

ARTICLE 18 SITE DEVELOPMENT STANDARDS

Section 18.01 Application

The permitted or special land uses allowed in any given zoning district and listed in this Article shall be subject to the site development standards specified below as well as those provided in Article 15, Schedule of Regulations; Article 16, General Provisions; Article 19, Off-Road Parking and Loading; and Article 20, Sign Regulations. Whenever any provision of this Article imposes more stringent requirements or restrictions than are imposed or required by other provisions of this Ordinance, the more stringent requirements or restrictions shall prevail.

Section 18.02 Foster Care Homes

1. One (1) on-site parking space shall be provided for each employee in addition to the parking required for the dwelling unit.
2. A designated passenger loading/unloading area of adequate dimensions shall be provided near a barrier-free entrance to the facility.
3. A loading/unloading area of adequate dimensions shall be provided for delivery vehicles servicing the home.
4. A greenbelt buffer shall be provided along all property lines that abut a less intense residential district and around the visible perimeters of the off-road parking and loading/unloading areas.
5. All exterior lighting of entryways, parking spaces, or loading/unloading areas should not reflect onto adjacent properties, and preferably, should be motion activated.
6. Notices to the neighbors and/or neighborhood associations is recommended but not required to promote integration of the Foster care home into the community.
7. A foster care large group home shall not be located within fifteen hundred (1,500) feet of another similar state licensed facility.
8. If the proposal does not meet the above criteria, a variance may be sought according to the procedures outlined in Article 24, Board of Appeals.

Section 18.03 Accessory Dwelling

1. The primary structure or the accessory dwelling unit shall be owner occupied.

2. Accessory dwellings are only permitted with standard, detached single-family dwelling units.
3. The accessory dwelling unit shall be incorporated into the primary residence on the property or a garage serving the primary residence.
4. The residence containing an accessory dwelling shall be designed to retain a single-family appearance in term of doorway entry, building materials, and rooflines.
5. The total square footage of the accessory dwelling unit shall not exceed 45% of the square footage contained in the primary residence or nine hundred (900) square feet, whatever one is less.
6. There shall be a minimum of one (1) and a maximum of two (2) designated parking spaces for the accessory dwelling unit.

Section 18.04 Reserved

Section 18.05 Automobile Service Stations

1. Merchandise shall be displayed or stored only within enclosed buildings. The Planning Commission, upon application by the property owner, may modify this requirement to permit, during business hours, limited displays immediately adjacent to the building, upon finding the display is customarily found in connection with the nature of the operation or use.
2. Any repair and/or replacement activity shall be conducted within a totally enclosed building.
3. All used and/or discarded parts shall be stored within a completely enclosed building.
4. Any such activity shall be located not less than twenty-five (25) feet from a property line.
5. The parking of vehicles on site shall be limited to those that may be serviced within a ninety-six (96) hour period.
6. There shall be no outside storage of any partially dismantled or inoperative vehicles.
7. In operations such as automobile reconditioning, but not necessarily limited to such activities, there shall be no releasing of toxic gases, liquids or materials in any form into the atmosphere, the water or sewer systems of the Township, or on, or into the earth. Further, such operations shall not have an adverse affect on adjacent property or development.

8. The storage, sale or rental of mechanical equipment, utility trailers, trucks, new or used cars, motorcycles, minibikes or similar vehicles, wrecked or otherwise shall not be permitted.

Section 18.06 Automobile Washes Including Automatic Car Washes

1. All washing activities must be carried on within a structure.
2. Vacuum islands may be placed in the front yard but no closer than fifty (50) feet from adjacent property boundaries.
3. Access to the wash facility shall be from within the lot and not directly to or from an adjoining public right-of-way. A public right-of-way shall not be used as maneuvering or parking spaces for vehicles to be serviced at the facility.
4. Overnight parking or storage of vehicles is prohibited.

Section 18.07 Bed and Breakfasts

1. The bed and breakfast establishment shall be the principle dwelling unit on the property and shall be occupied by a permanent resident.
2. No separate cooking facilities shall be provided for guests of the bed and breakfast.
3. Proof of evaluation of the well and septic system by the County Health Department and conformance with that agency's requirements shall be supplied by the owner of the establishment.
4. Rental of snowmobiles, all terrain vehicles, or similar vehicles, boats or other marine equipment in conjunction with the establishment shall be prohibited.
5. Bed and breakfast establishments shall only be permitted in standard single-family dwelling units. The structures for the single-family dwelling units shall be in compliance with all applicable zoning regulations, such as lot size, setbacks, building height, parking, etc. Bed and breakfasts are permitted on legal, nonconforming lots.
6. One non-illuminated sign identifying the establishment not to exceed nine (9) square feet in area and not closer to the front lot line than ten (10) feet shall be allowed.
7. Not more than six (6) rooms with a maximum of twelve (12) people in the residence may be used for rental purposes.

8. The rooms utilized for sleeping shall be part of the primary residential use and not specifically constructed for rental purposes.
9. The rental sleeping rooms shall have a minimum size of one hundred (100) square feet for each two (2) occupants.

Section 18.08 Campgrounds and Recreational Vehicle Parks

1. Minimum lot size shall be ten (10) acres. The term “lot” shall mean the entire campground or recreational vehicle park.
2. The lot shall have direct access to a public road.
3. Adequate public sanitary facilities (potable water source, toilet and refuse container) shall be provided throughout the lot.
4. No commercial enterprises shall be permitted to operate on the lot unless there is a minimum of twenty-five (25) campsites.
5. A landscape screen with a minimum width of twenty (20) feet shall be required when the facility is adjacent to any residential use.

Section 18.09 Carry-out, Fast-food, and Drive-in Restaurants

1. Access to the site shall be located at least seventy-five (75) feet from any intersection as measured from the nearest right-of-way line to the edge of the nearest driveway opening, and such access shall be from a paved public road. The minimum distance between any drive opening and any property line shall be ten (10) feet, unless access to the site is on a shared driveway.
2. Any unpaved area of the site shall be landscaped with lawn or other plant materials, maintained in a neat orderly manner and separated from the paved areas by a low curb or other equivalent barrier.

Section 18.10 Cemeteries

1. Minimum lot size shall be five (5) acres. The term “lot” shall mean the entire cemetery.
2. All access shall be from a paved public road.

Section 18.11 Places of Worship

1. The lot shall have frontage along and access from a paved public road.

2. Off-road parking shall be prohibited within the front yard setback area and within twenty (20) feet of the rear or side property lines.
3. Buildings of greater than the maximum height allowed by Article 15, Schedule of Regulations, may be permitted provided that front, side and rear yards are increased above the minimum required yards by one (1) foot for each foot of building height that exceeds the maximum height allowed.

Section 18.12 Clubs and Fraternal Organizations

1. The use shall be accessed from a paved public road.
2. Off-road parking shall be prohibited within the front yard setback area and within twenty (20) feet of the rear or side property lines.
3. Any commercial use of the facility shall be secondary to the club or organization's primary function.

Section 18.13 Communication Towers

1. A commercial or public use tower shall be set back from adjacent rights-of-way and property lines a distance not less than the height of the tower except along M 37 and US 31 the setback shall be 800 feet. The Planning Commission may waive the setback requirement if the tower is shown to pose no threat of collapsing into adjacent rights-of-way or properties except the Planning Commission may not waive the setback requirements on M 37 and US 31.
2. Landscape materials shall be provided to screen the tower base, any accessory structures or fencing from the view of adjacent public road rights-of-way and adjacent residential uses or residential zoning districts.
3. Towers shall not be located within parking lots or other areas where they will interfere with the operation of a business on the property.
4. No tower shall be constructed as a speculative tower. Prior to construction, each tower shall have at least one contracted carrier and evidence shall be provided of such contract at the time of application.
5. Each tower shall be designed and built to accommodate at least two antennas. Before any tower is considered, the proposer shall demonstrate in writing that there are no other feasible locations for their antennas.
6. The base of the tower shall be enclosed with a security fence at least six (6) feet in height.

7. Towers shall not have signs, banners or other forms of commercial advertisement attached or otherwise affixed to the tower or the security fence.
8. If a tower ceases to transmit for a period of twenty four (24) months, the tower shall be deemed abandoned and shall be removed upon written notice by the Zoning Administrator within one year of abandonment.
9. All new towers shall meet current standards and regulations of the FAA, the FCC, and any other agency of the state or federal government with the authority to regulate towers and antennas.
10. Where a feasible alternative exists, towers, alternative tower structures and supporting structures shall not utilize a power source which generates noise able to be heard by a person of normal aural acuity at adjoining property lines or public property; however, this section shall not be construed as limiting the use of temporary generators or similar devices used to create power during periods of interruption of the primary power source.
11. Towers shall not be artificially lighted, unless required or permitted by the FAA or other applicable authority. Lighting shall be designed to minimize disturbance to neighboring properties.
12. Antenna and metal towers shall be grounded for protection against a direct strike by lightning and shall comply as to electrical connections and wiring and as to structural integrity with all applicable state and local building codes and the applicable standards for towers published by the Electronic Industries Association, as amended from time to time.

Section 18.14 Composting and Recycling Facilities

1. The minimum size of a composting and/or recycling facility shall be twenty (20) acres.
2. Property used for such a facility shall be graded and maintained so as to have a minimum two (2) to three (3) percent slope to permit surface water run-off to be collected in an on-site retention basin.
3. A composting facility shall not be allowed in any one hundred (100) year or five hundred (500) year floodplain unless the Michigan Department of Natural Resources (MDNR) has approved the area of operations. A sign-off from the MDNR stating where composting operations will be allowed in the floodplain shall be necessary before site plan review.
4. A composting facility shall not be allowed on any protected wetlands. A wetlands determination shall be made by the MDNR prior to site plan review.
5. To ensure that ground or surface waters are not contaminated, monitoring wells must be installed by the owner/operator and/or lessee on site prior to construction of the composting and/or recycling facility. The location of such wells shall be

determined on a site-by-site basis, subject to review and approval by a professional acceptable to the Township. All review costs shall be assumed by owner/operator and/or lessee.

6. If any stream or swale is present on the site, it shall be buffered by a twenty (20) foot unoccupied setback measured from the outer edge of the floodplain or all alluvial soils. Approval from the designated agent responsible for the enforcement of the Soil Erosion Control Act shall be required ensuring the stream is adequately protected from pollution.
7. The surface and groundwaters at a composting and/or recycling facility shall meet the standards of Water Resources Commission Act, Public Act 245 of 1929, as amended, being Section 323.1 et. seq. of the Michigan Compiled Laws and the State Administrative Rules promulgated thereunder, being Section 323.1001 et. seq. of the Michigan Administrative Code.
 - a. Sampling of water from the groundwater monitoring wells must start before operations begin, continue quarterly during the active life of operations, and quarterly for a two (2) year period after operations cease for compliance with Act 245 of Public Acts of 1929, as amended. The monitoring shall be done by a professional acceptable to the Township. All costs for such monitoring shall be assumed by owner/operator and/or lessee.
 - b. Should monitoring well test results reveal violation of the water quality requirements of Act 245 of Public Acts of 1929, as amended, the petitioner shall be required to install a groundwater remediation system. The system shall be subject to review and approval by a professional acceptable to the Township. All costs shall be assumed by owner/operator and/or lessee.
 - c. Surface water monitoring shall also be required in addition to groundwater monitoring to assess the adequacy of leachate containment and runoff control and for compliance with Act 245 of Public Act of 1929, as amended. Such monitoring shall be required quarterly. The monitoring shall be done by a professional acceptable to the Township. All costs for such monitoring shall be assumed by the owner/operator and/or lessee.
 - d. Analysis for all ground and surface water monitoring events shall be submitted to the Township within sixty (60) days after analyses.
 - e. Discharge of water from composting or recycling activities collected in an on-site retention basin shall only be handled in the following ways.
 - 1) Reintroduced into the compost pile.
 - 2) Directed into a sanitary sewer.

- 3) Transported by a liquid industrial waste hauler.
8. Written documentation addressing the following shall be provided:
 - a. Hours of operation.
 - b. Methods of controlling fugitive dust, noxious odors, noise, vibration, light, and blowing debris.
 - c. Fencing and other means of limiting access.
 - d. Method of receiving compost materials.
 - e. Method of sorting and handling composting materials on site.
 - f. Measures to be taken should anaerobic conditions arise.
 - g. Expected frequency of removal of composted materials.
 - h. Expected frequency for turning of composting windows.
 - i. Fire protection.
 - j. Description of daily cleanup procedures.
 - k. Measures to be taken should surface or groundwater contamination take place.
 - l. The capacity of the composting facility in terms of cubic yards, and the maximum amount of compost material to be accepted annually.
 - m. Maintenance Plan for all outdoor areas where compost materials are received, processed, cured, or stored to prevent rutting which allows on-site ponding/puddling of water in places other than a retention basin.
9. A composition or recycling site shall be closed when anaerobic conditions arise and the only operations taking place must be concerned with correcting conditions. If anaerobic conditions arise more than two (2) times in a one (1) month period, the facility must: a) pay a fine set by Township Board; and, b) close for a one (1) month period of time. After three (3), one (1) month closures in a year, the Township may order the site to be closed permanently subject to provisions of Section 18.14.17. Also, corrective actions must begin immediately upon determination of anaerobic conditions. Determination of anaerobic conditions may be made by an authorized County Official Inspector.
10. Compost materials shall not be accepted on site in an anaerobic condition. If

inspections reveal acceptance of anaerobic materials, the owner/operator and/or lessee shall be subject to the conditions of Section 18.14(9).

11. Landscaping Requirements

To ensure proper buffering of the composting facility from nearby land uses that may be adversely affected by the facility, the following requirements shall apply.

- a. No composting and/or recycling facility shall be constructed within one thousand two hundred (1,200) feet of an existing residential district lot line, nor within one thousand five hundred (1,500) feet of the nearest existing residential dwelling in other zoning districts. The separation distance shall be measured from the beginning of the program area designated to the composting and/or recycling facility to the residential lot line in residential districts. In other zoning districts, the separation distance shall be measured from the beginning of the program area designated to the composting facility to the existing residence.
- b. If a residence is within one thousand two hundred (1,200) feet to two thousand two hundred fifty (2,250) feet of a composting and/or recycling facility, there shall be established along the composting and/or recycling facility's lot line a six (6) foot high seeded earthen berm or dense evergreen landscape buffer. The evergreen landscape buffer shall be provided with a double row of evergreen trees, a minimum of six (6) feet high, landscape grade, planted in staggered rows thirty (30) feet apart on center. The plant materials selected shall be in accordance with the Grand Traverse Bay Region Development Guidebook.
- c. If the property fronts on a public road, a landscape berm or evergreen plantings shall be required along the road right-of-way.

12. At the time of site plan approval, the operator of the composting facility shall submit an Off-Site Road Maintenance Plan that addresses, at a minimum, the following:

- a. Method of dislodging mud and/or composting materials from the vehicles or undercarriage.
- b. An on-site traffic control pattern, including a by-pass road around the truck cleaning area if applicable.
- c. Method for removing soil, dust, and/or compost materials attributable to the composting operations from public off-site roads within two thousand five hundred (2,500) feet of the composting area entrance and exits.
- d. Trucks and off-site roads shall be cleaned as described in the plan cited

above as often as necessary to prevent the occurrence of nuisances resulting from the tracking of mud and/or compost materials.

13. The operation of a composting and/or recycling facility shall not result in unreasonable off-site deterioration of air quality, cause unreasonable interference with the comfortable enjoyment of life and property, or cause injurious effects to human health, safety, and welfare. All composting and/or recycling facilities shall be designed, constructed and operated so that fugitive dust, noxious odors, noise, vibration, light, and blowing debris are controlled and do not cause off-site problems or nuisances.
 - a. The applicant shall submit with the site plan an operations plan to minimize the off-site occurrences of fugitive dust, noxious odors, vibrations, light, and blowing debris. This plan may include such measures as restricting the daily work area, refusing to accept certain compost materials, or other appropriate measures. This plan shall be approved by the Planning Commission.
 - b. If there is evidence that performance standards have not been met and/or that a problem or nuisance condition exists as determined by the Zoning Administrator, despite compliance with the operation plan, then a contingency plan shall be developed by the operator. This contingency plan shall be submitted within ten (10) working days from the date that the Zoning Administrator notifies the operator. This plan shall demonstrate to the satisfaction of the Zoning Administrator that the problem will be abated within two (2) weeks.
 - c. In the preparation of the operations plans required above, the applicant or operator shall comply with the requirements of the Air Quality Rules promulgated under Act 348 of 1965, as amended.
14. Height of stored material shall not exceed eight (8) feet.
15. No sludge of any kind shall be stored or deposited on composting and/or recycling facility property.
16. At the time of application to the Township, a closure plan shall be submitted which shall detail the final end use of the property should use of the facility discontinue for more than twelve (12) months. The plan should describe:
 - a. How the existing site will be cleaned up.
 - b. How and where the existing surface debris will be disposed.
 - c. What the final disposition of the land will be.
17. Violation of any of the provisions of this Ordinance or inability to meet the requirements of these provisions will result in the Township having the right to

close and/or clean up the composting and/or recycling facility and operation at the expense of the owner and/or operator and/or lessee of the composting and/or recycling facility.

The Township may, at such time, direct the owner, operator, or lessee to close and/or clean up the composting and recycling facility and operation at the expense of the owner, operator, or lessee.

Section 18.15 Contractor's Yards -Major

1. All equipment, supplies, and materials shall be stored in a fully enclosed structure located no closer than fifty (50) feet to any property line and road right-of-way.
2. Driveways serving the yard shall be maintained in a dust-free condition.

Section 18.16 Convalescent Homes and Nursing Homes, Congregate Care Facilities

1. The lot shall have frontage along a paved public road and access to the lot shall be from said road.
2. The principle and accessory structures shall be set back fifty (50) feet from all property lines.

Section 18.17 Day Care Centers, Nursery Schools

1. No portion of a day care center shall be located within three hundred (300) feet of any gasoline pumps, underground storage tanks, or any other explosive material.
2. The outdoor play area shall be enclosed with a fence with a minimum height of four (4) feet.
3. Outdoor play areas adjacent to residential zoning districts or existing residential uses shall provide landscape screening along the perimeter of the outdoor play area.
4. One-way access drives and on-site circulation is encouraged.

Section 18.18 Elderly Housing Developments/Apartments

1. Minimum lot area shall be one (1) acre.
2. Minimum dwelling unit size shall be three hundred fifty (350) square feet of area, not including kitchen and sanitary facilities.
3. Such developments may provide:
 - a. Cottage-type one-story and/or apartment type dwelling units.

- b. Accessory services in common use shall include, but not be limited to, the provision of central dining facilities, indoor and outdoor recreational areas, lounges, and workshops.

Section 18.19 Gasoline Filling Stations

1. No more than one (1) drive opening shall be permitted along any road frontage.
2. No drive opening shall be located closer than thirty (30) feet to any intersection or adjacent residential zoning district or existing residential use.
3. All gasoline pumps shall be located no closer than twenty-four (24) feet to the public right-of-way line and sixteen (16) feet to any lot line and shall be so arranged that motor vehicles shall not be supplied with gasoline while parked on or overhanging any public right-of-way or adjacent property.
4. The entire lot, excluding the area occupied by any structures and/or landscaped areas shall be hard surfaced. Landscaped areas shall be separated from hard surfacing areas by a low barrier or curb.
5. All repair and maintenance activities permitted shall be conducted entirely within an enclosed building.

Section 18.20 Reserved

Section 18.21 Golf Driving Ranges - Outdoor

1. The facility shall be designed and constructed to contain all golf balls on site. A fifty (50) foot open space area must be maintained along all property lines. On those sides abutting a residential zoning district or use, there shall be provided a landscape screen consisting of plant materials eight (8) feet in height or greater, sufficient to contain golf balls on-site.
2. Range hours shall be restricted to daylight hours.

Section 18.22 Reserved

Section 18.23 Home Occupations

1. A home occupation shall utilize no more than twenty-five (25) percent of the total floor area of the dwelling unit and garage.
2. A home occupation shall involve not more than one (1) employee on site other than members of the household.
3. All home occupation activities shall be conducted indoors, except gardening.

4. No structural alterations or additions which would alter the residential character of the structure shall be permitted to accommodate the home occupation.
5. Only customary domestic or household equipment, or equipment judged by the Zoning Administrator not to be injurious or a nuisance to the surrounding area shall be permitted.
6. There shall be no external evidence of the home occupation other than a sign as permitted by Article 20, Sign Regulations.
7. No article or service shall be sold or offered for sale on the premises, except as such produced on the premise by the home occupation.
8. No home occupation shall be permitted which is detrimental to the general character of the residential district and creates a congested or otherwise hazardous traffic or parking condition.

Section 18.24 Hospitals

1. Access to the facility shall be from a paved road.
2. Ambulance and emergency entrance areas shall be visually screened from the view of adjacent residential uses or residential zoning districts by a structure or fence a minimum of six (6) feet or more in height.

Section 18.25 Junkyards, Salvage Yards, and Used Materials Yards

1. Minimum lot area shall be five (5) acres.
2. The setback from the front property line to the area upon which materials shall be stored shall be not less than one hundred (100) feet.
3. Materials shall be placed behind an opaque fence that is a minimum of eight (8) feet high. An evergreen screen meeting the requirements listed in Section 16.05 shall be planted between the opaque and the property line. Materials shall not be stored in a manner that exceeds the height of any required screening.
4. The area upon which materials are stored, including any principle or accessory structures, shall not be located any closer than three hundred (300) feet to any public building, institutional use, residential zoning district or use.
5. All roads, driveways and parking lots used by the general public shall be paved. All other areas of the site shall be maintained in such a manner as to limit the nuisance caused by wind borne dust.
6. All fluids contained in junk vehicles and equipment shall be drained prior to storage on the site. Drained fluids shall be contained and disposed of in

accordance with the regulations of the Michigan Department of Public Health, Michigan Department of Natural Resources, the County Health Department, and the U.S. Environmental Protection Agency.

Section 18.26 Kennels

1. Minimum lot area shall be five (5) acres.
2. All structures that are used for animal occupancy shall be fifty (50) feet from all property lines.
3. All animal runs and outdoor areas designated for use by animals shall be fifty (50) feet from all property lines.

Section 18.27 Landing Fields

1. Minimum parcel size and configuration shall be adequate to accommodate the whole of any proposed landing area required by the Michigan Aeronautics Commission rules and regulations. Proof of the applicant's ability to comply with these rules and regulations shall be provided to the Planning Commission prior to any public hearing.
2. There shall be no buildings or cell towers associated with the landing field.
3. Paving the landing field is not permitted.

Section 18.28 Lumber Yards, Building Material Yards, Sawmills, Asphalt Plants, Concrete Cement Mixing Plants

1. Open storage of materials shall not be permitted in the front yard as established by the front building line of the principal structure, and within one hundred (100) feet of the public right-of-way line. Open storage of materials shall not be permitted within fifty (50) feet of any property line.
2. Open storage shall be screened on all sides by a minimum of an eight (8) foot high opaque fence. Stored materials shall not be piled or stored so as to exceed the height of the fence, except when said materials are stored within a storage shed structure. A greenbelt, meeting the requirements listed in Section 16.05(2) shall be planted along the fence line to minimize the visual impact.
3. All equipment, supplies shall be stored in a fully enclosed structure located no closer than fifty (50) feet to any property line. All loading operations shall occur within a fully enclosed structure located no closer than fifty (50) feet to any property line.

4. The minimum lot size shall be five (5) acres.

Section 18.29 Mini-Storage Warehouses

1. Minimum lot area shall be three (3) acres.
2. The lot shall be accessed from a paved roadway.
3. The minimum distance between self-storage buildings within the same lot shall be fifteen (15) feet, as measured from side to side, or front to rear, or equal to the building height, whichever is greater.
4. A landscape buffer with a minimum width of ten (10) feet shall be provided between the property line and road right-of-ways, adjacent residential uses, or residential zoning districts. The landscaping shall comply with the requirements in Section 16.05.
5. No structure that houses individual storage units shall exceed five thousand (5,000) square feet in area.

Section 18.30 Mortuary Establishments

1. An adequate vehicle assembly area shall be provided to be used in the funeral procession. This area shall be in addition to required off-road parking areas or its related maneuvering space.
2. A caretaker's residence may be provided within the main building.

Section 18.31 Motels and Hotels

1. Ingress and egress shall be from a paved road.
2. The minimum floor area of each guest unit shall be two hundred fifty (250) square feet.

Section 18.32 Multiple-Family Residential Developments

(Amendment 104-05-16-01; Effective 5/19/2016)

1. Maximum structure coverage shall not exceed seventy-five (75) percent of the site area.
2. The distance between any two structures within a multiple-family residential development shall be not less than thirty (30) feet.
3. Maximum height of any structure shall be fifty-five (55) feet.

4. Any multiple-family residential development adjoining any single-family residential district or any nonresidential district shall be provided with a twenty (20) foot landscape screen planted in accordance with Section 16.05.1.
5. Provisions shall be made for safe and efficient ingress and egress to public roads and highways serving any multiple-family residential development which shall be designated to minimize congestion and interference with normal traffic flow.
6. All multiple-family residential developments shall have direct access only to paved public roads.
7. The site shall be developed and facilities shall be provided in such a manner so as to ensure adequate drainage.
8. The minimum lot area required shall be five (5) acres.
9. Public sewer and water facilities shall be provided.
10. There shall be set aside for common open space not less than ten percent (10%) of land for every one (1) acre of land. Open space shall be laid out and maintained for the maximum benefit of the area.

Section 18.33 Open Air Business Uses

1. Minimum lot area shall be fifteen thousand (15,000) square feet.
2. Minimum lot width shall be one hundred fifty (150) feet.
3. In the case of retail car sales, house trailers, or boat lots:
 - a. All vehicular use areas shall be paved with a durable, dust-free surface and appropriate bumper guards installed where needed.
 - b. Access to the outdoor sales area shall be at least seventy-five (75) feet from the intersection of any two (2) roads as measured from the right-of-way line.
4. These provisions do not apply to seasonal produce stands, Christmas tree sales, firewood sales, or other uses that require a temporary use permit.

Section 18.34 Open Storage Areas

1. All outdoor storage of building, contracting, or plumbing materials, sand, gravel, stone, lumber, equipment, or other supplies shall be located no closer than fifty (50) feet to any public right-of-way line.
2. The storage of combustible materials such as lumber, fuels, or fertilizer shall be

- no closer than twenty (20) feet to any property line.
3. All open storage areas shall be screened from all public road right-of-ways, all sides which abut any residential or commercial district by a solid eight (8) foot fence, and all stored material shall not be stacked to a height greater than eight (8) feet.
 4. The storage of any soil, fertilizer, or other loose material shall be contained to prevent any adverse affects on neighboring properties.

Section 18.35 Mega-church, Private Noncommercial Recreation Areas; Institutional or Community Recreation Centers

1. If the site will attract or is intended to attract persons from beyond the immediate neighborhood, the lot shall have frontage along a paved major road and the site shall provide access from said road.
2. Front, side, and rear yard setbacks shall be fifty (50) feet and shall be provided with a greenbelt buffer.
3. There shall be no parking or structures permitted in any required yard except for access drives.

Section 18.36 Riding Stables

1. The minimum lot area for a riding stable is five (5) acres. There shall be no more than (1) horse for the first acre. Afterwards, one (1) additional horse is permitted for every half acre.
2. The facility shall be constructed and maintained so that odor, dust, noise, or drainage shall not be a nuisance or hazard to adjoining premises.

Section 18.37 Reserved

Section 18.38 Salesrooms, Rental Facilities, and/or Sales Lots for New and/or Used Automobiles, Recreation Vehicles, Trucks, Mobile Homes, Trailers, Modular Homes, and Agricultural Machinery

1. All service and repair facilities shall be located within an enclosed building. Damaged vehicles and/or vehicles waiting for repair may be stored outside provided such storage area is screened by a fence (8) feet in height. The materials being stored shall not be stacked higher than the wall.
2. There shall be a ten (10) foot wide landscape area between the opaque fence and adjacent property. The landscaping shall meet the requirements listed in 16.05(6). At a minimum, there shall be one (1) tree for every twenty (20) feet of lot width.

Section 18.39 Scrap Tire Collection Sites

1. The facility shall have direct access to a paved road.
2. Scrap tire storage shall be prohibited in front yard or in any required side or rear yard setback.
3. The scrap tire storage areas shall not be permitted within one hundred (100) feet of a protected wetland or within a one hundred (100) year floodplain, unless specifically approved by the Michigan Department of Environmental Quality.
4. A fire suppression plan shall be submitted and approved by the local fire authority.
5. Minimum lot size shall be five (5) acres.
6. At a minimum, an eight (8) foot high opaque fence shall surround the scrap tire collection area.
7. There shall be a ten (10) foot wide landscape area between the opaque fence and adjacent property. The landscaping shall meet the requirements listed in 16.05(6). At a minimum, there shall be one (1) tree for every twenty (20) feet of lot width.

Section 18.40 Shooting and Archery Ranges - Outdoor

1. Minimum front, side, and rear yard setbacks for the outdoor shooting/archery ranges shall be two hundred fifty (250) feet. There shall be no activity within the setback area.
2. All federal, state, and county codes and ordinances in regard to firearms shall be strictly adhered to.
3. A site plan for the range shall be submitted to the Planning Commission. The site plan shall clearly demonstrate that all current applicable National Rifle Association range design standards and guidelines have been met.
4. The operator shall have the County Sheriff review and comment on the site plan prior to submitting it to the Township Planning Commission.
5. At a minimum, a six (6) foot high fence shall be provided around the entire shooting area to assure that individuals will not unknowingly trespass on the property, particularly where firearms are being discharged.
6. Hours of operation shall be the legal shooting range hours determined by the Department of Natural Resources.

Section 18.41 Shooting and Archery Ranges- Indoor

1. All federal, state, and county codes and ordinances in regard to firearms shall be strictly adhered to.
2. A site plan for the range shall be submitted to the Planning Commission. The site plan shall clearly demonstrate that all applicable National Rifle Association range design standards and guidelines have been met.
3. The operator shall have the County Sheriff review and comment on the site plan prior to submitting it to the Township Planning Commission.
4. The entire shooting/archery ranges shall be inside a building.

Section 18.42 Waste Material/Recyclable Material Transfer Stations

1. The facility shall have direct access to a paved primary road.
2. Truck parking shall not be allowed in the front yard setback.
3. No loading shall be permitted in front of the front building line.
4. Waste material/recyclable materials shall be stored within an enclosed structure.
5. There shall be a minimum of five (5) acres.

Section 18.43 Cluster Development

A cluster development allows residential dwelling units to be grouped closer together than would normally be allowed under other sections of this Zoning Ordinance. These groupings of dwelling are to be on the most buildable portions of a site so that the remainder of the site can be preserved as open space.

1. The purpose of cluster housing developments are to:
 - a. Preserve the natural drainage systems, open space, farmlands, rural character, woodlands and wetlands, natural topography, and environmental sensitive areas.
 - b. Promote development that is consistent with the Master Plan.
2. Development Standards.

- a. The allowable number of units shall be clustered on the site, so at least fifty (50%) percent of the site remains as protected open space by means of a conservation easement, plat dedication, restrictive covenant or other legal means, acceptable to the Planning Commission, that will protect the open space in perpetuity.
 - b. The minimum yard setback requirements may be reduced if approved by the Planning Commission. The perimeter setback shall comply with the district's setback regulations and may not be reduced.
 - c. The minimum lot size for a unit not served by *central* sewer and water shall be determined by the standards established by Grand Traverse County for well and septic capacity. There shall be no minimum lot size for units served by *central* water and sewer.
(Amendment 104-05-07-02; Effective November 27, 2007)
3. The conservation easement, plat dedication, restrictive covenant, or other legal means maintaining the open space shall include the following:
 - a. Indicate the proposed use(s) of the required open space.
 - b. Provide maintenance standards and a maintenance schedule.
 - c. Be recorded with Grand Traverse County Register of Deeds to provide a record of the restrictions to all persons having an interest in the property contained in the Cluster Development.

Section 18.44 Planned Unit Development (PUD)

(Amendment 104-05-07-04; Effective April 4, 2008)

A planned unit development allows for innovative and mixed-use development uses in a coordinated manner. These developments shall be designed to encourage the conservation of farmlands and/or natural features such as, but not limited to woodlots, slopes, meadows, floodplains, and wetland areas and achieve economies of design related to vehicular and pedestrian circulation ways, utility construction, and dwelling unit siting.

A planned unit development shall be planned, developed, operated, and maintained as a single entity and contain (1) one or more residential, recreational, commercial, industrial, public, or quasi-public land uses which are integrated into the design and carried out in conformance with an approved plan.

1. The application for a planned unit development shall demonstrate the following:
 - a. The planned unit development will achieve at least one of the following:
 - 1) A recognizable and material benefit to the residents of the project as well as to the community, where such benefit would otherwise be unfeasible or unlikely without application of the planned unit development provisions;

- 2) The long-term conservation of farmlands, natural features and/or sensitive environmental lands that would not be protected with conventional developments.
 - b. The proposed type and density of the planned unit development shall not result in an unreasonably increased burden upon public services, facilities, and/or utilities compared to uses permitted by the zoning district.
 - c. The proposed planned unit development shall not result in unreasonable negative economic impacts on the surrounding properties.
2. Planned Unit Development Design Standards
 - a. The plan may provide for a variety of permanent housing types, including detached and attached single-family dwellings, manufactured homes, and multiple-family dwellings, but not mobile homes, as herein defined. Single-family attached and cluster housing developments may be used as a means of conserving natural features and providing additional common open space.
 - b. There are no minimum lot size or width requirements.
 - c. There shall be a thirty five (35) foot perimeter setback requirement for the PUD development from all adjacent property lines. There shall be a fifty (50) foot setback from external public road right-of-ways.
 - d. There are no internal setback requirements, unless required by the County Building Department.
 - e. The permitted density requirement shall equal the specified limitation in the designated zoning district, unless the provisions of 18.44 (2.f) apply.
 - f. To allow greater flexibility in design of the development there shall be no density requirement if:
 - 1) A minimum of one (1) acre is dedicated as a Subdivision Park and meets the requirements listed in section 16.15.
 - 2) There are designated pedestrian trails in the development.
3. All planned unit developments shall maintain a minimum of ten (10) percent of the parcel as common open space that is readily accessible and available to the residents of the planned unit development. This area shall exclude wetlands, floodplains, and open water. The Subdivision Park may be included within this common open space area.
4. Both public and private nonresidential uses of an educational or recreational nature, including but not limited to golf courses, tennis clubs, swim clubs, riding

stables, and necessary accessory uses and structures, designed as an integral part of the overall planned unit development, may occupy appropriate portions of the site. The area so occupied may be applied, at the discretion of the Planning Commission and Township Board, to satisfy a percentage of the total common open space requirement.

5. Signage, lighting, landscaping, exterior building materials, and other features of the project shall be designed and constructed with the objective of creating an integrated and controlled development, consistent with the character of the community, the surrounding developments, and the site's natural features.
6. The proposed location and arrangement of structures shall not be materially detrimental to existing or prospective adjacent structures or to existing or prospective development of the neighborhood. The Planning Commission and/or Township Board may require landscaping and/or berming for the purpose of buffering the adjacent properties from the planned unit development. The setback distance and buffering treatment need not be uniform at all points on the perimeter of the development.

However, in cases where non-residential uses in the planned unit development are adjacent to residentially zoned property, such uses shall be visually screened by a landscape berm, evergreen screen, or a decorative fence. The screening shall comply with Section 16.05(2), Screening Between Land Uses, of this Ordinance.

7. Each residential development phase shall be designed to stand-alone and provide a residential environment which is compatible with the surrounding existing development. Deviations from the number of dwelling units per acre established for the entire planned unit development may be permitted within certain development phases as long as the number of dwelling units authorized per acre is not affected.
8. Planned Unit Development Application

The procedure for application, review and approval of a PUD shall be a two-part process. The first part shall be application and approval of a Concept Plan, which shall require a public hearing and Special Land Use Review.

The second part of the review and approval process shall be the application for approval of a Final Development Plan for the entire project or for any one or more phases of the project. A Final Development Plan for the entire project or for any one or more phases of the project shall require site plan approval by the Planning Commission.

In addition to the requirements listed in Section 18.44(2), the following requirements shall apply.

- a. The procedures for a planned unit development submittal shall follow the special land use procedures as outlined in Article 22, Special Land Use Review Procedures as described in this Zoning Ordinance.
 - b. Twelve (12) copies of a Concept Plan shall be submitted to the Zoning Administrator who shall forward it to the Planning Commission for consideration. The Concept Plan shall be a dimensionally correct plan and include the information from Section 21.02, A through I and O.
9. After the Township Board has approved the Special Use Permit for the Planned Unit Development, a Final Development Plan shall be submitted to the Planning Commission for approval. The final site plan shall meet the requirements listed in Section 18.44(8) of the Zoning Ordinance and the following:
- a. Twelve (12) copies of a Final Development Plan containing all of the applicable data as outlined below shall be submitted. The submission shall be made to the Zoning Administrator who shall forward it to the Planning Commission for consideration at a regular or special meeting. The plan shall be prepared by a Licensed Professional Engineer, Community Planner or Architect and shall be accompanied by an application form and fee as determined by the Township Board. The Final Development Plan shall contain all information in Section 21.02 of this Ordinance and all of the following information unless specifically waived by the Zoning Administrator:
 - 1). A site analysis indicating all known natural resources and natural features and the most appropriate areas for development.
 - 2). Location and size of all existing structures on the site.
 - 3). Location and size of all proposed structures on the site.
 - 4). Size and location of all areas devoted to open space.
 - 5). Location and description of existing vegetation and general location and size of proposed landscaped areas and buffer strips.
 - 6). All areas within the 100-year floodplain, wetland areas or bodies of water.
 - 7). A comparison calculation indicating the maximum number of dwelling units that may be developed on the site under the terms of the existing Zoning Ordinance.

- 8). An illustration of adjacent project phases or stages.
- 9). The size and location of water, sanitary sewer and stormwater utilities.
In the event the proposed project is to be served by properly permitted community water and sanitary sewer systems in accord with Township policies, the Concept Plan shall indicate the size, location and capacity of the proposed well and the location, capacity and type of treatment and discharge for the wastewater system.
- 10). Elevation renderings of key elements (as determined by the Zoning Administrator and or Planning Commission) of the proposed project consistent with the design principals and standards of the project.
- 11). A narrative describing the nature and concept of the project including a detailed description of the design principals and standards to be achieved within the project; the proposed density, number, and types of dwelling units if a residential PUD; a statement describing how the proposed project meets the objectives of the PUD including the benefits that are expected to result from the adoption of the PUD provisions pertaining to the subject site; a detailed description of the legal mechanisms and structures proposed to assure the perpetual maintenance of all open space proposed; a statement from a registered professional engineer describing how the proposed project will be served by public water, sanitary sewer, and storm drainage or properly permitted community systems; a narrative description of the phasing or staging plan; a specific listing of all departures from the regulations of the Ordinance which are requested; and, a copy of the project market study, if required, shall be submitted with the narrative.
- 12). Proof of ownership or legal interest in property.

10. Effect

After approval of a planned unit development, the land to which it pertains shall be developed and used in its entirety only as authorized and described in the order approving the planned unit development or only as authorized by the provisions of this Ordinance which would apply if the planned unit development order had not been issued.

11. Phased PUDS

Each phase of a PUD shall be planned, developed and approved to exist as a complete development able to stand on its own in the event subsequent phases are not implemented.

12. Amendments

An order approving a planned unit development may be amended as follows:

a. Minor amendments. Minor amendments are those which will have no foreseeable effect beyond the property boundary such as minor changes in the location of buildings, the alignment of utilities, and the alignment of interior roadways and parking areas. Minor amendments for good cause may be authorized by the Zoning Administrator provided no such changes shall increase the size or height of structures, reduce the efficiency or number of public facilities serving the PUD, reduce usable open space, or encroach on natural features proposed by the plan to be protected.

b. Major amendments. Any amendment not qualifying as a minor amendment is considered to be a major amendment and must be approved by the Planning Commission according to the procedures authorized by this section for approval of a planned unit development.

13. Termination

The PUD order shall expire two years from date of final approval if the applicant has not commenced substantial construction and is diligently proceeding to completion. Upon written request stating the reasons therefore, and with a positive recommendation from the Planning Commission, the Township Board of Trustees may extend an order. An order may be canceled by written agreement executed by the owner of the land to which it pertains and the Zoning Administrator at any time when the development and use of the land is in conformance with all provisions of this ordinance which would apply if such order had not been issued. The order may be rescinded at any time by the Township Board of Trustees for violation of the order by the applicant, its successors, agents or assigns after notice to the current owners and occupiers of the PUD area and after a hearing on the violation. Upon termination of an order the zoning requirements shall revert to the current requirements for the zoning district designated for the property prior to the order.

14. Performance Guarantee

The Planning Commission or Township Board may require an irrevocable letter of credit to assure the completion of the proposed planned unit development.

15. Ordinance Amendment

A planned unit development approval shall not be considered an ordinance amendment.

Section 18.45 Planned Business Development

The Planned Business Development is established to provide an aesthetically attractive working environment exclusively for, and conducive to, the development and protection of offices, research and development institutions, manufacturing establishments of a non-

nuisance type, and retail uses.

The provisions of this Section have been developed to coordinate these developments with the intent to:

- Establish and maintain high aesthetic standards;
 - Preserve the development's visual character by assuring improvements that are properly related to their sites and to surrounding developments;
 - Encourage originality, flexibility and innovation in site planning and development, including architecture, landscaping and graphic design; and
 - Encourage development that is compatible with and complementary to nearby residential and commercial areas.
1. The application for a planned business development is for those areas particularly suited for mixed-use development of the types listed above. Property may be designated Planned Business Development when one or more of the following criteria are satisfied:
 - a. The site has been designated for non-residential development in the Township's Master Plan;
 - b. The property and the affected area are presently provided with adequate public facilities, services and transportation networks to support this use; or such facilities, services and transportation networks are planned to be provided concurrently with the development;
 - c. The development will not involve uses, activities, processes, materials, equipment and conditions of the operation that will be detrimental to any persons, property or the general welfare by reason of smoke, fumes, glare, noise, vibration or odors.
 2. Planned Business Development Design Standards
 - a. Lot coverage, including all buildings and paved areas, shall not exceed seventy (70%) percent of the lot area
 - b. All structures shall be a minimum of thirty (30) feet from any public road right-of-way.
 - c. All structures shall meet applicable side and rear setback requirements.
 - d. Principal or accessory buildings shall not be less than fifty (50) feet from any property line abutting residentially zoned lands.

The following improvements are excluded from this setback restriction:

- 1) Structures below and covered by the ground.
 - 2) Steps, walks, driveways and curbing.
 - 3) Planters, walls, fences or hedges not exceeding four (4) feet in height.
 - 4) Landscaping
 - 5) Pedestrian plazas/walkways.
- e. Access to each parcel or lot must be from an internal street and not from an abutting major thoroughfares or arterial.
- f. There shall be set aside for common open space not less than one (1) acre of land for every five (5) acres of land devoted to office, research, industrial and/or business, and commercial uses. Such computation shall exclude the area devoted to the internal street system and the anticipated required off-street parking.

The location of common open space shall be consistent with the declared function of the common usable open space and where possible, the common open space shall be planned as a contiguous area centrally located to the site for the maximum benefit of the area. Protected environmentally sensitive areas, such as woodlands, wetlands and natural drainage areas may be included in the calculation of required open space. Stormwater drainage areas may be included, provided that the stormwater structure is designed and landscaped to have a naturalized appearance.

- g. The internal circulation system shall include pedestrian paths that provide continuous circulation from the boundary streets to each lot or parcel within the development, common open space area and all other important interior site destinations.
- h. A minimum of ten (10) percent of the gross area of the Planned Business Development shall be open land with vegetative ground cover and other plant materials not covered by buildings, paving or other impervious surfaces. Pedestrian paths/walkways may be included in the calculation of this requirement.
- i. All utility lines serving the internal development shall be underground. Entry fixtures must be located away from high use areas and main entrances or screened in an approved manner.

3. Building Design Requirements
 - a. Architectural style is not restricted. Evaluation of the appearance of a project shall be based on the quality of its design, relationship to surroundings, sensitive integration of form, textures and colors with the particular landscape.
 - b. Buildings shall have a good scale and be in harmonious conformance with permanent development in the general vicinity.
 - c. Materials shall have good architectural character and shall be selected for harmony of the building with adjoining buildings. Accessory buildings shall have the same materials, or those that are architecturally harmonious, used for all building walls and other exterior building components wholly or partly visible from public rights-of-way.
 - d. All exterior building walls that are visible from a public right-of-way shall include attractive, durable materials.
 - e. Building components, such as windows, doors, eaves and parapets shall have good proportions and relationships to one another.
 - f. Colors shall be harmonious and shall use only compatible accents.
 - g. Monotony of design in single or multiple building projects shall be avoided. Variation of detail, form and siting shall be used to provide visual interest. In multiple building projects, variable siting or individual buildings may be used to prevent a monotonous appearance.
 - h. Antennas should be located where they are not visible on the front façade. Mechanical equipment such as window air conditioning units or condenser elements attached to the side or roof of a building, including heating vents, should be kept as low as possible and covered or screened to blend with the building to which it is affixed.
4. Uses permitted. All of the permitted uses in the CM Commercial Manufacturing are permitted in the Planned Business Development, with the following exceptions:
 - a. Truck terminals.
 - b. Outdoor material storage.
 - c. Contractors yard.
 - d. Asphalt plants.
 - e. Concrete manufacturing plant.
 - f. All uses essentially similar to the above uses.

5. Planned Business Development Application

In additions to the requirements listed in Section 18.46(2), the following requirements shall apply:

- a. The procedures for a planned business development submittal shall follow the special land use procedures as outlined in Article 22, Special Land Use Review Procedures as described in this Zoning Ordinance.
 - a. If the application is for concurrent special use and site plan approval, then a site plan containing all of the applicable data as outlined in Article 21, Site Plan Review Procedures, shall be required for that portion of the site where site plan approval is requested.
6. After the Township Board has approved the Special Use Permit for the Planned Business Development, a site plan for the development may be submitted to the Planning Commission for approval. The site plan shall meet the requirements listed in Article 21 of this Zoning Ordinance.

18.46 Small Retail Operations

This use allows small retail operations that are designed to serve the convenience shopping needs of persons residing in adjacent residential areas to be placed near those residential areas. Small commercial operations shall meet the following requirements:

1. No drive-thrus are permitted.
 - a. No more than eight (8) parking spaces may be provided.
 - b. The gross floor area for one (1) business shall not exceed 2,500 square feet. If the structure contains two (2) or more independent businesses with different owners, then the structure may be a maximum of 3,500 square feet.
 - c. There shall be a sidewalk/pathway from adjacent public road right-of-ways to the operation.
 - d. The operation is not located on an interior subdivision road.
 - e. The sale of sexually oriented merchandise is prohibited.
 - f. The design of the building is compatible with the adjacent properties with respect to building materials, mass and scale, color, and roof-pitch.
 - g. Only one (1) sign is permitted on the parcel. The surface display area for the sign shall not exceed twenty-five (25) square feet. The sign height shall not exceed eight (8) feet above grade.

- h. There shall be an additional twenty (20) foot setback from residentially zoned properties.

Section 18.47 Wind Energy Systems

The purpose of sections 18.47, 18.48, and 18.49 is to establish requirements for the location of Wind Energy Systems. The Township recognizes that it is in the public interest to permit the location of wind turbine generators within the Township. The Township also recognizes the need to protect the scenic beauty of Blair Township from unnecessary or unreasonable visual interference. As such, this section seeks to:

- Regulate the development of renewable energy resources in a prudent manner;
- Protect all areas of the Township from any potential adverse impacts of wind energy systems and anemometer towers;
- Regulate the location of wind energy systems and anemometer towers in the Township;
- Protect the public health, safety and welfare of Blair Township residents;
- Avoid potential damage to adjacent property from the failure of wind energy systems and anemometer towers or the result of natural occurrences (ice throw)

All wind energy systems shall meet the following standards: (See also Section 18.48 Small Wind Energy Systems 35 feet in height or less and Section 18.49 Large Wind Energy Systems, Small Wind Energy Systems over 35 feet and Anemometer Towers)

1. Setback, for wind energy systems, from all adjoining property lines and rights-of-way shall be the greater of the setback requirements of the zoning district or one and a half times the combined height of the tower and the diameter of the rotor ($1.5 \times (h+d)$). Anemometer towers shall be setback the height of the tower as measured from the highest point. No part of the wind energy systems, including guy wire anchors, shall extend into any required setback.
2. The site area shall be of a size that meets the required setback and any other standards of this section.
3. Wind energy systems shall not be artificially lighted unless required by the FAA or other applicable authority. Where the FAA requires lighting, the lighting shall be the lowest intensity allowable under FAA regulations. All fixtures shall be shielded and directed, to the greatest extent possible, to minimize glare and visibility from the ground. Strobe lighting shall be strictly prohibited unless specifically required by the FAA.
4. Wind energy systems shall be equipped with controls to limit the rotational speed of the blades within design limits for the specific wind energy system.
5. On-site electrical transmission lines shall be located underground.

6. Wind energy systems shall be designed and sited to minimize shadow flicker on roadways and existing structures located off site.
7. Wind energy systems, subject to any applicable standards of the FAA, shall be painted a neutral color so as to reduce visual obtrusiveness. No part of the wind energy system may include advertising.
8. Wind energy systems shall comply with all applicable state construction and electrical codes and local building permit requirements.
9. Wind energy systems and anemometer towers that are not operated or maintained for a period of twenty four (24) consecutive months shall be deemed abandoned. The system and all associated pertinences shall be entirely removed at the owner's expense within one year upon receiving written notice from the Zoning Administrator. If removal of the wind energy system is not completed within designated time, the Township may remove the wind energy system and the costs remain the burden of the property owner.
10. Wind energy systems shall be designed to the current state of technology. Used, outdated or obsolete equipment shall not be permitted to be constructed or installed.
11. A performance guarantee shall meet requirements of Section 21.07.
12. Shall have posted no more than one sign, not to exceed four (4) square feet, at an accessible location, at the service drive entrance of the tower that shall contain emergency phone number and contact information. The emergency telephone number shall allow a caller to contact a responsible individual to address emergencies at any time during or after regular business hours and on weekends and holidays.
13. These regulations pertaining to large or small wind energy systems are intended to respond to equipment available at the time of adoption. Blair Township recognizes that this is an emerging technology and that new means of collecting wind energy, including but not limited to vertical axis wind energy systems, are under development. Accordingly, these standards will be reviewed and may be amended as technology advances.

Section 18.48 Small Wind Energy Systems 35 feet in height or less

Small wind energy systems 35 feet in height or less shall meet the following requirements:

1. Requirements of Section 18.47 for this Ordinance.
2. Small wind energy systems shall be an accessory structure.

3. Blade clearance shall be fifteen (15) feet from the ground.
4. Rotor blade shall be twenty (20) feet or less in diameter.
5. Shall not be attached to dwelling or accessory structure.
6. Noise from a small wind energy system shall not exceed 50 dB(A), at any given time, as measured at the property line.
7. The applicant shall submit a site plan with the following information:
 - a. Property lines, physical dimensions of the property and required yard setbacks
 - b. Location, dimensions, and types of existing major structures on the property
 - c. Location of proposed wind energy system
 - d. All right-of-ways, utilities, and easements
 - e. Wind energy system specifications, including manufacturer and model, rotor diameters, tower height, tower type and color
 - f. Tower and tower foundation blueprints or drawings
 - g. Any additional information, requested by the township to demonstrate compliance with Sections 18.47 and this section of the Ordinance (noise, shadow flicker, etc.)

Section 18.49 Large Wind Energy Systems, Small Wind Energy Systems over 35 feet in Height and Anemometer Towers

Large wind energy systems, small wind energy systems over 35 feet in height and anemometer towers shall meet the following requirements:

1. Requirements of Section 18.47 of this Ordinance.
2. Blade clearance shall be twenty five (25) feet from the ground for small wind energy systems over 35 feet in height and fifty (50) feet from the ground for large wind energy systems.
3. Maximum height of 300 feet. The Planning Commission may approve an increased height of a wind energy system if the following conditions are met:
 - a. The height increase is necessary for the preservation of a substantial stand of trees, existing land forms or structures that would otherwise be removed to increase wind velocity.
 - b. To improve noise level at the property lines.
 - c. It is the minimum necessary variance to meet a and b above.

4. Shall be designed and sited to minimize adverse visual and noise impacts on neighboring areas. Noise shall be limited to no more than 10 dB(A) above the original ambient baseline sound level at the property lines as reported in the noise study as required under 18.49.8.d below.
5. Shall be designed and constructed to limit access, to the extent possible, to authorized personnel only.
6. Shall be constructed and operated so that it does not interfere with television, radio, cellular telephone or microwave reception in neighboring areas.
7. Shall be a monopole or monotube style construction, not lattice style tower, and shall not utilize guy wires.
8. In addition to the application requirements of Article 22 and Section 18.47, an application for a special use permit shall include all of the following information, unless expressly indicated otherwise:
 - a. A detailed analysis by a professional engineer, experienced in wind energy systems, licensed in the State of Michigan, describing the specific wind energy system structure(s) or anemometer tower proposed and all phases for implementing the development.
 - b. A study prepared by a professional engineer, experienced in wind energy systems licensed in the State of Michigan, documenting that the site of the wind energy system has sufficient wind resources for the proposed wind energy system equipment. This regulation shall not apply to anemometer towers.
 - c. A resume or other written summary of the education, experience, and other qualifications of all experts providing information concerning the wind energy system or anemometer tower project.
 - d. Analysis, measurements and projections of the wind energy system noise propagation conforming to the International Electromechanical Commission Standard 61400-11 Part 11, to include:
 - i. Existing ambient background noise levels;
 - ii. Prediction of the wind energy system noise levels at the property borders;
 - iii. Identification and support for a model for sound propagation;
 - iv. A comparison of calculated wind sound pressure levels with and without the wind energy system.

This regulation shall not apply to anemometer towers.

- e. A detailed written statement, with supporting evidence, demonstrating how the proposed wind energy system or anemometer tower will comply with all the standards for approval.
- f. Elevation drawings, computer generated sound models or simulations and other aids or documentation projecting the sound reaching off the property on which the wind energy system will be constructed, and the extent and duration of the sound. This regulation shall not apply to an anemometer tower.
- g. Elevation drawings, computer generated photographic simulations or other images and visual aids that depict how the wind energy system tower and all accessory structures will appear as constructed on the proposed site from vantage points north, south, east, and west of the wind energy system tower. This regulation shall not apply to an anemometer tower.
- h. Any additional information as determined by the Planning Commission and/or Township Board to demonstrate compliance with Sections 18.47 and this section of the Ordinance

Section 18.50 Top Soil Extraction

- 1. The activity shall be deemed a violation of this ordinance if it becomes a nuisance by any of the following factors:
 - a. Excessive noise that disturbs adjacent properties.
 - b. Excessive soil blowing onto adjacent properties.
 - c. Excessive vibrations that disturb adjacent properties.
 - d. Any other factor that falls under the “Nuisance Factor” definition in Section 2.02 of this ordinance.

Section 18.51 Class 1 Disposal Wells and Related Facilities

(Amendment 104-05-12-05; Effective 03/25/13)

- 1. *There shall be a two (2) acre minimum lot size*
- 2. *A six (6) foot high security fence with a locked gate at the site that completely encloses all activities shall be required*

Section 18.52 – Solar Energy Systems – Solar Panels (energy systems will be allowed in all Districts of the Blair Township Zoning Ordinance as a use by right).

(Amendment #104-05-14-01; Effective 02/14/2014)

- 1. New solar energy systems or any upgrade, modification or structural change that alters the size or placement of an existing solar energy system shall comply with the provisions in this Section.

2. Solar panels will be permitted by right as an accessory use in all districts where structures are permitted.
3. A solar panel system may be structurally mounted or freestanding.
4. Solar panels shall meet the accessory structure setbacks for the zoning district.
5. Building and roof structures shall not exceed the maximum of 15 feet in height within the zoning district.
6. Solar panels mounted to the roof of a building will not require a Land Use Permit.
7. All ground mounted solar energy mechanical and electrical equipment shall be screened from any adjacent property that is used for residential purposes.
8. Solar panels shall be placed such that solar radiation or glare shall not be directed onto nearby properties or roadways. Glare from any solar panels directed onto nearby properties will be in violation and shall constitute a public nuisance.
9. Solar panels shall not be placed in the vicinity of any airport in a manner that would interfere with airport flight patterns. Solar panels must comply with FAA requirements,
10. No solar energy systems shall be used to display advertising, including signage, streamers, pennants, spinners, reflectors, tinsel, balloons, flags, banners or similar materials.
11. If a ground solar energy system is defective or is deemed to be unsafe by the County Electrical Inspector, the solar energy system shall be repaired by the owner to meet the current federal, state and local safety standards. Alternatively, the solar energy system shall be removed by the property owner within the time period of six (6) months.
12. No guy wires will be allowed in any district.