

FLOOD DAMAGE PREVENTION LOCAL LAW

Effective:

July 13, 1987

Local Law #2 1987

A local law replacing the Flood Damage Protection Ordinance adopted 12 March 1980 by the Common Council.

Be it enacted by the Common Council of the City of Rensselaer, New York, as follows:

FLOOD DAMAGE PREVENTION LOCAL LAW

SECTION 1.0
STATUTORY AUTHORIZATION AND PURPOSE

1.1 FINDINGS

The Common Council of the City of Rensselaer finds that the potential and/or actual damages from flooding and erosion may be a problem to the residents of the City of Rensselaer and that such damages may include: destruction or loss of private and public housing, damage to public facilities, both publicly and privately owned, and injury to and loss of human life. In order to minimize the threat of such damages and to achieve the purposes and objectives hereinafter set forth, this local law is adopted.

1.2 STATEMENT OF PURPOSE

It is the purpose of this local law 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) regulate 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;
- (2) require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (3) control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;
- (4) control filling, grading, dredging and other development which may increase erosion or flood damage;
- (5) regulate the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards to other lands, and;
- (6) qualify and maintain for participation in the National Flood Insurance Program.

1.3 OBJECTIVES

The objectives of this local law are:

- (1) to protect human life and health;
- (2) to minimize expenditure of public money for costly flood control projects;
- (3) to minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) to minimize prolonged business interruptions;
- (5) to minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, sewer

lines, streets and bridges located in areas of special flood hazard;

- (6) to help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
- (7) to provide that developers are notified that property is in an area of special flood hazard; and,
- (8) to ensure that those who occupy the areas of special flood hazard assume financial responsibility for their actions.

SECTION 2.0 DEFINITIONS

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

"Appeal" means a request for a review of the Local Administrator's interpretation of any provision of this Local Law or a request for a variance.

"Area of shallow flooding" means a designated AO or VO Zone on a community's Flood Insurance Rate Map (FIRM) 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 the velocity flow may be evident.

"Base flood" means the flood having a one percent chance of being equalled or exceeded in any given year.

"Basement" means that portion of a building having its floor subgrade (below ground level) on all sides.

"Breakaway wall" means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system.

"Building" means any structure built for support, shelter, or enclosure for occupancy or storage.

"Cellar" - has the same meaning as "Basement."

"Coastal high hazard area" means the area subject to high velocity waters including, but not limited to, hurricane wave wash. The area is designated on a FIRM as zone VI - 30, VE, VO, or V.

"Development" means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, paving, excavation or drilling operations located within the area of special flood hazard.

"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), or shear walls.

"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 of runoff of surface waters from any source.

"Flood Boundary and Floodway Map (FBFM)" means an official map of the Community published by the Federal Emergency Management Agency as part of a riverine Community's Flood Insurance Study. The FBFM delineates a Regulatory Floodway along watercourses studied in detail in the Flood Insurance Study.

"Flood Hazard Boundary Map (FHBM)" means an official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the areas of special flood hazard have been defined but no water surface elevation is provided.

"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.

"Flood Insurance Study" is the official report provided by the Federal Emergency Management Agency. The report contains flood profiles, as well as the Flood Boundary Floodway Map and the water surface elevations of the base flood.

"Flood proofing" means any combination of structural and non-structural additions, changes or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

"Floodway" - has the same meaning as "Regulatory Floodway."

"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.

"Functionally dependent use" means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of passengers, shipbuilding, and ship repair. The term does not include long-term storage, manufacture, sales, or service facilities.

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

"Lowest Floor" means lowest level including basement or cellar of the lowest enclosed area. An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement is not considered a building's lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this Local Law.

"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 park trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.

"Mean Sea Level" means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

"Mobile home" - has the same meaning as "Manufactured home."

"National Geodetic Vertical Datum (NGVD)" as corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the floodplain.

"New construction" means structures for which the "start of construction" commenced on or after the effective date of this local law.

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

"100-year flood" has the same meaning as "Base Flood."

"Regulatory 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 a designated height as determined by the Federal Emergency Management Agency in a Flood Insurance Study or by other agencies as provided in Section 4.3-2 of this law.

"Sand dunes" means naturally occurring accumulations of sand in ridges or mounds landward of the beach.

"Start of construction" means the initiation, excluding planning and design, of any phase of a project, physical alteration of the property, and shall include land preparation, such as clearing, grading, and filling; installation of streets and/or walkways; excavation for a basement, footings, piers, or foundations or the erection of temporary forms. It also includes the placement and/or installation on the property of accessory buildings (garages, sheds), storage trailers, and building materials. For manufactured homes the "actual start" means affixing of the manufactured home to its permanent site.

"Structure" means a walled and roofed building, a manufactured home, or a gas or liquid storage tank, that is principally above ground.

"Substantial improvement" means any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

- (1) before the improvement or repair is started; or
- (2) if the structure has been damaged and is being restored, before the damage occurred.

For the purposes of this definition "substantial improvement" is considered to commence 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 either:

- (1) any project for improvement of a structure to comply with existing state or local building, fire, health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions; or
- (2) any alteration of a structure or contributing structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

"variance" means a grant of relief from the requirements of this local law which permits construction or use in a manner that would otherwise be prohibited by this Local Law.

SECTION 3.0 GENERAL PROVISIONS

3.1 LANDS TO WHICH THIS LOCAL LAW APPLIES

This Local Law shall apply to all areas of special flood hazards within the jurisdiction of the City of Rensselaer.

3.2 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD

The areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report entitled the "Flood Insurance Study for the City of Rensselaer, of Rensselaer County, New York", dated September, 1979, with accompanying Flood Insurance Rate Maps and Flood Boundary-Floodway Maps is hereby adopted and declared to be a part of this Local Law.

The Flood Insurance Study and maps are on file at the Rensselaer Planning and Development Agency, City Hall, 505 Broadway, Rensselaer, NY 12144.

3.3 INTERPRETATION, CONFLICT WITH OTHER LAWS

This Local Law is adopted in response to revisions to the National Flood Insurance Program effected October 1, 1986 and shall supersede all previous laws adopted for the purpose of establishing and maintaining eligibility for flood insurance. In their interpretation and application, the provisions of this Local Law shall be held to be minimum requirements, adopted for the promotion of the public health, safety and welfare. Whenever the requirements of this Local Law are at variance with the requirements of any other lawfully adopted rules, regulations, or ordinances, the most restrictive, or that imposing the higher standards, shall govern.

3.4 SEVERABILITY

The invalidity of any section or provision of this local law shall not invalidate any other section or provision thereof.

3.5 PENALTIES FOR NON-COMPLIANCE

No structure shall hereafter be constructed, located, extended, converted, or altered and no land shall be excavated or filled without full compliance with the terms of this Local Law and any other applicable regulations. Any infraction of the provisions of this Local Law by failure to comply with any of its requirements, including infractions of conditions and safeguards established in connection with conditions of the permit, shall constitute a violation. Any person who violates this Local Law or fails to comply with any of its requirements shall, upon conviction thereof, be fined no more than \$250 or imprisoned for not more than 15 days or both. Each day of noncompliance shall be considered a separate offense. Nothing herein contained shall prevent the City of Rensselaer from taking such other lawful action as necessary to prevent or remedy an infraction. Any structure found not compliant with the requirements of this Local Law for which the developer and/or owner has not applied for and received an approved variance under section 6.0 will be declared noncompliant and notification sent to the Federal Emergency Management Agency.

3.6 WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by this Local Law is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and

will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This Local Law does not imply that land outside the area of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This Local Law shall not create liability on the part of the City of Rensselaer, any officer or employee thereof, or the Federal Emergency Management Agency, for any flood damages that result from reliance on this Local Law or any administrative decision lawfully made thereunder.

SECTION 4.0 ADMINISTRATION

4.1 DESIGNATION OF THE LOCAL ADMINISTRATOR

The Building and Zoning Administrator is hereby appointed Local Administrator to administer and implement this Local Law by granting or denying development permit applications, upon review and approval of the application and accompanying plans and documentation by the City Planning Commission. The Flood Hazard Development Permit included herein shall be considered a special use permit under the City's Zoning Law (Schedule of Use Regulations) and shall be reviewed by the City Planning Commission in accordance with Article V of said Zoning Law.

4.2 ESTABLISHMENT OF DEVELOPMENT PERMIT

A Development Permit shall be obtained before the start of construction or any other development within the area of special flood hazard as established in Section 3.2. Application for a Development Permit shall be made on forms furnished by the Building and Zoning Administrator and may include, but not be limited to plans, in duplicate, drawn to scale and showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing.

4.2-1 APPLICATION STAGE

The following information is required where applicable:

- (a) elevation in relation to mean sea level of the proposed lowest floor (including basement or cellar) of all structures;

- (b) elevation in relation to mean sea level to which any non-residential structure will be flood-proofed;
- (c) when required a certificate from a licensed professional engineer or architect that the utility floodproofing will meet the criteria in Section 5.1-3(1);
- (d) certificate from a licensed professional engineer or architect that the non-residential flood-proofed structure will meet the flood-proofing criteria in Section 5.2; and
- (e) description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

4.2-2 CONSTRUCTION STAGE

Upon placement of the lowest floor, or flood-proofing by whatever means, it shall be the duty of the permit holder to submit to the Building and Zoning Administrator a certificate of the elevation of the lowest floor, or flood-proofed elevation, in relation to mean sea level. The elevation certificate shall be prepared by, or under the direct supervision of, a licensed land surveyor or professional engineer and certified by same. When flood-proofing is utilized for a particular building, the floodproofing certificate shall be prepared by, or under the direct supervision of, a licensed professional engineer or architect and certified by same. Any further work undertaken prior to submission and approval of the certification shall be at the permit holder's risk. The Building and Zoning Administrator shall review all data submitted. Deficiencies detected shall be cause to issue a stop-work order for the project unless immediately corrected.

4.3 DUTIES AND RESPONSIBILITIES OF THE BUILDING AND ZONING ADMINISTRATOR

Duties of the Building and Zoning Administrator shall include, but not be limited to:

4.3-1 PERMIT APPLICATION REVIEW

- (1) Assistance to the Planning Commission in review of all permit applications to determine that the requirements of this Local Law have been satisfied.

- (2) Assistance to the Planning Commission in review of all development permit applications to determine that all necessary permits have been obtained from those Federal, State or Local governmental agencies from which prior approval is required.
- (3) Assistance to the Planning Commission in review of all development permit applications to determine if the proposed development adversely affects the area of special flood hazard. For the purposes of this Local Law, "adversely affects" means physical damage to adjacent properties. An engineering study may be required of the applicant for this purpose.
 - (i) If there is no adverse effect, then the permit shall be granted consistent with the provisions of this local law.
 - (ii) If there is an adverse effect, then flood damage mitigation measures shall be made a condition of the permit.
- (4) Review all development permits for compliance with the provisions of Section 5.1-5, Encroachments.

4.3-2 USE OF OTHER BASE FLOOD AND FLOODWAY DATA

When base flood elevation data has not been provided in accordance with Section 3.2, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, the Building and Zoning Administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, including data developed pursuant to Section 5.1-4(4) in order to administer Section 5.2, SPECIFIC STANDARDS, and Section 5.3, FLOODWAYS.

4.3-3 INFORMATION TO BE OBTAINED AND MAINTAINED

- (1) Obtain and record the actual elevation, in relation to mean sea level, of the lowest floor, including basement or cellar of all or substantially improved structures, and whether or not the structure contains a basement or cellar.
- (2) For all new or substantially improved floodproofed structures:

- (i) obtain and record the actual elevation, in relation to mean sea level, to which the structure has been floodproofed; and
- (ii) maintain for public inspection all records pertaining to the provisions of this local law including variances when granted and Certificates of Compliance.

4.3-4 ALTERATION OF WATERCOURSES

- (1) Notify adjacent communities and the New York State Department of Environmental Conservation prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Regional Director, Federal Emergency Management Agency, Region II, 26 Federal Plaza, New York, NY 10278.
- (2) Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

4.3-5 INTERPRETATION OF FIRM BOUNDARIES

The Building and Zoning Administrator shall have the authority to make interpretations when there appears to be a conflict between the limits of the federally identified area of special flood hazard and actual field conditions. Base flood elevation data established pursuant to Section 3.2 and/or Section 4.3-2, when available, shall be used to accurately delineate the area of special flood hazards. The Building and Zoning Administrator shall use flood information from any other authoritative source including historical data, to establish the limits of the area of special flood hazards when base flood elevations are not available.

4.3-6 STOP WORK ORDERS

- (1) All floodplain development found ongoing without an approved permit shall be subject to the issuance of a stop work order by the Building and Zoning Administrator. Disregard of a stop work order shall be subject to the penalties described in Section 3.5 of this Local Law.

- (2) All floodplain development found noncompliant with the provisions of this law and/or the conditions of the approved permit shall be subject to the issuance of a stop work order by the Building and Zoning Administrator. Disregard of a stop work order shall be subject to the penalties described in Section 3.5 of this Local Law.

4.3-7 INSPECTIONS

The Building and Zoning Administrator and/or the developer's engineer or architect shall make periodic inspections at appropriate times throughout the period of construction in order to monitor compliance with permit conditions and enable said inspector to certify that the development is in compliance with the requirements of either the Development Permit or the approved variance.

4.3-8 CERTIFICATE OF COMPLIANCE

- (1) It shall be unlawful to use or occupy or to permit the use or occupancy of any building or premises, or both, or part thereof hereafter created, erected, changed, converted or wholly or partly altered or enlarged in its use or structure until a Certificate of Compliance has been issued by the Building and Zoning Administrator stating that the building or land conforms to the requirements of this Local Law.
- (2) All other development occurring within the designated flood hazard area will have upon completion a Certificate of Compliance issued by the Building and Zoning Administrator.

All certifications shall be based upon the inspections conducted subject to Section 4.3-7 and/or any certified elevation, hydraulic information, floodproofing, anchoring requirements or encroachment analysis which may have been required as a condition of the approved permit.

SECTION 5.0
PROVISIONS FOR FLOOD HAZARD REDUCTION

5.1 GENERAL STANDARDS

In all areas of special flood hazards the following standards are required:

5.1-1 ANCHORING

- (1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- (2) All manufactured homes shall be installed using methods and practices which minimize flood damage. Manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Manufactured homes shall be elevated to or above the base flood elevation or 2 feet above the highest adjacent grade when no base flood elevation has been determined. Methods of anchoring may include, but are not to be limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and Local anchoring requirements for resisting wind forces.

5.1-2 CONSTRUCTION MATERIALS AND METHODS

- (1) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- (2) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

5.1-3 UTILITIES

- (1) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. When designed for location below the base flood elevation, a professional engineer's or architect's certification is required.

- (2) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- (3) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters; and,
- (4) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

5.1-4 SUBDIVISION PROPOSALS

- (1) All subdivision proposals shall be consistent with the need to minimize flood damage;
- (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;
- (3) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and
- (4) Base flood elevation data shall be provided for subdivision proposals and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than either 50 lots or 5 acres.

5.1-5 ENCROACHMENTS

- (1) All proposed development in riverine situation where no flood elevation data is available (unnumbered A Zones) shall be analyzed to determine the effects on the flood carrying capacity of the area of special flood hazards set forth in section 4.3-1(3), Permit Application Review. This may require the submission of additional technical data to assist in the determination.
- (2) In all areas of special flood hazard in which base flood elevation data is available pursuant to Section 4.3-2 or Section 5.1-4(4) and no floodway

has been determined, the cumulative effects of any proposed development, when combined with all other existing and anticipated development, shall not increase the water surface elevation of the base flood more than one foot at any point.

- (3) In all areas of the special flood hazard where floodway data is provided or available pursuant to Section 4.3-2, the requirements of Section 5.3, Floodways, shall apply.

5.2 SPECIFIC STANDARDS

In all areas of special flood hazards where base flood elevation data has been provided as set forth in Section 3.2 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARDS and Section 4.3-2, USE OF OTHER BASE FLOOD DATA, the following standards are required:

5.2-1 RESIDENTIAL CONSTRUCTION

New Construction and substantial improvement of any resident structure shall:

- (1) have the lowest floor, including basement or cellar, elevated to or above the base flood elevation;
- (2) have fully enclosed areas below the lowest floor that are subject to flooding designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a licensed professional engineer or architect or meet or exceed the following minimum criteria:
 - (i) a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - (ii) the bottom of all such openings shall be no higher than one foot above the lowest adjacent finished grade; and

- (iii) openings may be equipped with louvers, valves, screens or other coverings or devices provided they permit the automatic entry and exit of floodwaters.

5.2-2 NONRESIDENTIAL CONSTRUCTION

New construction and substantial improvements of any commercial, industrial or other non-residential structure, together with attendant utility and sanitary facilities, shall either: have the lowest floor, including basement or cellar, elevated to or above the base flood elevation; or be floodproofed so that the structure is watertight below the base flood level with walls substantially impermeable to the passage of water. All structural components located below the base flood level must be capable of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy.

- (1) If the structure is to be elevated, fully enclosed areas below the base flood elevation shall be designed to automatically (without human intervention) allow for the entry and exit of floodwaters for the purpose of equalizing hydrostatic flood forces on exterior walls. Designs for meeting this requirement must either be certified by a licensed professional engineer or a licensed architect or meet the following criteria:
 - (i) a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - (ii) the bottom of all such openings shall be no higher than one foot above the lowest adjacent finished grade; and
 - (iii) openings may be equipped with louvers, valves, screens or other covering or devices provided they permit the automatic entry and exit of floodwaters.

- (2) If the structure is to be floodproofed:

- (i) a licensed professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice to make the structure watertight with walls substantially impermeable to the passage of water, with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
- (ii) a licensed professional engineer or licensed land surveyor shall certify the specific elevation (in relation to mean sea level) to which the structure is floodproofed.

The Building and Zoning Administrator shall maintain on record a copy of all such certificates noted in this section.

5.2-3 CONSTRUCTION STANDARDS FOR AREAS OF SPECIAL FLOOD HAZARDS WITHOUT BASE FLOOD ELEVATIONS

New construction or substantial improvements of structures including manufactured homes shall have the lowest floor including basement elevated to or above the base flood elevation as may be determined in Section 4.3-2 or 2 feet above the highest adjacent grade where no elevation data is available.

- (1) New construction or substantial improvements of structures including manufactured homes shall have the lowest floor (including basement) elevated at least 2 feet above the highest adjacent grade next to the proposed foundation of the structure.
- (2) Fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically (without human intervention) allow for the entry and exit of floodwaters for the purpose of equalizing hydrostatic flood forces on exterior

walls. Designs for meeting this requirement must either be certified by a licensed professional engineer or a licensed architect or meet the following criteria:

- (i) a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
- (ii) the bottom of all such openings shall be no higher than one foot above the lowest adjacent finished grade;
- (iii) openings may be equipped with louvers, valves, screens or other coverings or openings provided they permit the automatic entry and exit of floodwaters.

5.3 FLOODWAYS

Located within areas of special flood hazard are areas designated as floodways (see definition, Section 2.0). The floodway is an extremely hazardous area due to high velocity flood waters carrying debris and posing additional threats from potential erosion forces. When floodway data is available for a particular site as provided by Section 3.2 and Section 4.3-2, all encroachments including fill, new construction, substantial improvements, and other development are prohibited within the limits of the floodway unless a technical evaluation demonstrates that such encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

SECTION 6.0 VARIANCE PROCEDURE

6.1 APPEALS BOARD

- (1) The Zoning Board of Appeals as established by the City of Rensselaer shall hear and decide appeals and requests for variances from the requirements of this local law in accordance with procedures established in Article X of the City Zoning Law.

- (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 Building and Zoning Administrator in the enforcement or administration of this Local Law.
- (3) Those aggrieved by the decision of the Zoning Board of Appeals may appeal such decision to the Supreme Court pursuant to Article 78 of the Civil Practice Law and Rules.
- (4) In passing upon such applications, the Zoning Board of Appeals shall consider all technical evaluation, all factors and standards specified in other sections of this Local Law and:
 - (i) the danger that materials may be swept onto other lands to the injury of others;
 - (ii) the danger to life and property due to flooding or erosion damage;
 - (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 availability of alternate locations for the proposed use which are not subject to flooding or erosion damage;
 - (vii) the compatibility of the proposed use with existing and anticipated development;
 - (viii) the relationship of the proposed use to the comprehensive plan and flood plain management program of that area;
 - (ix) the safety of access to the property in times of flood for ordinary and emergency vehicles;

- (x) the costs to local governments and the dangers associated with conducting search and rescue operations during periods of flooding.;
 - (xi) 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
 - (xii) the costs of providing governmental services during and after flood conditions, including search and rescue operations, maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems and streets and bridges.
- (5) Upon consideration of the factors of Section 6.1(4) and the purposes of this Local Law, the Zoning Board of Appeals may attach such conditions to the granting of variances as it deems necessary to further the purposes of this Local Law.
 - (6) The Building and Zoning Administrator shall maintain the records of all appeal actions including technical information and report any variances to the Federal Emergency Management Agency upon request.

6.2 CONDITIONS FOR VARIANCES

- (1) Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items (i-xii) in Section 6.1(4) have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
- (2) Variances may be issued for the reconstruction, rehabilitation or restoration of structures and contributing structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the contributing structures procedures set forth in the remainder of this section.

