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VILLAGE OF TOWER LAKES

ORDINANCE NO. 2022-

AN ORDINANCE AMENDING
TITLE 10, "ZONING REGULATIONS", OF THE
VILLAGE OF TOWER LAKES VILLAGE CODE

(RE: Chapter 1, "Administrative Provisions";
Chapter 4, "Districts Enumerated", and
Chapter 6, "General Requirements" - New Section 10-6-12, "Solar Energy Systems")

ADOPTED BY THE
CORPORATE AUTHORITIES
OF THE
VILLAGE OF TOWER LAKES, ILLINOIS

THIS _____ DAY OF _____, 2022

Published in pamphlet form by authority of the Corporate Authorities of the Village of Tower Lakes,
Lake County, Illinois, this _____ day of _____, 2022.

AN ORDINANCE AMENDING
TITLE 10, "ZONING REGULATIONS", OF THE
VILLAGE OF TOWER LAKES VILLAGE CODE

(RE: Chapter 1, "Administrative Provisions";
Chapter 4, "Districts Enumerated", and
Chapter 6, "General Requirements" - New Section 10-6-12, "Solar Energy Systems")

WHEREAS, the Corporate Authorities of the Village of Tower Lakes have determined that it is in the best interests of the Village and its residents to amend Title 10, "Zoning Regulations", of the Tower Lakes Village Code to establish regulations relative to the installation, operation and maintenance of solar energy systems on properties located within the Village as set forth herein:

BE IT ORDAINED by the President and Board of Trustees of the Village of Tower Lakes, Lake County, Illinois, as follows:

SECTION 1: The Corporate Authorities of the Village hereby find that the recitals hereinabove set forth are true and correct and are incorporated into the text of this Ordinance as its findings of fact to the same extent as if such recitals had been set forth herein in their entirety.

SECTION 2: Section 10-1-3, "Definitions", of Chapter 1, "Administrative Provisions", of the Village of Tower Lakes Zoning Regulations set forth in Title 10 of the Village of Tower Lakes Village Code is hereby amended by amending the definition of the word "Fence" as follows:

FENCE: Shall include any barrier, whether or not affixed to the ground, but the following structures shall not be construed to be fences:

- (A) Retaining walls of rock or other masonry construction.
- (B) Decorative screens not exceeding four feet (4') in height which are: 1) located at least twenty feet (20') from any lot line parallel and adjacent to a road, and 2) do not enclose an area, and 3) do not extend more than thirty feet (30') in total length, and 4) provided, however, that not more than one such decorative screen shall be located within a distance of two hundred feet (200') of another such decorative screen on the same zoning lot.
- (C) Enclosures for garden(s) which: 1) are located at least ten feet (10') from any lot line parallel and adjacent to a road, street, or other public right-of-way; 2) do not enclose

an area exceeding four hundred (400') square feet; 3) do not exceed six feet (6') in height at the highest point from the existing ground level; 4) are not located on, over, or within any septic field or on, over, or within any Village or public utility easement; 5) with the exception of posts, are constructed entirely of chicken wire or deer fencing of plastic mesh or netting, which wire, mesh or netting shall be black, dark green, or dark brown in color, and shall be consistently open so as to permit viewing; and 6) do not consist of or include in whole or in part any chain link fencing, electric-charged fencing or wires, barbed wire, snow fencing, razor or concertina wire, corrugated metal, or picket or stockade wooden fencing.

- (D) Enclosures for pets or children which: 1) are located in rear yards only and attached to residences, and 2) do not exceed thirty feet (30') on any one side, and 3) do not enclose an area exceeding two hundred (200) square feet, and 4) do not exceed six feet (6') in height at the highest point, and 5) are constructed of materials of a decorative nature or, if constructed of wire, are screened from view by shrubbery to the full height of the enclosure, and 6) have covers constructed of an open type of material, if covers are desired, and 7) have no point closer than twenty feet (20') from any perimeter lot line; and 8) no such enclosure shall be allowed which impairs an adequate supply of light or air to adjacent property or alters the essential characteristics of the neighborhood.
- (E) Swimming pool enclosures as permitted by any Village ordinance regulating swimming pools, now in force or as hereafter adopted or as hereafter amended.
- (F) A fenced chicken run used for backyard chickens, the fenced enclosure of which does not exceed 300 square feet and which is in compliance with the regulations applicable to chicken runs and coops as set forth in Chapter 3 of Title 8, "Animal Control", and Title 10, "Zoning Regulations", of this Village Code.
- (G) Enclosures for ground-based solar energy systems, but only if such an enclosure does not exceed 1,800 square feet and only if such system is in compliance with the regulations of this Title 10 which are applicable to Solar Energy Systems.
- ~~(G)~~ Any enclosure used as an accessory use in relationship to community waterworks in order to provide security for community waterworks, or to provide security for any portion thereof. Any enclosure used for such purpose shall be a permitted accessory use in any zoning district in which community waterworks are a permitted use.
- ~~(H)~~ Any structure specifically permitted by Paragraphs A, B, C, D, E, ~~and/or F,~~ and/or G above: (i) shall not obstruct any line of sight for vehicle(s) and/or for any pedestrian(s) on a public right-of-way; and (ii) shall be maintained in a safe and structurally sound condition, in good repair and in a neat and clean condition; and (iii) and shall not impair an adequate supply of light or air to adjacent property or alter the essential characteristic(s) of the neighborhood in which it is located.

SECTION 3: Section 10-1-3, "Definitions", of Chapter 1, "Administrative Provisions", of the

Village of Tower Lakes Zoning Regulations set forth in Title 10 of the Village of Tower Lakes Village Code is also hereby amended by the addition of the following new definitions, in alphabetical order, which definitions shall read as follows:

BATTERY MANAGEMENT SYSTEMS (BMS)

A device or system which monitors and manages cell voltage, cell current, cell temperature, cell charge balancing, charge control, and internal short circuit detection.

GRID-CONNECTED SOLAR ENERGY SYSTEM

A solar photovoltaic system that is connected to an electric circuit served by an electric utility company.

OFF-GRID SOLAR ENERGY SYSTEM

A photovoltaic solar energy system in which the circuits energized by the solar energy system are not electrically connected in any way to electric circuits that are served by an electric utility company.

PHOTOVOLTAIC (PV) CELL

A semiconductor device that converts solar energy into electricity.

SOLAR ENERGY SYSTEM

A system which converts solar energy into electrical energy for storage or use.

SOLAR ENERGY SYSTEM, BUILDING-MOUNTED OR ROOF-MOUNTED

A structure that is part of a solar energy system that is mounted on the roof of either a principal or accessory structure.

SOLAR ENERGY SYSTEM, GROUND-MOUNTED

A structure that is part of a solar energy system not attached to another structure and is ground-mounted.

SOLAR ENERGY SYSTEM, ROOF-INTEGRATED

A structure that is part of a solar energy system that is an integral part of a principal or accessory building replacing or substituting for an architectural or structural part of the building. These include, but are not limited to, photovoltaic systems that are contained within roofing materials and similar architectural components.

SOLAR PANEL

A group of photovoltaic cells assembled on a panel.

SECTION 4: Chapter 4, “Districts Enumerated”, of the Village of Tower Lakes Zoning

Regulations set forth in Title 10 of the Village of Tower Lakes Village Code is hereby amended as set forth on Exhibit A which is attached hereto and thereby made a part hereof.

SECTION 5: Section 10-6-3, “Minimum Floor Area; Maximum Lot Coverage Ratios, and Impervious Surface Area Ratios”, of Chapter 6, “General Requirements”, of the Village of Tower Lakes Zoning Regulations set forth in Title 10 of the Village of Tower Lakes Village Code is hereby amended to read as set forth on Exhibit B which is attached hereto and thereby made a part hereof.

SECTION 6: Paragraph B, “Incidental Uses of Existing Residence”, of Section 10-6-8, “Incidental Uses; Home Occupations; Occasional Sales; Short-Term Rentals”, of Chapter 6, “General Requirements”, of the Village of Tower Lakes Zoning Regulations set forth in Title 10 of the Village of Tower Lakes Village Code is hereby amended to read as follows:

“(B) Incidental Uses of Existing Residence:

Except as otherwise prohibited and/or restricted herein by this Title, use of an existing residence uses and/or structures accessory or incidental thereto to a residence are permitted but only on the condition that any such use or structure is located on the same lot or parcel upon which the residence and/or structure is located or is located on the same group of contiguous lots held in common ownership as such residence. However, such accessory or incidental uses use and structures structure shall not be constructed, established, and/or operated on any property within the Village prior to the establishment or construction of the principal-use residence, provided that, for the purpose of complying with this Paragraph (B), such accessory or incidental use may be located either on the same lot or on a group of contiguous lots held in common ownership as the residence. Any garages or other accessory buildings constructed in any residential A Zoning District must shall be attached to the residence in such a manner so as to be part of the dwelling unit, except with the exception of: (1) playhouses and play equipment when in conformity full compliance with Section 10-6-11 of this Chapter, and except (2) chicken coops and runs when in conformity full compliance with Section 8-3-10 of this Code, and (3) solar energy systems when in full compliance with Section 10-6-13 of this Chapter.”

SECTION 7: Chapter 6, “General Requirements”, of the Village of Tower Lakes Zoning Regulations set forth in Title 10 of the Village of Tower Lakes Village Code is hereby amended by the addition of a new Section 10-6-13, “Solar Energy Systems”, which shall read as set forth on Exhibit C which is attached hereto and thereby made a part hereof.

SECTION 8: All parts of the Village of Tower Lakes Village Code in conflict with the terms or provisions of this Ordinance shall be and the same are hereby amended or repealed to the extent of

such conflict, and said Village Code and all other existing ordinances shall otherwise remain in full force and effect.

SECTION 9: The Corporate Authorities of the Village intend that this Ordinance will be made part of the Village Code and that sections of this Ordinance can be renumbered or relettered and the word “Ordinance” can be changed to “Section”, “Article”, “Chapter”, or some other appropriate word or phrase to accomplish codification, and regardless of whether this Ordinance is ever codified, the Ordinance can be renumbered or relettered and typographical errors can be corrected with the authorization of the Village Attorney, or his or her designee.

SECTION 10: If any section, subsection, subdivision, paragraph, sentence, clause or phrase of this Ordinance or any part thereof is for any reason held to be unconstitutional or invalid or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or effectiveness of the remaining portions of this Ordinance, or any part thereof. The Board of Trustees hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause or phrase thereof irrespective of the fact that any one or more sections, subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional, invalid or ineffective. This Ordinance supersedes all ordinances, or parts of ordinances, adopted prior hereto which are in conflict herewith, but only to the extent of such conflict.

SECTION 11: This Ordinance shall be in full force and effect from and after its passage, approval, and publication.

SECTION 12: The Village Clerk is hereby directed to published this ordinance in pamphlet form.

Presented, read and passed by the President and Board of Trustees of the Village of Tower Lakes, Lake County, Illinois, on a roll call vote at a duly called regular or special meeting of the Board of Trustees on the ____ day of _____, 2022, and deposited and filed in the Office of the Clerk of said Village on said date.

ROLL CALL VOTE:

YEAS:

NAYS:

ABSENT:

ABSTAIN:

APPROVED by the President of the Village of Tower Lakes, Illinois, this ____ day of _____, 2022.

David Parro, Village President,
Village of Tower Lakes

ATTEST:

Christine Burgoon, Village Clerk,
Village of Tower Lakes

Recorded in the Record of Ordinances
of the Village as Ordinance No. 2022-_____

Christine Burgoon, Village Clerk,
Village of Tower Lakes

PUBLISHED IN PAMPHLET FORM THIS ____ DAY OF _____, 2022.

EXHIBIT A

**CHAPTER 4
DISTRICTS ENUMERATED**

ARTICLE A: RESIDENCE DISTRICTS

10-4A-1: A-1 DISTRICTS:

In the A-1 Districts (Residence, 40,000 square feet) the only uses which hereafter may be established are:

- (A) Single-family residences, excluding trailers and tents, each on a building plot or lot of not less than one hundred forty feet (140') in width at the established building line and forty thousand (40,000) square feet in area, except as otherwise provided by this Chapter.
- (B) Churches.
- (C) Public and community parks excluding commercial enterprises therein.
- (D) Community waterworks.
- (E) Public fire stations.
- (F) Solar energy systems as defined in and only in compliance with Section 10-6-12, "Solar Energy Systems", of Chapter 6 of Title 10 of this Village Code.

10-4A-2: A-2 DISTRICTS:

In the A-2 Districts (Residence, 20,000 square feet) the only uses which hereafter may be established are those permitted in A-1 Districts and, in addition, the following:

- (A) Single-family residences, excluding trailers and tents, each on a building plot or lot of not less than one hundred feet (100') in width at the established building line and twenty thousand (20,000) square feet in area, except as otherwise provided by this Chapter.
- (B) Solar energy systems as defined in and only in compliance with Section 10-6-12, "Solar Energy Systems", of Chapter 6 of Title 10 of this Village Code.

10-4A-3: A-3 DISTRICTS:

In the A-3 Districts (Residence - 5 acres) the only uses which hereafter may be established are:

- (A) Single-family residences, excluding trailers and tents, each on a lot or parcel of not less than three hundred feet (300') in width at the established building line and five (5) acres in area, except as otherwise provided by this Chapter.
- (B) Churches.
- (C) Public and community parks excluding commercial enterprises, therein.
- (D) Community waterworks.
- (E) Public fire stations.
- (F) Backyard chickens as defined in and only if in compliance with Chapter 3 of Title 8 of this Village Code.
- (G) Solar energy systems as defined in and only in compliance with Section 10-6-12, "Solar Energy Systems", of Chapter 6 of Title 10 of this Village Code.

10-4A-4: A-4 DISTRICTS:

In the A-4 Districts (Residence - 2 acres) the only uses which hereafter may be established are those permitted in the A-3 Districts and, in addition, the following:

- (A) Single-family residences, excluding trailers and tents, each on a lot or parcel of not less than two hundred feet (200') in width at the established building line and two (2) acres in area, except as otherwise provided by this Chapter.
- (B) Backyard chickens as defined in and only if in compliance with Chapter 3 of Title 8 of this Village Code.
- (C) Solar energy systems as defined in and only in compliance with Section 10-6-12, "Solar Energy Systems", of Chapter 6 of Title 10 of this Village Code.

ARTICLE B: BUSINESS DISTRICTS

10-4B-1: B-1 DISTRICTS:

In the B-1 Districts, the only uses which hereafter may be established are those permitted in the A-2 Districts, and, in addition, the following:

- (A) Permitted Uses:
 - (1) Animal hospitals.
 - (2) Greenhouses.
 - (3) Nurseries.
 - (4) Professional and business offices.
 - (5) Residential apartments and duplex or group houses at the rate of not more than one living unit for each three thousand (3,000) square feet of lot or building plot.
 - (6) Restaurants.
 - (7) Retail business and service establishments.
 - (8) Solar energy systems as defined in and only in compliance with Section 10-6-12, "Solar Energy Systems", of Chapter 6 of Title 10 of this Village Code.
- (B) Special Uses:
 - (1) Personal wireless service facilities.
 - (2) Schools, whether public or private.

ARTICLE C: FARMING DISTRICTS

10-4C-1: F DISTRICTS:

In the farming districts, the only uses which hereafter may be established are the following:

- (A) Permitted Uses:
 - (1) On a lot or parcel of not less than twenty (20) acres in area, the growing of usual farm products, such as vegetables, fruits, trees and grain and their storage, the raising of livestock and other customary uses of agricultural land, and the keeping of backyard chickens as defined in and only if in compliance with Chapter 3 of Title 8 of this Village Code.

- (2) Single-family residences, excluding trailers and tents, each on a lot or parcel of not less than one hundred forty feet (140') in width at the established building line and forty thousand (40,000) square feet in area, except as otherwise provided by this Chapter.
- (3) Solar energy systems as defined in and only in compliance with Section 10-6-12, "Solar Energy Systems", of Chapter 6 of Title 10 of this Village Code.

(B) Special Uses:

- (1) Personal wireless service facilities.
- (2) Schools, whether public or private.

ARTICLE D: RECREATIONAL DISTRICTS

10-4D-1: PR-1 DISTRICTS:

In the PR-1 Districts (Private Recreational, Passive Recreation Areas) the only use allowed is as a "passive recreational area", which is defined as an area used in such a manner that the existing nature of the land is not altered, changed, or varied in any respect. No structures or lighting may be installed, erected or maintained.

10-4D-2: PR-2 DISTRICTS:

In the PR-2 Districts (Private Recreational, less than 30,000 square feet) the only uses allowed are:

- (A) Uses permitted in the PR-1 Districts.
- (B) Minor recreational areas.
- (C) Solar energy systems as defined in and only in compliance with Section 10-6-12, "Solar Energy Systems", of Chapter 6 of Title 10 of this Village Code.

For the purposes of determining the uses allowed in a PR-2 District a "minor recreational area" is defined as an area wherein the following uses are allowed: "Tot parks" including the installation of "playground type" equipment (e.g., swings, slides, climbers, teeter-totters, etc.); pedestrian parks including the installation of benches, and areas with single basketball backstops having appropriate surfaces and support poles. However, except as permitted herein, no structures as defined in Section 10-1-3 of this Title or temporary or permanent facilities (whether or not attached to the ground) or lighting facilities may be installed or erected, except after a grant of variation pursuant to the conditions and procedures as set forth in this Zoning Ordinance.

10-4D-3: PR-3 DISTRICTS:

In the PR-3 Districts (Private Recreational, 30,000 square feet or more) the only uses allowed are:

- (A) Uses permitted in the PR-1 and PR-2 Districts.
- (B) Major recreational areas.
- (C) Solar energy systems as defined in and only in compliance with Section 10-6-12, "Solar Energy Systems", of Chapter 6 of Title 10 of this Village Code.

For the purpose of determining the uses allowed in a PR-3 District, a “major recreational area” is defined as an area wherein the following uses are allowed: baseball diamonds, provided backstops may not exceed three hundred (300) square feet; football, soccer and other field sport areas including the usual and customary goal facilities; tennis courts with appropriate surfaces, necessary fencing, nets, player and spectator benches, providing that the fencing does not exceed twelve feet (12’) in vertical dimension and that the player-spectator benches do not exceed a capacity of thirty (30) persons nor six feet (6’) in vertical dimension.

Except as permitted herein, no structures as defined in Section 10-1-3 of this Title, or temporary or permanent facilities (whether or not attached to the ground) or lighting facilities, may be installed or erected within this District, except after a grant of variation pursuant to the conditions and procedures set forth in this Zoning Ordinance.

ARTICLE E: PUBLIC LAND DISTRICT

10-4E-1: PL DISTRICT:

In the Public Land District (PL), the only uses which may hereafter be established in this District shall be the following:

(A) Permitted Uses:

- (1) Community waterworks.
- (2) Public buildings and land which are utilized for a village hall, police station, and/or other municipal offices and facilities.
- (3) Public forest, wildlife, and/or nature preserves.
- (4) Public parks and playgrounds.
- (5) Solar energy systems as defined in and only in compliance with Section 10-6-12, “Solar Energy Systems”, of Chapter 6 of Title 10 of this Village Code.

(B) Special Uses:

- (1) Personal wireless service facilities.
- (2) Schools, whether public or private.

ARTICLE F: INTERPRETATION

10-4F-1: INTERPRETATION:

Any use which is not specifically listed as a permitted use or special use in a Zoning District is prohibited in such Zoning District.

EXHIBIT B

10-6-3: MINIMUM FLOOR AREA; MAXIMUM LOT COVERAGE RATIOS; AND IMPERVIOUS SURFACE AREA RATIOS:

(A) Minimum Floor Area:

Every dwelling hereafter erected in the following zoning districts shall have not less than the floor areas as set by the respective zoning districts, said floor areas being measured from the outside of the exterior walls, including utility rooms but excluding cellars, basements, open porches, breezeways, garages and other spaces that are not used frequently or during extended periods for living, eating or sleeping purposes:

Zoning District	1-Story	More Than 1-Story
F (Farming)	1,800 sq. ft.	2,100 sq. ft. with not less than 1,225 sq. ft. on the first floor
A-1 (40,000 sq. ft.)	1,800 sq. ft.	2,100 sq. ft. with not less than 1,225 sq. ft. on the first floor
A-2 (20,000 sq. ft.)	1,800 sq. ft.	2,100 sq. ft. with not less than 1,225 sq. ft. on the first floor
A-3 (5 acres)	1,800 sq. ft.	2,100 sq. ft. with not less than 1,225 sq. ft. on the first floor
A-4 (2 acres)	1,800 sq. ft.	2,100 sq. ft. with not less than 1,225 sq. ft. on the first floor

(B) Maximum Lot Coverage Ratios:

The lot coverage ratio is that numerical value obtained as a result of dividing the sum of the gross horizontal area of the footprint of all buildings and structures located on a lot or parcel by the area of the lot or parcel on which the buildings are located or intended to be located. Lot coverage includes, but is not limited to, the area of the lot or parcel covered by the house, garage, porch, deck, gazebo, any ground-mounted solar energy system, and any other structure. The maximum lot coverage ratios shall be:

Actual Area Of Lot Or Parcel (In Sq. Ft.)	Maximum Lot Coverage Area
10,000 or less	34% of the area of the lot
15,000 or less, but greater than 10,000	30% of the area of the lot, up to a maximum of 4,500 sq. ft.
20,000 or less, but greater than 15,000	25% of the area of the lot, up to a maximum of 5,200 sq. ft.
25,000 or less, but greater than 20,000	22% of the area of the lot, up to a maximum of 5,500 sq. ft.
30,000 or less, but greater than 25,000	20% of the area of the lot, up to a maximum of 6,000 sq. ft.
35,000 or less, but greater than 30,000	18% of the area of the lot, up to a maximum of 6,300 sq. ft.
40,000 or less, but greater than 35,000	16% of the area of the lot, up to a maximum of 6,400 sq. ft.
Greater than 40,000	6,400 sq. ft., plus 5% of the area of the lot in excess of 40,000 sq. ft.

Any existing residence and/or other existing structure on a zoning lot or parcel with a lot area of twenty thousand (20,000) square feet or greater with lot coverage in excess of the otherwise applicable maximum lot coverage restriction(s) as set forth above may continue to exist as a legal nonconforming use, notwithstanding the foregoing maximum lot coverage restrictions; any new or replacement structure on any zoning lot or parcel with a lot area of twenty thousand (20,000)

square feet or greater shall comply with maximum lot coverage restriction(s) as set forth above and with the other applicable provisions of this Zoning Ordinance; and no new residence or other structure shall be constructed or maintained on any zoning lot or parcel where the zoning lot or parcel has a lot area of less than twenty thousand (20,000) square feet, provided, however, that in such cases where there is an existing residence or other structure on such a nonconforming zoning lot or parcel, only a replacement residence complying with the maximum lot coverage restrictions as set forth above and with the other applicable provisions of this Zoning Ordinance shall be allowed.

(C) Impervious Surface Area Ratio:

The impervious surface ratio is that numerical value obtained as a result of dividing the sum of the gross horizontal area of all impervious surface or surfaces on a lot or parcel added together by the area of the lot or parcel on which the impervious surface is located. An impervious surface is any hard surface or man-made surface or area, which surface or area does not readily absorb or retain water, including but not limited to any building roof, porch, gazebo, parking and/or driveway area, graveled area, sidewalk, animal enclosure, ~~and/or~~ recreation area, and/or any ground-mounted solar energy system. The maximum permitted impervious surface area ratio on any lot or parcel shall be calculated as follows:

A	B	C
Actual Lot Area (in square feet)	Maximum Lot Coverage Area	Maximum Impervious Surface Area Ratio
10,000 sq. ft. or less	34% of the area of lot	40%
15,000 sq. ft. or less, but greater than 10,000 sq. ft.	30% of the area of lot, up to maximum of 4,500 sq. ft.	36%
20,000 sq. ft. or less, but greater than 15,000 sq. ft.	25% of the area of lot, up to maximum of 5,200 sq. ft.	31%
25,000 sq. ft. or less, but greater than 20,000 sq. ft.	22% of the area of lot, up to maximum of 5,500 sq. ft.	28%
30,000 sq. ft. or less, but greater than 25,000 sq. ft.	20% of the area of lot, up to maximum of 6,000 sq. ft.	26%
35,000 sq. ft. or less, but greater than 30,000 sq. ft.	18% of the area of lot, up to maximum of 6,300 sq. ft.	24%
40,000 sq. ft. or less, but greater than 35,000 sq. ft.	16% of the area of lot, up to maximum of 6,400 sq. ft.	22%
Greater than 40,000 sq. ft.	6,400 sq. ft., plus 5% of the area in excess of 40,000 sq. ft.	22%, plus 1.86% of area of lot in excess of 40,000 sq. ft.

In the event the building(s) and structure(s) on any lot or parcel, including but not limited to any recreation area, are less than the maximum permitted lot coverage ratio as set forth above, additional impervious area may be added to such lot or parcel up to the maximum permitted impervious surface area ratio for the size of such lot or parcel as set forth above.

EXHIBIT C

10-6-13: SOLAR ENERGY SYSTEMS:

- (A) Scope/Applicability: This Section regulates the location, installation, operation, and maintenance of solar energy systems within the Village. All systems installed after the effective date of adoption of this Chapter shall be located, installed, operated, and maintained in compliance with this Chapter.
- (B) Purpose/Intent:
- (1) The regulations set forth in this Section are intended to encourage the efficient and effective development and use of solar energy systems located within the corporate limits of the Village of Tower Lakes while protecting the public health, safety, and welfare.
 - (2) Solar energy is a valuable economic resource that can be utilized throughout the Village for purposes which include but are not limited to:
 - (a) To implement the following objectives of the Village's Official Comprehensive Plan by: (i) encouraging the use of local solar energy resources; (ii) promoting sustainable building design and practices; (iii) encouraging economic development while preserving the community's semi-rural character;
 - (b) To decrease the community's reliance on fossil fuel power sources and reduce greenhouse gas emissions and achieve carbon reduction goals;
 - (c) To enhance the reliability and resiliency of the local power grid and make more efficient use of the local electric distribution infrastructure;
 - (d) To promote consumer choice and allow residents and businesses to use local, solar energy while displacing fossil fuel generation;
 - (e) To improve air quality and protect public health;
 - (f) To establish reasonable and uniform regulations for the location, installation, operation and maintenance of solar energy systems;
 - (g) To assure that development and production of solar energy systems is safe and to minimize adverse effects on the community and adjacent properties;
 - (h) To facilitate energy cost savings for the residents of the Village of Tower Lakes; and
 - (i) To promote solar energy resources in support of national and state goals.
- (C) General Requirements Applicable to Solar Energy Systems:
- (1) Zoning: A solar energy system shall be authorized in any Zoning District of the Village as a permitted accessory use provided that such system and the location, installation and operation thereof is in compliance with this Section and all other applicable provisions of this Village Code.
 - (2) Height: Building-mounted or roof-mounted solar energy systems shall not exceed the maximum height otherwise permitted in the respective zoning district in which the system is located. For purposes of this Section, the term "height" shall be as defined and measured in accordance with the definition of "height" as set forth in Section 10-1-3, "Definitions", of this Title.

- (3) Accessory Use: A solar energy system shall be considered a permitted accessory use, the primary purpose of which shall be to produce energy to support the permitted use(s) on the subject property.
- (4) Sale of Surplus Power: It is permissible to sell excess energy that is produced by a solar energy system to the local electric utility company in accordance with all applicable federal, state and local laws and regulations.
- (5) Industry Standards: Each system shall conform to applicable industry standards including those of the American National Standards Institute (ANSI), Underwriters Laboratories (UL), the American Society for Testing and Materials (ASTM), and the Institute of Electrical and Electronics Engineers (IEEE).
- (6) Building Permit Required:
 - (a) No solar energy system shall be constructed or installed without first obtaining a building permit issued by the Village, however, no fee for such a Village permit shall be required.
 - (b) Installation of any solar energy system within the Village shall be subject to all inspections as required by this Village Code.
- (7) Building Permit Application Requirements: An application for a building permit for the installation of all solar energy systems shall be submitted to the Village for the Village's review and approval, shall be executed by the record owner(s) of the subject property, and shall contain the following information as well as be accompanied by the documentation set forth below:
 - (a) Name, address and telephone number of both the applicant as well as the owner(s) of record of the subject property;
 - (b) Name, address and telephone number of the person, firm or corporation constructing and installing the solar energy system, as well as the Contractor's License number.
 - (c) Elevation drawing(s) (and/or photographs) and site plan showing location, size and design details of proposed system(s);
 - (d) Manufacturer specifications of the solar energy devices, including, wattage capacity, dimensions of collectors, mounting mechanisms and/or foundation details and structural requirements.
 - (e) For a roof-mounted solar energy system, plans identifying the existing roof structure, location of panels, and the anchorage details, as well as dimensions of the installation components, along with setbacks from the edge of the roof;
 - (f) A certificate of compliance demonstrating that the system has been tested and approved by Underwriters Laboratories (UL) or other approved independent testing agency.
 - (g) Written consent of the owner of the building or other structure or of the land on which the solar energy system is to be erected;
 - (h) Information evidencing full compliance by the respective solar energy system with this Section and any other applicable ordinances of the Village.

- (8) Compliance with Building Codes: Solar energy systems must comply with the Building Regulations of the Village (Title 4 of this Village Code) as well as with all other applicable ordinances of the Village.
- (9) Adjacent Property: Any and all solar energy system(s) installed within the Village shall be constructed so as not to restrict or limit the use and/or development of any adjacent properties or other properties within the Village.
- (10) Indemnification: The owner(s) of a solar energy system shall execute and submit to the Village a Hold Harmless and Indemnification Agreement which shall be in the following form: The undersigned hereby agree, to the greatest extent permitted by law, to defend, indemnify and hold harmless the Village of Tower Lakes and its elected and appointed officers, officials, employees, agents, and volunteers from and against any and all claims, demands, losses, suits, causes of action, damages, injuries, costs, expenses and liabilities whatsoever, including but not limited to attorney's fees and costs of defense arising out of and/or resulting from the installation, operation, and/or maintenance of the solar energy system of the undersigned arising out of and/or resulting from any act(s) or omission(s) of the owner(s) relative to the subject solar energy system.
- (11) Aesthetic Considerations: Solar energy systems shall be designed and installed so as to reduce to the greatest degree practicable the visual impact upon surrounding property(ies) as viewed by an observer from street level on any adjacent property(ies) and/or from any adjacent Village street(s) in the vicinity of the subject property.

(D) Roof-Mounted Solar Energy System Requirements:

- (1) Solar energy systems shall comply with all applicable provisions of this Village Code.
- (2) No solar energy system shall exceed the height limitations for structures within the zoning district in which the solar energy system will be located.
- (3) Any roof used to support a roof-mounted solar energy system shall be designed and constructed to support the roof, snow loads, and the solar energy system load.
- (4) Penetrations of the roof covering shall be flashed and sealed or self-sealing fasteners used.
- (5) Building-mounted solar energy systems may be installed on any pitched roof provided they are fixed and installed parallel with the plane of a pitched roof. No solar energy system equipment of any kind can protrude from the plane or surface of any type of pitched roof.
- (6) Roof-mounted solar energy systems on a flat roof may be oriented to achieve maximum sun exposure but shall not exceed three (3) feet in overall height or extend above the building parapet, whichever is less. If no parapet exists, screening which is architecturally compatible shall be installed. Any screening must be installed a minimum of the distance equal to the height of the screening from the edge of the roof.
- (7) A solar energy system shall not obstruct any plumbing, mechanical or building roof vents.

- (8) Solar panels for solar energy systems shall be installed on rooftops so as to be as unobtrusive as possible from the street level.
 - (a) Solar panels shall be installed on a rail or frame system parallel to the roof or shall be integrated directly into the roof deck. Panels raised at an angle above the roof are prohibited, except on a flat roof where such panels shall not exceed three (3) feet above the plane of the flat roof.
 - (b) Total height of panels from the plane of the roof to the top of the panels must not exceed eight inches (8") on a pitched roof.
 - (c) No portion of a solar energy, including but not limited to the respective solar panels, shall extend beyond any existing roof line or beyond the building façade of the building on which the system is mounted.
 - (d) Solar panels may not be installed on the facing portions of mansard or gambrel roofs if these roofs are visible from the street.
- (9) On each roof plane, a minimum eighteen inch (18") wide pathway from the lowest roof edge to ridge shall be provided on the same roof plane as the PV array.
- (10) For each roof plane on which a PV array is to be installed, an eighteen inch (18") wide pathway shall be provided on each side of the roof ridge.
- (11) Any emergency escape window(s) located on the second floor of a structure must have a clear thirty-six inch (36") wide path from the window(s) to an eave of the roof.
- (12) A Direct Current (DC) disconnect switch must be mounted at eye level near the electric meter with access for the Fire Department. The switch must be labeled to show that it disconnects the PV array.
- (13) PV frame modules, electrical equipment and conductor enclosures shall each be grounded.
- (14) A double-pole Alternating Current (AC) disconnect must be provided in the circuit breaker box of the building to disconnect the inverter from the main power supply.

(E) Ground-Mounted Solar Energy Systems:

- (1) A ground-mounted solar energy system shall be allowed only if a roof-mounted solar energy system is impossible or impractical to install due to roof design, as determined by a written opinion signed and sealed by an architect at the owner(s)' expense.
- (2) Any ground-mounted solar energy system with motorized solar tracking is specifically prohibited within the Village.
- (3) Installation of a ground-mounted solar energy system on a property shall not be allowed within ten feet (10') of any portion of a septic system. In order to determine compliance with this requirement, an application for a Village building permit shall include "As-Built Plans" for the septic system on the site and either a letter of approval or a "no permit required" letter from the Lake County Board of Health.

- (4) Screening shall be installed and/or constructed so as to effectively block the view(s) of a ground-mounted solar energy system from the respective properties of any adjacent neighbor(s), which screening shall consist of landscaping, non-deciduous trees, and/or a berm, but any berm installed for such purpose shall require a separate Village permit approved by the Village Engineer.
- (5) No ground-mounted solar energy system shall be installed or erected on any ground or surface that has been raised, filled or landscaped for the purpose of circumventing the height restrictions of this Section. Any ground-mounted solar energy system shall be limited to ten feet (10') in height.
- (6) The lowest point on any ground-mounted solar energy system equipment, exclusive of its base, shall not be more than two feet (2') in height, as defined in Section 10-1-3 of this Title, of the site on which the equipment is located.
- (7) Location and Setbacks:
 - (a) Ground-mounted solar energy systems shall only be installed in rear yards, and no ground-mounted solar energy system equipment shall be installed in any front yard, corner side yard, or interior side yard.
 - (b) All ground-mounted solar energy systems shall comply with all required zoning setback requirements, as measured from the property line to the closest edge of the system.
 - (c) All ground-mounted solar energy systems shall be set back a minimum of fifteen feet (15') from any property line(s) and a minimum of thirty feet (30') from any dwelling(s) located on any adjacent lot(s).
 - (d) All ground-mounted solar energy systems shall also comply with all setbacks as required by the zoning for other structures as detailed in the Village Code.
 - (e) All ground-mounted solar energy systems shall also be subject to required minimum setback requirements from bodies of water as provided for in Section 10-6-4 of this Chapter.
- (8) Lot Coverage: The total surface of a ground-mounted solar energy system shall be included in the calculations of both the maximum lot coverage ratio and the maximum impervious area ratio. The total surface area of the ground-mounted solar energy system shall be less than or equal to five percent (5%) of the net buildable acreage of the property, which is the area of the lot or parcel excluding all required zoning setbacks.
- (9) Array: The array surface area of any ground-mounted solar energy system shall be less than or equal to 1,200 square feet.
- (10) Height: Ground mounted solar energy systems shall not exceed ten feet (10') in height when oriented at maximum tilt. (11) Additional application requirements: The application for a building permit for a ground-mounted solar energy system shall include:
 - (a) A site plan which shows:
 - (i) Existing and proposed contours, at a minimum of two foot (2') intervals;

- (ii) Location, setbacks, exterior dimensions and square footage of all existing and proposed structures.
- (iii) Location and size of existing waterways, wetlands, 100-year floodplains, sanitary sewers, drain tiles and water distribution systems.
- (iv) Location of any overhead or underground utilities and easements.
- (v) Location of septic fields and associated pipes.
- (vi) Location of any water well(s) on the subject property.

(12) Electrical Considerations:

- (a) PV frame modules, electrical equipment and conductor enclosures must be grounded.
- (b) A double-pole AC disconnect must be provided in the owner's circuit breaker box to disconnect the inverter from the main power supply.
- (c) A DC disconnect switch must be mounted at eye level near the electric meter with access for the fire department, and the switch must be labeled to show that it disconnects the PV array.
- (d) All electrical cables leading from the ground-mounted array to any building shall be underground.

(F) Requirements for Battery Storage Systems for Solar Energy Systems:

- (1) Such battery storage system shall be utility interactive with an auto disconnect feature in the event of a power failure.
- (2) Such battery storage system shall include a Battery Management System (BMS) to prevent overcharging and thermal runaway.
- (3) Such battery storage system shall not be installed in any living area(s).
- (4) Such battery storage system shall have a certificate of compliance demonstrating that the system has been tested and approved by Underwriters Laboratories (UL) or other approved independent testing agency is required.
- (5) Such battery storage system shall be installed away from sources of heat and in a well-ventilated area.
- (6) Such battery storage system shall be enclosed.
- (7) Such battery storage system shall have a separate disconnect switch located in close proximity or as a part of the system.
- (8) Such battery storage system shall be installed by a licensed contractor, solar contractor or licensed electrician.

(G) Disposal of Solar Energy Systems:

- (1) A solar energy system which has reached the end of its useful life or has been abandoned shall be removed. The owner(s) of the subject property and the operator of the system shall

be and are jointly and severally obligated to physically remove the installation no more than one hundred eighty (180) days after the date the operation of the system has ceased. The owner(s) and operator(s) of the system shall be and are jointly and severally obligated to notify the Village's Building Department of the proposed date of discontinued operations and plans for removal. Decommissioning shall consist of:

- (a) Physical removal of all solar energy systems, structures, equipment, and electrical wiring lines from the site.
- (b) Disposal or recycling of all solid and hazardous waste related to the system in accordance with local, state, and federal waste disposal and recycling regulations.
- (c) For ground-mounted solar energy systems, stabilization or re-vegetation of the site as necessary to minimize erosion. The Village may allow the owner or operator to leave landscaping or certain specified below-grade foundations or electrical wiring in order to minimize erosion and disruption to vegetation.