

SECTION SIX
FLOODPLAIN ZONING

6-01 STATUTORY AUTHORIZATION, FINDING OF FACT, PURPOSE AND OBJECTIVES

6-01.1 STATUTORY AUTHORIZATION

The Legislature of the State of Connecticut has in Section 7-148(c) (7) of the General Statutes delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the Planning and Zoning Commission of Southington, Connecticut, does ordain as follows:

6-01.2 FINDINGS OF FACT

- A. The flood hazard areas of Southington 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.
- B. These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities, the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages, and an increase in impervious areas of watersheds.

6-01.3. STATEMENT OF PURPOSE

It is the purpose of this regulation 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:

- A. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
- B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;
- D. Control filling, grading, dredging and other development which may increase erosion or flood damage, and;
- E. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands.

6-01.4

OBJECTIVES

- A. To protect human life and health;
- B. To minimize expenditure of public money for costly flood control projects;
- C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. To minimize prolonged business interruptions;
- E. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
- F. To 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 areas, and;
- G. To insure that potential home buyers are notified that property is in a flood area.

6-02. DEFINITIONS (Applicable to Section 6 of these regulations)

6-02.1. Unless specifically defined below, words or phrases used in these regulations shall be interpreted so as to give them the meaning they have in common usage and to give this regulations its most reasonable application.

- A. “Addition (to an existing building)” means any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a fire wall. Any walled and roofed addition which is connected by a fire wall or is separated by independent perimeter load-bearing walls is new construction.
- B. “Appeal” means a request for a review of the Town Planner’s interpretation of any provision of this ordinance or a request for a variance.
- C. “Area of shallow flooding” means a designated AO or VO Zone on a community’s Flood Insurance Rate Map with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.
- D. “Area of special flood hazard” is the land in the floodplain within a community subject to one percent or greater chance of flooding in any given year.
- E. “Base flood” means the flood having a one percent chance of being equaled or exceeded in any given year.

- F. “Base Flood Elevation” (BFE) – The elevation of the crest of the base flood or 100-year flood. The height in relation to mean sea level expected to be reached by the waters of the base flood at pertinent points in the floodplains of coastal and riverine areas.¹
- G. “Basement” means that portion of a building having its floor subgrade (below ground level) on all sides.
- H. “Building” means any structure built for support, shelter, or enclosure for any occupancy or storage.
- I. “Cost” – As related to substantial improvements, the cost of any reconstruction, rehabilitation, addition, alteration, repair or other improvement of a structure shall be established by a detailed written contractor’s estimate. The estimate shall include, but not be limited to: the cost of materials (interior finishing components, structural components, utility and service equipment); sales tax on materials; building equipment and fixtures, including heating and air conditioning and utility meters; labor, built-in appliances; demolition and site preparation; repairs made to damaged parts of the building worked on at the same time; contractor’s overhead; contractor’s profit; and grand total. Items to be excluded include: cost of plans and specification; survey costs; permit fees; outside improvements such as septic systems, water supply wells, landscaping, sidewalks, fences, yard lights, irrigation systems, and detached structures such as garages, sheds, and gazebos.²
- J. “Development” means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or permanent storage of materials or equipment.
- K. “Elevated building” means a non-basement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns (posts and piers), shear walls, or breakaway walls.
- L. Existing Manufactured Home Park or Subdivision – A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured home are to be affixed (including, as 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 floodplain management regulations adopted by a community.³

¹ New, ZA #545, effective 5/3/08

² New, ZA #545, effective 5/3/08

³ New, ZA #545, effective 5/3/08

- M. Expansion to an Existing Manufactured Home Park or Subdivision – The preparation of additional sites by the construction of facilities for servicing the lots on which the manufacturing 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).¹
- N. Federal Emergency Management Agency (FEMA) -- The federal agency that administers the National Flood Insurance Program (NFIP).²
- O. “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 water;
 2. The unusual and rapid accumulation or runoff of surface waters from any source.
- P. “Flood Insurance Rate Map (FIRM)” means an official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.
- Q. “Flood Insurance Study” is the official report by the Federal Emergency Management Agency which contains examinations, evaluation and determination of flood hazards and corresponding flood profiles and water surface elevations. The report contains flood profiles, as well as the flood Boundary Floodway Map and the water surface elevation of the base flood.
- R. “Floodway” means 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 cumulatively increasing the water surface elevation more than one foot.
- S. “Floor” means the top surface of an enclosed area in a building (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.
- T. “Functionally Dependent Facility” means a facility which cannot be used for its intended purpose unless it is located in close proximity to water such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing facilities. The term does not include long-term storage, manufacture, sales, or service facilities.

¹ New, ZA #545, effective 5/3/08

² New, ZA #545, effective 5/3/08

- U. “Highest Adjacent Grade” means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a structure.
- V. “Lowest Floor” means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area is not considered a building’s lowest floor. Such areas must be designed in accordance with Section 6-05.3.B of these Regulations.
- W. “Manufactured Home” means a structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes recreational vehicles, park trailers, travel trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.
- X. “Manufactured Home Park or Subdivision” a parcel, or contiguous parcels, of land divided into two or more manufactured home lots for rent or sale.
- Y. Market Value – Market value of the structure shall be determined by an independent appraisal by a professional appraiser.¹
- Z. “Mean Sea Level” means, for purposes of the National Flood Insurance Program, the North American Vertical Datum (NAVD) of 1988 or other datum, to which base flood elevations shown on a community’s Flood Insurance Rate Map (FIRM) are referenced.²
- AA. “National Geodetic Vertical Datum (NGVD)” as corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the floodplain.
- BB. “New Construction” means structures for which the “start of construction” commenced on or after May 3, 2008, which is the effective date of this ordinance (not revision date).³
- CC. New Manufactured Home Park or Subdivision – 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 floodplain management regulations adopted by the Community.⁴
- DD. “Recreational Vehicle” means a vehicle which is:

¹ New, ZA #545, effective 5/3/08

² Revised, ZA #545, effective 5/3/08

³ Revised, ZA #545, effective 5/3/08

⁴ New, ZA #545, effective 5/3/08

- (a) Built on a single chassis;
- (b) 400 square feet or less when measured at the largest horizontal projection;
- (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 a temporary living quarters for recreational, camping, travel or seasonal use.

EE. “Start of Construction” (For other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. 97-348), including substantial improvement means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or 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, footing, piers or foundations or the erection of the 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.

FF. “Structure” means a walled and roofed building that is principally above ground, a manufactured home, a gas or liquid storage tank, or other man-made facilities or infrastructures.

GG. “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.

HH. “Substantial Improvement” means any combination of repairs, reconstruction, alteration, or improvements to a structure, taking place during the life of a structure, in which the cumulative cost equals or exceeds fifty percent of the market value of the structure. The market value of the structure should be: (1) the appraised value of the structure prior to the start of the initial repair or improvement, or (2) in the case of damage, the value of the structure prior to the damage occurring. For the purposes of this definition, “Substantial Improvement” is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or

not that alteration affects the external dimensions of the structure. The term does not, however, include any project for improvement of the structure required to comply with existing health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions.

- II. “Variance” is a grant of relief from the requirements of this ordinance which permits construction in a manner otherwise prohibited by this ordinance where specific enforcement would result in unnecessary hardship.
- JJ. “Violation” – Failure of a structure or other development to be fully compliant with the community’s floodplain management regulations. A structure or other development without required permits, lowest floor elevation documentation, flood-proofing certificates or required floodway encroachment calculations is presumed to be in violation until such time as that documentation is provided.¹
- KK. “Water Surface Elevation” means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

6-03. GENERAL PROVISIONS

6-03.1 LANDS TO WHICH THIS REGULATION APPLIES

This regulation shall apply to all areas of special flood hazard within the jurisdiction of Southington.

6-03.2 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD

The areas of special flood hazard identified by the Federal Emergency Management Agency (FEMA) in its Flood Insurance Study (FIS) for Hartford County, Connecticut, dated May 16, 2017, and accompanying Flood Insurance Rate Maps (FIRM), dated May 16, 2017 (Panels – 09003C0469G, 09003C0488G, 09003C0582G, 09003C0584G, 09003C0592G, 09003C0601G, 09003C0603G, 09003C0611G), and September 26, 2008 (Panels – 09003C0465F, 09003C0468F, 09003C0489F, 09003C0581F, 09003C0583F, 09003C0591F, 09003C0602F, 09003C0604F), and other supporting data applicable to the Town of Southington, and any subsequent revisions thereto, are adopted by reference and declared to be a part of this regulation. Since mapping is legally adopted by reference into this regulation it must take precedence until such time as a map amendment or map revision is obtained from FEMA. The area of special flood hazard includes any area shown on the FIRM as Zones A and AE including areas designated as a floodway on the FIRM. Areas of special flood hazard are determined utilizing the base flood elevations (BFE) provided on the flood profiles in the Flood Insurance Study (FIS) for a community. BFEs provided on a Flood Insurance Rate Map (FIRM) are approximate (rounded up or down) and should be verified with the BFEs published in the FIS for a specific location. The FIS and FIRM are on file with the Town clerk.²

¹ new, ZA #545, effective 5/3/08

² Revised, ZA #591, effective 4/19/17

6-03.3 ESTABLISHMENT OF THE FLOODPLAIN MANAGEMENT

A Development Permit shall be required in conformance with the provisions of this regulation prior to the commencement of any development activities.

6-03.4 COMPLIANCE

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

6-03.5 ABROGATION AND GREATER RESTRICTIONS

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

6-03.6 INTERPRETATION

In the interpretation and application of this regulation; all provisions shall be: (1) considered as minimum requirements; (2) liberally construed in favor of the governing body, and; (3) deemed neither to limit nor repeal any other powers granted under state statutes.

6-03.7 WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by this regulation is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This regulation does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This regulation shall not create liability on the part of Southington or by any officer or employee thereof for any flood damages that result from reliance on this regulation or any administrative decision lawfully made thereunder.

6-03.8 ADDITIONAL PROVISIONS

- a. Compensatory Storage - The water holding capacity of the floodplain, except those areas that are tidally influenced, shall not be reduced. Any reduction caused by filling, new construction, or substantial improvements involving an increase in footprint to the structure shall be compensated for by deepening and/or widening of the floodplain. Storage shall be provided on-site, unless easements have been gained from adjacent property owners; it shall be provided within the same hydraulic reach and a volume not previously used for flood storage; it shall be hydraulically comparable and incrementally equal to the theoretical volume of flood water at each elevation, up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body. Compensatory storage can be provided off-site if approved by the municipality.¹

¹ New, ZA #545, effective 5/3/08

b. Equal Conveyance - Within the floodplain, except those areas which are tidally influenced, as designated on the Flood Insurance Rate Map (FIRM) for the community, encroachments resulting from filling, new construction or substantial improvements involving an increase in footprint of the structure, are prohibited unless the applicant provides certification by a registered professional engineer demonstrating, with supporting hydrologic and hydraulic analyses performed in accordance with standard engineering practice, that such encroachments shall not result in any (0.00 feet) increase in flood levels (base flood elevation). Work within the floodplain and the land adjacent to the floodplain, including work to provide compensatory storage shall not be constructed in such a way as to cause an increase in flood stage or flood velocity.¹

c. Aboveground Oil Tanks - Above-ground storage tanks (oil, propane, etc.) which are located outside or inside of the structure must either be elevated above the base flood elevation (BFE) on a concrete pad, or be securely anchored with tie-down straps to prevent flotation or lateral movement, have the top of the fill pipe extended above the BFE, and have a screw fill cap that does not allow for the infiltration of flood water.²

d. No Structure Entirely or Partially Over Water - New construction, substantial improvements and repair to structures that have sustained substantial damage cannot be constructed or located entirely or partially over water.³

e. Structures in Two Flood Zones - If a structure lies within two or more flood zones, the construction standards of the most restrictive zone apply to the entire structure (i.e. V zone is more restrictive than A zone; structure must be built to the highest BFE). The structure includes any attached additions, garages, decks, sunrooms, or any other structure attached to the main structure. Decks or porches that extend into a more restrictive flood zone will require the entire structure to meet the standards of the more restrictive zone.⁴

6-04 ADMINISTRATION

6-04.1 DESIGNATION OF THE REGULATION ADMINISTRATOR

The Town Planner is hereby appointed to administer and implement the provisions of this regulation.

6-04.2 PERMIT PROCEDURES

Application for a Floodplain Filling Permit shall be made to the Town Planner on forms furnished by him or her prior to any development activities, and may include, but not be limited to, six (6) copies of the following plans drawn to scale showing the nature, location, dimensions, and elevations of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities and the

¹ new, ZA #545, effective 5/3/08

² new, ZA #545, effective 5/3/08

³ new, ZA #545, effective 5/3/08

⁴ new, ZA #545, effective 5/3/08

locations of the foregoing. Specifically, the following information is required:¹

A. Application Stage

1. Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all structures, Section 6-05.3 A.1.;
2. Elevation in relation to mean sea level to which any non-residential structure will be flood-proofed, Section 6-05.3 A.1. (b);
3. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development;
4. A statement as to whether or not the proposed alterations to an existing structure meets the criteria of the substantial improvement definition Section 6-02.1 AA.;
5. A statement as to whether there will be dry access to the structure during the 100 year storm event.

Where applicable, the following certifications by a registered engineer or architect are required, and must be provided to the Town Planner. The design and methods of construction must be certified to be in accordance with accepted standards of practice, and with the provisions of Article 5, Section B.

6. Non-Residential Flood Proofing - Must meet the provisions of Section 6-05.3 A 1.(a) and (b).
7. Enclosed Areas Below the Base Flood Elevation - If the minimum design criteria in Section 6-05.3 B.1 through 6-05.3 B.1.3. is not used, then the design and construction methods must be certified as explained in Section 6-05.3 B.
8. No increase in Floodway or Floodway Fringe Heights may be allowed. No alterations are permitted within the floodway.
9. Structural Anchoring - must meet the provisions of Section 6-05.

B. Construction Stage

Upon completion of the applicable portion of construction, the applicant shall provide verification to the Town Planner of the following as is applicable:

1. Lowest floor elevation - The elevation to be verified for:
 - (a) A structure in any A zone is the top of the lowest floor (including basement) Section 6-05.3 A.1.;

¹ revised, effective 5/8/07

- (b) A structure which has been floodproofed is the elevation to which the floodproofing is effective Section 6-05.3 A.1.(a).
- 2. Deficiencies detected by the review of the above listed shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed. Failure to submit the survey or failure to make said corrections required hereby, shall be cause to issue a Cease and Desist Order for the project.

6-04.3 DUTIES AND RESPONSIBILITIES OF THE TOWN PLANNER

Duties of the Town Planner shall include, but not be limited to:

- A. Review all permit applications to determine whether proposed building sites will be reasonably safe from flooding.
- B. Review all development permits to assure that the permit requirements of this regulation have been satisfied.
- C. Advise permittee that additional Federal or State permits may be required, and if specific Federal or State permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit. Possibly including but not limited to: DEP, Water Diversion, DEP Dam Safety, and/or Corps of Engineers 404.
- D. Notify the Regional Planning Agency and the affected municipality at least 35 days prior to the public hearing if any change of regulation or use of a flood zone will affect an area within 500 feet of another municipality.
- E. Notify adjacent communities and the Department of Environmental Protection, Water Resources Unit prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
- F. Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
- G. Record the elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, in accordance with Section 6-05.3 A.1.
- H. Record the elevation (in relation to mean sea level) to which the new or substantially improved structures have been flood-proofed, in accordance with Section 6-05.3 A.1.(a).
- I. When flood-proofing is utilized for a particular structure, the Town Planner shall obtain certification from a registered professional engineer or architect, in accordance with Section 6-05.3 A.1.(a).

- J. Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Town Engineer shall make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.
- K. When base flood elevation data or floodway data have not been provided in accordance with Article 3, Section B, then the Town Engineer shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source in order to administer the provisions of Section 6-05.
- L. All records pertaining to the provisions of this ordinance shall be maintained in the office of the Town Planner.
- M. The Town Planner shall refer all requests for development within an area of special flood hazard to the Conservation Commission, in order to obtain their recommendation to the Planning and Zoning Commission.
- N. The Planning and Zoning Commission shall give final approval to all requests for development within an area of special flood hazard; providing, that a two-thirds (2/3) vote is required to override a negative recommendation of the Conservation Commission.

5.0 PROVISIONS FOR FLOOD HAZARD REDUCTION¹

5.1 GENERAL STANDARDS

In all Special Flood Hazard Areas (SFHAs) the following provisions are required:

- 5.1.1 New construction, substantial improvements, and structures that have sustained substantial damage shall be constructed using methods and practices that minimize flood damage.
- 5.1.2 New construction, substantial improvements, and structures that have sustained substantial damage shall be constructed with materials and utility equipment that are flood-damage resistant and conform to the provisions of FEMA Technical Bulletin 2, Flood Damage-Resistant Material Requirements. This includes, but is not limited to, flooring, interior and exterior walls, wall coverings and other materials installed below the base flood elevation plus one (1.0) foot.
- 5.1.3 New construction, substantial improvements, and repairs to structures that have sustained substantial damage shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

¹ Revised, effective 5.19.21

- 5.1.4 New construction, substantial improvements and repair to structures that have sustained substantial damage cannot be constructed or located entirely or partially over water unless they are a functionally dependent use or facility.
- 5.1.5 The bottom of all electrical, heating, plumbing, ventilation and air conditioning equipment, appliances, fixtures and components, HVAC duct work and duct systems, and any other utility service equipment, facilities, machinery, or connections servicing a structure shall be elevated one (1.0) foot above the base flood elevation (BFE). This includes, but is not limited to, furnaces, oil or propane tanks, air conditioners, heat pumps, hot water heaters, ventilation duct work, washer and dryer hook-ups, electrical junction boxes, and circuit breaker boxes. Systems, fixtures, equipment and components shall not be mounted on or penetrate through breakaway walls intended to fail under flood loads. Connections or other equipment that must be located below the BFE plus 1.0 foot elevation are permitted only when no other elevation alternative is available and provided they are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of the base flood event. Electrical wiring systems that must be located below the BFE plus 1.0 foot shall conform to the standards for wet locations.
- 5.1.6 New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- 5.1.7 New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharges from the system into flood waters.
- 5.1.8 On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- 5.1.9 Underground tanks shall be anchored to prevent flotation, collapse and lateral movement under conditions of the base flood. Above-ground storage tanks which are located outside or inside of a structure must be elevated one (1.0) foot above the base flood elevation (BFE) or shall be securely anchored to prevent flotation, collapse or lateral movement under conditions of the base flood. Where elevated on platforms, the platforms shall be cantilevered from or knee braced to the building or shall be supported on elevated foundations that conform to the standards for the particular flood zone as described in Section 5.3. Anchored tanks must have the top of the fill pipe located at least one (1.0) foot above the BFE and have a screw fill cap that does not allow for the infiltration of flood water.
- 5.1.10 In any portion of a watercourse that is altered or relocated, the flood carrying capacity must be maintained. Notify adjacent communities and the Connecticut Department of Energy and Environmental Protection (CTDEEP), Inland Water Resources Division (IWRD) prior to any alteration or relocation of a watercourse.
- 5.1.11 If any portion of a structure lies within the Special Flood Hazard Area (SFHA), the

entire structure is considered to be located within the SFHA and must meet the construction requirements of the flood zone. The structure includes any structurally attached additions, garages, decks, porches, sunrooms, patios or any other structure attached to the main structure.

- 5.1.12 If a structure lies within two or more flood zones, the construction standards of the most restrictive zone apply to the entire structure (i.e., VE zone is more restrictive than AE zone; structure must be built to the highest BFE). The structure includes any structurally attached additions, garages, decks, porches, patios, sunrooms, or any other structure attached to the main structure.
- 5.1.13 Compensatory Storage. The water holding capacity of the floodplain, except those Areas which are tidally influenced, shall not be reduced. Any reduction caused by filling, new construction or substantial improvements involving an increase in footprint to the structure, shall be compensated for by deepening and/or widening of the floodplain. Storage shall be provided on-site, unless easements have been gained from adjacent property owners; it shall be provided within the same hydraulic reach and a volume not previously used for flood storage; it shall be hydraulically comparable and incrementally equal to the theoretical volume of flood water at each elevation, up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body. Compensatory storage can be provided off-site if approved by the municipality.
- 5.1.14 Equal Conveyance. Within the floodplain, except those areas which are tidally influenced, as designated on the Flood Insurance Rate Map (FIRM) for the community, encroachments resulting from filling, new construction or substantial improvements involving an increase in footprint of the structure, are prohibited unless the applicant provides certification by a registered professional engineer demonstrating, with supporting hydrologic and hydraulic analyses performed in accordance with standard engineering practice, that such encroachments shall not result in any (0.00 feet) increase in flood levels (base flood elevation). Work within the floodplain and the land adjacent to the floodplain, including work to provide compensatory storage shall not be constructed in such a way so as to cause an increase in flood stage or flood velocity.

5.2 STANDARDS FOR WATERCOURSES WITHOUT ESTABLISHED BASE FLOOD ELEVATIONS (UN-NUMBERED A ZONE), ADOPTED FLOODWAYS AND/OR FLOOD MAPPING

- 5.2.1 The Town Planner shall require base flood elevation (BFE) data be provided with any application for new construction, substantial improvement, repair to structures which have sustained substantial damage or other development in Zone A without a FEMA-published BFE (un-numbered A Zone). A registered professional engineer must determine the BFE in accordance with accepted hydrologic and hydraulic engineering practices and document the technical methods used. Studies, analyses and computations shall be submitted in sufficient detail to allow thorough review and approval. The Town

Planner shall obtain, review and reasonably utilize any BFE and floodway data available from a federal, state or other source, including data developed for subdivision proposals, as criteria for requiring that new construction, substantial improvements, repair to structures which have sustained substantial damage or other development in un-numbered A Zones on the community's Flood Insurance Rate Map (FIRM) meet the standards in Section 4.4 and Section 5.3. If no BFE can be determined, the lowest floor, including basement, must be elevated to two (2) feet above the highest adjacent grade next to the structure.

- 5.2.2 When BFEs have been determined within Zones A1-30 and AE on the community's FIRM but a regulatory floodway has not been designated, the Town Planner must require that no new construction, substantial improvements, repair to structures which have sustained substantial damage or other development, including fill, shall be permitted which will increase the water surface elevation of the base flood more than one (1.0) foot at any point within the community when all existing and anticipated development is considered cumulatively with the proposed development.
- 5.2.3 The Town Planner may request floodway data of an applicant for watercourses without FEMA-published floodways. When such data is provided by an applicant or whenever such data is available from any other source (in response to the municipality's request or not), the community shall adopt a regulatory floodway based on the principle that the floodway must be able to convey the waters of the base flood without increasing the water surface elevation more than one (1.0) foot at any point within the community.
- 5.2.4 The Town Planner shall obtain, review and reasonably utilize any BFE and floodway data available from a federal, state or other source, as criteria for requiring that new construction, substantial improvements, repair to structures which have sustained substantial damage or other development in any area of potential, demonstrable or historical flooding within the community meet the standards in Section 4.4 and Section 5.3.
- 5.2.5 Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program regulations, a community may approve certain development in Zones A1-30, AE, AH, on the community's FIRM which increases the water surface elevation of the base flood by more than one (1.0) foot, provided that the community first completes all of the provisions required by Section 65.12.

5.3 SPECIFIC STANDARDS

- 5.3.1 Construction Standards in Special Flood Hazard Areas (SFHA), Zones A, A1-30, AE.

5.3.1.1 Residential Construction.

All new construction, substantial improvements, and repair to structures that have sustained substantial damage which are residential structures shall have the bottom of the lowest floor, including basement, elevated one (1.0) foot above the base flood elevation (BFE). Electrical, plumbing, machinery or other utility equipment that service the structure must be elevated one (1.0) foot above the BFE.

5.3.1.2 Non-Residential Construction.

All new construction, substantial improvements, and repair to structures that have sustained substantial damage which are commercial, industrial or non-residential structures shall:

- (a) Have the bottom of the lowest floor, including basement, elevated one (1.0) foot above the base flood elevation (BFE); or
- (b) In lieu of being elevated, non-residential structures may be dry flood-proofed to one (1.0) foot above the BFE provided that together with all attendant utilities and sanitary facilities the areas of the structure below the required elevation are watertight with walls substantially impermeable to the passage of water, and provided that such structures are composed of structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. A registered professional engineer or architect shall review and/or develop structural design specifications and plans for the construction, and shall certify that the design and methods of construction are in accordance with acceptable standards of practice for meeting the provisions of this section. Such certification shall be provided to the [title of local administrator] on the FEMA Floodproofing Certificate, Form 81-65.
- (c) The bottom of all electrical, plumbing, machinery or other utility equipment that service the structure must be elevated one (1.0) foot above the BFE.

5.3.1.3 Fully Enclosed Areas Below The Base Flood Elevation Of Elevated Buildings.

All new construction, substantial improvements, or repair to structures that have sustained substantial damage, whether residential or non-residential, that include fully enclosed areas formed by a foundation and other exterior walls shall have the lowest floor elevated to one (1.0) foot above the base flood elevation (BFE). The elevated building shall be designed to preclude finished living space below the lowest floor and be designed to allow for the entry and exit of flood waters to automatically equalize hydrostatic flood forces on exterior walls (wet flood-proofing). Designs for complying with this requirement must either be certified by a registered professional engineer or architect as meeting the requirements of ASCE 24 Section 2.6.2.2, or meet the following minimum criteria listed in sections (a)-(h) below:

- (a) Provide a minimum of two (2) openings (hydraulic flood vents) having a total

net area of not less than one square inch for every one square foot of enclosed area subject to flooding. The enclosed area is measured on the exterior of the enclosure walls. These hydraulic openings must be located on at least two different exterior walls of each enclosed area. If the structure has more than one enclosed area, openings must be installed in the exterior walls of each enclosed area so that flood waters can enter directly from the outside;

- (b) The bottom of all openings shall be no higher than one (1.0) foot above the higher of either the final interior grade or floor elevation, or the finished exterior grade adjacent to the outside of the foundation wall. At least one side of the structure's fully enclosed area must be at or above grade. Fill placed around the foundation walls must be graded so that the elevation inside the enclosed area is equal to or higher than the adjacent outside elevation on at least one side of the building. The finished floor of the enclosed area shall be no lower than the bottom of the foundation openings. The foundation slab of a residential structure, including the slab or a crawlspace, must be set equal to the outside finished grade on at least one side of the building;
- (c) The openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic entry and exit of flood waters in both directions without any external influence or control such as human intervention, including the use of electrical and other non-automatic mechanical means. These coverings must not block or impede the automatic flow of floodwaters into and out of the enclosed area. Other coverings may be designed and certified by a registered professional engineer or approved by the Town Planner;

- (d) Openings shall not be less than three (3) inches in any direction in the plane of the wall;
- (e) The area cannot be used as finished living space. Use of the enclosed area shall be the minimum necessary and shall only be used for the parking of vehicles, building access or limited storage. Access to the enclosed area shall be the minimum necessary to allow for the parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator). The enclosed area shall not be used for human habitation;
- (f) All interior walls, floor, and ceiling materials located below one (1.0) foot above the BFE shall be unfinished and resistant to flood damage-resistant in accordance with FEMA Technical Bulletin 2, Flood Damage-Resistant Requirements.
- (g) Electrical, plumbing, HVAC ductwork, machinery or other utility equipment and connections that service the structure (including, but not limited to, furnaces, oil or propane tanks, air conditioners, heat pumps, hot water heaters, ventilation, washers and dryer hook-ups, electrical junction boxes, circuit breaker boxes and food freezers) are prohibited in the fully enclosed area below the BFE plus one (1.0) foot. Utilities or service equipment located in this enclosed area, even if elevated one (1.0) foot above the BFE in the space, will subject the structure to increased flood insurance rates.
- (h) A residential building with a structurally attached garage having the floor slab below the BFE is considered an enclosed area below the BFE and must meet the standards of Sections 5.3.1.3 (a)-(g). A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry and exit of floodwaters in both directions. Flood openings or vents are required in the exterior walls of the garage or in the garage doors. Garage doors that must be manually opened do not meet the flood vent opening requirements in Section 5.3.1.3 (a)-(c). In addition to the automatic entry of floodwaters, the areas of the garage below BFE plus one (1.0) foot must be constructed with flood damage-resistant materials per the requirements of FEMA Technical Bulletin 2. Garages attached to non-residential structures must also meet the aforementioned requirements or be dry floodproofed as per the requirements of Section 5.3.1.2.

5.3.2 Manufactured (Mobile) Homes and Recreational Vehicles (RVs).

- 5.3.2.1 In all Special Flood Hazard Areas (SFHA), any manufactured (mobile) homes to be newly placed, undergoing a substantial improvement or repaired as a result of substantial damage, shall be elevated so that the bottom of the frame is located one (1.0) foot above the base flood elevation (BFE). The manufactured home must also meet all the construction standards per Section 5.3.1. The foundation and anchorage of manufactured homes to be located in floodways shall be designed and constructed in accordance with ASCE24. This includes SFHAs outside a manufactured home park or subdivision, in a new manufactured home park or subdivision, in an existing manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision, or on a site in an existing park which a manufactured home has incurred substantial damage as a result of a flood.
- 5.3.2.2 All manufactured (mobile) homes within a SFHA shall be placed on a permanent foundation which itself is securely anchored and to which the structure is securely anchored so that it will resist flotation, lateral movement and hydrostatic pressures. Anchoring may include, but not be limited to, the use of over-the-top or frame ties to ground anchors.
- 5.3.2.3 All manufactured (mobile) homes within a SFHA shall be installed using methods and practices which minimize flood damage. Adequate access and drainage should be provided. Elevation construction standards include piling foundations placed no more than ten (10) feet apart, and reinforcement is provided for piers more than six (6) feet above ground level.
- 5.3.2.4 Recreational vehicles placed on sites within a SFHA shall either (i) be on the site for fewer than 180 consecutive days, and (ii) be fully licensed and ready for highway use, OR (iii) meet all the general standards of Section 5.1 and the elevation and anchoring requirement of Section 5.3.2.1, 5.3.2.2, and 5.3.2.3. A recreational vehicle is ready for highway use if it is 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.

5.3.3 Floodways

Located within Special Flood Hazard Areas (SFHA) are areas designated as floodways on the community's Flood Insurance Rate Maps (FIRM) or Flood Boundary and Floodway Maps (FBFM). Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and has erosion potential, no encroachments, including fill, new construction, substantial improvements, repairs to substantially damaged structures and other developments shall be permitted unless certification, with supporting technical data, by a registered professional engineer is provided demonstrating, through hydrologic and hydraulic analyses performed in accordance with standard engineering practice, that encroachments shall not result in any (0.00 feet) increase in flood levels during occurrence of the base flood discharge published by FEMA. Buildings and structures meeting the standard above and located in whole or in part in the floodway shall be designed and constructed in accordance with ASCE 24. Fences in the floodway must be aligned with the flow and be of an open design. A permit may be given which allows encroachments resulting in increases in base flood elevations provided the community first obtains a conditional floodway revision by meeting the requirements of C.F.R. 44, Chapter 1, Subsection 65.12.

5.3.4 Standards for Development in Areas of Shallow Flooding (Zones AO and AH)

Located within the Special Flood Hazard Areas (SFHA) are areas designated as shallow flooding areas (AO and AH Zones). These areas have flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate. In AO and AH zones, the following provisions apply:

- 5.3.4.1 For residential structures, all new construction, substantial improvements and repair to structures that have sustained substantial damage shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as one (1.0) foot above the depth number specified on the Flood Insurance Rate Map (FIRM). If no depth number is specified, the lowest floor, including basement, shall be elevated at least three (3.0) feet above the highest adjacent grade.
- 5.3.4.2 For non-residential structures, all new construction, substantial improvements and repair to structures that have sustained substantial damage shall:
 - (a) Have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as one (1.0) foot above the depth number specified on the Flood Insurance Rate Map (FIRM). If no depth number is specified, the lowest floor, including basement, shall be elevated at least three (3.0) feet above the highest adjacent grade; or
 - (b) Together with attendant utility and sanitary facilities be completely flood-

proofed to above the highest adjacent grade at least as high as one (1.0) foot above the depth number specified on the FIRM, or if no depth number is specified at least three (3.0) feet above the highest adjacent grade, so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Designs for complying with this requirement must be certified by either a registered professional engineer or architect.

5.3.4.3 On-site drainage for all proposed structures in AO and AH Zones located on slopes shall provide adequate drainage paths to guide flood waters around and away from such structures.

5.3.4.4 Fully enclosed areas below the lowest floor in AO and AH Zones must comply with the provisions of Section 5.3.1.3 for hydraulic flood vents.

6-06 STANDARDS FOR SUBDIVISION PROPOSALS

In all special flood hazard areas the following requirements shall apply:

- 6-06.1 All subdivision proposals shall be consistent with the need to minimize flood damage;
- 6-06.2 All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
- 6-06.3 All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards, and;
- 6-06.4 In Zone A, Base flood elevation data shall be provided for all subdivision proposals and other proposed development.

6-07 VARIANCES PROCEDURES

- 6-07.1 The Zoning Board of Appeals shall hear and decide appeals and requests for variances from the requirements of this regulation.
- 6-07.2 The Zoning Board of Appeals shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Town Planner in the enforcement or administration of this regulation.
- 6-07.3 Any person aggrieved by the decision of the Zoning Board of Appeals or any person owning land which abuts or is within a radius of one hundred feet (100) of the land in question may appeal within 15 days after legal notice of such decision to the State Superior Court of Hartford/New Britain, as provided in Section 8-8 of the General Statutes, as amended.

6-07.4 BUILDINGS ON AN HISTORIC REGISTER

Variations may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places without regard to the procedures set forth in the remainder of this section, except for Section 6-07.7 A. through 6-07.7 D., and provided the proposed reconstruction, rehabilitation, or restoration will not result in the structure losing its historical character.

No renovations or alterations may be made to an historical structure without due consideration and effort to incorporate design concepts which, while preserving the historical character of the building, will also serve to reduce the potential for future flood damage and threat to human life and property.

6-07.5 FLOODWAY PROHIBITION

Variations shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

6-07.6 CONSIDERATIONS FOR GRANTING OF VARIANCES

- A. In passing upon such application, the Zoning Board of Appeals shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and:
1. The danger that materials may be swept onto other lands to the injury of others;
 2. The danger to life and property due to flooding or erosion damage;
 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 4. The importance of the services provided by the proposed facility to the community;
 5. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use
 6. The compatibility of the proposed use with existing and anticipated development;
 7. The relationship of the proposed use to the Comprehensive Plan and Floodplain Management Program for that area;
 8. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 9. The expected heights, velocity, duration, rate of rise and sediment transport of

the flood waters and the effects of wave action, if applicable, expected at the site, and;

10. 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.

B. Upon consideration of the factors listed above, and the purposes of this regulation, the Zoning Board of Appeals may attach such conditions to the granting of variances as it deems necessary to further the purposes of this regulation.

6-07.7 CONDITIONS FOR VARIANCES

A. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and in the instance of a historical building, a determination that the variance is the minimum necessary as not to destroy the historic character and design of the building.

B. Variances shall only be issued upon (i) a showing of good and sufficient cause, (ii) a determination that failure to grant the variance would result in exceptional hardship, and; (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing town regulations.

C. Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the structure is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation up to amounts as high as \$25 for \$100 of insurance coverage.

D. The Town Planner shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

6-08 PENALTIES FOR VIOLATIONS

Violation of the provisions of this regulation or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a misdemeanor. Any person who violates this ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$250.00 per day if proven done willfully and \$100.00 per day if not, or imprisoned for not more than 10 days for each day of violation, or both, and in addition, shall pay all costs and reasonable legal fees involved in the case. Nothing herein contained shall prevent the Town of Southington from taking such other lawful action as is necessary to prevent or remedy any violation.

6-09 SEVERABILITY

If any section, provision, or portion of this Regulation is adjudged unconstitutional or invalid by a court for any reason whatsoever, the remainder of the Regulation shall not be affected, which shall remain in full force and effect; and to this end the provisions of this Regulation are hereby declared to be severable.

6-10 EFFECTIVE DATE OF REGULATIONS¹

Adopted May 19, 1981

Effective June 3, 1981

Revised to May 8, 2007

Revised to May 3, 2008

Revised to April 19, 2017

Revised to May 19, 2021

¹ New, ZA #545, effective 5/3/08