

6-16-2-46. Increased Cost of Compliance {ICC} means the cost to repair a substantially damaged structure that exceeds the minimal repair cost and that is required to bring a substantially damaged structure into compliance with the local flood damage prevention regulations. Acceptable mitigation measures are elevation, relocation, demolition, or any combination thereof. All renewal and new business flood insurance policies with effective dates on or after June 1, 1997, will include ICC coverage.

6-16-2-47. Letter of Map Amendment (LOMA) means an amendment to the currently effective FEMA map that establishes that a property is not located in a SFHA. A LOMA is only issued by FEMA.

6-16-2-48. Letter of Map Revision (LOMR) means an official revision to the currently effective FEMA map. It is issued by FEMA and changes flood zones, delineations, and elevations.

6-16-2-49. Letter of Map Revision Based on Fill (LOMR-F) means an official revision by letter to an effective NFIP map. A LOMR-F provides FEMA's determination concerning whether a structure or parcel has been elevated on fill above the BFE and excluded from the SFHA

6-16-2-50. Lowest adjacent grade means the lowest elevation, after completion of construction, of the ground, sidewalk, patio, deck support, or basement entryway immediately next to the structure.

6-16-2-51. Lowest floor means the lowest of the following:

- (1) the top of the lowest level of the structure;
- (2) the top of the basement floor;
- (3) the top of the garage floor, if the garage is the lowest level of the structure;
- (4) the top of the first floor of a structure elevated on pilings or pillars;
- (5) the top of the floor level of any enclosure, other than a basement, below an elevated structure where the walls of the enclosure provide any resistance to the flow of flood waters unless:
 - a). the walls are designed to automatically equalize the hydrostatic flood forces on the walls by allowing for the entry and exit of flood waters by providing a minimum of two openings (in addition

to doorways and windows) in a minimum of two exterior walls having a total net area of one (1) square inch for every one square foot of enclosed area. The bottom of all such openings shall be no higher than one (1) foot above the exterior grade or the interior grade immediately beneath each opening, whichever is higher; and,

b). such enclosed space shall be usable solely for the parking of vehicles and building access.

6-16-2-52. Manufactured home means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

6-16-2-53. Manufactured home park or subdivision means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

6-16-2-54. Map amendment means a change to an effective NFIP map that results in the exclusion from the SFHA of an individual structure or a legally described parcel of land that has been inadvertently included in the SFHA (i.e., no alterations of topography have occurred since the date of the first NFIP map that showed the structure or parcel to be within the SFHA).

6-16-2-55. Map panel number is the four-digit number followed by a letter suffix assigned by FEMA on a flood map. The first four digits represent the map panel, and the letter suffix represents the number of times the map panel has been revised. (The letter "A" is not used by FEMA, the letter "B" is the first revision.)

6-16-2-56. Market value means the building value, excluding the land (as agreed to between a willing buyer and seller), as established by what the local real estate market will bear. Market value can be established by independent certified appraisal, replacement cost depreciated by age of building (actual cash value) or adjusted assessed values.

6-16-2-57. Mitigation means sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects. The purpose of mitigation is two-fold: to protect people and structures, and to minimize the cost of disaster response and recovery.

6-16-2-58. National Flood Insurance Program (NFIP) is the federal program that makes flood insurance available to owners of property in participating communities nationwide through the cooperative efforts of the Federal Government and the private insurance industry.

6-16-2-59. National Geodetic Vertical Datum (NGVD) of 1929 as corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the floodplain.

6-16-2-60. New construction means any structure for which the "start of construction" commenced after the effective date of the community's first floodplain ordinance.

6-16-2-61. New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of the community's first floodplain ordinance.

6-16-2-62. North American Vertical Datum of 1988 (NAVD 88) as adopted in 1993 is a vertical control datum used as a reference for establishing varying elevations within the floodplain.

6-16-2-63. Obstruction includes, but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, canalization, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation, or other material in, along, across or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water; or due to its location, its propensity to snare or collect debris carried by the flow of water, or its likelihood of being carried downstream.

6-16-2-64. One-hundred-year flood (100-year flood) is the flood that has a one percent (1%) chance of being equaled or exceeded in any given year. Any flood zone that begins with the letter A is subject to the one percent annual chance flood. See "Regulatory Flood".

6-16-2-65. One-percent annual chance flood is the flood that has a one percent (1%) chance of being equaled or exceeded in any given year. Any flood zone that begins with the letter A is subject to the one-percent annual chance flood. See "Regulatory Flood".

6-16-2-66. Participating community is any community that voluntarily elects to participate in the NFIP by adopting and enforcing floodplain management regulations that are consistent with the standards of the NFIP.

6-16-2-67. Physical Map Revision (PMR) is an official republication of a community's FEMA map to effect changes to base (1-percent annual chance) flood elevations, floodplain boundary delineations, regulatory floodways, and planimetric features. These changes typically occur as a result of structural works or improvements, annexations resulting in additional flood hazard areas, or correction to base flood elevations or SFHAs.

6-16-2-68. Pre-FIRM construction means construction or substantial improvement, which started on or before December 31, 1974, or before the effective date of the initial FIRM of the community, whichever is later.

6-16-2-69. Probation is a means of formally notifying participating communities of violations and deficiencies in the administration and enforcement of the local floodplain management regulations.

6-16-2-70. Public safety and nuisance means anything which is injurious to the safety or health of an entire community, neighborhood or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

6-16-2-71. Recreational vehicle means a vehicle which is (1) built on a single chassis; (2) 400 square feet or less when measured at the largest horizontal projections; (3) designed to be self-propelled or permanently towable by a light duty truck; and (4) designed primarily not for use as a permanent dwelling, but as quarters for recreational camping, travel, or seasonal use.

6-16-2-72. Regular program means the phase of the community's participation in the NFIP where more comprehensive floodplain management requirements are imposed, and higher amounts of insurance are available based upon risk zones and elevations determined in a FIS.

6-16-2-73. Regulatory flood means the flood having a one percent (1%) chance of being equaled or exceeded in any given year, as calculated by a method and procedure that is acceptable to and approved by the Indiana Department of Natural Resources and the Federal Emergency Management Agency. The regulatory flood elevation at any location is as defined in Article 3-16-2-6 of these regulations.

The "Regulatory Flood" is also known by the term "Base Flood", "One-Percent Annual Chance Flood", and "100-Year Flood".

6-16-2-74. Repetitive loss means flood-related damages sustained by a structure on two separate occasions during a 10-year period ending on the date of the event for which the second claim is made, in which the cost of repairing the flood damage, on the average, equaled or exceeded 25% of the market value of the structure at the time of each such flood event.

6-16-2-75. Section 1316 is that section of the National Flood Insurance Act of 1968, as amended, which states that no new flood insurance coverage shall be provided for any property that the Administrator finds has been declared by a duly constituted state or local zoning authority or other authorized public body to be in violation of state or local laws, regulations, or ordinances that intended to discourage or otherwise restrict land development or occupancy in flood-prone areas.

6-16-2-76. Special Flood Hazard Area (SFHA) means those lands within the jurisdictions of the County subject to inundation by the regulatory flood. The SFHAs of Starke County are generally identified as such on the Starke County Indiana Unincorporated Areas Flood Insurance Rate Map prepared by the Federal Emergency Management Agency, dated April 1, 1993. (These areas are shown on a FHBM or FIRM as Zone A, AE, AI- A30, AH, AR, A99, or AD).

6-16-2-77. Start of construction includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement or permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footing, installation of piles, construction of columns, or any work beyond the stage of excavation for placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, foundations, or the erection of temporary forms. For substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

6-16-2-78. Structure means a structure that is principally above ground and is enclosed by walls and a roof. The term includes a gas or liquid storage tank, a

manufactured home, or a prefabricated building. The term also includes recreational vehicles to be installed on a site for more than 180 days.

6-16-2-79. Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

6-16-2-80. Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures that have incurred "repetitive loss" or "substantial damage" regardless of the actual repair work performed. The term does not include improvements of structures to correct existing violations of state or local health, sanitary, or safety code requirements or any alteration of a "historic structure", provided that the alteration will not preclude the structures continued designation as a "historic structure".

6-16-2-81. Suspension means the removal of a participating community from the NFIP because the community has not enacted and/or enforced the proper floodplain management regulations required for participation in the NFIP.

6-16-2-82. Variance is a grant of relief from the requirements of these regulations, which permits construction in a manner otherwise prohibited by these regulations where specific enforcement would result in unnecessary hardship.

6-16-2-83. Violation means the failure of a structure or other development to be fully compliant with these regulations. A structure or other development without the elevation, other certification, or other evidence of compliance required in these regulations is presumed to be in violation until such time as that documentation is provided.

6-16-2-84. Watercourse means a lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

6-16-2-85. Water surface elevation means the height, in relation to the North American Vertical Datum of 1988 (NAVD 88) or National Geodetic Vertical Datum of 1929 (NGVD) (other datum where specified) of floods of various magnitudes and frequencies in the floodplains of riverine areas.

6-16-2-86. X zone means the area where the flood hazard is less than that in the SFHA. Shaded X zones shown on recent FIRMs {8 zones on older FIRMs} designate areas subject to inundation by the flood with a 0.2 percent chance of being equaled or exceeded (the 500-year flood). Unshaded X zones (C zones on older FIRMs) designate areas where the annual exceedance probability of flooding is less than 0.2 percent.

6-16-2-87. Zone means a geographical area shown on a FHBM or FIRM that reflects the severity or type of flooding in the area.

6-16-2-88. Zone A (see definition for A zone)

6-16-2-89. Zone B, C, and X means areas identified in the community as areas of moderate or minimal hazard from the principal source of flood in the area. However, buildings in these zones could be flooded by severe, concentrated rainfall coupled with inadequate local drainage systems. Flood insurance is available in participating communities but is not required by regulation in these zones. (Zone X is used on new and revised maps in place of Zones B and C.)

6-16-3. General Provisions.

6-16-3-1. Lands to Which These Regulations Apply.

These regulations shall apply to all SFHAs and known flood prone areas within the jurisdiction of Starke County.

6-16-3-2. Basis for Establishing Regulatory Flood Data.

These regulation's protection standard is the regulatory flood. The best available regulatory flood data is listed below. Whenever a party disagrees with the best available data, the party submitting the detailed engineering study needs to replace existing data with better data and submit it to the Indiana Department of Natural Resources for review and approval.

(1) The regulatory flood elevation, floodway, and fringe limits for the SFHAs within the jurisdiction of Starke County delineated as an "A Zone" on the Starke County Indiana Unincorporated Areas Flood Insurance Rate Map prepared by the Federal Emergency Management Agency and dated April 1, 1993, shall be according to the best data available as provided by the Indiana Department of Natural Resources; provided the upstream drainage area from the subject site is greater than one square mile.

(2) In the absence of a published FEMA map, or absence of identification on a FEMA map, the regulatory flood elevation, floodway, and fringe limits of any watercourse in the community's known flood prone areas shall be according to the best data available as provided by the Indiana Department of Natural Resources; provided the upstream drainage area from the subject site is greater than one square mile.

6-16-3-3. Establishment of Floodplain Development Permit.

A Floodplain Development Permit shall be required in conformance with the provisions of these regulations prior to the commencement of any development activities in areas of special flood hazard.

6-16-3-4. Compliance.

No structure shall hereafter be located, extended, converted or structurally altered within the SFHA without full compliance with the terms of these regulations and other applicable regulations. No land or stream within the SFHA shall hereafter be altered without full compliance with the terms of these regulations and other applicable regulations.

6-16-3-5. Abrogation and Greater Restrictions.

These regulations are not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where these regulations and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

6-16-3-6. Discrepancy between Mapped Floodplain and Actual Ground Elevations.

(1) In cases where there is a discrepancy between the mapped floodplain (SFHA) on the FIRM and the actual ground elevations, the elevation provided on the profiles shall govern.

(2) If the elevation of the site in question is below the base flood elevation, that site shall be included in the SFHA and regulated accordingly.

(3) If the elevation (natural grade) of the site in question is above the base flood elevation, that site shall be considered outside the SFHA and the floodplain regulations will not be applied. The property owner should be advised to apply for a LOMA.

6-16-3-7. Interpretation.

In the interpretation and application of these regulations all provisions shall be:

- (1) Considered as minimum requirements;
- (2) Liberally construed in favor of the governing body; and,
- (3) Deemed neither to limit nor repeal any other powers granted under state statutes.

6-16-3-8. Warning and Disclaimer of Liability.

The degree of flood protection required by these regulations are considered reasonable for regulatory purposes and is based on available information derived from engineering and scientific methods of study. Larger floods can and will occur on rare occasions. Therefore, these regulations do not create any liability on the part of Starke County, the Indiana Department of Natural Resources, or the State of Indiana, for any flood damage that results from reliance on these regulations, or any administrative decision made lawfully thereunder.

6-16-3-9. Penalties for Violation.

Failure to obtain a Floodplain Development Permit in the SFHA or failure to comply with the requirements of a Floodplain Development Permit or conditions of a variance shall be deemed to be a violation of these regulations. All violations shall be considered a common nuisance and be treated as such in accordance with the provisions of the Zoning Code for Starke County. All violations shall be punishable by a fine not exceeding \$300.00 per day.

(1) A separate offense shall be deemed to occur for each day the violation continues to exist.

(2) The Starke County Planning Commission shall inform the owner that any such violation is considered a willful act to increase flood damages and therefore may cause coverage by a Standard Flood Insurance Policy to be suspended.

(3) Nothing herein shall prevent the County from taking such other lawful action to prevent or remedy any violations. All costs connected therewith shall accrue to the person or persons responsible.

6-16-3-10. Increased Cost of Compliance (ICC).

In order for buildings to qualify for a claim payment under ICC coverage as a "repetitive loss structure", the National Reform Act of 1994 requires that the building be covered by a contract for flood insurance and incur flood-related damages on two occasions during a 10-year period ending on the date of the event for which the second claim is made, in which the cost of repairing the flood damage, on the average, equaled or exceeded 25 percent of the market value of the building at the time of each such flood event.

6-16-4. Administration.

6-16-4-1. Designation of Administrator.

The Board of Commissioners hereby appoints the Planning Administrator to administer and implement the provisions of these regulations and is herein referred to as the Floodplain Administrator.

6-16-4-2. Permit Procedures.

Application for a Floodplain Development Permit shall be made to the Floodplain Administrator on forms furnished by him or her prior to any development activities, and may include, but not be limited to, the following plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, earthen fill, storage of materials or equipment, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

(1) Application stage.

- a). A description of the proposed development;
- b). Location of the proposed development sufficient to accurately locate property and structure in relation to existing roads and streams;
- c). A legal description of the property site;
- d). A site development plan showing existing and proposed development locations and existing and proposed land grades;
- e). Elevation of the top of the lowest floor (including basement) of all proposed buildings.

f). Elevation (in NAVD 88 or NGVD; to which any non-residential structure will be floodproofed;

g). Description of the extent to which any watercourse will be altered or relocated as a result of proposed development, and;

(2) Construction stage.

Upon placement of the lowest floor; or floodproofing, it shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the NAVD as or NGVD elevation of the lowest floor or flood proofed elevation, as built. Said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by the same. When flood proofing is utilized for a particular structure said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. Any work undertaken prior to submission of the certification shall be at the permit holders' risk. (The Floodplain Administrator shall review the lowest floor and floodproofing elevation survey data submitted.) The permit holder shall correct deficiencies detected by such review before any further work is allowed to proceed. Failure to submit the survey or failure to make said corrections required hereby shall be cause to issue a stop-work order for the project

6-16-4-3. Duties and Responsibilities of the Floodplain Administrator.

The Floodplain Administrator and/or designated staff is hereby authorized and directed to enforce the provisions of these regulations. The administrator is further authorized to render interpretations of these regulations, which are consistent with its spirit and purpose.

Duties and Responsibilities of the Floodplain Administrator shall include, but not be limited to:

(1) Review all floodplain development permits to assure that the permit requirements of these regulations have been satisfied;

(2) Inspect and inventory damaged structures in the SFHA and complete substantial damage determinations;

(3) Ensure that construction authorization has been granted by the Indiana Department of Natural Resources for all development projects subject to 6-16-5-5 and 6-16-5-7-1 of these regulations, and

maintain a record of such authorization (either copy of actual permit or flood plain analysis/regulatory assessment)

(4) Ensure that all necessary federal or state permits have been received prior to issuance of the local floodplain development permit. Copies of such permits are to be maintained on file with the floodplain development permit;

(5) Notify adjacent communities and the State Floodplain Coordinator prior to any alteration or relocation of a watercourse, and submit copies of such notifications to FEMA;

(6) Maintain for public inspection and furnish upon request local permit documents, damaged structure inventories, substantial! damage determinations; regulatory flood data, SFHA maps, Letters of Map Amendment (LOMA), letters of Map Revision (LOMR). copies of DNR permits and floodplain analysis and regulatory assessments (letters of recommendation), federal permit documents, and "as-built" elevation and floodproofing data for all buildings constructed subject to these regulations.

(7) Utilize and enforce all Letters of Map Revision (LOMR) or Physical Map Revisions (PMR) issued by FEMA for the currently effective SFHA maps of the community.

(8) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished;

(9) Verify and record the actual elevation of the lowest floor (including basement) of all new or substantially improved structures, in accordance with 6-16-4-2;

(10) Verify and record the actual elevation to which any new or substantially improved structures have been floodproofed, in accordance with 6-16-4-2;

(11) Review certified plans and specifications for compliance.

(12) Stop Work Orders

a). Upon notice from the floodplain administrator, work on any building, structure or premises that is being done contrary to the provisions of these regulations shall immediately cease.

b). Such notice shall be in writing and shall be given to the owner of the property, or to his agent, or to the person doing the work, and shall state the conditions under which work may be resumed.

(13) Revocation of Permits

a). The floodplain administrator may revoke a permit of approval, issued under the provisions of these regulations, in cases where there has been any false statement or misrepresentation as to the material fact in the application or plans on which the permit or approval was based.

b). The floodplain administrator may revoke a permit upon determination by the floodplain administrator that the construction, erection, alteration, repair, moving, demolition, installation, or replacement of the structure for which the permit was issued is in violation of, or not in conformity with, the provisions of these regulations.

(14) Inspect sites for compliance. For all new and/or substantially improved buildings constructed in the SFHA, inspect before, during and after construction. Authorized Stake County Building Commission and/or Planning Administrator and/or Flood Plain Administrator shall have the right to enter and inspect properties located in the SFHA.

6-16-5. Provisions for Flood Hazard Reduction.

6-16-5-1. General Standards.

In all SFHAs and known flood prone areas the following provisions are required:

(1) New construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure;

(2) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces;

(3) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage below the FPG;

(4) New construction and substantial improvements shall be constructed by methods and practices that minimize flood damage;

(5) Electrical, heating, ventilation, plumbing, air conditioning equipment utility meters, and other service facilities shall be located at/above the FPG or designed so as to prevent water from entering or accumulating within the components below the FPG. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other waterproofed service facilities may be located below the FPG;

(6) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;

(7) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system;

(8) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;

(9) Any alteration, repair, reconstruction or improvements to a structure that is in compliance with the provisions of these regulations shall meet the requirements of "new construction" as contained in these regulations; and,

(10) Any alteration, repair, reconstruction or improvement to a structure that is not in compliance with the provisions of these regulations, shall be undertaken only if said non-conformity is not further, extended, or replaced.

(11) Whenever any portion of the SFHA is authorized for use, the volume of space which will be occupied by the authorized fill or structure below the BFE shall be compensated for and balanced by an equivalent volume of excavation taken below the BFE. The excavation volume shall be at least equal to the volume of storage lost (replacement ratio of 1 to 1) due to the fill or structure.

a). The excavation shall take place in the floodplain and in the same property in which the authorized fill or structure is located;

b). Under certain circumstances, the excavation may be allowed to take place outside of but adjacent to the floodplain provided that the excavated volume will be below the regulatory flood elevation, will be in the same property in which the authorized fill or structure is located, will be accessible to the regulatory flood water, will not be subject to ponding when not inundated by flood water, and that it shall not be refilled;

c). The excavation shall provide for true storage of floodwater but shall not be subject to ponding when not inundated by flood water;

d). The fill or structure shall not obstruct a drainage way leading to the floodplain;

e). The grading around the excavation shall be such that the excavated area is accessible to the regulatory flood water;

f). The fill or structure shall be of a material deemed stable enough to remain firm and in place during periods of flooding and shall include provisions to protect adjacent property owners against any increased runoff or drainage resulting from its placement; and,

g). Plans depicting the areas to be excavated and filled shall be submitted prior to the actual start of construction or any site work; once site work is complete, but before the actual start of construction, the applicant shall provide to the Floodplain Administrator a certified survey of the excavation and fill sites demonstrating the fill and excavation comply with this article.

6-16-5-2. Specific Standards.

In all SFHAs, the following provisions are required:

(1) In addition to the requirements of 6-16-5-1, all structures to be located in the SFHA shall be protected from flood damage below the FPG. This building protection requirement applies to the following situations:

a}. Construction or placement of any new structure having a floor area greater than 400 square feet;

b). Addition or improvement made to any existing structure:

(i) where the cost of the addition or improvement equals or exceeds 50% of the value of the existing structure (excluding the value of the land);

(ii) with a previous addition or improvement constructed since the community's first floodplain ordinance.

c). Reconstruction or repairs made to a damaged structure where the costs of restoring the structure to its before damaged condition equals or exceeds 50% of the market value of the structure (excluding the value of the land) before damage occurred;

d). Installing a travel trailer or recreational vehicle on a site for more than 180 days.

e). Installing a manufactured home on a new site or a new manufactured home on an existing site. These regulations do not apply to returning the existing manufactured home to the same site it lawfully occupied before it was removed to avoid flood damage; and

I). Reconstruction or repairs made to a repetitive loss structure;

(2) Residential Construction. New construction or substantial improvement of any residential structure (or manufactured home) shall

have the lowest floor, including basement, at or above the FPG (two feet above the base flood elevation). Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with the standards of 6-16-5-2(4).

(3) Non-Residential Construction. New construction or substantial improvement of any commercial, industrial, or non-residential structure (or manufactured home) shall either have the lowest floor including basement, elevated to or above the FPG (two feet above the base flood elevation) or be floodproofed to or above the FPG. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with the standards of 6-16-5-2(4).

Structures located in all "A Zones" may be flood proofed in lieu of being elevated if done in accordance with the following:

a). A Registered Professional Engineer or Architect shall certify that the structure has been designed so that below the FPG, the structure and attendant utility facilities are watertight and capable of resisting the effects of the regulatory flood. The structure design shall take into account flood velocities, duration, rate of rise, hydrostatic pressures, and impacts from debris or ice. Such certification shall be provided to the official as set forth in 6-16-4-3(10).

b). Floodproofing measures shall be operable without human intervention and without an outside source of electricity.

(4) Elevated structures. New construction or substantial improvements of elevated structures shall have the lowest floor at or above the FPG.

Elevated structures with fully enclosed areas formed by foundation and other exterior walls below the flood protection grade shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize

hydrostatic flood forces on exterior walls. Designs must meet the following minimum criteria:

a). provide a minimum of two openings located in a minimum of two exterior walls (having a total net area of not less than one square inch for every one square foot of enclosed area); and

b). the bottom of all openings shall be no more than one foot above the exterior grade or the interior grade immediately beneath each opening, whichever is higher; and,

c). openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions; and

d). openings are to be not less than 3 inches in any direction in the plane of the wall. This requirement applies to the hole in the wall, excluding any device that may be inserted such as typical foundation air vent device; and

e). access to the enclosed area shall be the minimum necessary to allow for parking for vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and

f). the interior portion of such enclosed area shall not be partitioned or finished into separate rooms; and

g). the interior grade of such enclosed area shall be a! an elevation at or higher than the exterior grade; and

h). where elevation requirements exceed 6 feet above the highest adjacent grade, a copy of the legally recorded deed restriction prohibiting the conversion of the area below the lowest floor to a use or dimension contrary to the structure's originally approved design, shall be presented as a condition of issuance of the final Certificate of Occupancy.

(5) Structures Constructed on Fill. A residential or nonresidential structure may be constructed on a permanent land fill in accordance with the following:

(a) The fill shall be placed in layers no greater than one (1) foot deep before compacting to 95% of the maximum density obtainable with either the Standard or Modified Proctor Test method.

(b) The fill should extend at least ten feet beyond the foundation of the structure before sloping below the FPG.

(c) the fill shall be protected against erosion and scour during flooding by vegetative cover, riprap, or bulkheading. If vegetative cover is used, the slopes shall be no steeper than 3 horizontal to 1 vertical.

(d) The fill shall not adversely affect the flow of surface drainage from or onto neighboring properties.

(e) The top of the lowest floor including basements shall be at or above the FPG.

6-16-5-3. Standards for Manufactured Homes and Recreational Vehicles. Manufactured homes and recreational vehicles to be installed or substantially improved on a site for more than 180 days must meet one of the following requirements:

(a) The manufactured home shall be elevated on a permanent foundation such that its lowest floor shall be at or above the FPG and securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement. This requirement applies to all manufactured homes to be placed on a site:

- a. Outside a manufactured home park or subdivision.
- b. In a new manufactured home park or subdivision.
- c. In an expansion to an existing manufactured home park or subdivision.

- d. In an existing manufactured home park or subdivision on which a manufactured home has incurred “substantial damage” as a result of a flood.
- (b) The manufactured home shall be elevated so that the lowest floor of the manufactured home chassis is supported by reinforced piers or other foundation elevations that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement. This requirement applies to all manufactured homes to be placed on a site in an existing manufactured home park or subdivision that has not been substantially damaged by a flood.
- (c) Manufactured homes with fully enclosed areas formed by foundation and other exterior walls below the flood protection grade shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls as required for elevated structures in 6-16-5-2 (4).
- (d) Flexible skirting and rigid skirting not attached to the frame or foundation of a manufactured home are not required to have openings.
- (e) Recreational vehicles placed on a site shall either:
 - a. Be on site for less than 180 days; and
 - b. Be fully licensed and ready for highway use (defined as being on its wheels or jacking system, is attached to the site only by quick disconnected type utilities and security devices, and has no permanently attached additions); or
 - c. Meet the requirements for “manufactured homes” as stated earlier in this section.

6-16-5-3. Standards for Subdivision Proposals.

6-16-5-3-1. All subdivision proposals shall be considered with the need to minimize flood damage;

6-16-6-3-2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.

6-16-5-3-3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards;

6-16-5-3-4. Base flood elevation data shall be provided for subdivision proposals and other proposed development (including manufactured home parks and subdivisions), which is greater than the lesser of fifty lots or five acres;

6-16-5-3-5. All subdivision proposals shall minimize development in the SFHA and/or limit density of development permitted in the SFHA;

6-16-5-3-6. All subdivision proposals shall ensure safe access into/out of SFHA for pedestrians and vehicles (especially emergency responders).

6-16-5-4. Critical facility. Construction of new critical facilities shall be, to the extent possible, located outside the limits of the SFHA. Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated to or above the FPG at the site. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the FPG shall be provided to all critical facilities to the extent possible.

6-16-5-5. Standards for Identified Floodways. Located within SFHAs established in 6-16-3-2, are areas designated as floodways. The floodway is an extremely hazardous area due to the velocity of floodwaters, which carry debris, potential projectiles, and has erosion potential. If the site is an identified floodway, the Floodplain Administrator shall require the applicant to forward the application, along with all pertinent plans and specifications, to the Indiana Department of Natural Resources and apply for a permit for construction in a floodway. Under the provisions of IC 14-28-1 a permit for construction in a floodway from the Indiana Department of

Natural Resources is required prior to the issuance of a local building permit for any excavation, deposit, construction, or obstruction activity located in the floodway. This includes land preparation activities such as filling, grading, clearing, and paving, etc. undertaken before the actual start of construction of the structure. However, it does exclude non-substantial additions/improvements to existing (lawful) residences in a non-boundary river floodway. (IC 14-28-1-26 allows construction of non-substantial additions/improvements to residences in a non-boundary river floodway without obtaining a permit for construction in the floodway from the Indiana Department of Natural Resources. Please note that if fill is needed to elevate an addition above the existing grade, prior approval (construction in a floodway permit) for the fill is required from the Indiana Department of Natural Resources).

No action shall be taken by the Floodplain Administrator until a permit (when applicable) has been issued by the Indiana Department of Natural Resources. Granting approval for construction in the floodway. Once a permit for construction in a floodway has been issued by the Indiana Department of Natural Resources, the Floodplain Administrator may issue the local Floodplain Development Permit, provided the provisions contained in 6-16-5 have been met. The Floodplain Development Permit cannot be less restrictive than the permit for construction in a floodway issued by the Indiana Department of Natural Resources. However, a community's more restrictive regulations (if any) shall take precedence.

No development shall be allowed which acting alone or in combination with existing or future development, will increase the regulatory flood more than 0.14 of one foot; and

For all projects involving channel modifications or fill (including levees) the County shall submit the data and request that the Federal Emergency management Agency revise the regulatory flood data.

6-16-5-6. Standards for Identified Fringe. If the site is located in an identified fringe, then the Floodplain Administrator may issue the local Floodplain Development Permit provided the provisions contained in 6-16-5 have been met. The key provision is that the top of the lowest

floor of any new or substantially improved structure shall be at or above the FPG.

6-16-5-7. Standards for SFHAs Without Established Base Flood Elevation and/or Floodways/Fringes.

6-16-5-7-1. Drainage area upstream of the site is greater than one square mile:

6-16-5-7-1-1. If the site is in an identified floodplain where the limits of the floodway and fringe have not yet been determined, and the drainage area upstream of the site is greater than one square mile the Floodplain Administrator shall require the applicant to forward the application, along with all pertinent plans and specifications, to the Indiana department of Natural Resources for review and comment.

6-16-5-7-1-2. No action shall be taken by the Floodplain Administrator until either a permit for construction in a floodway or a floodplain analysis/regulatory assessment citing the one percent annual chance flood elevation and the recommended Flood Protection Grade has been received from the Indiana Department of Natural Resources.

6-16-5-7-1-3. Once the Floodplain Administrator has received the proper permit for construction in a floodway or floodplain analysis/regulatory assessment approving the proposed development, a Floodplain Development Permit may be issued provided the conditions of the Floodplain Development Permit are not less restrictive than the conditions received from the Indiana Department of Natural Resources and the provisions contained in 6-16-5 have been met.

6-16-5-7-2. Drainage area upstream of the site is less than one square mile:

6-16-5-7-2-1. If the site is in an identified floodplain where the limits of **the floodway and fringe have not yet been determined and the drainage area upstream** of the site is less than one square mile, the Floodplain Administrator shall require the applicant to provide an engineering analysis showing the limits of the floodplain and one percent annual chance flood elevation for the site.

6-16-5-7-2-2. Upon receipt, the Floodplain Administrator may issue the local Floodplain Development Permit, provided the provisions contained in 6-16-5 have been met.

6-16-5-7-2-3. The total cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the regulatory flood more than 0.14 of one foot and will not increase flood damages or potential flood damages.

6-16-5-8. Standards for Flood Prone Areas. All development in known flood prone areas not identified on FEMA maps, or where no FEMA published map is available, shall meet general standards as required per 16-1-5-1 through 16-1-5-7.

6-16-6. Variance Procedures.

6-16-6-1. Designation of Variance and Appeals Board. The Board of Zoning Appeals as established by the Board of Commissioners of Starke County shall hear and decide appeals and requests for variances from requirements of these regulations.

6-16-6-2. Duties of variance and Appeals Board. The Board shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the Floodplain Administrator in the enforcement or administration of these regulations. Any person aggrieved by the decision of the Board may appeal such decision to the Starke Circuit Court.

6-16-6-3. Variance Procedures. In passing upon such applications, the Board of Zoning Appeals shall consider all technical evaluations, all relevant factors, all standards specified in other sections of these regulations and:

6-16-6-3-1. The danger of life and property due to folding or erosion damage;

6-16-6-3-2. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

6-16-6-3-3. The importance of the services provided by the proposed facility to the community;

6-16-6-3-4. The necessity to the facility of a waterfront location, where applicable;

6-16-6-3-5. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;

6-16-6-3-6. The compatibility of the proposed use with existing and anticipated development;

6-16-6-3-7. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

6-16-6-3-8. The safety of access to the property in times of flood for ordinary and emergency vehicles;

6-16-6-3-9. The expected height, velocity, duration, rate of rise, and sediment of transport of the floodwaters at the site; and

6-16-6-3-10. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as water, gas, electrical, and water systems, and streets and bridges.

6-16-6-4. Conditions for Variances.

6-16-6-4-1. Variances shall only be issued when there is:

6-16-6-4-1-1. A showing of good and sufficient cause;

6-16-6-4-1-2. A determination that failure to grant the variance would result in extreme hardship; and

6-16-6-4-1-3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud or victimization of the public, or conflict with existing laws or ordinances.

6-16-6-4-2. No variance for a residential use within a floodway subject to 6-16-5 including 6-16-5-7-1 may be granted.

6-16-6-4-3. Any variance granted in a floodway subject to 16-6-5 including 6-16-5-7-1 will require a permit from the Indiana Department of Natural Resources.

6-16-6-4-4. Variances to the Provisions for Flood Hazard Reduction of 16-6-5-2 may be granted only when a new structure is to be located on a lot of one-half acre or less in size, contiguous to and surrounded by lots with existing structures constructed below the flood protection grade.

6-16-6-4-5. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

6-16-6-4-6. Variances may be granted for the reconstruction or restoration of any structure individually listed on the National Register of Historic Places or the Indiana State Register of Historic Sites and Structures.

6-16-6-4-7. Any application to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the lowest floor is to be built and stating that the cost of the flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation (See 6-16-6-5)

6-16-6-4-8. The Floodplain Administrator shall maintain the records of appeal actions and report any variances to the Federal Emergency Management Agency or the Indiana Department of Natural Resources upon request (See 6-16-6-5).

6-16-6-5. Variance Notification. Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that:

6-16-6-5-1. The issuance of a variance to construct a structure below the base flood elevation will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage; and

6-16-6-5-2. Such construction below the base flood level increases risks to life and property. A copy of the notice shall be recorded by the Floodplain Administrator in the office of the County Recorder and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.

The Floodplain Administrator will maintain a record of all variance actions, including justification for their issuance and report such variances issued in the

community's biennial report submission to the Federal Emergency Management Agency.

6-16-6-6. Historic Structure. Variances may be issued for the repair or rehabilitation of "historic structures" upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as an "historic structure" and the variance is the minimum to preserve the historic character and design of the structure.

6-16-6-7. Special Conditions. Upon the consideration of the factors listed in 6-16-6, and the purposes of these regulations, the Board of Zoning Appeals may attach such conditions to the granting of variances as it deems necessary to further the purposes of these regulations.

6-16-7. Severability. If any section, clause, sentence, or phrase in these regulations is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way affect the validity of the remaining portions of these regulations.

6-16-8. Effective Date. These regulations were passed and adopted by the Board of Commissioners of Starke County on June 20, 2011, following the required public hearing and approval of the Starke County Planning Commission on June 15, 2011.

ARTICLE 6-17 REGULATION OF CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFO)

6-17-1. INTENT & PURPOSE

Establishing a procedure for the permitting of CAFO'S.

Regulation the location, development, and the expansion of CAFO'S.

Protecting CAFO'S from residential, commercial, and public land use conflicts.

Protecting agriculture's ability to grow and change.

Protecting the land, water, and air resources of Starke County.

Protecting Starke County's taxpayer's property values.

Protecting human welfare, health, safety, and well-being.

6-17.2. DEFINITIONS

"Animal Feeding Operation, AFO "

A lot or facility, other than an aquatic animal production facility, where both of these conditions are met:

A. Animals, other than aquatic animals, have been, are, or will be stabled or confined and fed or maintained for a total of forty-five (45) days or more in any twelve (12) month period; and

B. Crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over at least fifty percent {SO%} of the lot or facility. Reference 327 IAC 5-4-3(b)13)

"Concentrated Animal Feeding Operation, CAFO"

An AFO that stables or confined as many as or more than the number of animals specified in any of the following categories. Two (2) or more AFOs under common ownership are considered to be a single CAFO, if the AFO's adjoin each other or use a common area for land application of manure, litter, or process wastewater.

A. Seven hundred (700) mature dairy cows, whether milked or dry.

B. One thousand (1,000) veal calves.

C. One thousand (1,000) cattle other than mature dairy cows or veal calves. Cattle include, but are not limited to, heifers, steers, bulls, and cow/calf pairs.

D. Two thousand five hundred (2,500) swine each weighing fifty-five (55) pounds or more.

E. Ten thousand (10,000) swine each weighing less than fifty-five (55) pounds.

F. Five hundred (500) horses.

G. Ten thousand (10,000) sheep or lambs.

H. Fifty-five thousand (55,000) turkeys.

I. Thirty thousand (30,000) laying hens or broilers, if the AFO uses a liquid manure handling system.

J. One hundred twenty-five thousand (125,000) chickens, other than laying hens, if the AFO uses other than a liquid manure handling system.

K. Eighty-two thousand (82,000) laying hens, if the AFO uses other than a liquid manure handling system.

L. Thirty thousand (30,000) ducks, if the AFO uses other than a liquid manure handling system.

M. Five thousand (5,000) ducks, if the AFO uses a liquid manure handling system. Reference 327 IAC 5-4-3(b)(4) & 5-4-3(b)(7)

"Shall"

Means that the requirement is mandatory, rather than optional,

"Non-Farm Residence"

An occupied dwelling or house located in Agriculture Zoned Property that is not controlled by the owner and/or operator of a CAFO.

"Waste Management System"

Any method of managing manure at a site, including: 1) manure storage structure, 2) manure transfer system, 3) manure treatment systems, such as a constructed wetland, vegetative management system, or wastewater treatment system, 4) feedlot, 5) confinement building, 6) waste liquid handling, storage, and treatment system. Reference 327 IAC 16-2-44

6-17-3. DEVELOPMENT STANDARDS

CONFORMANCE REQUIREMENTS

A Concentrated Animal Feeding Operation (CAFO) shall meet all applicable requirements of the Federal, State or local government. In addition, CAFO applicants shall meet the following requirements.

a) Obtain a pre-application permit from the Planning Commission of Starke County prior to the submission of a permit application for approval from the Indiana Department of Environmental Management (IDEM)

1) A pre-application permit shall be granted to the CAFO upon submittal of the application to the Planning Commission if the CAFO ordinance requirements are met.

2) A CAFO is a "proposed" CAFO, for purposes of this ordinance, when a preapplication permit is submitted.

3) A CAFO is an "existing" CAFO, for purposes of this ordinance, when approval and a permit from IDEM is issued.

b) CAFO waste management system, compost facility, and mortality staging shall not be within one hundred fifty (150) feet of any county road centerline. Any other developed portions of the facility shall abide by existing zoning setbacks for like structures.

c) The minimum lot size on which a CAFO shall be permitted is ten (10) acres.

d) CAFO'S shall only be allowed on agriculturally zoned property.

e) A CAFO waste management system, compost facility, and mortality staging shall not be located within one hundred fifty (150) feet of any side or rear property line unless permission for a reduced setback is granted by the adjoining landowner.

f) Adequate truck loading areas and access shall be provided. Ingress and egress shall be designed to avoid creation of traffic hazards and congestion, odor, dust, noise or drainage impacts.

g) All CAFO'S shall obtain a "Route Permit" from the County Highway Department.

h) A copy of the Indiana Department of Environmental Management approval shall be submitted to the Planning Commission prior to receiving a Building Permit.

6-17-4: ODOR SETBACKS

a) Minimum setback for any CAFO waste management system from non-farm residences shall be as follows:

1. Seven hundred fifty (750) feet as long as the CAFO includes three (3) odor controls prior to the start-up of the operation.

2. One thousand (1,000) feet as long as the CAFO includes two (2) odor controls prior to the start-up of the operation.

3. One thousand three hundred twenty (1320) feet as long as the CAFO includes one (1) odor control prior to the start-up of the operation.

4. One thousand five hundred seventy (1570) feet when the CAFO does not include any odor control prior to the start-up of the operation. Operations that do not include odor controls shall increase the minimum setback by two hundred fifty (250) feet for each multiple greater than one (1) (rounded up to the nearest whole number), above the animal numbers required to be a CAFO. (i.e., A dairy with seven hundred (700) mature cows without odor controls would require a one thousand five hundred seventy (1570) foot setback; A dairy with one thousand five hundred {1500} mature cows without odor controls would require a one thousand eight hundred thirty (1830) foot setback; $(1,500-700)/700-1=0.14$, round up to 1, 1,570 feet + [1x250 feet]).

5. Odor controls include, but are not limited to, the controls listed in Table 1. Proven odor controls are listed in Table 1 for reference. Other proven odor controls not listed in Table 1 may be used to determine the required setback.

Table 1: Proven Odor Controls

Diet Manipulation/Fee Additives	Liquid separation
Shelterbelts	Anaerobic treatment lagoon
Vegetation screens	Anaerobic digester
Windbreak walls	Manure storage surface accretion

Biofilters	Reduced anaerobic lagoon loading rate
Biomass filters	Aerobic treatment
Air filters	Ozonation
Aerodynamic deduster (air cleaner)	Urine/feces segregation
Wet scrubber (ventilation air)	Permeable covers (i.e., geotextile)
Catalytic converter	Impermeable covers
Vegetable oil spray (dust control)	Pit additives (i.e., biological, chemical)

a) A new CAFO shall not locate the waste management system within a two (2) mile buffer from the city limits of the cities of Knox, North Judson, and Hamlet

b) An active animal feeding operation (AFO) that expands such that it is defined as a CAFO shall not locate a new waste management system within a two (2) mile buffer from the city limits of Knox, North Judson, and Hamlet or any closer than the setback between an existing waste management system and the city limits of Knox, North Judson, and Hamlet (whichever is least restrictive).

c) A new CAFO shall not locate the waste management system within a minimum of one thousand five hundred seventy (1570) feet or the prescribed setback from a non-farm residence required by this ordinance (whichever is greater) of an incorporated city or town limits.

d) An active animal feeding operation (AFO) that expands such that it is defined as a CAFO shall not locate a new waste management system within a minimum of one thousand five hundred seventy (1570) feet, the prescribed setback from a non-farm residence required by this ordinance, or any closer than the setback between an existing waste management system and the city or town limits of an incorporated city or town (whichever is least restrictive).

e) If the setback between an existing CAFO and non-farm residence is less than the setback prescribed in subsection {a) above, the existing CAFO may expand at the same location provided the new or expanded waste management system does not reduce the existing setback between the CAFO waste management system and non-farm residence unless written permission is given by the owner of the non-farm residence.

f) An existing AFO proposing to expand such that after the expansion it would be defined as a

CAFO may expand at the same location provided the following:

1. If the setback between the existing AFO and non-farm residence is less than the setback prescribed in subsection (a) above, the existing AFO may expand at the same location provided the new or expanded waste management system does not reduce the existing setback between the AFO waste management system and nonfarm residence, unless written permission is given by the owner of the non-farm residence.

2. If the setback between the existing AFO and non-farm residence is greater than the setback prescribed in subsection (a) above, the existing AFO may expand at the same location provided the new or expanded waste management system location maintains the setback distances prescribed in subsection (a) above, unless written permission is given by the owner of the non-farm residence.

g) A newly constructed non-farm residence shall not be located within the required setback by subsection (a)(4) of Section III of this ordinance from an existing or proposed CAFO waste management system for the number of animals at the existing or proposed CAFO. The minimum setback shall be 1,570 feet.

h) If a variance is granted by the BZA for a non-farm residence from the setback standards of this ordinance, the party obtaining the variance/rezone shall be required to enter into the following covenant protecting the CAFO's right to operate:

"In accepting this deed, grantees acknowledge that surrounding land is agricultural in usage; and grantees, and their successors in interest, are precluded from attempting to enjoin any farm operation within the prescribed setback of [(required setback)] required by the Starke County Concentrated Feeding Operation Ordinance because of nuisances which might result from said operation."

i) If a variance/rezone is granted for a new subdivision development in an agriculturally zoned property there shall be a condition of receiving a variance/rezone, the grantee must sign an agricultural clause that must be accompanied by a deed restriction to successive owners:

"Grantee/owners of said lot(s) and their successors in title are on notice and understand that this residence/subdivision will be built in a predominantly agricultural area and that farming operations, to include animal feeding operations and other livestock operations may be practiced in the area of this residence/subdivision. With this understanding, grantee/all owners of the lot(s) in this subdivision and their successors in title forego their right to bring claim against any agricultural operation in the area who has not been negligent."

6-17-5. SETBACK EXCEPTIONS

a) Grandfathered Non-conforming Uses. Any existing CAFO legally established prior to September 21, 2015 shall be considered a legal non-conforming use.

b) A non-farm residence may agree to a reduced setback between a new or expanding CAFO and to a non-farm residence. A written agreement between the non-farm residence and a CAFO must be filed with the Planning Commission prior to the issuance of a building permit.

6-17-6: ENVIRONMENTAL PROTECTION

a) The operator of a new, expanding, or existing CAFO shall comply with all State laws and rules; including the laws and rules administered by IDEM and with any permits granted by IDEM.

b) All applicants who have or had ownership in any CAFO/AFO in the State of Indiana or any other state during the five years prior to the date of obtaining a pre-application permit must not have any unresolved violations with the Indianan Department of Environmental Management or any other corresponding or comparable local, state, or federal regulatory agency. All such outstanding violations must be resolved before a building permit will be issued by the Planning Commission.

c) CAFO'S shall abide by 312 IAC 12 Water Well Drilling and Ground Water and register all wells capable of withdrawing over one hundred thousand (100,000) gallons per day or seventy (70) gallons per minute with the Department of Natural Resources.

d) A CAFO shall follow all manure application rules as defined in their IDEM permit and in accordance with their manure management plan.

e) A CAFO/AFO shall not locate any portion of the waste management system within the flood plain unless a Federal Emergency Management Agency, National Flood Insurance Program "Floodproofing Certificate" for non-residential structures is provided and the waste management system access is at least two (2) feet above the flood base elevation. Reference 327 IAC 16-8-1(a)(3).

f) Groundwater test wells shall be required all new approved floodplain CAFO sites. Placement, number, and depth of these systems shall be determined by a licensed engineer or hydro-geologist after the groundwater directional flow is determined. Sampling and testing of these systems for nitrates and bacteria shall be performed bi-annually by the Starke County Health Department.

g) If the Starke County Health Department determines that surface or ground water has been or is being contaminated by the CAFO, the Health Department may order any reasonable or necessary corrective action to protect public health.

h) A copy of the results of any environmental testing must be provided to the Starke County Health Department.

6-17-7. SEVERABILITY

The provisions of this ordinance are severable, and the invalidity of a particular provision shall not invalidate any other provisions.

6-17-8. EFFECTIVE DATE

THIS ORDINANCE IS APPLICABLE TO NEW CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFO) AND ACTIVE ANIMAL FEEDING OPERATIONS (AFO) THAT WISH TO EXPAND SUCH THAT AFTER THE EXPANSION IT WOULD BE DEFINED AS A CAFO. (September 21, 2015)

ARTICLE 6-18 EMERGENCY ACTION TO SEAL BUILDINGS

- A. Any building whose doors and windows have been so damaged by fire that they cannot be closed and secured from unauthorized entry by normal locks immediately upon expiration of the fire, is hereby declared to be an immediate and imminent threat to public welfare and safety.
- B. Upon the extinguishment of any fire, all burned structures shall be immediately sealed with materials as shall render the property enterable only through a single locked entrance.
- C. Burned structures shall be sealed by qualified contractors or individuals, registered by the Starke County Plan Commission. Upon approval, each contractor shall be placed on a rotating list which shall be on file at the Starke County Dispatch Center.
- D. Upon receipt of a request from the Starke County Plan Commission or jurisdictional fire department, the Starke County Dispatch will contact the registered contractor in proper order of rotation to seal the burned structure.
- E. The Contractors must be registered by the Starke County Plan Commission, and only registered contractors will be on the call list. The list of registered contractors will be kept at the Starke County Dispatch Center, Starke County Plan Commission, and the local fire departments.
- F. The contractors will supply all labor and materials necessary to seal the building. The materials must meet all specifications required by the Starke County Plan Commission and shall meet the following minimum requirements: All broken windows, doors and openings shall be covered with 3/8 inch plywood, particle board, or chip bard, which shall be fastened to the building with 1 ½ clutch head or square head screws. Once entranceway of at least ½ thickness shall be fastened to the building with hinges and a hasp, shall be padlocked, and the key shall be delivered to the local jurisdictional fire department.
- G. The contractors shall be compensated in the manner set forth in I.C. 36-7-9 et seq. and shall have no claim against the Starke County government or the local jurisdictional fire department.
- H. Construction, repair, or demolition must start within 90 days of this order except in extenuating circumstances and on an appeal made to the Starke County Plan Commission for an extension.

6-19 SOLAR ENERGY

6-19-1: Commercial Solar Energy Systems

The Commercial Solar Energy Systems Standards shall apply to the following zoning district: AGRICULTURE.

6-19-1-1: Purpose. It is the purpose of these performance standards to enable Starke County to regulate the permitting of commercial solar energy systems; be informed of the placement of commercial solar energy systems; preserve and protect public health and safety; allow for the orderly development of land; and protect property values in Starke County. The terms, conditions, and regulations set forth herein may be enforced through the issuance and enforcement of a Location Improvement Permit.

6-19-1-2: Commercial Solar Energy Systems (CSES) and Private Residential Solar Energy Systems (PRSES) are defined in 6-19-1-16-1 and 6-19-1-16-2.

6-19-1-3: Permitted Districts: Subject to issuance of a Location Improvement Permit (hereinafter "Permit") a CSES may be located as follows only:
Zoning District – Agriculture

6-19-1-4: Parcel Line Setbacks. Any CSES equipment, excluding any security fencing, poles, roads, and wires, necessary to connect to facilities of the electric utility, must be set back in accordance with the accessory structure standards for the zoning district. Ground mounted solar panels/arrays shall be set back a minimum of 50 feet from any adjoining property line and a minimum of 100 feet from the center of any public road. These setbacks shall not apply between adjoining participating parcels. Additionally, such CSES equipment must be set back a minimum of 200 feet from the foundation of a primary dwelling unit located on a parcel not participating in the CSES. These setbacks may be waived in writing by adjacent property owners.

6-19-1-5: Height Limit. The height of any CSES ground mounted solar equipment is limited to 35 feet, as measured from the highest natural grade below each solar panel. If a switchyard or substation is required to connect the project to the electrical grid, the switchyard's/substation's design, including height will be in accordance with applicable electrical codes.

6-19-1-6: Noise Limit. A noise study shall be performed and included in the application. Noise caused by an operational CSES shall not exceed 55 dBA above background, as measured at a dwelling unit measured on an average hourly basis (Leg) (1 hour). These limits may be waivable by any adjoining property owners.

6-19-1-7: Landscape Buffer. Evergreens shall be placed along the perimeter of the CSES (outside of the fence), including along road frontage. This requirement shall not apply between adjoining participating parcels. This requirement may be waived by an adjoining property owner, but no waiver applies along road frontage.

6-19-1-8: Application Procedure. Applications for CSES permits shall be filed on forms provided by the Zoning Administrator.

6-19-1-9: Application and Permits. Any CSES shall be required to submit a preliminary/conceptual commercial site plan to the Technical Advisory Committee for review. Such review shall occur within 30 days of filing. Once an application has been approved, an Improvement Location Permit shall be issued. The following shall also be required:

6-19-1-9-1. Solar system specifications, including typical manufacturer and model and maximum spatial extent (height and fence lines).

6-19-1-9-2. Preliminary array/module design and site plans with the maximum spatial extent of the CSES and its perimeter fence indicated.

6-19-1-9-3. Certification that layout, design, and installation conform to and comply with all applicable industry standards, such as the National Electrical Code (NEC) (NFPA-70), the American National Standards Institute (ANAI), the Underwriters Laboratories (UL), the American Society for Testing & Materials (ASTM), the Institute of Electric and Electronic Engineers (IEEE), the Solar Rating and Certification Corporation (SRCC), the Electrical Testing Laboratory (ETL), and other similar certifying organizations, the Federal Aviation Administration (FAA), the Indiana Building Code (IBC), and any other standards applicable to solar energy systems. The manufacturer's specifications for the key components of the CSES shall be submitted with the application.

6-19-1-9-4. All ground mounted electrical and control equipment for CSES shall be labeled and secured to prevent unauthorized access.

6-19-1-9-5. All CSES shall be installed so as not to cause significant wire or wireless communication signal disturbance.

6-19-1-9-6. All CSES shall be designed to avoid concentrated and prolonged glare onto abutting structures and roadways.

6-19-1-9-7. All ground mounted electrical and control equipment for CSES shall be fenced to prevent unauthorized access. The solar array and/or modules shall be designed and installed to prevent access by the public, and access to same shall be through a locked gate.

6-19-1-9-8. To the greatest practical extent, all electrical wires and utility connections for CSES shall be installed underground, except for transformers, inverters, switchyards/substations, and controls. The Plan Director will take into consideration prohibitive cost and site limitations in making his or her determination.

6-19-1-9-9. Exterior lighting for CSES shall be limited to that required for safety, inspection, repair/maintenance, and operational purposes.

6-19-1-9-10. All signs, other than the manufacturer's or installer's identification, appropriate warning (including safety and trespassing) signs, or owner identification on a solar panel array and/or modules, building, or other structure associated with a CSES, shall be prohibited.

6-19-1-9-11. The CSES applicant shall certify that the applicant will comply with the utility notification requirements contained in Indiana law, and accompanying regulations through the Indiana Public Utility Commission, unless the applicant intends, and so states on the application, that the system will not be connected to the electric grid.

6-19-1-9-12. Prior to the start of construction, a Decommissioning Agreement must be executed by the applicant which stipulates that decommissioning of the entire facility will begin upon the occurrence of twelve consecutive months of no power generation at the facility. In order to facilitate and ensure appropriate removal of the energy generation equipment of a CSES when it reaches the end of its useful life, or if the applicant ceases operation of the facility, applicants must file a decommissioning agreement which details the means by which decommissioning will be accomplished and the timeline for completion. This agreement must include a description of implementing the decommissioning, a description of the work required, a cost estimate for decommissioning, a schedule

for contributions to a decommissioning fund, and a demonstration of financial assurance. Salvage value shall be considered in determining decommissioning cost. In the event of a force majeure or other event which results in the absence of electrical generation for twelve months, by the end of the twelfth month of non-operation the applicant must demonstrate to Starke County that the project will be substantially operational producing electricity within twenty-four months of the force majeure or other event. If such a demonstration is not made to Starke County's satisfaction the decommissioning must be initiated eighteen months after the force majeure or other event. The County considers a force majeure to mean fire, earthquake, flood, tornado, or other acts of God and natural disasters, and war, civil strife, or other similar violence. The operator of any CSES shall secure and provide a performance bond, escrow deposit, or other financial assurance in a form acceptable to the County in an amount determined by a third-party engineering firm to ensure the proper decommissioning and removal of the CSES. The applicant will have the financial assurance mechanism in place prior to the start of construction and will re-evaluate the decommissioning cost and financial assurance at the end of years five, ten, and fifteen. Every five years after the start of construction, updated proof of acceptable financial assurance must be submitted to Starke County for review. Proof of acceptable financial assurance will be required prior to the start of commercial operation.

6-19-1-9-13. The site plan should be submitted in accordance with the plan requirements of the Starke County Storm Drainage, Erosion and Sediment Control Ordinance (Rule 5).

6-19-1-9-14. Drainage Board approval shall be required for all CSES and must be located at a minimum of 75 feet from any county ditch and shall not be built over any county tile lines.

6-19-1-9-15. Must follow same rules as building in a flood plain, including raising elevation of structures if deemed necessary.

6-19-1-9-16. Applicant agrees to pay all attorney fees and costs in the enforcement of the terms of this Article.

6-19-1-10. Public Improvements and Repairs

6-19-1-10-1. Road Capacity. During construction, roads shall remain open at all times except for periods of time less than twenty (20) minutes unless notice is provided as required herein. Expected loss of capacity (i.e.,

temporary closures) greater than twenty (20) minutes shall require notice to neighboring and affected property owners at least twenty-four hours prior to the temporary closure, and either a detour to be established or personnel to redirect traffic to alternate routes during the temporary closure closed for the day by the Starke County Highway Department. Any necessary temporary closures and proposed detours shall be made known to the Highway Department at least twenty-four (24) hours prior to the temporary closure or as otherwise agreed.

6-19-1-10-2. Commitment to Avoid Disruptions; Responsibility for Damages. In addition to a surety, the CSES operator shall sign an affidavit indicating they will compensate Starke County for any and all damage to public roads caused by CSES construction vehicles or traffic and shall strive to avoid damage to roads, unreasonable disruption of vehicular circulation around the development site, and unreasonable disruption of power or other utility services to surrounding areas.

6-19-1-11. Public Notice. The CSES operator shall identify all State highways and local roads to be used in the transport of equipment and parts for construction of the CSES. It shall also prepare a time line and phasing plan for construction and identify any known road closures. This information shall be released to the local newspapers as notice to persons who may be affected. This information shall also be conveyed to local law enforcement, emergency services, public school corporations, the United States Postal Service, and the regional office of the Department of Transportation.

6-19-1-12. As-Built Plans Requirement. Upon completion of all development, the exact measurements of the location of utilities and structures erected during the development are necessary for public record and shall be recorded. The applicant, owner, or operator shall submit a copy of the Final Construction Plans (as-Built plans), as amended, to the Plan Administrator with the exact measurements thereon shown. The Plan Administrator after being satisfied that the measurements are substantially the same as indicated on the originally approved final plans, shall approve, date and sign said Construction Plans for the project, which the applicant, owner, or operator shall then record.

6-19-1-13. Change in Ownership. It is the responsibility of the owner or operator listed in the application to inform the Advisory Plan Staff of all changes in ownership and operation during the life of the project, including the sale or transfer of ownership or operation.

6-19-1-14. CSES Permits and Fees

6-19-1-14-1. Fees applicable to Site Plan submittal shall also be required, as well as any and all other permits as required by Starke County.

6-19-1-14-2. An ILP application for a CSES permit shall be accompanied by a fee of:

0-10 kilowatts	\$150.00
11-50 kilowatts	\$300.00
51-100 kilowatts	\$600.00
101-500 kilowatts	\$1,200.00
501-1,000 kilowatts	\$2,750.00
1,001-2,000 kilowatts	\$6,000.00
Over 2,000 kilowatts	\$6,000.00 + \$200.00 for each additional kw
Maximum Fee	\$30,000.00

6-19-1-15. PRSES Permits. Application shall be accompanied by an accessory use fee of \$150.00.

6-19-1-16. Definitions.

6-19-1-16-1. "Commercial Solar Energy Systems (CSES)" means an area of land or other area used by a property owner, multiple property owners, and/or corporate entity for a solar collection system principally used to capture solar energy, convert it to electrical energy or thermal power, and supply electrical or thermal power, primarily or solely for off-site utility grid use, and consisting of one or more free-standing ground mounted, solar arrays or modules, battery storage facilities, solar related equipment, and ancillary improvements, including substations. CSES are a minimum of 10 acres in total area.

6-19-1-16-2. "Private Residential Solar Energy Systems (PRSES)" means an area of land or other area used for a solar collection system principally used to capture solar energy, convert it to electrical energy or thermal power, and supply electrical or thermal power, primarily or solely for on-site residential use, and consisting of one or more free-standing, ground or roof mounted, solar arrays or modules, or solar related equipment, intended to primarily reduce on-site consumption of utility power and/or fuels. PRSES shall be permitted in all

zoning districts and shall be treated as accessory structures in each zoning district in which they are erected. The maximum size of PRSES is limited to the maximum size allowed for an accessory structure in each zoning district (other accessory structures shall not be included in maximum size calculations).

6-20: Dog Kennels

6-20-1: Zoning Requirements

1. Commercial Kennels

a. Shall be permitted in agricultural and commercially zoned areas provided all the requirements of this ordinance are met, as it pertains to them.

b. Shall not be permitted in residential zoned areas or subdivisions.

2. Non-Commercial Kennels

a. Shall be permitted in agricultural and commercially zoned areas provided all the requirements of this ordinance are met, as it pertains to them.

b. Shall not be permitted in residential zoned areas or subdivisions.

3. Kennel permits are required for any residence that has more than four (4) total dogs.

6-20-2: Minimum Lot Specifications

1. Commercial Kennels

a. The minimum lot size shall be two (2) acres.

b. The kennel structure shall be set back at least four hundred (400) feet from the nearest adjacent residence.

c. The kennel structure and/or the confining fencing shall be set back from all property lines by at least twenty (20) feet.

2. Non-commercial Kennels

a. The minimum lot size shall be two (2) acres.

b. The kennel structure shall be set back at least four hundred (400) feet from the nearest adjacent residence.

c. The kennel structure and/or the confining fencing shall be set back from all property lines by at least twenty (20) feet.

6-20-3: Kennel Site Requirements

1. Commercial Kennels

a. All exercise areas proposed to be used by loose dogs shall be fully enclosed by a fence.

b. The fence should be of a height to keep the dog confined, based on the size of the dog. (see Appendix A)

c. The kennel shall be constructed of new or otherwise serviceable materials.

2. Non-commercial Kennels

a. All exercise areas proposed to be used by loose dogs shall be fully enclosed by a fence.

b. The fence should be of a height to keep the dog confined, based on the size of the dog. (see Appendix A)

c. The kennel shall be constructed of new or otherwise serviceable materials.

6-20-4: Required Supporting Documentation

1. Commercial Kennels

a. The applicant shall submit a manure management plan acceptable to the County Health Department.

1. Kennels already established, are well kept, and where no problem exists, are exempt.

b. The applicant shall submit calculations supporting the proposed kennel size. For example: Dog breed A typically requires a minimum kennel area of X

square feet per animal and the proposed number of animals is Y. Therefore for dog breed A, the proposed kennel will have a minimum of (X)(Y) square feet of space. Please refer to I.C. 35-46-3-0.5 for additional information.

1. Kennels already established, are well kept, and where no problem exists, are exempt.

c. The applicant shall submit a dog kennel management plan that includes the following information:

1. Maximum number of animals on premises
2. Proposed breeding and marketing schedules
3. Proposed animal dwelling time, i.e. temporary vs. long term
4. Proposed daily animal care requirements
5. Mortality disposal plan

- a. Kennels already established, are well kept, and where no problem exists, are exempt from submitting a management plan.

d. It is recommended that an emergency contact number and number of animals be listed on any building, or home, that contains animals, in case of an emergency.

e. The applicant shall submit a copy of their Commercial Dog Breeders registration/license, required by the State of Indiana.

f. The applicant shall submit a proposed construction schedule, as applies to new structures, and those structures being remodeled.

g. All dogs kept outside, should be provided with adequate shelter, cleanliness, food, water, and those things are necessary for good health.

h. The applicant shall submit proof of liability insurance.

i. Need to adhere to the Standard of Care Statement in 6-20-5.

2. Non-commercial Kennels

- a. Shall submit a manure management plan, as necessary for the County Health Department.
- b. Shall submit a proposed kennel area.
- c. Shall submit a dog kennel management plan that includes an estimate of the number of dogs on the premises. Example (less than 20, more than 20, etc.) this is required to differentiate between a Minor/Major Kennel License.
- d. It is recommended that an emergency contact number and number of animals be listed on any building, or home, that contains animals, in case of an emergency.
- e. There is no registration/license required by the State of Indiana (they are exempt).
- f. Shall be exempted from submitting a proposed construction schedule, except as is required by county building codes for new structures and those structures being remodeled.
- g. All dogs kept outside, should be provided with adequate shelter, cleanliness, food, water, and those things necessary for good health.
- h. Shall be allowed to decide, with the help of their insurance company, whether or not they need to be covered by liability insurance.
- i. Need to adhere to the Standard of Care Statement in 6-20-5.

6-20-5: Standards of Care Statement

1. All dogs will be provided with adequate shelter
 - a. Considering shade and location when taking extreme temperatures under consideration. Protect from rain, direct sun, and snow.
 - b. Consider size of area, so that animals can comfortably move around in their enclosures, or specified areas.

c. Provide adequate ventilation.

2. All dogs will be provided with clean, fresh water at all times.

3. All dogs will be provided with adequate nutrition (taking their lifestyles into consideration - working, hunting, training, pregnant/nursing, regular activity).

4. All dogs will be provided a clean area to lie down and walk around, free of feces and urine.

5. All dogs will be provided adequate exercise (taking their lifestyles into consideration).

6. All dogs should be kept in good health; providing medical treatment as needed.

6-20-6: Penalties for Commercial Kennels

1. Penalties/Fines

a. A person who is found to be in violation of any provisions of this Ordinance may also be liable for all reasonable attorney fees and costs incurred by the County in the enforcement of this Ordinance.

b. A person who has violated the provisions of this Ordinance, or failing or refusing to comply with an order issued under this Ordinance within the time prescribed, may be fined a sum not less than one (1) dollar (\$1.00) and not greater than five hundred (500) dollars (\$500.00) per violation.

c. All fines, penalties, and clean-up costs paid pursuant to this ordinance shall be deposited into the General Fund of the County of Starke, Indiana.

d. Collection of such amounts shall constitute collection of money owed the unit pursuant to Indiana Code Section 36-1-4-17.

6-20-7: Penalties for All Non-Commercial Kennels

1. Fines

a. Any complaints/problems brought forth against these kennels may be fined a sum not less than one (1) dollar (\$1.00) and not greater than one hundred (100) dollars (\$100.00) per day per violation.

b. First time complaints/problems will be given a prescribed time to be resolved before any fines would be charged, provided that no damages have occurred.

c. All fines shall be deposited into the General Fund of the County of Starke, Indiana.

6-20-8

APPENDIX A

Purpose

The purpose of Appendix A is to give guidelines as to the size of Kennel Fence that should be considered for the type and breed of dog being raised.

1. Extra small and small dogs should be fenced with at least a three foot high fence.
2. Medium and large dogs should be fenced with at least a four foot high fence.
3. Extra Large and XXL dogs should be fenced with at least a six foot high fence.

All fence requirements are for guideline purposes only, and may be modified depending on the Planning Administrator's judgement.

Dog Size Chart

Size Weight	Size Measurements	Animal Examples
1 - 10 lbs	Extra Small 19" x 13"	Most cats, Yorkies, Chihuahuas, Pomeranians, Maltese, Papillons
26- 40 lbs	Medium 30" x 20"	Beagle, Mini Schnauzer, Shetland Sheepdogs, Cavalier

		King Charles, Scottish Terriers, American Staffordshire Terriers
71 - 90 lbs	Extra Large 42" x 28"	Labrador Retrievers, Golden Retrievers, Siberian Huskies, Weimaraners, Collies, Vizslas, Siredale, Standard Poodle, Border Collies, Chow Chows, German Shepherd, Rottweilers, Doberman Pinschers, Rhodesian Ridgebacks
91 - 110 lbs	XX Large 48" x 30"	Alaskan Malamute, Bernese Mountain Dog, Great Dane, St. Bernard

ZONING ORDINANCE
STARKE COUNTY COMPREHENSIVE AIRPORT ZONING
ORDINANCE

An ordinance regulating and restricting the height of structures and objects of natural growth; regulating the use of land; and mode of construction of structures within noise impacted areas in proximity of Starke County Airport; providing an effective date and repealing all ordinances or provisions thereof in conflict herewith.

Be it ordained by the Starke County Council in lawful session assembled as follows:

This ordinance is adopted pursuant to the authority conferred by Indiana Code 8-22-3-14. It is hereby found that an airport obstruction has the potential for being hazardous to aircraft operations as well as to persons and property on the ground in the vicinity of such an obstruction. An obstruction may affect land use in its vicinity and may reduce the size of areas available for taking off, maneuvering and landing of aircraft, thus, tending to impair or destroy the utility of the Starke County Airport, and the public investment therein. Certain other land uses in the vicinity of airports also have the potential for being hazardous to normal aircraft operations or to increase the potential for personal and property damage in the event of an aircraft accident.

Further it is hereby found that aircraft noise may be an annoyance or objectionable to residents in the community surrounding the Starke County Airport.

Accordingly, it is declared that:

1. The creation or establishment of an airport obstruction which is hazardous to aircraft operations or which reduces the size of the area available for such operations is a public nuisance and an injury to the region served by the Starke County Airport.
2. It is necessary in the interest of the public health, public safety, and general welfare that the creation of airport obstructions and the incompatible use of land within certain airport zones to be prevented; and

3. The prevention of these obstructions and incompatible land uses should be accomplished to the extent legally possible, by the exercise of police power without compensation.

It is further declared that preventing the creation or establishment of airport obstructions and incompatible land uses and their elimination, removal, alternation, or mitigation to include marking and lighting of existing airport obstructions is a public purpose for which the political subdivision may raise and expend public funds and acquire land or interests in land.

A. Zones, Limitations, Variances

The purpose of this part is to establish standards of heights and land uses to prevent the creation of obstructions hazardous to aeronautical operations which would impair utility and capacity of the Starke County Airport. This part creates specific land use limitations and; establishes procedures for their orderly administration and enforcement.

1. **Airport-** An area of land or water designed and set aside for the landing and taking off of aircraft, utilized or to be utilized in the interest of the public for such purpose and validly licensed by the state in the Public Airport category which includes AP.

2. **Airport Elevation-** The highest point of the airport's usable landing area measured in feet Above Mean Sea Level (AMSL).

3. **Airport Obstruction-** Any object of natural growth or structure or use of land which would exceed the federal obstructions standards as contained in 14 CFR S.S. 71.21, 77.23, 77.25, 77.28, 77.29 or which obstruct the airspace required for flight of aircraft in taking off, maneuvering or landing at an airport or may otherwise be hazardous to the taking off, maneuvering or landing of aircraft.

4. **Airspace Height-** The height limits are established in all zones set forth in this ordinance. AMSL elevation shall be the datum unless otherwise specified.

5. **Climb Gradient-** Aircraft instrument departure procedure requiring adherence to a minimum climb slope or grade expressed in feet per nautical mile.

6. **Decision Height-** The height at which a pilot must decide, during an Instrument Landing System (ILS) approach, to either continue the approach or to execute a missed approach.

7. **Minimum Decent Altitude-** The lowest AMSL altitude to which descent is authorized on final approach or doing circling-to-land maneuvering in execution of a Standard Instrument Approach Procedure (SIAP) where electronic glide slope is not provided.

8. **Minimum Enroute Altitude (MEA)-** The lowest published altitude between radio fixes that assures acceptable navigational signals coverage and meets obstruction clearance requirements between those fixes.

9. **Minimum Obstruction Clearance Altitude (MOCA)-** The lowest published altitude between radio fixes on Federal VOR airways, off-airway routes, on routes segments that meets obstruction clearance requirements for the entire segment and assures acceptable navigational signal coverage only within 22 miles of a VOR.

10. **Minimum Vectoring Altitude (MVA)-** The lowest AMSL altitude at which aircraft operating on Instrument Flight Rules (IFR) will be vectoring by a radar controller, except when otherwise authorized for radar approaches, departures, or missed approaches.

11. **Nonconforming Use-** any pre-existing structure, objet, or natural growth or use of land which is inconsistent with the provisions of this Ordinance, or amendments thereto.

12. **Non-Precision Instrument Runway-** A runway having an instrument approach procedure utilizing air navigational facilities with only horizontal guidance, or area type navigational equipment, for which a straight-in non-precision instrument approach procedure has been approved or planned, and for which no precision instrument approach facilities are planned or indicated on an appropriate civil or military airport planning document.

13. **Nonstandard Take Off Minimums-** Conditions of existing weather required for take off at an airport which exceed the standards prescribed in Federal Aviation Regulations Part 91.

14. **Other Than Utility Runway-** A runway designed for and intended to be used by all types of aircrafts including those having gross weights greater than 12,500 pounds.

15. **Precision Instrument Runway-** A runway having an instrument approach procedure utilizing an Instrument Landing System (ILS), Microwave Landing System (MLS), or a Precision Approach Radar (PAR) including a runway for which such a system is planned and is so indicated on an approved civil or military airport layout plan; other FAA planning documents, or comparable military service planning documents.

16. **Runway-** A defined area on an airport prepared for landing and take off of aircrafts along its length.

17. **Structure-** Any object, constructed, or installed by man, including but not limited to: buildings, towers, smoke stacks, cranes, utility poles, and overhead transmission lines.

18. **Utility Runway-** A runway that is constructed for and intended to be used only by propeller driven aircrafts of 12,500 pounds maximum gross weight and less.

19. **Visual Runway-** A runway intended solely for the operation of aircraft using visual approach procedures with no instrument approach procedure planned or indicated on an approved civil or military airport layout plan, or by any other planning document submitted to the FAA by competent authority.

20. **Zoning Administrator-** The administrative office or agency responsible for administering and enforcing the requirements of this ordinance within Starke County or within each political subdivision that adopts this ordinance. The zoning administrator in Starke County is the Starke County Zoning Administrator.

B. Airport Zones and Airspace Height Limitations

There are heavy created, and established certain zones which includes all land lying beneath the approach, transitional, horizontal, and conical surfaces as they apply to a particular airport. Such zones are shown on the Starke County Airport Zoning Map(s) attached to this ordinance and made a part thereof as Appendix 1. An area located in more than one of the described zones is considered to be only in

the zone with the more restrictive height limitations. The various zones are hereby established and defined as follows:

1. **Primary Zone:** An area longitudinally centered on each runway, extending 200 feet beyond each end of that runway with the width specified for the most precise approach existing or planned for either end of the runway. The width of each Primary Zone is as follows: Other Than Utility, Non-precision, Instrument Runway(s); 500 feet.

Zone Height: No structure or obstruction will be permitted within a Primary Zone that is not part of the landing and take off facility and is of a greater elevation AMSL height than the nearest point of the runway centerline.

2. **Horizontal Zone:** An area around each public use airport with an outer boundary perimeter of which is constructed by swinging arcs of specified radii from the center of each end of the Primary Zone of each runway and connecting the adjacent arcs by lines tangent to those arcs. The radius of the arc specified for each end of the runway will have the arithmetic value, and the value will be the highest composite value determined for either end of that runway. When a smaller arc is encompassed by the tangent connecting two adjacent larger arcs, the smaller arc will be disregarded in the construction of the perimeter of the horizontal zone. The radius of each runway are is as follows: Precision Instrument and Other Than Utility, Non-precision Runway(s); 10,000 feet.

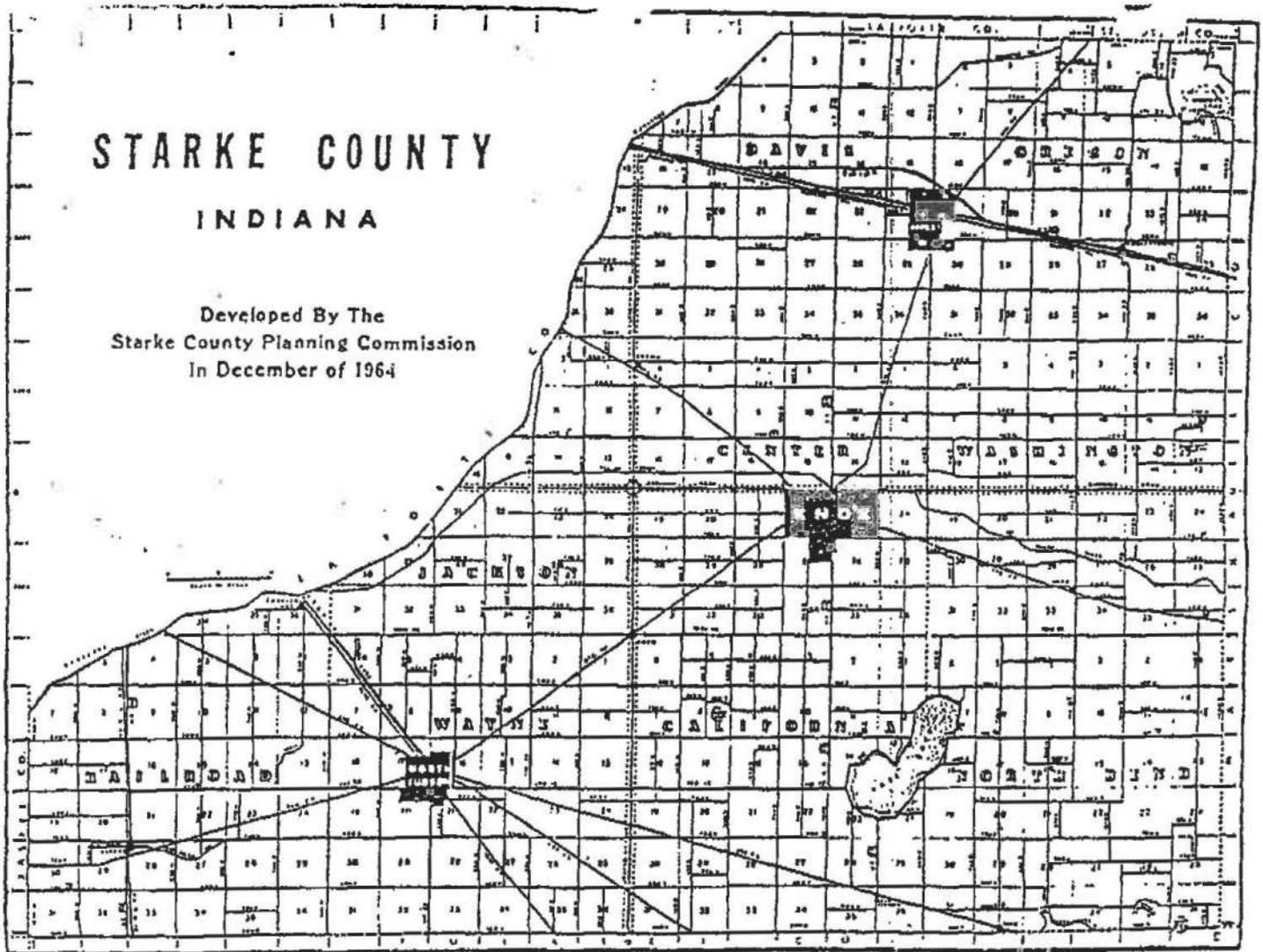
Zone Height: No structure or obstruction will be permitted in the Horizontal Zone that has a height greater than 150 feet above the airport height.

3. **Conical Zone:** An area extended outward from the periphery of an airport Horizontal Zone for a distance of 4,000 feet.

Zone Height: No structure or obstruction will be permitted in the Conical Zone that has a height greater than 150 feet above the airport height at its inner boundary with permitted height increasing one (1) foot vertically for every twenty (20) feet of horizontal distance measured outward from the inner boundary to a height of 350 feet above airport elevation at the outer boundary.

4. **Approach Zone:** An area longitudinally centered on the extended runway centerline and extending outward from the end of the Primary Surface. The approach zone is designated for each runway based upon the type of approach available or planned for that runway end and;

A. Approach Zone Widths: The inner edge of the Approach Zone is the same width as the Primary Zone. The outer width of the Approach Zone is prescribed for the most precise approach existing or planned for that runway end expanding uniformly outward to a width of: Other Than Utility, Non-precision



Instrument Runway(s); 3,500 feet.

B. Approach Zone Lengths: The Approach Zone extends for a horizontal distance of: Other Than Utility, Non-precision Instrument Runway(s); 10,000 feet.

C. Approach Zone Heights: No structure or obstruction will be permitted within approach zones having a height greater than the runway end elevation at its

inner edge, increasing with horizontal distance from the inner edge as follows: Other Than Utility, Non-precision Instrument Runway(s); one (1) foot vertically for every thirty-four (34) feet horizontally.

5. **Transitional Zone:** An area extending outward from the ends of each Primary Zone and Approach Zone connecting them to the Horizontal Zone and an area outward 5,000 feet horizontally or until intersection with the Conical Zone from the side of that portion of the Approach Zone of a Precision Instrument Runway extending through and beyond the Conical Zone.

Zone Height: No structure or object will be permitted within the Transitional Zone greater in height than the Primary or Approach Zone at their adjoining lines increasing at a rate of one (1) foot vertically for every seven (7) feet horizontally, with the horizontal distance measured at right angles to the runway centerline and extended centerline, until the height matches the height of the Horizontal Zone, or the height of Conical Zone for a horizontal distance of 5,000 feet from each side of that part of the Approach Zone for a Precision Instrument Runway extending beyond the Conical Zone.

6. **Other Areas:** In addition to the height limitations imposed in paragraphs 1 through 5 above, no structure or obstruction will be permitted within Starke County that would cause a MDA, MOCA, MVA, or a decision height to be raised nor which would impose either the establishment or restrictive minimum climb gradients or non-standard take off minimums for any runway at the Starke County Airport.

C. Airport Land Use Restrictions

Not with standing any other provisions of this Ordinance, no use may be made of the land or water within any Zones established by this Ordinance in such manner as to interfere with the operation of an airborne aircraft. The following special requirements shall apply to each permitted use:

1. All lights or illumination used in conjunction with street, parking, signs, or use of land and structures shall be arranged and operated in such manner that is not misleading or dangerous to aircrafts operating from the Starke County Airport or in the vicinity thereof.

2. No operations from any type shall smoke, glare, or produce other visual hazards within three (3) statute miles of any usable runway of the Starke County Airport.

3. No operations from any type shall produce electronic interference with navigational signals or radio communication between aircrafts, the airport, or other air traffic control facilities.

4. Within any airport Primary Zone or within any runway Approach Zone area where the zone height is fifty (50) feet or less above the end of the runway, no operations of any type shall involve the storage; distribution or manufacturing of flammable, explosive, toxic, or other hazardous material. This restriction shall apply to those materials in a quantity or of a type which if exposed to an aircraft accident, would further jeopardize the safety or health of the aircraft occupants, of the facility in the vicinity, by-standers and emergency personnel or would prevent, delay, limit, or otherwise curtail appropriate response actions by emergency personnel.

5. Within any airport Primary Zone or within any runway Approach Zone area where the zone height is fifty (50) feet or less above the end of the runway, no operations of any type shall involve the congregation of people for either short or long term purposes. This restriction shall apply to any use involving individuals who by their numbers condition, age, or other factor, should they be exposed to an aircraft accident, escalate the resultant effect.

6. Sanitary landfills shall be considered as an incompatible use if located within areas established for the airport through the application of the following criteria:

a. Landfills located within 10,000 feet of any runway used or planned at the Starke County Airport.

b. Any landfill located so that it places on the runways and/or approach departure patterns at the Starke County Airport between bird feeding, water or roosting areas.

c. Landfills outside the above perimeters but still within the lateral limits of the airport zones described herein will be reviewed on a case-by-case basis.

D. Obstruction Marking and Lighting

Any variance or permit granted as a specific condition, require the owner to mark and light the structure to indicate to aircraft pilots the presence of an obstruction. Such marking and lighting shall conform to the specific standards established by Chapter 14-60, *Rules of the Department of Transportation* and the Federal Aviation Administration Advisory Circular 70/7460-1 as amended and attached to this report as Appendix 2.

E. Variances

Any person desiring to erect or increase the height of any structure or use his/her property not in accordance with the regulations prescribed by this Ordinance, may apply to the Board of Zoning Appeals for a variance from such regulations. At that time of filing, the applicant shall forward a copy of his/her application for variance by certified mail return receipt requested the Indiana Department of Transportation- Office of Aviation and the Starke County Airport Authority. The Office of Aviation and the Airport Authority shall have 45 days from the receipt of the application to provide comments to the applicant and the Board of Zoning Appeals after which time that right is waived. Additionally, no application for a variance may be considered unless the applicant shows evidence the requirement for Notice of Construction or Alteration under Title 14, Code of Federal Regulations, Part 77 has been complied with. No application for a variance to the requirements of this Ordinance may be considered by the Board of Zoning Appeals unless a copy of the application has been furnished to the Starke County Zoning Administrator. The Board of Zoning Appeals may proceed with consideration of an application only upon receipt of the Office of Aviation and/or Airport Authority comments or the waiver of the right as demonstrated by the applicant's filing a copy of a return receipt showing the 45 days have elapsed.

F. Nonconforming Use

The requirements prescribed by this Ordinance shall not be construed to necessitate the removal, lowering, or other alternation of any existing structure or tree not conforming to the requirements as of the effective date of this Ordinance. Nothing herein contained shall require any change in the construction or alteration which has begun prior to the effective date of this Ordinance, and is diligently pursued and completed within two (2) years thereof. The cost of removing or lowering any tree not conforming to the requirements of this Ordinance shall be borne by the Starke County Airport Authority. Before any nonconforming structure or tree may be replaced, substantially altered or repaired, rebuilt or allowed to

grow higher or replanted, a permit must be secured from the Zoning Administrator or his/her a duly appointed designee. No permit shall be granted that would allow the establishment or creation of an obstruction hazardous to aircraft operations or permit a nonconforming structure or tree or nonconforming use to be made or become higher or become a greater hazard to air navigation than it was as of the effective date of this Ordinance. Whenever the Zoning Administrator determines that a nonconforming use or nonconforming structure or tree has been abandoned or that the cost of repair, reconstruction, or restoration exceeds the value of the structure or tree, no permit shall be granted that would allow said structure or tree to be repaired, reconstructed, or restored except by a conforming structure or tree.

G. Administration and Enforcement

It shall be the duty of the Zoning Administrator to administer and enforce the requirements prescribed herein within the territorial limits over which Starke County has jurisdiction through the permitting process. Permits shall be requested by use of IC 8-21-10 *Regulation of Tall Structures* Application attached to this report as Appendix 3. Prior to the issuance or denial of a Tall Structure permit by the Zoning Administrator, the Federal Aviation Administration must have reviewed the proposed construction or alteration and issued a determination of the proposal's effect on navigable airspace where such prior notification under Title 14, Code of Federal Regulations, Part 77 is required. Temporary or conditional permits pending completion of the Federal Aviation Administration's review shall not be issued. In the event that the Zoning Administrator finds any violation of the requirements herein, the Zoning Administrator shall give notice to the person responsible for such violation in writing. Such notice shall indicate the nature of the violation and the necessary action to correct or abate the violation. A copy of said notice shall be sent to the Board of Zoning Appeals. The Zoning Administrator shall order discontinuance of any work being done or shall take any or all other action necessary to correct violations and obtain compliance with all the provisions of this Ordinance.

H. Board of Zoning Appeals

1. The Starke County Board of Zoning Appeals shall have and will exercise the following power on matters relating to areas within their territorial limit of authority:

a. to hear and decide appeals from any order, requirement, decision, or determination made by the Zoning Administrator in the enforcement of this Ordinance.

- b. to hear and decide special exceptions to the terms of this Ordinance upon which such Board of Zoning Appeals may be required to pass.
- c. to hear and decide specific variances.

2. The Board of Zoning Appeals shall adopt rules for its governance in harmony with the provisions of this Ordinance. Meetings of the Board of Zoning Appeals shall be held at the call of the Chairman and at such other times as the Board of Zoning Appeals may determine. The Chairman, or in his/her absence the acting Chairman, may administer oaths and compel the attendance of witnesses. All hearings of the Board of Zoning Appeals shall be public. The Board of Zoning Appeals shall keep minutes of its proceedings showing the vote, indicating such fact, and shall keep records of its examinations, and other official actions, all of which shall immediately be filed in the office of the Starke County Clerk.

3. The concurring vote of a majority of the members of the Board of Zoning Appeals shall be sufficient to reverse any order, requirement, decision, or Determination of the Zoning Administrator, or to decide in favor of the application on any matter upon which it is required to pass under this Ordinance, or to effect variation of this Ordinance.

I. Appeals

1. Any person aggrieved, or any taxpayer, by any decision of the Zoning Administrator made in the administration of this Ordinance, may appeal to the Board of Zoning Appeals.

2. All appeals hereunder must be made within a reasonable time as provided by the rules of the Board of Zoning Appeals, by filing with the Zoning Administrator a notice of appeal specifying the grounds thereof. The Zoning Administrator shall forthwith transmit to the Board of Zoning Appeals, all the papers constituting the record upon which the action appealed was taken.

3. An appeal shall stay all proceedings in furtherance of the action appealed unless the Zoning Administrator certifies to the Board of Zoning Appeals, after the notice of appeal has been filed, that by reason of the facts stated in the certificate, a stay would cause imminent peril to life and property. In such case, proceedings shall not be stayed except by order of the Board of Zoning Appeals on notice to the Zoning Administrator and after cause is shown.

4. The Board of Zoning Appeals shall fix a reasonable time for hearing appeals, give the public notice and due notice to the interested parties and render a decision within a reasonable time. During the hearing, any party may appear in person, by agent, or by attorney.

5. The Board of Zoning Appeals may, in conformity with the provisions of this Ordinance, reverse or affirm, in whole or in part, or modify the order, requirement, decision, or determination, as may be appropriate under the circumstances,

J. Judicial Review

Any person aggrieved, or any taxpayer affected by any new decision of the Board of Zoning Appeals, may appeal to the Circuit Court as provided in Indiana Code 36-7-4-1003 et. seq.

K. Penalties

Each violation of this Ordinance or of any regulation, order, or ruling promulgated herein shall be punishable as set forth in the Starke County Zoning Ordinance.

L. Conflicting Regulations

Where there exists a conflict between any of the requirements or limitations prescribed in this Ordinance and any other requirements, regulations, or zoning applicable to the same area, whether the conflict be with respect to the height of structures or trees; the use of land; or any other matter, the more stringent limitation or requirement shall govern and prevail. The variance to or waiver of any such more stringent limitation or requirement shall not constitute automatic variance or waiver of the less stringent limitations or requirements of this Ordinance.

M. Severability

If any of the provisions of this Ordinance or the application thereof to any person or circumstances is held invalid, such invalidity shall not affect other provisions or applications of the Ordinance which can be given effect without the invalid provisions or application, and to the end, the provisions of this Ordinance are declared to be severable.

PART II COMPATIBLE LAND USES AND REQUIREMENTS

The purpose of this Part is to establish standards for land use at the Starke County Airport, and establishes notification procedures to prospective purchasers of real estate.

A. Definitions

1. **Avigation Easement** - The assignment of a right of the Starke County Airport Authority to a portion of the total benefits of the ownership of real property. The selected rights may be granted or may be purchased.

2. **Occupied Rooms** - Rooms within enclosed structures which are or may reasonably be expected to be used for human activities which involve speech communication, sleeping, eating, listening to live, recorded, or broadcast music or speech, or the regular use of telephones.

3. **Persons** - Individual, firm, partnership, corporation, company, association, joint stock association, or political body including the trustee, receiver, assignee, administrator, executor, guardian, or other representative.

B. Land Use Restrictions

1. **Permitted and Restrictive Activities**

Land uses in the Noise Sensitive Area of the Starke County Airport shall be permitted as provided by Indiana Code (IC) 8-21-10-3 attached to this Ordinance and made a part hereof in Appendix 4. Those activities and land uses not specifically listed in the IC are permitted or restricted based on their familiarity to noise tolerance and compatibility with normal airport operations.

2. **Nonconforming Uses**

The regulations prescribed by this Part shall not be construed to require the sound conditioning or other changes or alteration of any existing structure not conforming to this Part as of the effective date of this Ordinance or to otherwise interfere with the continuance of any such existing nonconforming use. Nothing herein contained shall require any such change in the construction or alteration of a structure which was begun prior to the effective date of this Ordinance and is diligently pursued.

C. Appeals

An appeal from any interpretation or administrative decision of the Zoning Administrator may be taken, and requests for variance or exception may be made to the Board of Zoning Appeals as provided in Section I of this Ordinance.

D. Future Uses

No change shall be made in the use of land, and no structure shall be altered or otherwise established in any zone hereby created except in accordance with this Part.

E. Variances

A variance may be granted by the Board of Zoning Appeals where, owing to conditions peculiar to the property and not the result of the actions of the applicant, a literal enforcement of the regulations would result in unnecessary and undue hardship, and would prevent the substantial enjoyment of property rights as shared by nearby properties which do conform to this Ordinance. In granting any variance, the Board of Zoning Appeals may prescribe appropriate conditions, requirements and safeguards in conformity with this Act and the intent hereof including avigation easements if deemed necessary.

F. Violation and Penalties

Each violation of this Ordinance or of any regulation, order, or ruling promulgated herein shall be punishable as set forth in the Starke County Zoning Ordinance.

G. Severability

If any section, provision, or part thereof in this Part shall be adjudged invalid or unconstitutional by a court of competent jurisdiction, such adjudication shall not affect the validity of this Part as a whole, or any section, provision or Part hereof not adjudged invalid or unconstitutional.

H. Effective Date

This Ordinance shall take effect on adoption by the Starke County Council and does hereby repeal all ordinances or provisions thereof in conflict herewith.

Passed and Adopted in regular session, this, the 16th day of May, 2016.

Starke County Plan Commission Public Hearing Held on: April 20, 2016

**Recommended and Approved by the Starke County Plan Commission:
April 20, 2016**

Presented to the Starke County Council on: May 16, 2016

