

ARTICLE XXI
LIGHTING, LANDSCAPING, FENCING AND SCREENING
(Revised 08-14-2018)

Section 21.1 PURPOSE

The purpose of this article is to provide regulations and requirements for exterior lighting, landscaping, fencing and screening of the perimeter of certain land uses and facilities in order to protect the character of the surrounding area, incorporate dark skies initiatives, prevent trespassing into unsafe areas, discourage theft, prevent light from glaring onto adjoining properties, stabilize soils, control wind-blown dust and debris reduce storm water runoff, increase ground water infiltration and reduce noise.

Section 21.2 LIGHTING REQUIREMENTS *(Revised 08-14-2018)*

The purpose of this ordinance is to:

1. Permit reasonable uses of outdoor lighting for nighttime safety, utility, security, and enjoyment while preserving the ambiance of the night,
2. Curtail and reverse any degradation of the nighttime visual environment and the night sky;
3. Minimize glare and obtrusive light by limiting outdoor lighting that is misdirected, excessive, or unnecessary;
4. Conserve energy and resources to the greatest extent possible;
5. Help protect the natural environment from the damaging effects of nighttime lighting

A. All outdoor light fixtures shall have full cut-off shielding such that no light is emitted above an imaginary horizontal plane passing through the fixture below the light source regardless of type or wattage, EXCEPT for gas lighting, glass tubes filled with Neon, Argon or Krypton, and small decorative fixtures such as porch lights.

B Exterior lighting installed after the effective date of this ordinance shall have the Fixture Seal of Approval (FSA) for dark sky friendly light fixtures as certified by the International Dark Sky Association. FSA compliant fixture can be referenced at: www.darksky.org/outdoorlighting-29

C Exterior light fixtures shall be energized only when necessary by means of automatic timing devices and through the use of motion detection devices on security lighting.

D. All outdoor lighting in all use districts shall be directed toward, and confined to the ground areas of, lawns and parking lots. Parking lots shall not be lit between the hours of 9:00 am and 4:00 p.m., unless conditions regarding weather, employment, or parking lot use patterns warrant otherwise.

E. Floodlights shall be directed downward, shielded as necessary so that the light source is not visible from roads or adjacent property, and located and directed so that light is neither unnecessarily reflected onto adjacent property or into the night sky

F. All illumination of signs and any other outdoor feature shall not be of a flashing, moving or intermittent type. Artificial light shall be maintained stationary and constant in intensity and color at all times when in use.

G. All freestanding and outdoor lighting shall not exceed twenty-eight (28) feet in height except as shown on the approved site plan for the use or facility

H. Sodium light sources shall be used for street lighting, parking lot lighting, and for security lighting when such security lighting is not to be energized by motion detection devices. Where feasible, low-pressure sodium lighting is to be encouraged.

I. In addition to fixture design and shielding, architectural and landscape design features may be incorporated into an outdoor lighting plan to meet the requirements and comply with the intent of this Article

J. Off-premises advertising signs, if permitted, shall not be illuminated externally or internally.

K. Lighted signs shall not be illuminated between one (1) hour after the close of business or eleven PM (11:00 PM), whichever is later, and one (1) hour before the opening of business on the following day except by special permission granted as a condition of site plan approval. All fixtures or circuits illuminating lighted signs shall be equipped with automatic timing device.

L. Quartz and mercury vapor lighting are prohibited because of the broad spectrum of visible light which these sources emit and because of the diffusive and reflective character of such light

M. All parking lots shall be illuminated only when in use during regular business hours and thereafter only until the public and employees have left the premises. Security lighting fixtures meeting requirements of this Article will be permitted only as shown on the approved site plan.

N. Entrance and traffic marker lights along access roads and drives, in parking lots and along pedestrian ways shall be sodium type and equipped with full cut-off shielding as well as shielding to keep the light source out of view of vehicular and pedestrian traffic

O. Outdoor display areas including display or storage lots may be illuminated during the hours the business is open to the public or until 11 00 P.M. Metal halide light sources may be used provided such fixtures are equipped with full cut-off shielding and project only the minimum amount of light necessary for good visibility.

P. Lighting of building facades shall be from the top and directed downward with full cut-off shielding and additional shielding to keep the light source from the view of vehicular and pedestrian traffic and adjacent property.

Q. Security lighting shall be directed away from and/or shielded from road traffic and adjacent properties.

R. Limit the type of LED light to a "warm-white" or filtered LEDs's (with a Correlated Color Temperature (CCT) lower than 3,000K) to minimize blue emissions.

S. Approved Materials: The provisions of this Article are not intended to prevent the use of any design, material or method of installation, even if not specifically prescribed by this Article, provided that such alternate has been approved by the Planning Commission and meets or exceeds the Illuminating Engineers Society (IES) standards and has the Fixture Seal of Approval (FSA) from the International Dark Sky Association.

T. Exemptions: The following uses and activities shall be exempt from these Exterior Lighting Regulations:

- 1 Lighting in swimming pools and other water features governed by Article 680 of the National Electrical Code.
- 2 Exit signs and other illumination required by building codes.
- 3 Lighting for stairs and ramps, as required by the building code.
- 4 Signs are regulated by the sign code, but all sign lighting is recommended to be fully shielded.
- 5 Holiday and temporary lighting (less than forty-five (45) days use in any one year).
- 6 Football, baseball, and softball field lighting; only with permit from the Township recognizing that steps have been taken to minimize glare and light trespass, and utilize sensible curfews.
- 7 Low voltage landscape lighting, but such lighting should be shielded in such a way as to eliminate glare and light trespass.

Section 21.3 RIGHT-OF-WAY PROTECTION AND PUBLIC SAFETY

No trees or shrubs shall be planted within a public right-of-way without the prior written consent of the appropriate public agency responsible for maintaining the right-of-way. Landscaping shall not interfere with public safety, and shall not interfere with the safe movement of motor vehicles, bicycles, or pedestrians (see especially Section 3.20). Landscape materials shall not obstruct the operation of fire hydrants, electrical or other utility lines or facilities.

Section 21.4 REQUIRED VEGETATION

A greenbelt, buffer strip, or berm as required by this Ordinance or as a condition to the approval of a Site Plan, Special Use Permit, Planning Unit Development Permit or variance, shall be installed and maintained in a healthy living condition for the duration of the principal use of property in accordance with the following requirements. Where this Ordinance or a condition of a permit issued under this Ordinance fails to specify a particular option, the owner or developer may choose which option to install: a greenbelt, buffer strip or berm. If none is selected, the Zoning Administrator shall select and so note on the permit. See also Section 21.8.

A. Greenbelts: A greenbelt shall consist of an open space strip running along the property line at least thirty (30) feet in width, seeded and maintained as grass or other plant ground cover. Trees or shrubs may be planted at the discretion of the landowner without regard for the spacing requirements of Section 21.4.B.

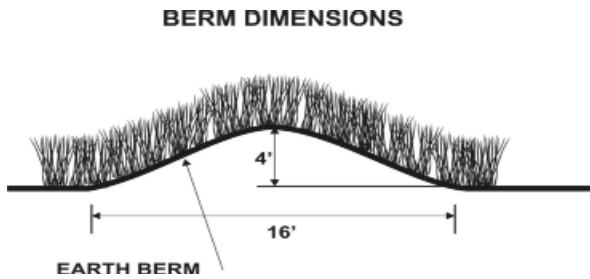
B. Buffer Strips: A buffer strip shall consist of a landscaped strip at least fifteen (15) feet in width containing at least two (2) trees plus one (1) additional tree for each twenty (20) feet in length of the buffer strip. Said trees shall be at least one and three-fourths (1 $\frac{3}{4}$) inches in caliper measured six (6) inches above ground level. Dead or dying trees shall be replaced within eight (8) months. Grass or other plant ground cover, mulch, or ornamental bark or stone, shall completely cover area not planted in trees or shrubs.

C. Berms: A berm shall consist of a linear mound of earthen material rising to a height of at least four (4) feet with a minimum base of sixteen (16) feet covered and maintained as grass, ground cover, shrubs or other approved vegetation and constructed in accordance with the diagram below, or with a base of at least four (4) times the desired height of the berm. See Figure 21-1 and the provisions of Section 21-7.

See Figure 21-1 on following page.

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Figure 21-1



D. Plant Materials:

1. Plant Material Spacing:

- a. Except as provided below, plant materials shall not be placed closer than four (4) feet from the fence line property line.
- b. Where plant materials are placed in two or more rows, plantings shall be staggered in rows.
- c. Evergreen trees shall be planted not more than twenty (20) feet on centers, and shall be not less than five (5) feet in height, nor closer than five (5) feet to an adjoining property line.
- d. Narrow evergreens shall be planted not more than six (6) feet on centers, and shall not be less than three (3) feet in height.
- e. Tree-like shrubs shall be planted not more than ten (10) feet on centers, and shall be not less than four (4) feet in height.
- f. Large deciduous shrubs shall be planted not more than four (4) feet on centers, and shall not be less than six (6) feet in height.
- g. Large deciduous trees shall be planted not more than twenty (20) feet on centers, and shall not be less than eight (8) feet in height, nor closer than ten (10) feet to an adjoining property line, unless approved by the neighboring property owner.

Suggested Plant Materials:

The Zoning Administrator shall maintain a list of preferred vegetation for use in Greenbelts, Buffer Strips, and Berms, and may refer the applicant to the Benzie Soil Conservation District for assistance. The Zoning Administrator shall also maintain a list of native and natural planting materials for use where a more natural and less ornamental appearance is desired, as well as a list of salt tolerant species which are encouraged to be planted along major thoroughfares.

Section 21.5 UNDESIRABLE TREES

Tree health problems and “nuisance” characteristics are primary reasons to prohibit planting specific tree species. Tree health problems are usually due to insect or disease susceptibility. The result is poor tree vigor and growth, dieback

and early mortality. Weakened trees may also become hazardous to people and property. Nuisance means that a characteristic of the specific tree species may create irritating or annoying conditions that must be dealt with regularly. For example, fruits drop every year and can create slippery sidewalks. Some roots grow toward water, often getting into sewer lines, requiring them to be roto-rooted out. Trees on the undesirable list have characteristics that may require additional time, maintenance or money. Sometimes the benefits of the tree species outweigh the negative characteristics. For example, a mulberry tree in the back yard may attract and feed birds without causing problems on sidewalks or sewers.

The Zoning Administrator shall maintain a list of vegetation undesirable for use in Greenbelts, Buffer Strips, and Berms, and may refer the applicant to the Benzie Soil Conservation District for alternate species.

Section 21.6 DRIVES AND ACCESSWAYS

Necessary drives and accessways from public rights-of-way through such buffer strips shall be permitted, provided that such accessways shall not be subtracted from the lineal dimension used to determine the required number of plants.

Section 21.7 BUFFERING PROVISIONS FOR SURFACE MINING AREAS AND JUNK YARDS

Where requirements in Article XVI for buffering for surface mining areas, and junk yards or any other use in Article XVI are more restrictive than provisions of Article 21, the provisions of Article XVI shall apply.

Section 21.8 SIDE AND REAR YARD LANDSCAPING AND FENCING OPTIONS

In any situation requiring either a greenbelt, buffer strip or berm to meet the requirements of Section 21.4, the landowner has the option in fulfilling landscaping requirements. A fence meeting the requirements of Section 21.15 may also be used in addition to any of these landscaping options, unless required as a standard or condition of approval of a site plan, Special Use Permit, Planned Unit Development Permit or variance.

Table 21-1

**SIDE YARD & REAR YARD
LANDSCAPING & FENCING OPTIONS**

	GREENB ELT Section 21.4.A	BUFFER STRIP Section 21.4.B	BERM Section 21.4.C	FENCE* Section 21.15	YARD	NOTE
When a use in an						
C-1, C/R, C-3, C-4, VC, L-1, I/O district abuts an R-1, R-2, R-3, R-4, R-5, VR, or RP district or an existing single family dwelling unit in any district then	X	or X	or X	<input type="checkbox"/>	side	
	X	or X	or X	<input type="checkbox"/>	rear	
Special Use abutting any district or an existing single family dwelling unit in any district	X	or X	or X	<input type="checkbox"/>	side	Unless a specific landscaping option is required by a standard in Article XVI.
	X	or X	or X	<input type="checkbox"/>	rear	
P.U.D. abutting any district or an existing single family dwelling unit in any district	X	or X	or X	<input type="checkbox"/>	side	Unless a specific landscaping option is required by a standard in Article XVII.
	X	or X	or X	<input type="checkbox"/>	rear	

A fence is optional at the discretion of the landowner, unless required as a condition of approval of a site plan, Special Use Permit, P.U.D. Permit, or variance. Any fence erected must meet the requirements of Section 21.15, and any special standards particular to that use (as in Article XVI) or if around a trash receptacle, per the requirements of Section 21.12, or if around a loading/unloading area, per the requirements of Section 21.9.

**Section 21.9 PARKING LOT LANDSCAPING AND
LOADING SPACE FENCING**

A. Separate landscaped areas shall be required either within or at the perimeter of parking lots. There shall be one (1) tree for every eight (8) parking

spaces, with minimum landscaped space within a designated parking area of fifty (50) square feet. A minimum distance of three (3) feet shall be established between proposed tree or shrub plantings and the backside of the curb or edge of the pavement. This distance shall be increased if the volume of snow to be plowed from the parking lot requires a larger storage area.

B. Landscaping along the perimeter of the parking lot shall meet the requirements for a buffer strip in Section 21.4.D.

Where any off-street loading space adjoins or abuts a lot or premises used for residential, educational, recreational, or religious purposes, or abuts a residential district, there shall be provided a masonry wall or solid fence not less than four (4) feet in height between the off-street loading space and said residential, educational, recreational, or religious premises or residential zone.

Section 21.10 LANDSCAPING FOR ALL OTHER PROPERTIES REQUIRING SITE PLAN REVIEW

A. In addition to any greenbelt, buffer strip, berm and/or parking lot landscaping required by this Article, ten (10) percent of the site area, excluding existing thoroughfare right-of-way, shall be landscaped.

B. Areas used for storm drainage purposes, such as unfenced drainage courses or retention areas in front or side yards, may be included as a portion of the required landscaped area not to exceed five (5) percent of the site area.

Section 21.11 MINIMUM STANDARDS FOR LANDSCAPE MATERIALS

A. Quality: Plant material and grasses shall be of generally acceptable varieties and species, free of insects and diseases, hardy to the climate, conform to the current minimum standard of the American Association of Nurserymen, and shall have proof of any required governmental regulations and/or inspections.

B. Composition: A mixture of plant material, such as evergreen, deciduous trees and shrubs, is recommended as a protective measure against insect and disease infestation.

A limited mixture of hardy naturally occurring or native species is recommended rather than a large quantity of different species to produce a more aesthetic, cohesive design and avoid a disorderly appearing arrangement. See Sections 21.4.D and 21.5.

C. Existing Trees

1. If existing plant material is labeled "To Remain" on site plans by the applicant or required by the Zoning Administrator, protective techniques, such as,

but not limited to, fencing or barriers placed at the dripline around the perimeter of the plant material shall be installed during construction. No vehicle or other construction equipment shall be parked, or stored, or driven within the dripline of any plant material intended to be saved. Other protective techniques may be used provided such techniques are approved by the Zoning Administrator.

2. In the event that healthy trees which are used to meet the minimum requirements of this Ordinance or those labeled to remain are cut down, destroyed, damaged, or excavated at the dripline, as determined by the Zoning Administrator, the Contractor shall replace them with trees which meet Ordinance requirements.

Section 21.12 SCREENING OF TRASH

All areas used for the storage of trash or rubbish including dumpsters and other commercial containers shall be screened by a solid fence or dense plant materials no less than six (6) feet in height. If a fence is used, view obstructing doors at least six (6) feet in height shall be installed and kept closed except when accessing.

Section 21.13 EXISTING SCREENING

Any fence, landscape screen, wall or hedge which does not conform to this Ordinance and which is legally existing at the effective date of this Ordinance may be continued and maintained, provided there is not physical change other than necessary maintenance and repair; unless otherwise regulated by this Ordinance.

Section 21.14 MAINTENANCE

It shall be the owner's responsibility to see that the landscaping is maintained in a neat, clean, orderly and healthful condition. This includes, among other things, proper pruning, mowing of lawns, weeding, removal of litter, replacement of plants when necessary, and the regular watering of all plants.

Section 21.15 FENCES, WALLS AND SCREENS

- A. Fence, wall and screen requirements follow:
1. Whenever a use is established or substantially improved in a nonresidential district and the lot abuts a residential district, a fence at least six (6) feet in height shall be erected along the common lot by the nonresidential use unless the abutting lot owner in the residential district signs a waiver for this requirement and a buffer strip, or berm shall be installed instead.

2. No fence, wall, or structural screen other than plant material shall be erected higher than eight (8) feet in an C-1, C/R, C-3, C-4, VC, L-1, or I/O district.
3. No fence shall be required to be higher than five (5) feet in height between uses within the same district, nor permitted to be higher than six (6) feet between uses in the same residential district.

B. Fences on all lots of record in all residential districts which enclose property and/or are within a required side or rear yard shall not exceed six (6) feet in height, measured from the surface of the ground. Fences located in the front yard or beyond the front of the dwelling unit shall not exceed three (3) feet in height, measured from the surface of the ground and shall have at least a seventy-five percent (75%) open area. No fence, wall, planting or structure shall, within ten (10) feet of any public or private right-of-way, be of such a nature as will impede clear vision of an intersecting sidewalk, street, alley or driveway (see Figure 3-2 in Article III). All fences shall be constructed so as to allow the passage of air through the fence to an adjacent dwelling.

C. Fences, walls, or obscuring walls shall not contain barbed wire, electric current or charge of electricity (except in RP, AP or F/R districts), glass, spikes, or other sharp protruding objects.

Notwithstanding the foregoing provision, security fences six (6) feet high or more may include up to eighteen (18) inches of barbed wire in an industrial area, surrounding a public utility, or around a police or corrections facility. Such barbed wire shall slant inward towards property, or be straight up. Security fences with barbed wire in any other location or surrounding any other use require approval by the Site Plan Review Committee.

D. All fences shall have the finish side facing out, away from the property on which the fence is located.

E. Fences are structures that may be erected along property lines or within yards, irrespective of the setback requirements of this Ordinance. No site plan review is required for a fence which conforms with Ordinance standards in an R-1, R-2, R-3, R-4, R-5, VR, or RP District. The Zoning Administrator may waive site plan review for a fence in any other district if no other structural changes or changes in the design or layout of the site are proposed.

F. The Zoning Administrator may require the removal, reconstruction or repair of any fence, wall or screen not in good condition.

Section 21.16 TIME TO COMPLETE AND PERFORMANCE GUARANTEE

A. Time Period to Complete. The required improvements are to be completed within one year of the issuance of the zoning permit. In the event of

unusual delays, or adverse weather conditions that make it impossible to plant, the Zoning Administrator may grant a single extension of the time limit for a further period of not more than six (6) months.

B. Occupancy. No occupancy of land shall occur unless the parking and landscape improvements have been completed or a performance guarantee to cover the cost of the contemplated improvements as estimated by the Zoning Administrator, has been deposited with the Township pursuant to the requirements of this Ordinance.

C. Performance Guarantee: In all cases the Site Plan Review Committee or the Planning Commission may, due to weather conditions, seasonal availability of plant materials, or other factors, require a performance guarantee equal to the estimated cost of the plant material and installation cost. Such performance guarantee shall be related to the various vegetation or planting plans shown on the site plan. Such performance guarantee shall be processed according to the requirements of this Ordinance.

Section 21.17 WAIVER OF LANDSCAPING, BUFFERING AND FENCING REGULATIONS

A. Planning Commission Modification: Any of the requirements of this Article may be waived or modified through Site Plan approval, provided the Zoning Administrator for minor site plans or the Planning Commission for major site plans, first makes a written finding that specifically identified characteristics of the site or site vicinity would make required landscaping, fencing, buffering or screening unnecessary or ineffective, or where it would impair vision at a driveway or street intersection.

B. Board of Appeals: The Board of Appeals may require or waive any fencing, screening, landscaping or buffering as may be provided for in this Article as a condition of a variance or other authorization in whatever manner necessary to achieve an identified public purpose. The Board of Appeals shall record the reason for the condition and clearly specify what landscaping, buffering or fencing is required in any approval granted.

Section 21.18 LANDSCAPING, PLANTING AND SPACING GUIDELINES

The Zoning Administrator shall keep a list of landscaping, planting and spacing guidelines available for use by interested persons in designing and planting landscaping. These guidelines shall be prepared and periodically updated with assistance of the Soil and Water Conservation District. Additions to the list of prohibited trees in Section 21.5 may be made without amendment of this Ordinance in response to an insect, fungus or similar menace.