

MEMORANDUM FROM STAFF

From: Marcellus Johnson, Planning Administrator

To: Lapel Plan Commission

Date: 06/03/2025

RE: Proposed updates to Lapel's Unified Development Ordinance per IDNR's requested changes to the Floodplain Management Standards

Project Description

Indiana Department of Natural Resources (IDNR) requested that Lapel updates its floodplain standards in the UDO to make them meet state requirements and provide a draft to IDNR for review. Staff received comments and edits on the provided first draft and was requested to provide a second draft for IDNR to review. Staff provided a second draft, and IDNR approved the proposed language. Updates to the UDO must first be recommended to Town Council by the Plan Commission.

Analysis

Staff reviewed existing Lapel's UDO language relevant to administering development in the floodplain. Exhibit A contains the current Flood Hazard Area Standards as contained in Volume 2. The same language is found in Volumes 3-11. Here is a summary of the existing floodplain standards language:

- **Variance:** V 1.6.10. Floodplain Standards Variances
- **Definitions:** V 1.10.5 Glossary (there are some flood-related terms).
- **Standards** (same standards in each zoning district):
 - Volume 2: V 2.2.11 Flood Hazard Area Standards
 - Volume 3: V 3.2.14 Flood Hazard Area Standards
 - Volume 4: V 4.2.14 Flood Hazard Area Standards
 - Volume 5: V 5.2.14 Flood Hazard Area Standards
 - Volume 6: V 6.2.14 Flood Hazard Area Standards
 - Volume 7: V 7.2.14 Flood Hazard Area Standards
 - Volume 8: V 8.2.13 Flood Hazard Area Standards
 - Volume 9: V 9.2.13 Flood Hazard Area Standards
 - Volume 10: V 10.2.13 Flood Hazard Area Standards
 - Volume 11: V 11.2.12 Flood Hazard Area Standards
- **Subdivision:**
 - **V 12.1.6** Major Subdivision Principles & Design Standards, Flood Hazard Area Standards (p.54) + some language under drainage, erosion control, and general standards.
- **Permit:**
 - **V 12.3.10**, Flood Hazard Area Construction (p. 76). Requirements regarding applying for an ILP permit in the flood hazard area.

IDNR's proposed language is in Exhibit F. Their language has the most up-to-date requirements. Staff's review of the floodplain standards of other jurisdictions in Indiana shows that most of the NFIP communities adopt this language as is with some local small variations.

Proposal

Staff proposes to amend Lapel's UDO using IDNR's suggested language to make it meet state's requirements and fit the structure of the existing Lapel's UDO in the following way:

- IDNR's draft proposes a list of terms in Article 2. Staff proposes to revise existing flood-related terms and add new ones to Section V1.10.5 Glossary of Terms (see Exhibit B).
 - Some of the terms are explicitly related to floodplain standards, and they are added without any qualifiers.
 - Some terms like "accessory structure" are already in Lapel's UDO. However, for the purpose of Floodplain Management requirements, the meaning of some terms is a little different. Due to that, other communities add such terms *with a qualifier* of some sort after the term to indicate that the terms are used for the purpose of administering floodplain requirements (e.g., "as related to floodplain management", or "as related to Article/Chapter... Floodplain Ordinance..."). I proposed to add "as related to Floodplain Management Regulations" in parenthesis after such terms. "Floodplain Management Regulations" has a definition of its own and is included in this draft of terms too.
- IDNR's draft proposes language for handling variances in the floodplain. Lapel already has separate language for *floodplain* variances in Section V1.6.10. Staff proposes to repeal the existing section and replace it with language to match IDNR's proposed language while incorporating some additional language (see Exhibit D).
- IDNR's draft proposes language in Articles 1, 3, 4, and 5 related to regulating development in the floodplain and proper administration. Lapel's UDO currently has Flood Area Hazard language under each Volume that governs development of every zoning district separately.
 - First, staff proposes to create one separate section in Volume 12: 12.4 Flood Damage Prevention Ordinance and compile all language there. When the state law changes regarding the floodplain, Lapel would need to revise language only in one place instead of 10. See Exhibit C for revisions
 - Second, staff proposes to reference this new section in the code under the existing "Flood Area Hazard Standards" of Volumes 2-11. See Exhibit G.
- Other sections that have flood-related language are in Exhibit E. Staff proposes to keep them with some revisions. The language under those sections that is similar to the proposed language by IDNR is kept.

NOTE: the red-lined version has portions of the text highlighted in green. Those sections are references to the language elsewhere in the UDO. I revised all of them to reference the right place within the proposed structure. They are kept highlighted so that if the location of the references changes due to future revisions, we know what references need to be updated.

Summary of Exhibits

- Exhibit A: Current Flood Hazard Area Standards (pulled from V2.2.11, but same in other volumes listed above)
- Exhibit B: Red-lined section V1.10.5 Glossary of Defined Terms showing only new and revised terms
- Exhibit C: Red-lined Flood Hazard Area Standards showing revision into new section V12.4
- Exhibit D: Red-lined section V1.6.10 Floodplain Standards Variances
- Exhibit E: Red-lined additional code references to floodplain standards
- Exhibit F: IDNR Model Ordinance
- Exhibit G: Proposed ordinance language to be adopted

EXHIBIT A

LAPEL'S CURRENT LANGUAGE (date: 1/16/2025)

V2.2.11 Flood Hazard Area Standards

This Flood Hazard Area Standards section applies to the Agricultural District: The purpose of this section is to guide development in flood hazard areas in order to reduce the potential for loss of life and property, reduce the potential for health and safety hazards, and to reduce the potential for extraordinary public expenditures for flood protection and relief. Under the authority granted to local units of government to control land use within their jurisdiction, which includes taking into account the effects of flooding, the Town Council of the Town of Lapel adopts these flood hazard area standards in order to accomplish the following:

- to prevent unwise developments from increasing flood or drainage hazards to others;
- to protect new buildings and major improvements to buildings from flood damage;
- to protect human life and health from the hazards of flooding;
- to lessen the burden on the taxpayer for flood control projects, repairs to flood-damaged public facilities and utilities, and flood rescue and relief operations;
- to maintain property values and a stable tax base by minimizing the potential for creating flood blighted areas; and
- to make federally subsidized flood insurance available for structures and their contents in the Town of Lapel by fulfilling the requirements of the National Flood Insurance Program.

A. **Disclaimer of Liability:**

The degree of flood protection required by this section is 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, this Ordinance does not create any liability on the part of the Town of Lapel, the Department of Natural Resources, or the State of Indiana, for any flood damage that results from reliance on this Ordinance or any administrative decision made lawfully thereunder.

B. **Duties of the Building Inspector:**

The Building Inspector shall review all development and subdivision proposals to ensure compliance with this Ordinance, including but not limited to the following duties:

- i. Ensure that all development activities within the Special Flood Hazard Areas (SFHA) of the jurisdiction of Lapel meet the requirements of this Code;
- ii. Provide information and assistance to citizens upon request about permit procedures and floodplain construction techniques;
- iii. Ensure that construction authorization has been granted by the Indiana Natural Resources Commission for all development projects subject to the requirements of this section, and maintain a record of such authorization (either copy of actual permit or letter of recommendation);
- iv. Maintain a record of the "as-built" elevation of the top of the lowest floor (including basement) of new and / or substantially improved buildings constructed in the SFHA. Inspect before, during, and after construction;
- v. Maintain a record of the engineer's certificate and the "as-built" flood-proofed elevation of all buildings subject to the requirements of this section;
- vi. Cooperate with state and federal floodplain management agencies to improve base flood and floodway data and to improve the administration of this section. Submit reports as required for the National Flood Insurance Program;
- vii. Maintain for public inspection and furnish upon request regulatory flood data, SFHA maps, Letters of Map Amendment (LOMA), Letters of Map Revision (LOMR), copies of DNR permits and letters of recommendation, federal permit documents, and "as-built" elevation and flood-proofing data for all building constructed subject to this Code; and

- viii. Notify adjacent communities and the State Coordinating Office prior to any alteration or relocation of a watercourse, and submit copies of such notifications to FEMA.

C. Regulatory Flood Elevation:

This section's protection standard is the regulatory flood.

The regulatory flood elevation and floodway limits for each of the SFHAs delineated as an "A Zone" on the Flood Insurance Rate Map of Madison County dated May 3rd, 2011, shall be the best data available as provided by the Department of Natural Resources.

- i. 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 Department of Natural Resources for review and approval.
- ii. For all projects involving channel modifications or fill (including levees) the Town shall submit the data and request that the Federal Emergency Management Agency revise the regulatory flood data.

D. Improvement Location Permit Application:

No person, firm, corporation, or governmental body not exempted by state law shall commence any "development" in the SFHA without first obtaining an Improvement Location Permit. The Building Inspector shall not issue an Improvement Location Permit if the proposed "development" does not meet the requirements of this Ordinance. The application for an Improvement Location Permit shall be accompanied by the following:

- i. A description of the proposed development.
- ii. Location of the proposed development sufficient to accurately locate property and structure in relation to existing roads and streams.
- iii. A legal description of the property site.
- iv. A site development plan showing existing and proposed development locations and existing and proposed land grades.
- v. Elevation of the top of the lowest floor (including basement) of all proposed development. Elevation should be in National Geodetic Vertical Datum of 1929 (NGVD) or North American Vertical Datum (NAVD). In either case the conversion formula should be included.

E. Improvement Location Permit Review and Approval: Upon receipt of an application for an Improvement Location Permit, the Building Inspector shall determine if the site is located within an identified floodway, floodway fringe, or within the floodplain where the limits of the floodway have not yet been determined.

- i. Identified Floodway Sites: If the site is in an identified floodway the Building Inspector shall require the applicant to forward the application, along with all pertinent plans and specifications, to the Department of Natural Resources and apply for a permit for construction in a floodway.
 - 1. Under the provisions of IC 14-28-1 a permit from the Natural Resources Commission is required prior to the issuance of a local improvement location 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 building.
 - 2. No action shall be taken by the Building Inspector until a permit has been issued by the Natural Resources Commission granting approval for construction in the floodway.
 - 3. Once a permit has been issued by the Natural Resources Commission, the Building Inspector may issue the local Improvement Location Permit, subject to compliance with all requirements of this section. The Improvement Location Permit cannot be less restrictive than the permit issued by the Natural Resources Commission.
- ii. Identified Floodway Fringe Sites: If the site is located in an identified floodway fringe, the

LAPEL'S CURRENT LANGUAGE (date: 1/16/2025)

Building Inspector may issue the local Improvement Location Permit provided the provisions contained in this section have been met. The key provision is that the top of the lowest floor of any

- iii. new or substantially improved structure shall be at or above the Flood Protection Grade (FPG).
Undefined Floodplain Sites with Significant Upstream Drainage: If the site is in an identified floodplain where the limits of the floodway and floodway fringe have not yet been determined, and the drainage area upstream of the site is greater than one square mile, the Building Inspector shall require the applicant to forward the application, along with all pertinent plans and specifications, to the Department of Natural Resources for review and comment.
 - 1. No action shall be taken by the Building Inspector until either a permit for construction in the floodway or a letter of recommendation citing the 100-year flood elevation and the recommended Flood Protection Grade has been received from the Department of Natural Resources.
 - 2. Once the Building Inspector has received the proper permit or letter of recommendation approving the proposed development, an Improvement Location Permit may be issued provided the conditions of the Improvement Location Permit are not less restrictive than the conditions received from the Department of Natural Resources and the provisions contained in this section have been met.
- iv. Undefined Floodplain Sites with Insignificant Upstream Drainage: If the site is in an floodplain where the limits of the floodway and floodway fringe have not yet been determined and the drainage area upstream of the site is less than one square mile, the Building Inspector shall require the applicant to provide an engineering analysis showing the limits of the floodway, floodway fringe and 100 year elevation for the site. Upon receipt, the Building Inspector may issue the local Improvement Location Permit, provided the provisions contained in this section have been met.

F. Flood Plain Development:

All development shall be prohibited in the 100-year floodplain unless otherwise specified below:

- i. Permitted Uses: The following uses shall be permitted by right, provided they are permitted in the underlying district:
 - 1. Agricultural uses such as crop production, pastures, orchards, tree farms, plant nurseries, vineyards, and general farming.
 - 2. Forestry, wildlife areas and nature preserves.
 - 3. Parks and recreational uses except golf course and driving range.
 - 4. Public streets, bridges, and roadways.
- ii. Special Uses: Uses permitted as a Special Use are as follows:
 - 1. Riding stables or trails.
 - 2. Public well.
 - 3. Sewage treatment plant (not including septic fields).
 - 4. Water management use facilities (i.e. dams, docks, channel improvements, dikes, jetties, marinas, piers, wharves, levees, floodwalls, and irrigation facilities).
 - 5. Public / private parking area.
 - 6. Golf course.
 - 7. Driving range.
 - 8. Mineral extractions and processing as shown on the flood-insurance rate maps.

G. Preventing Increased Damages:

No development in the SFHA shall create a damaging or potentially damaging increase in flood heights or velocity or threat to public health and safety.

LAPEL'S CURRENT LANGUAGE (date: 1/16/2025)

- i. Within the floodplain identified on the Flood Boundary and Floodway Map, the Flood Insurance Rate Map, or engineering analysis provided, no development shall be allowed which acting alone or in combination with existing or future development, will cause any increase in the elevation of the regulatory flood or result in a net loss of floodwater capacity.
- ii. No development in the SFHA shall include locating or storing chemicals, explosives, buoyant materials, flammable liquids, pollutants, or other hazardous or toxic materials below the Flood Protection Grade, unless such materials are stored in a flood-proofed storage tank or building constructed according to the requirements of this section.
- iii. New and replacement sanitary sewer lines and on- site waste disposal systems may be permitted providing all manholes or other above ground openings are located above the FPG, or those which are located below the FPG are watertight.

H. Building Protection Requirements:

In addition to the damage prevention requirements of this section, all buildings to be located in the SFHA shall be protected from flood damage below the FPG. This building protection requirement applies to the following situations:

- i. construction or placement of any new building having a floor area greater than 400 square feet;
- ii. structural alterations made to:
 1. an existing (previously unaltered) building, the cost of which equals or exceeds 50% of the value of the pre-altered building (excluding the value of the land);
 2. Any previously altered building;
- iii. reconstruction or repairs made to a damaged building that are valued at or more than 50% of the market value of the building (excluding the value of the land) before damage occurred;
- iv. installing a manufactured home on a new site or a new manufactured home on an existing site. This Ordinance does not apply to returning the existing manufactured home to the same site it lawfully occupied before it was removed to avoid flood damage; and
- v. installing a travel trailer or recreational vehicle on a site for more than 180 days.

I. Building Protection Methods:

The building protection requirement may be met by one of the following methods. The Building Inspector shall maintain a record of compliance with these building protection standards as required by this section.

- i. Residential or Non-residential Structures on Fill: A residential or nonresidential building may be constructed on a permanent land fill in accordance with the following:
 1. The fill shall be placed in layers no greater than 1 foot deep before compacting to 95% of the maximum density obtainable with the Standard Proctor Test method.
 2. The fill should extend at least ten (10) feet beyond the foundation of the building before sloping below the FPG.
 3. 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 three (3) horizontal to one (1) vertical.
 4. The fill shall not adversely affect the flow of surface drainage from or onto neighboring properties.
5. The top of the lowest floor including basements, (see definition of lowest floor) shall be at or above the FPG.
- ii. Elevated Residential and Non-residential Structures: A residential or nonresidential building may be elevated in accordance with the following:

LAPEL'S CURRENT LANGUAGE (date: 1/16/2025)

1. The building or improvements shall be elevated on posts, piers, columns, extended walls, or other types of similar foundation provided: **(A)** Walls of any enclosure below the elevated floor shall be designed to automatically equalize hydrostatic flood forces on the walls by allowing for the entry and exit of floodwaters, through providing a minimum of two (2) openings (in addition to doorways and windows) having a total area of one (1) square foot for every one (1) square foot of enclosed area subject to flooding (the bottom of all such opening shall be no higher than one foot above grade); and **(B)** Any enclosure below the elevated floor is used for storage of vehicles and building access.
2. The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as buoyancy, current, waves, ice, and floating debris.
 3. All areas below the FPG shall be constructed of materials resistant to flood damage. The top of the lowest floor (including basement) and all electrical, heating, ventilating, plumbing, and air conditioning equipment and utility meters shall be located at or above the FPG. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other water-proofed service facilities may be located below the FPG.
- iii. Permanent 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 anchoring requirements:
 1. The manufactured home shall be elevated on a permanent foundation such that the 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; or **(D)** in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood.
 2. 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.
 3. The manufactured home shall be elevated so that the lowest floor of the manufactured home chassis is supported by reinforced piers or other foundation elements 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.
- iv. Temporary Recreational Vehicles: Recreational vehicles placed on a site shall either:
 1. be on the site for less than 180 consecutive days;
 2. 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 disconnect type utilities and security devices, and has no permanently attached additions); or
 3. meet the requirements for "manufactured homes" in **Subsection iii** above.
- v. Flood-proofed Non-residential Structures: A non- residential building may be flood-proofed to the FPG (in lieu of elevating) if done in accordance with the following:
 1. A Registered Professional Engineer shall certify that the building has been designed so that below the FPG, the structure and attendant utility facilities are watertight and

LAPEL'S CURRENT LANGUAGE (date: 1/16/2025)

capable of resisting the effects of the regulatory flood. The building design shall take into account flood velocities, duration, rate of rise, hydrostatic pressures, and impacts from debris or ice.

2. Flood-proofing measures shall be operable without human intervention and without an outside source of electricity.

PROPOSED ACTIONS: Add new terms, revise some existing terms.

- Existing Terms in BLACK
- Revision in RED

V 1.10.5 Glossary of Defined Terms

Accessory Structure (as related to Floodplain Management Regulations): A structure with a floor area of 400 square feet or less that is on the same parcel of property as a principal structure and the use of which is incidental to the use of the principal structure; an accessory structure specifically excludes structures used for human habitation.

- A) Accessory structures are considered walled and roofed where the structure includes at least two outside rigid walls and a fully secured roof.
- B) Examples of accessory structures include but are not necessarily limited to detached garages, carports, storage and tool sheds, and small boathouses
- C) The following may have uses that are incidental or accessory to the principal structure on a parcel but are generally not considered to be accessory structures by the NFIP:
- Structures in which any portion is used for human habitation, whether as a permanent residence or as temporary or seasonal living quarters, such as a detached garage or carriage house that includes an apartment or guest quarters, or a detached guest house on the same parcel as a principal residence.
 - Structures used by the public, such as a place of employment or entertainment.
 - Development that does not meet the NFIP definition of a structure for floodplain management purposes. Examples include, but are not necessarily limited to, a gazebo, pavilion, picnic shelter, or carport that is open on all sides (roofed but not walled).

Addition (as related to Floodplain Management Regulations): Any walled and roofed expansion to the perimeter of an existing structure in which the addition is connected by a common load-bearing wall other than a firewall. Any walled and roofed addition, which is connected by a firewall or is separated by independent perimeter load-bearing walls, is new construction.

Alteration of a watercourse (as related to Floodplain Management Regulations): A dam, impoundment, channel relocation, change in channel alignment, channelization, or change in cross-sectional area of the channel or the channel capacity, or any other modification which may alter, impede, retard, or change the direction and/or velocity of the flow of water during conditions of the base flood.

Appeal (as related to Floodplain Management Regulations): A request for a review of the floodplain administrators interpretation of any provision of this ordinance, a request for a variance, or a challenge of a board decision.

Area of special flood hazard: The land within a community subject to a one percent (1%) or greater chance of being flooded in any given year.

Base flood: The flood having a one percent (1%) chance of being equaled or exceeded in any given year. The base flood may also be referred to as the 1% annual chance flood or one hundred (100) year flood.

Base Flood Elevation (BFE): The water surface elevation of the base flood in relation to a specified datum, usually the North American Vertical Datum of 1988.

Basement: That portion of a structure having its floor sub-grade (below ground level) on all sides.

Best Available Flood Layer (BAFL): The floodplain studies and any corresponding floodplain maps prepared and/or approved by the Indiana Department of Natural Resources which provide base flood elevation information, floodplain limits, and/or floodway delineations for flood hazards identified by approximate studies on the currently effective FIRM (Zone A) and/or for waterways where the flood hazard is not identified on available floodplain mapping.

Building (as related to Floodplain Management Regulations): See “Structure.”

Critical Facility (as related to Floodplain Management Regulations): A facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire, and emergency response installations, and installations which produce, use, or store hazardous materials or hazardous waste.

Development (as related to Floodplain Management Regulations): Any man-made change to improved or unimproved real estate including but not limited to:

- A) construction, reconstruction, or placement of a structure or any addition to a structure;
- B) installing a manufactured home on a site, preparing a site for a manufactured home, or installing a recreational vehicle on a site for more than 180 days;
- C) installing utilities, erection of walls and fences, construction of roads, or similar projects;
- D) construction of flood control structures such as levees, dikes, dams, channel improvements, etc.;
- E) mining, dredging, filling, grading, excavation, or drilling operations;
- F) construction and/or reconstruction of boat lifts, docks, piers, and seawalls;
- G) construction and/or reconstruction of bridges or culverts;
- H) storage of materials; or
- I) any other activity that might change the direction, height, or velocity of flood or surface waters.

“Development” does not include activities such as the maintenance of existing structures and facilities such as painting; re-roofing; resurfacing roads; or gardening, plowing, and similar agricultural practices that do not involve filling, grading, excavation, or the construction of permanent structures.

Elevation Certificate: A FEMA form that is routinely reviewed and approved by the White House Office of Management and Budget under the Paperwork Reduction Act, that is encouraged to be used to collect certified elevation information.

Enclosed area or Enclosure: An area of a structure enclosed by walls on all sides.

Enclosure below the lowest floor: See “Lowest Floor” and “Enclosed Area.”

Existing manufactured home park or subdivision (as related to Floodplain Management Regulations): 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 before the effective date of the

community's first floodplain ordinance.

Expansion to an existing manufactured home park or subdivision (as related to Floodplain Management Regulations): The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

FBFM: Flood Boundary and Floodway Map.

FEMA: Federal Emergency Management Agency.

FHBM: Flood Hazard Boundary Map.

Fill (as related to Floodplain Management Regulations): Any material deposited or placed which has the effect of raising the level of the ground surface above the natural grade elevation. Fill material includes but is not limited to consolidated material such as concrete and brick and unconsolidated material such as soil, sand, gravel, and stone.

FIRM: Flood Insurance Rate Map. An official map of a community, on which FEMA has delineated both the areas of special flood hazard and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

FIS: Flood Insurance Study. The official hydraulic and hydrologic report provided by FEMA. The report contains flood profiles, as well as the FIRM and the water surface elevation of the base flood.

Flood or Flooding: A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow, the unusual and rapid accumulation, or the runoff of surface waters from any source.:

- A) The overflow of inland or tidal waters.
- B) The unusual and rapid accumulation or runoff of surface waters from any source.
- C) Mudslides (i.e., mudflows) which are proximately caused by flooding and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

Flood or flooding also includes the collapse or subsidence of land along the shore of a lake or similar body of water as a result of erosion or undermining caused by waves or current of water exceeding anticipated cyclical levels that result in a flood as defined above.

Flood hazard area (See "Special Flood Hazard Area"): Areas subject to the one percent (1%) annual chance flood.

Flood prone area: Any land area acknowledged by a community as being susceptible to inundation by water from any source (See "Floodplain").

Flood Protection Grade or the (FPG): The base flood elevation of the regulatory flood plus two feet at any given location in the SFHA.

Floodplain: Any land area susceptible to being inundated by water from any source. See "Flood." The relatively flat area or low land adjoining the channel of a river or stream which has been or may be covered by flood water. The flood plain includes the channel, floodway, and floodway fringe. Flood plain boundaries are to be determined by using the Floodway-Flood Boundary Maps of the Federal Insurance Administration/Federal Emergency Management Administration.

Floodplain management: The operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

Floodplain management regulations: Zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a floodplain ordinance, grading ordinance and erosion control ordinance), and other applications of police power which control development in flood-prone areas. The term describes such state or local regulations in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

Floodproofing (dry floodproofing): A method of protecting a structure that ensures that the structure, together with attendant utilities and sanitary facilities, is watertight to the floodproofed design elevation with walls that are substantially impermeable to the passage of water. All structural components of these walls are capable of resisting hydrostatic and hydrodynamic flood forces, including the effects of buoyancy, and anticipated debris impact forces.

Floodproofing certificate: A form used to certify compliance for non-residential structures as an alternative to elevating structures to or above the FPG.

Floodway: The channel of a river or stream~~other watercourse~~ and those portions of the floodplains adjoining the channel which are reasonably required to to the adjacent land areas that must be reserved in order to discharge the base flood without cumulative increasing the water surface elevation more than a designated height~~efficiently carry and discharge the peak flood flow of the regulatory flood of any river or stream.~~

Floodway Fringe: Those portions of the floodplain lying outside the floodway.

Freeboard (as related to Floodplain Management Regulations): A factor of safety, usually expressed in feet above the BFE, which is applied for the purposes of floodplain management. It is used to compensate for the many unknown factors that could contribute to flood heights greater than those calculated for the base flood.

Fringe or Floodway Fringe: Those portions of the floodplain lying outside the floodway.

Functionally dependent use (as related to Floodplain Management Regulations): means aA use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

Floodway: The channel of a river or stream and those portions of the floodplains adjoining the channel which are reasonably required to efficiently carry and discharge the peak flood flow of the regulatory flood of any river or stream.

Hardship (as related to Floodplain Management Regulations): The exceptional hardship that would result from a failure to grant a requested variance. The Town requires that the variance is exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is NOT exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

Highest adjacent grade: The highest natural elevation of the ground surface, prior to the start of construction, next to the proposed walls of a structure.

Historic structure: Any structure that is:

- A) listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- B) certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- C) individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- D) individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified by (a) an approved state program as determined by the Secretary of Interior, or (b) directly by the Secretary of Interior in states without approved programs.

Hydrologic and hydraulic engineering analysis: Analyses performed by a professional engineer licensed by the State of Indiana, in accordance with standard engineering practices that are accepted by the Indiana Department of Natural Resources and FEMA, used to determine the base flood, other frequency floods, flood elevations, floodway information and boundaries, and flood profiles.

International Code Council-Evaluation Service (ICC-ES) Report: A document that presents the findings, conclusions, and recommendations from a particular evaluation. ICC-ES reports provide information about what code requirements or acceptance criteria were used to evaluate a product, and how the product should be identified, installed.

Letter of Final Determination (LFD): A letter issued by FEMA during the mapping update process which establishes final elevations and provides the new flood map and flood study to the community. The LFD initiates the six-month adoption period. The community must adopt or amend its floodplain management regulations during this six-month period unless the community has previously incorporated an automatic adoption clause.

Letter of Map Change (LOMC): A general term used to refer to the several types of revisions and amendments to FEMA maps that can be accomplished by letter. They are broken down into the following categories:

- **Conditional Letter of Map Revision (CLOMR):** FEMA's comment on a proposed project that would, upon construction, result in modification of the SFHA through the placement of fill outside the existing regulatory floodway.

- **Conditional Letter of Map Revision Based on Fill (CLOMR-F):** A letter from FEMA stating that a proposed structure that will be elevated by fill would not be inundated by the base flood.
- **Letter of Map Amendment (LOMA):** An amendment by letter to the currently effective FEMA map that establishes that a building or area of land is not located in a SFHA through the submittal of property specific elevation data. A LOMA is only issued by FEMA.
- **Letter of Map Amendment Out as Shown (LOMA-OAS):** An official determination by FEMA that states the property or building is correctly shown outside the SFHA as shown on an effective NFIP map. Therefore, the mandatory flood insurance requirement does not apply. An out-as-shown determination does not require elevations.
- **Letter of Map Revision (LOMR):** An official revision to the currently effective FEMA map. It is issued by FEMA and changes flood zones, delineations, and elevations.
- **Letter of Map Revision Based on Fill (LOMR-F)** means FEMA's modification of the SFHA shown on the FIRM based on the placement of fill outside the existing regulatory floodway.

Letter of Map Amendment (LOMA): An amendment to the currently effective FEMA map that establishes that a property is not located in a Special Flood Hazard Area (SFHA). A LOMA is only issued by FEMA.

Letter of Map Revision (LOMR): An official revision to the currently effective FEMA map. It is issued by FEMA and changes flood zones, delineations, and elevations.

Lowest adjacent grade: The lowest elevation, after completion of construction, of the ground, sidewalk, patio, deck support, or basement entryway immediately next to the structure.

Lowest Floor (as related to Floodplain Management Regulations): The lowest elevation described among of the following:

- A) the lowest floor of a building;
- B) the top of the basement floor;
- C) the top of the garage floor, if the garage is the lowest level of connected to the building;
- D) the top of the first floor of buildings elevated on pilings or pillars constructed on a crawl space with permanent openings; or
- E) the top of the floor level of any enclosure below an elevated building where the walls of the enclosure provide any resistance to the flow of flood-waters. Designs for meeting the flood opening requirement must either be certified by a registered professional engineer or architect or meet or exceed the following criteria unless:
 - 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 At least two (2) openings (in addition to doorways and windows) are designed and maintained for the entry and exit of floodwater; and these openings provide a total net area of at least having a total area of one (1) square foot-inch for every one (1) square foot of enclosed area subject to flooding. 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.; or such enclosed space shall be usable for the parking of vehicles and building access. Doors and windows do not qualify as openings.

Manufactured home (as related to Floodplain Management Regulations): 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."

Manufactured home park or subdivision (as related to Floodplain Management Regulations): A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Mitigation: Sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects. The purpose of mitigation is twofold: to protect people and structures, and to minimize the cost of disaster response and recovery.

Natural grade (as related to Floodplain Management Regulations): The elevation of the undisturbed natural surface of the ground. Fill placed prior to the date of the initial identification of the flood hazard on a FEMA map is also considered natural grade.

New construction (as related to Floodplain Management Regulations): Any structure for which the “start of construction” commenced on or after the effective date of a floodplain management regulations adopted by a community and includes any subsequent improvements to such structures.

New manufactured home park or subdivision (as related to Floodplain Management Regulations): 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.

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.

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.

One-percent annual chance flood: The flood that has a one percent (1%) chance of being equaled or exceeded in any given year. See “Regulatory Flood”.

Physical Map Revision (PMR): 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.

Prefabricated Building (as related to Floodplain Management Regulations): A building that is manufactured and constructed using prefabrication. It consists of factory-made components or units that are transported and assembled on-site to form the complete building.

Principally above ground (as related to Floodplain Management Regulations): At least 51 percent of the actual cash value of the structure, less land value, is above ground.

Recreational vehicle: A vehicle which is:

- A) built on a single chassis;
- B) 400 square feet or less when measured at the largest horizontal projections;
- C) designed to be self-propelled or permanently towable by a light duty truck; and
- D) designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational camping, travel, or seasonal use.

Regulatory Flood: The flood having a one percent (1%) probability of being equaled or exceeded in any given year, as calculated by a method and procedure which is acceptable to and approved by the Indiana Department of Natural Resources Commission and the Federal Emergency Management Agency. The regulatory flood elevation at any location is as defined in subsection V12.4.2.B of this Code. The “Regulatory Flood” is also known by the term “Base Flood,” “One-Percent Annual Chance Flood”, and “100-Year Flood”.

Regulatory Floodway: ~~The channel of a river or stream and those portions of the flood plains adjoining the channel which are reasonably required to efficiently carry and discharge peak flow of the regulatory flood of any river or stream and, is that area covered by floodwaters in significant downstream motion or covered by significant volumes of stored water during the occurrence of the regulatory flood.~~

Repetitive loss: Flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equaled or exceeded 25% of the market value of the structure before the damage occurred.

Riverine: Relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

SFHA or Special Flood Hazard Area: Synonymous with “areas of special flood hazard” and “floodplain.” Those lands within the jurisdiction of the Town subject to a one percent (1%) or greater chance of flooding in any given year. Special flood hazard areas are designated by the Federal Emergency Management Agency on Flood Insurance Rate Maps, Flood Insurance Studies, Flood Boundary and Floodway Maps and Flood Hazard Boundary Maps as Zones A, AE, AH, AO, A1-30, A99, or VE. The SFHA includes areas that are flood prone and designated from other federal, state or local sources of data including but not limited to best available flood layer maps provided by or approved by the Indiana Department of Natural Resources, historical flood information reflecting high water marks, previous flood inundation areas, and flood prone soils associated with a watercourse that are subject to inundation by the regulatory flood. The SFHAs of the Town are generally identified as such on the Flood Insurance Rate Map of the County prepared by the Federal Emergency Management Agency and dated May 3, 2011.

Start of construction (as related to Floodplain Management Regulations): Including substantial improvement, 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 either the first placement of permanent construction of a structure on a site, such as the pouring of a slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the 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; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a 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.

Structure (as related to Floodplain Management Regulations): A walled and roofed building, including a gas or liquid storage tank, which is principally above ground. The term includes a manufactured home, as well as a prefabricated building. It also includes recreational vehicles installed on a site for more than 180 consecutive days.

Substantial damage (as related to Floodplain Management Regulations): 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.

Substantial improvement (as related to Floodplain Management Regulations): 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 which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions.

Variance (as related to Floodplain Management Regulations): A grant of relief from the requirements of this ordinance consistent with the variance conditions herein.

Violation (as related to Floodplain Management Regulations): The failure of a structure or other development to be fully compliant with this ordinance.

Walled and roofed (as related to Floodplain Management Regulations): A building that has two or more exterior rigid walls and a fully secured roof and is affixed to a permanent site.

Watercourse: 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.

V2.2.11, V 3.2.14, V 4.2.14, V 5.2.14, V 6.2.14, V 7.2.14, V 8.2.13, V 9.2.13, V 10.2.13, V 11.2.12

Proposed actions:

- A. Repeal language under all sections listed above and replace with the new language suggested by the IDNR under a new Section 12.4 added to Volume 12.
- B. Insert reference to Section V12.4 under the flood hazard area standards in each zoning district, volumes 2-11.

Flood Hazard Area Standards12.4 Flood Damage Prevention Ordinance

~~This Flood Hazard Area Standards section applies to the Agricultural District. The purpose of this section is to guide development in flood hazard areas in order to reduce the potential for loss of life and property, reduce the potential for health and safety hazards, and to reduce the potential for extraordinary public expenditures for flood protection and relief. Under the authority granted to local units of government to control land use within their jurisdiction, which includes taking into account the effects of flooding, the Town Council of the Town of Lapel adopts these flood hazard area standards in order to accomplish the following:~~

- ~~• to prevent unwise developments from increasing flood or drainage hazards to others;~~
- ~~• to protect new buildings and major improvements to buildings from flood damage;~~
- ~~• to protect human life and health from the hazards of flooding;~~
- ~~• to lessen the burden on the taxpayer for flood control projects, repairs to flood-damaged public facilities and utilities, and flood rescue and relief operations;~~
- ~~• to maintain property values and a stable tax base by minimizing the potential for creating flood-blighted areas; and~~
- ~~• to make federally subsidized flood insurance available for structures and their contents in the Town of Lapel by fulfilling the requirements of the National Flood Insurance Program.~~

A. Disclaimer of Liability:

~~The degree of flood protection required by this section is 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, this Ordinance does not create any liability on the part of the Town of Lapel, the Department of Natural Resources, or the State of Indiana, for any flood damage that results from reliance on this Ordinance or any administrative decision made lawfully thereunder.~~

B. Duties of the Building Inspector:

~~The Building Inspector shall review all development and subdivision proposals to ensure compliance with this Ordinance, including but not limited to the following duties:~~

- ~~i. Ensure that all development activities within the Special Flood Hazard Areas (SFHA) of the jurisdiction of Lapel meet the requirements of this Code;~~
- ~~ii. Provide information and assistance to citizens upon request about permit procedures and floodplain construction techniques;~~
- ~~iii. Ensure that construction authorization has been granted by the Indiana Natural Resources Commission for all development projects subject to the requirements of this section, and maintain a record of such authorization (either copy of actual permit or letter of recommendation);~~
- ~~iv. Maintain a record of the "as-built" elevation of the top of the lowest floor (including basement) of new and / or substantially improved buildings constructed in the SFHA. Inspect before, during, and after construction;~~

- v. ~~Maintain a record of the engineer's certificate and the "as-built" flood-proofed elevation of all buildings subject to the requirements of this section;~~
- vi. ~~Cooperate with state and federal floodplain management agencies to improve base flood and floodway data and to improve the administration of this section. Submit reports as required for the National Flood Insurance Program;~~
- vii. ~~Maintain for public inspection and furnish upon request regulatory flood data, SFHA maps, Letters of Map Amendment (LOMA), Letters of Map Revision (LOMR), copies of DNR permits and letters of recommendation, federal permit documents, and "as-built" elevation and flood-proofing data for all building constructed subject to this Code; and~~
- viii. ~~Notify adjacent communities and the State Coordinating Office prior to any alteration or relocation of a watercourse, and submit copies of such notifications to FEMA.~~

C. ~~Regulatory Flood Elevation:~~

~~This section's protection standard is the regulatory flood.~~

~~The regulatory flood elevation and floodway limits for each of the SFHAs delineated as an "A Zone" on the Flood Insurance Rate Map of Madison County dated May 3rd, 2011, shall be the best data available as provided by the Department of Natural Resources.~~

- i. ~~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 Department of Natural Resources for review and approval.~~
- ii. ~~For all projects involving channel modifications or fill (including levees) the Town shall submit the data and request that the Federal Emergency Management Agency revise the regulatory flood data.~~

D. ~~Improvement Location Permit Application:~~

~~No person, firm, corporation, or governmental body not exempted by state law shall commence any "development" in the SFHA without first obtaining an Improvement Location Permit. The Building Inspector shall not issue an Improvement Location Permit if the proposed "development" does not meet the requirements of this Ordinance. The application for an Improvement Location Permit shall be accompanied by the following:~~

- i. ~~A description of the proposed development.~~
- ii. ~~Location of the proposed development sufficient to accurately locate property and structure in relation to existing roads and streams.~~
- iii. ~~A legal description of the property site.~~
- iv. ~~A site development plan showing existing and proposed development locations and existing and proposed land grades.~~
- v. ~~Elevation of the top of the lowest floor (including basement) of all proposed development. Elevation should be in National Geodetic Vertical Datum of 1929 (NGVD) or North American Vertical Datum (NAVD). In either case the conversion formula should be included.~~

E. ~~Improvement Location Permit Review and Approval:~~ ~~Upon receipt of an application for an Improvement Location Permit, the Building Inspector shall determine if the site is located within an identified floodway, floodway fringe, or within the floodplain where the limits of the floodway have not yet been determined.~~

- i. ~~Identified Floodway Sites: If the site is in an identified floodway the Building Inspector shall require the applicant to forward the application, along with all pertinent plans and specifications, to the Department of Natural Resources and apply for a permit for construction in a floodway.~~

1. ~~Under the provisions of IC 14-28-1 a permit from the Natural Resources Commission is required prior to the issuance of a local improvement location 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 building.~~
 2. ~~No action shall be taken by the Building Inspector until a permit has been issued by the Natural Resources Commission granting approval for construction in the floodway.~~
 3. ~~Once a permit has been issued by the Natural Resources Commission, the Building Inspector may issue the local Improvement Location Permit, subject to compliance with all requirements of this section. The Improvement Location Permit cannot be less restrictive than the permit issued by the Natural Resources Commission.~~
- ii. ~~Identified Floodway Fringe Sites: If the site is located in an identified floodway fringe, the Building Inspector may issue the local Improvement Location Permit provided the provisions contained in this section 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 Flood Protection Grade (FPG).~~
- iii. ~~Undefined Floodplain Sites with Significant Upstream Drainage: If the site is in an identified floodplain where the limits of the floodway and floodway fringe have not yet been determined, and the drainage area upstream of the site is greater than one square mile, the Building Inspector shall require the applicant to forward the application, along with all pertinent plans and specifications, to the Department of Natural Resources for review and comment.~~
1. ~~No action shall be taken by the Building Inspector until either a permit for construction in the floodway or a letter of recommendation citing the 100-year flood elevation and the recommended Flood Protection Grade has been received from the Department of Natural Resources.~~
 2. ~~Once the Building Inspector has received the proper permit or letter of recommendation approving the proposed development, an Improvement Location Permit may be issued provided the conditions of the Improvement Location Permit are not less restrictive than the conditions received from the Department of Natural Resources and the provisions contained in this section have been met.~~
- iv. ~~Undefined Floodplain Sites with Insignificant Upstream Drainage: If the site is in an floodplain where the limits of the floodway and floodway fringe have not yet been determined and the drainage area upstream of the site is less than one square mile, the Building Inspector shall require the applicant to provide an engineering analysis showing the limits of the floodway, floodway fringe and 100-year elevation for the site. Upon receipt, the Building Inspector may issue the local Improvement Location Permit, provided the provisions contained in this section have been met.~~

F. ~~Flood Plain Development:~~

~~All development shall be prohibited in the 100-year floodplain unless otherwise specified below:~~

- i. ~~Permitted Uses: The following uses shall be permitted by right, provided they are permitted in the underlying district:~~
 1. ~~Agricultural uses such as crop production, pastures, orchards, tree farms, plant nurseries, vineyards, and general farming.~~
 2. ~~Forestry, wildlife areas and nature preserves.~~
 3. ~~Parks and recreational uses except golf course and driving range.~~
 4. ~~Public streets, bridges, and roadways.~~
- ii. ~~Special Uses: Uses permitted as a Special Use are as follows:~~

1. ~~_____~~ Riding stables or trails.
2. ~~_____~~ Public well.
3. ~~_____~~ Sewage treatment plant (not including septic fields).
4. ~~_____~~ Water management use facilities (i.e. dams, docks, channel improvements, dikes, jetties, marinas, piers, wharves, levees, floodwalls, and irrigation facilities).
5. ~~_____~~ Public / private parking area.
6. ~~_____~~ Golf course.
7. ~~_____~~ Driving range.
8. ~~_____~~ Mineral extractions and processing as shown on the flood insurance rate maps.

G. ~~_____~~ Preventing Increased Damages:

No development in the SFHA shall create a damaging or potentially damaging increase in flood heights or velocity or threat to public health and safety.

- i. ~~_____~~ Within the floodplain identified on the Flood Boundary and Floodway Map, the Flood Insurance Rate Map, or engineering analysis provided, no development shall be allowed which acting alone or in combination with existing or future development, will cause any increase in the elevation of the regulatory flood or result in a net loss of floodwater capacity.
- ii. ~~_____~~ No development in the SFHA shall include locating or storing chemicals, explosives, buoyant materials, flammable liquids, pollutants, or other hazardous or toxic materials below the Flood Protection Grade, unless such materials are stored in a flood-proofed storage tank or building constructed according to the requirements of this section.
- iii. ~~_____~~ New and replacement sanitary sewer lines and on-site waste disposal systems may be permitted providing all manholes or other above ground openings are located above the FPG, or those which are located below the FPG are watertight.

H. ~~_____~~ Building Protection Requirements:

In addition to the damage prevention requirements of this section, all buildings to be located in the SFHA shall be protected from flood damage below the FPG. This building protection requirement applies to the following situations:

- i. ~~_____~~ construction or placement of any new building having a floor area greater than 400 square feet;
- ii. ~~_____~~ structural alterations made to:
 1. ~~_____~~ an existing (previously unaltered) building, the cost of which equals or exceeds 50% of the value of the pre-altered building (excluding the value of the land);
 2. ~~_____~~ Any previously altered building;
- iii. ~~_____~~ reconstruction or repairs made to a damaged building that are valued at or more than 50% of the market value of the building (excluding the value of the land) before damage occurred;
- iv. ~~_____~~ installing a manufactured home on a new site or a new manufactured home on an existing site. This Ordinance does not apply to returning the existing manufactured home to the same site it lawfully occupied before it was removed to avoid flood damage; and
- v. ~~_____~~ installing a travel trailer or recreational vehicle on a site for more than 180 days.

I. ~~_____~~ Building Protection Methods:

The building protection requirement may be met by one of the following methods. The Building Inspector shall maintain a record of compliance with these building protection standards as required by this section.

- i. ~~_____~~ Residential or Non-residential Structures on Fill: A residential or nonresidential building may be

constructed on a permanent land fill in accordance with the following:

1. ~~The fill shall be placed in layers no greater than 1 foot deep before compacting to 95% of the maximum density obtainable with the Standard Proctor Test method.~~
 2. ~~The fill should extend at least ten (10) feet beyond the foundation of the building before sloping below the FPG.~~
 3. ~~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 three (3) horizontal to one (1) vertical.~~
 4. ~~The fill shall not adversely affect the flow of surface drainage from or onto neighboring properties.~~
 5. ~~The top of the lowest floor including basements, (see definition of lowest floor) shall be at or above the FPG.~~
- ii. ~~Elevated Residential and Non-residential Structures: A residential or nonresidential building may be elevated in accordance with the following:~~
1. ~~The building or improvements shall be elevated on posts, piers, columns, extended walls, or other types of similar foundation provided: (A) Walls of any enclosure below the elevated floor shall be designed to automatically equalize hydrostatic flood forces on the walls by allowing for the entry and exit of floodwaters, through providing a minimum of two (2) openings (in addition to doorways and windows) having a total area of one (1) square foot for every one (1) square foot of enclosed area subject to flooding (the bottom of all such opening shall be no higher than one foot above grade); and (B) Any enclosure below the elevated floor is used for storage of vehicles and building access.~~
 2. ~~The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as buoyancy, current, waves, ice, and floating debris.~~
 3. ~~All areas below the FPG shall be constructed of materials resistant to flood damage. The top of the lowest floor (including basement) and all electrical, heating, ventilating, plumbing, and air conditioning equipment and utility meters shall be located at or above the FPG. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other water-proofed service facilities may be located below the FPG.~~
- iii. ~~Permanent 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 anchoring requirements:~~
1. ~~The manufactured home shall be elevated on a permanent foundation such that the 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; or (D) in an existing manufactured home park or subdivision on which a manufactured home~~

- has incurred “substantial damage” as a result of a flood.
2. ~~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.~~
 3. ~~The manufactured home shall be elevated so that the lowest floor of the manufactured home chassis is supported by reinforced piers or other foundation elements 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.~~
- iv. ~~Temporary Recreational Vehicles: Recreational vehicles placed on a site shall either:~~
1. ~~be on the site for less than 180 consecutive days;~~
 2. ~~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 disconnect type utilities and security devices, and has no permanently attached additions); or~~
 3. ~~meet the requirements for “manufactured homes” in **Subsection iii** above.~~
- v. ~~Flood-proofed Non-residential Structures: A non-residential building may be flood-proofed to the FPG (in lieu of elevating) if done in accordance with the following:~~
1. ~~A Registered Professional Engineer shall certify that the building 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 building design shall take into account flood velocities, duration, rate of rise, hydrostatic pressures, and impacts from debris or ice.~~
 2. ~~Flood-proofing measures shall be operable without human intervention and without an outside source of electricity.~~

12.4.1. Statutory Authorization, Findings of Fact, Purpose, and Methods (in DNRs draft: Article 1)

A. Title

This Ordinance shall be known as the Town of Lapel Flood Damage Prevention Ordinance.

B. Statutory Authorization

The Indiana Legislature has in IC 36-1-4-11 granted the power to local government units to control land use within their jurisdictions. Therefore, the Town Council of the Town of Lapel, Indiana does hereby adopt the following floodplain management regulations.

C. Findings of Fact

The flood hazard areas of the Town of Lapel are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare. Additionally, structures that are inadequately elevated, floodproofed, or otherwise protected from flood damage also contribute to the flood loss. In order to minimize the threat of such damages and to achieve the purposes hereinafter set forth, these regulations are adopted.

D. Statement of Purpose

It is the purpose of this ordinance to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- i. Protect human life and health.
- ii. Minimize expenditure of public money for costly flood control projects.
- iii. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public.
- iv. Minimize prolonged business interruptions.
- v. Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, and sewer lines, streets, and bridges located in floodplains.
- vi. Help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight area.
- vii. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.
- viii. Minimize the impact of development on adjacent properties within and near flood prone areas.
- ix. Ensure that the flood storage and conveyance functions of the floodplain are maintained.
- x. Minimize the impact of development on the natural, beneficial values of the floodplain.
- xi. Prevent floodplain uses that are either hazardous or environmentally incompatible.
- xii. Meet community participation requirements of the National Flood Insurance Program.

E. Methods of Reducing Flood Loss

In order to accomplish its purposes, these regulations include methods and provisions for:

- i. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water hazards, or which result in damaging increases in flood heights or velocities.
- ii. Requiring that uses vulnerable to floods, including facilities, which serve such uses, be protected against flood damage at the time of initial construction.
- iii. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters.
- iv. Controlling filling, grading, dredging, excavating, and other development which may increase flood damage.
- v. Preventing or regulating the construction of flood barriers, which will unnaturally divert floodwaters, or which may increase flood hazards in other areas.

12.4.2 General Provisions (in DNRs draft: Article 3)

A. Lands to Which This Ordinance Applies

This ordinance shall apply to all areas of special flood hazard (SFHAs) within the jurisdiction of the Town of Lapel, Indiana as identified in subsection 12.4.2.B, including any additional areas of special flood hazard annexed by the Town of Lapel, Indiana.

B. Basis for Establishing the Areas of Special Flood Hazard

- i. The regulatory flood elevation, floodway, and fringe limits for the studied SFHAs within the jurisdiction of the Town of Lapel, delineated as an "AE Zone" on the Madison County, Indiana and Incorporated Areas Flood Insurance Rate Map dated June 9, 2014 shall be determined from the one-percent annual chance flood profiles in the Flood Insurance Study of Madison County, Indiana and Incorporated Areas and the corresponding Flood Insurance Rate Maps (FIRM) dated June 9, 2014 as well as any subsequent updates, amendments, or revisions, prepared by the Federal Emergency Management Agency with the most recent date. Should the floodway limits not be delineated on the Flood Insurance Rate Map for a studied SFHA designated as an "AE Zone", the limits of the floodway will be according to the best available flood layer as provided by the Indiana Department of Natural Resources.

- ii. The regulatory flood elevation, floodway, and fringe limits for each of the SFHAs within the jurisdiction of the Town of Lapel, delineated as an "A Zone" on the Madison County, Indiana and Incorporated Areas Flood Insurance Rate Map, dated June 9, 2014, as well as any subsequent updates, amendments, or revisions, prepared by the Federal Emergency Management Agency with the most recent date, shall be according to the best available flood layer provided by the Indiana Department of Natural Resources, provided the upstream drainage area from the subject site is greater than one square mile. Whenever a party disagrees with the best available flood layer data, the party needs to replace existing data with better data that meets current engineering standards. To be considered, this data must be submitted to the Indiana Department of Natural Resources for review and subsequently approved.
- iii. 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 available flood layer as provided by the Indiana Department of Natural Resources, provided the upstream drainage area from the subject site is greater than one square mile.
- iv. Upon issuance of a Letter of Final Determination (LFD), any more restrictive data in the new (not yet effective) mapping/study shall be utilized for permitting and construction (development) purposes, replacing all previously effective less restrictive flood hazard data provided by FEMA.

C. Establishment of Floodplain Development Permit

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

D. Compliance

- i. No structure shall hereafter be located, extended, converted, or structurally altered within the SFHA without full compliance with the terms of this ordinance and other applicable regulations.
- ii. Where an existing or proposed structure or other development is affected by multiple flood zones, by multiple base flood elevations, or both, the development activity must comply with the provisions of this ordinance applicable to the most restrictive flood zone and the most conservative (highest) base flood elevation affecting any part of the existing or proposed structure; or for other developments, affecting any part of the area of the development.
- iii. No land or stream within the SFHA shall hereafter be altered without full compliance with the terms of this ordinance and other applicable regulations.

E. Abrogation and Greater Restrictions

This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

F. Discrepancy between Mapped Floodplain and Actual Ground Elevations

- i. In cases where there is a discrepancy between the mapped floodplain (SFHA) with base flood elevations provided (riverine or lacustrine Zone AE) on the FIRM and the actual ground elevations, the elevation provided on the profiles or table of still water elevations shall govern.
- ii. 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.
- iii. If the natural grade elevation of the site in question is at or above the base flood elevation and a LOMA or LOMR-FW is obtained, the floodplain regulations will not be applied provided the LOMA or LOMR-FW is not subsequently superseded or invalidated.

G. Interpretation

In the interpretation and application of this ordinance all provisions shall be:

- i. Considered as minimum requirements.
- ii. Liberally construed in favor of the governing body.
- iii. Deemed neither to limit nor repeal any other powers granted under state statutes.

H. Warning and Disclaimer of Liability

The degree of flood protection required by this ordinance is 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, this ordinance does not create any liability on the part of the Town of Lapel, the Indiana Department of Natural Resources, or the State of Indiana, for any flood damage that results from reliance on this ordinance, or any administrative decision made lawfully thereunder.

I. 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 this ordinance. All violations shall be considered a common nuisance and be treated as such in accordance with the provisions of this Code pursuant to Section V1.9.

- i. A separate offense shall be deemed to occur for each day the violation continues to exist.
- ii. The Town of Lapel 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.
- iii. Nothing herein shall prevent the Town from taking such other lawful action to prevent or remedy any violations. All costs connected therewith shall accrue to the person or persons responsible.

12.4.3 Administration (in DNR's draft, it's Article 4)

A. Designation of Administrator

The Town Council of Lapel hereby appoints the Building Inspector to administer and implement the provisions of this ordinance and is herein referred to as the Floodplain Administrator.

B. Floodplain Development Permit and Certification Requirements

An application for a floodplain development permit shall be made to the Floodplain Administrator for all development activities located wholly within, partially within, or in contact with an identified special flood hazard area. Such application shall be made by the owner of the property or his/her authorized agent, herein referred to as the applicant, prior to the actual commencement of such construction on a form furnished for that purpose. Such applications shall include, but not be limited to plans 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:

i. Application Stage.

1. A description of the proposed development.
2. Location of the proposed development sufficient to accurately locate property and structure(s) in relation to existing roads and streams.
3. A legal description of the property site.

4. For the reconstruction, rehabilitation, or improvement of an existing structure, or an addition to an existing building, a detailed quote and description of the total work to be completed including but not limited to interior work, exterior work, and labor as well as a certified valuation of the existing (pre-improved or pre-damaged) structure.
5. A site development plan showing existing and proposed development locations and existing and proposed land grades.
6. A letter from a licensed professional surveyor or engineer noting that an elevation reference benchmark has been established or confirmed for those projects requiring elevations to be met.
7. Verification that connection to either a public sewer system or to an approved on-site septic system is available and approved by the respective regulatory agency for proposed structures to be equipped with a restroom, kitchen or other facilities requiring disposal of wastewater.
8. Plans showing elevation of the top of the planned lowest floor (including basement) of all proposed structures in Zones A, AH, and AE. Elevation should be in NAVD 88.
9. Plans showing elevation (in NAVD 88) to which any non-residential structure will be floodproofed.
10. Plans showing location and specifications for flood openings for any proposed structure with enclosed areas below the flood protection grade.
11. Plans showing materials to be used below the flood protection grade for any proposed structure are flood resistant.
12. Plans showing how any proposed structure will be anchored to resist flotation or collapse.
13. Plans showing how any electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities are designed and/or located. Elevation should be in NAVD 88.
14. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development. A hydrologic and hydraulic engineering analysis is required, and any watercourse changes submitted to DNR for approval. Once DNR approval is obtained, a FEMA Conditional Letter of Map Revision must be obtained prior to construction. (See subsections V12.4.3.C.viii and V12.4.3.E for additional information.)
15. Any additional information, as requested by the Floodplain Administrator, which may be necessary to determine the disposition of a proposed development or structure with respect to the requirements of this ordinance.

ii. Construction Stage.

Upon establishment of the lowest floor of an elevated structure or structure constructed on fill, it shall be the duty of the applicant to submit to the Floodplain Administrator an elevation certificate for the building under construction. The Floodplain Administrator shall review the elevation certificate. Any deficiencies detected during the review shall be corrected by the applicant before work is allowed to continue. 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.

iii. Finished Construction.

1. Upon completion of construction of any structure requiring certification of elevation, an elevation certificate which depicts the "as-built" lowest floor elevation and other applicable elevation data is required to be submitted by the applicant to the Floodplain Administrator. The elevation certificate shall be prepared by or under the direct supervision of a registered land surveyor and certified by the same.
2. Upon completion of construction of an elevated structure constructed on fill, a fill report is required to be submitted to the Floodplain Administrator to verify the required standards were met, including compaction.
3. Upon completion of construction of a floodproofing measure, a floodproofing certificate is required to be submitted by the applicant to the Floodplain Administrator. The floodproofing certificate shall be prepared by or under the direct supervision of a registered professional engineer or architect and certified by same.

C. Duties and Responsibilities of the Floodplain Administrator

The Floodplain Administrator and/or designated staff is hereby authorized and directed to enforce the provisions of this ordinance. The administrator is further authorized to render interpretations of this ordinance, which are consistent with its spirit and purpose. Duties and Responsibilities of the Floodplain Administrator shall include, but are not limited to:

- i. Enforce the provisions of this ordinance.
- ii. Evaluate application for permits to develop in special flood hazard areas to assure that the permit requirements of this ordinance have been satisfied.
- iii. Interpret floodplain boundaries and provide flood hazard and flood protection elevation information.
- iv. Issue permits to develop in special flood hazard areas when the provisions of these regulations have been met or refuse to issue the same in the event of noncompliance.
- v. Advise permittee that additional Federal, State and/or local permits may be required. If specific Federal, State and/or local permits are known, require that copies of such permits be provided and maintained on file with the floodplain development permit.
- vi. Conduct substantial damage determinations to determine whether existing structures, damaged from any source and in special flood hazard areas, must meet the development standards of these regulations.
- vii. For applications to improve structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the Floodplain Administrator shall:
 1. Verify and document the market value of the pre-damaged or pre-improved structure.
 2. Compare the cost to perform the improvement; or the cost to repair a damaged building to its pre-damaged condition; or, the combined costs of improvements and repair, if applicable, to the market value of the pre-damaged or pre-improved structure. The cost of all work must be included in the project costs, including work that might otherwise be considered routine maintenance. Items/activities that must be included in the cost shall be in keeping with guidance published by FEMA to ensure compliance with the NFIP and to avoid any conflict with future flood insurance claims of policyholders within the community.
 3. Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; the determination requires evaluation of previous permits issued for improvements and repairs as specified in the definition of "substantial improvement" for proposed work to repair damage

- caused by flood, the determination requires evaluation of previous permits issued to repair flood-related damage as specified in the definition of substantial damage.
4. Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the applicable general and specific standards in **Section V12.4.4** of this ordinance are required.
- viii. 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.
- ix. Ensure that construction authorization has been granted by the Indiana Department of Natural Resources for all development projects subject to **subsections V12.4.4.A.i, V12.4.4.A.iii.1, and V12.4.4.A.iv** of this ordinance. Maintain a record of such authorization (either copy of actual permit/authorization or floodplain analysis/regulatory assessment).
- x. Verify the upstream drainage area of any proposed development site near any watercourse not identified on a FEMA map to determine if **subsection V.12.4.3.C.ii** is applicable.
- xi. Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
- xii. Verify and record the actual elevation of the lowest floor (including basement) of all new or substantially improved structures, in accordance with **V12.4.3.B**
- xiii. Verify and record the actual elevation to which any new or substantially improved structures have been floodproofed in accordance with **V12.4.3.B**
- xiv. Make on-site inspections of projects in accordance with **V12.4.3.D**
- xv. Coordinate with insurance adjusters prior to permitting any proposed work to bring any flood-damaged structure covered by a standard flood insurance policy into compliance (either a substantially damaged structure or a repetitive loss structure) to ensure eligibility for ICC funds.
- xvi. Ensure that an approved connection to a public sewer system or an approved on-site septic system is planned for any structures (residential or non-residential) to be equipped with a restroom, kitchen or other facilities requiring disposal of wastewater.
- xvii. Provide information, testimony, or other evidence as needed during variance hearings.
- xviii. Serve notices of violations, issue stop-work orders, revoke permits and take corrective actions in accordance with **V12.4.3.D**
- xix. 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 Change (LOMC), copies of DNR permits, letters of authorization, 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 this ordinance in accordance with **V12.4.3.D**
- xx. Coordinate map maintenance activities and associated FEMA follow-up in accordance with **V12.4.3.E**
- xxi. Utilize and enforce all Letters of Map Change (LOMC) or Physical Map Revisions (PMR) issued by FEMA for the currently effective SFHA maps of the community.

xxii. Request any additional information which may be necessary to determine the disposition of a proposed development or structure with respect to the requirements of this ordinance.

D. Administrative Procedures

i. **Inspections of Work in Progress.** As the work pursuant to a permit progresses, the floodplain administrator shall make as many inspections of the work as may be necessary to ensure that the work is being done according to the provisions of the local ordinance and terms of the permit. In exercising this power, the administrator has a right, upon presentation of proper credential, to enter on any premises within the territorial jurisdiction at any reasonable hour for the purposes of inspection or other enforcement action.

ii. **Stop Work Orders.**

1. Upon notice from the floodplain administrator, work on any building, structure or premises that is being done contrary to the provisions of this ordinance shall immediately cease.
2. 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.

iii. **Revocation of Permits.**

1. The floodplain administrator may revoke a permit or approval, issued under the provisions of the ordinance, 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.
2. 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 this ordinance.

iv. **Floodplain Management Records.**

1. Regardless of any limitation on the period required for retention of public records, records of actions associated with the administration of this ordinance shall be kept on file and maintained under the direction of the Floodplain Administrator in perpetuity. These records include permit applications, plans, certifications, Flood Insurance Rate Maps; Letter of Map Change; records of issuance of permits and denial of permits; determinations of whether proposed work constitutes substantial improvement or repair of substantial damage; required design certifications and documentation of elevations required by this ordinance; notifications to adjacent communities, FEMA, and the state related to alterations of watercourses; assurances that the flood carrying capacity of altered watercourses will be maintained; documentation related to appeals and variances, including justification for issuance or denial; and records of enforcement actions taken pursuant to this ordinance.
2. These records shall be available for public inspection at Lapel Town Hall.

v. **Periodic Inspection.** Once a project is completed, periodic inspections may be conducted by the Floodplain Administrator to ensure compliance. The Floodplain Administrator shall have a right, upon presentation of proper credential, to enter on any premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action.

E. Map Maintenance Activities

To meet NFIP minimum requirements to have flood data reviewed and approved by FEMA, and to ensure that the Town of Lapel flood maps, studies and other data identified in **V12.4.2.B** accurately represent flooding conditions so appropriate floodplain management criteria are based on current data, the following map maintenance activities are identified:

i. Requirement to Submit New Technical Data

1. For all development proposals that impact floodway delineations or base flood elevations, the community shall ensure that technical data reflecting such changes be submitted to FEMA within six months of the date such information becomes available. These development proposals include:
 - a) Floodway encroachments that increase or decrease base flood elevations or alter floodway boundaries.
 - b) Fill sites to be used for the placement of proposed structures where the applicant desires to remove the site from the special flood hazard area.
 - c) Alteration of watercourses that result in a relocation or elimination of the special flood hazard area, including the placement of culverts; and Subdivision or large-scale development proposals requiring the establishment of base flood elevations.
2. It is the responsibility of the applicant to have required technical data for a Conditional Letter of Map Revision or Letter of Map Revision and submitted to FEMA. The Indiana Department of Natural Resources will review the submittals as part of a partnership with FEMA. The submittal should be mailed to the Indiana Department of Natural Resources at the address provided on the FEMA form (MT-2) or submitted through the online Letter of Map Change website. Submittal and processing fees for these map revisions shall be the responsibility of the applicant.
3. The Floodplain Administrator shall require a Conditional Letter of Map Revision prior to the issuance of a floodplain development permit for proposed floodway encroachments that increase the base flood elevation.
4. Floodplain development permits issued by the Floodplain Administrator shall be conditioned upon the applicant obtaining a Letter of Map Revision from FEMA for any development proposal subject to this section.

ii. Right to Submit New Technical Data

The Floodplain Administrator may request changes to any of the information shown on an effective map that does not impact floodplain or floodway delineations or base flood elevations, such as labeling or planimetric details. Such a submission shall include appropriate supporting documentation made in writing by the Lapel Town County President of the Town of Lapel and may be submitted to FEMA at any time.

iii. Annexation / Detachment

Upon occurrence, the Floodplain Administrator shall notify FEMA in writing whenever the boundaries of the Town of Lapel have been modified by annexation or the community has assumed authority over an area, or no longer has authority to adopt and enforce floodplain management regulations for a particular area. In order that the Madison County, Indiana and Incorporated Areas Flood Insurance Rate Map accurately represent the Town of Lapel boundaries, include within such notification a copy of a map of the Town of Lapel suitable for reproduction, clearly showing the new corporate limits or the new area for which the Town of Lapel has assumed or relinquished floodplain management regulatory authority.

12.4.4. Provisions for Flood Hazard Reduction (in DNR's draft, it's Article 5)

A. Floodplain Status Standards

i. Floodways (Riverine)

Located within SFHAs, established in **subsection V12.4.2 B**, 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. Under the provisions of the Flood Control Act (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 undertaken before the actual start of construction of the structure. General licenses and exemptions to the requirements of the Flood Control Act (IC 14-28-1 and 312 IAC 10) may apply to qualified additions/improvements to existing lawful residential structures, rural bridges, logjam removals, wetland restoration, utility line crossings, outfall projects, creek rock removal, and prospecting.

1. If the site is in a regulatory floodway as established in **subsection V12.4.2 B**, 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 approval for construction in a floodway, provided the activity does not qualify for a general license or exemption (IC 14-28-1 or 312 IAC 10).
2. No action shall be taken by the Floodplain Administrator until approval has been granted by the Indiana Department of Natural Resources for construction in the floodway, or evidence provided by an applicant that the development meets specified criteria to qualify for a general license or exemption to the requirement of the Flood Control Act. The Floodplain Development Permit shall meet the provisions contained in this Section.
3. The Floodplain Development Permit cannot be less restrictive than an approval issued for construction in a floodway issued by the Indiana Department of Natural Resources, or the specified criteria used to qualify for a general license or exemption to the Flood Control Act for a specific site/project. However, a community's more restrictive regulations (if any) shall take precedence.
4. In floodway areas identified on the FIRM, development shall cause no increase in flood levels during the occurrence of the base flood discharge without first obtaining a Conditional Letter of Map Revision and meeting requirements of **subsection V12.4.3 E**. A Conditional Letter of Map Revision cannot be issued for development that would cause an increase in flood levels affecting a structure and such development should not be permitted.
5. In floodway areas identified by the Indiana Department of Natural Resources through detailed or approximate studies but not yet identified on the effective FIRM as floodway areas, the total cumulative effect of the proposed development, when combined with all other existing and anticipated development, shall not adversely affect the efficiency of, or unduly restrict the capacity of the floodway. This adverse effect is defined as an increase in the elevation of the regulatory flood of at least fifteen-hundredths (0.15) of a foot as determined by comparing the regulatory flood elevation under the project condition to that under the natural or pre-floodway condition as proven with hydraulic analyses.

6. For all projects involving channel modifications or fill (including levees) the Town shall submit the data and request that the Federal Emergency Management Agency revise the regulatory flood data per mapping standard regulations found at 44 CFR § 65.12.

ii. Fringe (Riverine)

If the site is in the fringe (either identified on the FIRM or identified by the Indiana Department of Natural Resources through detailed or approximate studies and not identified on a FIRM), the Floodplain Administrator may issue the local Floodplain Development Permit provided the provisions contained in this Ordinance have been met.

iii. SFHAs without Established Base Flood Elevation and/or Floodways/Fringes (Riverine)

1. Drainage area upstream of the site is greater than one square mile:

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.

No action shall be taken by the Floodplain Administrator until written approval from the Indiana Department of Natural Resources (approval for construction in a floodway, letter of authorization, or evidence of general license qualification) 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.

Once the Floodplain Administrator has received the proper written approval, evidence of general license qualification, or floodplain analysis/regulatory assessment approving the proposed development from the Indiana Department of Natural Resources, 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 this section have been met.

2. Drainage area upstream of the site is less than one square mile:

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.

Upon receipt, the Floodplain Administrator may issue the local Floodplain Development Permit, provided the provisions contained in this Ordinance have been met.

iv. SFHAs not Identified on a Map

1. If a proposed development site is near a waterway with no SFHA identified on a map, the Floodplain Administrator shall verify the drainage area upstream of the site. If the drainage area upstream of the site is verified as being 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.
2. No action shall be taken by the Floodplain Administrator until written approval from the Indiana Department of Natural Resources (approval for construction in a floodway, letter of authorization, or evidence of general license qualification) 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.

3. Once the Floodplain Administrator has received the proper written approval, evidence of general license qualification, or floodplain analysis/regulatory assessment approving the proposed development from the Indiana Department of Natural Resources, 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 this Ordinance have been met.

B. General Standards

In all areas of special flood hazard, the following provisions are required:

- i. All new construction, reconstruction or repairs made to a repetitive loss structure, and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
- ii. New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage below the FPG.
- iii. New construction and substantial improvements must incorporate methods and practices that minimize flood damage.
- iv. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be located at/above the FPG for residential structures. Electrical, heating, ventilation, plumbing, air conditioning equipment, 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 for non-residential structures. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other waterproofed service facilities may be located below the FPG.
- v. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- vi. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- vii. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- viii. Any alteration, repair, reconstruction, or improvements to a structure that is in compliance with the provisions of this ordinance shall meet the requirements of "new construction" as contained in this ordinance.
- ix. Base flood elevation data shall be provided for subdivision proposals and other proposed development (including manufactured home parks and subdivisions), which is greater than fifty (50) lots or five (5) acres, whichever is less.
- x. Where an existing or proposed structure or other development is affected by multiple flood zones, by multiple base flood elevations, or both, the development activity must comply with the provisions of this ordinance applicable to the most restrictive flood zone and the highest base flood elevation affecting any part of the existing or proposed structure; or for other developments, affecting any part of the area of the development.

- xi. Fill projects that do not involve a structure must be protected against erosion and scour during flooding by vegetative cover, riprap, or bulk heading. If vegetative cover is used, the slopes shall be no steeper than 3' horizontal to 1' vertical.
- xii. Non-conversion agreements shall be required for all new or substantially improved elevated structures with an enclosure beneath the elevated floor, accessory structures, and open-sided shelters.
- xiii. Construction of new solid waste disposal facilities, hazard waste management facilities, salvage yards, and chemical storage facilities shall not be permitted in areas of special flood hazard.

C. Specific Standards

In all areas of special flood hazard where base flood elevation data or flood depths have been provided, as set forth in **subsection V12.4.2.B**, the following provisions are required:

- i. **Building Protection Requirement.** In addition to the general standards described in **subsection V12.4.4.B**, 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:

- 1. Construction or placement of a residential structure.
- 2. Construction or placement of a non-residential structure.
- 3. Addition or improvement made to an existing structure 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). An addition and/or improvement project that is continuous in scope or time is considered as one project for permitting purposes.
- 4. 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 (the costs of any proposed additions or improvements beyond restoring the damaged structure to its before damaged condition must be included in the cost).
- 5. Installing a manufactured home on a new site or a new manufactured home on an existing site.
- 6. Installing a travel trailer or recreational vehicle on a site for more than 180 days.
- 7. Reconstruction or repairs made to a repetitive loss structure.
- 8. Addition or improvement made to any existing structure with a previous repair, addition or improvement constructed since the community's first floodplain ordinance.

ii. Residential Construction.

- 1. New construction or substantial improvement of any residential structures shall meet provisions described in **subsection V12.4.4.A** and applicable general standards described in **subsection V12.4.4.B**.
- 2. In Zone A and Zone AE, new construction or substantial improvement of any residential structure shall have the lowest floor, including basement, at 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 **subsection V12.4.4.C.ii.3**. Should fill be used to elevate a structure, the standards of **subsection V12.4.4.C.ii.4** must be met.

3. Fully enclosed areas formed by foundation and other exterior walls below the flood protection grade shall meet the following requirement:
 - a) Designed to preclude finished living space and designed to allow for the automatic entry and exit of floodwaters to equalize hydrostatic flood forces on exterior walls. Flood openings must be designed and installed in compliance with criteria set out in FEMA Technical Bulletin 1. Engineered flood openings must be designed and certified by a registered design professional (requires supporting engineering certification or make/model specific ICC-ES Report), or meet the following criteria for non-engineered flood openings:
 - (1) Provide a minimum of two openings on different sides of an enclosure. If there are multiple enclosed areas, each is required to meet the requirements for enclosures, including the requirement for flood openings in exterior walls (having a total net area of not less than one square inch for every one square foot of enclosed area).
 - (2) The bottom of all openings shall be no more than one foot above the higher of the final interior grade (or floor) and the finished exterior grade immediately under each opening.
 - (3) If the floor of the enclosure is below the BFE, the openings must be located wholly below the BFE.
 - (4) If the floor of the enclosure is at or above the BFE, but below the FPG, the openings must be located wholly below the FPG.
 - (5) Doors and windows do not qualify as openings.
 - (6) Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
 - (7) 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.
 - b) The floor of such enclosed area must be at or above grade on at least one side.
4. A residential structure may be constructed on a fill in accordance with the following:
 - a) Fill shall be placed in layers no greater than 1 foot deep before compacting to 95% of the maximum density obtainable with either the Standard or Modified Proctor Test method. The results of the test showing compliance shall be retained in the permit file.
 - b) Fill shall extend ten feet beyond the foundation of the structure before sloping below the BFE.
 - c) Fill shall be protected against erosion and scour during flooding by vegetative cover, riprap, or bulk heading. If vegetative cover is used, the slopes shall be no steeper than 3' horizontal to 1' vertical.
 - d) Fill shall not adversely affect the flow of surface drainage from or onto neighboring properties.
 - e) Fill shall be composed of clean granular or earthen material.
5. A residential structure may be constructed using a stem wall foundation (also called chain wall, raised-slab-on-grade, and slab-on-stem-wall-with-fill). Any backfilled stem wall foundation (also called chain wall, raised-slab-on-grade, and slab-on-stem-wall-with-fill) must be backfilled with compacted structural fill,

concrete, or gravel that supports the floor slab. No flood openings are required for this type of construction.

iii. Non-Residential Construction.

1. New construction or substantial improvement of any non-residential structures (excludes accessory structures) shall meet provisions described in subsection V12.4.4.A and applicable general standards described in subsection V12.4.4.B.
2. In Zone A and Zone AE, new construction, or substantial improvement of any commercial, industrial, or non-residential structure (excludes accessory structures) shall either have the lowest floor, including basement, elevated to or above the FPG 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 subsection V12.4.4.C.iii.3. Should fill be used to elevate a structure, the standards of subsection V12.4.4.C.iii.4 must be met.
3. Fully enclosed areas formed by foundation and other exterior walls below the flood protection grade shall meet the following requirement:
 - a) Designed to preclude finished living space and designed to allow for the automatic entry and exit of floodwaters to equalize hydrostatic flood forces on exterior walls. Flood openings must be designed and installed in compliance with criteria set out in FEMA Technical Bulletin 1. Engineered flood openings must be designed and certified by a registered design professional (requires supporting engineering certification or make/model specific ICC-ES Report), or meet the following criteria for non-engineered flood openings:
 - (1) Provide a minimum of two openings on different sides of an enclosure. If more than one enclosed area is present, each must have openings on exterior walls (having a total net area of not less than one square inch for every one square foot of enclosed area).
 - (2) The bottom of all openings shall be no more than one foot above the higher of the final interior grade (or floor) and the finished exterior grade immediately under each opening.
 - (3) If the floor of the enclosure is below the BFE, the openings must be located wholly below the BFE.
 - (4) If the floor of the enclosure is at or above the BFE, but below the FPG, the openings must be located wholly below the FPG.
 - (5) Doors and windows do not qualify as openings.
 - (6) Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
 - (7) 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.
 - b) The floor of such enclosed area must be at or above grade on at least one side.
4. A nonresidential structure may be constructed on fill in accordance with the following:

- a) Shall be placed in layers no greater than 1 foot deep before compacting to 95% of the maximum density obtainable with either the Standard or Modified Proctor Test method. The results of the test showing compliance shall be retained in the permit file.
 - b) Shall extend ten feet beyond the foundation of the structure before sloping below the BFE.
 - c) Shall be protected against erosion and scour during flooding by vegetative cover, riprap, or bulk heading. If vegetative cover is used, the slopes shall be no steeper than 3' horizontal to 1' vertical.
 - d) Shall not adversely affect the flow of surface drainage from or onto neighboring properties.
 - e) Shall be composed of clean granular or earthen material.
5. A nonresidential structure may be floodproofed 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 Floodplain Administrator.
 - b) Floodproofing measures shall be operable without human intervention and without an outside source of electricity.
6. A nonresidential structure may be constructed using a stem wall foundation (also called chain wall, raised-slab-on-grade, and slab-on-stem-wall-with-fill). Any backfilled stem wall foundation must be backfilled with compacted structural fill, concrete, or gravel that supports the floor slab. No flood openings are required for this type of construction.

iv. Manufactured Homes and Recreational Vehicles.

1. These requirements apply to all manufactured homes to be placed on a site in the SFHA:
- a) The manufactured home shall be elevated on a permanent foundation such that the 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.
 - b) Fully enclosed areas formed by foundation and other exterior walls below the FPG 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 subsection **V124.4.C.i.3.**
 - c) Flexible skirting and rigid skirting not attached to the frame or foundation of a manufactured home are not required to have openings.
2. Recreational vehicles placed on a site in the SFHA shall either:
- a) Be on site for less than 180 days and be fully licensed and ready for use on a public highway (defined as being on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions), or
 - b) Meet the requirements for "manufactured homes" as stated earlier in this section.

v. Accessory Structures

Within SFHAs, new construction or placement of an accessory structure must meet the following standards:

1. Shall have a floor area of 400 square feet or less.
2. Use shall be limited to parking of vehicles and limited storage.
3. Shall not be used for human habitation.
4. Shall be constructed of flood resistant materials.
5. Shall be constructed and placed on the lot to offer the minimum resistance to the flow of floodwaters.
6. Shall be firmly anchored to prevent flotation.
7. Service facilities such as electrical and heating equipment shall be elevated or floodproofed to or above the FPG.
8. Shall be 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 **subsection V12.4.4.C.iii.3.**
9. Shall not have subsequent additions or improvements that would preclude the structure from its continued designation as an accessory structure.

vi. Free-standing Pavilions, Gazebos, Decks, Carports, and Similar Development.

Within SFHAs, new construction or placement of free-standing pavilions, gazebos, decks, carports, and similar development must meet the following standards:

1. Shall have open sides (having not more than one rigid wall).
2. Shall be anchored to prevent flotation or lateral movement.
3. Shall be constructed of flood resistant materials below the FPG.
4. Any electrical, heating, plumbing and other service facilities shall be located at/above the FPG.
5. Shall not have subsequent additions or improvements that would preclude the development from its continued designation as a free-standing pavilion, gazebo, carport, or similar open-sided development.

vii. Above Ground Gas or Liquid Storage Tanks.

Within SFHAs, all newly placed aboveground gas or liquid storage tanks shall meet the requirements for a non-residential structure as required in **subsection V12.4.4.C.iii.3.**

D. Standards for Subdivision and Other New Developments

- i. All subdivision proposals and all other proposed new development shall be consistent with the need to minimize flood damage.
- ii. All subdivision proposals and all other proposed new development shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
- iii. All subdivision proposals and all other proposed new development shall have adequate drainage provided to reduce exposure to flood hazards.
- iv. In all areas of special flood hazard where base flood elevation data are not available, the applicant shall provide a hydrologic and hydraulic engineering analysis that generates base flood elevations for all subdivision

proposals and all other proposed new development (including manufactured home parks and subdivisions), which is greater than fifty (50) lots or five (5) acres, whichever is less.

v. All subdivision proposals shall minimize development in the SFHA and/or limit density of development permitted in the SFHA.

vi. All subdivision proposals shall ensure safe access into/out of SFHA for pedestrians and vehicles (especially emergency responders).

vii. Streets, blocks lots, parks and other public grounds shall be located and laid out in such a manner as to preserve and utilize natural streams and channels. Wherever possible the floodplains shall be included within parks or other public grounds.

E. Standards for Critical Facilities

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.

12.4.5 Legal Status Provisions

A. Severability

If any section, subsection, sentence, clause, or phrase of these regulations is, for any reason, declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the regulations as a whole, or any part thereof, other than the part so declared.

B. Effective Date

This ordinance shall be in full force and effect upon adoption.

Passed by the Town Council of Lapel, Indiana on the _____ day of _____ (month), (year).

The Town Council of Lapel

The Town of Lapel, Indiana

[type name of individual approving]

[type name of individual approving]

LAPEL'S PROPOSED LANGUAGE – **red-lined version**

[type name of individual approving]

Attest:

[type name of individual attesting]

PROPOSED ACTIONS: Revise the existing language using IDNR's updated suggested language.

- Existing Terms in BLACK
- Revision in RED

V 1.6.10 Floodplain Standards Variances

- A) In addition to reviewing a petition for a variance of development standards as regulated by Section V1.6.9 of this UDO, a review of variance from the Flood Damage Prevention Ordinance shall also follow standards in this Section V1.6.10.
- B) 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 this ordinance. Any person aggrieved by the decision of the board may appeal such decision to the Madison County Circuit Court.
- C) A written report addressing each of the factors in subsection **V1.6.9.D** and findings in subsection **V1.6.9.E** shall be submitted with the application for a variance.
- D) In considering variances of development standards from the Flood Damage Prevention Ordinance applications, the Board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and:
- i) The danger to life and property due to flooding or erosion damage.
 - ii) The danger that materials may be swept onto other lands to the injury of others.
 - iii) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
 - iv) The importance of the services provided by the proposed facility to the community.
 - v) The necessity to the facility of a waterfront location, where applicable.
 - vi) The compatibility of the proposed use with existing and anticipated development.
 - vii) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage.
 - viii) The safety of access to the property in times of flood for ordinary and emergency vehicles.
 - ix) The expected height, velocity, duration, rate of rise, and sediment transport of the floodwaters at the site.
 - x) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- A)E) The Board may grant a variance from ~~Flood Damage Prevention Ordinance~~ **Flood Hazard Area Standards** of this Ordinance only if, after a public hearing, it makes findings of facts in writing, that:
- i) there exists a good and sufficient cause for the requested variance;
 - ii) ~~the strict application of the terms of this Ordinance will constitute an exceptional hardship to the applicant; and~~ **A determination that failure to grant the variance would result in exceptional hardship as defined in V 1.10.5 Glossary of Defined Terms.**
 - iii) the granting of the requested variance will not increase flood heights, create additional threats to public safety, cause additional public expense, create nuisances, cause fraud or victimization of the public, or conflict with existing laws or ordinances.
- B) ~~The Board of Zoning Appeals may only issue a variance to the terms and provisions of the Flood Hazard Area Standards of this Ordinance subject to the following conditions:~~

- ~~G)F)~~ No variance for a residential use within a floodway subject to subsections V12.4.4.A.i, V12.4.4.A.iii.1, and V12.4.4.A.iv of this the Floodway Standards of this Code may be granted.;
- ~~D)G)~~ Any variance granted in a floodway subject to subsections V12.4.4.A.i, V12.4.4.A.iii.1, and V12.4.4.A.iv will require a permit from the Indiana Department of Natural Resources. Variances shall not be issued within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result. ~~this Ordinance will require a permit from the Indiana Department of Natural Resources;~~
- ~~E)H)~~ Variances to the Provisions for Flood Hazard Reduction of V12.4.4 Building Protection Standards of the Floodway Standards of this Code 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.;
- ~~I)~~ Variances may be granted 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 a “historic structure” and the variance is the minimum to preserve the historic character and design of the structure.
- ~~F)~~ Variances may be granted for the reconstruction or restoration of any structure individually listed on the Register of Historic Places or the Indiana State Survey of Historic Architectural, Archaeological and Cultural Sites, Structures, Districts, and Objects;
- ~~J)~~ Variances may be granted for new construction, substantial improvements, and other development necessary for the conduct of a functionally dependent use.
- ~~K)~~ Variances shall only be granted upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- ~~L)~~ Any applicant to whom a variance is granted shall be given written notice specifying the difference between the Flood Protection Grade 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.
- ~~G)~~ All variances shall give the minimum relief necessary and be such that the maximum practical flood protection will be given to the proposed construction; and
- ~~M)~~ The Board of Zoning Appeals shall issue a written notice to the recipient of a variance or exception that the proposed construction will be subject to increased risks to life and property and could require payment of increased flood insurance premiums. Upon consideration of the factors listed above and the purposes of this Code, the Board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this Code.
- ~~H)~~ The Board may impose such reasonable conditions upon its approval as it deems necessary to find that the criteria for approval in **Section V1.6.10 (A) and (B)** above will be served.
- ~~I)N)~~ The Board may require the owner of the property to make written commitments concerning the use or development of the property and have such commitments recorded in the Recorder’s Office.
- ~~O)~~ A floodplain standards variance granted by the Board and executed in a timely manner as described in this section shall run with the parcel until such time as: (a) the property conforms with the Ordinance as written, or (b) the variance is terminated.
- ~~J)P)~~ 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.

EXHIBIT E

LAPEL'S PROPOSED LANGUAGE – red-lined version

PROPOSED ACTIONS

Revise the existing language using updated language, terms and references to the new proposed flood ordinance location within the UDO.

- Existing language in BLACK
- Revision in RED

V 1.5.6 Nonconforming Uses of Structures, Land, or Structures and Land in Combination

V 1.5.6.I. Any use which is legal nonconforming due to its presence in ~~thea Regulatory Flood 100-year floodplain~~ may be altered, enlarged, or extended on a one-time only basis provided that the new construction conforms with Section 12.4 Flood Damage Prevention Ordinance ~~the Flood Hazard Area Standards section~~ included in this Unified Development Code and does not increase the value of the structure or use (excluding the value of the land) by more than 50% of its pre-improvement market value.

V 12.3.10, Flood Hazard Area Construction

The Building Inspector shall review all applications for Improvement Location Permits for new construction, additions to existing construction, or other development to ascertain as to whether the proposed construction, addition or development lies in a flood hazard area. The determination and actions of the Building Inspector regarding permit applications for construction in a flood hazard area shall conform to Section 12.4 Flood Damage Prevention Ordinance ~~the Flood Hazard Standards~~ in the Town of Lapel Zoning Code.

V 12.1.6 Major Subdivision Principles & Design Standards

General Drainage Standards

- D) **Floodway Development:** The Plan Commission shall not approve any proposed plat which includes lots platted with buildable areas located in any Regulatory Flood 100-year floodway. The Regulatory Flood 100-year floodway may be included as part of the lots, however, the required buildable area for each lot shall be provided outside of the floodway. All such floodways shall be placed within drainage easements.
- E) **Loss of Storage Capacity:** Loss of the Regulatory Flood 100-year floodplain water storage capacity due to building or filling shall not be allowed. No primary structures are permitted to be constructed in the 100-year floodway fringe unless explicitly permitted by the Lapel Zoning Ordinance. No building or filling is allowed at all in the 100-year floodway.

Flood Hazard Area Standards

A) Subdivisions shall adhere to the standards in the subsection 12.4.4.D.

- A)B) Plans and materials for all subdivisions located within the 100-year floodplain Regulatory Flood shall be forwarded, by the developer, to the Indiana Department of Natural Resources for review and comment. The Plan Commission shall require appropriate changes and modifications to the subdivision in order to assure that:
- it is consistent with the need to minimize flood damages;
 - all public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage;
 - adequate drainage is provided so as to reduce exposure to flood hazards;

LAPEL'S PROPOSED LANGUAGE – red-lined version

iv) onsite waste disposal systems, if provided, will be so located and designed to avoid impairment of them or contamination from them during the occurrence of the regulatory flood.

B)C) Subdividers shall indicate the Regulatory Flood ~~100-year flood~~ elevation and, the boundaries of the Regulatory Flood ~~100-year floodplain, and the boundaries of the 100-year floodway~~ on all subdivision Preliminary and Final Plats containing any lands within Regulatory Flood. ~~a 100-year floodplain~~.

G)D) All developers of subdivisions, all or a portion of which is located within the Special Flood Hazard Area (SFHA) identified on the community's National Flood Insurance Program (NFIP) Map shall develop an evacuation plan for those lots located in the SFHA and file it with the Plan Commission and have it filed with and approved by the appropriate community emergency management authorities.

FLOOD DAMAGE PREVENTION ORDINANCE

ARTICLE 1. STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE, AND METHODS

- Section A. Statutory Authorization
- Section B. Findings of Fact
- Section C. Statement of Purpose
- Section D. Methods of Reducing Flood Loss

ARTICLE 2. Definitions

ARTICLE 3. General Provisions

- Section A. Lands to Which This Ordinance Applies
- Section B. Basis for Establishing the Areas of Special Flood Hazard
- Section C. Establishment of Floodplain Development Permit
- Section D. Compliance
- Section E. Abrogation and Greater Restrictions
- Section F. Discrepancy between Mapped Floodplain and Actual Ground Elevations
- Section G. Interpretation
- Section H. Warning and Disclaimer of Liability
- Section I. Penalties for Violation

ARTICLE 4. ADMINISTRATION

- Section A. Designation of Administrator
- Section B. Floodplain Development Permit and Certification Requirements
- Section C. Duties and Responsibilities of the Administrator
- Section D. Map Maintenance Activities
- Section E. Variance Procedures

ARTICLE 5. PROVISIONS FOR FLOOD HAZARD REDUCTION

- Section A. Floodplain Status Standards
 - 1. Standards for Identified Floodways
 - 2. Standards for Identified Fringe
 - 3. Standards for SFHAs without Established Base Flood Elevation and/or Floodways/Fringe
 - 4. Standards for SFHAs not Identified on a Map
- Section B. General Standards
- Section C. Specific Standards
 - 1. Building Protection Requirement
 - 2. Residential Construction (excluding manufactured homes)
 - 3. Non-Residential Construction
 - 4. Manufactured Homes and Recreational Vehicles
 - 5. Accessory Structures
 - 6. Pavilions, Gazebos, Decks, Carports, and Similar Development
 - 7. Above Ground Gas or Liquid Storage Tanks
- Section D. Standards for Subdivision Proposals
- Section E. Standards for Critical Facilities*

ARTICLE 6. LEGAL STATUS PROVISIONS

- Section A. Severability
- Section B. Effective Date

FLOOD DAMAGE PREVENTION ORDINANCE

Article 1. Statutory Authorization, Findings of Fact, Purpose, and Methods

Section A. Statutory Authorization

The Indiana Legislature has in IC 36-1-4-11 granted the power to local government units to control land use within their jurisdictions. Therefore, the **Town Council of the Town of Lapel, Indiana** does hereby adopt the following floodplain management regulations.

Section B. Findings of Fact

The flood hazard areas of **the Town of Lapel** are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare. Additionally, structures that are inadequately elevated, floodproofed, or otherwise protected from flood damage also contribute to the flood loss. In order to minimize the threat of such damages and to achieve the purposes hereinafter set forth, these regulations are adopted.

Section C. Statement of Purpose

It is the purpose of this ordinance to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- (1) Protect human life and health.
- (2) Minimize expenditure of public money for costly flood control projects.
- (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public.
- (4) Minimize prolonged business interruptions.
- (5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, and sewer lines, streets, and bridges located in floodplains.
- (6) Help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight area.
- (7) Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.
- (8) Minimize the impact of development on adjacent properties within and near flood prone areas.
- (9) Ensure that the flood storage and conveyance functions of the floodplain are maintained.
- (10) Minimize the impact of development on the natural, beneficial values of the floodplain.
- (11) Prevent floodplain uses that are either hazardous or environmentally incompatible.
- (12) Meet community participation requirements of the National Flood Insurance Program.

Section D. Methods of Reducing Flood Loss

In order to accomplish its purposes, these regulations include methods and provisions for:

- (1) Restricting or prohibiting uses which are dangerous to health, safety, and property due to water hazards, or which result in damaging increases in flood heights or velocities.
- (2) Requiring that uses vulnerable to floods, including facilities, which serve such uses, be protected against flood damage at the time of initial construction.
- (3) Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters.
- (4) Controlling filling, grading, dredging, excavating, and other development which may increase flood damage.
- (5) Preventing or regulating the construction of flood barriers, which will unnaturally divert floodwaters, or which may increase flood hazards in other areas.

Article 2. Definitions

Unless specifically defined below, words or phrases used in these regulations shall be interpreted so as to give them meaning they have in common usage and to give these regulations the most reasonable application.

Accessory Structure means a structure with a floor area of 400 square feet or less that is on the same parcel of property as a principal structure and the use of which is incidental to the use of the principal structure; an accessory structure specifically excludes structures used for human habitation.

- (1) Accessory structures are considered walled and roofed where the structure includes at least two outside rigid walls and a fully secured roof.
- (2) Examples of accessory structures include but are not necessarily limited to two-car detached garages (or smaller), carports, storage and tool sheds, and small boathouses.
- (3) The following may have uses that are incidental or accessory to the principal structure on a parcel but are generally not considered to be accessory structures by the NFIP:
 - a. Structures in which any portion is used for human habitation, whether as a permanent residence or as temporary or seasonal living quarters, such as a detached garage or carriage house that includes an apartment or guest quarters, or a detached guest house on the same parcel as a principal residence.
 - b. Structures used by the public, such as a place of employment or entertainment.
 - c. Development that does not meet the NFIP definition of a structure for floodplain management purposes. Examples include, but are not necessarily limited to, a gazebo, pavilion, picnic shelter, or carport that is open on all sides (roofed but not walled).

Addition (to an existing structure) means any walled and roofed expansion to the perimeter of a structure in which the addition is connected by a common load-bearing wall other than a firewall. Any walled and roofed addition, which is connected by a firewall or is separated by independent perimeter load-bearing walls, is new construction.

Alteration of a watercourse means a dam, impoundment, channel relocation, change in channel alignment, channelization, or change in cross-sectional area of the channel or the channel capacity, or any other modification which may alter, impede, retard, or change the direction and/or velocity of the flow of water during conditions of the base flood.

Appeal means a request for a review of the floodplain administrator's interpretation of any provision of this ordinance, a request for a variance, or a challenge of a board decision.

Area of special flood hazard is the land within a community subject to a one percent (1%) or greater chance of being flooded in any given year.

Base flood means the flood having a one percent (1%) chance of being equaled or exceeded in any given year. The base flood may also be referred to as the 1% annual chance flood or one hundred (100) year flood.

Base Flood Elevation (BFE) means the water surface elevation of the base flood in relation to a specified datum, usually the North American Vertical Datum of 1988.

Basement means that portion of a structure having its floor sub-grade (below ground level) on all sides.

Best Available Flood Layer (BAFL) means floodplain studies and any corresponding floodplain maps prepared and/or approved by the Indiana Department of Natural Resources which provide base flood elevation information, floodplain limits, and/or floodway delineations for flood hazards identified by approximate studies on the currently effective FIRM (Zone A) and/or for waterways where the flood hazard is not identified on available floodplain mapping.

Building – See "Structure."

Community means a political entity that has the authority to adopt and enforce floodplain ordinances for the areas within its jurisdiction.

Critical facility means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire, and emergency response installations, and installations which produce, use, or store hazardous materials or hazardous waste.

Development means, for floodplain management purposes, any man-made change to improved or unimproved real estate including but not limited to:

- (1) construction, reconstruction, or placement of a structure or any addition to a structure;
- (2) installing a manufactured home on a site, preparing a site for a manufactured home, or installing a recreational vehicle on a site for more than 180 days;
- (3) installing utilities, erection of walls and fences, construction of roads, or similar projects;
- (4) construction of flood control structures such as levees, dikes, dams, channel improvements, etc.;
- (5) mining, dredging, filling, grading, excavation, or drilling operations;
- (6) construction and/or reconstruction of boat lifts, docks, piers, and seawalls;
- (7) construction and/or reconstruction of bridges or culverts;
- (8) storage of materials; or
- (9) any other activity that might change the direction, height, or velocity of flood or surface waters.

"Development" does not include activities such as the maintenance of existing structures and facilities such as painting; re-roofing; resurfacing roads; or, gardening, plowing, and similar agricultural practices that do not involve filling, grading, excavation, or the construction of permanent structures.

Elevation Certificate means a FEMA form that is routinely reviewed and approved by the White House Office of Management and Budget under the Paperwork Reduction Act, that is encouraged to be used to collect certified elevation information.

Enclosed area (enclosure) is an area of a structure enclosed by walls on all sides.

Enclosure below the lowest floor. See “Lowest Floor” and “Enclosed Area.”

Existing 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 before the effective date of the community’s first floodplain ordinance.

Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

FEMA means the Federal Emergency Management Agency.

Fill for floodplain management purposes, means any material deposited or placed which has the effect of raising the level of the ground surface above the natural grade elevation. Fill material includes but is not limited to consolidated material such as concrete and brick and unconsolidated material such as soil, sand, gravel, and stone.

Flood or Flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (1) The overflow of inland or tidal waters.
- (2) The unusual and rapid accumulation or runoff of surface waters from any source.
- (3) Mudslides (i.e., mudflows) which are proximately caused by flooding and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

Flood or flooding also includes the collapse or subsidence of land along the shore of a lake or similar body of water as a result of erosion or undermining caused by waves or current of water exceeding anticipated cyclical levels that result in a flood as defined above.

Flood hazard area means areas subject to the one percent (1%) annual chance flood. (See “Special Flood Hazard Area”)

Flood Insurance Rate Map (FIRM) means an official map of a community, on which FEMA has delineated both the areas of special flood hazard and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

Flood Insurance Study (FIS) means the official hydraulic and hydrologic report provided by FEMA. The report contains flood profiles, as well as the FIRM and the water surface elevation of the base flood.

Flood prone area means any land area acknowledged by a community as being susceptible to inundation by water from any source. (See “Floodplain”)

Flood Protection Grade (FPG) is the BFE plus two (2) feet at any given location in the SFHA.

Floodplain or flood prone area means any land area susceptible to being inundated by water from any source. (See “Flood”)

Floodplain management means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

Floodplain management regulations means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a floodplain ordinance, grading ordinance and erosion control ordinance), and other applications of police power which control development in flood-prone areas. The term describes such state or local regulations in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

Floodproofing (dry floodproofing) is a method of protecting a structure that ensures that the structure, together with attendant utilities and sanitary facilities, is watertight to the floodproofed design elevation with walls that are substantially impermeable to the passage of water. All structural components of these walls are capable of resisting hydrostatic and hydrodynamic flood forces, including the effects of buoyancy, and anticipated debris impact forces.

Floodproofing certificate is a form used to certify compliance for non-residential structures as an alternative to elevating structures to or above the FPG.

Floodway is the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulative increasing the water surface elevation more than a designated height.

Freeboard means a factor of safety, usually expressed in feet above the BFE, which is applied for the purposes of floodplain management. It is used to compensate for the many unknown factors that could contribute to flood heights greater than those calculated for the base flood.

Fringe or Flood Fringe is the portion of the floodplain lying outside the floodway.

Functionally dependent use means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

Hardship (as related to variances of this ordinance) means the exceptional hardship that would result from a failure to grant the requested variance. The **Town** requires that the variance is exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is NOT exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

Highest adjacent grade means the highest natural elevation of the ground surface, prior to the start of construction, next to the proposed walls of a structure.

Historic structure means any structure that is:

- (1) listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (2) certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

- (3) individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- (4) individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified by (a) an approved state program as determined by the Secretary of Interior, or (b) directly by the Secretary of Interior in states without approved programs.

Hydrologic and hydraulic engineering analysis means analyses performed by a professional engineer licensed by the State of Indiana, in accordance with standard engineering practices that are accepted by the Indiana Department of Natural Resources and FEMA, used to determine the base flood, other frequency floods, flood elevations, floodway information and boundaries, and flood profiles.

International Code Council-Evaluation Service (ICC-ES) Report means a document that presents the findings, conclusions, and recommendations from a particular evaluation. ICC-ES reports provide information about what code requirements or acceptance criteria were used to evaluate a product, and how the product should be identified, installed.

Letter of Final Determination (LFD) means a letter issued by FEMA during the mapping update process which establishes final elevations and provides the new flood map and flood study to the community. The LFD initiates the six-month adoption period. The community must adopt or amend its floodplain management regulations during this six-month period unless the community has previously incorporated an automatic adoption clause.

Letter of Map Change (LOMC) is a general term used to refer to the several types of revisions and amendments to FEMA maps that can be accomplished by letter. They are broken down into the following categories:

- (1) **Conditional Letter of Map Revision (CLOMR)** means FEMA's comment on a proposed project that would, upon construction, result in modification of the SFHA through the placement of fill outside the existing regulatory floodway.
- (2) **Conditional Letter of Map Revision Based on Fill (CLOMR-F)** means a letter from FEMA stating that a proposed structure that will be elevated by fill would not be inundated by the base flood.
- (3) **Letter of Map Amendment (LOMA)** means an amendment by letter to the currently effective FEMA map that establishes that a building or area of land is not located in a SFHA through the submittal of property specific elevation data. A LOMA is only issued by FEMA.
- (4) **Letter of Map Amendment Out as Shown (LOMA-OAS)** means an official determination by FEMA that states the property or building is correctly shown outside the SFHA as shown on an effective NFIP map. Therefore, the mandatory flood insurance requirement does not apply. An out-as-shown determination does not require elevations.
- (5) **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) **Letter of Map Revision Based on Fill (LOMR-F)** means FEMA's modification of the SFHA shown on the FIRM based on the placement of fill outside the existing regulatory floodway.

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.

Lowest floor means, for floodplain management purposes, the lowest elevation described among the following:

- (1) The lowest floor of a building.
- (2) The basement floor.

- (3) The garage floor if the garage is connected to the building.
- (4) The first floor of a structure elevated on pilings or pillars.
- (5) 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 floodwaters. Designs for meeting the flood opening requirement must either be certified by a registered professional engineer or architect or meet or exceed the following criteria:
 - a. The walls are designed to automatically equalize the hydrostatic flood forces on the walls by allowing for the entry and exit of floodwaters.
 - b. At least two (2) openings are designed and maintained for the entry and exit of floodwater; and these openings provide a total net area of at least one (1) square inch for every one (1) 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. Doorways and windows do not qualify as openings.
- (6) The first floor of a building elevated on pilings or columns in a coastal high hazard area (as that term is defined in 44 CFR 59.1), as long as it meets the requirements of 44 CFR 60.3.

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."

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.

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 twofold: to protect people and structures, and to minimize the cost of disaster response and recovery.

Natural grade for floodplain management purposes means the elevation of the undisturbed natural surface of the ground. Fill placed prior to the date of the initial identification of the flood hazard on a FEMA map is also considered natural grade.

New construction for floodplain management purposes means any structure for which the "start of construction" commenced on or after the effective date of a floodplain management regulations adopted by a community and includes any subsequent improvements to such structures.

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.

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.

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.

One-percent annual chance flood is the flood that has a one percent (1%) chance of being equaled or exceeded in any given year. See “Regulatory Flood”.

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.

Prefabricated Building is a building that is manufactured and constructed using prefabrication. It consists of factory-made components or units that are transported and assembled on-site to form the complete building.

Principally above ground means that at least 51 percent of the actual cash value of the structure, less land value, is above ground.

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 temporary living quarters for recreational camping, travel, or seasonal use.

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, B** of this ordinance. The "Regulatory Flood" is also known by the term "Base Flood", “One-Percent Annual Chance Flood”, and “100-Year Flood”.

***Repetitive loss** means flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equaled or exceeded 25% of the market value of the structure before the damage occurred.*

Riverine means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

***Solid waste disposal facility** means any facility involved in the storage or disposal of non-liquid, non-soluble materials ranging from municipal garbage to industrial wastes that contain complex and sometimes hazardous substances. Solid waste also includes sewage sludge, agricultural refuse, demolition wastes, mining wastes, and liquids and gases stored in containers.*

Special Flood Hazard Area (SFHA), synonymous with “areas of special flood hazard” and floodplain, means those lands within the jurisdiction of the **Town** subject to a one percent (1%) or greater chance of flooding in any given year. Special flood hazard areas are designated by the Federal Emergency Management Agency on Flood Insurance Rate Maps, Flood Insurance Studies, Flood Boundary and Floodway Maps and Flood Hazard Boundary Maps as Zones A, AE, AH, AO, A1-30, A99, or VE. The SFHA includes areas that are flood prone and designated from other federal, state or local sources of data including but not limited to best available flood layer maps provided by or approved by the Indiana Department of Natural Resources, historical flood information reflecting high water marks, previous flood inundation areas, and flood prone soils associated with a watercourse.

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 either the first placement of permanent construction of a structure on a site, such as the pouring of a slab or

footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the 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; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a 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.

Structure means a walled and roofed building, including a gas or liquid storage tank, which is principally above ground. The term includes a manufactured home, as well as a prefabricated building. It also includes recreational vehicles installed on a site for more than 180 consecutive days.

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.

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 which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions.

Variance is a grant of relief from the requirements of this ordinance consistent with the variance conditions herein.

Violation means the failure of a structure or other development to be fully compliant with this ordinance.

Walled and roofed means a building that has two or more exterior rigid walls and a fully secured roof and is affixed to a permanent site.

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.

Article 3. General Provisions

Section A. Lands to Which This Ordinance Applies

This ordinance shall apply to all areas of special flood hazard (SFHAs) within the jurisdiction of **the Town of Lapel, Indiana** as identified in **Article 3, Section B**, including any additional areas of special flood hazard annexed by **the Town of Lapel, Indiana**.

Section B. Basis for Establishing the Areas of Special Flood Hazard

- (1) The regulatory flood elevation, floodway, and fringe limits for the studied SFHAs within the jurisdiction of **the Town of Lapel**, delineated as an “AE Zone” on the **Madison County, Indiana and Incorporated Areas** Flood Insurance Rate Map dated **June 9, 2014** shall be determined from the one-percent annual chance flood profiles in the Flood Insurance Study of **Madison County, Indiana and Incorporated Areas** and the corresponding Flood Insurance Rate Maps (FIRM) dated **June 9, 2014** as well as any subsequent updates, amendments, or revisions, prepared by the Federal Emergency Management Agency with the most recent date. Should the floodway limits not be delineated on the Flood Insurance Rate Map for a studied SFHA designated as an “AE Zone”, the limits of

the floodway will be according to the best available flood layer as provided by the Indiana Department of Natural Resources.

- (2) The regulatory flood elevation, floodway, and fringe limits for each of the SFHAs within the jurisdiction of **the Town of Lapel**, delineated as an "A Zone" on the **Madison County, Indiana and Incorporated Areas** Flood Insurance Rate Map, dated **June 9, 2014**, as well as any subsequent updates, amendments, or revisions, prepared by the Federal Emergency Management Agency with the most recent date, shall be according to the best available flood layer provided by the Indiana Department of Natural Resources, provided the upstream drainage area from the subject site is greater than one square mile. Whenever a party disagrees with the best available flood layer data, the party needs to replace existing data with better data that meets current engineering standards. To be considered, this data must be submitted to the Indiana Department of Natural Resources for review and subsequently approved.
- (3) 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 available flood layer as provided by the Indiana Department of Natural Resources, provided the upstream drainage area from the subject site is greater than one square mile.
- (4) Upon issuance of a Letter of Final Determination (LFD), any more restrictive data in the new (not yet effective) mapping/study shall be utilized for permitting and construction (development) purposes, replacing all previously effective less restrictive flood hazard data provided by FEMA.

Section C. Establishment of Floodplain Development Permit

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

Section D. Compliance

- (1) No structure shall hereafter be located, extended, converted, or structurally altered within the SFHA without full compliance with the terms of this ordinance and other applicable regulations.
- (2) Where an existing or proposed structure or other development is affected by multiple flood zones, by multiple base flood elevations, or both, the development activity must comply with the provisions of this ordinance applicable to the most restrictive flood zone and the most conservative (highest) base flood elevation affecting any part of the existing or proposed structure; or for other developments, affecting any part of the area of the development.
- (3) No land or stream within the SFHA shall hereafter be altered without full compliance with the terms of this ordinance and other applicable regulations.

Section E. Abrogation and Greater Restrictions

This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

Section F. Discrepancy between Mapped Floodplain and Actual Ground Elevations

- (1) In cases where there is a discrepancy between the mapped floodplain (SFHA) with base flood elevations provided (riverine or lacustrine Zone AE) on the FIRM and the actual ground elevations, the elevation provided on the profiles or table of still water elevations 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 natural grade elevation of the site in question is at or above the base flood elevation and a LOMA or LOMR-FW is obtained, the floodplain regulations will not be applied provided the LOMA or LOMR-FW is not subsequently superseded or invalidated.

Section G. Interpretation

In the interpretation and application of this ordinance all provisions shall be:

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

Section H. Warning and Disclaimer of Liability

The degree of flood protection required by this ordinance is 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, this ordinance does not create any liability on the part of **the Town of Lapel**, the Indiana Department of Natural Resources, or the State of Indiana, for any flood damage that results from reliance on this ordinance, or any administrative decision made lawfully thereunder.

Section I. 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 this ordinance. All violations shall be considered a common nuisance and be treated as such in accordance with the provisions of the Zoning Code for **the Town of Lapel**. All violations shall be punishable by a fine not exceeding \$200.00.

- (1) A separate offense shall be deemed to occur for each day the violation continues to exist.
- (2) The **Town of Lapel** 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 **Town** from taking such other lawful action to prevent or remedy any violations. All costs connected therewith shall accrue to the person or persons responsible.

Article 4. Administration.

Section A. Designation of Administrator

The **Town Council of Lapel** hereby appoints **the Building Inspector** to administer and implement the provisions of this ordinance and is herein referred to as the Floodplain Administrator.

Section B. Floodplain Development Permit and Certification Requirements

An application for a floodplain development permit shall be made to the Floodplain Administrator for all development activities located wholly within, partially within, or in contact with an identified special flood hazard area. Such application shall be made by the owner of the property or his/her authorized agent, herein referred to as the applicant, prior to the actual commencement of such construction on a form furnished for that purpose. Such applications shall include, but not be limited to plans 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(s) in relation to existing roads and streams.
- c. A legal description of the property site.
- d. For the reconstruction, rehabilitation, or improvement of an existing structure, or an addition to an existing building, a detailed quote and description of the total work to be completed including but not limited to interior work, exterior work, and labor as well as a certified valuation of the existing (pre-improved or pre-damaged) structure.
- e. A site development plan showing existing and proposed development locations and existing and proposed land grades.
- f. *A letter from a licensed professional surveyor or engineer noting that an elevation reference benchmark has been established or confirmed for those projects requiring elevations to be met.*
- g. Verification that connection to either a public sewer system or to an approved on-site septic system is available and approved by the respective regulatory agency for proposed structures to be equipped with a restroom, kitchen or other facilities requiring disposal of wastewater.
- h. Plans showing elevation of the top of the planned lowest floor (including basement) of all proposed structures in Zones A, AH, and AE. Elevation should be in NAVD 88.
- i. Plans showing elevation (in NAVD 88) to which any non-residential structure will be floodproofed.
- j. Plans showing location and specifications for flood openings for any proposed structure with enclosed areas below the flood protection grade.
- k. Plans showing materials to be used below the flood protection grade for any proposed structure are flood resistant.
- l. Plans showing how any proposed structure will be anchored to resist flotation or collapse.
- m. Plans showing how any electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities are designed and/or located. Elevation should be in NAVD 88.

- n. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development. A hydrologic and hydraulic engineering analysis is required, and any watercourse changes submitted to DNR for approval. Once DNR approval is obtained, a FEMA Conditional Letter of Map Revision must be obtained prior to construction. (See **Article 4, Section C (8) and Article 4, Section E** for additional information.)
- o. Any additional information, as requested by the Floodplain Administrator, which may be necessary to determine the disposition of a proposed development or structure with respect to the requirements of this ordinance.

(2) Construction Stage.

- a. *Upon establishment of the lowest floor of an elevated structure or structure constructed on fill, it shall be the duty of the applicant to submit to the Floodplain Administrator an elevation certificate for the building under construction. The Floodplain Administrator shall review the elevation certificate. Any deficiencies detected during the review shall be corrected by the applicant before work is allowed to continue. 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.*

(3) Finished Construction.

- a. Upon completion of construction of any structure requiring certification of elevation, an elevation certificate which depicts the “as-built” lowest floor elevation and other applicable elevation data is required to be submitted by the applicant to the Floodplain Administrator. The elevation certificate shall be prepared by or under the direct supervision of a registered land surveyor and certified by the same.
- b. Upon completion of construction of an elevated structure constructed on fill, a fill report is required to be submitted to the Floodplain Administrator to verify the required standards were met, including compaction.
- c. Upon completion of construction of a floodproofing measure, a floodproofing certificate is required to be submitted by the applicant to the Floodplain Administrator. The floodproofing certificate shall be prepared by or under the direct supervision of a registered professional engineer or architect and certified by same.

Section C. Duties and Responsibilities of the Floodplain Administrator

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

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

- (1) Enforce the provisions of this ordinance.
- (2) Evaluate application for permits to develop in special flood hazard areas to assure that the permit requirements of this ordinance have been satisfied.
- (3) Interpret floodplain boundaries and provide flood hazard and flood protection elevation information.
- (4) Issue permits to develop in special flood hazard areas when the provisions of these regulations have been met or refuse to issue the same in the event of noncompliance.

- (5) Advise permittee that additional Federal, State and/or local permits may be required. If specific Federal, State and/or local permits are known, require that copies of such permits be provided and maintained on file with the floodplain development permit.
- (6) Conduct substantial damage determinations to determine whether existing structures, damaged from any source and in special flood hazard areas, must meet the development standards of these regulations.
- (7) For applications to improve structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the Floodplain Administrator shall:
 - a. Verify and document the market value of the pre-damaged or pre-improved structure.
 - b. Compare the cost to perform the improvement; or the cost to repair a damaged building to its pre-damaged condition; or, the combined costs of improvements and repair, if applicable, to the market value of the pre-damaged or pre-improved structure. The cost of all work must be included in the project costs, including work that might otherwise be considered routine maintenance. Items/activities that must be included in the cost shall be in keeping with guidance published by FEMA to ensure compliance with the NFIP and to avoid any conflict with future flood insurance claims of policyholders within the community.
 - c. Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; the determination requires evaluation of previous permits issued for improvements and repairs as specified in the definition of “substantial improvement” for proposed work to repair damage caused by flood, the determination requires evaluation of previous permits issued to repair flood-related damage as specified in the definition of substantial damage.
 - d. Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the applicable general and specific standards in [Article 5](#) of this ordinance are required.
- (8) 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.
- (9) Ensure that construction authorization has been granted by the Indiana Department of Natural Resources for all development projects subject to [Article 5, Section A \(1\), Section A \(3\) \(a\) and Section A \(4\)](#) of this ordinance. Maintain a record of such authorization (either copy of actual permit/authorization or floodplain analysis/regulatory assessment).
- (10) Verify the upstream drainage area of any proposed development site near any watercourse not identified on a FEMA map to determine if [Article 4, Section C \(9\)](#) is applicable.
- (11) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
- (12) Verify and record the actual elevation of the lowest floor (including basement) of all new or substantially improved structures, in accordance with [Article 4, Section B](#).
- (13) Verify and record the actual elevation to which any new or substantially improved structures have been floodproofed in accordance with [Article 4, Section B](#).
- (14) Make on-site inspections of projects in accordance with [Article 4, Section D](#).

- (15) Coordinate with insurance adjusters prior to permitting any proposed work to bring any flood-damaged structure covered by a standard flood insurance policy into compliance (either a substantially damaged structure or a repetitive loss structure) to ensure eligibility for ICC funds.
- (16) Ensure that an approved connection to a public sewer system or an approved on-site septic system is planned for any structures (residential or non-residential) to be equipped with a restroom, kitchen or other facilities requiring disposal of wastewater.
- (17) Provide information, testimony, or other evidence as needed during variance hearings.
- (18) Serve notices of violations, issue stop-work orders, revoke permits and take corrective actions in accordance with **Article 4, Section D.**
- (19) 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 Change (LOMC), copies of DNR permits, letters of authorization, 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 this ordinance in accordance with **Article 4, Section D.**
- (20) Coordinate map maintenance activities and associated FEMA follow-up in accordance with **Article 4, Section E.**
- (21) Utilize and enforce all Letters of Map Change (LOMC) or Physical Map Revisions (PMR) issued by FEMA for the currently effective SFHA maps of the community.
- (22) Request any additional information which may be necessary to determine the disposition of a proposed development or structure with respect to the requirements of this ordinance.

Section D. Administrative Procedures

- (1) Inspections of Work in Progress. As the work pursuant to a permit progresses, the floodplain administrator shall make as many inspections of the work as may be necessary to ensure that the work is being done according to the provisions of the local ordinance and terms of the permit. In exercising this power, the administrator has a right, upon presentation of proper credential, to enter on any premises within the territorial jurisdiction at any reasonable hour for the purposes of inspection or other enforcement action.
- (2) 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 this ordinance 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.
- (3) Revocation of Permits.
 - a. The floodplain administrator may revoke a permit or approval, issued under the provisions of the ordinance, 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 this ordinance.

(4) Floodplain Management Records.

- a. Regardless of any limitation on the period required for retention of public records, records of actions associated with the administration of this ordinance shall be kept on file and maintained under the direction of the Floodplain Administrator in perpetuity. These records include permit applications, plans, certifications, Flood Insurance Rate Maps; Letter of Map Change; records of issuance of permits and denial of permits; determinations of whether proposed work constitutes substantial improvement or repair of substantial damage; required design certifications and documentation of elevations required by this ordinance; notifications to adjacent communities, FEMA, and the state related to alterations of watercourses; assurances that the flood carrying capacity of altered watercourses will be maintained; documentation related to appeals and variances, including justification for issuance or denial; and records of enforcement actions taken pursuant to this ordinance.
- b. These records shall be available for public inspection at [OFFICE NAME AND ADDRESS]. [Click here and type name of office.]

- (5) Periodic Inspection. Once a project is completed, periodic inspections may be conducted by the Floodplain Administrator to ensure compliance. The Floodplain Administrator shall have a right, upon presentation of proper credential, to enter on any premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action.

Section E. Map Maintenance Activities

To meet NFIP minimum requirements to have flood data reviewed and approved by FEMA, and to ensure that the Town of Lapel flood maps, studies and other data identified in Article 3, Section B accurately represent flooding conditions so appropriate floodplain management criteria are based on current data, the following map maintenance activities are identified:

(1) Requirement to Submit New Technical Data

- a. For all development proposals that impact floodway delineations or base flood elevations, the community shall ensure that technical data reflecting such changes be submitted to FEMA within six months of the date such information becomes available. These development proposals include:
 - i. Floodway encroachments that increase or decrease base flood elevations or alter floodway boundaries.
 - ii. Fill sites to be used for the placement of proposed structures where the applicant desires to remove the site from the special flood hazard area.
 - iii. Alteration of watercourses that result in a relocation or elimination of the special flood hazard area, including the placement of culverts; and Subdivision or large-scale development proposals requiring the establishment of base flood elevations.
- b. It is the responsibility of the applicant to have required technical data for a Conditional Letter of Map Revision or Letter of Map Revision and submitted to FEMA. The Indiana Department of Natural Resources will review the submittals as part of a partnership with FEMA. The submittal should be mailed to the Indiana Department of Natural Resources at the address provided on the FEMA form (MT-2) or submitted through the online Letter of Map Change website. Submittal and processing fees for these map revisions shall be the responsibility of the applicant.
- c. The Floodplain Administrator shall require a Conditional Letter of Map Revision prior to the issuance of a floodplain development permit for proposed floodway encroachments that increase the base flood elevation.

- d. Floodplain development permits issued by the Floodplain Administrator shall be conditioned upon the applicant obtaining a Letter of Map Revision from FEMA for any development proposal subject to this section.

(2) Right to Submit New Technical Data

The Floodplain Administrator may request changes to any of the information shown on an effective map that does not impact floodplain or floodway delineations or base flood elevations, such as labeling or planimetric details. Such a submission shall include appropriate supporting documentation made in writing by the **Lapel Town County President of the Town of Lapel** and may be submitted to FEMA at any time.

(3) Annexation / Detachment

Upon occurrence, the Floodplain Administrator shall notify FEMA in writing whenever the boundaries of the **Town of Lapel** have been modified by annexation or the community has assumed authority over an area, or no longer has authority to adopt and enforce floodplain management regulations for a particular area. In order that the **Madison County, Indiana and Incorporated Areas** Flood Insurance Rate Map accurately represent the **Town of Lapel** boundaries, include within such notification a copy of a map of the **Town of Lapel** suitable for reproduction, clearly showing the new corporate limits or the new area for which the **Town of Lapel** has assumed or relinquished floodplain management regulatory authority.

Section F. Variance Procedures

- (1) The **Board of Zoning Appeals** (the board) as established by **Town Council** shall hear and decide appeals and requests for variances from requirements of this ordinance.
- (2) 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 this ordinance. Any person aggrieved by the decision of the board may appeal such decision to the **Madison County Circuit Court**.
- (3) In considering such applications, the board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and:
 - a. the danger to life and property due to flooding or erosion damage.
 - b. the danger that materials may be swept onto other lands to the injury of others.
 - c. the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
 - d. the importance of the services provided by the proposed facility to the community.
 - e. the necessity to the facility of a waterfront location, where applicable.
 - f. the compatibility of the proposed use with existing and anticipated development.
 - g. the availability of alternative locations for the proposed use which are not subject to flooding or erosion damage.
 - h. the safety of access to the property in times of flood for ordinary and emergency vehicles.
 - i. the expected height, velocity, duration, rate of rise, and sediment transport of the floodwaters at the site.

- j. the costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- (4) A written report addressing each of the above factors shall be submitted with the application for a variance.
 - (5) Variances from the provisions of this ordinance shall only be granted when the board can make positive findings of fact based on evidence submitted at the hearing for the following:
 - a. A showing of good and sufficient cause.
 - b. A determination that failure to grant the variance would result in exceptional hardship as defined in **Article 2**.
 - c. 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) No variance for a residential use within a floodway subject to **Article 5, Section A (1), Section A (3) (a) or Section A (4)** of this ordinance may be granted.
 - (7) Any variance granted in a floodway subject to **Article 5, Section A (1), Section A (3) (a) or Section A (4)** will require a permit from the Indiana Department of Natural Resources. Variances shall not be issued within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result.
 - (8) Variances to the Provisions for Flood Hazard Reduction of **Article 5** 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.
 - (9) 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 a “historic structure” and the variance is the minimum to preserve the historic character and design of the structure.
 - (10) Variances may be issued for new construction, substantial improvements, and other development necessary for the conduct of a functionally dependent use.
 - (11) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - (12) Upon consideration of the factors listed above and the purposes of this ordinance, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.
 - (13) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the Flood Protection Grade 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.
 - (14) 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.

Article 5. Provisions for Flood Hazard Reduction

Section A. Floodplain Status Standards

(1) Floodways (Riverine)

Located within SFHAs, established in **Article 3, Section B**, 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. Under the provisions of the Flood Control Act (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 undertaken before the actual start of construction of the structure. General licenses and exemptions to the requirements of the Flood Control Act (IC 14-28-1 and 312 IAC 10) may apply to qualified additions/improvements to existing lawful residential structures, rural bridges, logjam removals, wetland restoration, utility line crossings, outfall projects, creek rock removal, and prospecting.

- a. If the site is in a regulatory floodway as established in **Article 3, Section B**, 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 approval for construction in a floodway, provided the activity does not qualify for a general license or exemption (IC 14-28-1 or 312 IAC 10).
- b. No action shall be taken by the Floodplain Administrator until approval has been granted by the Indiana Department of Natural Resources for construction in the floodway, or evidence provided by an applicant that the development meets specified criteria to qualify for a general license or exemption to the requirement of the Flood Control Act. The Floodplain Development Permit shall meet the provisions contained in this article.
- c. The Floodplain Development Permit cannot be less restrictive than an approval issued for construction in a floodway issued by the Indiana Department of Natural Resources, or the specified criteria used to qualify for a general license or exemption to the Flood Control Act for a specific site/project. However, a community's more restrictive regulations (if any) shall take precedence.
- d. In floodway areas identified on the FIRM, development shall cause no increase in flood levels during the occurrence of the base flood discharge without first obtaining a Conditional Letter of Map Revision and meeting requirements of **Article 4, Section E (1)**. A Conditional Letter of Map Revision cannot be issued for development that would cause an increase in flood levels affecting a structure and such development should not be permitted.
- e. In floodway areas identified by the Indiana Department of Natural Resources through detailed or approximate studies but not yet identified on the effective FIRM as floodway areas, the total cumulative effect of the proposed development, when combined with all other existing and anticipated development, shall not adversely affect the efficiency of, or unduly restrict the capacity of the floodway. This adverse effect is defined as an increase in the elevation of the regulatory flood of at least fifteen-hundredths (0.15) of a foot as determined by comparing the regulatory flood elevation under the project condition to that under the natural or pre-floodway condition as proven with hydraulic analyses.
- f. For all projects involving channel modifications or fill (including levees) the **Town** shall submit the data and request that the Federal Emergency Management Agency revise the regulatory flood data per mapping standard regulations found at 44 CFR § 65.12.

(2) Fringe (Riverine)

If the site is in the fringe (either identified on the FIRM or identified by the Indiana Department of Natural Resources through detailed or approximate studies and not identified on a FIRM), the Floodplain Administrator may issue the local Floodplain Development Permit provided the provisions contained in this **article** have been met.

(3) SFHAs without Established Base Flood Elevation and/or Floodways/Fringes (Riverine)

- a. Drainage area upstream of the site is greater than one square mile:

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.

No action shall be taken by the Floodplain Administrator until written approval from the Indiana Department of Natural Resources (approval for construction in a floodway, letter of authorization, or evidence of general license qualification) 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.

Once the Floodplain Administrator has received the proper written approval, evidence of general license qualification, or floodplain analysis/regulatory assessment approving the proposed development from the Indiana Department of Natural Resources, 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 this section have been met.

- b. Drainage area upstream of the site is less than one square mile:

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.

Upon receipt, the Floodplain Administrator may issue the local Floodplain Development Permit, provided the provisions contained in this **article** have been met.

(4) SFHAs not Identified on a Map

- a. If a proposed development site is near a waterway with no SFHA identified on a map, the Floodplain Administrator shall verify the drainage area upstream of the site. If the drainage area upstream of the site is verified as being 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.
- b. No action shall be taken by the Floodplain Administrator until written approval from the Indiana Department of Natural Resources (approval for construction in a floodway, letter of authorization, or evidence of general license qualification) 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.
- c. Once the Floodplain Administrator has received the proper written approval, evidence of general license qualification, or floodplain analysis/regulatory assessment approving the proposed development from the Indiana Department of Natural Resources, 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 this **article** have been met.

Section B. General Standards

In all areas of special flood hazard, the following provisions are required:

- (1) All new construction, *new construction or repairs made to a repetitive loss structure*, and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
- (2) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage below the FPG.
- (3) New construction and substantial improvements must incorporate methods and practices that minimize flood damage.
- (4) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be located at/above the FPG for residential structures. Electrical, heating, ventilation, plumbing, air conditioning equipment, 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 for non-residential structures. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other waterproofed service facilities may be located below the FPG.
- (5) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- (6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- (7) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- (8) Any alteration, repair, reconstruction, or improvements to a structure that is in compliance with the provisions of this ordinance shall meet the requirements of “new construction” as contained in this ordinance.
- (9) Base flood elevation data shall be provided for subdivision proposals and other proposed development (including manufactured home parks and subdivisions), which is greater than fifty (50) lots or five (5) acres, whichever is less.
- (10) Where an existing or proposed structure or other development is affected by multiple flood zones, by multiple base flood elevations, or both, the development activity must comply with the provisions of this ordinance applicable to the most restrictive flood zone and the highest base flood elevation affecting any part of the existing or proposed structure; or for other developments, affecting any part of the area of the development.
- (11) Fill projects that do not involve a structure must be protected against erosion and scour during flooding by vegetative cover, riprap, or bulk heading. If vegetative cover is used, the slopes shall be no steeper than 3’ horizontal to 1’ vertical.
- (12) *Non-conversion agreements shall be required for all new or substantially improved elevated structures with an enclosure beneath the elevated floor, accessory structures, and open-sided shelters.*
- (13) *Construction of new solid waste disposal facilities, hazard waste management facilities, salvage yards, and chemical storage facilities shall not be permitted in areas of special flood hazard.*

Section C. Specific Standards

In all areas of special flood hazard where base flood elevation data or flood depths have been provided, as set forth in **Article 3, Section B**, the following provisions are required:

- (1) **Building Protection Requirement.** In addition to the general standards described in **Article 5, Section B**, 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 a residential structure.
- b. Construction or placement of a non-residential structure.
- c. Addition or improvement made to an existing structure 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). An addition and/or improvement project that is continuous in scope or time is considered as one project for permitting purposes.
- d. 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 (the costs of any proposed additions or improvements beyond restoring the damaged structure to its before damaged condition must be included in the cost).
- e. Installing a manufactured home on a new site or a new manufactured home on an existing site.
- f. Installing a travel trailer or recreational vehicle on a site for more than 180 days.
- g. *Reconstruction or repairs made to a repetitive loss structure.*
- h. *Addition or improvement made to any existing structure with a previous repair, addition or improvement constructed since the community's first floodplain ordinance.*

(2) Residential Construction.

- a. New construction or substantial improvement of any residential structures shall meet provisions described in **Article 5, Section A and applicable general standards described in Article 5, Section B.**
- b. In **Zone A and Zone AE**, new construction or substantial improvement of any residential structure shall have the lowest floor; including basement, at 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 **Article 5, Section C (2) (c)**. Should fill be used to elevate a structure, the standards of **Article 5, Section C (2) (d)** must be met.
- c. **Fully enclosed areas** formed by foundation and other exterior walls below the flood protection grade shall meet the following requirement:
 - i. Designed to preclude finished living space and designed to allow for the automatic entry and exit of floodwaters to equalize hydrostatic flood forces on exterior walls. Flood openings must be designed and installed in compliance with criteria set out in FEMA Technical Bulletin 1. Engineered flood openings must be designed and certified by a registered design professional (requires supporting engineering certification or make/model specific ICC-ES Report), or meet the following criteria for non-engineered flood openings:
 - A. Provide a minimum of two openings on different sides of an enclosure. If there are multiple enclosed areas, each is required to meet the requirements for enclosures, including the requirement for flood openings in exterior walls (having a total net area of not less than one square inch for every one square foot of enclosed area).
 - B. The bottom of all openings shall be no more than one foot above the higher of the final interior grade (or floor) and the finished exterior grade immediately under each opening.
 - C. If the floor of the enclosure is below the BFE, the openings must be located wholly below the BFE.

- D. If the floor of the enclosure is at or above the BFE, but below the FPG, the openings must be located wholly below the FPG.
 - E. Doors and windows do not qualify as openings.
 - F. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
 - G. *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.*
- ii. The floor of such enclosed area must be at or above grade on at least one side.
- d. A residential structure may be constructed on a **fill** in accordance with the following:
 - i. Fill shall be placed in layers no greater than 1 foot deep before compacting to 95% of the maximum density obtainable with either the Standard or Modified Proctor Test method. The results of the test showing compliance shall be retained in the permit file.
 - ii. Fill shall extend **ten** feet beyond the foundation of the structure before sloping below the BFE.
 - iii. Fill shall be protected against erosion and scour during flooding by vegetative cover, riprap, or bulk heading. If vegetative cover is used, the slopes shall be no steeper than 3' horizontal to 1' vertical.
 - iv. Fill shall not adversely affect the flow of surface drainage from or onto neighboring properties.
 - v. *Fill shall be composed of clean granular or earthen material.*
 - e. A residential structure may be constructed using a **stem wall foundation** (also called chain wall, raised-slab-on-grade, and slab-on-stem-wall-with-fill). Any backfilled stem wall foundation (also called chain wall, raised-slab-on-grade, and slab-on-stem-wall-with-fill) must be backfilled with compacted structural fill, concrete, or gravel that supports the floor slab. No flood openings are required for this type of construction.

(3) Non-Residential Construction.

- a. New construction or substantial improvement of any non-residential structures (excludes accessory structures) shall meet provisions described in **Article 5, Section A and applicable general standards described in Article 5, Section B.**
- b. In **Zone A and Zone AE**, new construction, or substantial improvement of any commercial, industrial, or non-residential structure (excludes accessory structures) shall either have the lowest floor, including basement, elevated to or above the FPG 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 **Article 5, Section C (3) (c).** Should fill be used to elevate a structure, the standards of **Article 5, Section C (3) (d)** must be met.
- c. **Fully enclosed areas** formed by foundation and other exterior walls below the flood protection grade shall meet the following requirement:

- i. Designed to preclude finished living space and designed to allow for the automatic entry and exit of floodwaters to equalize hydrostatic flood forces on exterior walls. Flood openings must be designed and installed in compliance with criteria set out in FEMA Technical Bulletin 1. Engineered flood openings must be designed and certified by a registered design professional (requires supporting engineering certification or make/model specific ICC-ES Report), or meet the following criteria for non-engineered flood openings:
 - A. Provide a minimum of two openings on different sides of an enclosure. If more than one enclosed area is present, each must have openings on exterior walls (having a total net area of not less than one square inch for every one square foot of enclosed area).
 - B. The bottom of all openings shall be no more than one foot above the higher of the final interior grade (or floor) and the finished exterior grade immediately under each opening.
 - C. If the floor of the enclosure is below the BFE, the openings must be located wholly below the BFE.
 - D. If the floor of the enclosure is at or above the BFE, but below the FPG, the openings must be located wholly below the FPG.
 - E. Doors and windows do not qualify as openings.
 - F. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
 - G. *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.*
 - ii. The floor of such enclosed area must be at or above grade on at least one side.
- d. A nonresidential structure may be constructed on **fill** in accordance with the following:
- i. Shall be placed in layers no greater than 1 foot deep before compacting to 95% of the maximum density obtainable with either the Standard or Modified Proctor Test method. The results of the test showing compliance shall be retained in the permit file.
 - ii. Shall extend **ten** feet beyond the foundation of the structure before sloping below the BFE.
 - iii. Shall be protected against erosion and scour during flooding by vegetative cover, riprap, or bulk heading. If vegetative cover is used, the slopes shall be no steeper than 3' horizontal to 1' vertical.
 - iv. Shall not adversely affect the flow of surface drainage from or onto neighboring properties.
 - v. *Shall be composed of clean granular or earthen material.*
- e. A nonresidential structure may be **floodproofed** in accordance with the following:
- i. 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 Floodplain Administrator.

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

- f. A nonresidential structure may be constructed using a **stem wall foundation** (also called chain wall, raised-slab-on-grade, and slab-on-stem-wall-with-fill). Any backfilled stem wall foundation must be backfilled with compacted structural fill, concrete, or gravel that supports the floor slab. No flood openings are required for this type of construction.

(4) Manufactured Homes and Recreational Vehicles.

- a. These requirements apply to all manufactured homes to be placed on a site in the SFHA:
- i. The manufactured home shall be elevated on a permanent foundation such that the 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.
 - ii. Fully enclosed areas formed by foundation and other exterior walls below the FPG 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 **Article 5, Section C (2) (c)**.
 - iii. *Flexible skirting and rigid skirting not attached to the frame or foundation of a manufactured home are not required to have openings.*
- b. Recreational vehicles placed on a site in the SFHA shall either:
- i. Be on site for less than 180 days and be fully licensed and ready for use on a public highway (defined as being on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions), or
 - ii. Meet the requirements for “manufactured homes” as stated earlier in this section.

(5) Accessory Structures

Within SFHAs, new construction or placement of an accessory structure must meet the following standards:

- a. Shall have a floor area of 400 square feet or less.
- b. Use shall be limited to parking of vehicles and limited storage.
- c. Shall not be used for human habitation.
- d. Shall be constructed of flood resistant materials.
- e. Shall be constructed and placed on the lot to offer the minimum resistance to the flow of floodwaters.
- f. Shall be firmly anchored to prevent flotation.
- g. Service facilities such as electrical and heating equipment shall be elevated or floodproofed to or above the FPG.
- h. Shall be 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 **Article 5, Section C (3) (c)**.

- i. Shall not have subsequent additions or improvements that would preclude the structure from its continued designation as an accessory structure.

(6) Free-standing Pavilions, Gazebos, Decks, Carports, and Similar Development.

Within SFHAs, new construction or placement of free-standing pavilions, gazebos, decks, carports, and similar development must meet the following standards:

- a. Shall have open sides (having not more than one rigid wall).
- b. Shall be anchored to prevent flotation or lateral movement.
- c. Shall be constructed of flood resistant materials below the FPG.
- d. Any electrical, heating, plumbing and other service facilities shall be located at/above the FPG.
- e. Shall not have subsequent additions or improvements that would preclude the development from its continued designation as a free-standing pavilion, gazebo, carport, or similar open-sided development.

(7) Above Ground Gas or Liquid Storage Tanks.

Within SFHAs, all newly placed aboveground gas or liquid storage tanks shall meet the requirements for a non-residential structure as required in **Article 5, Section C (3)**.

Section D. Standards for Subdivision and Other New Developments

- (1) All subdivision proposals and all other proposed new development shall be consistent with the need to minimize flood damage.
- (2) All subdivision proposals and all other proposed new development shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
- (3) All subdivision proposals and all other proposed new development shall have adequate drainage provided to reduce exposure to flood hazards.
- (4) In all areas of special flood hazard where base flood elevation data are not available, the applicant shall provide a hydrologic and hydraulic engineering analysis that generates base flood elevations for all subdivision proposals and all other proposed new development (including manufactured home parks and subdivisions), which is greater than fifty (50) lots or five (5) acres, whichever is less.
- (5) All subdivision proposals shall minimize development in the SFHA and/or limit density of development permitted in the SFHA.*
- (6) All subdivision proposals shall ensure safe access into/out of SFHA for pedestrians and vehicles (especially emergency responders).*
- (7) Streets, blocks lots, parks and other public grounds shall be located and laid out in such a manner as to preserve and utilize natural streams and channels. Wherever possible the floodplains shall be included within parks or other public grounds.*

Section E. Standards for Critical Facilities

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.

Article 6. Legal Status Provisions

Section A. Severability.

If any section, subsection, sentence, clause, or phrase of these regulations is, for any reason, declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the regulations as a whole, or any part thereof, other than the part so declared.

Section B. Effective Date.

This ordinance shall be in full force and effect upon adoption.

Passed by the **Town Council of Lapel**, Indiana on the **[Click here and insert day of month]** day of **[Click here and insert month]**, **[Click here and insert year]**.

The Town Council of Lapel
The Town of Lapel, Indiana

[Click here and type name of individual approving]

[Click here and type name of individual approving]

[Click here and type name of individual approving]

Attest: _____
[Click here and type name of individual attesting]

PROPOSED ACTIONS: Repeal V 1.6.10 from current UDO and replace with V 1.6.10 as written below**V 1.6.10 Floodplain Standards Variances**

- A) In addition to reviewing a petition for a variance of development standards as regulated by Section V1.6.9 of this UDO, a review of variance from the Flood Damage Prevention Ordinance shall also follow standards in this Section V1.6.10.
- B) 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 this ordinance. Any person aggrieved by the decision of the board may appeal such decision to the Madison County Circuit Court.
- C) A written report addressing each of the factors in subsection V1.6.9.D and findings in subsection V1.6.9.E shall be submitted with the application for a variance.
- D) In considering variances of development standards from the Flood Damage Prevention Ordinance applications, the Board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and:
 - i) The danger to life and property due to flooding or erosion damage.
 - ii) The danger that materials may be swept onto other lands to the injury of others.
 - iii) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
 - iv) The importance of the services provided by the proposed facility to the community.
 - v) The necessity to the facility of a waterfront location, where applicable.
 - vi) The compatibility of the proposed use with existing and anticipated development.
 - vii) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage.
 - viii) The safety of access to the property in times of flood for ordinary and emergency vehicles.
 - ix) The expected height, velocity, duration, rate of rise, and sediment transport of the floodwaters at the site.
 - x) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- E) The Board may grant a variance from Flood Damage Prevention Ordinance of this Ordinance only if, after a public hearing, it makes findings of facts in writing, that:
 - i) there exists a good and sufficient cause for the requested variance;
 - ii) A determination that failure to grant the variance would result in exceptional hardship as defined in V 1.10.5 Glossary of Defined Terms.
 - iii) the granting of the requested variance will not increase flood heights, create additional threats to public safety, cause additional public expense, create nuisances, cause fraud or victimization of the public, or conflict with existing laws or ordinances.
- F) No variance for a residential use within a floodway subject to subsections V12.4.4.A.i, V12.4.4.A.iii.1, and V12.4.4.A.iv of this Code may be granted.
- G) Any variance granted in a floodway subject to subsections V12.4.4.A.i, V12.4.4.A.iii.1, and V12.4.4.A.iv will require a permit from the Indiana Department of Natural Resources. Variances shall not be issued within any designated regulatory floodway if any increase in flood levels during the base flood discharge would result.

LAPEL'S PROPOSED LANGUAGE – for adoption

- H) Variances to the Provisions for Flood Hazard Reduction of V12.4.4 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.
- I) Variances may be granted 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 a “historic structure” and the variance is the minimum to preserve the historic character and design of the structure.
- J) Variances may be granted for new construction, substantial improvements, and other development necessary for the conduct of a functionally dependent use.
- K) Variances shall only be granted upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- L) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the Flood Protection Grade 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.
- M) Upon consideration of the factors listed above and the purposes of this Code, the Board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this Code.
- N) The Board may require the owner of the property to make written commitments concerning the use or development of the property and have such commitments recorded in the Recorder’s Office.
- O) A floodplain standards variance granted by the Board and executed in a timely manner as described in this section shall run with the parcel until such time as: (a) the property conforms with the Ordinance as written, or (b) the variance is terminated.
- P) 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.

PROPOSED ACTIONS: Adopt the following terms and definitions, replacing existing definitions where necessary

V 1.10.5 Glossary of Defined Terms

Accessory Structure (as related to Floodplain Management Regulations): A structure with a floor area of 400 square feet or less that is on the same parcel of property as a principal structure and the use of which is incidental to the use of the principal structure; an accessory structure specifically excludes structures used for human habitation.

- A) Accessory structures are considered walled and roofed where the structure includes at least two outside rigid walls and a fully secured roof.
- B) Examples of accessory structures include but are not necessarily limited to detached garages, carports, storage and tool sheds, and small boathouses
- C) The following may have uses that are incidental or accessory to the principal structure on a parcel but are generally not considered to be accessory structures by the NFIP:
 - i) Structures in which any portion is used for human habitation, whether as a permanent residence or as temporary or seasonal living quarters, such as a detached garage or carriage house that includes an apartment or guest quarters, or a detached guest house on the same parcel as a principal residence.
 - ii) Structures used by the public, such as a place of employment or entertainment.
 - iii) Development that does not meet the NFIP definition of a structure for floodplain management purposes. Examples include, but are not necessarily limited to, a gazebo, pavilion, picnic shelter, or carport that is open on all sides (roofed but not walled).

Addition (as related to Floodplain Management Regulations): Any walled and roofed expansion to the perimeter of an existing structure in which the addition is connected by a common load-bearing wall other than a firewall. Any walled and roofed addition, which is connected by a firewall or is separated by independent perimeter load-bearing walls, is new construction.

Alteration of a watercourse (as related to Floodplain Management Regulations): A dam, impoundment, channel relocation, change in channel alignment, channelization, or change in cross-sectional area of the channel or the channel capacity, or any other modification which may alter, impede, retard, or change the direction and/or velocity of the flow of water during conditions of the base flood.

Appeal (as related to Floodplain Management Regulations): A request for a review of the floodplain administrators interpretation of any provision of this ordinance, a request for a variance, or a challenge of a board decision.

Area of special flood hazard: The land within a community subject to a one percent (1%) or greater chance of being flooded in any given year.

Base flood: The flood having a one percent (1%) chance of being equaled or exceeded in any given year. The base flood may also be referred to as the 1% annual chance flood or one hundred (100) year flood.

Base Flood Elevation (BFE): The water surface elevation of the base flood in relation to a specified datum, usually the North American Vertical Datum of 1988.

Basement: That portion of a structure having its floor sub-grade (below ground level) on all sides.

LAPEL'S PROPOSED LANGUAGE – for adoption

Best Available Flood Layer (BAFL): The floodplain studies and any corresponding floodplain maps prepared and/or approved by the Indiana Department of Natural Resources which provide base flood elevation information, floodplain limits, and/or floodway delineations for flood hazards identified by approximate studies on the currently effective FIRM (Zone A) and/or for waterways where the flood hazard is not identified on available floodplain mapping.

Building (as related to Floodplain Management Regulations): See “Structure.”

Critical Facility (as related to Floodplain Management Regulations): A facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire, and emergency response installations, and installations which produce, use, or store hazardous materials or hazardous waste.

Development (as related to Floodplain Management Regulations): Any man-made change to improved or unimproved real estate including but not limited to:

- A) construction, reconstruction, or placement of a structure or any addition to a structure;
- B) installing a manufactured home on a site, preparing a site for a manufactured home, or installing a recreational vehicle on a site for more than 180 days;
- C) installing utilities, erection of walls and fences, construction of roads, or similar projects;
- D) construction of flood control structures such as levees, dikes, dams, channel improvements, etc.;
- E) mining, dredging, filling, grading, excavation, or drilling operations;
- F) construction and/or reconstruction of boat lifts, docks, piers, and seawalls;
- G) construction and/or reconstruction of bridges or culverts;
- H) storage of materials; or
- I) any other activity that might change the direction, height, or velocity of flood or surface waters.

“Development” does not include activities such as the maintenance of existing structures and facilities such as painting; re-roofing; resurfacing roads; or gardening, plowing, and similar agricultural practices that do not involve filling, grading, excavation, or the construction of permanent structures.

Elevation Certificate: A FEMA form that is routinely reviewed and approved by the White House Office of Management and Budget under the Paperwork Reduction Act, that is encouraged to be used to collect certified elevation information.

Enclosed area or Enclosure: An area of a structure enclosed by walls on all sides.

Enclosure below the lowest floor: See “Lowest Floor” and “Enclosed Area.”

Existing manufactured home park or subdivision (as related to Floodplain Management Regulations): 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 before the effective date of the community’s first floodplain ordinance.

LAPEL'S PROPOSED LANGUAGE – for adoption

Expansion to an existing manufactured home park or subdivision (as related to Floodplain Management Regulations): The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

FEMA: Federal Emergency Management Agency.

Fill (as related to Floodplain Management Regulations): Any material deposited or placed which has the effect of raising the level of the ground surface above the natural grade elevation. Fill material includes but is not limited to consolidated material such as concrete and brick and unconsolidated material such as soil, sand, gravel, and stone.

FIRM: Flood Insurance Rate Map. An official map of a community, on which FEMA has delineated both the areas of special flood hazard and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

FIS: Flood Insurance Study. The official hydraulic and hydrologic report provided by FEMA. The report contains flood profiles, as well as the FIRM and the water surface elevation of the base flood.

Flood or Flooding: A general and temporary condition of partial or complete inundation of normally dry land areas from:

- A) The overflow of inland or tidal waters.
- B) The unusual and rapid accumulation or runoff of surface waters from any source.
- C) Mudslides (i.e., mudflows) which are proximately caused by flooding and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

Flood or flooding also includes the collapse or subsidence of land along the shore of a lake or similar body of water as a result of erosion or undermining caused by waves or current of water exceeding anticipated cyclical levels that result in a flood as defined above.

Flood hazard area (See “Special Flood Hazard Area”): Areas subject to the one percent (1%) annual chance flood.

Flood prone area: Any land area acknowledged by a community as being susceptible to inundation by water from any source (See “Floodplain”).

Flood Protection Grade or the (FPG): The base flood elevation of the regulatory flood plus two feet at any given location in the SFHA.

Floodplain: Any land area susceptible to being inundated by water from any source. See “Flood.”

Floodplain management: The operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space

LAPEL'S PROPOSED LANGUAGE – for adoption

plans.

Floodplain management regulations: Zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a floodplain ordinance, grading ordinance and erosion control ordinance), and other applications of police power which control development in flood-prone areas. The term describes such state or local regulations in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

Floodproofing (dry floodproofing): A method of protecting a structure that ensures that the structure, together with attendant utilities and sanitary facilities, is watertight to the floodproofed design elevation with walls that are substantially impermeable to the passage of water. All structural components of these walls are capable of resisting hydrostatic and hydrodynamic flood forces, including the effects of buoyancy, and anticipated debris impact forces.

Floodproofing certificate: A form used to certify compliance for non-residential structures as an alternative to elevating structures to or above the FPG.

Floodway: The channel of a river or other watercourse and to the adjacent land areas that must be reserved in order to discharge the base flood without cumulative increasing the water surface elevation more than a designated height.

Freeboard (as related to Floodplain Management Regulations): A factor of safety, usually expressed in feet above the BFE, which is applied for the purposes of floodplain management. It is used to compensate for the many unknown factors that could contribute to flood heights greater than those calculated for the base flood.

Fringe or Flood Fringe: Those portions of the floodplain lying outside the floodway.

Functionally dependent use (as related to Floodplain Management Regulations): A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

Hardship (as related to Floodplain Management Regulations): The exceptional hardship that would result from a failure to grant a requested variance. The Town requires that the variance is exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is NOT exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

Highest adjacent grade: The highest natural elevation of the ground surface, prior to the start of construction, next to the proposed walls of a structure.

Historic structure: Any structure that is:

A) listed individually in the National Register of Historic Places (a listing maintained by the Department of the

LAPEL'S PROPOSED LANGUAGE – for adoption

Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

- B) certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- C) individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- D) individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified by (a) an approved state program as determined by the Secretary of Interior, or (b) directly by the Secretary of Interior in states without approved programs.

Hydrologic and hydraulic engineering analysis: Analyses performed by a professional engineer licensed by the State of Indiana, in accordance with standard engineering practices that are accepted by the Indiana Department of Natural Resources and FEMA, used to determine the base flood, other frequency floods, flood elevations, floodway information and boundaries, and flood profiles.

International Code Council-Evaluation Service (ICC-ES) Report: A document that presents the findings, conclusions, and recommendations from a particular evaluation. ICC-ES reports provide information about what code requirements or acceptance criteria were used to evaluate a product, and how the product should be identified, installed.

Letter of Final Determination (LFD): A letter issued by FEMA during the mapping update process which establishes final elevations and provides the new flood map and flood study to the community. The LFD initiates the six-month adoption period. The community must adopt or amend its floodplain management regulations during this six-month period unless the community has previously incorporated an automatic adoption clause.

Letter of Map Change (LOMC): A general term used to refer to the several types of revisions and amendments to FEMA maps that can be accomplished by letter. They are broken down into the following categories:

- **Conditional Letter of Map Revision (CLOMR):** FEMA's comment on a proposed project that would, upon construction, result in modification of the SFHA through the placement of fill outside the existing regulatory floodway.
- **Conditional Letter of Map Revision Based on Fill (CLOMR-F):** A letter from FEMA stating that a proposed structure that will be elevated by fill would not be inundated by the base flood.
Letter of Map Amendment (LOMA): An amendment by letter to the currently effective FEMA map that establishes that a building or area of land is not located in a SFHA through the submittal of property specific elevation data. A LOMA is only issued by FEMA.
- **Letter of Map Amendment Out as Shown (LOMA-OAS):** An official determination by FEMA that states the property or building is correctly shown outside the SFHA as shown on an effective NFIP map. Therefore, the mandatory flood insurance requirement does not apply. An out-as-shown determination does not require elevations.
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- **Letter of Map Revision (LOMR):** An official revision to the currently effective FEMA map. It is issued by FEMA and changes flood zones, delineations, and elevations. **Letter of Map Revision Based on Fill (LOMR-F)** means FEMA's modification of the SFHA shown on the FIRM based on the placement of fill outside the existing regulatory floodway.

LAPEL'S PROPOSED LANGUAGE – for adoption

Lowest adjacent grade: The lowest elevation, after completion of construction, of the ground, sidewalk, patio, deck support, or basement entryway immediately next to the structure.

Lowest Floor (as related to Floodplain Management Regulations): The lowest elevation described among the following:

- A) the lowest floor of a building;
- B) the basement floor;
- C) the garage floor, if the garage is connected to the building;
- D) the first floor of buildings elevated on pilings or pillars; or
- E) the floor level of any enclosure below an elevated building where the walls of the enclosure provide any resistance to the flow of floodwaters. Designs for meeting the flood opening requirement must either be certified by a registered professional engineer or architect or meet or exceed the following criteria:
 - the walls are designed to automatically equalize the hydrostatic flood forces on the walls by allowing for the entry and exit of flood waters;
 - At least two (2) openings are designed and maintained for the entry and exit of floodwater; and these openings provide a total net area of at least one (1) square inch for every one (1) square foot of enclosed area subject to flooding. 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. Doors and windows do not qualify as openings.

Manufactured home (as related to Floodplain Management Regulations): 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."

Manufactured home park or subdivision (as related to Floodplain Management Regulations): A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Mitigation: Sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects. The purpose of mitigation is twofold: to protect people and structures, and to minimize the cost of disaster response and recovery.

Natural grade (as related to Floodplain Management Regulations): The elevation of the undisturbed natural surface of the ground. Fill placed prior to the date of the initial identification of the flood hazard on a FEMA map is also considered natural grade.

New construction (as related to Floodplain Management Regulations): Any structure for which the "start of construction" commenced on or after the effective date of a floodplain management regulations adopted by a community and includes any subsequent improvements to such structures.

New manufactured home park or subdivision (as related to Floodplain Management Regulations): 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.

LAPEL'S PROPOSED LANGUAGE – for adoption

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.

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.

One-percent annual chance flood: The flood that has a one percent (1%) chance of being equaled or exceeded in any given year. See “Regulatory Flood”.

Physical Map Revision (PMR): 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.

Prefabricated Building (as related to Floodplain Management Regulations): A building that is manufactured and constructed using prefabrication. It consists of factory-made components or units that are transported and assembled on-site to form the complete building.

Principally above ground (as related to Floodplain Management Regulations): At least 51 percent of the actual cash value of the structure, less land value, is above ground.

Recreational vehicle: A vehicle which is:

- A) built on a single chassis;
- B) 400 square feet or less when measured at the largest horizontal projections;
- C) designed to be self-propelled or permanently towable by a light duty truck; and
- D) designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational camping, travel, or seasonal use.

Regulatory Flood: The flood having a one percent (1%) probability of being equaled or exceeded in any given year, as calculated by a method and procedure which 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 subsection V12.4.2.B of this Code. The “Regulatory Flood” is also known by the term “Base Flood”, “One-Percent Annual Chance Flood”, and “100-Year Flood”.

Repetitive loss: Flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equaled or exceeded 25% of the market value of the structure before the damage occurred.

LAPEL'S PROPOSED LANGUAGE – for adoption

Riverine: Relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

SFHA or Special Flood Hazard Area: Synonymous with “areas of special flood hazard” and “floodplain,” those lands within the jurisdiction of the Town subject to a one percent (1%) or greater chance of flooding in any given year. Special flood hazard areas are designated by the Federal Emergency Management Agency on Flood Insurance Rate Maps, Flood Insurance Studies, Flood Boundary and Floodway Maps and Flood Hazard Boundary Maps as Zones A, AE, AH, AO, A1-30, A99, or VE. The SFHA includes areas that are flood prone and designated from other federal, state or local sources of data including but not limited to best available flood layer maps provided by or approved by the Indiana Department of Natural Resources, historical flood information reflecting high water marks, previous flood inundation areas, and flood prone soils associated with a watercourse.

Start of construction (as related to Floodplain Management Regulations): Including substantial improvement, 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 either the first placement of permanent construction of a structure on a site, such as the pouring of a slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the 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; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a 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.

Structure (as related to Floodplain Management Regulations): A walled and roofed building, including a gas or liquid storage tank, which is principally above ground. The term includes a manufactured home, as well as a prefabricated building. It also includes recreational vehicles installed on a site for more than 180 consecutive days.

Substantial damage (as related to Floodplain Management Regulations): 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.

Substantial improvement (as related to Floodplain Management Regulations): 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 which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions.

Variance (as related to Floodplain Management Regulations): A grant of relief from the requirements of this ordinance consistent with the variance conditions herein.

Violation (as related to Floodplain Management Regulations): The failure of a structure or other development to be fully compliant with this ordinance.

LAPEL'S PROPOSED LANGUAGE – **for adoption**

Walled and roofed (as related to Floodplain Management Regulations): A building that has two or more exterior rigid walls and a fully secured roof and is affixed to a permanent site.

Watercourse: 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.

PROPOSED ACTIONS

Revise the existing language using updated language, terms and references to the new proposed flood ordinance location within the UDO as written below:

V 1.5.6 Nonconforming Uses of Structures, Land, or Structures and Land in Combination

- I. Any use which is legal nonconforming due to its presence in the Regulatory Flood may be altered, enlarged, or extended on a one-time only basis provided that the new construction conforms with Section 12.4 Flood Damage Prevention Ordinance included in this Unified Development Code and does not increase the value of the structure or use (excluding the value of the land) by more than 50% of its pre-improvement market value.

V 12.3.10, Flood Hazard Area Construction

The Building Inspector shall review all applications for Improvement Location Permits for new construction, additions to existing construction, or other development to ascertain as to whether the proposed construction, addition or development lies in a flood hazard area. The determination and actions of the Building Inspector regarding permit applications for construction in a flood hazard area shall conform to Section 12.4 Flood Damage Prevention Ordinance in the Town of Lapel Zoning Code.

V 12.1.6 Major Subdivision Principles & Design Standards

General Drainage Standards

- A. **Floodway Development:** The Plan Commission shall not approve any proposed plat which includes lots platted with buildable areas located in any Regulatory Flood. The Regulatory Flood may be included as part of the lots, however, the required buildable area for each lot shall be provided outside of the floodway. All such floodways shall be placed within drainage easements.
- B. **Loss of Storage Capacity:** Loss of the Regulatory Flood water storage capacity due to building or filling shall not be allowed. No primary structures are permitted to be constructed in the floodway fringe unless explicitly permitted by the Lapel Zoning Ordinance. No building or filling is allowed at all in the floodway.

Flood Hazard Area Standards

- A. Subdivisions shall adhere to the standards in subsection 12.4.4.D.
- B. Plans and materials for all subdivisions located within the Regulatory Flood shall be forwarded, by the developer, to the Indiana Department of Natural Resources for review and comment. The Plan Commission shall require appropriate changes and modifications to the subdivision in order to assure that:
 - i. it is consistent with the need to minimize flood damages;
 - ii. all public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage;
 - iii. adequate drainage is provided so as to reduce exposure to flood hazards;
 - iv. onsite waste disposal systems, if provided, will be so located and designed to avoid impairment of them or contamination from them during the occurrence of the regulatory flood.
- C. Subdividers shall indicate the Regulatory Flood elevation and the boundaries of the Regulatory Flood on all subdivision Preliminary and Final Plats containing any lands within the Regulatory Flood.
- D. All developers of subdivisions, all or a portion of which is located within the Special Flood Hazard Area (SFHA) identified on the community's National Flood Insurance Program (NFIP) Map shall develop an evacuation plan

LAPEL'S PROPOSED LANGUAGE – for adoption

for those lots located in the SFHA and file it with the Plan Commission and have it filed with and approved by the appropriate community emergency management authorities.