21-400 DEVELOPMENT IN FLOOD PLAIN (SPECIAL FLOOD HAZARD) AREAS

Section 1. Purpose.

All new development proposals in the Flood Plain (Special Flood Hazard) Areas shall be reviewed and approved by the Building Officials so as to accomplish the following purposes:

A. To prevent unwise developments from increasing flood or drainage hazards to others;

B. protect new buildings and major improvements to buildings from flood damage;

C. to promote and protect the public health, safety, and general welfare of the citizens from the hazards of flooding;

D. to lessen the burden on the taxpayer for flood control, repairs to public facilities and utilities, and flood rescue and relief operations;

E. maintain property values and a stable tax base by minimizing the potential for creating blight areas;

F. make federally subsidized flood insurance available, and

G. to preserve the natural characteristics and functions of watercourses and floodplains in order to moderate flood and stormwater impacts, improve water quality, reduce soil erosion, protect aquatic and riparian habitat, provide recreational opportunities, provide aesthetic benefits and enhance community and economic development.

Section 2. Definitions.

For the purposes of this ordinance, the following definitions are adopted:

Base Flood- The flood having a one percent (1%) probability of being equaled or exceeded in any given year. The base flood is also known as the 100-year flood. The base flood elevation at any location is as defined in Section 3 of this ordinance.

Base Flood Elevation (BFE)- The elevation in relation to mean sea level of the crest of the base flood.

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

Building- A walled and roofed structure, including gas or liquid storage tank, that is principally above ground, including manufactured homes, prefabricated buildings and gas or liquid storage tanks. The term also includes recreational vehicles and travel trailers installed on a site for more than one hundred eighty (180) days per year.

Critical Facility- Any facility which is critical to the health and welfare of the population and, if flooded, would create an added dimension to the disaster. Damage to these critical facilities can impact the delivery of vital services, can cause greater damage to other sectors of the community, or can put special populations at risk.

Examples of critical facilities where flood protection should be required include: emergency services facilities (such as fire and police stations), schools, hospitals retirement homes and senior care facilities, major roads and bridges, critical utility sites (telephone switching stations or electrical transformers, and hazardous material storage facilities (chemicals, petrochemicals, hazardous or toxic substances).

Development- Any man-made change to real estate including, but not necessarily limited to:

1. Demolition, construction, reconstruction, repair, placement of a building, or any structural alteration to a building;

2. substantial improvement of an existing building;

3. installation of a manufactured home on a site, preparing a site for a manufactured home, or installing a travel trailer on a site for more than one hundred eighty (180) days per year;

4. installation of utilities, construction of roads, bridges, culverts or similar projects;

5. construction or erection of levees, dams walls or fences;

6. drilling, mining, filling, dredging, grading, excavating, paving, or other alterations of the ground surface;

7. storage of materials including the placement of gas and liquid storage tanks, and channel modifications or any other activity that might change the direction, height, or velocity of flood or surface waters.

"Development" does not include routine maintenance of existing buildings and facilities, resurfacing roads, or gardening, plowing, and similar practices that do not involve filing, grading, or construction of levees.

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 homes are to be affixed or buildings to be constructed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community.

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

manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

FEMA- Federal Emergency Management Agency

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

Flood Fringe- That portion of the floodplain outside of the regulatory floodway.

Flood Insurance Rate Map- A map prepared by the Federal Emergency Management Agency that depicts the floodplain or special flood hazard area (SFHA) within a community. This map includes insurance rate zones and may or may not depict floodways and show base flood elevations.

Flood Insurance Study- An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations.

Floodplain and Special Flood Hazard Area (SFHA)- These two terms are synonymous. Those lands within the jurisdiction of the City of Mt. Vernon, the extraterritorial jurisdiction of the City of Mt. Vernon, or that may be annexed into the City of Mt. Vernon, that are subject to inundation by the base flood. The floodplains of the City of Mt. Vernon are generally identified as such on panel numbers (0179C, 0180C, 0183C, 0184C, 0185C, 0190C, 0191C, 0192C, 0195C, and 0225C) of the countywide Flood Insurance Rate Map of Jefferson County prepared by the Federal Emergency Management Agency and dated September 17, 2010**.** Floodplain also includes those areas of known flooding as identified by the community.

The floodplains of those parts of unincorporated Jefferson County that are within the extraterritorial jurisdiction of the City of Mt. Vernon or that may be annexed into the City of Mt. Vernon are generally identified as such on the Flood Insurance Rate map prepared for Jefferson County by the Federal Emergency Management Agency and dated September 17, 2010.

Floodproofing- Any combination of structural or nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate, property and their contents.

Floodproofing Certificate- A form published by the Federal Emergency management agency that is used to certify that a building has been designed and constructed to be structurally dry flood proofed to the flood protection elevation.

Flood Protection Elevation (FPE)- The elevation of the base flood plus one foot of freeboard at any given location in the floodplain.

Floodway- That portion of the floodplain required to store and convey the base flood. The floodway for the floodplains of Church Tributary, West Tributary, East Fork Botch's Ditch, Botch's Ditch, Casey Fork, Bell Street Ditch, Brickyard Creek, and Bishop Creek

shall be as delineated on the countywide Flood Insurance Rate Map of Jefferson prepared by FEMA and dated September 17, 2010. The floodways for each of the remaining floodplains of the City of Mt. Vernon shall be according to the best data available from the Federal, State, or other sources.

Freeboard- An increment of elevation added to the base flood elevation to provide a factor of safety for uncertainties in calculations, future watershed development, unknown localized conditions, wave actions and unpredictable effects such as those caused by ice or debris jams.

Historic Structure- Any structure that is:

1. Listed individually in the National Register of Historic Places or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register.

2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district.

3. Individually listed on the state inventory of historic places by the Illinois Historic Preservation Agency.

4. Individually listed on a local inventory of historic places that has been certified by the Illinois Historic Preservation Agency.

IDNR/OWR- Illinois Department of Natural Resources/Office of Water Resources.

Lowest Floor- 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. Provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of Section 7 of this ordinance.

Manufactured Home- A structure transportable in one or more sections, that is built on a permanent chassis and is designed to be used with or without a permanent foundation when connected to required utilities.

Manufactured Home Park or Subdivision- A parcel (or contiguous parcels) of land divided into two or more lots for rent or sale.

New Construction- Structures for which the start of construction commenced or after the effective date of floodplain management regulations adopted by a community and includes any subsequent improvements of such structures.

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 or buildings to be constructed (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 a community.

NFIP- National Flood Insurance Program.

Recreational Vehicle or Travel Trailer- A vehicle which is:

1. built on a single chassis;
2. four hundred (400) square feet or less in size;
3. designed to be self-propelled or permanently towable by a light duty truck and designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

Repetitive Loss- Flood related damages sustained by a structure on two separate occasions during a ten year period for which the cost of repairs at the time of each such flood event on the average equals or exceeds twenty-five percent (25%) of the market value of the structure before the damage occurred.

SFHA- See definition of floodplain.

Start of Construction- Includes substantial improvement and means the date the building permit was issued. This, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement or other improvement, was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns or any work beyond the stage of excavation or placement of a manufactured home on a foundation. For a substantial improvement, actual start of construction means the first alteration of any wall, ceiling, floor or other structural part oaf a building whether or not that alteration affects the external dimensions of the building.

Structure (see "Building")

Substantial Damage- Damage of any origin sustained by a structure whereby the cumulative percentage of damage subsequent to the adoption of this ordinance equals or exceeds fifty percent (50%) of the market value of the structure before the damage occurred regardless of actual repair work performed. Volunteer labor and materials must be included in this determination. The term includes "Repetitive Loss Buildings" (see definition).

Substantial Improvement- Any reconstruction, rehabilitation, addition or improvement of a structure taking place subsequent to the adoption of this ordinance in which the cumulative percentage of improvements:

equals or exceeds fifty percent (50%) of the market value of the structure before the improvement or repair is started, or

increases the floor area by more than twenty percent (20%).

"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. This term includes structures which have incurred repetitive loss or substantial damage, regardless of the actual repair work done.

The term does not include:

1. Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or

2. Any alteration of a structure listed on the National Register of Historic Places or the Illinois Register of Historic Places.

Violation- The failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the required federal, state, and/or local permits and elevation certification is presumed to be in violation until such time as the documentation is provided.

Section 3. Base Flood Elevation.

This ordinance's protection standard is the base flood. The best available base flood data are listed below. Whenever a party disagrees with the best available data, the party shall finance the detailed engineering study needed to replace the existing data with better data and submit it to the FEMA and IDNR/OWR for approval prior to any development of the site.

A. The base flood elevation for the floodplains of Church Tributary, West Tributary, East Fork Botch's Ditch, Botch's Ditch, Casey Fork, Bell Street Ditch, Brickyard Creek, and Bishop Creek shall be as delineated on the 100-year flood profiles in the countywide Flood Insurance Study of Jefferson prepared by the Federal Emergency Management Agency and dated September 17, 2010.

B. The base flood elevation for each floodplain delineated as an "AH Zone" or AO Zone" shall be that elevation (or depth) delineated on the county wide Flood Insurance Rate Map of Jefferson County.

C. The base flood elevation for each of the remaining floodplains delineated as a "A Zone" on the countywide Flood Insurance Rate Map of Jefferson County shall be according to the best data available from federal, state or sources. Should no other data exist, an engineering study must be financed by the applicant to determine base flood elevations.

Section 4. Duties of the Building Official.

The Building Official of the City of Mt. Vernon shall be responsible for the general administration of this ordinance and ensure that all development activities within the floodplains under the jurisdiction of the City of Mt. Vernon meet the requirements of this ordinance. Specifically, the Building Official shall:

A. Process development permits in accordance with Section 5;

B. ensure that all development in a floodway (or a floodplain with no delineated floodway) meets the damage prevention requirements of Section 6;

C. ensure that the building protection requirements for all buildings subject to Section 7 are met and maintain a record of the "as-built" elevation of the lowest floor (including basement) or floodproof certificate;

D. assure that all subdivisions and annexations meet the requirements of Section 8;

E. ensure that water supply and waste disposal systems meet the Public Health standards of Section 9;

F. if a variance is requested, ensure that the requirements of Section 11 are met and maintain documentation of any variances granted;

G. inspect all development projects and take any and all penalty actions outlined in Section 13 as a necessary to ensure compliance with this ordinance;

H. assure that applicants are aware of and obtain any and all other required local, state, and federal permits;

I. notify IDNR/OWR and any neighboring communities prior to any alteration or relocation of a watercourse;

J. provide information and assistance to citizens upon request about permit procedures and floodplain construction techniques;

K. cooperate with state and federal floodplain management agencies to coordinate base flood data and to improve the administration of this ordinance;

L. maintain for public inspection base flood data, floodplain maps, copies of state and federal permits, and documentation of compliance for development activities subject to this ordinance;

M. perform site inspections to ensure compliance with this ordinance and make substantial damage determinations for structures within the floodplain, and

N. maintain the accuracy of floodplain maps including notifying IDNR/OWR and/or submitting information to FEMA within six months whenever a

modification of the floodplain may change the base flood elevation or result in a change to the floodplain map.

Section 5. Development Permit.

No person, firm, corporation, or governmental body not exempted by law shall commence any development in the floodplain without first obtaining a development permit from the Building Official. The Building Official shall not issue a development permit if the proposed development does not meet the requirements of this ordinance.

A. The application for development permit shall be accompanied by:

1. drawings of the site, drawn to scale showing property line dimensions;

2. existing grade elevations and all changes in grade resulting from excavation or filling;

3. the location and dimensions of all buildings and additions to buildings;

4. the elevation of the lowest floor (including basement) of all proposed buildings subject to the requirements of Section 7 of this ordinance, and

5. cost of project or improvements as estimated by a licensed engineer or architect. A signed estimate by a contractor may also meet this requirement.

B. Upon receipt of an application for a development permit, the Building Official shall compare the elevation of the site to the base flood elevation. Any development located on land that can be shown by the base flood elevation. Any development located on land that can be shown by survey data to be higher than the current base flood elevation and which has not been filled after the date of the site's first Flood Insurance Rate Map is not in the floodplain and therefore not subject to the requirements of this ordinance. Conversely, any development located on land shown to be below the base flood elevation and hydraulically connected, but not shown on the current Flood Insurance Rate Map, is subject to the provisions of this ordinance.

The Building Official shall maintain documentation of the existing ground elevation at the development site and certification that this ground elevation existed prior to the date of the site's first Flood Insurance Rate Map identification.

The Building Official shall be responsible for obtaining from the applicant copies of all other federal, state, and local permits, approvals or permit-not-required letters that may be required for this type of activity. The Building

Official shall not issue a permit unless all other federal, state, and local permits have been obtained.

Section 6. Preventing Increased Flood Heights and Resulting Damages.

Within any floodway identified on the countywide Flood Insurance Rate Map, and within all other floodplains where a floodway has not been delineated, the following standards shall apply:

A. Except as provided in Section 6(B) of this ordinance, no development shall be allowed which, acting in combination with existing and anticipated development will cause any increase in flood heights or velocities or threat to public health and safety. The following specific development activities shall be considered as meeting this requirement:

1. Bridge and culvert crossings of streams in rural areas meeting the following conditions of the Illinois Department of Natural Resources, Office of Water Resources Statewide Permit Number 2:

    a. the crossing will not result in an increase in water surface profile elevation in excess of 1.0 feet, and

    b. the crossing will not result in an increase in water surface profile elevation in excess of one half (0.5) feet at a point one thousand (1,000) feet upstream of the proposed structure.

    c. There are no buildings in the area impacted by the increases in water surface profile.

    d. The proposed bridge or culvert crossing will not involve straightening, enlarging, or relocating the existing channel.

    e. The design must be certified by a licensed professional engineer in the State of Illinois and the designs must meet the conditions of an IDNR/OWR permit.

    f. The design must be certified by a second licensed professional engineer.

2. Barge fleeting facilities meeting the following conditions of IDNR/OWR Statewide Permit Number 3:

    a. The permit is only applicable when deadmen, pier cells, or other similar anchorage devices have been permitted by the U.S. Army Corps of Engineers.

3. Aerial utility crossings meeting the following conditions of IDNR/OWR Statewide Permit Number 4;

    a. The utility line must be constructed above the existing 100-year flood elevation or attached to an existing bridge.

    b. A utility line attached to an existing bridge shall be constructed above the low cord elevation of the bridge.

    c. No supporting towers or poles shall be located in a river, lake or stream.

    d. Supporting towers including foundation and poles shall be designed and located so as to not cause an obstruction of flood flows by trapping debris.

    e. All disturbed areas shall be returned to pre-construction grades and re-vegetated.

    f. All Illinois Commerce Commission, National Electrical Safety Code, and federal requirements must be met.

4. Minor boat docks meeting the following conditions of IDNR/OWR Statewide Permit Number 5:

    a. The boat dock must not extend more than fifty (50) feet into a waterway and no more than one quarter (1/4) of the width of the waterway and shall not extend beyond the navigational limited established by the IDNR and Corps of Engineers.

    b. The width of the boat dock shall not be more than ten (10) feet.

    c. For L-Shaped or T-shaped docks, the length of that portion parallel to the shoreline must not exceed fifty percent (50%) of the landowner's shoreline frontage nor fifty (50) feet.

    d. Docks must be aligned so as not to cross the projection of property lines into the waterway or come within ten (10) feet of the projected property line.

    e. Dock posts must be marked by reflective devices.

    f. The boat dock must be securely anchored to prevent detachment during times of high wind or water.

g. Metal drums or containers may not be used as buoyancy units unless they are filled with floatation foam. Containers which previously stored pesticides, herbicides, or any other toxic chemicals are not permissible.

h. This permit does not authorize any other related construction activity such as shore protection or fill.

i. Non-floating boat docks must be constructed in a manner which will minimize obstruction to flow.

j. At any future date, the permittee must agree to make necessary modifications to the dock as determined by the IDNR or Corp of Engineers

5. Minor, non-obstructive activities meeting the following conditions of IDNR/OWR Statewide Permit Number 6:

a. the following activities (not involving fill or positive change in grade) are covered by this permit:

i. The construction of underground utility lines, wells, or septic tanks not crossing a lake or stream.

ii. The construction of light poles, sign posts, and similar structures.

iii. The construction of sidewalks, driveways, athletic fields (excluding fences), patios, and similar structures.

iv. The construction of properly anchored, unwalled, open structures such as playground equipment, pavilions, and carports.

v. The placement of properly anchored buildings not exceeding seventy (70) square feet in size, nor ten (10) square feet in any dimension. Only one such building on a property is authorized by this statewide permit.

vi. The raising of existing buildings, provided no changes are made to the outside dimensions of the building and the placement of fill is not involved.

6. Outfall Structures and drainage ditch outlets meeting the following conditions of IDNR/OWR Statewide Permit Number 7:

    a. Any outfall structure, including any headwall or end-section, shall not extend riverward or lakeward of the existing adjacent natural bank slope or adjacent bank protection.

    b. The velocity of the discharge shall not exceed the scour velocity of the channel soil, unless channel erosion would be prevented by the use of riprap or other design measures.

    c. Outlets from drainage ditches shall not be opened to a stream until the ditch is vegetated or otherwise stabilized to minimize stream sedimentation.

    d. Disturbance of streamside vegetation shall be kept to a minimum during construction to prevent erosion and sedimentation. All disturbed floodway areas, including the stream banks, shall be restored to their original contours and seeded or otherwise stabilized upon completion of construction.

7. Underground pipeline and utility crossings meeting the conditions of IDNR/OWR Statewide Permit Number 8:

    a. In all cases, the crossing shall be placed beneath the bed of the river, lake or stream and, unless the crossing is encased in concrete or entrenched in bedrock, a minimum of three (3) feet of cover shall be provided. The river, lake or stream bed shall be returned to its original condition.

    b. Disturbance of streamside vegetation shall be kept to a minimum during construction to prevent erosion and sedimentation. All disturbed floodway areas, including stream banks, shall be restored to their original contours and seeded or otherwise stabilized upon completion of construction.

    c. Any utility crossing carrying material which may cause water pollution, as defined by the Environmental Protection Act (415 ILCS 5), shall be provided with shut-off valves on each side of the body of water to be crossed.

    d. If blasting is to be utilized in the construction of the crossing, the permittee shall notify the IDNR/OWR at

least ten (10) days prior to the blasting date to allow monitoring of any related fish kills.

8. Bank stabilization projects meeting the conditions of IDNR/OWR Statewide Permit Number 9:

    a. Only the following materials may be utilized in urban areas: stone and concrete riprap, steel sheet piling, cellular blocks, fabric-formed concrete, gabion baskets, rock and wire mattresses, sand/cement filled bags, geotechnical fabric materials, natural vegetation and treated timber. Urban areas are defined as: areas of the State where residential, commercial, or industrial development currently exists or, based on land use plans or controls, is expected to occur within ten (10) years. (The Department should be consulted if there is a question of whether or not an area is considered urban).

    b. In addition to the materials listed in Section 6 (A)(8)(a), other materials (e.g. tire revetments) may be utilized in rural areas provided all other conditions of this permit are met.

    c. The following materials shall **not** be used in any case: auto bodies, garbage of debris, scrap lumber, metal refuse, roofing materials, asphalt or other bituminous materials, or any material which would cause water pollution as defined by the Environmental Protections Act (415 ILCS 5).

    d. The affected length of shoreline, stream bank, or channel to be protected shall not exceed, either singularly or cumulatively, one thousand (1000) feet.

    e. All material utilized shall be properly sized or anchored to resist anticipated forces of current and wave action.

    f. Materials shall be placed in a way which would not cause erosion or the accumulation of debris on properties adjacent to or opposite the project.

    g. Materials shall not be placed higher than the existing top of the bank.

    h. Materials shall be placed so that the modified bank full-width and cross-sectional area of the channel will conform to or be no more restrictive than that of the natural channel upstream and downstream of the site.

For projects involving continuous placement of riprap along the bank, toe of the bank or other similar applications, in no case shall the cross-sectional area of the natural channel be reduced by more than ten percent (10%) nor the volume of material placed exceed two (2) cubic yards per lineal foot of the stream bank or shoreline. The bank may be graded to obtain a flatter slope and to lessen the quantity of material required.

i. If broken concrete is used, all protruding materials such as reinforcing rods shall be cut flush with the surface of the concrete and removed from the construction area.

j. Disturbance of vegetation shall be kept to a minimum during construction to prevent erosion and sedimentation. All disturbed areas shall be seeded or otherwise stabilized upon completion of construction.

k. In the case of seawalls and gabion structures on lakes, the structure shall be constructed at or landward of the water line as determined by the normal pool elevation, unless:

i. It is constructed in alignment with an existing seawall(s) or gabion structure(s), and

ii. The volume of material placed, including the structure, would not exceed two (2) cubic yards per lineal foot.

l. Excess material excavated during the construction of the bank or shoreline protection shall be placed in accordance with local, state, and federal laws and rules, shall not be placed in a floodway.

9. Accessory structures and additions to existing residential buildings meeting the conditions of IDNR/OWR Statewide Permit Number 10:

a. The accessory structure or building addition must comply with the requirements of the local floodplain ordinance.

b. The principle structure to which the project is being added must have been in existence on the effective date of this permit (July 25, 1988).

c. The accessory structure or addition must not exceed five hundred (500) square feet in size and must not deflect floodwaters onto another property, and

d. Must not involve the placement of any fill material.

e. No construction shall be undertaken in, or within fifty (50) feet of the bank of the stream channel.

f. The accessory structure or addition must be properly anchored to prevent its movement during flood conditions.

g. Only one accessory structure or addition to an existing structure shall be authorized by this permit; plans for any subsequent addition must be submitted to IDNR/OWR for review.

h. Disturbances of vegetation shall be kept to a minimum during construction to prevent erosion and sedimentation. All disturbed floodway areas shall be seeded or otherwise stabilized upon completion of construction.

10. Minor maintenance dredging activities meeting the following conditions of IDNR/OWR Statewide Permit Number 11:

a. The affected length of the stream shall not either singularly or cumulatively exceed one thousand (1000) feet.

b. The project shall not include the construction of any new channel; all work must be confined to the existing channel or to reestablishing flows in the natural stream channel, and

c. The cross-sectional area of the dredged channel shall conform to that of the natural channel upstream and down stream of the site.

d. Dredged or spoil material shall not be disposed of in a wetland and shall be either:

i. removed from the floodway;

ii. used to stabilize an existing bank provided no materials would be placed higher than the existing top of bank and provided the cross-sectional area of the natural channel would not be reduced by more than ten percent (10%), nor the volume of material placed exceed two (2) cubic yards per lineal foot of streambank;

iii. used to fill an existing washed out or scoured floodplain area such that the average natural floodplain elevation is not increased;

iv. used to stabilize and existing levee provided the height of the levee would not be increased nor its alignment changed;

v. placed in a disposal site previously approved by the Department in accordance with the conditions of the approval, or

vi. used for beach nourishment, provided the material meets all applicable water quality standards.

e. Disturbance of streamside vegetation shall be kept to a minimum during construction to prevent erosion and sedimentation. All disturbed floodway areas, including the stream banks, shall be seeded or otherwise stabilized upon completion of construction.

11. Bridge and culvert replacement structures and bridge widening meeting the following conditions of IDNR/OWR statewide Permit Number 12:

a. A licensed professional engineer shall determine and document that the existing structure has not been the cause of demonstrable flood damage. Such documentation shall include, at a minimum, confirmation that:

i. No buildings or structures have been impacted by the backwater induced by the existing structure, and

ii. There is no record of complaints of flood damages associated with the existing structure.

b. A licensed professional engineer shall determine that the new structure will provide the same or greater effective waterway opening as the existing structure. For bridge widening projects the existing piers and the proposed pier extensions must be in line with the direction of the approaching flow upstream of the bridge.

c. The project shall not include any appreciable raising of the approach roads. (This condition does not apply if all points on the approaches exist at an elevation equal

to or higher than the 100-year frequency flood headwater elevation as determined by a FEMA flood insurance study completed or approved by IDNR/OWR).

d. The project shall not involve the straightening, enlargement or relocation of the existing channel of the river or stream except as permitted by the Department's Statewide Permit Number 9 (Minor Shoreline, channel and Streambank Protection Activities) or Statewide Permit Number 11 (Minor Maintenance Dredging Activities).

e. The permittee shall maintain records of projects authorized by this permit necessary to document compliance with the above conditions.

12. Temporary construction activities meeting the following conditions of IDNR/OWR statewide Permit Number 13:

a. No temporary construction activity shall be commenced until the individual permittee determines that the permanent structure (if any) for which the work is being performed has received all required federal, state and local authorizations.

b. The term "temporary" shall mean not more than one construction season. All temporary construction materials must be removed from the stream and floodway within one year of their placement and the area returned to the conditions existing prior to the beginning of construction. Any desired subsequent or repetitive material placement shall not occur without the review and approval of the IDNR/OWR.

c. The temporary project shall be constructed such that it will not cause erosion or damage due to increases in water surface profiles to adjacent properties. For locations where there are structures in the upstream floodplain, the temporary project shall be constructed such that all water surface profile increases, due to the temporary project, are contained within the channel banks.

d. This permit does not authorize the placement or construction of any solid embankment or wall such as a dam, roadway, levee, or dike across any channel or floodway.

e. No temporary structure shall be placed within any river or stream channel until a licensed professional engineer determines and documents that the temporary structure will meet the requirements of Special Condition Number 3 of this statewide permit. Such documentation shall include, at a minimum, confirmation that no buildings or structures will be impacted by the backwater induced by the temporary structure.

f. The permittee shall maintain records of projects authorized by this permit necessary to document compliance with the above condition.

g. Disturbance of vegetation shall be kept to a minimum during construction to prevent erosion and sedimentation. All disturbed areas shall be seeded or otherwise stabilized upon completion of the removal of the temporary construction.

h. Materials used for the project shall not cause water pollution as defined by the Environmental Protection Act (415 ILCS 5).

13. Any Development determined by IDNR/OWR to be located entirely within a flood fringe area shall be exempt from State Floodway permit requirements.

B. Other development activities not listed in 6(A) may be permitted <u>only</u> if:

1. permit has been issued for the work by IDNR/OWR (or written documentation is provided that an IDNR/OWR permit is not required), or

2. sufficient data has been provided to FEMA when necessary, and approval obtained from FEMA for a revision of the regulatory map and base flood elevation.

<u>Section 7. Protecting Buildings.</u>

A. In addition to the damage prevention requirements of Section 6 of this ordinance, all buildings located in the floodplain shall be protected from flood damage below the flood protection elevation. This building protection requirement applies to the following situations:

1. Construction or placement of a new building or alteration or addition to an existing building valued at more than one thousand dollars ($1,000) or seventy (70) square feet.

2. Substantial improvements or structural alterations made to an existing building that increase the floor area by more than twenty percent (20%) or equal or exceed the market value by fifty percent (50%). Alteration shall be figured cumulatively subsequent to the adoption of this ordinance. If substantially improved, the existing structure and the addition must meet the flood protection standards of this section.

3. Repairs made to a substantially damaged building. These repairs shall be figured cumulatively subsequent to the adoption of this ordinance. If substantially damaged the entire structure must meet the flood protection standards of this section.

4. Installing a manufactured home on a new site or a new manufactured home on an existing site. (The building protection requirements do not apply to returning a manufactured home to the same site it lawfully occupied before it was removed to avoid flood damage).

5. Installing a travel trailer or recreational vehicle on a site for more than one hundred eighty (180) days per year.

6. Repetitive loss to an existing building as defined in Section 2.

B. <u>Residential or non-residential buildings</u> can meet the building protection requirements by one of the following methods:

1. The building may be constructed on permanent land fill in accordance with the following:

    a. The lowest floor (including basement) shall be at or above the flood protection elevation.

    b. The fill shall be placed in layers no greater than six inches before compaction and should extend at least ten (10) feet beyond the foundation before sloping below the flood protection elevation.

    c. The fill shall be protected against erosion and scour during flooding by vegetative cover, riprap, or other structural measure.

    d. The fill shall be composed of rock or soil and not incorporated debris or refuse material, and

    e. shall not adversely affect the flow of surface drainage from or onto neighboring properties and when necessary stormwater management techniques such as swales or basins shall be incorporated.

2. The building may be elevated on solid walls in accordance with the following:

    a. The building or improvements shall be elevated on stilts, piles, walls, crawlspace, or other foundation that is permanently open to flood waters.

    b. The lowest floor and all electrical, heating, ventilating, plumbing, and air conditioning equipment and utility meters shall be located at or above the flood protection elevation.

    c. If walls are used, all enclosed areas below the flood protection elevation shall address hydrostatic pressures by allowing the automatic entry and exit of flood waters. Designs must either be certified by a licensed professional engineer or by having a minimum of one (1) permanent opening on each wall no more than one (1) foot above grade with a minimum of two (2) openings. The openings shall provide a total net area of not less than one (1) square inch for every one (1) square foot of enclosed area subject to flooding below the base flood elevation, and

    d. The foundation and supporting members shall be anchored, designed, and certified so as to minimize exposure to hydrodynamic forces such as current, waves, ice, and floating debris.

        i. All structural components below the flood protection elevation shall be constructed of materials resistant to flood damage.

        ii. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other service facilities may be located below the flood protection elevation provided they are waterproofed.

        iii. The area below the flood protection elevation shall be used solely for parking or building access and not later modified or occupied as habitable space, or

        iv. In lieu of the above criteria, the design methods to comply with these requirements may be certified by a licensed professional engineer or architect.

3. The building may be constructed with a <u>crawlspace</u> located below the flood protection elevation provided that the following conditions are met:

4. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

5. Any enclosed area below the flood protection elevation shall have openings that equalize hydrostatic pressures by allowing for the automatic entry and exit of floodwaters. A minimum of one opening on each wall having a total net area of not less than one (1) square inch per one (1) square foot of enclosed area. The openings shall be no more than one (1) foot above grade.

6. The interior grade of the crawlspace below the flood protection elevation must not be more than two (2) feet below the lowest adjacent exterior grade.

7. The interior height of the crawlspace measured from the interior grade of the crawl to the top of the foundations wall must not exceed four (4) feet at any point.

8. An adequate drainage system must be installed to remove floodwaters from the interior area of the crawlspace within a reasonable period of time after a flood event.

9. Portions of the building below the flood protection elevation must be constructed with materials resistant to flood damage, and

10. Utility systems within the crawlspace must be elevated above the flood protection elevation.

C. Non-residential buildings may be structurally dry floodproofed (in lieu of elevation) provided a licensed professional engineer or architect certifies that:

1. Below the flood protection elevation the structure and attendant utility facilities are watertight and capable of resisting the effects of the base flood.

2. The building design accounts for flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, the effects of buoyancy, and the impact from debris and ice.

3. Floodproofing measures will be incorporated into the building design and operable without human intervention and without an outside source of electricity.

4. Levees, berms, floodwalls and similar works are not considered floodproofing for the purpose of this subsection.

D. Manufactured homes or travel trailers to be permanently installed on site shall be:

1. Elevated to or above the flood protection elevation in accordance with Section 7(B), and

2. anchored to resist flotation, collapse, or lateral movement by being tied down in accordance with the rules and regulations for the Illinois Mobile Home Tie-Down Act issued pursuant to 77 Ill. Adm. Code § 870.

E. Travel trailers and recreational vehicles on site for more than one hundred eighty (180) days per year shall meet the elevation requirements of section 7(D) unless the following conditions are met:

1. The vehicle must be either self-propelled or towable by a light duty truck.

2. The hitch must remain on the vehicle at all times.

3. The vehicle must not be attached to external structures such as decks and porches

4. The vehicle must be designed solely for recreation, camping, travel, or seasonal use rather than as a permanent dwelling.

5. The vehicles largest horizontal projections must be no larger than four hundred (400) square feet.

6. The vehicle's wheels must remain on axles and inflated.

7. Air conditioning units must be attached to the frame so as to be safe for movement of the floodplain.

8. Propane tanks as well as electrical and sewage connections must be quick-disconnect and above the 100-year flood elevation.

9. The vehicle must be licensed and titled as a recreational vehicle or park model, and

10. must either:

    a. entirely be supported by jacks, or

    b. have a hitch jack permanently mounted, have the tires touching the ground and be supported by block in a manner that will allow the block to be easily removed by used of the hitch jack.

F. Garages, sheds or other minor accessory structures constructed ancillary to an existing residential use may be permitted provided the following conditions are met:

1. The garage of shed must be non-habitable.

2. The garage or shed must be used only for the storage of vehicles and tools and cannot be modified later into another use.

3. The garage or shed must be located outside of the floodway or have the appropriate state and/or federal permits.

4. The garage or shed must be on a single family lot and be accessory to an existing principle structure on the same lot.

5. Below the base flood elevation, the garage or shed must be built of materials not susceptible to flood damage.

6. All utilities, plumbing, heating, air conditioning and electrical must be elevated above the flood protection elevation.

7. The garage or shed must have at least one permanent opening on each wall not more than one (1) foot above grade with one (1) square inch of opening for every one (1) square foot of floor area.

8. The garage or shed must be less than ten thousand dollars ($10,000) in market value or replacement cost whichever is greater or less than five hundred (500) square feet.

9. The structure shall be anchored to resist floatation and overturning.

10. All flammable or toxic materials (gasoline, paint, insecticides, fertilizers, etc.) shall be stored above the flood protection elevation.

11. The lowest floor elevation should be documented and the owner advised of the flood insurance implications.

Section 8. Subdivision Requirements

The City of Mt. Vernon shall take into account hazards, to the extent that they are known, in all official actions related to land management use and development.

A. New subdivisions, manufactured home parks, annexation agreements, planned unit developments, and additions to manufactured home parks and subdivisions shall meet the damage prevention and building protections standards of Sections 6 and 7 of this ordinance. Any proposal for such development shall include the following data:

1. The base flood elevation and the boundary of the floodplain, where the base flood elevation is not available from an existing study, the

applicant shall be responsible for calculating the base flood elevation;

2. the boundary of the floodway when applicable, and

3. a signed statement by a Registered Professional Engineer that the proposed plat or plan accounts for changes in the drainage of surface waters in accordance with the Plat Act (765 ILCS 205/2).

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

Section 9. Public Health and Other Standards

A. Public health standards must be met for all floodplain development. In addition to the requirements of Sections 6 and 7 of this ordinance the following standards apply:

1. No development in the floodplain shall include locating or storing chemicals, explosives, buoyant materials, flammable liquids, pollutants, or other hazardous or toxic materials below the flood protection elevation unless such materials are stored in a floodproofed and anchored storage tank and certified by a professional engineer or floodproofed building constructed according to the requirements of Section 7 of this ordinance.

2. Public utilities and facilities such as sewer, gas and electric shall be located and constructed to minimize or eliminate flood damage.

3. Public sanitary sewer systems and water supply systems shall be located and constructed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.

4. New and replacement on-site sanitary sewer lines or waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding. Manholes or other above ground openings located below the flood protection elevation shall be watertight.

5. Construction of new or substantially improved critical facilities shall be located outside the limits of the floodplain. Construction of new critical facilities shall be permissible within the floodplain if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor (including basement) elevated or structurally dry floodproofed to the 500-year flood

frequency elevation or three feet above the level of the 100-year flood frequency elevation whichever is greater. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities.

B. All other activities defined as development shall be designed so as not to alter flood flows or increase potential flood damages.

Section 10. Carrying Capacity and Notification.

For all projects involving channel modification, fill, or stream maintenance (including levees), the flood carrying capacity of the watercourse shall be maintained.

In addition, the City of Mt. Vernon shall notify adjacent communities in writing thirty (30) days prior to the issuance of a permit for the alteration or relocation of the watercourse.

Section 11. Variances.

Whenever the standards of this ordinance place undue hardship on a specific development proposal, the applicant may apply to the Zoning and Planning Commission of the City of Mt. Vernon for a variance. The Zoning and Planning Commission of the City of Mt. Vernon shall review the applicant's request for a variance and shall submit its recommendation to the City Council. The City Council may attach such conditions to granting of a variance as it deems necessary to further the intent of this ordinance.

A. No variance shall be granted unless the applicant demonstrates that all of the following conditions are met:

1. The development activity cannot be located outside the floodplain.

2. An exceptional hardship would result if the variance were not granted.

3. The relief requested is the minimum necessary.

4. There will be no additional threat to public health, safety or creation of a nuisance.

5. There will be no additional public expense for flood protection, rescue or relief operations, policing, or repairs to roads, utilities, or other public facilities.

6. The applicant's circumstances are unique and do not establish a pattern inconsistent with the intent of the NFIP, and

7. all other state and federal permits have been obtained.

B. The Zoning and Planning Commission of the City of Mt. Vernon shall notify an applicant in writing that a variance from the requirements of the building protections standards of Section 7 that would lessen the degree of protection to a building will:

1. Result in increased premium rates for flood insurance up to twenty-five dollars ($25) per one hundred dollars ($100) of insurance coverage;

2. increase the risk to life and property, and

3. require that the applicant proceed with knowledge of these risks and that the applicant acknowledge in writing the assumption of the risk and liability.

C. Variances to the building protection requirements of Section 7 of this ordinance which are requested in connection with reconstruction, repair, or alteration of a historic site or historic structure as defined in "Historic Structures", may be granted using criteria more permissive than the requirements of Sections 6 and 7 of this ordinance subject to the conditions that:

1. The repair or rehabilitation is the minimum necessary to preserve the historic character and design of the structure.

2. The repair or rehabilitation will not result in the structure being removed as a certified historic structure.

Section 12. Disclaimer of Liability.

The degree of protection required by this ordinance is considered reasonable for regulatory purposes and is based on available information derived from engineering and scientific methods of study. Larger floods may occur or flood heights may be increased by man-made or natural causes. This ordinance does not imply that development either inside or outside of the floodplain will be free from flooding or damage. This ordinance does not create liability on the part of the City of Mt. Vernon or any officer or employee thereof for any flood damage that results from proper reliance on this ordinance or any administrative decision made lawfully thereunder.

Section 13. Penalty.

Failure to obtain a permit for development in the floodplain or failure to comply with the conditions of a permit or a variance shall be deemed to be a violation of this ordinance. Upon due investigation, the Building Official may determine that a violation of the minimum standards of this ordinance exists. The Building Official shall notify the owner in writing of such violation.

A. If such owner fails after ten (10) days notice to correct the violation:

1. The City of Mt. Vernon shall make application to the circuit court for an injunction requiring conformance with this ordinance or make such other order as the court deems necessary to secure compliance with the ordinance.

2. Any person who violates this ordinance shall upon conviction thereof be fined not less than fifty dollars ($50) or more than seven hundred fifty ($750) for each offense.

3. A separate offense shall be deemed committed upon each day during or on which a violation occurs or continues, and

4. The City of Mt. Vernon shall record a notice of violation on the title of the property.

B. The Building Official shall inform the owner that any such violation is considered a willful act to increase flood damages and therefore may cause coverage by a Standard Flood Insurance Policy to be suspended.

The Building Official is authorized to issue an order requiring the suspension of the subject development. The stop-work order shall be in writing, indicate the reason for the issuance, and shall order the action, if necessary, to resolve the circumstances requiring the stop-work order. The stop-work order constitutes a suspension of the permit.

No site development permit shall be permanently suspended or revoked until a hearing is held by the Zoning and Planning Commission of the City of Mt. Vernon. Written notice of such hearing shall be served on the permittee and shall state:

1. The grounds for the complaint, reasons for suspension or revocation, and

2. The time and place of the hearing.

At such hearing the permittee shall be given an opportunity to present evidence on their behalf. At the conclusion of the hearing, the Zoning and Planning Commission of the City of Mt. Vernon shall determine whether the permit shall be suspended or revoked.

C. Nothing herein shall prevent the City of Mt. Vernon from taking such other lawful action to prevent or remedy any violations. All costs connected therewith shall accrue to the person or persons responsible.

Section 14. Abrogation and Greater Restrictions.

This ordinance does not repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. Where this ordinance and other ordinances, easements, covenants or

deed restrictions conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

Section 15. Severability.

The provisions and sections of this ordinance shall be deemed separable and the invalidity of any portion of this ordinance shall not affect the validity of the remainder.