COUNTY COMMISSIONERS OF CHARLES COUNTY, MARYLAND

2013 Legislative Session
Legislative Day #

BILL NO. 2013-14

Introduced by: Charles County Commissioners

FLOODPLAIN MANAGEMENT ORDINANCE

EMERGENCY BILL

Date introduced: 06 / 11 / 2013

Public Hearing: 07 / 10 / 2013 @ 6:30 p.m.

Commissioners Action: 07 / 10 / 2013

Commissioner Votes: CQK: Y, RC: Y, KR: Y, DD: Y, BR: Y

Pass/Fail: Pass

Effective Date: 07 / 10 / 2013

Remarks:

COUNTY COMMISSIONERS OF CHARLES COUNTY, MARYLAND

2013 Legislative Session

Bill No. 2013-14

Chapter No. 238

Introduced by Charles County Commissioners

Date of Introduction June 11, 2013

EMERGENCY BILL

AN ACT concerning

FLOODPLAIN MANAGEMENT ORDINANCE

FOR the purpose of

Enacting a new Floodplain Management Ordinance to meet the requirements of the Federal Emergency Management Agency (FEMA) and Maryland Department of the Environment as part of the adoption of revised Flood Insurance Rate maps by FEMA.

BY repealing:

Chapter 238, Article II– Floodplain Management

Sections 238-5 through 238-12

Code of Charles County, Maryland

(1994 Edition, 2000 Supplement)

BY enacting:

Chapter 238, Article II – Floodplain Management Ordinance

Section 238-5 through 238-13

Code of Charles County, Maryland

(1994 Edition, 2000 Supplement)

SECTION 1. BE IT ENACTED BY THE COUNTY COMMISSIONERS OF CHARLES COUNTY, MARYLAND, that the Laws of Charles County, Maryland read as

follows:

CHAPTER 238

ARTICLE II – FLOODPLAIN MANAGEMENT ORDINANCE

SECTION 238-5. GENERAL PROVISIONS.

(A) FINDINGS

THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) HAS IDENTIFIED SPECIAL FLOOD HAZARD AREAS WITHIN THE BOUNDARIES OF CHARLES COUNTY, MARYLAND. SPECIAL FLOOD HAZARD AREAS ARE SUBJECT TO PERIODIC INUNDATION WHICH MAY RESULT IN LOSS OF LIFE AND PROPERTY, HEALTH AND SAFETY HAZARDS, DISRUPTION OF COMMERCE AND GOVERNMENTAL SERVICES, EXTRAORDINARY PUBLIC EXPENDITURES FOR FLOOD PROTECTION AND RELIEF, AND IMPAIRMENT OF THE TAX BASE, ALL OF WHICH ADVERSELY AFFECT THE PUBLIC HEALTH, SAFETY AND GENERAL WELFARE. STRUCTURES THAT ARE INADEQUATELY ELEVATED, IMPROPERLY FLOODPROOFED, OR OTHERWISE UNPROTECTED FROM FLOOD DAMAGE ALSO CONTRIBUTE TO FLOOD LOSSES.

(B) CHARLES COUNTY, MARYLAND, BY RESOLUTION, AGREED TO MEET THE REQUIREMENTS OF THE NATIONAL FLOOD INSURANCE PROGRAM AND WAS ACCEPTED FOR PARTICIPATION IN THE PROGRAM ON JUNE 5, 1985. AS OF THAT DATE OR AS OF JUNE 5, 1985, THE INITIAL EFFECTIVE DATE OF THE CHARLES COUNTY, MARYLAND FLOOD INSURANCE RATE MAP, ALL DEVELOPMENT AND NEW CONSTRUCTION AS DEFINED HEREIN, ARE TO BE COMPLIANT WITH THESE REGULATIONS.

(C) STATUTORY AUTHORIZATION. THE MARYLAND GENERAL ASSEMBLY, IN THE LAND USE ARTICLE OF THE ANNOTATED CODE OF MARYLAND, SECTION 4-101, ET SEQ., HAS ESTABLISHED, AS POLICY OF THE STATE, THAT THE ORDERLY DEVELOPMENT AND USE OF LAND AND STRUCTURES REQUIRES COMPREHENSIVE REGULATION THROUGH THE IMPLEMENTATION OF PLANNING AND ZONING CONTROL, AND THAT PLANNING AND ZONING CONTROLS SHALL BE IMPLEMENTED BY LOCAL GOVERNMENT IN ORDER TO, AMONG OTHER PURPOSES, SECURE THE

PUBLIC SAFETY, PROMOTE HEALTH AND GENERAL WELFARE, AND PROMOTE THE CONSERVATION OF NATURAL RESOURCES. THEREFORE, THE COMMISSIONERS OF CHARLES COUNTY, MARYLAND DO HEREBY ADOPT THE FOLLOWING FLOODPLAIN MANAGEMENT REGULATIONS.

(D) STATEMENT OF PURPOSE. IT IS THE PURPOSE OF THESE REGULATIONS TO PROMOTE THE PUBLIC HEALTH, SAFETY AND GENERAL WELFARE, AND TO:

(1) PROTECT HUMAN LIFE, HEALTH AND WELFARE;

(2) ENCOURAGE THE UTILIZATION OF APPROPRIATE CONSTRUCTION PRACTICES IN ORDER TO PREVENT OR MINIMIZE FLOOD DAMAGE IN THE FUTURE;

(3) MINIMIZE FLOODING OF WATER SUPPLY AND SANITARY SEWAGE DISPOSAL SYSTEMS;

(4) MAINTAIN NATURAL DRAINAGE;

(5) REDUCE FINANCIAL BURDENS IMPOSED ON CHARLES COUNTY, ITS GOVERNMENTAL UNITS, AND ITS RESIDENTS, BY DISCOURAGING UNWISE DESIGN AND CONSTRUCTION OF DEVELOPMENT IN AREAS SUBJECT TO FLOODING;

(6) MINIMIZE THE NEED FOR RESCUE AND RELIEF EFFORTS ASSOCIATED WITH FLOODING AND GENERALLY UNDERTAKEN AT THE EXPENSE OF THE GENERAL PUBLIC;

(7) MINIMIZE PROLONGED BUSINESS INTERRUPTIONS;

(8) MINIMIZE DAMAGE TO PUBLIC FACILITIES AND OTHER UTILITIES SUCH AS WATER AND GAS MAINS, ELECTRIC, TELEPHONE AND SEWER LINES, STREETS AND BRIDGES;

(9) REINFORCE THAT THOSE WHO BUILD IN AND OCCUPY SPECIAL FLOOD HAZARD AREAS SHOULD ASSUME RESPONSIBILITY FOR THEIR ACTIONS;

(10) MINIMIZE THE IMPACT OF DEVELOPMENT ON ADJACENT PROPERTIES WITHIN AND NEAR FLOOD-PRONE AREAS;

(11) PROVIDE THAT THE FLOOD STORAGE AND CONVEYANCE FUNCTIONS OF FLOODPLAINS ARE MAINTAINED;

(12) MINIMIZE THE IMPACT OF DEVELOPMENT ON THE NATURAL AND BENEFICIAL FUNCTIONS OF FLOODPLAINS;

(13) PREVENT FLOODPLAIN USES THAT ARE EITHER HAZARDOUS OR ENVIRONMENTALLY INCOMPATIBLE; AND

(14) MEET COMMUNITY PARTICIPATION REQUIREMENTS OF THE NATIONAL FLOOD INSURANCE PROGRAM AS SET FORTH IN THE CODE OF FEDERAL REGULATIONS AT 44 C.F.R. SECTION 59.22.

(E) AREAS TO WHICH THESE REGULATIONS APPLY. THESE REGULATIONS SHALL APPLY TO ALL SPECIAL FLOOD HAZARD AREAS WITHIN THE JURISDICTION OF CHARLES COUNTY, MARYLAND, AND IDENTIFIED IN SECTION 238-5(E).

(F) BASIS FOR ESTABLISHING SPECIAL FLOOD HAZARD AREAS AND BFE'S.

(1) FOR THE PURPOSES OF THESE REGULATIONS, THE MINIMUM BASIS FOR ESTABLISHING SPECIAL FLOOD HAZARD AREAS AND BASE FLOOD ELEVATIONS IS THE FLOOD INSURANCE STUDY FOR CHARLES COUNTY, MARYLAND AND INCORPORATED AREAS DATED SEPTEMBER 4, 2013, OR THE MOST RECENT REVISION THEREOF, AND THE ACCOMPANYING FLOOD INSURANCE RATE MAPS AND ALL SUBSEQUENT AMENDMENTS AND REVISIONS TO THE FIRMS. THE FIS AND FIRMS ARE RETAINED ON FILE AND AVAILABLE TO THE PUBLIC AT THE CHARLES COUNTY GOVERNMENT BUILDING.

(2) WHERE FIELD SURVEYED TOPOGRAPHY OR DIGITAL TOPOGRAPHY INDICATES THAT GROUND ELEVATIONS ARE BELOW THE CLOSEST APPLICABLE BASE FLOOD ELEVATION, EVEN IN AREAS NOT DELINEATED AS A SPECIAL FLOOD HAZARD ON THE FIRM, THE AREA SHALL BE CONSIDERED AS SPECIAL FLOOD HAZARD AREA.

(3) TO ESTABLISH BASE FLOOD ELEVATIONS IN SPECIAL FLOOD HAZARD AREAS THAT DO NOT HAVE SUCH ELEVATIONS SHOWN ON THE FIRM, THE FLOODPLAIN ADMINISTRATOR MAY PROVIDE THE BEST AVAILABLE DATA FOR BASE FLOOD ELEVATIONS, MAY REQUIRE THE APPLICANT TO OBTAIN AVAILABLE INFORMATION FROM FEDERAL, STATE OR OTHER SOURCES, OR MAY REQUIRE THE APPLICANT TO ESTABLISH SPECIAL FLOOD HAZARD AREAS AND BASE FLOOD ELEVATIONS AS SET FORTH IN SECTION 238-7(C), (D)

AND (E) OF THESE REGULATIONS. THE FLOODPLAIN ADMINISTRATOR MAY ALSO ESTABLISH BASE FLOOD ELEVATIONS FOR UNMAPPED FLOODPLAINS OUTSIDE OF SPECIAL FLOOD HAZARD AREAS SHOWN ON THE FIRM BY REQUIRING FLOOD STUDIES AS ESTABLISHED IN SECTION 238-9(H).

(G) ABROGATION AND GREATER RESTRICTIONS. THESE REGULATIONS ARE NOT INTENDED TO REPEAL OR ABROGATE ANY EXISTING REGULATIONS AND ORDINANCES, INCLUDING SUBDIVISION REGULATIONS, ZONING ORDINANCES, BUILDING CODES, OR ANY EXISTING EASEMENTS, COVENANTS, OR DEED RESTRICTIONS. IN THE EVENT OF A CONFLICT BETWEEN THESE REGULATIONS AND ANY OTHER ORDINANCE, THE MORE RESTRICTIVE SHALL GOVERN.

(H) INTERPRETATION. IN THE INTERPRETATION AND APPLICATION OF THESE REGULATIONS, ALL PROVISIONS SHALL BE:

(1) CONSIDERED AS MINIMUM REQUIREMENTS;

(2) LIBERALLY CONSTRUED IN FAVOR OF CHARLES COUNTY; AND,

(3) DEEMED NEITHER TO LIMIT NOR REPEAL ANY OTHER POWERS GRANTED UNDER STATE STATUTES;

(4) NOTES REFERENCING PUBLICATIONS OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY REFER TO THE MOST RECENT EDITION OF THOSE PUBLICATIONS, ARE INTENDED ONLY AS GUIDANCE, AND DO NOT BIND OR ALTER THE AUTHORITY OF THE FLOODPLAIN ADMINISTRATOR TO INTERPRET AND APPLY THESE REGULATIONS.

(I) WARNING AND DISCLAIMER OF LIABILITY.

(1) THE DEGREE OF FLOOD PROTECTION REQUIRED BY THESE REGULATIONS IS CONSIDERED REASONABLE FOR REGULATORY PURPOSES AND IS BASED ON SCIENTIFIC AND ENGINEERING CONSIDERATIONS. LARGER FLOODS CAN AND WILL OCCUR, AND FLOOD HEIGHTS MAY BE INCREASED BY MAN-MADE OR NATURAL CAUSES. THESE REGULATIONS DO NOT IMPLY THAT LAND OUTSIDE OF THE SPECIAL FLOOD HAZARD AREAS OR USES THAT ARE

PERMITTED WITHIN SUCH AREAS WILL BE FREE FROM FLOODING OR FLOOD DAMAGE.

(2) THESE REGULATIONS SHALL NOT CREATE LIABILITY ON THE PART OF CHARLES COUNTY, ANY OFFICER OR EMPLOYEE THEREOF, THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) OR THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), FOR ANY FLOOD DAMAGE THAT RESULTS FROM RELIANCE ON THESE REGULATIONS OR ANY ADMINISTRATIVE DECISION LAWFULLY MADE HEREUNDER.

(J) SEVERABILITY. SHOULD ANY SECTION OR PROVISION OF THESE REGULATIONS BE DECLARED BY THE COURTS TO BE UNCONSTITUTIONAL OR INVALID, SUCH DECISION SHALL NOT AFFECT THE VALIDITY OF THE REGULATIONS AS A WHOLE, OR ANY PART THEREOF OTHER THAN THE P ART SO DECLARED TO BE UNCONSTITUTIONAL OR INVALID.

SECTION 238-6. DEFINITIONS.

UNLESS SPECIFICALLY DEFINED BELOW, WORDS OR PHRASES USED IN THESE REGULATIONS SHALL BE INTERPRETED TO HAVE THE MEANING THEY HAVE IN COMMON USAGE AND TO GIVE THESE REGULATIONS THE MOST REASONABLE APPLICATION.

ACCESSORY STRUCTURE: A BUILDING OR STRUCTURE ON THE SAME LOT WITH, AND OF A NATURE CUSTOMARILY INCIDENTAL AND SUBORDINATE TO, THE PRINCIPAL STRUCTURE. FOR THE PURPOSES OF THESE REGULATIONS, AN ACCESSORY STRUCTURE SHALL BE USED SOLELY FOR PARKING OF VEHICLES AND LIMITED STORAGE.

AGREEMENT TO SUBMIT AN ELEVATION CERTIFICATE: A FORM ON WHICH THE APPLICANT FOR A PERMIT TO CONSTRUCT A BUILDING OR STRUCTURE, TO CONSTRUCT CERTAIN HORIZONTAL ADDITIONS, TO PLACE OR REPLACE A MANUFACTURED HOME, TO SUBSTANTIALLY IMPROVE A BUILDING, STRUCTURE, OR MANUFACTURED HOME, AGREES TO HAVE AN ELEVATION CERTIFICATE PREPARED BY A LICENSED PROFESSIONAL ENGINEER OR LICENSED PROFESSIONAL SURVEYOR, AS

SPECIFIED BY THE FLOODPLAIN ADMINISTRATOR, AND TO SUBMIT THE CERTIFICATE:

(1) UPON PLACEMENT OF THE LOWEST FLOOR AND PRIOR TO FURTHER VERTICAL CONSTRUCTION; AND

(2) PRIOR TO THE FINAL INSPECTION AND ISSUANCE OF THE CERTIFICATE OF USE AND OCCUPANCY.

ALTERATION OF A WATERCOURSE: FOR THE PURPOSE OF THESE REGULATIONS, ALTERATION OF A WATERCOURSE INCLUDES, BUT IS NOT LIMITED TO WIDENING, DEEPENING OR RELOCATING THE CHANNEL, INCLUDING EXCAVATION OR FILLING OF THE CHANNEL. ALTERATION OF A WATERCOURSE DOES NOT INCLUDE CONSTRUCTION OF A ROAD, BRIDGE, CULVERT, DAM, OR IN-STREAM POND UNLESS THE CHANNEL IS PROPOSED TO BE REALIGNED OR RELOCATED AS PART OF SUCH CONSTRUCTION.

AREA OF SHALLOW FLOODING: A DESIGNATED ZONE AO ON THE FLOOD INSURANCE RATE MAP WITH A 1-PERCENT ANNUAL CHANCE OR GREATER OF FLOODING TO AN AVERAGE DEPTH OF ONE TO THREE FEET WHERE A CLEARLY DEFINED CHANNEL DOES NOT EXIST, WHERE THE PATH OF FLOODING IS UNPREDICTABLE, AND WHERE VELOCITY FLOW MAY BE EVIDENT; SUCH FLOODING IS CHARACTERIZED BY PONDING OR SHEET FLOW.

BASE BUILDING: THE BUILDING TO WHICH AN ADDITION IS BEING ADDED. THIS TERM IS USED IN PROVISIONS RELATING TO ADDITIONS.

BASE FLOOD: THE FLOOD HAVING A ONE-PERCENT CHANCE OF BEING EQUALED OR EXCEEDED IN ANY GIVEN YEAR; THE BASE FLOOD ALSO IS REFERRED TO AS THE 1-PERCENT ANNUAL CHANCE (100-YEAR) FLOOD.

BASE FLOOD ELEVATION (BFE): THE WATER SURFACE ELEVATION OF THE BASE FLOOD IN RELATION TO THE DATUM SPECIFIED ON CHARLES COUNTY'S FLOOD INSURANCE RATE MAP. IN AREAS OF SHALLOW FLOODING, THE BASE FLOOD ELEVATION IS THE HIGHEST ADJACENT NATURAL GRADE ELEVATION PLUS THE DEPTH NUMBER SPECIFIED IN

FEET ON THE FLOOD INSURANCE RATE MAP, OR AT LEAST FOUR (4) FEET IF THE DEPTH NUMBER IS NOT SPECIFIED.

BASEMENT: ANY AREA OF THE BUILDING HAVING ITS FLOOR SUBGRADE (BELOW GROUND LEVEL) ON ALL SIDES.

BUILDING CODE(S): THE EFFECTIVE MARYLAND BUILDING PERFORMANCE STANDARDS (COMAR 05.02.07), INCLUDING THE BUILDING CODE, RESIDENTIAL CODE, AND EXISTING BUILDING CODE.

CHIEF – THE CHIEF OF THE DIVISION OF THE COUNTY RESPONSIBLE FOR IMPLEMENTATION OF THE FLOODPLAIN MANAGEMENT PROGRAM.

COASTAL A ZONE: AN AREA WITHIN A SPECIAL FLOOD HAZARD AREA, LANDWARD OF A COASTAL HIGH HAZARD AREA (V ZONE) OR LANDWARD OF A SHORELINE WITHOUT A MAPPED COASTAL HIGH HAZARD AREA, IN WHICH THE PRINCIPAL SOURCE(S) OF FLOODING ARE ASTRONOMICAL TIDES AND STORM SURGES, AND IN WHICH, DURING BASE FLOOD CONDITIONS, THE POTENTIAL EXISTS FOR BREAKING WAVES WITH HEIGHTS GREATER THAN OR EQUAL TO 1.5 FEET. THE INLAND LIMIT OF THE COASTAL A ZONE MAY BE DELINEATED ON FIRMS AS THE "LIMIT OF MODERATE WAVE ACTION."

COASTAL HIGH HAZARD AREA: AN AREA OF SPECIAL FLOOD HAZARD EXTENDING FROM OFFSHORE TO THE INLAND LIMIT OF A PRIMARY FRONTAL DUNE ALONG AN OPEN COAST AND ANY OTHER AREA SUBJECT TO HIGH VELOCITY WAVE ACTION FROM STORMS. COASTAL HIGH HAZARD AREAS ALSO ARE REFERRED TO AS "V ZONES" AND ARE DESIGNATED ON FIRMS AS ZONES VE OR V1-30.

COMMUNITY: A POLITICAL SUBDIVISION OF THE STATE OF MARYLAND (COUNTY, CITY OR TOWN) THAT HAS AUTHORITY TO ADOPT AND ENFORCE FLOODPLAIN MANAGEMENT REGULATIONS WITHIN ITS JURISDICTIONAL BOUNDARIES.

COUNTY ENGINEER: THE ENGINEER EMPLOYED BY THE COUNTY WHO IS IN RESPONSIBLE CHARGE AND HAS DIRECT SUPERVISION OF TECHNICAL ISSUES IN THE COUNTY.

CRITICAL AND ESSENTIAL FACILITIES: BUILDINGS AND OTHER STRUCTURES THAT ARE INTENDED TO REMAIN OPERATIONAL IN THE

EVENT OF EXTREME ENVIRONMENTAL LOADING FROM FLOOD, WIND, SNOW OR EARTHQUAKES. NOTE: SEE MARYLAND BUILDING PERFORMANCE STANDARDS, SEC. 1602 AND TABLE 1604.5. CRITICAL AND ESSENTIAL FACILITIES TYPICALLY INCLUDE HOSPITALS, FIRE STATIONS, POLICE STATIONS, STORAGE OF CRITICAL RECORDS, FACILITIES THAT HANDLE OR STORE HAZARDOUS MATERIALS, AND SIMILAR FACILITIES.

DECLARATION OF LAND RESTRICTION (NONCONVERSION AGREEMENT): A FORM SIGNED BY THE OWNER TO AGREE NOT TO CONVERT OR MODIFY IN ANY MANNER THAT IS INCONSISTENT WITH THE TERMS OF THE PERMIT AND THESE REGULATIONS, CERTAIN ENCLOSURES BELOW THE LOWEST FLOOR OF ELEVATED BUILDINGS AND CERTAIN ACCESSORY STRUCTURES. THE FORM REQUIRES THE OWNER TO RECORD IT ON THE PROPERTY DEED TO INFORM FUTURE OWNERS OF THE RESTRICTIONS.

DEVELOPMENT: ANY MANMADE CHANGE TO IMPROVED OR UNIMPROVED REAL ESTATE, INCLUDING BUT NOT LIMITED TO BUILDINGS OR OTHER STRUCTURES, PLACEMENT OF MANUFACTURED HOMES, MINING, DREDGING, FILLING, GRADING, PAVING, EXCAVATION OR DRILLING OPERATIONS OR STORAGE OF EQUIPMENT OR MATERIALS.

DIRECTOR: THE HEAD OF THE DEPARTMENT OF THE COUNTY RESPONSIBLE FOR IMPLEMENTATION OF THE FLOODPLAIN MANAGEMENT PROGRAM.

ELEVATION CERTIFICATE: FEMA FORM 81-31, ON WHICH SURVEYED ELEVATIONS AND OTHER DATA PERTINENT TO A PROPERTY AND A BUILDING ARE IDENTIFIED AND WHICH SHALL BE COMPLETED BY A LICENSED PROFESSIONAL LAND SURVEYOR OR A LICENSED PROFESSIONAL ENGINEER, AS SPECIFIED BY THE FLOODPLAIN ADMINISTRATOR. WHEN USED TO DOCUMENT THE HEIGHT ABOVE GRADE OF BUILDINGS IN SPECIAL FLOOD HAZARD AREAS FOR WHICH BASE FLOOD ELEVATION DATA ARE NOT AVAILABLE, THE ELEVATION CERTIFICATE SHALL BE COMPLETED IN ACCORDANCE WITH THE INSTRUCTIONS ISSUED BY FEMA. NOTE: FEMA FORM 81-31 AND

INSTRUCTIONS ARE AVAILABLE ONLINE AT HTTP://WWW.FEMA.GOV/LIBRARY/VIEWRECORD.DO?ID=1383.

ENCLOSURE BELOW THE LOWEST FLOOR: AN UNFINISHED OR FLOOD-RESISTANT ENCLOSURE THAT IS LOCATED BELOW AN ELEVATED BUILDING, IS SURROUNDED BY WALLS ON ALL SIDES, AND IS USABLE SOLELY FOR PARKING OF VEHICLES, BUILDING ACCESS OR STORAGE, IN AN AREA OTHER THAN A BASEMENT AREA, PROVIDED THAT SUCH ENCLOSURE IS BUILT IN ACCORDANCE WITH THE APPLICABLE DESIGN REQUIREMENTS SPECIFIED IN THESE REGULATIONS. ALSO SEE "LOWEST FLOOR."

ENGINEER - MEANS PROFESSIONAL ENGINEER AS DEFINED BY TITLE 14 OF THE BUSINESS OCCUPATIONS & PROFESSIONAL ARTICLE OF THE ANNOTATED CODE OF MARYLAND.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA): THE FEDERAL AGENCY WITH THE OVERALL RESPONSIBILITY FOR ADMINISTERING THE NATIONAL FLOOD INSURANCE PROGRAM.

FLOOD OR FLOODING: A GENERAL AND TEMPORARY CONDITION OF PARTIAL OR COMPLETE INUNDATION OF NORMALLY DRY LAND AREAS FROM:

(1) THE OVERFLOW OF INLAND OR TIDAL WATERS, AND/OR

(2) THE UNUSUAL AND RAPID ACCUMULATION OR RUNOFF OF SURFACE WATERS FROM ANY SOURCE.

FLOOD DAMAGE-RESISTANT MATERIALS: ANY CONSTRUCTION MATERIAL THAT IS CAPABLE OF WITHSTANDING DIRECT AND PROLONGED CONTACT WITH FLOODWATERS WITHOUT SUSTAINING ANY DAMAGE THAT REQUIRES MORE THAN COSMETIC REPAIR. NOTE: SEE NFIP TECHNICAL BULLETIN #2, "FLOOD DAMAGE-RESISTANT MATERIALS REQUIREMENTS."

FLOOD INSURANCE RATE MAP (FIRM): AN OFFICIAL MAP ON WHICH THE FEDERAL EMERGENCY MANAGEMENT AGENCY HAS DELINEATED SPECIAL FLOOD HAZARD AREAS TO INDICATE THE MAGNITUDE AND NATURE OF FLOOD HAZARDS, TO DESIGNATE APPLICABLE FLOOD ZONES, AND TO DELINEATE FLOODWAYS, IF APPLICABLE. FIRMS THAT HAVE

BEEN PREPARED IN DIGITAL FORMAT OR CONVERTED TO DIGITAL FORMAT ARE REFERRED TO AS DIGITAL FIRMS (DFIRM).

FLOOD INSURANCE STUDY (FIS): THE OFFICIAL REPORT IN WHICH THE FEDERAL EMERGENCY MANAGEMENT AGENCY HAS PROVIDED FLOOD PROFILES, FLOODWAY INFORMATION, AND THE WATER SURFACE ELEVATIONS.

FLOOD OPENING: A FLOOD OPENING (NON-ENGINEERED) IS AN OPENING THAT IS USED TO MEET THE PRESCRIPTIVE REQUIREMENT OF 1 SQUARE INCH OF NET OPEN AREA FOR EVERY SQUARE FOOT OF ENCLOSED AREA. AN ENGINEERED FLOOD OPENING IS AN OPENING THAT IS DESIGNED AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER OR LICENSED ARCHITECT AS MEETING CERTAIN PERFORMANCE CHARACTERISTICS, INCLUDING PROVIDING AUTOMATIC ENTRY AND EXIT OF FLOODWATERS; THE CERTIFICATION REQUIREMENT MAY BE SATISFIED BY AN INDIVIDUAL CERTIFICATION OR ISSUANCE OF AN EVALUATION REPORT BY THE ICC EVALUATION SERVICE, INC. (NOTE: SEE NFIP TECHNICAL BULLETIN #1, "OPENINGS IN FOUNDATION WALLS AND WALLS OF ENCLOSURES.")

FLOOD PROTECTION ELEVATION: THE BASE FLOOD ELEVATION PLUS TWO (2) FEET OF FREEBOARD UNLESS NOTED OTHERWISE IN THIS ORDINANCE. FREEBOARD IS A FACTOR OF SAFETY THAT COMPENSATES FOR UNCERTAINTY IN FACTORS THAT COULD CONTRIBUTE TO FLOOD HEIGHTS GREATER THAN THE HEIGHT CALCULATED FOR A SELECTED SIZE FLOOD AND FLOODWAY CONDITIONS, SUCH AS WAVE ACTION, OBSTRUCTED BRIDGE OPENINGS, DEBRIS AND ICE JAMS, CLIMATE CHANGE, AND THE HYDROLOGIC EFFECT OF URBANIZATION IN A WATERSHED.

FLOOD PROTECTION SETBACK: A DISTANCE MEASURED PERPENDICULAR TO THE TOP OF BANK OF A WATERCOURSE THAT DELINEATES AN AREA TO BE LEFT UNDISTURBED TO MINIMIZE FUTURE FLOOD DAMAGE AND TO RECOGNIZE THE POTENTIAL FOR BANK EROSION. ALONG NONTIDAL WATERS OF THE STATE, THE FLOOD PROTECTION SETBACK IS:

(1) 100 FEET, IF THE WATERCOURSE HAS SPECIAL FLOOD HAZARD AREAS SHOWN ON THE FIRM, EXCEPT WHERE THE SETBACK EXTENDS BEYOND THE BOUNDARY OF THE FLOOD HAZARD AREA; OR

(2) 50 FEET, IF THE WATERCOURSE DOES NOT HAVE SPECIAL FLOOD HAZARD AREAS SHOWN ON THE FIRM.

FLOOD ZONE: A DESIGNATION FOR AREAS THAT ARE SHOWN ON FLOOD INSURANCE RATE MAPS:

(1) **ZONE A:** SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1-PERCENT ANNUAL CHANCE (100-YEAR) FLOOD; BASE FLOOD ELEVATIONS ARE NOT DETERMINED.

(2) **ZONE AE AND ZONE A1-30:** SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1-PERCENT ANNUAL CHANCE (100-YEAR) FLOOD; BASE FLOOD ELEVATIONS ARE DETERMINED; FLOODWAYS MAY OR MAY NOT BE DETERMINED. IN AREAS SUBJECT TO TIDAL FLOODING, THE LIMIT OF MODERATE WAVE ACTION MAY OR MAY NOT BE DELINEATED.

(3) **ZONE AH AND ZONE AO:** AREAS OF SHALLOW FLOODING, WITH FLOOD DEPTHS OF 1 TO 3 FEET (USUALLY AREAS OF PONDING OR SHEET FLOW ON SLOPING TERRAIN), WITH OR WITHOUT BFES OR DESIGNATED FLOOD DEPTHS.

(4) **ZONE B AND ZONE X (SHADED):** AREAS SUBJECT TO INUNDATION BY THE 0.2-PERCENT ANNUAL CHANCE (500-YEAR) FLOOD; AREAS SUBJECT TO THE 1-PERCENT ANNUAL CHANCE (100-YEAR) FLOOD WITH AVERAGE DEPTHS OF LESS THAN ONE (1) FOOT OR WITH C ONTRIBUTING DRAINAGE AREA LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED FROM THE BASE FLOOD BY LEVEES.

(5) **ZONE C AND ZONE X (UNSHADED):** AREAS OUTSIDE OF ZONES DESIGNATED A, AE, A1-30, AO, VE, V1-30, B, AND X (SHADED).

(6) **ZONE VE AND ZONE V1-30:** SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1-PERCENT ANNUAL CHANCE (100-YEAR) FLOOD AND SUBJECT TO HIGH VELOCITY WAVE ACTION (ALSO SEE COASTAL HIGH HAZARD AREA).

FLOODPLAIN: ANY LAND AREA SUSCEPTIBLE TO BEING INUNDATED BY WATER FROM ANY SOURCE (SEE DEFINITION OF "FLOOD" OR "FLOODING").

FLOODPROOFING OR FLOODPROOFED: ANY COMBINATION OF STRUCTURAL AND NONSTRUCTURAL ADDITIONS, CHANGES, OR ADJUSTMENTS TO BUILDINGS OR STRUCTURES WHICH REDUCE OR ELIMINATE FLOOD DAMAGE TO REAL ESTATE OR IMPROVED REAL PROPERTY, WATER AND SANITARY FACILITIES, STRUCTURES AND THEIR CONTENTS, SUCH THAT THE BUILDINGS OR STRUCTURES ARE WATERTIGHT WITH WALLS SUBSTANTIALLY IMPERMEABLE TO THE PASSAGE OF WATER AND WITH STRUCTURAL COMPONENTS HAVING THE CAPABILITY OF RESISTING HYDROSTATIC AND HYDRODYNAMIC LOADS AND EFFECTS OF BUOYANCY. (NOTE: STATE REGULATIONS AT COMAR 26.17.04.11(B)(7) DO NOT ALLOW NEW NONRESIDENTIAL BUILDINGS IN NONTIDAL WATERS OF THE STATE TO BE FLOODPROOFED.)

FLOODPROOFING CERTIFICATE: FEMA FORM 81-65 THAT IS TO BE COMPLETED, SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER OR LICENSED ARCHITECT TO CERTIFY THAT THE DESIGN OF FLOODPROOFING AND PROPOSED METHODS OF CONSTRUCTION ARE IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF SECTION 238-9(D)(2) OF THESE REGULATIONS.

FLOODWAY: THE CHANNEL OF A RIVER OR OTHER WATERCOURSE AND THE ADJACENT LAND AREAS THAT MUST BE RESERVED IN ORDER TO PASS THE BASE FLOOD DISCHARGE SUCH THAT THE CUMULATIVE INCREASE IN THE WATER SURFACE ELEVATION OF THE BASE FLOOD DISCHARGE IS NO MORE THAN A DESIGNATED HEIGHT. WHEN SHOWN ON A FIRM, THE FLOODWAY IS REFERRED TO AS THE "DESIGNATED FLOODWAY."

FREE-OF-OBSTRUCTION: A TERM THAT DESCRIBES OPEN FOUNDATIONS (PILINGS, COLUMNS, OR PIERS) WITHOUT ATTACHED ELEMENTS OR FOUNDATION COMPONENTS THAT WOULD OBSTRUCT THE FREE PASSAGE OF FLOODWATERS AND WAVES BENEATH STRUCTURES THAT ARE

ELEVATED ON SUCH FOUNDATIONS. (NOTE: SEE NFIP TECHNICAL BULLETIN #5, "FREE-OF-OBSTRUCTION REQUIREMENTS.")

FUNCTIONALLY DEPENDENT USE: A USE WHICH CANNOT PERFORM ITS INTENDED PURPOSE UNLESS IT IS LOCATED OR CARRIED OUT IN CLOSE PROXIMITY TO WATER; THE TERM INCLUDES ONLY DOCKING FACILITIES, PORT FACILITIES THAT ARE NECESSARY FOR THE LOADING AND UNLOADING OF CARGO OR PASSENGERS, AND SHIP BUILDING AND SHIP REPAIR FACILITIES, BUT DOES NOT INCLUDE LONG-TERM STORAGE OR RELATED MANUFACTURING FACILITIES.

HIGHEST ADJACENT GRADE: THE HIGHEST NATURAL ELEVATION OF THE GROUND SURFACE, PRIOR TO CONSTRUCTION, NEXT TO THE PROPOSED FOUNDATION OF A STRUCTURE.

HISTORIC STRUCTURE: ANY STRUCTURE THAT IS:

(1) INDIVIDUALLY LISTED IN THE NATIONAL REGISTER OF HISTORIC PLACES (A LISTING MAINTAINED BY THE U.S. DEPARTMENT OF INTERIOR) OR PRELIMINARILY DETERMINED BY THE SECRETARY OF THE INTERIOR AS MEETING THE REQUIREMENTS FOR INDIVIDUAL LISTINGS ON THE NATIONAL REGISTER;

(2) CERTIFIED OR PRELIMINARILY DETERMINED BY THE SECRETARY OF THE INTERIOR AS CONTRIBUTING TO THE HISTORICAL SIGNIFICANCE OF A REGISTERED HISTORIC DISTRICT OR A DISTRICT PRELIMINARILY DETERMINED BY THE SECRETARY TO QUALIFY AS A REGISTERED HISTORIC DISTRICT;

(3) INDIVIDUALLY LISTED ON THE MARYLAND INVENTORY OF HISTORIC PROPERTIES MAINTAINED BY THE MARYLAND HISTORIC TRUST; OR

(4) INDIVIDUALLY LISTED ON THE INVENTORY OF HISTORIC PLACES MAINTAINED BY CHARLES COUNTY, MARYLAND WHOSE HISTORIC PRESERVATION PROGRAM HAS BEEN CERTIFIED BY THE MARYLAND HISTORIC TRUST OR THE SECRETARY OF THE INTERIOR.

HYDROLOGIC AND HYDRAULIC ENGINEERING ANALYSES: ANALYSES PERFORMED BY A LICENSED PROFESSIONAL ENGINEER, IN ACCORDANCE

WITH STANDARD ENGINEERING PRACTICES THAT ARE ACCEPTED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (NONTIDAL WETLANDS & WATERWAYS) AND FEMA, USED TO DETERMINE THE BASE FLOOD, OTHER FREQUENCY FLOODS, FLOOD ELEVATIONS, FLOODWAY INFORMATION AND BOUNDARIES, AND FLOOD PROFILES.

LETTER OF MAP CHANGE (LOMC): A LETTER OF MAP CHANGE IS AN OFFICIAL FEMA DETERMINATION, BY LETTER, THAT AMENDS OR REVISES AN EFFECTIVE FLOOD INSURANCE RATE MAP OR FLOOD INSURANCE STUDY. LETTERS OF MAP CHANGE INCLUDE:

LETTER OF MAP AMENDMENT (LOMA): AN AMENDMENT BASED ON TECHNICAL DATA SHOWING THAT A PROPERTY WAS INCORRECTLY INCLUDED IN A DESIGNATED SPECIAL FLOOD HAZARD AREA. A LOMA AMENDS THE CURRENT EFFECTIVE FLOOD INSURANCE RATE MAP AND ESTABLISHES THAT A SPECIFIC PROPERTY OR STRUCTURE IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA.

LETTER OF MAP REVISION (LOMR): A REVISION BASED ON TECHNICAL DATA THAT MAY SHOW CHANGES TO FLOOD ZONES, FLOOD ELEVATIONS, FLOODPLAIN AND FLOODWAY DELINEATIONS, AND PLANIMETRIC FEATURES. A LETTER OF MAP REVISION BASED ON FILL (LOMR-F), IS A DETERMINATION THAT A STRUCTURE OR PARCEL OF LAND HAS BEEN ELEVATED BY FILL ABOVE THE BASE FLOOD ELEVATION AND IS, THEREFORE, NO LONGER EXPOSED TO FLOODING ASSOCIATED WITH THE BASE FLOOD. IN ORDER TO QUALIFY FOR THIS DETERMINATION, THE FILL MUST HAVE BEEN PERMITTED AND PLACED IN ACCORDANCE WITH CHARLES COUNTY'S FLOODPLAIN MANAGEMENT REGULATIONS.

CONDITIONAL LETTER OF MAP REVISION (CLOMR): A FORMAL REVIEW AND COMMENT AS TO WHETHER A PROPOSED FLOOD PROTECTION PROJECT OR OTHER PROJECT COMPLIES WITH THE MINIMUM NFIP REQUIREMENTS FOR SUCH PROJECTS WITH RESPECT TO DELINEATION OF SPECIAL FLOOD HAZARD AREAS. A CLOMR DOES NOT REVISE THE EFFECTIVE FLOOD INSURANCE RATE MAP OR FLOOD INSURANCE STUDY; UPON SUBMISSION AND APPROVAL OF CERTIFIED AS-BUILT

DOCUMENTATION, A LETTER OF MAP REVISION MAY BE ISSUED BY FEMA, TO REVISE THE EFFECTIVE FIRM.

LICENSED: AS USED IN THESE REGULATIONS, LICENSED REFERS TO PROFESSIONALS WHO ARE AUTHORIZED TO PRACTICE IN THE STATE OF MARYLAND BY ISSUANCE OF LICENSES BY THE MARYLAND BOARD OF ARCHITECTS, MARYLAND BOARD OF PROFESSIONAL ENGINEERS, MARYLAND BOARD OF PROFESSIONAL LAND SURVEYORS, AND THE MARYLAND REAL ESTATE APPRAISERS AND HOME INSPECTORS COMMISSION.

LOWEST FLOOR: THE LOWEST FLOOR OF THE LOWEST ENCLOSED AREA (INCLUDING BASEMENT) OF A BUILDING OR STRUCTURE; THE FLOOR OF AN ENCLOSURE BELOW THE LOWEST FLOOR IS NOT THE LOWEST FLOOR PROVIDED THE ENCLOSURE IS CONSTRUCTED IN ACCORDANCE WITH THESE REGULATIONS. THE LOWEST FLOOR OF A MANUFACTURED HOME IS THE BOTTOM OF THE LOWEST HORIZONTAL SUPPORTING MEMBER (LONGITUDINAL CHASSIS FRAME BEAM).

MANUFACTURED HOME: A STRUCTURE, TRANSPORTABLE IN ONE OR MORE SECTIONS, WHICH IS BUILT ON A PERMANENT CHASSIS AND IS DESIGNED FOR USE WITH OR WITHOUT A PERMANENT FOUNDATION WHEN CONNECTED TO THE REQUIRED UTILITIES. THE TERM MANUFACTURED HOME DOES NOT INCLUDE A RECREATIONAL VEHICLE.

MARKET VALUE: THE PRICE AT WHICH A PROPERTY WILL CHANGE HANDS BETWEEN A WILLING BUYER AND A WILLING SELLER, NEITHER PARTY BEING UNDER COMPULSION TO BUY OR SELL AND BOTH HAVING REASONABLE KNOWLEDGE OF RELEVANT FACTS. FOR THE PURPOSES OF THESE REGULATIONS, THE MARKET VALUE OF A BUILDING IS DETERMINED BY A LICENSED REAL ESTATE APPRAISER OR THE MOST RECENT, FULL PHASED-IN ASSESSMENT VALUE OF THE BUILDING (IMPROVEMENT) DETERMINED BY THE MARYLAND DEPARTMENT OF ASSESSMENTS AND TAXATION.

MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE): A PRINCIPAL DEPARTMENT OF THE STATE OF MARYLAND THAT IS CHARGED WITH,

AMONG OTHER RESPONSIBILITIES, THE COORDINATION OF THE NATIONAL FLOOD INSURANCE PROGRAM IN MARYLAND (NFIP STATE COORDINATOR) AND THE ADMINISTRATION OF REGULATORY PROGRAMS FOR DEVELOPMENT AND CONSTRUCTION THAT OCCUR WITHIN THE WATERS OF THE STATE, INCLUDING NONTIDAL WETLANDS, NONTIDAL WATERS AND FLOODPLAINS, AND STATE AND PRIVATE TIDAL WETLANDS (TIDAL WETLANDS). UNLESS OTHERWISE SPECIFIED, "MDE" REFERS TO THE DEPARTMENT'S WETLANDS AND WATERWAYS PROGRAM.

NATIONAL FLOOD INSURANCE PROGRAM (NFIP): THE PROGRAM AUTHORIZED BY THE U.S. CONGRESS IN 42 U.S.C. §§4001 - 4129. THE NFIP MAKES FLOOD INSURANCE COVERAGE AVAILABLE IN COMMUNITIES THAT AGREE TO ADOPT AND ENFORCE MINIMUM REGULATORY REQUIREMENTS FOR DEVELOPMENT IN AREAS PRONE TO FLOODING (SEE DEFINITION OF "SPECIAL FLOOD HAZARD AREA").

NEW CONSTRUCTION: STRUCTURES, INCLUDING ADDITIONS AND IMPROVEMENTS, AND THE PLACEMENT OF MANUFACTURED HOMES, FOR WHICH THE START OF CONSTRUCTION COMMENCED ON OR AFTER JUNE 5, 1985, THE INITIAL EFFECTIVE DATE OF THE CHARLES COUNTY FLOOD INSURANCE RATE MAP, INCLUDING ANY SUBSEQUENT IMPROVEMENTS, ALTERATIONS, MODIFICATIONS, AND ADDITIONS TO SUCH STRUCTURES.

NFIP STATE COORDINATOR: SEE MARYLAND DEPARTMENT OF THE ENVIRONMENT.

NONTIDAL WATERS OF THE STATE: SEE "WATERS OF THE STATE." AS USED IN THESE REGULATIONS, "NONTIDAL WATERS OF THE STATE" REFERS TO ANY STREAM OR BODY OF WATER WITHIN THE STATE THAT IS SUBJECT TO STATE REGULATION, INCLUDING THE "100-YEAR FREQUENCY FLOODPLAIN OF FREE-FLOWING WATERS." COMAR 26.17.04 STATES THAT "THE LANDWARD BOUNDARIES OF ANY TIDAL WATERS SHALL BE DEEMED COTERMINOUS WITH THE WETLANDS BOUNDARY MAPS ADOPTED PURSUANT TO ENVIRONMENT ARTICLE, §16- 301, ANNOTATED CODE OF MARYLAND. THEREFORE, THE BOUNDARY BETWEEN THE TIDAL AND NONTIDAL WATERS OF THE STATE IS THE TIDAL WETLANDS BOUNDARY.

PERSON: AN INDIVIDUAL OR GROUP OF INDIVIDUALS, CORPORATION, PARTNERSHIP, ASSOCIATION, OR ANY OTHER ENTITY, INCLUDING STATE AND LOCAL GOVERNMENTS AND AGENCIES.

RECREATIONAL VEHICLE: A VEHICLE THAT IS BUILT ON A SINGLE CHASSIS, 400 SQUARE FEET OR LESS WHEN MEASURED AT THE LARGEST HORIZONTAL PROJECTION, 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.

SPECIAL FLOOD HAZARD AREA (SFHA): THE LAND IN THE FLOODPLAIN SUBJECT TO A ONE-PERCENT OR GREATER CHANCE OF FLOODING IN ANY GIVEN YEAR. SPECIAL FLOOD HAZARD AREAS ARE DESIGNATED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY IN FLOOD INSURANCE STUDIES AND ON FLOOD INSURANCE RATE MAPS AS ZONES A, AE, AH, AO, A1-30, AND A99, AND ZONES VE AND V1-30. THE TERM INCLUDES AREAS SHOWN ON OTHER FLOOD MAPS THAT ARE SPECIFICALLY LISTED OR OTHERWISE DESCRIBED IN SECTION 238-5(E).

START OF CONSTRUCTION: THE DATE THE BUILDING PERMIT WAS ISSUED, PROVIDED THE ACTUAL START OF CONSTRUCTION, REPAIR, RECONSTRUCTION, REHABILITATION, ADDITION PLACEMENT, OR OTHER IMPROVEMENT WAS WITHIN 180 DAYS OF THE PERMIT DATE. THE ACTUAL START MEANS EITHER THE FIRST PLACEMENT OF PERMANENT CONSTRUCTION OF A STRUCTURE ON A SITE, SUCH AS THE POURING OF SLAB OR FOOTINGS, THE INSTALLATION OF PILES, THE CONSTRUCTION OF COLUMNS, OR ANY WORK BEYOND THE STAGE OF EXCAVATION; OR THE PLACEMENT OF A MANUFACTURED HOME ON A FOUNDATION. PERMANENT CONSTRUCTION DOES NOT INCLUDE LAND PREPARATION, SUCH AS CLEARING, GRADING AND FILLING; NOR DOES IT INCLUDE THE INSTALLATION OF STREETS AND/OR WALKWAYS; NOR DOES IT INCLUDE EXCAVATION FOR A BASEMENT, FOOTINGS, PIERS, OR FOUNDATIONS OR THE ERECTION OF TEMPORARY FORMS; NOR DOES IT INCLUDE THE INSTALLATION ON THE PROPERTY OF ACCESSORY STRUCTURES, SUCH AS

GARAGES OR SHEDS NOT OCCUPIED AS DWELLING UNITS OR NOT PART OF THE MAIN STRUCTURE. FOR SUBSTANTIAL IMPROVEMENTS, THE ACTUAL START OF CONSTRUCTION MEANS THE FIRST ALTERATION OF ANY WALL, CEILING, FLOOR, OR OTHER STRUCTURAL PART OF A BUILDING, WHETHER OR NOT THAT ALTERATION AFFECTS THE EXTERNAL DIMENSIONS OF THE BUILDING.

STRUCTURE: THAT WHICH IS BUILT OR CONSTRUCTED; SPECIFICALLY, A WALLED AND ROOFED BUILDING, INCLUDING A GAS OR LIQUID STORAGE TANK THAT IS PRINCIPALLY ABOVE GROUND, AS WELL AS A MANUFACTURED HOME.

SUBSTANTIAL DAMAGE: DAMAGE OF ANY ORIGIN SUSTAINED BY A BUILDING OR STRUCTURE WHEREBY THE COST OF RESTORING THE BUILDING OR STRUCTURE TO IT BEFORE DAMAGED CONDITION WOULD EQUAL OR EXCEED 50 PERCENT OF THE MARKET VALUE OF THE BUILDING OR STRUCTURE BEFORE THE DAMAGE OCCURRED. ALSO USED AS "SUBSTANTIALLY DAMAGED" STRUCTURES.

SUBSTANTIAL IMPROVEMENT: ANY RECONSTRUCTION, REHABILITATION, ADDITION, OR OTHER IMPROVEMENT OF A BUILDING OR STRUCTURE, THE COST OF WHICH EQUALS OR EXCEEDS 50 PERCENT OF THE MARKET VALUE OF THE BUILDING OR STRUCTURE BEFORE THE START OF CONSTRUCTION OF THE IMPROVEMENT. THE TERM INCLUDES STRUCTURES WHICH HAVE INCURRED SUBSTANTIAL DAMAGE, REGARDLESS OF THE ACTUAL REPAIR WORK PERFORMED. THE TERM DOES NOT, HOWEVER, INCLUDE EITHER:

(1) ANY PROJECT FOR IMPROVEMENT OF A BUILDING OR STRUCTURE TO CORRECT EXISTING VIOLATIONS OF STATE OR LOCAL HEALTH, SANITARY, OR SAFETY CODE SPECIFICATIONS WHICH HAVE BEEN IDENTIFIED BY THE LOCAL CODE ENFORCEMENT OFFICIAL PRIOR TO SUBMISSION OF AN APPLICATION FOR A PERMIT AND WHICH ARE THE MINIMUM NECESSARY TO ASSURE SAFE LIVING CONDITIONS; OR

(2) ANY ALTERATION OF A HISTORIC STRUCTURE, PROVIDED THAT THE ALTERATION WILL NOT PRECLUDE THE STRUCTURE'S CONTINUED DESIGNATION AS A HISTORIC STRUCTURE.

TEMPORARY STRUCTURE: A STRUCTURE INSTALLED, USED, OR ERECTED FOR A PERIOD OF LESS THAN 180 DAYS.

UNMAPPED FLOODPLAINS: REFERS TO STREAMS, RIVULETS, OR LOW AREAS WHICH MAY BE DISCERNABLE IN THE FIELD BUT MAY OR MAY NOT HAVE BEEN IDENTIFIED ON ANY FLOODPLAIN REFERENCE MAPS. THIS WOULD APPLY TO ALL PERENNIAL AND INTERMITTENT STREAMS AS IDENTIFIED ON ANY U.S. GEOLOGICAL SURVEY, MARYLAND GEOLOGICAL SURVEY MAP OR ANY SOURCE, AND ANY LOW AREA WITH A CONTRIBUTING DRAINAGE AREA OF 50 ACRES OR MORE IN SIZE.

VARIANCE: A GRANT OF RELIEF FROM THE STRICT APPLICATION OF ONE OR MORE REQUIREMENTS OF THESE REGULATIONS.

VIOLATION: ANY CONSTRUCTION OR DEVELOPMENT IN A SPECIAL FLOOD HAZARD AREA THAT IS BEING PERFORMED WITHOUT AN ISSUED PERMIT. THE FAILURE OF A BUILDING, STRUCTURE, OR OTHER DEVELOPMENT FOR WHICH A PERMIT IS ISSUED TO BE FULLY COMPLIANT WITH THESE REGULATIONS AND THE CONDITIONS OF THE ISSUED PERMIT. A BUILDING, STRUCTURE, OR OTHER DEVELOPMENT WITHOUT THE REQUIRED DESIGN CERTIFICATIONS, THE ELEVATION CERTIFICATE, OR OTHER EVIDENCE OF COMPLIANCE REQUIRED IS PRESUMED TO BE A VIOLATION UNTIL SUCH TIME AS THE REQUIRED DOCUMENTATION IS PROVIDED.

WATERCOURSE: THE CHANNEL, INCLUDING CHANNEL BANKS AND BED, OF NONTIDAL WATERS OF THE STATE.

WATERS OF THE STATE: WATERS OF THE STATE INCLUDE:

(1) BOTH SURFACE AND UNDERGROUND WATERS WITHIN THE BOUNDARIES OF THE STATE SUBJECT TO ITS JURISDICTION;

(2) THAT PORTION OF THE ATLANTIC OCEAN WITHIN THE BOUNDARIES OF THE STATE;

(3) THE CHESAPEAKE BAY AND ITS TRIBUTARIES;

(4) ALL PONDS, LAKES, RIVERS, STREAMS, PUBLIC DITCHES, TAX DITCHES, AND PUBLIC DRAINAGE SYSTEMS WITHIN THE STATE, OTHER THAN THOSE DESIGNED AND USED TO COLLECT, CONVEY, OR DISPOSE OF SANITARY SEWAGE; AND

(5) THE FLOODPLAIN OF FREE-FLOWING WATERS DETERMINED BY MDE ON THE BASIS OF THE 100-YEAR FLOOD FREQUENCY.

SECTION 238-7. ADMINISTRATION.

(A) DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR. THE CHIEF IS HEREBY APPOINTED TO ADMINISTER AND IMPLEMENT THESE REGULATIONS AND IS REFERRED TO HEREIN AS THE FLOODPLAIN ADMINISTRATOR. THE FLOODPLAIN ADMINISTRATOR MAY:

(1) DELEGATE DUTIES AND RESPONSIBILITIES SET FORTH IN THESE REGULATIONS TO QUALIFIED TECHNICAL PERSONNEL, PLAN EXAMINERS, INSPECTORS, AND OTHER EMPLOYEES.

(2) ENTER INTO A WRITTEN AGREEMENT OR WRITTEN CONTRACT WITH A PRIVATE SECTOR ENTITY TO ADMINISTER SPECIFIC PROVISIONS OF THESE REGULATIONS. ADMINISTRATION OF ANY PART OF THESE REGULATIONS BY ANOTHER ENTITY SHALL NOT RELIEVE CHARLES COUNTY OF ITS RESPONSIBILITIES PURSUANT TO THE PARTICIPATION REQUIREMENTS OF THE NATIONAL FLOOD INSURANCE PROGRAM AS SET FORTH IN THE CODE OF FEDERAL REGULATIONS AT 44 C.F.R. SECTION 59.22.

(B) DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR. THE DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR SHALL INCLUDE BUT ARE NOT LIMITED TO:

(1) REVIEW APPLICATIONS FOR PERMITS TO DETERMINE WHETHER PROPOSED ACTIVITIES WILL BE LOCATED IN FLOOD HAZARD AREAS.

(2) INTERPRET FLOODPLAIN BOUNDARIES AND PROVIDE AVAILABLE BASE FLOOD ELEVATION AND FLOOD HAZARD INFORMATION.

(3) REVIEW APPLICATIONS TO DETERMINE WHETHER PROPOSED ACTIVITIES WILL BE REASONABLY SAFE FROM FLOODING AND

REQUIRE NEW CONSTRUCTION AND SUBSTANTIAL IMPROVEMENTS TO MEET THE REQUIREMENTS OF THESE REGULATIONS.

(4) REVIEW APPLICATIONS TO DETERMINE WHETHER ALL NECESSARY PERMITS HAVE BEEN OBTAINED FROM THE FEDERAL, STATE OR LOCAL AGENCIES FROM WHICH PRIOR OR CONCURRENT APPROVAL IS REQUIRED; IN PARTICULAR, PERMITS FROM MDE FOR ANY CONSTRUCTION, RECONSTRUCTION, REPAIR, OR ALTERATION OF A DAM, RESERVOIR, OR WATERWAY OBSTRUCTION (INCLUDING BRIDGES, CULVERTS, STRUCTURES), ANY ALTERATION OF A WATERCOURSE, OR ANY CHANGE OF THE COURSE, CURRENT, OR CROSS SECTION OF A STREAM OR BODY OF WATER, INCLUDING ANY CHANGE TO THE 100-YEAR FREQUENCY FLOODPLAIN OF FREE-FLOWING NONTIDAL WATERS OF THE STATE.

(5) VERIFY THAT APPLICANTS PROPOSING AN ALTERATION OF A WATERCOURSE HAVE NOTIFIED ADJACENT COMMUNITIES AND MDE (NFIP STATE COORDINATOR), AND HAVE SUBMITTED COPIES OF SUCH NOTIFICATIONS TO FEMA.

(6) ADVISE APPLICANTS FOR NEW CONSTRUCTION OR SUBSTANTIAL IMPROVEMENT OF STRUCTURES THAT ARE LOCATED WITHIN AN AREA OF THE COASTAL BARRIER RESOURCES SYSTEM ESTABLISHED BY THE COASTAL BARRIER RESOURCES ACT THAT FEDERAL FLOOD INSURANCE IS NOT AVAILABLE ON SUCH STRUCTURES; AREAS SUBJECT TO THIS LIMITATION ARE SHOWN ON FLOOD INSURANCE RATE MAPS AS COASTAL BARRIER RESOURCE SYSTEM AREAS (CBRS) OR OTHERWISE PROTECTED AREAS (OPA).

(7) APPROVE APPLICATIONS AND ISSUE PERMITS TO DEVELOP IN FLOOD HAZARD AREAS IF THE PROVISIONS OF THESE REGULATIONS HAVE BEEN MET, OR DISAPPROVE APPLICATIONS IF THE PROVISIONS OF THESE REGULATIONS HAVE NOT BEEN MET.

(8) INSPECT OR CAUSE TO BE INSPECTED, BUILDINGS, STRUCTURES, AND OTHER DEVELOPMENT FOR WHICH PERMITS HAVE BEEN ISSUED TO DETERMINE COMPLIANCE WITH THESE REGULATIONS OR

TO DETERMINE IF NON-COMPLIANCE HAS OCCURRED OR VIOLATIONS HAVE BEEN COMMITTED.

(9) REVIEW ELEVATION CERTIFICATES AND REQUIRE INCOMPLETE OR DEFICIENT CERTIFICATES TO BE CORRECTED.

(10) SUBMIT TO FEMA, OR REQUIRE APPLICANTS TO SUBMIT TO FEMA, DATA AND INFORMATION NECESSARY TO MAINTAIN FIRMS, INCLUDING HYDROLOGIC AND HYDRAULIC ENGINEERING ANALYSES PREPARED BY OR FOR CHARLES COUNTY, MARYLAND, WITHIN SIX MONTHS AFTER SUCH DATA AND INFORMATION BECOMES AVAILABLE IF THE ANALYSIS INDICATED IN BASE FLOOD ELEVATIONS.

(11) MAINTAIN AND PERMANENTLY KEEP RECORDS THAT ARE NECESSARY FOR THE ADMINISTRATION OF THESE REGULATIONS, INCLUDING:

(A) FLOOD INSURANCE STUDIES, FLOOD INSURANCE RATE MAPS (INCLUDING HISTORIC STUDIES AND MAPS AND CURRENT EFFECTIVE STUDIES AND MAPS) AND LETTERS OF MAP CHANGE; AND

(B) DOCUMENTATION SUPPORTING ISSUANCE AND DENIAL OF PERMITS, ELEVATION CERTIFICATES, DOCUMENTATION OF THE ELEVATION (IN RELATION TO THE DATUM ON THE FIRM) TO WHICH STRUCTURES HAVE BEEN FLOODPROOFED, OTHER REQUIRED DESIGN CERTIFICATIONS, VARIANCES, AND RECORDS OF ENFORCEMENT ACTIONS TAKEN TO CORRECT VIOLATIONS OF THESE REGULATIONS.

(12) ENFORCE THE PROVISIONS OF THESE REGULATIONS, INVESTIGATE VIOLATIONS, ISSUE NOTICES OF VIOLATIONS OR STOP WORK ORDERS, AND REQUIRE PERMIT HOLDERS TO TAKE CORRECTIVE ACTION.

(13) ADVISE THE DIRECTOR REGARDING THE INTENT OF THESE REGULATIONS AND, FOR EACH APPLICATION FOR A VARIANCE, PREPARE A STAFF REPORT AND RECOMMENDATION.

(14) ADMINISTER THE REQUIREMENTS RELATED TO PROPOSED WORK ON EXISTING BUILDINGS:

(A) MAKE DETERMINATIONS AS TO WHETHER BUILDINGS AND STRUCTURES THAT ARE LOCATED IN FLOOD HAZARD AREAS AND THAT ARE DAMAGED BY ANY CAUSE HAVE BEEN SUBSTANTIALLY DAMAGED.

(B) MAKE REASONABLE EFFORTS TO NOTIFY OWNERS OF SUBSTANTIALLY DAMAGED STRUCTURES OF THE NEED TO OBTAIN A PERMIT TO REPAIR, REHABILITATE, OR RECONSTRUCT, AND PROHIBIT THE NON-COMPLIANT REPAIR OF SUBSTANTIALLY DAMAGED BUILDINGS EXCEPT FOR TEMPORARY EMERGENCY PROTECTIVE MEASURES NECESSARY TO SECURE A PROPERTY OR STABILIZE A BUILDING OR STRUCTURE TO PREVENT ADDITIONAL DAMAGE.

(15) UNDERTAKE, AS DETERMINED APPROPRIATE BY THE FLOODPLAIN ADMINISTRATOR DUE TO THE CIRCUMSTANCES, OTHER ACTIONS WHICH MAY INCLUDE BUT ARE NOT LIMITED TO: ISSUING PRESS RELEASES, PUBLIC SERVICE ANNOUNCEMENTS, AND OTHER PUBLIC INFORMATION MATERIALS RELATED TO PERMIT REQUESTS AND REPAIR OF DAMAGED STRUCTURES; COORDINATING WITH OTHER FEDERAL, STATE, AND LOCAL AGENCIES TO ASSIST WITH SUBSTANTIAL DAMAGE DETERMINATIONS; PROVIDING OWNERS OF DAMAGED STRUCTURES INFORMATION RELATED TO THE PROPER REPAIR OF DAMAGED STRUCTURES IN SPECIAL FLOOD HAZARD AREAS; AND ASSISTING PROPERTY OWNERS WITH DOCUMENTATION NECESSARY TO FILE CLAIMS FOR INCREASED COST OF COMPLIANCE COVERAGE UNDER NFIP FLOOD INSURANCE POLICIES.

(16) NOTIFY THE FEMA WHEN THE CORPORATE BOUNDARIES OF CHARLES COUNTY, MARYLAND HAVE BEEN MODIFIED AND:

(A) PROVIDE A MAP THAT CLEARLY DELINEATES THE NEW CORPORATE BOUNDARIES OR THE NEW AREA FOR WHICH

THE AUTHORITY TO REGULATE PURSUANT TO THESE REGULATIONS HAS EITHER BEEN ASSUMED OR RELINQUISHED THROUGH ANNEXATION; AND

(B) IF THE FIRM FOR ANY ANNEXED AREA INCLUDES SPECIAL FLOOD HAZARD AREAS THAT HAVE FLOOD ZONES THAT HAVE REGULATORY REQUIREMENTS THAT ARE NOT SET FORTH IN THESE REGULATIONS, PREPARE AMENDMENTS TO THESE REGULATIONS TO ADOPT THE FIRM AND APPROPRIATE REQUIREMENTS, AND SUBMIT THE AMENDMENTS TO THE GOVERNING BODY FOR ADOPTION; SUCH ADOPTION SHALL TAKE PLACE WITHIN SIX MONTHS OF THE DATE OF ANNEXATION AND A COPY OF THE AMENDED REGULATIONS SHALL BE PROVIDED TO MDE (NFIP STATE COORDINATOR) AND FEMA.

(17) UPON THE REQUEST OF FEMA, COMPLETE AND SUBMIT A REPORT CONCERNING PARTICIPATION IN THE NFIP WHICH MAY REQUEST INFORMATION REGARDING THE NUMBER OF BUILDINGS IN THE SFHA, NUMBER OF PERMITS ISSUED FOR DEVELOPMENT IN THE SFHA, AND NUMBER OF VARIANCES ISSUED FOR DEVELOPMENT IN THE SFHA.

(C) USE AND INTERPRETATION OF FIRMS. THE FLOODPLAIN ADMINISTRATOR SHALL MAKE INTERPRETATIONS, WHERE NEEDED, AS TO THE EXACT LOCATION OF SPECIAL FLOOD HAZARD AREAS, FLOODPLAIN BOUNDARIES, AND FLOODWAY BOUNDARIES. THE FOLLOWING SHALL APPLY TO THE USE AND INTERPRETATION OF FIRMS AND DATA:

(1) WHERE FIELD SURVEYED TOPOGRAPHY INDICATES THAT GROUND ELEVATIONS:

(A) ARE BELOW THE BASE FLOOD ELEVATION, EVEN IN AREAS NOT DELINEATED AS A SPECIAL FLOOD HAZARD AREA ON A FIRM, THE AREA SHALL BE CONSIDERED AS SPECIAL FLOOD HAZARD AREA AND SUBJECT TO THE REQUIREMENTS OF THESE REGULATIONS;

(B) ARE ABOVE THE BASE FLOOD ELEVATION, THE AREA SHALL

BE REGULATED AS SPECIAL FLOOD HAZARD AREA UNLESS THE APPLICANT OBTAINS A LETTER OF MAP CHANGE THAT REMOVES THE AREA FROM THE SPECIAL FLOOD HAZARD AREA.

(2) IN FEMA-IDENTIFIED SPECIAL FLOOD HAZARD AREAS WHERE BASE FLOOD ELEVATION AND FLOODWAY DATA HAVE NOT BEEN IDENTIFIED AND IN AREAS WHERE FEMA HAS NOT IDENTIFIED SPECIAL FLOOD HAZARD AREAS, ANY OTHER FLOOD HAZARD DATA AVAILABLE FROM A FEDERAL, STATE, OR OTHER SOURCE SHALL BE REVIEWED AND REASONABLY USED.

(3) BASE FLOOD ELEVATIONS AND DESIGNATED FLOODWAY BOUNDARIES ON FIRMS AND IN FISS SHALL TAKE PRECEDENCE OVER BASE FLOOD ELEVATIONS AND FLOODWAY BOUNDARIES BY ANY OTHER SOURCES IF SUCH SOURCES SHOW REDUCED FLOODWAY WIDTHS AND/OR LOWER BASE FLOOD ELEVATIONS.

(4) OTHER SOURCES OF DATA SHALL BE REASONABLY USED IF SUCH SOURCES SHOW INCREASED BASE FLOOD ELEVATIONS AND/OR LARGER FLOODWAYAREAS THAN ARE SHOWN ON FIRMS AND IN FISS.

(5) IF A PRELIMINARY FLOOD INSURANCE RATE MAP AND/OR A PRELIMINARY FLOOD INSURANCE STUDY HAS BEEN PROVIDED BY FEMA:

(A) UPON THE ISSUANCE OF A LETTER OF FINAL DETERMINATION BY FEMA, THE PRELIMINARY FLOOD HAZARD DATA SHALL BE USED AND SHALL REPLACE THE FLOOD HAZARD DATA PREVIOUSLY PROVIDED FROM FEMA FOR THE PURPOSES OF ADMINISTERING THESE REGULATIONS.

(B) PRIOR TO THE ISSUANCE OF A LETTER OF FINAL DETERMINATION BY FEMA, THE USE OF PRELIMINARY FLOOD HAZARD DATA SHALL BE DEEMED THE BEST AVAILABLE DATA PURSUANT TO SECTION 238-5(D)(3) AND USED WHERE NO BASE FLOOD ELEVATIONS AND/OR FLOODWAY AREAS ARE PROVIDED ON THE EFFECTIVE FIRM.

(C) PRIOR TO ISSUANCE OF A LETTER OF FINAL DETERMINATION BY FEMA, THE USE OF PRELIMINARY FLOOD HAZARD DATA IS PERMITTED WHERE THE PRELIMINARY BASE FLOOD ELEVATIONS OR FLOODWAY AREAS EXCEED THE BASE FLOOD ELEVATIONS AND/OR DESIGNATED FLOODWAY WIDTHS IN EXISTING FLOOD HAZARD DATA PROVIDED BY FEMA. SUCH PRELIMINARY DATA MAY BE SUBJECT TO CHANGE AND/OR APPEAL TO FEMA.

(D) PERMITS REQUIRED AND EXPIRATION.

(1) IT SHALL BE UNLAWFUL FOR ANY PERSON TO BEGIN ANY DEVELOPMENT OR CONSTRUCTION WHICH IS WHOLLY WITHIN, PARTIALLY WITHIN, OR IN CONTACT WITH ANY FLOOD HAZARD AREA ESTABLISHED IN SECTION 238-5(E), INCLUDING BUT NOT LIMITED TO: FILLING; GRADING; CONSTRUCTION OF NEW STRUCTURES; THE SUBSTANTIAL IMPROVEMENT OF BUILDINGS OR STRUCTURES, INCLUDING REPAIR OF SUBSTANTIAL DAMAGE; PLACEMENT OR REPLACEMENT OF MANUFACTURED HOMES, INCLUDING SUBSTANTIAL IMPROVEMENT OR REPAIR OF SUBSTANTIAL DAMAGE OF MANUFACTURED HOMES; ERECTING OR INSTALLING A TEMPORARY STRUCTURE, OR ALTERATION OF A WATERCOURSE, UNTIL A PERMIT IS OBTAINED FROM CHARLES COUNTY. NO SUCH PERMIT SHALL BE ISSUED UNTIL THE REQUIREMENTS OF THESE REGULATIONS HAVE BEEN MET.

(2) IN ADDITION TO THE PERMITS REQUIRED IN PARAGRAPH (A), APPLICANTS FOR PERMITS IN NONTIDAL WATERS OF THE STATE ARE ADVISED TO CONTACT MDE UNLESS WAIVED BY MDE, PURSUANT TO CODE OF MARYLAND REGULATIONS 26.17.04, CONSTRUCTION ON NONTIDAL WATERS AND FLOODPLAINS, MDE REGULATES THE "100-YEAR FREQUENCY FLOODPLAIN OF FREE-FLOWING WATERS," ALSO REFERRED TO AS NONTIDAL WATERS OF THE STATE. TO DETERMINE THE 100-YEAR FREQUENCY FLOODPLAIN, HYDROLOGIC CALCULATIONS ARE BASED ON THE ULTIMATE DEVELOPMENT OF THE WATERSHED, ASSUMING EXISTING ZONING. THE RESULTING

FLOOD HAZARD AREAS DELINEATED USING THE RESULTS OF SUCH CALCULATIONS MAY BE DIFFERENT THAN THE SPECIAL FLOOD HAZARD AREAS ESTABLISHED IN SECTION 238-5(E) OF THESE REGULATIONS.

(3) A PERMIT IS VALID PROVIDED THE ACTUAL START OF WORK IS WITHIN 180 DAYS OF THE DATE OF PERMIT ISSUANCE. REQUESTS FOR EXTENSIONS SHALL BE SUBMITTED IN WRITING AND JUSTIFIABLE CAUSE DEMONSTRATED. THE FLOODPLAIN ADMINISTRATOR MAY GRANT, IN WRITING, ONE OR MORE EXTENSIONS OF TIME, FOR ADDITIONAL PERIODS NOT EXCEEDING 90 DAYS EACH AND PROVIDED THERE HAS BEEN NO AMENDMENT OR REVISION TO THE BASIS FOR ESTABLISHING SPECIAL FLOOD HAZARD AREAS AND BFES SET FORTH IN SECTION 238-8(E).

(4) PERMITS FOR INCREMENTAL IMPROVEMENTS AND ADDITIONS SHALL BE TRACKED BY THE DEPARTMENT, AND IF CUMULATIVE IMPROVEMENTS CONSTITUTE SUBSTANTIAL IMPROVEMENT, NO FURTHER PERMITS MAY BE ISSUED UNLESS THE STRUCTURE CONFORMS TO THE PROVISIONS OF THIS ORDINANCE.

(E) APPLICATION REQUIRED. APPLICATION FOR A PERMIT SHALL BE MADE BY THE OWNER OF THE PROPERTY OR THE OWNER'S AUTHORIZED AGENT (HEREIN REFERRED TO AS THE APPLICANT) PRIOR TO THE START OF ANY WORK. THE APPLICATION SHALL BE ON A FORM FURNISHED FOR THAT PURPOSE.

(1) APPLICATION CONTENTS. AT A MINIMUM, APPLICATIONS SHALL INCLUDE:

(A) SITE PLANS DRAWN TO SCALE SHOWING THE NATURE, LOCATION, DIMENSIONS, AND EXISTING AND PROPOSED TOPOGRAPHY OF THE AREA IN QUESTION, AND THE LOCATION OF EXISTING AND PROPOSED STRUCTURES, EXCAVATION, FILLING, STORAGE OF MATERIALS, DRAINAGE FACILITIES, AND OTHER PROPOSED ACTIVITIES.

(B) ELEVATION OF THE EXISTING NATURAL GROUND WHERE

BUILDINGS OR STRUCTURES ARE PROPOSED, REFERENCED TO THE DATUM ON THE FIRM.

(C) DELINEATION OF FLOOD HAZARD AREAS, DESIGNATED FLOODWAY BOUNDARIES, FLOOD ZONES, BASE FLOOD ELEVATIONS, AND FLOOD PROTECTION SETBACKS. BASE FLOOD ELEVATIONS SHALL BE USED TO DELINEATE THE BOUNDARY OF FLOOD HAZARD AREAS AND SUCH DELINEATIONS SHALL PREVAIL OVER THE BOUNDARY OF SFHAS SHOWN ON FIRMS.

(D) WHERE FLOODWAYS ARE NOT DELINEATED OR BASE FLOOD ELEVATIONS ARE NOT SHOWN ON THE FIRMS, THE FLOODPLAIN ADMINISTRATOR HAS THE AUTHORITY TO REQUIRE THE APPLICANT TO USE INFORMATION PROVIDED BY THE FLOODPLAIN ADMINISTRATOR, INFORMATION THAT IS AVAILABLE FROM FEDERAL, STATE, OR OTHER SOURCES, OR TO DETERMINE SUCH INFORMATION USING ACCEPTED ENGINEERING PRACTICES OR METHODS APPROVED BY THE FLOODPLAIN ADMINISTRATOR. NOTE: SEE "MANAGING FLOODPLAIN DEVELOPMENT IN APPROXIMATE ZONE A AREAS: A GUIDE FOR OBTAINING AND DEVELOPING BASE (100-YEAR) FLOOD ELEVATIONS" (FEMA 265).

(E) DETERMINATION OF THE BASE FLOOD ELEVATIONS, FOR DEVELOPMENT PROPOSALS AND SUBDIVISION PROPOSALS, EACH WITH AT LEAST 5 LOTS OR AT LEAST 5 ACRES, WHICHEVER IS THE LESSER, IN SPECIAL FLOOD HAZARD AREAS WHERE BASE FLOOD ELEVATIONS ARE NOT SHOWN ON THE FIRM; IF HYDROLOGIC AND HYDRAULIC ENGINEERING ANALYSES ARE SUBMITTED, SUCH ANALYSES SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS AND SPECIFICATIONS OF MDE AND FEMA.

(F) HYDROLOGIC AND HYDRAULIC ENGINEERING ANALYSES FOR PROPOSALS IN SPECIAL FLOOD HAZARD AREAS WHERE FEMA

HAS PROVIDED BASE FLOOD ELEVATIONS BUT HAS NOT DELINEATED A FLOODWAY; SUCH ANALYSES SHALL DEMONSTRATE THAT THE CUMULATIVE EFFECT OF PROPOSED DEVELOPMENT, WHEN COMBINED WITH ALL OTHER EXISTING AND ANTICIPATED DEVELOPMENT WILL NOT INCREASE THE WATER SURFACE ELEVATION OF THE BASE FLOOD BY MORE THAN ONE (1) FOOT OR A LOWER INCREASE IF REQUIRED BY MDE.

(G) FOR ENCROACHMENTS IN FLOODWAYS, AN EVALUATION OF ALTERNATIVES TO SUCH ENCROACHMENTS, INCLUDING DIFFERENT USES OF THE SITE OR PORTION OF THE SITE WITHIN THE FLOODWAY, AND MINIMIZATION OF SUCH ENCROACHMENT.

(H) IF FILL IS PROPOSED TO BE PLACED FOR A PURPOSE OTHER THAN TO ELEVATE STRUCTURES, THE APPLICANT SHALL INDICATE THE INTENDED PURPOSE FOR THE FILL.

(I) FOR PROPOSED BUILDINGS AND STRUCTURES, INCLUDING SUBSTANTIAL IMPROVEMENT AND REPAIR OF SUBSTANTIAL DAMAGE, AND PLACEMENT AND REPLACEMENT OF MANUFACTURED HOMES, INCLUDING SUBSTANTIAL IMPROVEMENT AND REPAIR OF SUBSTANTIAL DAMAGE:

(I) THE PROPOSED ELEVATION OF THE LOWEST FLOOR, INCLUDING BASEMENT, REFERENCED TO THE DATUM ON THE FIRM AND A SIGNED AGREEMENT TO SUBMIT AN ELEVATION CERTIFICATE.

(II) THE SIGNED DECLARATION OF LAND RESTRICTION (NONCONVERSION AGREEMENT) THAT SHALL BE RECORDED ON THE PROPERTY DEED PRIOR TO ISSUANCE OF THE CERTIFICATE OF USE AND OCCUPANCY, IF THE APPLICATION INCLUDES AN ENCLOSURE BELOW THE LOWEST FLOOR OR A CRAWL/UNDERFLOOR SPACE THAT IS MORE THAN FOUR (4) FEET IN HEIGHT.

(III) A WRITTEN EVALUATION OF ALTERNATIVE METHODS CONSIDERED TO ELEVATE STRUCTURES AND MANUFACTURED HOMES, IF THE LOCATION IS IN NONTIDAL WATERS OF THE STATE AND FILL IS PROPOSED TO ACHIEVE THE ELEVATION REQUIRED IN SECTION 238-9(D)(1) OR SECTION 238-9(E)(1).

(J) FOR ACCESSORY STRUCTURES THAT ARE 300 SQUARE FEET OR LARGER IN AREA (FOOTPRINT) THAT ARE BELOW THE BASE FLOOD ELEVATION, A DECLARATION OF LAND RESTRICTION (NONCONVERSION AGREEMENT) SHALL BE RECORDED ON THE PROPERTY DEED PRIOR TO ISSUANCE OF THE CERTIFICATE OF USE AND OCCUPANCY.

(K) FOR TEMPORARY STRUCTURES AND TEMPORARY STORAGE, SPECIFICATION OF THE DURATION OF THE TEMPORARY USE.

(L) FOR PROPOSED WORK ON EXISTING BUILDINGS, STRUCTURE, AND MANUFACTURED HOMES, INCLUDING ANY IMPROVEMENT, ADDITION, REPAIRS, ALTERATIONS, REHABILITATION, OR RECONSTRUCTION, SUFFICIENT INFORMATION TO DETERMINE IF THE WORK CONSTITUTES SUBSTANTIAL IMPROVEMENT OR REPAIR OF SUBSTANTIAL DAMAGE, INCLUDING BUT NOT LIMITED TO:

(I) IF THE EXISTING BUILDING OR STRUCTURE WAS CONSTRUCTED AFTER JUNE 5, 1985, EVIDENCE THAT THE WORK WILL NOT ALTER ANY ASPECT OF THE BUILDING OR STRUCTURE THAT WAS REQUIRED FOR COMPLIANCE WITH THE FLOODPLAIN MANAGEMENT REQUIREMENTS IN EFFECT AT THE TIME THE BUILDING OR STRUCTURE WAS PERMITTED.

(II) IF THE PROPOSED WORK IS A HORIZONTAL ADDITION, A DESCRIPTION OF THE ADDITION AND WHETHER IT WILL BE INDEPENDENTLY SUPPORTED OR STRUCTURALLY CONNECTED TO THE BASE BUILDING AND THE NATURE OF ALL OTHER MODIFICATIONS TO

THE BASE BUILDING, IF ANY.

(III) DOCUMENTATION OF THE MARKET VALUE OF THE BUILDING OR STRUCTURE BEFORE THE IMPROVEMENT OR, IF THE WORK IS REPAIR OF DAMAGE, BEFORE THE DAMAGE OCCURRED.

(IV) DOCUMENTATION OF THE ACTUAL CASH VALUE OF ALL PROPOSED WORK, INCLUDING THE ACTUAL CASH VALUE OF ALL WORK NECESSARY TO REPAIR AND RESTORE DAMAGE TO THE BEFORE-DAMAGED CONDITION, REGARDLESS OF THE AMOUNT OF WORK THAT WILL BE PERFORMED. THE VALUE OF WORK PERFORMED BY THE OWNER OR VOLUNTEERS SHALL BE VALUED AT MARKET LABOR RATES; THE VALUE OF DONATED OR DISCOUNTED MATERIALS SHALL BE VALUED AT MARKET RATES.

(M) CERTIFICATIONS AND/OR TECHNICAL ANALYSES PREPARED OR CONDUCTED BY A LICENSED PROFESSIONAL ENGINEER, OR LICENSED ARCHITECT, AS APPROPRIATE, INCLUDING:

(I) THE DETERMINATION OF THE BASE FLOOD ELEVATIONS OR HYDROLOGIC AND HYDRAULIC ENGINEERING ANALYSES PREPARED BY A LICENSED PROFESSIONAL ENGINEER THAT ARE REQUIRED BY THE FLOODPLAIN ADMINISTRATOR OR ARE REQUIRED BY THESE REGULATIONS IN: SECTION 238-8(B) FOR CERTAIN SUBDIVISIONS AND DEVELOPMENT; SECTION 238-9(C)(1) FOR DEVELOPMENT IN DESIGNATED FLOODWAYS; SECTION 238-9(C)(3) FOR DEVELOPMENT IN FLOOD HAZARD AREAS WITH BASE FLOOD ELEVATIONS BUT NO DESIGNATED FLOODWAYS; AND SECTION 238-9(D)(5) FOR DELIBERATE ALTERATION OR RELOCATION OF WATERCOURSES.

(II) THE FLOODPROOFING CERTIFICATE FOR NONRESIDENTIAL STRUCTURES THAT ARE

FLOODPROOFED AS REQUIRED IN SECTION 238-9(E)(2).

(III) CERTIFICATION THAT ENGINEERED FLOOD OPENINGS ARE DESIGNED TO MEET THE MINIMUM REQUIREMENTS OF SECTION 238-9(D)(3)(C) TO AUTOMATICALLY EQUALIZE HYDROSTATIC FLOOD FORCES.

(IV) CERTIFICATION THAT THE PROPOSED ELEVATION, STRUCTURAL DESIGN, SPECIFICATIONS AND PLANS, AND THE METHODS OF CONSTRUCTION TO BE USED FOR STRUCTURES IN COASTAL HIGH HAZARD AREAS (V ZONES) AND COASTAL A ZONES, ARE IN ACCORDANCE WITH ACCEPTED STANDARDS OF PRACTICE AND MEET THE REQUIREMENTS OF SECTION 238-10(C)(3).

(N) FOR NONRESIDENTIAL STRUCTURES THAT ARE PROPOSED WITH FLOODPROOFING, AN OPERATIONS AND MAINTENANCE PLAN AS SPECIFIED IN 238-9(E)(2)(C).

(O) SUCH OTHER MATERIAL AND INFORMATION AS MAY BE REQUESTED BY THE FLOODPLAIN ADMINISTRATOR AND NECESSARY TO DETERMINE CONFORMANCE WITHTHESE REGULATIONS.

(2) NEW TECHNICAL DATA

(A) THE APPLICANT MAY SEEK A LETTER OF MAP CHANGE BY SUBMITTING NEW TECHNICAL DATA TO FEMA, SUCH AS BASE MAPS, TOPOGRAPHY, AND ENGINEERING ANALYSES TO SUPPORT REVISION OF FLOODPLAIN AND FLOODWAY BOUNDARIES AND/OR BASE FLOOD ELEVATIONS. SUCH SUBMISSIONS SHALL BE PREPARED IN A FORMAT ACCEPTABLE TO FEMA AND ANY FEES SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT. A COPY OF THE SUBMITTAL SHALL BE ATTACHED TO THE APPLICATION FOR A PERMIT.

(B) IF THE APPLICANT SUBMITS NEW TECHNICAL DATA TO SUPPORT ANY CHANGE IN FLOODPLAIN AND DESIGNATED FLOODWAY BOUNDARIES AND/OR BASE FLOOD ELEVATIONS BUT HAS NOT SOUGHT A LETTER OF MAP CHANGE FROM

FEMA, THE APPLICANT SHALL SUBMIT SUCH DATA TO FEMA AS SOON AS PRACTICABLE, BUT NOT LATER THAN SIX MONTHS AFTER THE DATE SUCH INFORMATION BECOMES AVAILABLE. SUCH SUBMISSIONS SHALL BE PREPARED IN A FORMAT ACCEPTABLE TO FEMA AND ANY FEES SHALL BE THE SOLE RESPONSIBILITY OF THE APPLICANT.

(F) REVIEW OF APPLICATION. THE FLOODPLAIN ADMINISTRATOR SHALL:

(1) REVIEW APPLICATIONS FOR DEVELOPMENT IN SPECIAL FLOOD HAZARD AREAS TO DETERMINE THE COMPLETENESS OF INFORMATION SUBMITTED. THE APPLICANT SHALL BE NOTIFIED OF INCOMPLETENESS OR ADDITIONAL INFORMATION THAT IS REQUIRED TO SUPPORT THE APPLICATION.

(2) NOTIFY APPLICANTS THAT PERMITS FROM MDE AND THE U.S. ARMY CORPS OF ENGINEERS, AND OTHER STATE AND FEDERAL AUTHORITIES MAY BE REQUIRED.

(3) REVIEW ALL PERMIT APPLICATIONS TO ASSURE THAT ALL NECESSARY PERMITS HAVE BEEN RECEIVED FROM THE FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES FROM WHICH PRIOR APPROVAL IS REQUIRED. THE APPLICANT SHALL BE RESPONSIBLE FOR OBTAINING SUCH PERMITS, INCLUDING PERMITS ISSUED BY:

(A) THE U.S. ARMY CORPS OF ENGINEERS UNDER SECTION 10 OF THE RIVERS AND HARBORS ACT AND SECTION 404 OF THE CLEAN WATER ACT;

(B) MDE PURSUANT TO COMAR 26.23 (NONTIDAL WETLANDS) AND SECTION 401 OF THE CLEAN WATER ACT;

(C) MDE FOR CONSTRUCTION ON NONTIDAL WATERS OF THE STATE PURSUANT TO COMAR 26.17.04; AND

(D) MDE PURSUANT TO COMAR 26.24 (TIDAL WETLANDS).

(4) REVIEW APPLICATIONS FOR COMPLIANCE WITH THESE REGULATIONS AFTER ALL INFORMATION REQUIRED IN SECTION 238-7(A) OF THESE REGULATIONS OR IDENTIFIED AND REQUIRED BY THE FLOODPLAIN ADMINISTRATOR HAS BEEN RECEIVED.

(G) INSPECTIONS. THE FLOODPLAIN ADMINISTRATOR SHALL MAKE PERIODIC

INSPECTIONS OF DEVELOPMENT PERMITTED IN SPECIAL FLOOD HAZARD AREAS, AT APPROPRIATE TIMES THROUGHOUT THE PERIOD OF CONSTRUCTION IN ORDER TO MONITOR COMPLIANCE. SUCH INSPECTIONS MAY INCLUDE:

(1) STAKE-OUT INSPECTION, TO DETERMINE LOCATION ON THE SITE RELATIVE TO THE FLOOD HAZARD AREA AND DESIGNATED FLOODWAY.

(2) FOUNDATION INSPECTION, UPON PLACEMENT OF THE LOWEST FLOOR AND PRIOR TO FURTHER VERTICAL CONSTRUCTION, TO COLLECT INFORMATION OR CERTIFICATION OF THE ELEVATION OF THE LOWEST FLOOR.

(3) INSPECTION OF ENCLOSURES BELOW THE LOWEST FLOOR, INCLUDING CRAWL/UNDERFLOOR SPACES, TO DETERMINE COMPLIANCE WITH APPLICABLE PROVISIONS.

(4) UTILITY INSPECTION, UPON INSTALLATION OF SPECIFIED EQUIPMENT AND APPLIANCES, TO DETERMINE APPROPRIATE LOCATION WITH RESPECT TO THE BASE FLOOD ELEVATION.

(5) FINAL INSPECTION PRIOR TO ISSUANCE OF THE CERTIFICATE OF USE AND OCCUPANCY.

(H) SUBMISSIONS REQUIRED PRIOR TO FINAL INSPECTION. PURSUANT TO THE AGREEMENT TO SUBMIT AN ELEVATION CERTIFICATE SUBMITTED WITH THE APPLICATION AS REQUIRED IN SECTION 238-7(E)(1)(H), THE PERMITTEE SHALL HAVE AN ELEVATION CERTIFICATE PREPARED AND SUBMITTED PRIOR TO FINAL INSPECTION AND ISSUANCE OF A CERTIFICATE OF USE AND OCCUPANCY FOR ELEVATED STRUCTURES AND MANUFACTURED HOMES, INCLUDING NEW STRUCTURES AND MANUFACTURED HOMES, SUBSTANTIALLY- IMPROVED STRUCTURES AND MANUFACTURED HOMES, AND ADDITIONS TO STRUCTURES AND MANUFACTURED HOMES.

SECTION 238-8. REQUIREMENTS IN FLOOD HAZARD AREAS.

(A) THE GENERAL REQUIREMENTS OF THIS SECTION APPLY TO ALL DEVELOPMENT PROPOSED WITHIN ALL SPECIAL FLOOD HAZARD AREAS

IDENTIFIED IN SECTION 238-5(E).

(B) SUBDIVISION PROPOSALS AND DEVELOPMENT PROPOSALS.

(1) IN ALL FLOOD ZONES:

(A) SUBDIVISION PROPOSALS AND DEVELOPMENT PROPOSALS SHALL BE CONSISTENT WITH THE NEED TO MINIMIZE FLOOD DAMAGE AND ARE SUBJECT TO ALL APPLICABLE STANDARDS IN THESE REGULATIONS.

(B) SUBDIVISION PROPOSALS AND DEVELOPMENT PROPOSALS SHALL HAVE UTILITIES AND FACILITIES SUCH AS SEWER, GAS, ELECTRICAL, AND WATER SYSTEMS LOCATED AND CONSTRUCTED TO MINIMIZE FLOOD DAMAGE.

(C) SUBDIVISION PROPOSALS AND DEVELOPMENT PROPOSALS SHALL HAVE ADEQUATE DRAINAGE PATHS PROVIDED TO REDUCE EXPOSURE TO FLOOD HAZARDS AND TO GUIDE FLOODWATERS AROUND AND AWAY FROM PROPOSED STRUCTURES.

(D) SUBDIVISION PROPOSALS AND DEVELOPMENT PROPOSALS CONTAINING AT LEAST 5 LOTS OR AT LEAST 5 ACRES, WHICHEVER IS THE LESSER, THAT ARE WHOLLY OR PARTIALLY IN FLOOD HAZARD AREAS WHERE BASE FLOOD ELEVATION DATA ARE NOT PROVIDED BY THE FLOODPLAIN ADMINISTRATOR OR AVAILABLE FROM OTHER SOURCES, SHALL BE SUPPORTED BY DETERMINATIONS OF BASE FLOOD ELEVATIONS AS REQUIRED IN SECTION 238-7(E) OF THESE REGULATIONS.

(E) SUBDIVISION ROADS, ACCESS DRIVEWAYS AND PARKING AND TRAVEL AREAS FOR ANY TYPE OF DEVELOPMENT SHALL HAVE THE DRIVING SURFACE AT ONE (1) FOOT ABOVE THE BASE FLOOD ELEVATION.

(F) ADDITIONS TO STRUCTURES OR STRUCTURES THAT ARE SUBSTANTIALLY IMPROVED SHALL BE ELEVATED TO ONE (1) FOOT ABOVE THE BASE FLOOD ELEVATION AS OPPOSED TO THE FLOOD PROTECTION ELEVATION DEFINED IN THIS

ORDINANCE.

(2) IN SPECIAL FLOOD HAZARD AREAS OF NONTIDAL WATERS OF THE STATE:

(A) SUBDIVISION PROPOSALS SHALL BE LAID OUT SUCH THAT PROPOSED BUILDING PADS ARE LOCATED OUTSIDE OF THE SPECIAL FLOOD HAZARD AREA AND ANY PORTION OF PLATTED LOTS THAT INCLUDE LAND AREAS THAT ARE BELOW THE BASE FLOOD ELEVATION SHALL BE USED FOR OTHER PURPOSES, DEED RESTRICTED, OR OTHERWISE PROTECTED TO PRESERVE IT AS OPEN SPACE.

(B) SUBDIVISION ROADS, ACCESS DRIVEWAYS AND PARKING AND TRAVEL AREAS FOR ANY TYPE OF DEVELOPMENT SHALL HAVE THE DRIVING SURFACE AT ONE (1) FOOT ABOVE THE BASE FLOOD ELEVATION.

(C) PROTECTION OF WATER SUPPLY AND SANITARY SEWAGE SYSTEMS

(1) NEW AND REPLACEMENT WATER SUPPLY SYSTEMS SHALL BE DESIGNED TO MINIMIZE OR ELIMINATE INFILTRATION OF FLOODWATERS INTO THE SYSTEMS.

(2) NEW AND REPLACEMENT SANITARY SEWAGE SYSTEMS SHALL BE DESIGNED TO MINIMIZE OR ELIMINATE INFILTRATION OF FLOODWATERS INTO SYSTEMS AND DISCHARGES FROM SYSTEMS INTO FLOODWATERS.

(3) ON-SITE WASTE DISPOSAL SYSTEMS SHALL BE LOCATED TO AVOID IMPAIRMENT TO OR CONTAMINATION FROM THEM DURING CONDITIONS OF FLOODING.

(D) BUILDINGS AND STRUCTURES. NEW BUILDINGS AND STRUCTURES (INCLUDING THE PLACEMENT AND REPLACEMENT OF MANUFACTURED HOMES) AND SUBSTANTIAL IMPROVEMENT OF EXISTING STRUCTURES (INCLUDING MANUFACTURED HOMES) THAT ARE LOCATED, IN WHOLE OR IN PART, IN ANY SPECIAL FLOOD HAZARD AREA SHALL:

(1) BE DESIGNED (OR MODIFIED) AND CONSTRUCTED TO SAFELY SUPPORT FLOOD LOADS. THE CONSTRUCTION SHALL PROVIDE A COMPLETE LOAD PATH CAPABLE OF TRANSFERRING ALL LOADS

FROM THEIR POINT OF ORIGIN THROUGH THE LOAD-RESISTING ELEMENTS TO THE FOUNDATION. STRUCTURES SHALL BE DESIGNED, CONNECTED AND ANCHORED TO RESIST FLOTATION, COLLAPSE OR PERMANENT LATERAL MOVEMENT DUE TO STRUCTURAL LOADS AND STRESSES, INCLUDING HYDRODYNAMIC AND HYDROSTATIC LOADS AND THE EFFECTS OF BUOYANCY, FROM FLOODING EQUAL TO THE FLOOD PROTECTION ELEVATION OR THE ELEVATION REQUIRED BY THESE REGULATIONS OR THE BUILDING CODE, WHICHEVER IS HIGHER.

(2) BE CONSTRUCTED BY METHODS AND PRACTICES THAT MINIMIZE FLOOD DAMAGE.

(3) USE FLOOD DAMAGE-RESISTANT MATERIALS BELOW THE ELEVATION OF THE LOWEST FLOOR REQUIRED IN SECTION 238-9(E)(1) (FOR A ZONES) OR SECTION 238-10(C)(2) (FOR V ZONES AND COASTAL A ZONES).

(4) HAVE ELECTRICAL SYSTEMS, EQUIPMENT AND COMPONENTS, AND MECHANICAL, HEATING, VENTILATING, AIR CONDITIONING, AND PLUMBING APPLIANCES, PLUMBING FIXTURES, DUCT SYSTEMS, AND OTHER SERVICE EQUIPMENT LOCATED AT OR ABOVE THE ELEVATION OF THE LOWEST FLOOR REQUIRED IN SECTION 238-9(E) (A ZONES) OR SECTION 238-10(C) (V ZONES). ELECTRICAL WIRING SYSTEMS ARE PERMITTED TO BE LOCATED BELOW ELEVATION OF THE LOWEST FLOOR PROVIDED THEY CONFORM TO THE PROVISIONS OF THE ELECTRICAL PART OF THE BUILDING CODE FOR WET LOCATIONS. IF REPLACED AS PART OF A SUBSTANTIAL IMPROVEMENT, ELECTRICAL SYSTEMS, EQUIPMENT AND COMPONENTS, AND HEATING, VENTILATION, AIR CONDITIONING, AND PLUMBING APPLIANCES, PLUMBING FIXTURES, DUCT SYSTEMS, AND OTHER SERVICE EQUIPMENT SHALL MEET THE REQUIREMENTS OF THIS SECTION.

(5) AS AN ALTERNATIVE TO PARAGRAPH (4), ELECTRICAL SYSTEMS, EQUIPMENT AND COMPONENTS, AND HEATING, VENTILATING, AIR CONDITIONING, AND PLUMBING APPLIANCES, PLUMBING

FIXTURES, DUCT SYSTEMS, AND OTHER SERVICE EQUIPMENT ARE PERMITTED TO BE LOCATED BELOW THE ELEVATION OF THE LOWEST FLOOR PROVIDED THEY ARE DESIGNED AND INSTALLED TO PREVENT WATER FROM ENTERING OR ACCUMULATING WITHIN THE COMPONENTS AND TO RESIST HYDROSTATIC AND HYDRODYNAMIC LOADS AND STRESSES, INCLUDING THE EFFECTS OF BUOYANCY, DURING THE OCCURRENCE OF THE BASE FLOOD.

(6) HAVE THE ELECTRIC PANEL BOARD ELEVATED AT LEAST THREE (3) FEET ABOVE THE BFE.

(7) COMPLY WITH THE SPECIFIC REQUIREMENTS OF SECTION 238-9 IF LOCATED IN FLOOD HAZARD AREAS (A ZONES) THAT ARE NOT IDENTIFIED AS COASTAL A ZONES AND COASTAL HIGH HAZARD AREAS (V ZONES).

(8) COMPLY WITH THE SPECIFIC REQUIREMENTS OF SECTION 238-10 OR SECTION 238-9, IF APPLICABLE, IF LOCATED IN COASTAL A ZONES.

(9) COMPLY WITH THE SPECIFIC REQUIREMENTS OF SECTION 238-10 IF LOCATED IN COASTAL HIGH HAZARD AREAS (V ZONES).

(10) COMPLY WITH THE REQUIREMENTS OF THE MOST RESTRICTIVE DESIGNATION IF LOCATED ON A SITE THAT HAS MORE THAN ONE FLOOD ZONE DESIGNATION (A ZONE, DESIGNATED FLOODWAY, COASTAL A ZONE, V ZONE).

(E) PLACEMENT OF FILL

(1) DISPOSAL OF FILL, INCLUDING BUT NOT LIMITED TO EARTHEN SOILS, ROCK, RUBBLE, CONSTRUCTION DEBRIS, WOODY DEBRIS, AND TRASH, SHALL NOT BE PERMITTED IN SPECIAL FLOOD HAZARD AREAS.

(2) FILL SHALL NOT BE PLACED IN COASTAL A ZONES OR COASTAL HIGH HAZARD AREAS (V ZONES) EXCEPT AS PROVIDED IN SECTION 238-10(B).

(3) FILL PROPOSED TO BE PLACED TO ELEVATE STRUCTURES IN FLOOD HAZARD AREAS (A ZONES) THAT ARE NOT COASTAL A ZONES OR COASTAL HIGH HAZARD AREAS (V ZONES) SHALL COMPLY WITH

THE LIMITATIONS IN SECTION 238-9 AND THE REQUIREMENTS OF SECTION 238-9(D)(2).

(F) HISTORIC STRUCTURES. REPAIR, ALTERATION, ADDITION, REHABILITATION, OR OTHER IMPROVEMENT OF HISTORIC STRUCTURES SHALL BE SUBJECT TO THE REQUIREMENTS OF THESE REGULATIONS IF THE PROPOSED WORK IS DETERMINED TO BE A SUBSTANTIAL IMPROVEMENT, UNLESS A DETERMINATION IS MADE THAT THE PROPOSED WORK WILL NOT PRECLUDE THE STRUCTURE'S CONTINUED DESIGNATION AS A HISTORIC STRUCTURE. THE FLOODPLAIN ADMINISTRATOR MAY REQUIRE DOCUMENTATION OF A STRUCTURE'S CONTINUED ELIGIBILITY AND DESIGNATION AS A HISTORIC STRUCTURE.

(G) MANUFACTURED HOMES

(1) NEW MANUFACTURED HOMES SHALL NOT BE PLACED OR INSTALLED IN FLOODWAYS OR COASTAL HIGH HAZARD AREAS (V ZONES).

(2) FOR THE PURPOSE OF THESE REGULATIONS, THE LOWEST FLOOR OF A MANUFACTURED HOME IS THE BOTTOM OF THE LOWEST HORIZONTAL SUPPORTING MEMBER (LONGITUDINAL CHASSIS FRAME BEAM).

(3) NEW MANUFACTURED HOMES LOCATED OUTSIDE OF FLOODWAYS AND COASTAL HIGH HAZARD AREAS (V ZONES), REPLACEMENT MANUFACTURED HOMES IN ANY FLOOD HAZARD AREAS, AND SUBSTANTIAL IMPROVEMENT (INCLUDING REPAIR OF SUBSTANTIAL DAMAGE) OF EXISTING MANUFACTURED HOMES IN ALL FLOOD HAZARD AREA, SHALL:

(A) BE ELEVATED ON A PERMANENT, REINFORCED FOUNDATION IN ACCORDANCE WITH SECTION 238-9 OR SECTION 238-10, AS APPLICABLE TO THE FLOOD ZONE;

(B) BE INSTALLED IN ACCORDANCE WITH THE ANCHOR AND TIE-DOWN REQUIREMENTS OF THE BUILDING CODE OR THE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND SPECIFICATIONS; AND

(C) HAVE ENCLOSURES BELOW THE LOWEST FLOOR OF THE

ELEVATED MANUFACTURED HOME, IF ANY, INCLUDING ENCLOSURES THAT ARE SURROUNDED BY RIGID SKIRTING OR OTHER MATERIAL THAT IS ATTACHED TO THE FRAME OR FOUNDATION, THAT COMPLY WITH THE REQUIREMENTS OF SECTION 238-9 OR SECTION 238-10, AS APPLICABLE TO THE FLOOD ZONE.

NOTE: SEE "PROTECTING MANUFACTURED HOMES FROM FLOODS AND OTHER HAZARDS: A MULTI-HAZARD FOUNDATION AND INSTALLATION GUIDE" (FEMA 85).

(H) RECREATIONAL VEHICLES. RECREATIONAL VEHICLES SHALL:

(1) MEET THE REQUIREMENTS FOR MANUFACTURED HOMES IN SECTION 238-8(G); OR

(2) BE FULLY LICENSED AND READY FOR HIGHWAY USE; OR

(3) BE ON A SITE FOR LESS THAN 180 CONSECUTIVE DAYS.

(I) CRITICAL AND ESSENTIAL FACILITIES. CRITICAL AND ESSENTIAL FACILITIES SHALL:

(1) NOT BE LOCATED IN COASTAL HIGH HAZARD AREAS (V ZONES).

(2) IF LOCATED IN FLOOD HAZARD AREAS OTHER THAN COASTAL HIGH HAZARD AREAS, BE ELEVATED TO THE HIGHER OF ELEVATION REQUIRED BY THESE REGULATIONS PLUS ONE (1) FOOT, THE ELEVATION REQUIRED BY THE BUILDING CODE, OR THE ELEVATION OF THE 0.2 PERCENT CHANCE (500-YEAR) FLOOD.

(J) CRITICAL AND ESSENTIAL FACILITIES. CRITICAL AND ESSENTIAL FACILITIES SHALL:

(1) NOT BE LOCATED IN COASTAL HIGH HAZARD AREAS (V ZONES).

(2) IF LOCATED IN FLOOD HAZARD AREAS OTHER THAN COASTAL HIGH HAZARD AREAS, BE ELEVATED TO THE HIGHER OF ELEVATION REQUIRED BY THESE REGULATIONS PLUS ONE (1) FOOT, THE ELEVATION REQUIRED BY THE BUILDING CODE, OR THE ELEVATION OF THE 0.2 PERCENT CHANCE (500-YEAR) FLOOD.

(K) TEMPORARY STRUCTURES AND TEMPORARY STORAGE. IN ADDITION TO THE APPLICATION REQUIREMENTS OF SECTION 238-7(D), APPLICATIONS FOR THE PLACEMENT OR ERECTION OF TEMPORARY STRUCTURES AND

THE TEMPORARY STORAGE OF ANY GOODS, MATERIALS, AND EQUIPMENT, SHALL SPECIFY THE DURATION OF THE TEMPORARY USE. TEMPORARY STRUCTURES AND TEMPORARY STORAGE IN FLOODWAYS SHALL MEET THE LIMITATIONS OF SECTION 238-9(C)(1) OF THESE REGULATIONS. IN ADDITION:

(1) TEMPORARY STRUCTURES SHALL:

(A) BE DESIGNED AND CONSTRUCTED TO PREVENT FLOTATION, COLLAPSE OR LATERAL MOVEMENT RESULTING FROM HYDRODYNAMIC LOADS AND HYDROSTATIC LOADS DURING CONDITIONS OF THE BASE FLOOD;

(B) HAVE ELECTRIC SERVICE INSTALLED IN COMPLIANCE WITH THE ELECTRIC CODE; AND

(C) COMPLY WITH ALL OTHER REQUIREMENTS OF THE APPLICABLE STATE AND LOCAL PERMIT AUTHORITIES.

(2) TEMPORARY STORAGE SHALL NOT INCLUDE HAZARDOUS MATERIALS.

(L) GAS OR LIQUID STORAGE TANKS

(1) UNDERGROUND TANKS IN FLOOD HAZARD AREAS SHALL BE ANCHORED TO PREVENT FLOTATION, COLLAPSE OR LATERAL MOVEMENT RESULTING FROM HYDROSTATIC LOADS, INCLUDING THE EFFECTS OF BUOYANCY, DURING CONDITIONS OF THE BASE FLOOD.

(2) ABOVE-GROUND TANKS IN FLOOD HAZARD AREAS SHALL BE ANCHORED TO A SUPPORTING STRUCTURE AND ELEVATED TO OR ABOVE THE BASE FLOOD ELEVATION, OR SHALL BE ANCHORED OR OTHERWISE DESIGNED AND CONSTRUCTED TO PREVENT FLOTATION, COLLAPSE, OR LATERAL MOVEMENT RESULTING FROM HYDRODYNAMIC AND HYDROSTATIC LOADS, INCLUDING THE EFFECTS OF BUOYANCY, DURING CONDITIONS OF THE BASE FLOOD.

(3) IN FLOOD HAZARD AREAS, TANK INLETS, FILL OPENINGS, OUTLETS AND VENTS SHALL BE:

(A) AT OR ABOVE THE BASE FLOOD ELEVATION OR FITTED WITH COVERS DESIGNED TO PREVENT THE INFLOW OF

FLOODWATER OR OUTFLOW OF THE CONTENTS OF THE TANKS DURING CONDITIONS OF THE BASE FLOOD; AND

(B) ANCHORED TO PREVENT LATERAL MOVEMENT RESULTING FROM HYDRODYNAMIC AND HYDROSTATIC LOADS, INCLUDING THE EFFECTS OF BUOYANCY, DURING CONDITIONS OF THE BASE FLOOD.

(M) FUNCTIONALLY DEPENDENT USES. APPLICATIONS FOR FUNCTIONALLY DEPENDENT USES THAT DO NOT CONFORM TO THE REQUIREMENTS OF THESE REGULATIONS SHALL BE APPROVED ONLY BY VARIANCES ISSUED PURSUANT TO SECTION 238-11. IF APPROVED, FUNCTIONALLY DEPENDENT USES SHALL BE PROTECTED BY METHODS THAT MINIMIZE FLOOD DAMAGE DURING THE BASE FLOOD, INCLUDING MEASURES TO ALLOW FLOODWATERS TO ENTER AND EXIT, USE OF FLOOD DAMAGE-RESISTANT MATERIALS, AND ELEVATION OF ELECTRIC SERVICE AND EQUIPMENT TO THE EXTENT PRACTICAL GIVEN THE USE OF THE BUILDING.

SECTION 238-9. REQUIREMENTS IN FLOOD HAZARD AREAS (A ZONES) THAT ARE NOT COASTAL HIGH HAZARD OR COASTAL A ZONES

(A) GENERAL REQUIREMENTS. IN ADDITION TO THE GENERAL REQUIREMENTS OF SECTION 238-8, THE REQUIREMENTS OF THIS SECTION SHALL:

(1) APPLY IN FLOOD HAZARD AREAS THAT ARE NOT IDENTIFIED AS COASTAL HIGH HAZARD AREAS (V ZONES) AND COASTAL A ZONES. THESE FLOOD HAZARD AREAS, REFERRED TO COLLECTIVELY AS "A ZONES," INCLUDE SPECIAL FLOOD HAZARD AREAS ALONG NONTIDAL WATERS OF THE STATE, LANDWARD OF COASTAL HIGH HAZARD AREAS (V ZONES), AND LANDWARD OF COASTAL A ZONES (IF DELINEATED).

(2) APPLY TO ALL DEVELOPMENT, NEW CONSTRUCTION, SUBSTANTIAL IMPROVEMENTS (INCLUDING REPAIR OF SUBSTANTIAL DAMAGE), AND PLACEMENT, REPLACEMENT, AND SUBSTANTIAL IMPROVEMENT (INCLUDING REPAIR OF SUBSTANTIAL DAMAGE) OF MANUFACTURED HOMES.

(B) FLOOD PROTECTION SETBACKS. WITHIN AREAS DEFINED BY FLOOD PROTECTION SETBACKS ALONG NONTIDAL WATERS OF THE STATE:

(1) NO NEW BUILDINGS, STRUCTURES, OR OTHER DEVELOPMENT SHALL BE PERMITTED UNLESS THE APPLICANT DEMONSTRATES THAT THE SITE CANNOT BE DEVELOPED WITHOUT SUCH ENCROACHMENT INTO THE FLOOD PROTECTION SETBACK AND THE ENCROACHMENT IS THE MINIMUM NECESSARY AFTER CONSIDERATION OF VARYING OTHER SITING STANDARDS SUCH AS SIDE, FRONT, AND BACK LOT LINE SETBACKS.

(2) DISTURBANCE OF NATURAL VEGETATION SHALL BE MINIMIZED AND ANY DISTURBANCE ALLOWED SHALL BE VEGETATIVELY STABILIZED.

(3) PUBLIC WORKS AND TEMPORARY CONSTRUCTION MAY BE PERMITTED.

(C) DEVELOPMENT THAT AFFECTS FLOOD-CARRYING CAPACITY OF NONTIDAL WATERS OF THE STATE

(1) DEVELOPMENT IN DESIGNATED FLOODWAYS. FOR PROPOSED DEVELOPMENT THAT WILL ENCROACH INTO A DESIGNATED FLOODWAY, SECTION 238-7(E)(1)(G) REQUIRES THE APPLICANT TO SUBMIT AN EVALUATION OF ALTERNATIVES TO SUCH ENCROACHMENT, INCLUDING DIFFERENT USES OF THE SITE OR THE PORTION OF THE SITE WITHIN THE FLOODWAY, AND MINIMIZATION OF SUCH ENCROACHMENT. THIS REQUIREMENT DOES NOT APPLY TO FENCES THAT DO NOT BLOCK THE FLOW OF FLOODWATERS OR TRAP DEBRIS.

PROPOSED DEVELOPMENT IN A DESIGNATED FLOODWAY MAY BE PERMITTED ONLY IF:

(A) THE APPLICANT HAS BEEN ISSUED A PERMIT BY MDE; AND

(B) THE APPLICANT HAS DEVELOPED HYDROLOGIC AND HYDRAULIC ENGINEERING ANALYSES AND TECHNICAL DATA PREPARED BY A LICENSED PROFESSIONAL ENGINEER REFLECTING SUCH CHANGES, AND THE ANALYSES, WHICH SHALL BE SUBMITTED TO THE FLOODPLAIN ADMINISTRATOR,

DEMONSTRATE THAT THE PROPOSED ACTIVITY WILL NOT RESULT IN ANY INCREASE IN THE BASE FLOOD ELEVATION; OR

(C) IF THE ANALYSES DEMONSTRATE THAT THE PROPOSED ACTIVITIES WILL RESULT IN AN INCREASE IN THE BASE FLOOD ELEVATION, THE APPLICANT HAS OBTAINED A CONDITIONAL LETTER OF MAP REVISION OR LETTER OF MAP REVISION FROM FEMA. SUBMITTAL REQUIREMENTS AND FEES SHALL BE THE RESPONSIBILITY OF THE APPLICANT.

(2) DEVELOPMENT THAT INCLUDES THE PLACEMENT OF FILL IN NONTIDAL WATERS OF THE STATE FOR PROPOSED DEVELOPMENT THAT INCLUDES THE PLACEMENT OF FILL IN NONTIDAL WATERS OF THE STATE, OTHER THAN DEVELOPMENT THAT IS SUBJECT TO PARAGRAPH (D), A HYDRAULICALLY- EQUIVALENT VOLUME OF EXCAVATION IS REQUIRED. SUCH EXCAVATIONS SHALL BE DESIGNED TO DRAIN FREELY.

(3) DEVELOPMENT IN AREAS WITH BASE FLOOD ELEVATIONS BUT NO DESIGNATED FLOODWAYS FOR DEVELOPMENT IN SPECIAL FLOOD HAZARD AREAS OF NONTIDAL WATERS OF THE STATE WITH BASE FLOOD ELEVATIONS BUT NO DESIGNATED FLOODWAYS:

(A) THE APPLICANT SHALL DEVELOP HYDROLOGIC AND HYDRAULIC ENGINEERING ANALYSES AND TECHNICAL DATA REFLECTING THE PROPOSED ACTIVITY AND SHALL SUBMIT SUCH TECHNICAL DATA TO THE FLOODPLAIN ADMINISTRATOR AS REQUIRED IN SECTION 238-7(D)(1). THE ANALYSES SHALL BE PREPARED BY A LICENSED PROFESSIONAL ENGINEER IN A FORMAT REQUIRED BY FEMA FOR A CONDITIONAL LETTER OF MAP REVISION OR LETTER OF MAP REVISION. SUBMITTAL REQUIREMENTS AND FEES SHALL BE THE RESPONSIBILITY OF THE APPLICANT.

(B) THE PROPOSED DEVELOPMENT MAY BE PERMITTED IF THE APPLICANT HAS RECEIVED A PERMIT BY MDE AND IF THE ANALYSES DEMONSTRATE THAT THE CUMULATIVE EFFECT OF THE PROPOSED DEVELOPMENT, WHEN COMBINED

WITH ALL OTHER EXISTING AND POTENTIAL FLOOD HAZARD AREA ENCROACHMENTS WILL NOT INCREASE THE BASE FLOOD ELEVATION MORE THAN ONE (1) FOOT AT ANY POINT.

(4) CONSTRUCTION OF ROADS, BRIDGES, CULVERTS, DAMS AND IN-STREAM PONDS CONSTRUCTION OF ROADS, BRIDGES, CULVERTS, DAMS, AND IN-STREAM PONDS IN NONTIDAL WATERS OF THE STATE SHALL NOT BE APPROVED UNLESS THEY COMPLY WITH THIS SECTION AND THE APPLICANT HAS RECEIVED A PERMIT FROM MDE.

(5) ALTERATION OF A WATERCOURSE FOR ANY PROPOSED DEVELOPMENT THAT INVOLVES ALTERATION OF A WATERCOURSE NOT SUBJECT TO PARAGRAPH (C), UNLESS WAIVED BY MDE, THE APPLICANT SHALL DEVELOP HYDROLOGIC AND HYDRAULIC ENGINEERING ANALYSES AND TECHNICAL DATA REFLECTING SUCH CHANGES, INCLUDING THE FLOODWAY ANALYSIS REQUIRED IN SECTION 3.4(A), AND SUBMIT SUCH TECHNICAL DATA TO THE FLOODPLAIN ADMINISTRATOR AND TO FEMA. THE ANALYSES SHALL BE PREPARED BY A LICENSED PROFESSIONAL ENGINEER IN A FORMAT REQUIRED BY MDE AND BY FEMA FOR A CONDITIONAL LETTER OF MAP REVISION OR LETTER OF MAP REVISION. SUBMITTAL REQUIREMENTS AND FEES SHALL BE THE RESPONSIBILITY OF THE APPLICANT. ALTERATION OF A WATERCOURSE MAY BE PERMITTED ONLY UPON SUBMISSION, BY THE APPLICANT, OF THE FOLLOWING:

(A) A DESCRIPTION OF THE EXTENT TO WHICH THE WATERCOURSE WILL BE ALTERED OR RELOCATED;

(B) A CERTIFICATION BY A LICENSED PROFESSIONAL ENGINEER THAT THE FLOOD-CARRYING CAPACITY OF THE WATERCOURSE WILL NOT BE DIMINISHED;

(C) EVIDENCE THAT ADJACENT COMMUNITIES, THE U.S. ARMY CORPS OF ENGINEERS, AND MDE HAVE BEEN NOTIFIED OF THE PROPOSAL, AND EVIDENCE THAT SUCH NOTIFICATIONS HAVE BEEN SUBMITTED TO FEMA; AND

(D) EVIDENCE THAT THE APPLICANT SHALL BE RESPONSIBLE FOR PROVIDING THE NECESSARY MAINTENANCE FOR THE ALTERED OR RELOCATED PORTION OF THE WATERCOURSE SO THAT THE FLOOD CARRYING CAPACITY WILL NOT BE DIMINISHED. THE FLOODPLAIN ADMINISTRATOR MAY REQUIRE THE APPLICANT TO ENTER INTO AN AGREEMENT WITH CHARLES COUNTY SPECIFYING THE MAINTENANCE RESPONSIBILITIES; IF AN AGREEMENT IS REQUIRED, THE PERMIT SHALL BE CONDITIONED TO REQUIRE THAT THE AGREEMENT BE RECORDED ON THE DEED OF THE PROPERTY WHICH SHALL BE BINDING ON FUTURE OWNERS.

(D) RESIDENTIAL STRUCTURES AND RESIDENTIAL PORTIONS OF MIXED USE STRUCTURES

(1) NEW RESIDENTIAL STRUCTURES AND RESIDENTIAL PORTIONS OF MIXED USE STRUCTURES, AND SUBSTANTIAL IMPROVEMENT (INCLUDING REPAIR OF SUBSTANTIAL DAMAGE) OF EXISTING RESIDENTIAL STRUCTURES AND RESIDENTIAL PORTIONS OF MIXED USE STRUCTURES SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF SECTION 238-8 AND THIS SECTION. SEE SECTION 238-9 (F) FOR REQUIREMENTS FOR HORIZONTAL ADDITIONS.

(A) ELEVATION REQUIREMENTS

(1) LOWEST FLOORS SHALL BE ELEVATED TO OR ABOVE THE FLOOD PROTECTION ELEVATION.

(2) IN AREAS OF SHALLOW FLOODING (ZONE AO), THE LOWEST FLOOR (INCLUDING BASEMENT) SHALL BE ELEVATED AT LEAST AS HIGH ABOVE THE HIGHEST ADJACENT GRADE AS THE DEPTH NUMBER SPECIFIED IN FEET ON THE FIRM PLUS TWO (2) FEET, OR AT LEAST FOUR (4) FEET IF A DEPTH NUMBER IS NOT SPECIFIED.

(3) ENCLOSURES BELOW THE LOWEST FLOOR SHALL MEET THE REQUIREMENTS OF PARAGRAPH (C).

(B) LIMITATIONS ON USE OF FILL TO ELEVATE STRUCTURES

UNLESS OTHERWISE RESTRICTED BY THESE REGULATIONS, ESPECIALLY BY THE LIMITATIONS IN SECTION 238-9(C)(1), SECTION 238-9(C)(2), AND SECTION 238-9(C)(3), FILL PLACED FOR THE PURPOSE OF RAISING THE GROUND LEVEL TO SUPPORT A BUILDING OR STRUCTURE SHALL:

(1) CONSIST OF EARTHEN SOIL OR ROCK MATERIALS ONLY.

(2) EXTEND LATERALLY FROM THE BUILDING FOOTPRINT TO PROVIDE FOR ADEQUATE ACCESS AS A FUNCTION OF USE; THE FLOODPLAIN ADMINISTRATOR MAY SEEK ADVICE FROM THE STATE FIRE MARSHAL'S OFFICE AND/OR THE LOCAL FIRE SERVICES AGENCY;

(3) COMPLY WITH THE REQUIREMENTS OF THE BUILDING CODE AND BE PLACED AND COMPACTED TO PROVIDE FOR STABILITY UNDER CONDITIONS OF RISING AND FALLING FLOODWATERS AND RESISTANCE TO EROSION, SCOUR, AND SETTLING;

(4) BE SLOPED NO STEEPER THAN ONE (1) VERTICAL TO TWO (2) HORIZONTAL, UNLESS APPROVED BY THE FLOODPLAIN ADMINISTRATOR;

(5) BE PROTECTED FROM EROSION ASSOCIATED WITH EXPECTED VELOCITIES DURING THE OCCURRENCE OF THE BASE FLOOD; UNLESS APPROVED BY THE FLOODPLAIN ADMINISTRATOR, FILL SLOPES SHALL BE PROTECTED BY VEGETATION IF THE EXPECTED VELOCITY IS LESS THAN FIVE FEET PER SECOND, AND BY OTHER MEANS IF THE EXPECTED VELOCITY IS FIVE FEET PER SECOND OR MORE; AND

(6) BE DESIGNED WITH PROVISIONS FOR ADEQUATE DRAINAGE AND NO ADVERSE EFFECT ON ADJACENT PROPERTIES.

(C) ENCLOSURES BELOW THE LOWEST FLOOR

(1) ENCLOSURES BELOW THE LOWEST FLOOR SHALL BE USED SOLELY FOR PARKING OF VEHICLES, BUILDING

ACCESS, CRAWL/UNDERFLOOR SPACES, OR LIMITED STORAGE.

(2) ENCLOSURES BELOW THE LOWEST FLOOR SHALL BE CONSTRUCTED USING FLOOD DAMAGE-RESISTANT MATERIALS.

(3) ENCLOSURES BELOW THE LOWEST FLOOR SHALL BE PROVIDED WITH FLOOD OPENINGS WHICH SHALL MEET THE FOLLOWING CRITERIA: (NOTE: SEE NFIP TECHNICAL BULLETIN #1, "OPENINGS IN FOUNDATION WALLS AND WALLS OF ENCLOSURES BELOW ELEVATED BUILDINGS.")

(A) THERE SHALL BE A MINIMUM OF TWO FLOOD OPENINGS ON DIFFERENT SIDES OF EACH ENCLOSED AREA; IF A BUILDING HAS MORE THAN ONE ENCLOSURE BELOW THE LOWEST FLOOR, EACH SUCH ENCLOSURE SHALL HAVE FLOOD OPENINGS ON EXTERIOR WALLS.

(B) THE TOTAL NET AREA OF ALL FLOOD OPENINGS SHALL BE AT LEAST 1 SQUARE INCH FOR EACH SQUARE FOOT OF ENCLOSED AREA (NON-ENGINEERED FLOOD OPENINGS), OR THE FLOOD OPENINGS SHALL BE ENGINEERED FLOOD OPENINGS THAT ARE DESIGNED AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER TO AUTOMATICALLY ALLOW ENTRY AND EXIT OF FLOODWATERS; THE CERTIFICATION REQUIREMENT MAY BE SATISFIED BY AN INDIVIDUAL CERTIFICATION OR AN EVALUATION REPORT ISSUED BY THE ICC EVALUATION SERVICE, INC.

(C) THE BOTTOM OF EACH FLOOD OPENING SHALL BE ONE (1) FOOT OR LESS ABOVE THE HIGHER OF THE INTERIOR FLOOR OR GRADE, OR

THE EXTERIOR GRADE, IMMEDIATELY BELOW THE OPENING.

(D) ANY LOUVERS, SCREENS OR OTHER COVERS FOR THE FLOOD OPENINGS SHALL ALLOW THE AUTOMATIC FLOW OF FLOODWATERS INTO AND OUT OF THE ENCLOSED AREA.

(E) IF INSTALLED IN DOORS, FLOOD OPENINGS THAT MEET REQUIREMENTS OF PARAGRAPHS (A) THROUGH (D), ARE ACCEPTABLE; HOWEVER, DOORS WITHOUT INSTALLED FLOOD OPENINGS DO NOT MEET THE REQUIREMENTS OF THIS SECTION.

(E) NONRESIDENTIAL STRUCTURES AND NONRESIDENTIAL PORTIONS OF MIXED USE STRUCTURES. NEW NONRESIDENTIAL STRUCTURES AND NONRESIDENTIAL PORTIONS OF MIXED USE STRUCTURES, AND SUBSTANTIAL IMPROVEMENT (INCLUDING REPAIR OF SUBSTANTIAL DAMAGE) OF EXISTING NONRESIDENTIAL STRUCTURES AND NONRESIDENTIAL PORTIONS OF MIXED USE STRUCTURES SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF SECTION 238-8 AND THE REQUIREMENTS OF THIS SECTION. SEE SECTION 238-9(E) FOR REQUIREMENTS FOR HORIZONTAL ADDITIONS.

(A) ELEVATION REQUIREMENTS. ELEVATED STRUCTURES SHALL:

(1) HAVE THE LOWEST FLOOR (INCLUDING BASEMENT) ELEVATED TO OR ABOVE THE FLOOD PROTECTION ELEVATION; OR

(2) IN AREAS OF SHALLOW FLOODING (ZONE AO), HAVE THE LOWEST FLOOR (INCLUDING BASEMENT) ELEVATED AT LEAST AS HIGH ABOVE THE HIGHEST ADJACENT GRADE AS THE DEPTH NUMBER SPECIFIED IN FEET ON THE FIRM PLUS TWO

(2) FEET, OR AT LEAST FOUR (4) FEET IF A DEPTH NUMBER IS NOT SPECIFIED; AND

(3) HAVE ENCLOSURES BELOW THE LOWEST FLOOR, IF ANY, THAT COMPLY WITH THE REQUIREMENTS OF SECTION 238-9(D)(3); OR

(4) IF PROPOSED TO BE ELEVATED ON FILL, MEET THE LIMITATIONS ON FILL IN SECTION 238-9(D)(2).

(B) FLOODPROOFING REQUIREMENTS

(1) FLOODPROOFING OF NEW NONRESIDENTIAL BUILDINGS:

(A) IS NOT ALLOWED IN NONTIDAL WATERS OF THE STATE (COMAR 26.17.04.11(B)).

(B) IS NOT ALLOWED IN COASTAL A ZONES.

(2) FLOODPROOFING FOR SUBSTANTIAL IMPROVEMENT OF NONRESIDENTIAL BUILDINGS:

(A) IS ALLOWED IN NONTIDAL WATERS OF THE STATE.

(B) IS ALLOWED IN COASTAL A ZONES.

(3) IF FLOODPROOFING IS PROPOSED, STRUCTURES SHALL:

(A) BE DESIGNED TO BE DRY FLOODPROOFED SUCH THAT THE BUILDING OR STRUCTURE IS WATERTIGHT WITH WALLS AND FLOORS SUBSTANTIALLY IMPERMEABLE TO THE PASSAGE OF WATER TO THE LEVEL OF THE FLOOD PROTECTION ELEVATION PLUS ONE (1) FOOT, OR

(B) IF LOCATED IN AN AREA OF SHALLOW FLOODING (ZONE AO), BE DRY FLOODPROOFED AT LEAST AS HIGH ABOVE THE HIGHEST ADJACENT GRADE AS THE DEPTH NUMBER SPECIFIED ON THE FIRM PLUS THREE (3) FEET, OR AT LEAST FIVE (5) FEET IF A DEPTH NUMBER IS NOT SPECIFIED; AND

(C) HAVE STRUCTURAL COMPONENTS CAPABLE OF RESISTING HYDROSTATIC AND HYDRODYNAMIC LOADS AND EFFECTS OF BUOYANCY;

(D) HAVE FLOODPROOFING MEASURES THAT ARE DESIGNED TAKING INTO CONSIDERATION THE NATURE OF FLOOD-RELATED HAZARDS; FREQUENCY, DEPTH AND DURATION OF FLOODING; RATE OF RISE AND FALL OF FLOODWATER; SOIL CHARACTERISTICS; FLOOD-BORNE DEBRIS; AT LEAST 12 HOURS OF FLOOD

WARNING TIME FROM A CREDIBLE SOURCE; AND TIME NECESSARY TO IMPLEMENT ANY MEASURES THAT REQUIRE HUMAN INTERVENTION;

(E) HAVE AT LEAST ONE DOOR ABOVE THE APPLICABLE FLOOD ELEVATION THAT ALLOWS HUMAN INGRESS AND EGRESS DURING CONDITIONS OF FLOODING;

(F) HAVE AN OPERATIONS AND MAINTENANCE PLAN THAT IS FILED WITH LOCAL EMERGENCY MANAGEMENT OFFICIALS AND THAT SPECIFIES THE OWNER/OCCUPANT'S RESPONSIBILITIES TO MONITOR FLOOD POTENTIAL; THE LOCATION OF ANY SHIELDS, DOORS, CLOSURES, TOOLS, OR OTHER GOODS THAT ARE REQUIRED FOR IMPLEMENTATION; MAINTENANCE OF SUCH GOODS; METHODS OF INSTALLATION; AND PERIODIC INSPECTION; AND

(G) BE CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER OR LICENSED ARCHITECT, THROUGH EXECUTION OF A FLOODPROOFING CERTIFICATE THAT STATES THAT THE DESIGN AND METHODS OF CONSTRUCTION MEET THE REQUIREMENTS OF THIS SECTION. THE FLOODPROOFING CERTIFICATE SHALL BE SUBMITTED WITH THE CONSTRUCTION DRAWINGS AS REQUIRED IN SECTION 238-7(E)(1)(M).

(F) HORIZONTAL ADDITIONS

(A) A HORIZONTAL ADDITION PROPOSED FOR A BUILDING OR STRUCTURE THAT WAS CONSTRUCTED AFTER THE DATE SPECIFIED IN SECTION 238-8(A) SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF SECTION 238-8 AND THIS SECTION.

(B) IN NONTIDAL WATERS OF THE STATE THAT ARE SUBJECT TO THE REGULATORY AUTHORITY OF MDE, ALL HORIZONTAL ADDITIONS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF SECTION 238-8 AND THIS SECTION AND:

(1) IF THE ADDITION IS STRUCTURALLY CONNECTED TO THE

BASE BUILDING, THE REQUIREMENTS OF PARAGRAPH (C) APPLY.

(2) IF THE ADDITION HAS AN INDEPENDENT FOUNDATION AND IS NOT STRUCTURALLY CONNECTED TO THE BASE BUILDING AND THE COMMON WALL WITH THE BASE BUILDING IS MODIFIED BY NO MORE THAN A DOORWAY, THE BASE BUILDING IS NOT REQUIRED TO BE BROUGHT INTO COMPLIANCE.

(C) FOR HORIZONTAL ADDITIONS THAT ARE STRUCTURALLY CONNECTED TO THE BASE BUILDING:

(1) IF THE ADDITION COMBINED WITH OTHER PROPOSED REPAIRS, ALTERATIONS, OR MODIFICATIONS OF THE BASE BUILDING CONSTITUTES SUBSTANTIAL IMPROVEMENT, THE BASE BUILDING AND THE ADDITION SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF SECTION 4.0 AND THIS SECTION.

(2) IF THE ADDITION CONSTITUTES SUBSTANTIAL IMPROVEMENT, THE BASE BUILDING AND THE ADDITION SHALL COMPLY WITH ALL OF THE APPLICABLE REQUIREMENTS OF SECTION 238-8 AND THIS SECTION.

(D) FOR HORIZONTAL ADDITIONS WITH INDEPENDENT FOUNDATIONS THAT ARE NOT STRUCTURALLY CONNECTED TO THE BASE BUILDING AND THE COMMON WALL WITH THE BASE BUILDING IS MODIFIED BY NO MORE THAN A DOORWAY, THE BASE BUILDING IS NOT REQUIRED TO BE BROUGHT INTO COMPLIANCE.

(G) ACCESSORY STRUCTURES

(1) ACCESSORY STRUCTURES SHALL BE LIMITED TO NO MORE THAN SIX HUNDRED (600) SQUARE FEET IN FLOOR AREA.

(2) ACCESSORY STRUCTURES SHALL COMPLY WITH THE ELEVATION REQUIREMENTS AND OTHER REQUIREMENTS OF SECTION 238-9(D), THE FLOODPROOFING REQUIREMENTS OF SECTION 238-9(E)(2), OR SHALL:

(A) BE USEABLE ONLY FOR PARKING OF VEHICLES OR LIMITED

STORAGE;

(B) BE CONSTRUCTED WITH FLOOD DAMAGE-RESISTANT MATERIALS BELOW THE BASE FLOOD ELEVATION;

(C) BE CONSTRUCTED AND PLACED TO OFFER THE MINIMUM RESISTANCE TO THE FLOW OF FLOODWATERS;

(D) BE ANCHORED TO PREVENT FLOTATION;

(E) HAVE ELECTRICAL SERVICE AND MECHANICAL EQUIPMENT ELEVATED TO OR ABOVE THE BASE FLOOD ELEVATION; AND

(F) HAVE FLOOD OPENINGS THAT MEET THE REQUIREMENTS OF SECTION 238-9(D)(3).

(H) DEVELOPMENT IN UNMAPPED FLOODPLAIN ZONES

(1) UNLESS APPROVED OTHERWISE BY THE FLOODPLAIN ADMINISTRATOR FLOODPLAIN STUDIES ARE REQUIRED WHEN ANY DEVELOPMENT IS PROPOSED WITHIN 250' OF AN UNMAPPED LOW OR STREAM WITH A CONTRIBUTING DRAINAGE AREA OF 50 (FIFTY) ACRES OR GREATER WHICH IS NOT SHOWN AS A SPECIAL FLOOD HAZARD AREA ON THE FIRM.

(2) THE METHOD OF CALCULATING THE 100-YEAR FLOODPLAIN IS LIMITED TO THOSE METHODS APPROVED IN ADVANCE BY THE COUNTY ENGINEER.

(3) THE SPACING FOR THE PROPOSED SECTIONS MUST BE APPROVED IN ADVANCED BY THE COUNTY ENGINEER.

(4) THE METHOD OF DETERMINING THE "N" (MANNINGS ROUGHNESS COEFFICIENTS) ASSOCIATED WITH THE STREAM AND THE OVERBANK SHALL BE THOSE APPROVED IN ADVANCE BY THE COUNTY ENGINEER.

(5) RUNOFF DATA SHALL BE OBTAINED FROM THE LATEST EDITION OF "POINT PRECIPITATION FREQUENCY ESTIMATES" FROM NOAA ATLAS 14 FOR THE SITE LOCATION.

(6) THE LIMITS AND ELEVATIONS OF THE CALCULATED 100-YEAR FLOODPLAIN SHALL BE CLEARLY SHOWN FOR ALL SECTIONS ON THE APPLICABLE PLAN.

(7) THE SCALE OF THE DRAINAGE AREA MAPS SHALL BE AS APPROVED

IN ADVANCE BY THE COUNTY ENGINEER.

(8) THE DEVELOPMENT RESTRICTIONS IN THE UNMAPPED FLOODPLAIN ZONE SHALL BE THE SAME REQUIREMENTS AS THOSE IN NONTIDAL WATERS.

SECTION 238-10. REQUIREMENTS IN COASTAL HIGH HAZARD AREAS (V ZONES) AND COASTAL A ZONES

(A) GENERAL REQUIREMENTS. IN ADDITION TO THE GENERAL REQUIREMENTS OF SECTION 238-8, THE REQUIREMENTS OF THIS SECTION SHALL:

(1) APPLY IN FLOOD HAZARD AREAS THAT ARE IDENTIFIED AS COASTAL HIGH HAZARD AREAS (V ZONES) AND COASTAL A ZONES (IF DELINEATED).

(2) APPLY TO ALL DEVELOPMENT, NEW CONSTRUCTION, SUBSTANTIAL IMPROVEMENTS (INCLUDING REPAIR OF SUBSTANTIAL DAMAGE), AND PLACEMENT, REPLACEMENT, AND SUBSTANTIAL IMPROVEMENT (INCLUDING REPAIR OF SUBSTANTIAL DAMAGE) OF MANUFACTURED HOMES. EXCEPTION: IN COASTAL A ZONES, THE REQUIREMENTS OF SECTION 238-9 SHALL APPLY TO SUBSTANTIAL IMPROVEMENTS (INCLUDING REPAIR OF SUBSTANTIAL DAMAGE), AND SUBSTANTIAL IMPROVEMENT OF MANUFACTURED HOMES (INCLUDING REPAIR OF SUBSTANTIAL DAMAGE) AND REPLACEMENT MANUFACTURED HOMES. NOTE: SEE COASTAL CONSTRUCTION MANUAL (FEMA 55).

(B) LOCATION AND SITE PREPARATION

(1) THE PLACEMENT OF STRUCTURAL FILL FOR THE PURPOSE OF ELEVATING BUILDINGS IS PROHIBITED.

(2) BUILDINGS SHALL BE LOCATED LANDWARD OF THE REACH OF MEAN HIGH TIDE.

(3) MINOR GRADING, AND THE PLACEMENT OF MINOR QUANTITIES OF FILL, SHALL BE PERMITTED FOR LANDSCAPING AND FOR DRAINAGE PURPOSES UNDER AND AROUND BUILDINGS AND FOR SUPPORT OF PARKING SLABS, POOL DECKS, PATIOS AND WALKWAYS.

(4) SITE PREPARATIONS SHALL NOT ALTER SAND DUNES UNLESS AN ENGINEERING ANALYSIS DEMONSTRATES THAT THE POTENTIAL FOR FLOOD DAMAGE IS NOT INCREASED.

(C) RESIDENTIAL AND NONRESIDENTIAL STRUCTURES. NEW STRUCTURES AND SUBSTANTIAL IMPROVEMENT (INCLUDING REPAIR OF SUBSTANTIAL DAMAGE) OF EXISTING STRUCTURES SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF SECTION 4.0 AND THE REQUIREMENTS OF THIS SECTION.

(1) FOUNDATIONS

(A) STRUCTURES SHALL BE SUPPORTED ON PILINGS OR COLUMNS AND SHALL BE ADEQUATELY ANCHORED TO SUCH PILINGS OR COLUMNS. PILINGS SHALL HAVE ADEQUATE SOIL PENETRATIONS TO RESIST THE COMBINED WAVE AND WIND LOADS (LATERAL AND UPLIFT). WATER LOADING VALUES USED SHALL BE THOSE ASSOCIATED WITH THE BASE FLOOD. WIND LOADING VALUES SHALL BE THOSE REQUIRED BY APPLICABLE BUILDING CODES. PILE EMBEDMENT SHALL INCLUDE CONSIDERATION OF DECREASED RESISTANCE CAPACITY CAUSED BY SCOUR OF SOIL STRATA SURROUNDING THE PILING.

(B) SLABS, POOLS, POOL DECKS AND WALKWAYS SHALL BE LOCATED AND CONSTRUCTED TO BE STRUCTURALLY INDEPENDENT OF STRUCTURES AND THEIR FOUNDATIONS TO PREVENT TRANSFER OF FLOOD LOADS TO THE STRUCTURES DURING CONDITIONS OF FLOODING, SCOUR, OR EROSION FROM WAVE-VELOCITY FLOW CONDITIONS, AND SHALL BE DESIGNED TO MINIMIZE DEBRIS IMPACTS TO ADJACENT PROPERTIES AND PUBLIC INFRASTRUCTURE.

(2) ELEVATION REQUIREMENTS

(A) THE BOTTOM OF THE LOWEST HORIZONTAL STRUCTURAL MEMBER THAT SUPPORTS THE LOWEST FLOOR SHALL BE LOCATED AT OR ABOVE THE FLOOD PROTECTION ELEVATION.

(B) BASEMENT FLOORS THAT ARE BELOW GRADE ON ALL SIDES ARE PROHIBITED.

(C) THE SPACE BELOW AN ELEVATED BUILDING SHALL EITHER BE FREE-OF-OBSTRUCTION OR, IF ENCLOSED BY WALLS, SHALL MEET THE REQUIREMENTS OF PARAGRAPH (D). NOTE: SEE NFIP TECHNICAL BULLETIN #5, "FREE-OF-OBSTRUCTION REQUIREMENTS."

(3) CERTIFICATION OF DESIGN.

AS REQUIRED IN SECTION 238-7(E)(1)(M), THE APPLICANT SHALL INCLUDE IN THE APPLICATION A CERTIFICATION PREPARED BY A LICENSED PROFESSIONAL ENGINEER OR A LICENSED ARCHITECT THAT THE DESIGN AND METHODS OF CONSTRUCTION TO BE USED MEET THE REQUIREMENTS OF PARAGRAPH (A), PARAGRAPH (B), PARAGRAPH (D), AND THE BUILDING CODE.

(4) ENCLOSURES BELOW THE LOWEST FLOOR

(A) ENCLOSURES BELOW THE LOWEST FLOOR SHALL BE USED SOLELY FOR PARKING OF VEHICLES, BUILDING ACCESS OR LIMITED STORAGE.

(B) ENCLOSURES BELOW THE LOWEST FLOOR SHALL BE LESS THAN 299 SQUARE FEET IN AREA (EXTERIOR MEASUREMENT).

(C) WALLS AND PARTITIONS ARE PERMITTED BELOW THE ELEVATED FLOOR, PROVIDED THAT SUCH WALLS AND PARTITIONS ARE DESIGNED TO BREAK AWAY UNDER FLOOD LOADS AND ARE NOT PART OF THE STRUCTURAL SUPPORT OF THE BUILDING OR STRUCTURE. NOTE: SEE NFIP TECHNICAL BULLETIN #9, "DESIGN AND CONSTRUCTION GUIDANCE FOR BREAKAWAY WALLS."

(D) ELECTRICAL, MECHANICAL, AND PLUMBING SYSTEM COMPONENTS SHALL NOT BE MOUNTED ON OR PENETRATE THROUGH WALLS THAT ARE DESIGNED TO BREAK AWAY UNDER FLOOD LOADS.

(E) WALLS INTENDED TO BREAK AWAY UNDER FLOOD LOADS SHALL BE CONSTRUCTED WITH INSECT SCREENING OR OPEN LATTICE, OR SHALL BE DESIGNED TO BREAK AWAY OR COLLAPSE WITHOUT CAUSING COLLAPSE, DISPLACEMENT OR

OTHER STRUCTURAL DAMAGE TO THE ELEVATED PORTION OF THE BUILDING OR SUPPORTING FOUNDATION SYSTEM. SUCH WALLS, FRAMING AND CONNECTIONS SHALL HAVE A DESIGN SAFE LOADING RESISTANCE OF NOT LESS THAN 10 POUNDS PER SQUARE FOOT AND NO MORE THAN 20 POUNDS PER SQUARE FOOT; OR

(E) WHERE WIND LOADING VALUES OF THE BUILDING CODE EXCEED 20 POUNDS PER SQUARE FOOT, THE APPLICANT SHALL SUBMIT A CERTIFICATION PREPARED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER OR LICENSED ARCHITECT THAT:

(1) THE WALLS AND PARTITIONS BELOW THE LOWEST FLOOR HAVE BEEN DESIGNED TO COLLAPSE FROM A WATER LOAD LESS THAN THAT WHICH WOULD OCCUR DURING THE BASE FLOOD.

(2) THE ELEVATED PORTION OF THE BUILDING AND SUPPORTING FOUNDATION SYSTEM HAVE BEEN DESIGNED TO WITHSTAND THE EFFECTS OF WIND AND FLOOD LOADS ACTING SIMULTANEOUSLY ON ALL BUILDING COMPONENTS (STRUCTURAL AND NONSTRUCTURAL). WATER LOADING VALUES USED SHALL BE THOSE ASSOCIATED WITH THE BASE FLOOD; WIND LOADING VALUES USED SHALL BE THOSE REQUIRED BY THE BUILDING CODE.

(3) IN COASTAL A ZONES, IN ADDITION TO THE REQUIREMENTS OF THIS SECTION, WALLS BELOW THE LOWEST FLOOR SHALL HAVE FLOOD OPENINGS THAT MEET THE REQUIREMENTS OF SECTION 238-9(D)(3)(C).

(D) HORIZONTAL ADDITIONS TO STRUCTURES

(1) A HORIZONTAL ADDITION PROPOSED FOR A BUILDING OR STRUCTURE THAT WAS CONSTRUCTED AFTER THE DATE SPECIFIED IN SECTION 238-5(A) SHALL COMPLY WITH THE

APPLICABLE REQUIREMENTS OF SECTION 238-8 AND THIS SECTION.

(2) FOR HORIZONTAL ADDITIONS, WHETHER STRUCTURALLY CONNECTED OR NOT STRUCTURALLY CONNECTED, TO THE BASE BUILDING:

(A) IF THE ADDITION COMBINED WITH OTHER PROPOSED REPAIRS, ALTERATIONS, OR MODIFICATIONS OF THE BASE BUILDING CONSTITUTES SUBSTANTIAL IMPROVEMENT, THE BASE BUILDING AND THE ADDITION SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF SECTION 238-8 AND THIS SECTION.

(B) IF THE ADDITION CONSTITUTES SUBSTANTIAL IMPROVEMENT, THE BASE BUILDING AND THE ADDITION SHALL COMPLY WITH ALL OF THE APPLICABLE REQUIREMENTS OF SECTION 238-8 AND THIS SECTION. NOTE: THE BASE BUILDING IS REQUIRED TO COMPLY OTHERWISE IT IS AN OBSTRUCTION THAT DOES NOT COMPLY WITH THE FREE-OF-OBSTRUCTION REQUIREMENT THAT APPLIES TO THE ELEVATED ADDITION, SEE SECTION 238-10(C)(2)(C).

(C) IF THE ADDITION ALONE OR COMBINED WITH OTHER PROPOSED REPAIRS, ALTERATIONS, OR MODIFICATIONS OF THE BASE BUILDING DOES NOT CONSTITUTE A SUBSTANTIAL IMPROVEMENT THEN THE ADDITION MUST BE ELEVATED TO ONE (1) FOOT ABOVE THE BASE FLOOD ELEVATION.

(E) ACCESSORY STRUCTURES

(1) ACCESSORY STRUCTURES SHALL BE LIMITED TO NO MORE THAN THREE HUNDRED (300) SQUARE FEET IN FLOOR AREA.

(2) ACCESSORY STRUCTURES SHALL COMPLY WITH THE ELEVATION REQUIREMENTS AND OTHER REQUIREMENTS OF SECTION 238-10(C) OR, IF NOT ELEVATED, SHALL:

(A) BE USEABLE ONLY FOR PARKING OF VEHICLES OR LIMITED STORAGE;

(B) BE CONSTRUCTED WITH FLOOD DAMAGE-RESISTANT MATERIALS BELOW THE BASE FLOOD ELEVATION;

(C) BE CONSTRUCTED AND PLACED TO OFFER THE MINIMUM RESISTANCE TO THE FLOW OF FLOODWATERS;

(D) BE ANCHORED TO PREVENT FLOTATION;

(E) HAVE ELECTRICAL SERVICE AND MECHANICAL EQUIPMENT ELEVATED TO OR ABOVE THE BASE FLOOD ELEVATION; AND

(F) IF LARGER THAN 100 SQUARE FEET IN SIZE, HAVE WALLS THAT MEET THE REQUIREMENTS OF SECTION 238-10(C)(4)(C) THROUGH (G), AS APPLICABLE FOR THE FLOOD ZONE; AND IF LOCATED IN COASTAL A ZONES, WALLS SHALL HAVE FLOOD OPENINGS THAT MEET THE REQUIREMENTS OF SECTION 238-9(D)(3)(C).

(F) OTHER STRUCTURES AND DEVELOPMENT

(1) DECKS AND PATIOS

IN ADDITION TO THE REQUIREMENTS OF THE BUILDING CODE OR THE RESIDENTIAL CODE, IN COASTAL HIGH HAZARD AREAS (V ZONES), DECKS AND PATIOS SHALL BE LOCATED, DESIGNED, AND CONSTRUCTED IN COMPLIANCE WITH THE FOLLOWING:

(A) A DECK THAT IS STRUCTURALLY ATTACHED TO A BUILDING OR STRUCTURE SHALL HAVE THE BOTTOM OF THE LOWEST HORIZONTAL STRUCTURAL MEMBER AT OR ABOVE THE FLOOD PROTECTION ELEVATION AND ANY SUPPORTING MEMBERS THAT EXTEND BELOW THE DESIGN FLOOD ELEVATION SHALL COMPLY WITH THE FOUNDATION REQUIREMENTS THAT APPLY TO THE BUILDING OR STRUCTURE, WHICH SHALL BE DESIGNED TO ACCOMMODATE ANY INCREASED LOADS RESULTING FROM THE ATTACHED DECK.

(B) A DECK OR PATIO THAT IS LOCATED BELOW THE FLOOD PROTECTION ELEVATION SHALL BE STRUCTURALLY INDEPENDENT FROM STRUCTURES AND THEIR FOUNDATION SYSTEMS, AND SHALL BE DESIGNED AND CONSTRUCTED EITHER TO REMAIN INTACT AND IN PLACE DURING BASE FLOOD CONDITIONS OR TO BREAK APART INTO SMALL PIECES

THAT WILL NOT CAUSE STRUCTURAL DAMAGE TO ADJACENT ELEVATED STRUCTURES.

(C) A DECK OR PATIO THAT HAS A VERTICAL THICKNESS OF MORE THAN 12 INCHES OR THAT IS CONSTRUCTED WITH MORE THAN THE MINIMUM AMOUNT OF FILL THAT IS NECESSARY FOR SITE DRAINAGE SHALL NOT BE APPROVED UNLESS AN ANALYSIS DEMONSTRATES NO HARMFUL DIVERSION OF FLOODWATERS OR WAVE RUNUP AND WAVE REFLECTION THAT WOULD INCREASE DAMAGE TO ADJACENT ELEVATED STRUCTURES.

(D) A DECK OR PATIO THAT HAS A VERTICAL THICKNESS OF 12 INCHES OR LESS AND THAT IS AT NATURAL GRADE OR ON FILL MATERIAL THAT IS SIMILAR TO AND COMPATIBLE WITH LOCAL SOILS AND IS THE MINIMUM AMOUNT NECESSARY FOR SITE DRAINAGE MAY BE APPROVED WITHOUT REQUIRING ANALYSIS OF THE IMPACT ON DIVERSION OF FLOODWATERS OR WAVE RUNUP AND WAVE REFLECTION.

(2) OTHER DEVELOPMENT

OTHER DEVELOPMENT ACTIVITIES SHALL BE PERMITTED ONLY IF LOCATED OUTSIDE THE FOOTPRINT OF, AND NOT STRUCTURALLY ATTACHED TO, STRUCTURES, AND ONLY IF AN ANALYSIS DEMONSTRATES NO HARMFUL DIVERSION OF FLOODWATERS OR WAVE RUNUP AND WAVE REFLECTION ONTO ADJACENT ELEVATED STRUCTURES. OTHER DEVELOPMENT INCLUDES BUT IS NOT LIMITED TO:

(A) BULKHEADS, SEAWALLS, RETAINING WALLS, REVETMENTS, AND SIMILAR EROSION CONTROL STRUCTURES;

(B) SOLID FENCES, PRIVACY WALLS, AND FENCES PRONE TO TRAPPING DEBRIS, UNLESS DESIGNED AND CONSTRUCTED TO FAIL UNDER BASE FLOOD CONDITIONS; AND

(C) MOUNDED SEPTIC SYSTEMS.

SECTION 238-11. VARIANCES

(A) GENERAL

(1) THE DIRECTOR SHALL HAVE THE POWER TO CONSIDER AND AUTHORIZE OR DENY VARIANCES FROM THE STRICT APPLICATION OF THE REQUIREMENTS OF THESE REGULATIONS PROVIDED THAT THOSE VARIANCES ARE OF A NON TECHNICAL NATURE REQUIRING ENGINEERING JUDGMENT. A VARIANCE SHALL BE APPROVED ONLY IF IT IS DETERMINED TO NOT BE CONTRARY TO THE PUBLIC INTEREST AND WHERE, OWING TO SPECIAL CONDITIONS OF THE LOT OR PARCEL, A LITERAL ENFORCEMENT OF THE PROVISIONS OF THESE REGULATIONS, AN UNNECESSARY HARDSHIP WOULD RESULT.

(2) UPON CONSIDERATION OF THE PURPOSES OF THESE REGULATIONS, THE INDIVIDUAL CIRCUMSTANCES, AND THE CONSIDERATIONS AND LIMITATIONS OF THIS SECTION, THE DIRECTOR MAY ATTACH SUCH CONDITIONS TO VARIANCES AS IT DEEMS NECESSARY TO FURTHER THE PURPOSES OF THESE REGULATIONS.

(3) THE DIRECTOR SHALL NOTIFY, IN WRITING, ANY APPLICANT TO WHOM A VARIANCE IS GRANTED TO CONSTRUCT OR SUBSTANTIALLY IMPROVE A BUILDING OR STRUCTURE WITH ITS LOWEST FLOOR BELOW THE ELEVATION REQUIRED BY THESE REGULATIONS THAT THE VARIANCE IS TO THE FLOODPLAIN MANAGEMENT REQUIREMENTS OF THESE REGULATIONS ONLY, AND THAT THE COST OF FEDERAL FLOOD INSURANCE WILL BE COMMENSURATE WITH THE INCREASED RISK, WITH RATES UP TO $25 PER $100 OF INSURANCE COVERAGE.

(4) A RECORD OF ALL VARIANCE ACTIONS, INCLUDING JUSTIFICATION FOR ISSUANCE SHALL BE MAINTAINED PURSUANT TO SECTION 3.2(K) OF THESE REGULATIONS.

(B) APPLICATION FOR A VARIANCE

(1) THE OWNER OF PROPERTY, OR THE OWNER'S AUTHORIZED AGENT, FOR WHICH A VARIANCE IS SOUGHT SHALL SUBMIT AN APPLICATION FOR A VARIANCE TO THE FLOODPLAIN ADMINISTRATOR.

(2) AT A MINIMUM, THE APPLICATION SHALL CONTAIN THE FOLLOWING

INFORMATION: NAME, ADDRESS, AND TELEPHONE NUMBER OF THE APPLICANT AND PROPERTY OWNER; LEGAL DESCRIPTION OF THE PROPERTY; PARCEL MAP; DESCRIPTION OF THE EXISTING USE; DESCRIPTION OF THE PROPOSED USE; SITE MAP SHOWING THE LOCATION OF FLOOD HAZARD AREAS, DESIGNATED FLOODWAY BOUNDARIES, FLOOD ZONES, BASE FLOOD ELEVATIONS, AND FLOOD PROTECTION SETBACKS; DESCRIPTION OF THE VARIANCE SOUGHT; AND REASON FOR THE VARIANCE REQUEST. VARIANCE APPLICATIONS SHALL SPECIFICALLY ADDRESS EACH OF THE CONSIDERATIONS IN SECTION 238-11(C).

(3) IF THE APPLICATION IS FOR A VARIANCE TO ALLOW THE LOWEST FLOOR (A ZONES) OR BOTTOM OF THE LOWEST HORIZONTAL STRUCTURAL MEMBER (V ZONES AND COASTAL A ZONES) OF A BUILDING OR STRUCTURE BELOW THE APPLICABLE MINIMUM ELEVATION REQUIRED BY THESE REGULATIONS, THE APPLICATION SHALL INCLUDE A STATEMENT SIGNED BY THE OWNER THAT, IF GRANTED, THE CONDITIONS OF THE VARIANCE SHALL BE RECORDED ON THE DEED OF THE PROPERTY.

(4) IF THE APPLICATION IS FOR A VARIANCE FOR A HISTORIC STRUCTURE PURSUANT TO SECTION 238-8(F) OF THESE REGULATIONS, THE APPLICATION SHALL CONTAIN DOCUMENTATION THAT THE PROPOSED WORK DOES NOT PRECLUDE THE STRUCTURE'S CONTINUED ELIGIBILITY AND DESIGNATION AS A HISTORIC STRUCTURE. THE DOCUMENTATION SHALL BE OBTAINED FROM A SOURCE THAT IS AUTHORIZED TO MAKE SUCH DETERMINATIONS (SEE DEFINITION OF "HISTORIC STRUCTURE").

(C) CONSIDERATIONS FOR VARIANCES

(1) THE FLOODPLAIN ADMINISTRATOR SHALL REQUEST COMMENTS ON VARIANCE APPLICATIONS FROM MDE (NFIP STATE COORDINATOR) AND SHALL PROVIDE SUCH COMMENTS TO THE DIRECTOR.

(2) IN CONSIDERING VARIANCE APPLICATIONS, THE DIRECTOR SHALL CONSIDER AND MAKE FINDINGS OF FACT ON ALL EVALUATIONS, ALL RELEVANT FACTORS, REQUIREMENTS SPECIFIED IN OTHER

SECTIONS OF THESE REGULATIONS, AND THE FOLLOWING FACTORS:

(A) THE DANGER THAT MATERIALS MAY BE SWEPT ONTO OTHER LANDS TO THE INJURY OF OTHERS.

(B) THE DANGER TO LIFE AND PROPERTY DUE TO FLOODING OR EROSION DAMAGE.

(C) THE SUSCEPTIBILITY OF THE PROPOSED DEVELOPMENT AND ITS CONTENTS (IF APPLICABLE) TO FLOOD DAMAGE AND THE EFFECT OF SUCH DAMAGE ON THE INDIVIDUAL OWNER.

(D) THE IMPORTANCE OF THE SERVICES TO CHARLES COUNTY PROVIDED BY THE PROPOSED DEVELOPMENT.

(E) THE AVAILABILITY OF ALTERNATIVE LOCATIONS FOR THE PROPOSED USE WHICH ARE NOT SUBJECT TO, OR ARE SUBJECT TO LESS, FLOODING OR EROSION DAMAGE.

(F) THE NECESSITY TO THE FACILITY OF A WATERFRONT LOCATION, WHERE APPLICABLE, OR IF THE FACILITY IS A FUNCTIONALLY DEPENDENT USE.

(G) THE COMPATIBILITY OF THE PROPOSED USE WITH EXISTING AND ANTICIPATED DEVELOPMENT.

(H) THE RELATIONSHIP OF THE PROPOSED USE TO THE COMPREHENSIVE PLAN FOR THAT AREA.

(I) THE SAFETY OF ACCESS TO THE PROPERTY IN TIMES OF FLOOD FOR PASSENGER VEHICLES AND EMERGENCY VEHICLES.

(J) THE EXPECTED HEIGHTS, VELOCITY, DURATION, RATE OF RISE, AND SEDIMENT TRANSPORT OF THE FLOODWATERS AND THE EFFECTS OF WAVE ACTION, IF APPLICABLE, EXPECTED AT THE SITE.

(K) THE COSTS OF PROVIDING GOVERNMENT SERVICES DURING AND AFTER FLOOD CONDITIONS, INCLUDING MAINTENANCE AND REPAIR OF PUBLIC UTILITIES AND FACILITIES SUCH AS SEWER, GAS, ELECTRICAL, AND WATER SYSTEMS, AND STREETS AND BRIDGES.

(L) THE COMMENTS PROVIDED BY MDE (NFIP STATE

COORDINATOR).

(D) LIMITATIONS FOR GRANTING VARIANCES. THE DIRECTOR SHALL MAKE AN AFFIRMATIVE DECISION ON A VARIANCE REQUEST ONLY UPON:

(1) A SHOWING OF GOOD AND SUFFICIENT CAUSE.

(2) A DETERMINATION THAT FAILURE TO GRANT THE VARIANCE WOULD RESULT IN EXCEPTIONAL HARDSHIP DUE TO THE PHYSICAL CHARACTERISTICS OF THE PROPERTY. INCREASED COST OR INCONVENIENCE OF MEETING THE REQUIREMENTS OF THESE REGULATIONS DOES NOT CONSTITUTE AN EXCEPTIONAL HARDSHIP TO THE APPLICANT.

(3) A DETERMINATION THAT THE GRANTING OF A VARIANCE FOR DEVELOPMENT WITHIN ANY DESIGNATED FLOODWAY, OR FLOOD HAZARD AREA WITH BASE FLOOD ELEVATIONS BUT NO DESIGNATED FLOODWAY, WILL NOT RESULT IN INCREASED FLOOD HEIGHTS BEYOND THAT WHICH IS ALLOWED IN THESE REGULATIONS.

(4) A DETERMINATION THAT THE GRANTING OF A VARIANCE WILL NOT RESULT IN ADDITIONAL THREATS TO PUBLIC SAFETY; EXTRAORDINARY PUBLIC EXPENSE, NUISANCES, FRAUD OR VICTIMIZATION OF THE PUBLIC, OR CONFLICT WITH EXISTING LOCAL LAWS.

(5) A DETERMINATION THAT THE BUILDING, STRUCTURE OR OTHER DEVELOPMENT IS PROTECTED BY METHODS TO MINIMIZE FLOOD DAMAGES.

(6) A DETERMINATION THAT THE VARIANCE IS THE MINIMUM NECESSARY TO AFFORD RELIEF, CONSIDERING THE FLOOD HAZARD.

SECTION 238-12. ENFORCEMENT

(A) COMPLIANCE REQUIRED

(1) NO BUILDING, STRUCTURE OR DEVELOPMENT SHALL HEREAFTER BE LOCATED, ERECTED, CONSTRUCTED, RECONSTRUCTED, IMPROVED, REPAIRED, EXTENDED, CONVERTED, ENLARGED OR ALTERED WITHOUT FULL COMPLIANCE WITH THESE REGULATIONS AND ALL

OTHER APPLICABLE REGULATIONS.

(2) FAILURE TO OBTAIN A PERMIT SHALL BE A VIOLATION OF THESE REGULATIONS AND SHALL BE SUBJECT TO PENALTIES IN ACCORDANCE WITH SECTION 238-12(C).

(3) PERMITS ISSUED ON THE BASIS OF PLANS AND APPLICATIONS APPROVED BY THE FLOODPLAIN ADMINISTRATOR AUTHORIZE ONLY THE SPECIFIC ACTIVITIES SET FORTH IN SUCH APPROVED PLANS AND APPLICATIONS OR AMENDMENTS THERETO. USE, ARRANGEMENT, OR CONSTRUCTION OF SUCH SPECIFIC ACTIVITIES THAT ARE CONTRARY TO THAT AUTHORIZATION SHALL BE DEEMED A VIOLATION OF THESE REGULATIONS.

(B) NOTICE OF VIOLATION AND STOP WORK ORDER. IF THE FLOODPLAIN ADMINISTRATOR DETERMINES THAT THERE HAS BEEN A VIOLATION OF ANY PROVISION OF THESE REGULATIONS, THE FLOODPLAIN ADMINISTRATOR SHALL GIVE NOTICE OF SUCH VIOLATION TO THE OWNER, THE OWNER'S AUTHORIZED AGENT, AND THE PERSON RESPONSIBLE FOR SUCH VIOLATION, AND MAY ISSUE A STOP WORK ORDER. THE NOTICE OF VIOLATION OR STOP WORK ORDER SHALL BE IN WRITING AND SHALL:

(1) INCLUDE A LIST OF VIOLATIONS, REFERRING TO THE SECTION OR SECTIONS OF THESE REGULATIONS THAT HAVE BEEN VIOLATED;

(2) ORDER REMEDIAL ACTION WHICH, IF TAKEN, WILL EFFECT COMPLIANCE WITH THE PROVISIONS OF THESE REGULATIONS;

(3) SPECIFY A REASONABLE PERIOD OF TIME TO CORRECT THE VIOLATION;

(4) ADVISE THE RECIPIENTS OF THE RIGHT TO APPEAL; AND

(5) BE SERVED IN PERSON; OR

(6) BE POSTED IN A CONSPICUOUS PLACE IN OR ON THE PROPERTY AND SENT BY REGISTERED OR CERTIFIED MAIL TO THE LAST KNOWN MAILING ADDRESS, RESIDENCE, OR PLACE OF BUSINESS OF THE RECIPIENTS.

(C) VIOLATIONS AND PENALTIES

VIOLATIONS OF THESE REGULATIONS OR FAILURE TO COMPLY WITH THE

REQUIREMENTS OF THESE REGULATIONS OR ANY CONDITIONS ATTACHED TO A PERMIT OR VARIANCE SHALL CONSTITUTE A MISDEMEANOR. ANY PERSON RESPONSIBLE FOR A VIOLATION SHALL COMPLY WITH THE NOTICE OF VIOLATION OR STOP WORK ORDER. FAILURE TO COMPLY SHALL BE SUBJECT TO PENALTY AND VIOLATION FEES SET FORTH BY COUNTY FEES & CHARGES AS ENACTED BY THE COUNTY COMMISSIONERS. EACH DAY A VIOLATION CONTINUES SHALL BE CONSIDERED A SEPARATE OFFENSE. NOTHING HEREIN CONTAINED SHALL PREVENT THE CHARLES COUNTY FROM TAKING SUCH OTHER LAWFUL ACTION AS IS NECESSARY TO PREVENT OR REMEDY ANY VIOLATION.

SECTION 238-13. SUBSEQUENT AMENDMENTS

(A) ALL ORDINANCES OR PARTS OF ORDINANCES THAT ARE INCONSISTENT WITH THE PROVISIONS OF THIS ORDINANCE ARE HEREBY REPEALED TO THE EXTENT OF SUCH INCONSISTENCY. THIS ORDINANCE SHALL BE AMENDED AS REQUIRED BY THE FEMA, 44 CODE OF FEDERAL REGULATIONS. ALL SUBSEQUENT AMENDMENTS TO THIS ORDINANCE ARE SUBJECT TO THE APPROVAL OF THE FEMA AND THE MDE.

(B) THE REQUIREMENTS ESTABLISHED IN THIS ORDINANCE SHALL NOT APPLY TO ANY BUILDING PERMIT APPLICATION RECEIVED PRIOR TO THE EFFECTIVE DATE OF THIS ORDINANCE PROVIDED THOSE PERMITS ARE ISSUED WITHIN 180 DAYS OF THE EFFECTIVE DATE OF THIS ORDINANCE AND PROVIDED CONSTRUCTION BEGINS WITHIN 180 DAYS OF THE PERMIT ISSUANCE DATE. FURTHERMORE, THE REQUIREMENTS OF THIS ORDINANCE SHALL NOT APPLY TO ANY PENDING INFRASTRUCTURE PERMIT APPLICATION RECEIVED PRIOR TO THE EFFECTIVE DATE OF THIS ORDINANCE PROVIDED THE PERMIT IS ISSUED AND CONSTRUCTION BEGINS WITHIN 180 DAYS OF THE EFFECTIVE DATE OF THIS ORDINANCE.

SECTION 2. BE IT FURTHER ENACTED, that an emergency is hereby declared to exist affecting the public health, safety or welfare of the citizens of Charles County, said emergency being the need to meet FEMA deadline to approve new requirements in order for flood insurance protection to be available to County residents.

SECTION 3. BE IT FURTHER ENACTED, that this Act shall take effect on the day it becomes law.

ADOPTED THIS 10th DAY OF JULY, 2013.

COUNTY COMMISSIONERS
CHARLES COUNTY, MARYLAND

Candice Quinn Kelly, President

Reuben B. Collins, II, Esq., Vice President

Ken Robinson

Debra M. Davis, Esq.

Bobby Rucci

ATTEST:

Denise Ferguson, Clerk to the Commissioners