards established in the zone. Additionally, systems shall be mounted parallel to the pitch of the roof and be no higher than 6 inches from the roof surface except that systems not meeting the flush mount requirement may be allowed subject to approval of a Solar Energy System Special Use Permit, provided they do not project more than 5 feet from the roof surface. A system or a portion of a system not visible from abutting street rights of way is exempt from the flush mount requirement, but no part of the system shall project higher than 5 feet from the roof surface.

(h) Section 29.401(5), pertaining to height exceptions for architectural features and projections shall not apply.

(i) Section 29.402(2), pertaining to exceptions for projections into required setbacks shall not apply.

(j) There is no surface area size limitation on attached systems, unless otherwise required by a Solar Energy System Special Use Permit.

(5) **Non-Residential Attached Solar Energy Systems** are permitted on the roof of, or attached to a non-residential building, subject to all of the following:

(a) For wall mounting, no part of the system shall project more than five (5) feet from the wall.
(b) For roof mounting, no part of the system shall project more than ten (10) feet from the roof.
(c) No part of the system shall extend more than 50 percent into any required side or rear setback. No part of the system shall extend more than 20 percent into any required front setback.
(d) No part of the system shall exceed the maximum height permitted in the zone, for the structure to which it is attached.
(e) The building must have a conforming principal use.
(f) Section 29.401(5), pertaining to height exceptions for architectural features and projections shall not apply.
(g) Section 29.402(2), pertaining to exceptions for projections into required setbacks shall not apply.

(6) **Zoning Permit-Exempt systems.** The following systems are exempt from zoning permit requirements:
(a) Systems in which the cumulative surface area of the system is four (4) square feet or less
(b) Systems or building parts integral to the structure, that are passive (Passive Solar Energy Systems) in nature and do not project from the structure

(7) **Code Compliance.** Solar Energy Systems shall comply with all applicable building codes and are not exempt from any such inspections and permits. The applicant or designee is encouraged to meet with the regulatory and utility agencies before purchasing equipment to understand feasibility and code requirements prior to applying for a zoning permit.

(8) **Solar Access.** A property owner who has installed or intends to install a solar energy system shall be responsible for negotiating with other property owners in the vicinity for any necessary solar easement. The granting of a zoning permit or Special Use Permit by the City does not constitute solar access rights.

(9) **Historic Districts.** All solar energy systems within a historic overlay district are not permitted unless a Certificate of Appropriateness has been granted by the Historic Preservation Commission pursuant to Chapter 31, Municipal Code. None are exempt.

(10) **Application for Solar Energy System Zoning Permit (SES ZP)**
The Planning & Housing Director shall prescribe the application form and any necessary submittal requirements, as needed, to determine compliance with this section. The Zoning Permit application shall include, but not be limited to:
(a) A plot plan drawn to scale, showing:
   (i) Existing structures on the lot
   (ii) Proposed system
   (iii) Property lines
   (iv) Setbacks of existing and proposed structures
   (v) Rights of way
   (vi) Utility diagram applicable to proposed system

(b) Elevation views and dimensions
(c) Manufacturer’s photographs
(d) Manufacturer’s spec sheet including capacity
(e) Demarcation of dimensions. For systems claiming exemption due to “no-visibility” from abutting street rights of way, the applicant shall place demarcation posts, rods or balloons and schedule an appointment for staff to confirm no visibility.
(f) Certificate of Appropriateness from Historic Preservation Commission, if applicable

(11) **Issuance of Solar Energy System Zoning Permit (SES ZP)**
The Planning & Housing Director shall review the permit application. If the application is compliant, an approval shall constitute a Solar Energy System Zoning Permit (SES ZP) and the applicant shall then be authorized to seek any other necessary building permits and approvals before installation. Any decision of denial shall be in writing and supported by substantial evidence contained in a written record. The Zoning Permit can be revoked if there is evidence that the system does not comply with the permit.

(12) **Solar Energy System Special Use Permit (SES SUP):**
(a) Application. The Planning & Housing Director shall prescribe the application form and any necessary submittal requirements, as required in this Section and Section 29.1503. The Director can waive any of the submittal requirements of a SES SUP upon request of the applicant, which the Director deems not applicable.
(b) Procedure. The procedure shall follow Section 29.1503(a), Special Use Permits. Sections 29.1503(b-d), (Residential Zone Standards, Commercial Zone Standards and Functional Families) shall not apply to the review of SES SUP applications.
(c) Review Criteria. To approve a SES SUP, the Zoning Board of Adjustment must find that the proposal conforms to all of the following five criteria (i-v) and either vi. OR vii.:

(i) The system will be harmonious with the character of the neighboring properties as they exist on the date of approval, which is defined as properties within 200 feet of the system property.

(ii) Access to open space (air and light) from the neighboring properties is not significantly reduced.

(iii) If in a historic district, a Certificate of Appropriateness has been granted by the Historic Preservation Commission.

(iv) The predominate pattern of building placement, height, orientation and scale among the neighboring properties and general area beyond the neighboring properties will not be negatively impacted or altered by the system.

(v) The system conforms with all other city, state and federal regulations

AND EITHER

(vi) Unique topography, vegetation or lot conditions exist which help to shield the system from the view of neighboring properties and from the street.

OR

(vii) Placement of the principal building allows the system to be located and operated in a way that helps to shield the system from the view of neighboring properties and from the street.

(d) Review and Approval. The Zoning Board of Adjustment can request additional information if insufficient information is presented to determine conformance with the criteria. If approved, the SES SUP can be revoked after a public hearing, if there is evidence that the system does not comply with the provisions of the Special Use Permit. The Board may impose conditions as it deems necessary for the general welfare of the public and for ensuring that the intent and objectives of this Ordinance will be observed. The application shall include the same information required for a SES ZP, and shall also include statements addressing how the application meets the criteria of subsection C above.

When a Solar Energy System Special Use Permit is approved, it shall constitute the equivalent of the Solar Energy System Zoning Permit.

(13) Site Development Plan Exemption. A Freestanding Solar Energy System is exempt from Site Development Plan requirements if the surface area of the system is less than 150 square feet as measured in this Section.

(14) Exception Provisions Not Applicable. An Exception for a Minor Area Modification, as defined in Section 29.1506 shall not be allowed or applicable to Solar Energy Systems.

(15) Interconnection: Interconnected Solar Energy Systems are allowed subject to the standards in this section. Evidence of a signed interconnection agreement with the applicable electric utility shall be submitted to the Department of Planning & Housing prior to approval of any interconnected solar energy system. The applicant is encouraged to work with the applicable utility before purchasing equipment. The maximum allowable rated capacity of an Interconnected Solar Energy System is 10 kW, or 10,000 Watts unless evidence from the applicable utility has demonstrated that safe interconnection can be achieved and the need is for on-site usage for the principal use of the property. Any system over 100 kW is not allowed.

(16) Abandonment: System use shall be determined abandoned under the provisions of Section 29.307, which requires notice by the Zoning Enforcement Officer to the property owner. The system shall be removed within 90 days of the termination date, at the cost of the property owner.

(17) Signage: Any signs on the system shall be limited to one square foot.

(18) Commercial systems: A Commercial Solar Energy System is not allowed in the City of Ames.

(19) Appearance. The property owner of any solar energy system shall maintain such system in a safe and attractive manner, including replacement of defective parts, painting, cleaning, and other acts that may be required for the maintenance and upkeep of the function and appearance of such a system. The owner shall also maintain the ground upon which the system is located in an orderly manner, such that it is free of debris, tall grass and weeds, and any associated structures remain quality in appearance.

(20) Underground Wire Requirement. Wires shall be underground or otherwise concealed, to the greatest extent possible, where crossing open areas.

(21) Industry standard: Before any Solar Energy System zoning permit is issued for a Solar Energy...
System, evidence shall be shown that the system and parts meet industry standards, such as Underwriters Laboratories (UL), or another standard applicable to the technology and materials of the system.

(Ord. No. 4013, 11-10-09)

Sec. 29.1310. WIND ENERGY SYSTEMS.

(1) Intent.
   (a) Purpose. Wind energy is a clean, readily available and renewable energy source. This section establishes regulations to facilitate the installation and construction of Wind Energy Systems so that systems are safe, effective, and efficient and have minimal impact on surrounding development. The provisions of this Section apply to the placement, construction and use of “wind energy systems” as defined in this section.

(2) Definitions. See Sec. 29.201

(3) General Regulations.
   (a) A Small Wind Energy System (SWES) shall be allowed only as an accessory use to a permitted principal use on the same legalized lot. Commercial systems are not allowed. Non-electric systems are not regulated by this chapter.
   (b) Zoning: SWES are allowed only in PRC (Planned Regional Commercial), HOC (Highway-Oriented Commercial), GI (General Industrial) and PI (Planned Industrial) zoning districts subject to the provisions contained herein and elsewhere within the Municipal Code.

(4) Permit Required:
   (a) It shall be unlawful to construct, erect, install, alter or locate any SWES within the City of Ames, unless both a SWES Zoning Permit and a Building Permit have been obtained. The Zoning Permit may be revoked by the City of Ames any time the approved system does not comply with the rules set forth in this Section.
   (b) After a Zoning Permit has been issued, the owner/operator of the SWES shall obtain a building permit from the City of Ames Building Official prior to commencing construction of the system. Authorization for interconnection is independent of the approval for the SWES zoning and building permits. If an interconnected system is planned, the utility’s interconnection requirements must also be satisfied, and no building permit shall be issued until the Building Official has been provided with the utility’s written authorization.
   (c) In order to obtain a SWES Zoning Permit, a SWESZP application must be submitted to the Planning and Housing Department, in conformance with the Minor Site Development process and submittal requirements. The Planning and Housing Director, upon request of the applicant, may waive any of the submittal requirements that he or she deems not applicable. The Director may also require additional information as minimally needed to determine compliance with the Municipal Code. In addition to the requirements of Section 29.1502, the following information shall be submitted:
      (i) Manufacturer specifications of the proposed system
      (ii) Photographs or renderings of the proposed system
      (iii) Elevation drawings of the proposed system, including as applicable:
           (a) Elevation of building to which attached
           (b) Distance to other objects on the property, such as trees,

(5) Tower: Only monopole towers are permitted for freestanding Small Wind Energy Systems in the HOC, PRC, and PI zones. Either monopole or lattice towers are permitted in GI zones. Guyed towers or any other types of towers are not permitted.

(6) Color and Surface: Freestanding SWES shall be a neutral color such as white, sky blue, or light gray. Supporting structures for building mounted SWES shall match the color of the building on which they are mounted. Surfaces of the SWES and building mounted supporting structures shall be non-reflective

(7) Lighting: No lights shall be installed on the tower, unless required to meet FAA guidelines.

(8) Signage: Any signs on the system shall be limited to one square foot.

(9) Climbing Apparatus: The tower must be designed to prevent climbing within the first ten feet (10’).

(10) Maintenance: Facilities shall be well maintained in accordance with manufacturer’s specifications. The property owner of any SWES shall maintain such system in a safe and attractive manner, including replacement of defective parts, painting, cleaning, and other acts that may be required for the maintenance and upkeep of the function and appearance of such a system. The owner shall also maintain the ground upon which the system is located in an orderly manner, such that is free of debris, tall grass and weeds, and any associated structures remain quality in appearance.
AN ORDINANCE TO ADD A NEW CHAPTER 484 “SOLAR ENERGY SYSTEMS” TO THE TOWN CODE OF BETHANY BEACH

Whereas, the Town Council has determined that it is desirable for the Town to permit and regulate the use of Solar Energy Systems in the Town of Bethany Beach; and

Whereas, the Town Council has determined that the use and regulation of Solar Energy Electrical Systems in the Town will reduce the need for additional electrical generation and distribution and tend to reduce atmospheric pollution that are considered harmful to the environment; and

Whereas, the Town Council recognizes that it is necessary to regulate the use and placement of Solar Energy Systems in the Town because of the impact of said Systems on both building site improvements and overall Town aesthetics;

BE IT HEREBY ENACTED by the Town Council of the Town of Bethany Beach, a majority thereof concurring in Council duly met, that the following ordinance be and hereby is enacted:

Section 1. A new Chapter 484 entitled “Solar Energy Systems” shall be added to the Bethany Beach Town Code. The Chapter shall read as follows:


Section 484-1. Legislative Intent. Solar Energy Electrical Systems in the Town will reduce the need for additional electrical generation and distribution and tend to reduce atmospheric pollution that is considered harmful to the environment. There is a need to recognize both the permitted use and the regulation of solar energy systems because their placement within the Town of Bethany Beach affects both building site improvements as well as overall Town aesthetics. The use of solar energy systems is encouraged in the Town of Bethany Beach.

Section 484-2. Definitions.

Accessory Structures:
All accessory structures shall be located within the rear yard space on a lot or plot on
which a principal building or structure is erected or is being erected and shall be limited to three in number, including any detached garage. Accessory structures shall comply with all safety and structural requirements set by the Bethany Beach Building Inspector. No accessory structure or projection thereof shall be less than five feet from a property line. § 425-10. Accessory buildings. [Amended 4-18-1986 by Ord. No. 169; 3-16-2007 by Ord. No. 423]

Solar Energy Systems:
An energy system which converts solar energy to usable thermal, mechanical, chemical or electrical energy to meet all or a significant part of a building’s energy requirements.

Solar Energy Equipment:
Items including but not limited to solar panels, lines, pumps, batteries, mounting brackets, framing and/or foundations used for or intended to be used for the collection of solar energy in connection with a building on residential, municipal or commercial properties. Solar energy equipment and its use is accessory to the principal use of the property.

Section 4843. Regulations.

A. Solar energy systems are a permitted use in all zoning districts.
B. The placement of solar energy equipment on roofs of principal buildings is preferred and encouraged. For Town aesthetic purposes the front slope of the principal building shall not be used unless no other location of the solar energy equipment is feasible.
C. All exterior plumbing and electrical lines must be painted and/or coated to match the color of adjacent roofing material and walls. All visible exterior plumbing and electrical lines must not be installed in any portion of the front of the property. Aluminum trim, if used and visible, should be anodized or otherwise color treated to blend into the surroundings as much as possible.
D. Roof mounted solar energy systems on the principal building shall not be more than three (3) feet higher than the finished roof to which it is mounted. In no instance shall any part of the solar energy panels extend beyond the edge of the roof.
E. Roof mounted solar energy equipment shall be located so as not to increase the total height of the structure above the maximum allowable height of the structure on which it is located, in accordance with the applicable zoning regulations.
F. There is no limit to the number of modules and arrays installed on each property that comprise a solar energy system. The number of solar panels and supporting equipment shall be considered as one system.
G. The placement of ground mounted solar energy equipment may be permitted if the solar energy equipment is unable to be located on the roof of the principal structure, but all ground mounted solar energy equipment are considered to be an accessory structures. Prepackaged UL listed solar energy based lighting systems that do not involve any installation are exempt from this provision.
H. Solar energy commercial operations are prohibited as a principle use. These are systems whose main purpose is to generate energy for sale back into the energy grid system, rather than being consumed on the site.
I. Only commercially made and professionally installed solar energy systems are permitted. All solar energy systems shall be installed by licensed installers that are approved as Participating Contractors by the Green Energy Fund and/or are Certified Installers by the NABCEP and/or have proof of professional training and licensure.

Section 484-4, Permitting and Enforcement. The Town, prior to the issuing a building permit for the installation of any solar energy equipment, shall be provided with any requested information in regard to proving compliance with this section of the Town Code. This information may include but shall not be limited to the following:

A. Sun and shadow diagrams specific to the installation, which would enable the Town to determine if solar access will be impaired due to the proposed location or to the location of objects which may obstruct the solar access.

1. Solar pathfinder results shall be provided for all cases where shading occurs between 9:00 a.m. and 3:00 p.m.
2. Results of the solar shade analysis must determine that seventy percent (70%) of the annual solar path's area is shade free to be considered for a solar energy grant.

B. The Town may also require submission of detailed information, including maps, plans or dimensional sketches, showing the proposed location, including setbacks from property lines or distances from structures on neighboring properties.

C. The Town may also require the submission of an as-built plan showing the actual location of any installed solar energy equipment. If the equipment is not installed as permitted, the Town may order its removal and/or its relocation as appropriate.

1. All solar energy systems shall meet the minimum criteria as specified in the Green Energy Fund Guidelines and shall be installed to meet all applicable local building and zoning codes. Manufacturers specifications and proof of certification shall be submitted for review and approval.

D. Any and all non-functioning and/or damaged solar panels or equipment shall be dismantled by a licensed professional as described herein and removed within three (3) months of written notification from the Building Inspector. Failure to do so will be considered a violation under the Town's Property Maintenance ordinances and will be subject to penalties and fines as referenced in Chapter 1, General Provisions, Section 1.1 Fines and Penalties.
Synopsis

This ordinance amends the Town Code to include a new Chapter 484 regulating the use of Solar Energy Systems within the Town. The ordinance addresses the purpose for this legislation, defines key terms related to Solar Energy Systems, imposes regulations for the use and installation of Solar Energy Systems, and implements a permitting and enforcement provision unique to Solar Energy Systems.

This shall certify that this is a true and correct copy of the ordinance duly adopted by the Town Council of the Town of Bethany Beach at a duly-noticed and convened meeting at which a quorum was present on 5-21th, 2010.

Attest: 
Town Clerk

So Certifies:
Mayor

This shall certify that the title and synopsis of the foregoing ordinance was posted at the Town Hall on 1-22-2010 and published in The Wave on 1-23-2010.

So Certifies:
Town Clerk

This shall certify that the title, synopsis, date of adoption, and effective date of the foregoing ordinance was published in The Wave on 6-23-2010 and that a copy of the foregoing ordinance was posted at the Town Hall on 6-23-2010.

So Certifies:
Town Clerk
Blaine County, Idaho
County Code (2013)
Title 9, ZONING REGULATIONS

Chapter 3B UTILITIES FACILITIES; SOLAR

9-3B-1: PURPOSE AND INTENT:
9-3B-2: DEFINITIONS:
9-3B-3: ZONING REGULATIONS:
9-3B-4: OVERLAY DISTRICTS STANDARDS:
9-3B-5: EXCEPTION TO LOT LINE SETBACK REQUIREMENTS FOR GROUND OR POLE MOUNTED SOLAR ENERGY COLLECTING SYSTEMS:
9-3B-6: ADMINISTRATIVE REVIEW APPLICATION:

9-3B-1: PURPOSE AND INTENT:

It is Blaine County's intent to encourage the use of active solar systems for heating air and water and producing electricity in homes and businesses, as long as disruption to the site specific natural topography, riparian areas, wetlands, and hazard areas are mitigated or avoided and these areas are preserved. (Ord. 2010-11, 12-7-2010)

9-3B-2: DEFINITIONS:

CERTIFIED ENERGY AUDITOR: Residential energy auditor accredited by the Building Performance Institute (BPI) or the Residential Energy Services Network (RESNET).

ENERGY AUDIT: An evaluation of the energy efficiency of a residential structure by a certified energy auditor using professional testing including, but not limited to, a blower door and duct leakage test. The audit shall include at minimum the following: a) an assessment of the various characteristics of the building envelope including, but not limited to, the walls, ceilings, floors, doors, windows, and skylights b) lighting analysis c) appliance analysis d) prioritized list of energy improvements with estimated simple paybacks.

RESIDENTIAL SOLAR COLLECTOR SYSTEM: A net metered solar collector system, as defined in this chapter, that produces no more than twenty five (25) kW.

SOLAR COLLECTOR MOUNTS: Mounting arrangements that hold various devices for the absorption of solar radiation for the heating of water or buildings or the production of electricity.

Building Integrated Photovoltaics (BIPV) Mount: A solar collector system that is integrated into the structure of a building. Common BIPV applications include carports, awnings, and curtain walls.

Ground Mount: A solar collector system where an array is mounted onto the ground. The most common type of ground mount is a wedge structure constructed from steel supports anchored in concrete footings. The remainder of the structure is built from aluminum or galvanized steel.

Pole Mount: A solar collector system that consists of an array that is mounted on top of a single steel pole, which is ground mounted. This type of installation can be manually adjustable, so that the pitch of the array at different times of the year can be changed.
Roof Mount: A solar collector system with an array of solar panels located on the roof of a structure. In most cases this array will be attached directly to the structural members of the building.

SOLAR COLLECTOR SYSTEM: A system that is comprised of photovoltaic collectors designed to convert solar energy into electric energy or plate type collectors designed to use solar energy to heat air, water, or other fluids for use in hot water or space heating or other applications. A solar collector system's primary purpose shall be limited to supplying or offsetting energy needs of residences and businesses and shall not exceed the residential peak production capabilities as defined by Idaho Power. (Ord. 2010-11, 12-7-2010)

9-3B-3: ZONING REGULATIONS:

The placement, use or modification of a solar collector system shall be an allowed use in all zoning districts, provided the system meets zoning standards set out in subsections A through H of this section and section 9-3B-4 of this chapter. To lawfully install a solar collector system a solar permit shall be required. Repair, maintenance, replacement or upgrade of equipment to an existing solar collecting system installed prior to adoption of this chapter shall not be required to obtain a solar collector permit. The following shall be found to be true prior to issuance of a solar collector permit:

A. Photovoltaic solar collector panels are certified by the Solar Collector And Certification Corporation (SRCC);

B. Collector system panels and mounts are installed per manufacturer's specifications;

C. Solar panels mount systems located on roofs are installed to meet the international building code standards for wind loads. If panels do not contain wind load specification or circumstances require a modification to installation per the manufacturer's specifications an engineer shall review and certify that the modifications meet wind load standards as outlined in international building code and as amended Blaine County building code;

D. The building official has reviewed mounting plans to ensure the roof's structural integrity is maintained;

E. BIPV and roof collector mounted panels do not exceed five feet (5') from the top of a residential structure or forty feet (40') from natural grade;

F. Barn roof mounted systems meet the height standards outlined in the A-20 and A-40 zoning districts;

G. Ground and pole mounted solar collectors are firmly anchored and:
   1. Do not exceed fifteen feet (15') above grade; or
   2. Collector panels located on isolated slopes, not within the MOD, do not exceed twenty feet (20') above grade;

H. Solar collector system is located in a building envelope or solar collector system is located outside the building envelope and is not located within an overlay district, or has been found to comply with the standards set out in section 9-3B-4 of this chapter;
I. Collector systems located in the MOD have been categorically excluded or have received a site alteration permit. (Ord. 2010-11, 12-7-2010)

9-3B-4: OVERLAY DISTRICTS STANDARDS:

Solar permit applications located in an overlay district have the burden of demonstrating compliance with each of the standards of evaluation as set forth in this section.

A. Mountain Overlay District: Solar collector systems visible from a reference road shall be required to receive a site alteration permit per the standards, notice, and hearing requirements set out in chapter 21 of this title. The following standards, as outlined below, shall also be incorporated into site alteration review of solar collector systems which are visible from a reference road:

1. No location with solar potential equal to the proposed MOD location exists on the lot outside of the MOD for a solar system.

2. A reflection analysis from a qualified professional shall demonstrate the angle of the collector panels do not create line of sight reflection as viewed from a reference road.

3. Solar thermal collector panel glazing shall be tempered, low or no iron glass with transmittance greater than ninety percent (90%) or of an equivalent measure and outcome.

4. Solar thermal collector panel absorber coating shall have absorptivity greater than ninety five percent (95%) and emissivity less than ten percent (10%) or of an equivalent measure and outcome.

B. Scenic Highway Overlay District:

1. Collector systems located within one hundred feet (100’) of Idaho State Highway 75 right of way, excluding lands within the jurisdiction of an incorporated city, are subject to the scenic highway overlay district (SHO) standards, notice, and hearing requirements as set out in chapter 21A of this title.

C. FEMA Mapped Floodplain And Floodway: The placement of the collector systems within the floodplain or riparian overlay district may be permitted if the collector system does not cause increased flood heights or velocities and the following are found to be true:

1. No location with solar potential equal to the proposed FEMA floodway or floodplain location exists on the lot outside of the mapped FEMA floodway or floodplain for a solar system.

2. Collector systems panels located in the designated floodplain are two feet (2’) above base flood elevation.

3. Collector systems located in the designated floodplain are securely anchored and will stay in place during a 100-year flood event.

4. Placement of the collector system will result in no net loss or destruction of established native riparian vegetation located within the riparian setback.
D. Wetland And Riparian Overlay Districts: Placement of solar panels in a wetland may be permitted if the collector system does not impede wetlands function and the following are found to be true:

1. No location with solar potential equal to the proposed wetland or riparian location exists on the lot outside of wetlands or riparian setback for a solar system.

2. Placement of the collector system will result in no net loss or destruction of established native riparian vegetation.

3. No fill or excavation is required to install the collector system other than the minimum fill for pole or ground solar collector mounted systems' footings. (Ord. 2010-11, 12-7-2010)

9-3B-5: EXCEPTION TO LOT LINE SETBACK REQUIREMENTS FOR GROUND OR POLE MOUNTED SOLAR ENERGY COLLECTING SYSTEMS:

Exceptions to the minimum front, side and rear yard setbacks for single-family detached residences, duplexes, and manufactured homes may be allowed when the following is found to be true:

A. Pole and ground mounted systems shall be located at minimum 1.1 times the distance of vertical height of the solar collector system from property lines, residential structures and roads on subject property.

B. Landowners directly adjacent to the requested setback waiver are notified of the issuance of a solar permit within five (5) business days of its issuance. (Ord. 2010-11, 12-7-2010)

9-3B-6: ADMINISTRATIVE REVIEW APPLICATION:

The administrator shall review the solar permit application submittal for compliance to the submittal requirements set forth herein. Once it has been determined by the administrator that the submittal requirements have been satisfied, the administrator shall certify the application as complete and have twelve (12) business days to issue the administrative determination.

A. Application Process: Application for a solar collector permit shall be made on a form furnished by the administrator and shall be filed by the applicant(s). The application fee, established by a resolution of Blaine County, shall accompany each application. Additional fees resulting from the technical review by the county engineer or other qualified person as designated by the county are the responsibility of the applicant, and shall be paid prior to permit issuance. No application shall be certified as complete unless it includes the following minimum information in sufficient detail for the administrator to determine compliance with the standards of evaluation as set forth in this chapter. Based upon site specific circumstances, and upon appropriate findings, the administrator may require additional information in order to render a decision on an application. Further, the administrator may waive certain submittal requirements based upon site specific conditions and appropriate findings.
B. Application Requirements: The application for solar collector system shall include at a minimum the following items:

1. Name, address and telephone number of the applicant as well as any agents for the applicant.

2. Original signature for the applicant applying for the solar permit. If the applicant is represented by an agent, original signature authorizing the agent to represent the applicant is required.

3. A complete legal description of the subject property. A vicinity map shall be included.

4. Zoning designation of subject property including any overlay districts.

5. Standard drawings of the solar collector system, including design and dimensions of panels, base, mounting poles, footings, anchors that display the overall height from natural grade to tip of upmost panel and the square footage of the solar panels.

6. Projected amount of energy created or offset by solar collector system.

7. If applicable base flood elevations for project site.

8. If the system is located in an overlay zone or in a front, rear, or side yard setback an "energy audit", as defined in this chapter, conducted by a RESNET or BPI certified energy auditor.

9. Provide manufacturer's specification sheets on all components including, but not limited to, inverters and panels, which include the make, model, listing, size, weight, snow and wind loads if available.

10. A reflection analysis from a qualified professional when a collector system is located in the MOD and is visible from a reference road.

11. If applicable a jurisdictional wetlands determination from army corps of engineers.

C. Site Plan: The application for a solar collector system shall include at a minimum a plan drawn to scale of no less than one inch equals twenty feet (1" = 20’), specifying the following:

1. A scaled layout of the solar collector systems as proposed on the property or building. Site plans for ground or pole mounted systems should include building envelope, base flood elevations (if applicable), overlay district boundaries and the location and footprints of structures, adjacent roads, and property lines.

2. The location(s) of the panel installations, the main service location, and the locations of all equipment and disconnects (i.e., located on exterior face of west wall of house and clarify any interior locations of equipment). (Ord. 2010-11, 12-7-2010)

Footnote 1: Pole mounts need 4 feet of snow clearance. Panels are on average 5 feet x 3 feet; sometimes they will stack 2 panels on 1 pole mount. Jon Riley of Whole Energy Solar indicates the majority of pole mounted systems will not need to be more than 15 feet high, as measured from the top of the panel.

Active solar energy systems shall not be considered an accessory use under Title IX, Building and Construction Ordinance (BACO), Chapter 2300, Detached Accessory Structures, and shall comply with all requirements as set forth below.

(1) Height. Solar systems shall not exceed the maximum allowed height in any zoning district. For purposes for height measurement, solar systems other than building-integrated systems shall be considered to be mechanical devices and are restricted consistent with other building-mounted mechanical devices.

(2) Setback. Active solar systems must meet the accessory structure setback for the zoning district and primary land use associated with the lot on which the system is located.

   a. Roof-mounted solar systems. In addition to the building setback, the collector surface and mounting devices for roof-mounted solar systems shall not extend beyond the exterior perimeter of the building on which the system is mounted or built. Exterior piping for solar hot water systems shall be allowed to extend beyond the perimeter of the building on a side yard exposure.

   b. Ground-mounted solar systems. Ground-mounted solar energy systems may extend into the side-yard or rear setback provided that no exposed electrical components, wires, or devices other than the solar collector are at any time within nine feet of the property line. No ground-mounted solar system shall be allowed in an approved easement. In all cases the entire system must maintain a one-foot setback from the property line.

(3) Visibility. Active solar systems shall be designed to blend into the architecture of the building or be screened from routine view from public right-of-ways other than alleys. The color of the solar collector is not required to be consistent with other roofing materials except in those instances when a special use permit is required consistent with the provisions of this chapter. All active solar systems shall be consistent with any approved deed restrictions and covenants.

   a. Building integrated photovoltaic systems. Building integrated photovoltaic solar systems shall be allowed regardless of visibility, provided the building component in which the system is integrated meets all required setback, land use or performance standards for the district in which the building is located.

   b. Solar systems with mounting devices. Solar systems using roof mounting devices or ground-mount solar systems shall not be restricted if the system is not visible from the closest edge of any public right-of-way other than an alley. Roof-mount systems that are visible from the nearest edge of the street frontage right-of-way shall not have a highest finished pitch more than 20 percent steeper than the roof pitch on which the system is mounted. Systems with a pitch more than 20 percent greater than the finished roof pitch must acquire a special use permit.
(4) Approved solar components. Electric solar system components must have a UL listing.

(5) Plan approval required. All solar systems shall require administrative plan approval by the community development department.

(6) Plan applications. At the discretion of the building official, plan applications for solar systems may be accompanied by to-scale horizontal and vertical (elevation) drawings. The drawings must show the location of the system on the building or on the property for a ground-mount system, including the property lines.

   a. Pitched roof mounted solar systems. For all roof-mounted systems other than a flat roof the elevation must show the highest finished slope of the solar collector and the slope of the finished roof surface on which it is mounted.

   b. Flat roof mounted solar systems. For flat roof applications a drawing shall be submitted showing the distance to the roof edge and any parapets on the building and shall identify the height of the building on the street frontage side, the shortest distance of the system from the street frontage edge of the building, and the highest finished height of the solar collector above the finished surface of the roof.

(7) Plan approvals. Applications that meet the design requirements of this chapter, and do not require a special use permit, shall be granted administrative approval by the community development department. Plan approval does not indicate compliance with building code and electric code or approval by the building official.

(8) Compliance with building code. All active solar systems shall meet approval of local construction codes.

(9) Utility notification. No grid-intertie photovoltaic system shall be installed until evidence has been presented to the community development department that the owner has submitted notification to the utility company of the customer's intent to install an interconnected customer-owned generator. Off-grid systems shall not be permitted, unless by special use permit approval.

   a. Due to public health and safety concerns, facilities that use alternative energy systems exclusively for all power needs, and are not connected to a public power source or "grid" for any purpose, (known as "off-grid" systems), shall not be permitted, unless a special use permit is approved in accordance with this chapter.

(10) Special use permit. Where the standards in section 7.167.030 are not met, active solar energy systems shall be considered by a special use permit request. The following conditions shall govern approval of a special use permit application for an active solar energy system. The community development director, for active solar energy systems, may waive the fees for a special use permit application.

(11) Standards for solar system special use permits. When a special use permit is required, the permit may be granted if the applicant demonstrates that the following safety and aesthetic conditions are met:

   a. Aesthetic conditions. The solar system must blend into the building on which the system is mounted by being sufficiently set back from public right-of-ways or
screened from view from the right-of-way, or by using a surface collector color that blends into the roof or wall of the building as seen from the public right-of-way.

b. Safety conditions. The solar system must be anchored in such a manner as to withstand windspeeds up to 90 mph, and must be set back from adjoining properties far enough to not present a threat to accidental contact with electrical components, but in any case no farther than the building setback.

(12) Pole-mounted systems restricted. Pole-mounted or ground-mounted active solar systems shall not be allowed in residential districts between the front of the building and the front public right-of-way.
Title 17, Zoning
Chapter 17.46, Yard, Height, and Area Restrictions

Section 17.46.220 Solar energy systems can exceed height limits.

Solar energy systems shall be installed and constructed in conformance with the following:

A. Purpose:

To promote the use of solar energy systems in accordance with State law while protecting the public health and safety.

B. Definitions:

1. “Ancillary solar equipment” means any accessory part or device of a solar energy system that does not require direct access to sunlight, such as batteries, electric meters, AC/DC converters or water heater tanks.

2. “Solar collector” means any part or device of a solar energy system that requires direct access to sunlight and is typically located on the roof top, such as solar panels and solar hot water or swimming pool heaters.

3. "Solar energy system" means an accessory to the main structure and/or use which comprises of a combination of solar collector(s) and ancillary solar equipment used to generate electricity primarily for consumption on the property on which the system is located, or where multiple consumers or exceptional circumstances exist, on an adjoining property.

C. Development Standards:

1. Solar collectors and solar energy systems may exceed the height limits mandated by this Code to the minimum extent necessary for their safe and efficient operation in accordance with the California Building Code and other applicable provisions of state law.

2. Where feasible, solar energy systems shall be integrated into the design of the structure as an architectural element.

3. Where feasible, roof-mounted solar energy systems shall be located in such a manner as to ensure emergency access to the roof, provide areas for smoke ventilation opportunities and provide emergency egress from the roof.

4. Where feasible, ancillary solar equipment shall be located inside the building or be screened from public view.

5. Solar energy systems shall be erected in a secure, wind resistant manner and be maintained in good condition.

6. Other applicable development standards in this Code may be modified by the Director in the case where compliance would demonstrably reduce the operating efficiency or
performance of a solar energy system and compliance will not adversely impact public health and safety.

(Ord. 08-1295 §2, Oct. 2008)
ORDINANCE NO. 12-466

AN ORDINANCE TO AMEND THE ZONING ORDINANCES OF THE CITY OF HUNTSVILLE, ALABAMA

The public welfare requiring it, and under authority granted by Section 11-52-78 of the 1975 Code of Alabama, BE IT ORDAINED by the City Council for the City of Huntsville, Alabama, that the Zoning Ordinance of the City of Huntsville, Alabama, as adopted on the 21st day of March 1963, as amended, is hereby further amended as follows:

Section 1. Amend ARTICLE 3 - DEFINITIONS, Section 3.1 - Interpretation to add the following new definition:

Photovoltaic Solar Energy Production Facility - consists of one or more freestanding ground, pole, or roof mounted solar collector devices, solar related equipment and other accessory structures and buildings including substations, electrical infrastructure, transmission lines and other appurtenant structures and facilities.

Section 2. Amend ARTICLE 73 - SUPPLEMENTARY REGULATIONS, Section 73.1.1 - Accessory Uses to add the following:

(5) Photovoltaic Solar Energy System, On-Site

A photovoltaic solar energy system ("solar energy system") is permitted in all zoning districts as an accessory use to a principal use except in the case of a non-residential use in a residential zoning district. A solar energy system as an accessory use to a non-residential use in a residential zoning district requires a Special Exception. A solar energy system is considered an accessory use when the power generated from the solar energy system is equal to or less than the expected power usage of the principal use and any other accessory use on the property based on Huntsville Utilities Electric Department estimates. The installation and construction of a solar energy system shall be subject to the following development and design standards:

(a) A solar energy system shall provide no more electricity than is needed for the principal use and/or accessory use of the lot on which the solar energy system is located and shall not be used for the generation of energy for the sale of energy to users other than the homeowner’s primary supplier of electricity.

(b) The owner of a solar energy system connected to the utility grid shall provide written authorization from the local utility company acknowledging and approving such connection.

(c) A solar energy system may be roof mounted, pole mounted or ground mounted.
(d) A roof mounted system may be mounted on a principal building or accessory building. A roof mounted system, whether mounted on the principal building or accessory building, may not exceed the maximum principal building height or accessory building height, as the case may be, that is specified for the building type in the applicable zoning district. In no instance shall any part of the solar energy system extend beyond the edge of the roof. For purposes of the height measurement, solar energy systems other than building integrated systems shall be considered to be mechanical devices and are restricted consistent with other building mounted mechanical devices.

(e) A ground mounted or pole mounted system, measured when oriented at maximum design tilt, shall not exceed the maximum building height for accessory buildings in the applicable zoning district.

(f) Ground mounted and pole mounted solar energy systems shall be located so that any glare is directed away from an adjoining property.

(g) In residential zoning districts, no portion of a solar energy system shall be located within or above any front yard.

(h) In a non-residential zoning district, no portion of a solar energy system shall be located within or above any required front yard.

(i) In all zoning districts, the minimum solar energy system setback distance from the side and rear property lines, measured when the system is oriented at minimum design tilt, shall be equivalent to the accessory building setback requirement of the applicable zoning district.

(j) All electrical lines/utility lines shall be buried underground.

(k) For ground mounted and pole mounted solar energy systems, screening, capable of providing year round screening, shall be provided along the non-reflective sides of the solar energy system or collection of systems.

(l) The installation of a solar energy system shall not cause to apply the requirements of Article 70 -- Off-Street Parking and Loading Requirements or of Article 71 -- Off-Street Parking and Vehicular Use Area (PVA) Landscaping Requirements.

(m) Any solar energy system that has not been in use for its original purpose for a period of one hundred and eighty (180) days shall be deemed to be abandoned. The solar energy system owner and/or the property owner
shall have an additional ninety (90) days to remove the abandoned solar energy system and any appurtenant structures or to reactivate the solar energy system.

Section 3. Amend ARTICLE 92 - BOARD OF ADJUSTMENT, Section 92.5.3 - Permitted Uses as Special Exceptions to add the following:

(34) Photovoltaic Solar Energy System, On-Site, as an accessory use to a non-residential use in a residential zoning district, provided the conditions in Section 73.1.1(5) for on-site solar energy systems in residential districts are met in addition to any other conditions that may be imposed by the Board of Adjustment.

(35) Photovoltaic Solar Energy Production Facility, as a primary use in all non-residential zoning districts except for Residential Office and Office districts, provided all of the following conditions are met in addition to any other conditions that may be imposed by the Board of Adjustment:

(a) Area of use may not exceed five (5) acres onsite with no aggregation of solar collection panels on adjacent properties which exceeds five (5) acres.

(b) Solar energy production facilities shall adhere to the setback and height requirements of the district in which they are located.

(c) Abutting residential properties shall be visually screened from the project through any one or combination of the following: plantings, existing vegetation or fencing (not to exceed eight [8] feet in height). The screening, capable of providing year round screening, shall be provided along the non-reflective sides of the solar energy production facility or collection of facilities.

(d) The manufacturers’ or installers’ identification, the facility owners’ name and contact information, and the appropriate warning signage shall be posted on or near the panels in a clearly visible manner.

(e) All electrical interconnection and distribution lines within the project boundary, except for power lines that leave the project or are within the substation, shall be underground, unless determined otherwise by the Board of Adjustment because of severe environmental constraints.

(f) Lighting of the solar energy production facility and accessory structures shall be limited to the minimum necessary.

(g) Drawings that clearly illustrate the design of the solar energy production facility shall be submitted as part of the Special Exception application package. The Board of Adjustment may apply aesthetic consideration when approving the design of the solar energy
production facility.

(h) The installation of a solar energy production facility shall not cause to apply the requirements of Article 70 — Off-Street Parking and Loading Requirements or of Article 71 — Off-Street Parking and Vehicular Use Area (FVA) Landscaping Requirements.

(i) Any solar energy production facility that has not been in use for its original purpose for a period of one hundred and eighty (180) days shall be deemed to be abandoned. The solar energy production facility owner and/or the property owner shall have an additional ninety (90) days to remove the abandoned solar energy system and any appurtenant structures or to reactivate the solar energy system.

Section 4. This ordinance shall take effect from and after the date of its publication.

ADOPTED this the 23rd day of August, 2012.

[Signature]
President of the City Council of the City of Huntsville, Alabama

APPROVED this the 23rd day of August, 2012.

[Signature]
Mayor of the City of Huntsville, Alabama
City of Irvine, California
Zoning Ordinance (2014)

Division 3 - General Development Standards and Land Use Regulations
Chapter 3-31. - Solar Energy System Standards

Sec. 3-31-1. - Applicability.
Sec. 3-31-2. - Approvals required.
Sec. 3-31-3. - Residential standards.
Sec. 3-31-4. - Commercial/industrial/institutional/multi-use/office standards.
Sec. 3-31-1. - Applicability.

The purpose of the solar energy system standards is to encourage investment in solar energy systems on all parcels in the city, both residential and non-residential, while providing guidelines for the installation of those systems that are consistent with the architectural and building standards of the City. All solar energy systems shall comply with all applicable provisions of the City of Irvine Codes and the standards of this chapter.

(Code 1976, § V.E-321.1; Ord. No. 92-3, 4-14-92; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 09-02, § 3, 3-24-09)

Sec. 3-31-2. - Approvals required.

The applicant shall submit for and receive approval of a building permit prior to installation of any solar energy system.

(Code 1976, § V.E-321.2; Ord. No. 92-3, 4-14-92; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 09-02, § 3, 3-24-09)

Sec. 3-31-3. - Residential standards.

A. Ground-mounted solar energy systems

1. All ground-mounted solar energy systems shall not be located within the front, side, or rear building setbacks, or front yard area, and shall comply with all applicable height restrictions.

2. To the extent possible, without compromising the solar energy system's access to the sun, ground-mounted solar energy systems shall be screened from view at-grade from all adjacent streets and adjacent properties.

B. Roof-mounted solar energy systems.

1. All solar energy system appurtenances such as, but not limited to, water tanks, supports, and plumbing shall be screened to the maximum extent possible without compromising the effectiveness of the solar collectors, and shall be painted a color similar to the color of the surface upon which they are mounted. Solar collectors are exempt from the screening and color provisions of this subsection.

2. All roof-mounted solar collectors can be mounted at an optimum angle to the sun for maximum energy production. The maximum height of a solar collector shall be two feet, measured perpendicular to the roof surface, and may not exceed the maximum
overall building height. The remainder of the solar energy system shall be below the level of the solar collector(s).

(Code 1976, § V.E-321.3; Ord. No. 92-3, 4-14-92; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 09-02, § 3, 3-24-09)

Sec. 3-31-4. - Commercial/industrial/institutional/multi-use/office standards.

A. Covered parking solar energy systems.

1. Covered parking solar energy systems shall not be located within any required building setback but may encroach into a landscaping setback a maximum of 3 feet.

2. Covered parking solar energy systems shall not result in a net loss of any required parking.

B. Roof-mounted solar energy systems

1. All solar energy system appurtenances such as, but not limited to, plumbing, water tanks, and support equipment shall be screened to the maximum extent possible without compromising the effectiveness of the solar collectors and shall be painted a color similar to the color of the surface upon which they are mounted. If panels are used as screening, they shall contain a finish and color consistent with the building’s exterior walls. Solar collectors are exempt from the screening and color provisions of this subsection.

(Code 1976, § V.E-321.4; Ord. No. 92-3, 4-14-92; Ord. No. 94-7, § 3, 6-14-94; Ord. No. 09-02, § 3, 3-24-09)
Article III  Terminology

QUALIFIED SOLAR INSTALLER
A person who has skills and knowledge related to the construction and operation of solar electrical equipment and installations and has received safety training on the hazards involved. Persons who are on the list of eligible photovoltaic installers maintained by the New York State Energy Research and Development Authority (NYSERDA), or who are certified as a solar installer by the North American Board of Certified Energy Practitioners (NABCEP), shall be deemed to be qualified solar installers for the purposes of this definition. Persons who are not on NYSERDA’s list of eligible installers or NABCEP’s list of certified installers may be deemed to be qualified solar installers if the Town determines such persons have had adequate training to determine the degree and extent of the hazard and the personal protective equipment and job planning necessary to perform the installation safely. Such training shall include the proper use of special precautionary techniques and personal protective equipment, as well as the skills and techniques necessary to distinguish exposed energized parts from other parts of electrical equipment and to determine the nominal voltage of exposed live parts.
[Added 10-16-2006 by L.L. No. 11-2006]

SOLAR COLLECTOR
A solar photovoltaic cell, panel, or array, or solar hot air or water collector device, which relies upon solar radiation as an energy source for the generation of electricity or transfer of stored heat.
[Added 10-16-2006 by L.L. No. 11-2006]

SOLAR STORAGE BATTERY
A device that stores energy from the sun and makes it available in an electrical form.
[Added 10-16-2006 by L.L. No. 11-2006]

Article XXVI  Special Regulations

§ 270-219.1  Solar collectors and installations.
[Added 10-16-2006 by L.L. No. 11-2006]

A. Rooftop and building-mounted solar collectors are permitted in all zoning districts in the Town. Building permits shall be required for installation of rooftop and building-mounted solar collectors.

B. Ground-mounted and freestanding solar collectors are permitted as accessory structures in all zoning districts of the Town, subject to the following requirements:

(1) The location of the solar collector meets all applicable setback requirements of the zone in which it is located.

(2) The height of the solar collector and any mounts shall not exceed 20 feet when oriented at maximum tilt.
(3) The total surface area of all ground-mounted and freestanding solar collectors on the lot shall not exceed 1,000 square feet.

(4) A building permit has been obtained for the solar collector.

(5) The solar collector is located in a side or rear yard.

C. Where site plan approval is required elsewhere in this chapter for a development or activity, the site plan review shall include review of the adequacy, location, arrangement, size, design, and general site compatibility of proposed solar collectors. Where a site plan exists, an approved modified site plan shall be required if any of the thresholds specified in § 270-191 of this chapter are met, including but not limited to proposed changes to or additions of solar collectors where such changes or additions meet a § 270-191 threshold.

D. All solar collector installations must be performed by a qualified solar installer, and prior to operation, the electrical connections must be inspected by a Town Code Enforcement Officer and by an appropriate electrical inspection person or agency, as determined by the Town. In addition, any connection to the public utility grid must be inspected by the appropriate public utility. [Amended 4-12-2010 by L.L. No. 3-2010]

E. When solar storage batteries are included as part of the solar collector system, they must be placed in a secure container or enclosure meeting the requirements of the New York State Building Code when in use and when no longer used shall be disposed of in accordance with the laws and regulations of Tompkins County and other applicable laws and regulations.

F. If a solar collector ceases to perform its originally intended function for more than 12 consecutive months, the property owner shall remove the collector, mount and associated equipment and facilities by no later than 90 days after the end of the twelve-month period.
Photovoltaic and Thermal Solar Systems
Building Permit Application Checklist

This Checklist must accompany all applications.

Incomplete packages will not be accepted.

Initial each line or write N/A to items that do not apply.

1) Completed Application Form
2) Proof of Insurance Coverage
3) Fee
4) 2 copies of all drawings and/or specifications
   **May need to be Stamped – See Instructions
5) Town of Ithaca Electrical Permit Application
6) Survey Map or Plot Plan
7) Outdoor Lighting Details
8) Statement of Special Inspections
9) PV Worksheet
10) Stormwater Permit (Simple, Basic or Full)

Completed application packets should be submitted to the Code Enforcement Department located in Town Hall at 215 N. Tioga St. Monday thru Friday 8:00 - 4:00.

Attached instructions should be retained for your records.
Fee Information

The fee is based on the value of improvement. The value of improvement must include materials and a fair labor price, even if the work is done by the homeowner with no actual labor fee paid. Checks should be made payable to TOWN OF ITHACA.

**Building Permit**
(projects other than the installation of heating units)

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Over $20,000,000.99  $0.60 per $1,000 value of improvement

**Installation of Heating Unit**

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<td>185,000 to 1,000,000 BTU</td>
<td>$150.00</td>
</tr>
<tr>
<td>Over 1,000,000 BTU</td>
<td>$500.00</td>
</tr>
</tbody>
</table>

**Working Without a Building Permit**
The fees set forth shall be **doubled** if work is started prior to the issuance of a necessary permit or if work exceeds work permitted by an issued building or foundation permit.

**Building Permit Extension**
The first extension shall be the greater of $50.00 or 50% of the building permit fee. Subsequent extensions shall be equal to the original building permit fee.

**Foundation Fee**
The greater of $100.00 or 50% of the fee for the building permit, calculated on the estimated full value of the entire building. (Non-refundable and is not credited towards building permit fee.)

**Tent Permit**
$50.00 per tent
**TOWN OF ITHACA**  
215 NORTH TIOGA STREET, ITHACA, N.Y. 14850  
www.town.ithaca.ny.us  
Phone (607) 273-1783   Fax (607) 273-1704

<table>
<thead>
<tr>
<th>Permit Number</th>
<th>APPLICATION APPROVED Date: ______________ CEO Init ______________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date Received</td>
<td>APPLICATION DENIED - Section ______________ Date: ______________</td>
</tr>
<tr>
<td>Fee Paid</td>
<td>Date of ZBA Hearing ______________ Decision ______________</td>
</tr>
<tr>
<td>Value of Imp.</td>
<td>Date of Planning Board Approval ______________</td>
</tr>
<tr>
<td>Zoning District</td>
<td>Type of Planning Board Approval ______________</td>
</tr>
</tbody>
</table>

**BUILDING PERMIT APPLICATION FORM**

---

**GENERAL INFORMATION**

**Brief Description of Work**

________________________________________________________________________  
________________________________________________________________________

Value of Improvement $ _________________________

**Property Information:**  
Tax Parcel Number ______________________________

Street Address __________________________________________________________________________________

**Property Owner:**

Name ______________________________________ Phone # ____________________ Cell # ____________________

Mailing Address __________________________________________________________________________________

Email _________________________________

*If owner is a corporation, names and addresses of responsible officers must be included.*

**Builder:**

Company Name ___________________________________ Ph# ____________________ Fax # ____________________

Mailing Address __________________________________________________________________________________

Project Manager ___________________________________ Ph # ____________________ Cell # ____________________

Email _________________________________

**Contact Person (Primary point of contact for all communications regarding the building permit):**

Name _________________________________ Daytime Telephone ______________ Cell Phone ____________________

Email _________________________________
### Project Information

<table>
<thead>
<tr>
<th></th>
<th>Existing</th>
<th>Proposed</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Stories</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of Dwelling Units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building Height</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>Private/Town</td>
<td>Private/Town</td>
</tr>
<tr>
<td>Sewer</td>
<td>Private/Town</td>
<td>Private/Town</td>
</tr>
<tr>
<td>Sprinkler</td>
<td>Yes/no</td>
<td>Yes/no</td>
</tr>
<tr>
<td>Occupancy Class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Class</td>
<td></td>
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</table>

#### Gross Square Footage of:

<table>
<thead>
<tr>
<th></th>
<th>Existing</th>
<th>Proposed</th>
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</thead>
<tbody>
<tr>
<td>Basement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Floor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Floor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over Second</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total # of Rooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total # of Bedrooms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lot Coverage</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*(Lot Coverage = \( \text{sq ft ALL structures} \div \text{sq ft of lot} \))

---

### FOR ADDITIONS AND NEW CONSTRUCTION (including decks)

In what flood zone is the property located?  
- A  
- B  
- C

Is topsoil or fill material going to be moved onto or within the site in excess of 50 cubic yards?  
- Yes  
- No

If Yes, SWPPP application submitted?  
- Yes  
- No

If topsoil or fill material going to be moved onto or within the site in excess of 500 cubic yards?  
- Yes  
- No

If Yes, Fill Permit submitted?  
- Yes  
- No

---

### ADDITIONS, NEW CONSTRUCTION AND INTERIOR RENOVATIONS

- Electrical Application will be applied for?  
  - Yes  
  - No

- Does work involve any outdoor lighting?  
  - Yes  
  - No

- Plumbing Permit # ________________

---

✈️ (initials) I understand that if a building permit CANNOT be issued within 90 days of my initial application because I failed to provide information requested or because I failed to comply with any Legislative Board Conditions, my Building Permit application will be withdrawn without further action and will need to reapply and pay a new permit application fee.

The UNDERSIGNED HEREBY APPLIES for permission to do the above in accordance with provisions of the Zoning Ordinance and other Laws and Regulations of the Town of Ithaca, or others having jurisdiction, AND AFFIRMS that all statements and information given herein are correct to the best of his/her knowledge and belief, AND FURTHER AFFIRMS that all work shall be performed in compliance with the Codes of the Town of Ithaca, the NYS Uniform Fire Prevention and Building Code, and all other applicable state and local laws, ordinances, and regulations.

I ALSO CERTIFY that the structure for which this Permit will be issued, or has been issued, will be built, or has been built, according to the latest standards of the New York State Uniform Fire Prevention and Building Code, AND FURTHER CERTIFY that the approved plans will not be deviated from without prior approval from the Architect/Engineer of record, if applicable, and the Town of Ithaca.

______________________________  ______________
Signature of Property Owner* or Authorized Agent**  Date

*Applications for properties owned by a business or corporation must be signed by an individual that has been granted the authority by the business or corporation to sign on its behalf. The signature of the applicant must include the title of the signee.

**Must show proof that individual signing application has the property owner’s permission to act as his/her agent. Authorized Agent must provide written contract for project or notarized letter signed by the property owner stating the authorization.
Worksheet for Photovoltaic System Installation

Supplied Diagrams

___________ Is a basic site diagram supplied with the permit package?
   Location of major equipment identified on plan.

___________ Is a one-line diagram supplied with the permit package?

___________ Array configuration shown

___________ Array wiring identified

___________ Combiner/junction box identified

___________ Conduit from Array to PV Power Source Disconnect identified

___________ Equipment grounding specified

___________ Disconnect specified

___________ Conduit from disconnect to inverter identified

___________ Inverter specified

___________ Conduit from inverter to disconnect to panel identified

___________ System grounding specified

___________ Point of connection attachment method identified

Inverter Information

___________ Are cut sheets provided for inverter?

___________ Inverter model number

___________ Is inverter listed for utility interactivity
   (see CED list of Eligible Inverters)

___________ Maximum continuous output power at 40°C

___________ Input voltage range of inverter

PV Module Information

___________ Are cut sheets provided for PV modules?

___________ Are the modules listed? (see CEC list of Eligible PV Modules)

___________ Open-circuit voltage (Voc) from listing label

___________ Maximum permissible system voltage from listing label

___________ Short-circuit current (Isc) from listing label

___________ Maximum series fuse rating from listing label

___________ Maximum power at Standard Test Conditions (Pmax on Label)

___________ Voltage at Pmax from listing label

___________ Current at Pmax from listing label
Array Information

______________ Number of modules in series
______________ Number of parallel source circuits
______________ Total number of modules
______________ Operating voltage
       (number of modules in series x module voltage at Pmax)
______________ Operating current
       (number of parallel source circuits x module current at Pmax)
______________ Maximum system voltage (690.7)
______________ Short-circuit current (690.8)

Wiring and Overcurrent Protection

______________ Wire type is 90°C wet rated
______________ Conductor ampacities are sufficient
______________ Maximum PV source circuit current
______________ Minimum PV source circuit conductor ampacity
______________ Minimum PV output circuit conductor ampacity
______________ Minimum inverter output circuit conductor ampacity
______________ Source circuit overcurrent protection is sufficient

If inverter is not listed for no backfeed current, does each source circuit have overcurrent protection in compliance with the listed maximum series fuse?

If inverter is listed for no backfeed current, overcurrent protection is not necessary if only two parallel strings are connected to the inverter.

______________ Overcurrent protection on Inverter Output Circuit is sufficient
______________ Point of connection meets provisions of NEC 690.64
______________ Point of connection panel busbar rating
Roof Information (for rooftop systems)

________________ Are the conductors from the PV Array run through the house?
If yes, what method will be used to address the protection issues?

________________ Weight of array for rooftop systems
(pounds per square foot—including mounting hardware)

________________ Age of building (roof structure)

________________ Describe roof structural elements

________________ Identify roofing type
(e.g. comp shingle, masonry tile, shake, etc…)

Rafters:

________________ Size of rafters (e.g. 2” x 6”)

________________ Span of rafters (e.g. 14’)

________________ Spacing of rafters (e.g. 24”)

________________ Engineer statement that outlines how panels will be attached. This should include new load calculations for truss or rafters.

________________ Is the detail of PV panel mounting attachment to the roof-framing members provided?

________________ Identify method of sealing roof penetrations
(e.g. flashing, sealed with urethane caulk, etc…)

Ground Mounting Structure (for ground-mounted structures)

________________ Weight of array
(pounds per square foot—including mounting hardware)

________________ Are the details of the array supports, framing members, and foundation posts and footings provided?

________________ Is the information on mounting structure(s) construction provided?
(requires engineering calculations)

________________ Is the detail on module attachment method to mounting structure provided?

Solar Energy Systems

________________ Line diagram with all valves and components labeled

________________ Maximum temperature limitations

________________ Collectors—attach cut sheet

________________ Thermal storage units—attach cut sheet

________________ Backflow prevention device—location in line diagram and cutsheet
This page left blank intentionally.
INSTRUCTIONS FOR SUBMITTING A BUILDING PERMIT APPLICATION

Incomplete Applications Will Not Be Accepted.

Please retain instructions for your reference. Instructions should not be submitted as part of the building permit application.

Our Goal in the application review process is to verify compliance with the Town of Ithaca Code, the Uniform Fire Prevention and Building Code of New York State and any other applicable New York State regulations. We strive to complete a review of your application within 2 weeks of receipt of a COMPLETE APPLICATION. Large projects MAY take longer depending on time of year.

“An application for a building permit shall include such information as the Code Enforcement Officer (CEO) deems sufficient to permit a determination by the CEO that the intended work complies with the requirements of the Uniform Code, the Code of the Town of Ithaca and other applicable state and federal regulations, laws and ordinances.” Town Code Chapter 125.4(C)

Any Property for which a building permit application is made and found to be non-compliant with the Town of Ithaca Code or Uniform Code of New York State as part of the review process MAY BE REQUIRED to correct the non-conformity BEFORE a building permit will be issued.

CHECKLIST

The Building Permit Application Checklist must be completed and submitted as part of the application packet. Completed application packets may be submitted at the Town Hall of the Town of Ithaca located at 215 N. Tioga Street, Monday thru Friday 8:00 - 4:00. Please do not mail the application packet.

1) APPLICATION FORM

The Application for a Building Permit must be COMPLETELY filled out to be accepted. All blank spaces must be filled in. Answer “N/A” to any questions/requirements that are not applicable to the proposed project.

General Information

- Provide a brief description of the proposed work.
- The value of the improvement must include the value of the materials to be used and fair labor value. This includes values for materials that may have been donated or labor that is free, including work done by the property owner.
- Provide the street address of the property where the project is located.
- The tax parcel number is located on your tax bill or can be found by calling Tompkins County Assessment at 607-274-5517.
- Provide the property owner’s name and contact information including: mailing address, daytime phone number, cell phone number, and email address. If the owner is a corporation, the names and mailing addresses of responsible officers must be included.
- Provide the builder’s company name, mailing address, office phone and fax numbers and email address. Also provide the name and contact information of a project manager or contact person to be used as the primary contact for the builder.
- The contact person will be the primary point of contact for all communications from the Code Enforcement Office. This person may be the designer, builder, project manager, property owner, etc. It is recommended that the person listed on this line be someone knowledgeable with both the design process and the inspection process.
Project Information

- Provide the number of stories of the proposed building.
- Provide the number of dwelling units in the proposed building.
- The building height is defined in Chapter 270 of Town Code and is measured from the lowest exterior grade to the highest point. This number will include the total height to walk out basements, etc. This is a different measurement than what is used by the NYS Building Code.
- LOT COVERAGE AREA = The percentage of the lot to be occupied by all structures includes the primary building and all accessory structures on the lot.
- Square feet of floor area for existing and proposed must be completed for all projects. If the proposed work does not involve an addition to the floor area, complete the existing side and place “N/A” in the proposed side. The floor area is based on actual square footage of the building, not the habitable space.
- The total number of rooms does not need to include closets, hallways, or non habitable basements and attics.
- Provide the existing and proposed number of bedrooms.
- A pre-building permit inspection of the property is required to evaluate the existing conditions and to review the scope of the project. The CEO MAY require additional information following this inspection.
- Provide information on whether there will be more than 500 total cubic yards of fill moved onto, off of, or within the site. If the answer is yes, a Fill Permit application will also have to be submitted and approved. If more than 50 cubic yards are moved, a SWPPP permit will also need to be submitted.
- Application must be made for any electrical work being done. Applications are available online or at Town Hall. A Certificate of Occupancy will not be issued to occupy or use the space created or modified by a building permit until an electrical inspection is made and a Certificate of Completion is issued by the electrical inspector.
- Chapter 173 of the Code of the Town of Ithaca regulates outdoor lighting. See Outdoor Lighting for details.

Certification

Read and sign the statements located at the end of the application. The certifications must be initialed where indicated and signed by the property owner or an authorized agent.

2) INSURANCE

Proof of Workers’ Compensation, NYS Disability is required for ALL building permit applications by the NYS Worker Compensation Board. General Liability insurance is required by local law. The Town of Ithaca must be listed as the Certificate Holder on all insurance certificates.

- Proof of Workers’ Compensation MUST be submitted on NYS Form C105.2
- Proof of Disability Insurance MUST be submitted on NYS Form DB120.1
- General Liability Insurance ONLY can be submitted using the ACCORD Form
- Contractors without employees or are not required to have NYS Workers’ Compensation or Disability Insurance MUST supply a NYS Workers’ Compensation and Disability Waiver form.

This form can be completed and printed at www.wcb.ny.gov

**If the building is an Owner Occupied residence and the Homeowner is performing MOST of the work, they can complete the NYS Affidavit of Exemption. This form MUST be notarized. The Town Hall staff can notarize this document for you. YOU MUST HAVE PHOTO IDENTIFICATION FOR THIS SERVICE.
3) **FEE**
   See Page 2

4) **DRAWINGS AND SPECIFICATIONS**
   Two (2) sets of construction documents (drawings and specifications) MUST BE PROVIDED with your building permit application. All plan modifications MUST be provided to the CEO for review before the modifications are implemented.

   - **Stamped Plans – In accordance with the NYS Education Law**

     ALL CONSTRUCTION DOCUMENTS FOR COMMERCIAL CONSTRUCTION MUST BE SIGNED AND STAMPED BY A NYS LICENSED DESIGN PROFESSIONAL.

     For residential construction the Code Enforcement Officer may ask for all or a portion of the project design submitted to be signed and stamped by a design professional at any time. Stamped plans for single family homes are required for any alterations/renovation/additions, or alternative construction not addressed by NYS Building Code, where the total floor area of the structure is 1,500 square feet or greater and/or the value of improvement exceeds $20,000. Total floor area does not include garages, attics, and unfinished basements. Construction project applications below this threshold may be submitted without stamped plans for review, but stamped plans may be required after/during the review process.

     * All Building permits issued within a 12 month period are considered cumulative and will be viewed as one project to determine if the threshold is exceeded.

     * All portions of the proposed project, including electrical, heating, fire protection, insulation, etc are required to be stamped by the NYS licensed design professional of record.

     - When stamped plans are required, the second set required for submission may be a copy. The copied set will be marked as “approved” and returned to the builder when the building permit is issued.

     **This approved set must remain on the job site for the use of the Code Enforcement Officer until the final Certificate of Occupancy is issued.**

   - **Sprinkler Plans**

     Chapter 225 of the Town Code requires the installation of a sprinkler system for all new construction (except one- and two-family homes) and additions and/or remodeling projects that exceed 50% of the total area or total value of the existing structure. This is in addition to applicable requirements in the NYS Building Code. These plans must be stamped by a NYS licensed design professional and approved by the design professional of record.
• **Plan Details**
This list is provided only as a guide; plans must show full compliance with NYS Building Code.
   a) Floor plan - location of all rooms, including sizes of doors and windows.
   b) Framing - sizes and locations of all materials at floors, walls, ceilings, and roofs, including posts, joists, studs, rafters, headers, and beams; fastening schedules; and drilling and notching thresholds.
   c) Stair details - tread and riser sizes, handrail and guard details for all interior and exterior stairs; stair illumination; and under stair protection.
   d) Window schedule - include clear glass area, ventilation area, and clear opening dimensions for each window, and locations of safety glass.
   e) Foundation - sizes and locations of materials, including footers, anchoring, damp proofing, and depth below finished grade.
   f) Smoke and carbon monoxide detectors – locations and details for all smoke and carbon monoxide detectors.
   g) Fire separations - a rated or listed assembly must be specified for all required fire separations such as those between tenant spaces or between a garage and a house.
   h) Plumbing schematics for private water and sewer services.
   i) Information on locations of all heat producing equipment, such as furnaces, hot water heaters, and wood stoves.
   j) Proof of compliance with the New York State Energy Code.
   k) Electrical schematic – include all wiring and fixture details.

Material specifications may be listed on a separate sheet of paper and submitted with a simple floor and sectional plan of the project or all information may be shown on the sketches, or a combination of both.

• **Prefabricated Trusses** - the manufacturer's truss design certificates with a NYS Licensed Engineer's stamp must be submitted prior to the framing inspection.

5) **ELECTRICAL APPLICATION**
Complete and submit the attached Town of Ithaca Electrical Application for any electrical work. Please note that there is a separate fee for the Electrical Application; the Fee Schedule is located on the back of the Electrical Application. The construction documents for your electrical permit MUST include an Electrical Schematic – including ALL circuits, outlets and fixtures.

All electrical work must be inspected by the Town of Ithaca Electrical Inspector. Inspections may be conducted once the building permit is issued.

6) **SURVEY MAP**
• A plot plan must be submitted with the following information indicated:
   a) Dimensions of the lot
   b) Dimensions and location of all existing and proposed structures
   c) Distances from the road, both side lot lines, and rear lot line of each existing and proposed structure
   d) North arrow
   e) Street name and number.

*A survey map prepared by a New York State licensed land surveyor showing locations of all structures, both proposed and existing, is required when building setbacks are within ± 3 feet of the minimum allowed setback to a property line or when a discrepancy of conflicting differences are found during the plan review. This requirement can only be waived by the Code Enforcement Department.*
7) **OUTDOOR LIGHTING DETAILS**
Chapter 173 of the Code of the Town of Ithaca regulates outdoor lighting. The following details must be provided on the plans:

a) Plans indicating the location, description and type of any illuminating devices, fixtures, lamps, supports, reflectors, etc. The description may include, but is not limited to, catalog cuts by manufacturers and drawings (including sections where required);

b) Photometric data, such as that furnished by manufacturers or similar data showing the angle of cut off or light emissions, and the lumen output.

c) Additional evidence of compliance, such as certified test reports by a recognized testing laboratory, may be requested.

8) **SPECIAL INSPECTIONS**
Special Inspections are required as detailed in Chapter 17 of the NYS Building Code or upon request of the Code Enforcement Officer. A statement of special inspections must include full contact information of the Special Inspectors to be used and the schedule and duration of special inspections. Special inspection reports must be submitted in hard copy to the Code Enforcement Office.

9) **PV WORKSHEET**
Complete pages 5 through 7 of the photovoltaic building permit application.

10) **STORMWATER PERMIT**
Temporary erosion and sediment control (E&SC) is important even for small construction sites, such as individual home sites, that only disturb a small area. Small construction sites contribute a significant amount of sediment to downstream bodies of water. Sedimentation is one of the leading pollutants in Cayuga Lake, which is listed as an impaired water body by the New York State Department of Environmental Conservation (NYS DEC). All of the applications listed below are available at Town Hall and at www.town.ithaca.ny.us

The Town of Ithaca requires sites with any of the following conditions to submit a

**Simple Erosion and Sediment Control Plan:**
- Land development activity disturbing more than 10,000 square feet and less than 1 acre.
- Land development activity involving excavation and/or filling resulting in the movement of more than 50 but less than 250 cubic yards of fill, sod, loam, sand, gravel, or stone.
- Activity involving the laying, replacing, or enlarging of an underground pipe or other facility for 300 feet or more.
- Disturbance of a road ditch, drainage swale, or other channel for 30 feet or more.

The Town of Ithaca requires sites with any of the following conditions to submit a

**Basic Stormwater Pollution Prevention Plan (SWPPP):**
- Land development activity disturbing more than 1 acre but less than 5 acres.
- Land development activity involving excavation and/or filling resulting in the movement of more than 250 cubic yards of fill, sod, loam, sand, gravel, or stone.
- Land development activity disturbing less than 1 acre that is part of a larger common plan of development.

The Town of Ithaca requires sites with any of the following conditions to submit a

**Full Stormwater Pollution Prevention Plan (SWPPP):**
- Land development activity disturbing more than 1 acre that will directly discharge a pollutant of concern to an impaired water body or watershed.
- Land development activity disturbing 5 acres or more.
• Land development activity that creates 10,000 square feet or more of impervious cover, other than one- or two-family houses.
• Land development activity that is part of a larger common plan of development that meets or exceeds these thresholds.

RESIDENTIAL CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA
TABLE R301.2(1)

<table>
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<tr>
<th>Ground Snow Load</th>
<th>Wind Speed</th>
<th>Seismic Design Category</th>
<th>Weathering</th>
<th>Frost Line Depth</th>
<th>Termite</th>
<th>NYS Climate Zone</th>
<th>Ice Shield Required</th>
<th>Flood Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 psf up to 1000’ elevation add 2 psf for each 100’ of elevation</td>
<td>90 mph</td>
<td>B</td>
<td>severe</td>
<td>48”</td>
<td>moderate to heavy</td>
<td>Zone 6</td>
<td>2’ from inside face of wall</td>
<td>FIRM panel 360851, 06/19/1985</td>
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- A Free online version of the NYS Building Code may be referenced at [http://www.dos.state.ny.us/code/ls-codes.html](http://www.dos.state.ny.us/code/ls-codes.html).
- The Worker Compensation and Disability compliance forms (Insurance waiver forms) can be completed and printed at [www.wcb.ny.gov](http://www.wcb.ny.gov).
- New York State Code books may be purchased from the International Code Council [www.iccsafe.org](http://www.iccsafe.org).
- Free software for the energy code compliance check may be downloaded at [www.energycodes.gov](http://www.energycodes.gov).
- The Code of the Town of Ithaca, including the Zoning Ordinance and a Zoning Map is available at [www.town.ithaca.ny.us](http://www.town.ithaca.ny.us)

*Call the Town of Ithaca Code Enforcement with any questions*
City of Minneapolis, Minnesota  
*Code of Ordinances (2013)*  
Title 20, Zoning Code

Chapter 535, Regulations of General Applicability  
Article XII. Solar Energy Systems

**535.820. Purpose.** Regulations governing solar energy systems are established to provide for appropriate locations for solar energy systems, to ensure compatibility with surrounding uses, and to promote safe and effective use of solar energy to increase opportunities for generation of renewable energy.  
(2011-Or-008, § 1, 2-11-11)

**535.830. Definitions.** As used in this article, the following words shall mean:

*Building-integrated solar energy system.* A solar energy system that is an integral part of a principal or accessory building, rather than a separate mechanical device, replacing or substituting for an architectural or structural component of the building. Building-integrated systems include but are not limited to active photovoltaic or hot water systems that are contained within roofing materials, windows, walls, skylights, and awnings, or passive systems that are designed to capture direct solar heat.

*Building-mounted solar energy system.* A solar energy system affixed to a principal or accessory building.

*Freestanding solar energy system.* A solar energy system with a supporting framework that is placed on, or anchored in, the ground and that is independent of any building or other structure. Garages, carports or similar structures that incorporate building-integrated or building-mounted solar energy systems shall not be classified as freestanding solar energy systems and shall instead be subject to regulations governing accessory structures.

*Solar collector surface.* Any part of a solar energy system that absorbs solar energy for use in the system's transformation process. The collector surface does not include frames, supports, and mounting hardware.

*Solar energy.* Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.

*Solar energy system.* A device or structural design feature intended to provide for collection, storage, and distribution of solar energy for heating or cooling, electricity generating, or water heating.  
(2011-Or-008, § 1, 2-11-11)

**535.840. Permitted uses and specific standards, subject to administrative review and approval.**

(a) In general. Solar energy systems shall be permitted in all zoning districts, subject to the standards of this article. Solar collector surfaces and all mounting devices shall comply with the minimum yard requirements of the district in which they are located. Screening of solar collector surfaces shall not be required.
(b) Building-mounted solar energy systems.

(1) Notwithstanding the height limitations of the zoning district, building mounted solar energy systems shall not extend higher than three (3) feet above the ridge level of a roof on a structure with a gable, hip, or gambrel roof and shall not extend higher than ten (10) feet above the surface of the roof when installed on flat or shed roof.

(2) The solar collector surface and mounting devices for building-mounted solar energy systems shall be set back not less than one (1) foot from the exterior perimeter of a roof for every one (1) foot that the system extends above the parapet wall or roof surface, if no parapet wall exists, on which the system is mounted. Solar energy systems that extend less than three (3) feet above the roof surface shall be exempt from this provision.

c) Freestanding solar energy systems.

(1) Freestanding solar energy systems, measured to the highest point of the system, shall not exceed the height of the principal structure or twenty (20) feet, whichever is less. The height of the principal structure shall be measured as provided in Chapter 520, Introductory Provisions. Freestanding solar energy systems up to sixteen (16) feet in height shall be subject to the minimum yard requirements of an accessory structure. Freestanding solar energy systems greater than sixteen (16) feet in height shall be subject to the minimum yard requirements of a principal structure. The required yard shall be measured from the property line to the closest part of the structure at minimum design tilt.

(2) In the residence and office residence districts, the area of the solar collector surface of freestanding solar energy systems shall not exceed five (5) percent of the lot area. Notwithstanding any other provision to the contrary, the maximum area of solar energy systems shall be calculated independently of the floor area of all other accessory structures on the zoning lot.

(3) The supporting framework for freestanding solar energy systems shall not include unfinished lumber.

(4) All abandoned or unused freestanding solar energy systems shall be removed within twelve (12) months of the cessation of operations.

(2011-Or-008, § 1, 2-11-11)

535.850. Administrative review process.

(a) In general. The zoning administrator, in consultation with the planning director, shall have up to fifteen (15) working days following the submittal of a complete application to approve or deny such application. The zoning administrator may impose such conditions and require such guarantees deemed reasonable and necessary to protect the public interest and to ensure compliance with the standards and purposes of this zoning ordinance and policies of the comprehensive plan.

(b) Submittal requirements. An application for a solar energy system shall be filed on a form approved by the zoning administrator, as specified in Chapter 525, Administration and Enforcement. In addition, the applicant shall submit the following:
Written evidence that the electric utility service provider that serves the proposed site has been informed of the applicant's intent to install a solar energy system, unless the applicant does not plan, and so states so in the application, to connect the system to the electricity grid.

(2011-Or-008, § 1, 2-11-11)

**535.860. Conditional uses.** Solar energy systems that do not comply with the standards of section 535.840 above may be allowed by conditional use permit, subject to the provisions of Chapter 525, Administration and Enforcement, provided that requests to reduce minimum yard requirements shall be by variance.

(2011-Or-008, § 1, 2-11-11)

**535.870. Solar access.** Solar access easements may be filed consistent with Minn. Statute Section 500.30. Any property owner may purchase an easement across nearby properties to protect access to sunlight. The easement is purchased or granted by owners of nearby properties and can apply to buildings, trees, or other structures that would diminish solar access.

(2011-Or-008, § 1, 2-11-11)

**Chapter 537, Accessory Uses and Structures**

**537.110. Allowed accessory uses and structures.** The following accessory uses and structures shall be allowed, subject to the following development standards:

* * *

*Solar energy system.* Solar energy systems shall be allowed as an accessory use, subject to the applicable zoning district regulations and the regulations contained in Chapter 535, Regulations of General Applicability.
## TABLE 4-400(B): TABLE OF PERMITTED ACCESSORY USES

<table>
<thead>
<tr>
<th>ACCESSORY USE TYPE</th>
<th>RESIDENTIAL DISTRICTS</th>
<th>BUSINESS DISTRICTS</th>
<th>PLANNED DEVELOPMENT (PD) DISTRICT</th>
<th>ADD’L REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SF-2</td>
<td>SF-3</td>
<td>SF-4</td>
<td>SF-5</td>
</tr>
</tbody>
</table>
ARTICLE 4: USE REGULATIONS
Section 4-400: Accessory Uses and Structures

(a) Associated with a Residence
Such stable is used for boarding only horses and/or ponies owned by residents who reside on-site;

(b) No Commercial Operation
No horses or ponies belonging to persons living off-site are boarded;

(c) Limited in Size
The size of the stable shall be limited to a maximum of twenty-five percent (25%) of the principal use;

(d) Grazing Area
A minimum of nine hundred (900) square feet of pasture is provided for each horse or pony boarded; and

(e) Minimum Separation
The stable shall not be located within three hundred (300) feet of any residential dwelling located off-site.

(19) Ground-Mounted Solar Installations
In instances where roof-mounting of solar panels or solar thermal collectors is not practicable due to efficiency or aesthetic considerations, ground-mounting may be necessary. Due to differences in scale between residential and commercial/institutional/industrial solar systems, separate standards apply as follows:

(a) Residential

1. Must be located to the rear of the principal structure and screened from view from public streets.

2. Must be as close to the ground as practicable and in no case higher than the principal structure.

3. The mounting framework must be neutral in color or screened from view from surrounding residential properties.

(b) Commercial/Institutional/Industrial

1. Every effort must be made to completely screen the devices from view from public streets. In instances where complete screening is not possible, the devices must be screened and/or located as to have a minimal visual impact as seen from public streets.

2. Must be as close to the ground as practicable and in no case higher than the principal structure.

3. The mounting framework must be neutral in color or screened from view from public streets.
2. **Rear Yard Depth Required**

   Depth of required rear yards shall be measured at right angles to a straight line joining the rearmost points of the side lot lines. The rear building setback line shall be parallel to the straight line so established.

(2) **Allowable Yard Encroachments**

   Every part of every required yard shall be open and unobstructed from the ground to the sky except as provided in Table 5-200(A), *Allowable Yard Encroachments*, or as otherwise permitted in this Ordinance:

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>LIMITATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sills and Belt Courses</td>
<td>Shall not project over twelve (12) inches into a required yard</td>
</tr>
<tr>
<td>Movable awnings</td>
<td>Shall not project over three (3) feet into a required yard, provided that where the yard is less than five (5) feet in width, the projection shall not exceed one-half (½) of the width of the yard</td>
</tr>
<tr>
<td>Chimneys, Fireplaces, Bay Windows, or Pilasters</td>
<td>Shall not project more than two (2) feet into a required yard</td>
</tr>
<tr>
<td>Fire Escapes, Stairways, and Balconies(unenclosed)</td>
<td>Shall not project more than five (5) feet into a required yard, or more than three (3) feet into a required yard for a multiple family dwelling, hotel, or motel</td>
</tr>
<tr>
<td>Hoods, Canopies, Roof Overhangs, or Foundation Planters, or Marquees</td>
<td>Shall not project over three (3) feet into a required yard, and shall come no closer than one (1) foot to the lot line</td>
</tr>
<tr>
<td>Fences, Walls, and Hedges</td>
<td>Permitted in yards subject to the requirements of this section</td>
</tr>
<tr>
<td>Cornices, Eaves, and Gutters</td>
<td>Shall not project more than three (3) feet into a required yard, provided that where the yard is less than six (6) feet in width, the projection shall not exceed one-half (½) the width of the yard</td>
</tr>
<tr>
<td><em>Ground-Mounted Solar Panels or Solar Thermal Collectors</em></td>
<td>Installations that are six (6) feet or less in height shall not project more than two (2) feet into a required yard, based on the required yards for accessory structures. Installations taller than six (6) feet may not encroach into required yards unless approved as a variance by the Zoning Board of Appeals.</td>
</tr>
</tbody>
</table>
ARTICLE 6: DEVELOPMENT AND DESIGN STANDARDS  
Section 6-700: Exterior Lighting Standards

| TABLE 6-700(D): MAXIMUM ILLUMINATION VALUES*  
(REGARDLESS OF LIGHT TYPE) |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>USE</td>
</tr>
<tr>
<td>Residential; Public and Institutional</td>
</tr>
<tr>
<td>Commercial</td>
</tr>
<tr>
<td>Service and Industrial/Edge of right-of-way</td>
</tr>
<tr>
<td>Parking Lots</td>
</tr>
</tbody>
</table>

(4) Uniformity Ratios  
In order to maintain uniformity in light levels across a development, and prevent or minimize dark areas, the ratio of maximum to minimum lighting levels on a given site or parcel of land as measured in foot-candles at ground level, shall not exceed fifteen-to-one (15:1) in the Residential districts or ten-to-one (10:1) in the Business and Planned Development districts. Parking lots shall maintain the same uniformity ratios as the principal use they serve. In the cases of mixed uses, the uniformity ratios for Business and Planned Development districts shall apply.

(5) Direction of Lighting  
(a) No light source shall be directed outward toward property boundaries or adjacent right-of-way.

(b) Low intensity architectural lighting may be used to illuminate individual structures or landscaping materials provided the maximum illumination values comply with the standards in Table 6-700(D), Maximum Illumination Values.

(6) Distance from Property Line  
All exterior lighting fixtures shall be located a minimum of five (5) feet from a property line or five (5) feet from a right-of-way line and shall not be located within a required buffer area unless they are located at the interior edge.

(7) Hue  
Lighting sources shall be color-neutral types such as halogen or metal halide. Light types of limited spectral emission such as low-pressure sodium or mercury vapor lights, are prohibited.

(8) Solar-Powered Lighting  
Solar panels up to a maximum of twenty (20) square feet may be used as a power source for lighting fixtures when mounted on the same pole as the fixture. Solar panels larger than twenty (20) square feet must meet the standards of either Section 6-800 for roof-mounted solar installations or Section 4-400 for ground-mounted solar installations.

6-700(F) Wall-mounted Lights  
Wall-mounted lights shall be fully shielded luminaries (such as shoebox or can style fixtures) to prevent the light source from being visible from any adjacent residential property or public street right-of-way. Nothing in this subsection shall prevent the use of sconces or other decorative lighting fixtures provided that the source of illumination is not
(b) Design of Front Façades

1. All single-family detached dwellings with front façade widths of forty (40) feet or more shall incorporate wall offsets in the form of projections and/or recesses in the façade plane. Offsets shall have a minimum depth of two (2) feet, so that no single wall plane exceeds twenty-five (25) feet in width.

2. The provision of a front porch in accordance with Section 6-800(B)(2)(c), Front Porches, may serve as an alternative to the wall offsets required in Section 6-800(B)(2)(b)(1).

(c) Front Porches

If a block face contains two (2) or more lots with a front setback of twenty-five (25) feet or less, a minimum of fifty percent (50%) of the dwellings on such lots shall include a front porch with a minimum depth of six (6) feet, and a minimum width of eight (8) feet.

(d) Building Foundations

1. Except for Assisted Living Facilities, Nursing Homes, and structures designed or intended for occupation by persons with physical disabilities, the finished floor elevation at the front facade shall be located above grade in accordance with the following standards:
   a. For setbacks of ten (10) feet or more, the foundation supporting the floor framing on the front facade shall be a minimum of (eighteen) 18 inches above grade; and
   b. For setbacks of less than ten (10) feet, the foundation supporting the floor framing on the front facade shall be a minimum of twenty-four (24) inches above grade.

2. Exposed foundation walls or piers shall be clad in face brick, stone, stucco, or some other masonry material accurately imitating these materials. Latticework screening shall be installed between piers on front and side building facades.

3. Nothing in this subsection shall prevent the use of slab foundations, provided the slab is clad in the materials required in subsection (2), and extends to the minimum height above grade specified in subsection (1) above.

(e) Roof Penetrations and Equipment

All roof vents, pipes, antennas, satellite dishes, solar installations, and other roof penetrations and equipment (except chimneys), shall be located on the rear elevations or otherwise configured to the degree practicable to have a minimal visual impact as seen from the street. Solar installations that are visible from the street must be either composed of building-integrated components (such as solar shingles) that are not readily evident or be designed and mounted to match the shape, proportions, and slope of the roof. See below examples of acceptable and unacceptable visible residential solar installations.
ARTICLE 6: DEVELOPMENT AND DESIGN STANDARDS
Section 6-800: Design Standards

Acceptable:

Unacceptable
(b) Flat Roofs
When flat roofs are used, parapet walls with three-dimensional cornice treatments shall conceal them. The cornice shall include a perpendicular projection a minimum of four (4) inches from the parapet façade plane. Alternative cornice treatments may be approved as part of special architectural designs.

(c) Roof Penetrations and Equipment
All roof-based mechanical equipment, as well as vents, pipes, antennas, satellite dishes, solar installations, and other roof penetrations (with the exception of chimneys) shall be located, to the degree practicable, on the rear elevations or screened with a parapet or screen wall having a three-dimensional cornice treatment. The cornice of a parapet wall shall include a perpendicular projection a minimum of four (4) inches from the parapet façade plane. This standard is intended to minimize visual impact as seen from:

1. A public street;
2. Public areas of adjacent sites;
3. Vacant land classified as SF-2, SF-3, SF-4, SF-5, or SF-8; or
4. Lands containing single-family detached, attached, townhouse, or two- to four-family dwelling development.

Solar installations that are visible from the street must be either composed of building-integrated components (such as solar shingles) that are not readily evident or designed and mounted to match the shape, proportions, and slope of the roof or to serve as a feature of the building (such as awnings). See below examples of acceptable commercial solar installations.
(10) Off-Street Parking
Off-street parking shall comply with the standards of Section 6-100, *Off-Street Parking and Loading*, and the following:

(a) Parking Location
1. Within the MUC, NC, NO, PD-R, and PD-TND districts, no off-street surface parking shall be located between the building and the street it fronts, except in the NC district, up to 60 feet depth of parking and drive surface may be located between a building and the street it fronts if the building includes two (2) or more stories.

2. In the OI, LC, CC, GC, PD_R, PD-C, and PD-MEC districts, no more than sixty (60) feet depth of parking and drive surface (exclusive of internal landscaped islands) shall be located between a building and any adjacent street. This may be increased to 120 feet for buildings over 50,000 square feet, and to 180 feet for buildings over 100,000 square feet.

(b) Retail Uses in Parking Garages
All parking garages zoned for commercial or mixed use and directly fronting a street shall comply with the following standards:

1. A minimum of fifty percent (50%) of the ground floor street frontage shall be constructed to accommodate retail uses; and

2. The ground floor of the portion constructed to accommodate retail uses shall have a height of at least fifteen (15) feet between the average grade level and the underside of the structure's second floor.
ARTICLE 10: DEFINITIONS AND RULES FOR INTERPRETATION
Section 10-200: Definitions

SITE SPECIFIC DEVELOPMENT PLAN

A set of documents comprising a complete development plan and application submitted to the City by a landowner describing the types and density or intensity of uses for specific lands for a Planned Development (PD) Master Plan (and associated documents), Site Plan (major or minor), Variance, Special Exception, Conditional Use, Preliminary Plat for Subdivision, or other similar approval.

SLOPE, NON-CRITICAL/LOW

Those areas of land characterized by a slope less than or equal to fifteen percent (15%).

SLOPE, PRECAUTIONARY/MODERATE

Those areas of land characterized by a slope of between fifteen (15%) and twenty percent (20%).

SLOPE, PROHIBITIVE/SEVERE

Those areas of land characterized by a slope greater than or equal to twenty-five percent (25%).

SMALL LOAN COMPANY

Establishments that are restricted lenders regulated under Chapter 29 of Title 34 of the South Carolina Code of Laws and supervised lenders regulated under Chapter 3 of Title 37 of the South Carolina Code of Laws; however, the term does not include deferred presentment lenders, pawn shops, or those supervised lenders primarily providing short-term vehicle loans.

SOIL AND WATER CONSERVATION DISTRICT OR CONSERVATION DISTRICT

A governmental subdivision of the State of South Carolina created pursuant to Chapter 9, Title 48, Code of Laws of South Carolina, 1976, as amended; and Soil and Water Conservation District Board means the governing body of the Soil and Water Conservation District.

SOLAR INSTALLATION

A system such as a photovoltaic or solar thermal system that uses the sun’s energy to produce electricity or heat.

SOLAR PANEL

A grouping of photovoltaic cells that produce electricity from sunlight.

SOLAR THERMAL COLLECTOR

A device that collects heat form the sun and transfers the heat to another location for immediate heating or storage for use later. Solar thermal collectors are typically associated with solar water heating systems.

SORORITY HOUSE

See “Fraternity/Sorority House”.

SPECIAL EXCEPTION PERMIT

A permit approved, approved with conditions, or denied by the Zoning Board of Appeals (ZBA) in accordance with Section 2-300(D), Special Exception Permit.
TITLE 15: LAND USAGE
CHAPTER 154: ZONING

§ 154.27 DEFINITIONS.

SOLAR ACCESS: A property owner's right to have sunlight shine on his land.

SOLAR COLLECTOR: An assembly, structure, or design, including passive elements, used for gathering, concentrating or absorbing direct or indirect solar energy, specifically designed for holding a substantial amount of useful thermal energy and to transfer that energy to a gas, solid or liquid or to use that energy directly; this may include, but is not limited to, a mechanism or process used for gathering solar energy through thermal gradients, or a component used to transfer thermal energy to a gas, solid or liquid or to convert into electricity.

SOLAR ENERGY: Radiant energy received from the sun at wavelengths suitable for heat transfer, photosynthetic use, or photovoltaic use.

SOLAR ENERGY SYSTEM: A system that uses the power of the sun to capture and store energy and reduce on site consumption of utility power.

SOLAR ENERGY SYSTEM, BUILDING MOUNTED: A solar energy system mounted on either the principal or accessory structure or facade.

SOLAR ENERGY SYSTEM, FREESTANDING: A solar energy system that is not attached to another structure and is ground mounted.

SOLAR ENERGY SYSTEM, JOINT: A solar energy collector or storage mechanism that supplies energy for structures or processes on more than one lot or in more than one dwelling unit or leasehold, but not to the general public and involves at least two (2) owners or users.

SOLAR SKYSPACE: The maximum three-dimensional space extending from a solar collector to all positions of the sun necessary for efficient use of the collector.

(A) Where a solar energy system is used for heating purposes only, solar skyspace shall mean the maximum three-dimensional space extending from a solar energy collector to all positions of the sun between nine o'clock (9:00) A.M. and three o'clock (3:00) P.M. local apparent time from September 22 through March 22 of each year.

(B) Where a solar energy system is used for cooling purposes only, solar skyspace shall mean the maximum three-dimensional space extending from a solar collector to all positions of the sun between eight o'clock (8:00) A.M. and four o'clock (4:00) P.M. local apparent time from March 23 through September 21 of each year.

SOLAR SKYSPACE EASEMENT: A right, expressed as an easement, covenant, condition, restriction or other property interest in any deed, will or other instrument executed by or on behalf of any landowner or in any order of taking, appropriate to protect the solar skyzone of a solar collector at a particularly described location to forbid or limit any or all of the
following where detrimental to access to solar energy: structures on or above ground; vegetation on or above ground; or other activities. Such right shall specifically describe a solar skyspace in three-dimensional terms in which the activity, structures or vegetation are forbidden or limited or in which such an easement shall set performance criteria for adequate collections of solar energy at a particular location.

SOLAR STORAGE MECHANISM: Equipment or elements such as piping and transfer mechanisms, containers, heat exchangers or controls thereof and gases, solids, liquids or combinations thereof that are utilized for storing solar energy, gathered by a solar collector, for subsequent use.

ADMINISTRATION AND ENFORCEMENT
§ 154.56 - SOLAR ENERGY SYSTEMS.

(A) Intent: The intent of these standards is to allow for the safe and effective development of solar energy systems throughout the village of Schaumburg.

(B) General Requirements:

(1) Accessory Structure: Solar energy systems are permitted as accessory structures as detailed in this section.

(2) On Site Use: Energy produced through the solar energy system shall be utilized on site.

(3) Utility Provider Notification: Written evidence must be provided at the time a building permit is requested that the utility company has been notified of the customer's intent to install a solar energy system.

(4) Special Use: Additional height may be requested through the special use process outlined in section 154.44 of this chapter.

(a) In reviewing the request for additional height, such factors as height of the system in relationship to existing and potential structures, manmade or natural, and their impact on the system's efficacy shall be considered.

(C) Freestanding Systems: Freestanding systems shall be developed according to the following parameters. Refer to section 154.59, figure 1 of this chapter.

(1) Yard Location: Permitted in the interior side yard, rear yard, and interior courts.

(2) Setback: All parts of the freestanding system shall be set back ten feet (10') from the interior side and rear property lines and shall not be located in a public utility easement.

(3) Height: Shall be a maximum of fifteen feet (15') in height, measured from the average grade at the base of the pole to the highest edge of the system.

(4) Quantity: Single-family residential lots twenty thousand (20,000) square feet or less in size are limited to a total of one hundred (100) square feet in area of panels.
(5) Abandonment: If a freestanding system is inoperable or abandoned for a period of twelve (12) consecutive months; the owner may be notified by the village that the energy system must either be repaired and made operable or removed within ninety (90) days.

(D) Building Mounted Systems: Building mounted systems shall be developed according to the following parameters. Refer to section 154.59, figures 2 through 4 of this chapter.

1. Location: Building mounted systems are permitted in the following locations:
   - Principal and accessory structures.
   - Any roof face.
   - Side and rear building facades.
   - Front or corner building facades, if the following conditions are met:
     1. Solar access is optimized on the front and corner facades.
     2. Systems are simultaneously used to shade the structure's windows. Refer to section 154.59, figures 3 and 4 of this chapter.

2. Orientation: Panels shall be angled to maximize solar access.

3. Height: Height is measured from the roof surface, on which the system is mounted, to the highest edge of the system. Refer to section 154.59, figure 2 of this chapter.
   - Shall have a maximum height of fifteen feet (15').
   - Shall not extend more than five feet (5') above the highest peak of a pitched roof.

4. Projection: Solar energy systems may project off a roof edge or building facade as follows. Refer to section 154.59, figure 3 of this chapter on how to measure projection.
   - May project up to four feet (4') from a building facade or roof edge.
   - May project into a side or rear setback, but shall be no closer than five feet (5') to the side or rear property line.

(E) Solar Access Protection:

1. Creation Of Easements: Solar access easements across contiguous or nearby lots, tracts, or land may be created to establish a window of exposure to the sun so as to protect an existing or intended solar collector's exposure to the sun from obstruction of buildings and trees.
   - Such easements may be purchased, reserved, granted, or otherwise obtained.
   - Adverse possession cannot create such an easement.
(c) An easement infringed upon is a compensable property right through private remedy.

(2) Recording Of Easements: Solar access easements shall be recorded with the Cook County recorder of deeds or DuPage County recorder of deeds and filed with the community development department.

(3) Construction In Easement Areas: Any person seeking a building permit to construct or modify any structure or building so as to increase the consumption of airspace over that lot shall certify in writing that no solar access easement exists over that lot.

(4) Denial Of Permit: Should the community development department determine that the proposed construction would intrude upon the easement, no building permit shall be granted.

(Ord. 10-059, passed 6-8-2010)

§ 154.59 - SOLAR AND WIND ENERGY SYSTEM FIGURES.
Measuring height of a building mounted solar energy system.

Permitted projection of a building mounted solar energy system.
GENERAL PROVISIONS
§ 154.62 - BUILDING HEIGHTS, BULK REGULATIONS, AND REQUIRED YARDS.

(C) Solar Access Protection:

(1) Creation Of Easements: Solar skyspace easements across contiguous or nearby lots, tracts, or land may be created to establish a window of exposure to the sun so as to protect an existing or intended solar collector’s exposure to the sun from obstruction of buildings and trees. Such easements may be purchased, reserved, granted or otherwise obtained. Adverse possession cannot create such an easement. An easement infringed upon is a compensable property right through private remedy.

(2) Recording Of Easements: A solar easement may, at the discretion of the easement owner, be recorded with the Cook County recorder of deeds, or DuPage County recorder of deeds and filed with the community development department.

(3) Construction In Easement Areas: Any person seeking a building permit to construct or modify any structure or building so as to increase the consumption of airspace over that lot shall certify in writing that no solar skyspace easement exists over that lot. Where a solar skyspace easement exists, the applicant for the permit shall present a copy of the deed containing the legal description of the easement, unless the easement is already filed with the community development department. Should
the community development department determine that the proposed construction would intrude upon the easement, no building permit shall be granted.

Effective March 18, 2013
E. PLAY HOUSE: A detached building designed and used for children’s play.

ACCESSORY USE: A use which is supplemental and subordinate to the main use and used for purposes clearly incidental to those of the main use.

ACTIVE SOLAR ENERGY STRUCTURE: A structure which utilizes mechanically-operated solar collectors to collect, transfer or store solar energy.

ADULT DAY CARE HOME. A private residence, in which six (6) adults or less are given care and supervision for periods of time not to exceed sixteen (16) hours in a twenty-four (24) hour period.

ADULT DAY CARE CENTERS. A center other than a private residence, in which more than six (6) adults are supervised and receive group care for periods of time not to exceed sixteen (16) hours in a twenty-four (24) hour period.

ADULT FOSTER CARE FACILITIES: A governmental or non-governmental establishment that provides foster care to adults. It include facilities and foster care family homes for adults who are aged, mentally ill, developmentally disabled, or physically handicapped who require supervision or an ongoing basis but who do not require continuous nursing care. An adult foster care facility does not include nursing homes, homes for the aged, hospitals, alcohol or substance abuse rehabilitation center, residential centers for persons released from or assigned to a correctional facility, or any other facilities which have been exempted from the definition of adult foster care facility by the Adult Foster Care Facility Licensing Act, 218 of 1979, MCL 400.701, as amended. The types of licensed adult foster care facilities include the following:

A. FOSTER CARE SMALL GROUP HOME: A facility with the approved capacity to receive twelve (12) or fewer adults who are provided supervision, personal care, and protection in addition to room and board, for twenty-four (24) hours a day, five (5) or more days a week, and for two (2) or more consecutive weeks for compensation.

B. FOSTER CARE LARGE GROUP HOME: A facility with approved capacity to receive at least thirteen (13) but not more than twenty (20) adults to be provided supervision, personal care, and protection in addition to room and board, for twenty-four (24) hours a day, five (5) or more days a week, and for two (2) or more consecutive weeks for compensation.

C. FOSTER CARE FAMILY HOME: A private residence with the approved capacity to receive six (6) or fewer adults to be provided with foster care for five (5) or more days a week and for two (2) or more consecutive weeks. The adult foster care family home licensee must be a member of the household and an occupant of the residence.
OPEN AIR BUSINESS: A permanent business including the sales and/or display of retail merchandise or services outside of a permanent structure.

OPEN SPACE: A parcel or area of land that is intended to provide light and air, and is designed for resource protection, aesthetic, or recreational purposes. Open space uses may include, but are not limited to lawns, decorative plantings, walkways, active and passive recreation areas, land use buffers, playgrounds, fountains, woodlands, wetlands and bio-retention facilities. Open space shall not include streets, driveways, parking lots, or other surfaces designed or intended for vehicular traffic.

OPEN SPACE, COMMON: Open space within or related to a development, not in individually owned lots, which is designed for and dedicated to the common use or enjoyment of the residents of the development or general public.

OUTDOOR COMMERCIAL RECREATION: An enterprise conducted primarily outdoors, which receives a fee in return for the provision of some recreational activity or facility. Such activities and facilities include, but are not limited to soccer, baseball, football, or other athletic fields, outdoor miniature golf courses and driving ranges, tennis, basketball or other athletic courts, and other similar facilities or activities.

OPERATOR: Includes the owner, licensee, manager, or person in charge of any premises.

PARKING SPACE: An area of definite length and width, said area shall be exclusive of drives, aisles, or entrances giving access thereto, and shall be fully accessible for the storage or parking of permitted vehicles.

PASSIVE SOLAR ENERGY STRUCTURE: A structure which uses natural and architectural components to collect and store solar energy without using external mechanical energy.

PERFORMANCE STUDIO: A building or a portion of a building where the principal use of the space is the provision of instruction in the various arts, including but not limited to dance, theater, music, and singing. This shall not preclude student performances.

PERFORMANCE THEATER: A building or portion of a building where the principal use of the space is dramatic, dance, or musical performances or similar activities, in front of an audience, including performances on film, television, music video, or multimedia. Performance theaters shall include theaters, assembly halls, concert halls or similar places of assembly.

PERSON: An individual, firm, association, proprietorship, organization, partnership, trust, corporation, limited liability company, or other entity.

PLACES OF ASSEMBLY: Unless otherwise identified and defined by this Ordinance, “places of assembly” means any building, structure, and/or grounds where groups of
SENIOR HOUSING: An institution other than a hospital or hotel, which provides housing or room and board to non-transient persons primarily sixty (60) years of age or older. Housing for seniors may include:

A. INDEPENDENT LIVING: A multiple-family housing form with full facilities for self-sufficiency in each individual dwelling unit.

B. CONGREGATE CARE: A dependent elderly housing facility with cooking facilities within the unit, but with a central dining service option. Limited medical care is available.

C. ASSISTED LIVING: A dependent elderly housing facility without cooking facilities and only central dining service. Limited medical care is available.

D. CONVALESCENT HOME: A state licensed medical establishment providing accommodation and care for aged or infirmed persons, or for those who are bedfast or needing considerable nursing care, but not including facilities for the treatment of sickness or injuries or facilities for surgical care. Commonly referred to as “nursing home”.

SETBACK, REQUIRED: The distance required to meet the front, side, or rear yard open space requirements of this Ordinance.

SHOPPING CENTER: A minimum of three (3) commercial or service establishments within a single building served by a common parking area.

SIGN: Any structure or wall or other object used for the display of any message, and includes but is not limited to any bill, poster, placard, handbill, flyer, painting, balloon, streamer, or other similar object in any form whichever, which contains printed or written matter in words, symbols, or pictures, or in any combination thereof attached to or affixed to the ground or any structure, as defined and regulated by Chapter 85, Signs, of the City of Troy Code of Ordinances.

SOLAR ACCESS EASEMENT: A right, expressed as an easement, covenant, condition or other property interest in any deed or other instrument executed by or on behalf of any landowner, which protects the solar skyspace of an actual, proposed or designated solar energy collector at a described location by forbidding or limiting activities, land uses, structures and/or trees that interfere with access to solar energy. The solar skyspace must be described as the three (3) dimensional spaces in which obstruction is prohibited or limited. Any property owner may give or sell his right to access to sunlight. Such Solar Access Easements shall be recorded and copies shall be kept on file with the Troy Clerk’s Department.

SOLAR COLLECTOR: A device or combination of devices, structures, or parts thereof, that collects, transfers or transforms direct solar, radiant energy into thermal, chemical,
or electrical energy, and that contributes significantly to a structure’s energy supply. In addition to such functions, solar collectors may also serve as a part of a structure’s roof, wall, window or other structural member.

**SOLAR ENERGY:** Radiant energy (direct, diffuse, and reflected) received from the sun.

**SOLAR SKYSPACE:** The space between a solar energy collector and the sun which must be free of obstructions that shade the collector to an extent which precludes its cost-effective operation.

**SIGNIFICANT OR SUBSTANTIAL PORTION:** Means thirty (30) percent or more of the term modified by such phrase.

**STORY:** That part of a building, except a mezzanine, included between the surface of one (1) floor and the surface of the next floor, or if there is not a floor above, then the ceiling next above. A story thus defined shall not be counted as a story when more than fifty (50) percent by cubic content, is below the height level of the adjoining ground.

**STORY, HALF:** An uppermost story lying under a sloping roof, the usable floor area of which, at a height of four feet above the floor, does not exceed two-thirds (2/3) of the floor area in the story directly below and the height above at least two hundred (200) square feet of floor space is seven feet four inches (7’4”). When the usable floor area of such a story, at a height of four (4) feet above the floor, does exceed two-thirds (2/3) of the floor area of the story directly below, it shall be counted as a full story.
SECTION 7.05  FENCES

A. Approval Required. The construction of fences in all Districts shall meet the requirements set forth in Chapter 83 - Fences.

B. Visibility at Intersections. All fences in the front yards must comply with the requirements of Section 7.04, Corner Clearance.

SECTION 7.06  VOTING PLACE

The provisions of this Ordinance shall not interfere with or prevent the temporary use of any property as a voting place in connection with a public election.

SECTION 7.07  ESSENTIAL SERVICES AND OTHER PUBLIC PROPERTY

It is the intent of the Ordinance to regulate essential services and property owned, leased, or operated by public agencies, including local, state, federal, or any other public or governmental body or agency, as follows:

A. Essential services shall be permitted in any district.

B. Buildings constructed in conjunction with an essential service shall require site plan approval in accordance with the requirements set forth in Article 8, Site Plan Review.

C. Property owned, leased, or operated by the state or the United States shall be exempted from the provisions of this chapter, only to the extent that said property may not be constitutionally regulated by the City.

SECTION 7.08  GENERAL EXCEPTIONS

A. Height Exceptions. No building shall be erected, converted, enlarged, reconstructed, or structurally altered to exceed the height limit below established for the district in which the building is located, except as set forth below.

1. Roof structures and screening devices for the housing of elevators, stairways, tanks, roof-mounted mechanical equipment, solar panels, or similar equipment required to operate and maintain the building shall not exceed by more than ten (10) feet the height limit of the district in which the use is located.

2. Fire walls and skylights shall not exceed by more than five (5) feet the height limit of the district in which the use is located.
SECTION 12.05 SOLAR STRUCTURES AND EASEMENTS

A. Permitted. Active and passive solar energy devices, systems or structures shall be permitted in all zoning classifications by right, subject to administrative approval, except when such solar devices or architectural features project into required front or side yards, or are free-standing elements in a required front or side yard, in which case they are subject to site plan review in accordance with Article 8.

B. Maximum Height of Structures. Passive solar energy structures, such as flat plate collectors, photovoltaic cells, etc., which are roof-mounted or integrated otherwise into the roof structure shall not be included in the calculation of maximum height. Active solar energy structures, when mounted on either freestanding structural elements or integrated architecturally with a principal or accessory building shall not exceed a height of forty (40) feet.

C. Easements. A landowner may enter into an easement, covenant, condition or other property interest in any deed or other instrument, to protect the solar skyspace of an actual, proposed or designated solar energy structure at a described location by forbidding or limiting activities, land uses, structures and/or trees that interfere with access to solar energy. The solar skyspace must be described as the three (3) dimensional space in which obstruction is prohibited or limited. Any property owner may give or sell his right to access to sunlight. Such Solar Access Easements shall be recorded and copies shall be kept on file with the Troy Building Department.

SECTION 12.06 ENVIRONMENTAL PERFORMANCE STANDARDS

A. Intent. No use, unless otherwise allowed, shall be permitted within any district which does not conform to the following minimum requirements of use, occupancy, and operation.

B. Airborne Emissions.

1. Air Contaminants. All airborne emissions shall, at a minimum, comply with the applicable Federal and State standards.

2. Smoke.

   a. It shall be unlawful for any person, firm, or corporation to permit the emission of any smoke from any source to a density greater than that density described as No. 1 of the Ringlemann Chart; provided that the following exceptions shall be permitted: smoke, the shade or appearance of which is equal to but not darker than No. 2 of the Ringlemann Chart for a period or periods aggregating four (4) minutes in any thirty (30) minute period.