

ENERGY AND ENVIRONMENT CABINET

Department for Environmental Protection

Division of Water

(Amendment)

401 KAR 4:060. Floodplain development criteria and permitting process [~~Stream construction criteria~~].

RELATES TO: KRS 151.100, 151.110, 151.182, 151.184, 151.186, [~~151.210~~], 151.250, 151.260, 151.280, 151.310, 322.010, 401 KAR Chapter 4, 44 C.F.R. Part 59, 60, 64, 65, 80[64.3]

STATUTORY AUTHORITY: KRS 151.125, [~~151.230~~] 151.250, 151.260, 151.600

NECESSITY, FUNCTION, AND CONFORMITY: KRS 151.125 requires the secretary to establish requirements for flood control and water resources. [~~KRS 151.230 authorizes the cabinet to establish minimum standards for floodplain management.~~] KRS 151.250 prohibits obstructions along streams or in a floodway unless the plans and specifications have been approved by the cabinet and a permit issued. KRS 151.260 authorizes the cabinet to prescribe the form and manner of permit applications. KRS 151.600 requires the cabinet to develop and administer a public information program for National Flood Insurance Program-related activities. [This administrative regulation establishes standards for construction in floodplain areas].

Section 1. Definitions. Except as set forth below, definitions are as established by 44 C.F.R. 59.1 and 77.2.

- 1 (1) “Architect” is defined by KRS 323.010(2).
- 2 (2) “Base flood” is defined in KRS 151.100.
- 3 (3) “Base flood elevation” and “BFE” means the water surface elevation of the base flood.
- 4 (4) “Critical facility” means a structure or other improvement that provides vital
5 socioeconomic activities including:
- 6 (a) Health and safety services;
- 7 (b) Utilities and data storage centers;
- 8 (c) Government facilities and property; and
- 9 (d) Hazardous material facilities.
- 10 (5) "Cross section" means a graph or plot of ground elevation across a stream valley, or
11 portion of it, along a line perpendicular to the direction of stream flow.
- 12 (6) “Dam” is defined by KRS 151.100.
- 13 (7) "Discharge" means the volume of water that flows past a given point within a given
14 period of time, usually expressed in cubic feet per second (CFS) or gallons per minute (GPM).
- 15 (8) “Facility” means all structures, infrastructure, land, and related appurtenances
16 necessary to conduct an activity regulated by 401 KAR Chapter 4.
- 17 (9) “FEMA” means the Federal Emergency Management Agency.
- 18 (10) “Floodplain” is defined by KRS 151.100.
- 19 (11) “Floodway” is defined by KRS 151.100.
- 20 (12) “Professional land surveyor” is defined by KRS Chapter 322.010(9).
- 21 (13) "National Flood Insurance Program", or "NFIP", means a federal program which
22 makes available flood insurance protection to property owners in flood prone areas.
- 23 (14) "Professional engineer” is defined by KRS Chapter 322.010(3).

1 (15) "Profile" means a graph or elevation plot of the water surface or channel bottom
2 against distance along the stream.

3 (16) "Regulatory floodway" means the stream channel and that portion of adjacent land
4 area that is required to pass flood flows without raising the base flood elevation by more than one
5 (1) foot.

6 (17) "Repetitive Loss Property" means a structure that:

7 (a) Is covered by flood insurance issued under the NFIP;

8 (b) Has been damaged by flooding on two (2) occasions during a rolling ten (10) year
9 period which ends on the date of the second loss; and

10 (c) Has required flood damage repairs that averaged, equaled, or exceeded twenty-five
11 percent (25%) of the market value of the structure at the time of each flood loss.

12 (18) "Special Flood Hazard Area" or "SFHA" means the area of special flood hazard as
13 defined by 44 CFR 59.1.

14 (19) "Stream" is defined by KRS 151.100.

15 (20) "Structure" means an object constructed or installed which may be an obstruction to
16 flood flows, including:

17 (a) Buildings and tanks, including:

18 1. Walled and roofed buildings affixed to a permanent site;

19 2. Storage tanks that are principally above ground; and

20 3. Manufactured homes;

21 (b) Towers;

22 (c) Fencing;

23 (d) Smokestacks; and

1 (e) Overhead transmission lines.

2 (21) "Substantial improvement" means any combination of repairs, reconstruction,
3 alteration, or improvements to a structure:

4 (a) That take place during a rolling five (5) year period; and

5 (b) In which the cumulative cost equals or exceeds fifty (50) percent of the market value
6 of the structure, excluding periodic maintenance and upkeep that does not increase the value of the
7 structure.

8 Section 2. Applicability.

9 (1) This administrative regulation shall apply to all development across, along, or adjacent
10 to a stream, floodway, or floodplain for which a floodplain development permit is required
11 pursuant to KRS 151.250, 44 C.F.R. 60, 44 C.F.R. 64.3, and 44 C.F.R. 65, except for the
12 construction, improvement, or modification of a dam.

13 (2) This administrative regulation shall constitute minimum criteria for the issuance of
14 permits for floodplain development as established in KRS 151.250, 44 C.F.R. 60, 44 C.F.R. 64.3,
15 and 44 C.F.R. 65.

16 Section 3. Exemption. The cabinet may exempt those dams, embankments, or other
17 obstructions which are not of such size or type as to require approval by the cabinet in the interest
18 of safety or retention of water supply, pursuant to KRS 151.250(1).

19 Section 4. General Provisions.

20 (1) A revision to a base flood elevation determination shall be as established in 44 C.F.R.
21 65.3 and 65.6.

22 (2) A flood hazard identified in this administrative regulation shall be as established in 44
23 C.F.R. 65.

1 (3) A permit for development in a floodplain shall be as established in 44 C.F.R. 60.3,
2 where the Federal Emergency Management Agency (FEMA) has not established floodplain maps
3 for a drainage area of up to one (1) square mile.

4 (4) Structures prohibited from being placed in the floodway shall include a:

5 (a) Residential unit designed for human habitation;

6 (b) Any waste site or other type of facility where materials, vehicles, or machinery is
7 generated, stored, disposed of, recycled, scrapped, or salvaged;

8 (c) Critical facility; or

9 (d) Structure that could individually obstruct the flood flow except for a dam as established
10 in 401 KAR 4:030.

11 (5) All encroachments, including fill, new construction, substantial improvements, and
12 other development within a floodplain, shall be prohibited unless the activity is permitted pursuant
13 to Sections 5 and 6 and meets the standards established in Section 8 of this administrative
14 regulation.

15 (6) The cabinet shall utilize Flood Insurance Rate Map (FIRM) and Flood Insurance Study
16 data to determine special flood hazard areas and floodplain boundaries. The cabinet may also
17 consider the more restrictive of:

18 (a) Best available data in a preliminary FIRM and Flood Insurance Study data as
19 established in 44 C.F.R. 60.3;

20 (b) A hydrologic and hydraulic engineering analysis performed by a professional engineer
21 licensed in the Commonwealth of Kentucky; or

22 (c) Base flood flow determined by:

23 1. US Geological Service (USGS) gauge analysis;

1 2. Rainfall and runoff calculations; or

2 3. “Estimating the Magnitude of Peak Flows for Streams in Kentucky for Selected
3 Recurrence Intervals”, USGS, Water Resources Investigations Report 03-4180 (2003).

4 (7)(a) The cabinet shall develop freeboard maps depicting areas impacted by base flood
5 elevation and freeboard requirements for structures along, across, or adjacent to a waterway.

6 (b) Development within the freeboard area shall require a permit as established in Sections
7 5 and 6 of this regulation.

8 (c) A property owner may submit a NFIP Elevation Certificate or other industry standard
9 surveyed data to the cabinet to demonstrate that a site is located above the freeboard elevation and
10 does not require an Individual Permit.

11 Section 5. General Permits. Notwithstanding any other provision of this chapter, activities
12 that qualify for a floodplain development General Permit issued by the cabinet shall be deemed to
13 have a permit without the property owner submitting an application to the cabinet, if the
14 development activity:

15 (1) Is not otherwise regulated by or in violation of 401 KAR Chapter 4;

16 (2) Does not present a threat or potential threat to human life or safety, or the environment,
17 or an increase in base flood elevation; and

18 (3) Meets the Exclusion and Eligibility requirements listed in currently issued and effective
19 Division of Water Floodplain General Permits.

20 Section 6. Individual Permits. (1) Activities that do not qualify for a General Permit
21 pursuant to Section 5 of this administrative regulation shall require an individual permit; and

22 (2) Activities that shall require an individual permit include:

23 (a) A structure with a functionally dependent use as defined by 44 C.F.R. 59.1;

1 (b) An activity that meets exception and variance requirements as established in 44 C.F.R.
2 60.6;

3 (c) An activity that qualifies for development in a FEMA buyout area as established in 44
4 C.F.R. 80.19;

5 (d) A structure that is related to allowable open space uses, pursuant to 44 CFR 80.19, if
6 the structure is designed, constructed, and placed where there is no obstruction to flood flow;

7 (e) Dredging or removal of material from the floodplain when:

8 1. Removing material from the stream bank or a bridge is not possible; or

9 2. Access to the stream must be created;

10 (f) Low water crossings;

11 (g) Installation of utility poles, open-frame towers, or monopole towers where foundation
12 and footer structures are placed above grade;

13 (h) A transportation activity, including construction of a bridge or culvert, that has been
14 demonstrated through hydrologic and hydraulic analyses performed by a professional engineer
15 licensed in the Commonwealth of Kentucky that the proposed encroachment will not result in any
16 increase in flood level during the base flood discharge;

17 (i) A subfluvial utility or pipeline crossing that employs trenching;

18 (j) Any activity associated with the operation of a junk yard, scrap yard, salvage yard,
19 recycling station, waste site or facility, or any other operation that generates, stores, disposes of,
20 recycles, scraps, or salvages similar types of materials.

21 Section 7. Post-flood Emergency Work. (1) The requirements of this section shall not
22 relieve a local government, community, or individual from the provisions of any other applicable
23 federal, state, or local law or regulation.

1 (2) Prior to the commencement of development, cabinet approval shall not be required for
2 the repair, protection, or replacement of a pipeline or transportation structure in a regulatory
3 floodplain that:

4 (a) Has been damaged or destroyed by an event that has been declared an emergency or a
5 disaster by federal, state, or local government; and

6 (b) Provides an essential service and has been determined to be unsafe for normal use; or

7 (c) Must be repaired, protected, or replaced to prevent a threat to human life or property.

8 (3) Prior to the commencement of development, cabinet approval shall not be required for
9 other activities, including:

10 (a) Repair or replacement of an existing roadway drainage structure provided that the
11 structure will not result in further obstruction to the floodplain.

12 (b) Construction of a temporary low water crossing to replace a damaged or destroyed
13 essential transportation source that cannot be preserved or repaired. The temporary low water
14 crossing shall:

15 1. Not impede natural water flow;

16 2. Not remain longer than one hundred eighty (180) days without written approval from
17 the cabinet; and

18 3. Comply with the development requirements established in Section 6 of this
19 administrative regulation.

20 (4)(a) Damaged or destroyed transportation structures shall be replaced:

21 1. In kind; or

22 2. With an opening equal to the width of the natural stream at the replacement site.

23 (b) Additional fill for road approaches shall not be used.

1 (5) The community or property owner shall notify the cabinet within five (5) business days
2 after emergency work begins by submitting a completed Floodplain Development Permit
3 Application for Construction in a FEMA Special Flood Hazard Area form (DEP 4_060_1, Date).

4 (6) The community or property owner shall submit to the cabinet as-built floodplain
5 development drawings within thirty (30) days of completion of development. The cabinet may
6 grant an extension of up to ninety (90) days upon written request from the community or property
7 owner.

8 (7) An application for approval under a federal disaster declaration shall be submitted to
9 the cabinet within three hundred sixty-five (365) days of the date that the federal disaster
10 declaration was issued.

11 Section 8. Permit Application.

12 (1)(a) An application for a floodplain development permit shall not be considered complete
13 until the cabinet has received all applicable supporting information, documentation, forms, plans,
14 and specifications pursuant to this section.

15 (b) A completed Floodplain Development Permit Application for Construction in a FEMA
16 Special Flood Hazard Area form (DEP 4_060_1, Date) shall be submitted.

17 (2) All application forms and reports required by this administrative regulation shall be
18 signed by the property owner or an agent of the property owner authorized to sign on their behalf.
19 All plans and specifications submitted for approval by the cabinet shall be in accordance with KRS
20 151.260(2) and this administrative regulation.

21 (3)(a) If the cabinet determines that an individual permit application does not include all
22 information required by this section, or the application fails to provide the engineering, geological,
23 hydrological, or other scientific information necessary to determine that the site will comply with

this administrative regulation, the:

1. Cabinet shall notify the applicant in writing of the reasons that the application is deficient; and

2. Applicant shall submit the information requested by the cabinet.

(b) If the information requested is not received by the cabinet within thirty (30) days of the notice of deficiency, and the parties have not agreed upon an extension of time for the information, the application shall be dismissed.

(4) The site permittee or property owner may begin development activity in the floodplain when the cabinet gives written notice that the development activity complies with 401 KAR Chapter 4.

(5) An activity or development site shall not deviate from the approved design capacities specified in the permit.

(6) The site permittee or property owner shall submit a revised application form:

(a) Upon a change in ownership of the property;

(b) Prior to any changes in development activity previously identified in the original application; or

(c) To identify new types of development activity not previously identified in the original application form.

(7) A change listed in subsections 5, 6(b), or 6(c) of this section shall not be implemented until the permittee or property owner receives written approval from the cabinet.

(8)(a) If the cabinet determines that the revised individual permit application does not include all of the required information, or that the revised application fails to provide the engineering, geological, hydrological, or other scientific information necessary to determine that

1 the individual permit site will comply with this administrative regulation, the:

2 1. Cabinet shall notify the applicant in writing of the reasons that the application is
3 deficient; and

4 2. Applicant shall submit the information requested by the cabinet.

5 (b) If the information is not received by the cabinet within thirty (30) days of the notice of
6 deficiency, the application shall be dismissed.

7 (9) The individual permit holder and property owner shall comply at all times with the
8 provisions of 401 KAR Chapter 4.

9 (10) A floodplain development site that is not in compliance with this section shall be
10 subject to the provisions of Section 10 of this administrative regulation.

11 Section 9. Floodplain Development Requirements.

12 (1) The cabinet may approve a permit for the placement of fill material in the floodplain
13 provided that the fill shall not result in:

14 (a) An increase in water surface elevation during the base flood; or

15 (b) A net loss of natural floodplain storage.

16 (2) Fill being placed in the floodplain shall:

17 (a) Be composed of clean granular or earthen material;

18 (b) Protect against flood erosion and scour by vegetative cover, riprap, or bulkheading;

19 (c) Not adversely affect the flow of surface drainage from or onto adjacent properties; and

20 (d) For structures:

21 1. Be placed in layers at a depth of no greater than one (1) foot before being compacted to
22 95% of the maximum density obtainable. The results of the test demonstrating compliance shall
23 be provided to the cabinet as part of the Floodplain Construction Final Development, Permit

1 Extension, or Termination Form (DEP 4_060_2, Date); and

2 2. Extend a minimum of five (5) feet at grade beyond the foundation of the structure before
3 sloping at base flood elevation (BFE).

4 (3) Fill being placed in the floodplain may compensate for the loss of floodwater storage
5 volume by providing an equal volume of floodwater storage by excavation or other compensatory
6 measure located at or immediately adjacent to the development site within the 1% chance
7 floodplain.

8 (4) Placement of any material associated with the construction or operation of a facility
9 prohibited by Section 6 of this administrative regulation shall require an individual permit.

10 (5)(a) Any substantial improvement that increases the current market value of a structure
11 by more than fifty (50) percent within one (1) year of the permit issuance date shall be considered
12 new development. The market value of the structure shall be:

13 1.a. The appraised fair market value of the structure only prior to the start of the initial
14 repair or improvement; or

15 b. If damage has occurred, the fair market value of the structure only prior to the damage;
16 and

17 2. The value of the land on which the structure is placed shall not be included in the market
18 value of the structure.

19 (b) Substantial improvement shall occur when the first alteration of any wall, ceiling, floor,
20 or other structural part of a building commences, whether or not that alteration affects the external
21 dimensions of the structure, except any project required to comply with existing health, sanitary,
22 or safety code specifications that are solely necessary to ensure safe living conditions.

23 (6) A permit issued for the development of flood-damageable property in a floodplain shall

1 be in accordance with 44 C.F.R. 60.3 except:

2 (a) The lowest floor on new development or substantial improvements shall be elevated to:

3 1. Two (2) feet or greater above the BFE;

4 2. The 0.2% annual chance flood elevation; or

5 3. A climate-informed science-based level as set forth in FEMA Policy: Federal Flood Risk
6 Management Standard (FFRMS) FEMA Policy 206-24-005: Climate-Informed Science Approach
7 (CISA).

8 (b) The lowest floor on a critical facility shall be elevated or floodproofed to the highest of
9 the following of:

10 1. A minimum of two (2) feet or greater above the BFE;

11 2. To the 0.2% annual chance flood elevation; or

12 3. A climate-informed science-based level.

13 (7) Development of one (1) acre or more, and subdivisions of five (5) plots or more, that
14 are located in a special flood hazard area shall be designed so that residential building sites,
15 driveways, and roadways are located on land with a natural grade that:

16 (a) Is elevated at or above the freeboard flood elevation; and

17 (b) Has dry land access.

18 (8) A manufactured home, including one located in an existing manufactured home park,
19 that will be placed, moved, or substantially improved in the floodplain shall be:

20 (a) Elevated so that the lowest floor is a minimum of one (1) foot or greater above the BFE;

21 and

22 (b) Securely anchored to a permanent foundation that resists flotation, collapse, or lateral
23 movement.

1 (9) Appurtenant structures placed in the floodplain shall:

2 (a) Not be used for human habitation; and

3 (b) Be designed to resist flood damage from moving water and becoming wet to a minimum
4 of one (1) foot above the BFE.

5 (10) Utilities, including electric and heating equipment, shall be elevated or floodproofed
6 a minimum of one (1) foot above the BFE.

7 (11)(a) The lowest floor of new vertical or horizontal additions, including utilities and
8 mechanical equipment, must be elevated at or above the freeboard elevation;

9 (b) Non-residential additions may be floodproofed to the freeboard elevation.

10 (12) Construction materials shall be:

11 (a) Stable and inert;

12 (b) Free from most harmful pollutants;

13 (c) Installed per applicable manufacturing specifications and engineering standards; and

14 (d) Resistant to flood damage up to a minimum of one (1) foot or greater above the BFE.

15 (13) Any development limits specified in the permit shall be plainly staked or otherwise
16 marked on the site.

17 (14)(a) The permittee or property owner shall provide the cabinet with the floor or flood
18 proofing elevation for structures in the floodplain after the site is staked by a professional land
19 surveyor licensed in the Commonwealth of Kentucky.

20 (b) The lowest floor elevation shall be prepared and certified by, or under the direct
21 supervision of, a professional land surveyor or professional engineer in the Commonwealth of
22 Kentucky, as established in KRS Chapter 322, or architect licensed in the Commonwealth of
23 Kentucky, as established in KRS Chapter 323.

1 (c) If flood proofing is used, the certification shall be prepared by or under the direct
2 supervision of a professional engineer licensed in the Commonwealth of Kentucky.

3 (d) Any work undertaken prior to submission of the floor or flood proofing elevation shall
4 comply with this section.

5 (e) As-built lowest floor or floodproofing elevation documentation that shows the lowest
6 floor does not meet the permit elevation requirements shall require the permittee or property owner
7 to make corrections immediately and prior to any further work being performed. Failure to make
8 corrections, or submit documentation that the corrections have been made, shall be cause to issue
9 a notice of deficiency.

10 (15) The permittee shall provide a Floodplain Construction Final Development, Permit
11 Extension, or Termination Form (DEP 4_060_2, Date) to the cabinet confirming that development
12 was completed in accordance with approved plans and specifications not later than ninety (90)
13 days after development is completed. The form shall include:

14 (a) Photographs showing the development in compliance from all aspects; and, when
15 applicable:

16 (b) Elevation Certificate;

17 (c) Floodproofing Certificate;

18 (d) Fill compaction tests; and

19 (e) As-built drawings.

20 (16) If any of the provisions of the permit are not met, the cabinet may revoke or take any
21 action to enforce the permit conditions pursuant to KRS Chapter 151.

22 (17) The cabinet may impose more stringent limitations on floodplain development in areas
23 containing one (1) or more residential, commercial, or industrial buildings.

1 Section 10. Floodplain Compliance. (1) If development does not comply with the approved
2 floodplain development plans or permit as established in this administrative regulation and KRS
3 151.280, the cabinet may take any action authorized by KRS Chapter 151 to require the
4 development to conform to the requirements established in Chapter 151 and this administrative
5 regulation.

6 (2) Within five (5) business days of receiving lowest floor or floodproofing elevation
7 information, the cabinet shall notify the permittee that the development:

8 (a) Meets the requirements of the floodplain development permit; or

9 (b) Does not meet the requirements of the floodplain development permit and that the
10 cabinet intends to issue a notice of violation.

11 (3) Any work undertaken prior to submission of the floor or floodproofing elevation
12 information to the cabinet shall comply with the requirements established in this administrative
13 regulation.

14 Section 11. Public Notice and Public Comment. (1) Upon determining that an application
15 for an individual floodplain development permit is complete, the cabinet shall provide notice to
16 the public of the permit application and proposed floodplain development activity. The public
17 notice shall:

18 (a) Be placed on the cabinet's website, <https://eec.ky.gov/Pages/index.aspx>, for a minimum
19 of thirty (30) days;

20 (b) Be sent to any person who has indicated to the cabinet their interest in receiving
21 floodplain development permit notices; and

22 (c) Include the:

23 1. Name and address of the applicant;

1 2. Location, nature, and extent of the proposed development;

2 3. Cabinet website address at which the application, plans, maps, and other information
3 regarding the proposed development can be located; and

4 4. Division of Water address and email address to which the public can submit comments.

5 (2) The public shall have an opportunity to comment on the permit application for a
6 minimum of thirty (30) days from the date of the first publication of the public notice. The cabinet
7 may extend the public comment period if it determines that additional public input is necessary for
8 complete review and analysis of the proposed development.

9 (3) The cabinet shall summarize and respond to the comments received during the comment
10 period. The responses to comments shall be:

11 (a) Attached to the floodplain development permit; and

12 (b) Distributed to persons who submitted comments and any person who requests a copy;

13 (4)(a) The cabinet may waive the public notification requirement only for floodplain
14 development activity that will not impede flow or result in significant flood impacts; and

15 (b) The cabinet shall clearly explain its reason for granting the waiver in its notice of a
16 complete application to the applicant; and

17 (5) Public notice shall not be required for permit extensions.

18 Section 12. Permit Validity Periods. (1) An individual permit shall become effective on the
19 date of issuance and shall remain valid for a period of two (2) years.

20 (2) The cabinet may extend the validity period of an individual permit for up to one (1)
21 year if:

22 (a) At least thirty (30) days prior to the permit expiration date, the permittee requests the
23 extension in writing; and

1 (b) There has been no change in the:

2 1. Scope of work;

3 2. Property or site ownership;

4 3. BFE;

5 4. Floodway; or

6 5. Limits of special flood hazard area.

7 (3) The cabinet shall not approve more than two (2) permit extensions of one (1) year each
8 without requiring a newly completed floodplain permit application submitted in accordance with
9 Section 8 of this administrative regulation.

10 Section 13. Incorporation by Reference. (1) The following material is incorporated by
11 reference:

12 (a) “Estimating the Magnitude of Peak Flood Flows for Streams in Kentucky for Selected
13 Recurrence Intervals”, USGS, Water Resources Investigations Report 03-4180 (2003);

14 (b) Floodplain Development Permit Application for Construction in a FEMA Special Flood
15 Hazard Area form (DEP 4 060 1, Date);

16 (c) Floodplain Construction Final Development, Permit Extension, or Termination Form
17 (DEP 4 060 2, Date);

18 (d) “National Flood Insurance Program Elevation Certificate” (FEMA, October 2022); and

19 (2) The material established in subsection 1(a) through (c) of this section may be inspected,
20 copied, or obtained, subject to applicable copyright law, at the Kentucky Division of Water, 300
21 Sower Boulevard, Frankfort, Kentucky 40601, Monday through Friday, 8 a.m. to 4:30 p.m. This
22 material may also be obtained through the Division of Water website at
23 <https://eec.ky.gov/Environmental-Protection/Water/Pages/default.aspx>.

1 (3) The “National Flood Insurance Program Elevation Certificate and Instructions”
2 (October 2022) may be found at [https://www.fema.gov/sites/default/files/documents/fema_form-](https://www.fema.gov/sites/default/files/documents/fema_form-ff-206-fy-22-152.pdf)
3 [ff-206-fy-22-152.pdf](https://www.fema.gov/sites/default/files/documents/fema_form-ff-206-fy-22-152.pdf).

4 ~~[(1) "Areas of shallow flooding" means a designated flood zone, shown on a FEMA Flood~~
5 ~~Insurance Rate Map, with a one (1) percent or greater annual chance of flooding to an average~~
6 ~~depth of one (1) to three (3) feet where clearly defined channel does not exist, where the path of~~
7 ~~flooding is unpredictable, where velocity flow may be evident, and is characterized by ponding or~~
8 ~~sheet flow.~~

9 ~~(2) "Backwater effect" means the rise in water surface elevation caused by obstruction of~~
10 ~~a stream's flow, such as by a narrow bridge opening, buildings or fill material that limits the area~~
11 ~~through which the stream's flow must pass.~~

12 ~~(3) "Base flood" means the flood having a one (1) percent chance of being equaled or~~
13 ~~exceeded in any given year, also called the 100 year frequency flood.~~

14 ~~(4) "Base floodplain" means the area along, adjacent to, and including a stream, which is~~
15 ~~inundated by the base flood on that stream.~~

16 ~~(5) "Base flood elevation" or "BFE" means the elevation of the water surface measured~~
17 ~~above mean sea level, as defined on the applicable FEMA Flood Insurance Rate Map (FIRM) in~~
18 ~~either the NGVD 1929 or NAVD 1988 vertical datum, reached during the base flood.~~

19 ~~(6) "Basement" means any area of the building having its floor below ground level on all~~
20 ~~sides.~~

21 ~~(7) "Conveyance" means a measure of the flow-carrying capability of a stream cross~~
22 ~~section and is equal to the flow rate at a given depth in cubic feet per second divided by the square~~
23 ~~root of the slope of the energy grade line in feet per foot.~~

1 ~~(8) "Cross section" means a graph or plot of ground elevation across a stream valley or~~
2 ~~portion of it along a line perpendicular to the direction of stream flow.~~

3 ~~(9) "Designated floodway" means the stream and that portion of the adjacent base~~
4 ~~floodplain specified by a local ordinance or indicated on National Flood Insurance Program maps.~~

5 ~~(10) "Dry flood proofing" means modifying a structure so that it is watertight below the~~
6 ~~flood protection elevation so that floodwaters cannot enter.~~

7 ~~(11) "Energy grade line" means a line that represents the elevation of the total energy head~~
8 ~~of water flowing in a pipe, conduit, or channel.~~

9 ~~(12) "Existing construction" means any structure, manufactured home park, or subdivision~~
10 ~~constructed on or before the effective date of the FEMA Flood Insurance Rate Map (FIRM) or the~~
11 ~~Flood Hazard Boundary Map (FHBM) for the community where the proposed structure is located,~~
12 ~~or in cases where no FIRMs are available, on or before October 1987.~~

13 ~~(13) "Flood crest" means the maximum stage or elevation reached or expected to be~~
14 ~~reached by waters of a specific flood at a given location.~~

15 ~~(14) "Flood frequency" means a statistical expression of the average time period between~~
16 ~~floods equaling or exceeding a given magnitude.~~

17 ~~(15) "Flood Boundary and Floodway Map" or "FBFM" means a map on which the Federal~~
18 ~~Emergency Management Agency (FEMA) or Federal Insurance Administration (FIA) has~~
19 ~~delineated the areas of flood hazards and the regulatory floodway, pursuant to 44 C.F.R. Part 60~~
20 ~~and 64.3.~~

21 ~~(16) "Flood Hazard Boundary Map" or "FHBM" means an official map of a community~~
22 ~~issued by FEMA, pursuant to 44 C.F.R. Part 60 and 64.3, where the boundaries of the areas of~~
23 ~~special flood hazard have been identified as Zone A.~~

1 ~~(17) "Flood Insurance Rate Map" or "FIRM" means an official map of a community on~~
2 ~~which FEMA, pursuant to 44 C.F.R. Part 60 and 64.3, has delineated both the areas of special~~
3 ~~flood hazard and the risk premium zones applicable to the community.~~

4 ~~(18) "Flood Insurance Study" or "FIS" is the official hydraulic and hydrological report by~~
5 ~~FEMA, pursuant to 44 C.F.R. Part 60 and 64.3, containing flood profiles, the FIRM, FHBM, where~~
6 ~~applicable, and the water surface elevation of the base flood.~~

7 ~~(19) "Flood proofing" means structural changes or adjustments to new or existing~~
8 ~~structures and facilities, their contents, or their sites for the purpose of reducing or eliminating~~
9 ~~flood damages by protecting against structural failure, keeping water out, or reducing the effect of~~
10 ~~water entry, and includes dry flood proofing and wet flood proofing.~~

11 ~~(20) "Flood warning" means the issuance and dissemination of information about an~~
12 ~~imminent or current flood.~~

13 ~~(21) "Historic structure" means any structure that is:~~

14 ~~(a) Listed individually in the National Register of Historic Places or preliminarily~~
15 ~~determined by the Secretary of the Interior as meeting the requirements for listing;~~

16 ~~(b) Certified or preliminarily determined as contributing to the historical significance of a~~
17 ~~registered historic district;~~

18 ~~(c) Listed on the state inventory of historic places; or~~

19 ~~(d) Listed on a local inventory of historic places in communities with historic preservation~~
20 ~~programs approved by the state or the Secretary of the Interior.~~

21 ~~(22) "Letters of Map Change" or "LOMC" means an official FEMA determination by letter~~
22 ~~to amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps,~~
23 ~~and Flood Insurance Studies.~~

1 ~~(23) "Licensed engineer or land surveyor" means a professional engineer or surveyor with~~
2 ~~accreditation in the state of Kentucky.~~

3 ~~(24) "Lowest floor" means the lowest floor of the lowest enclosed area, including any~~
4 ~~basement, but does not include an unfinished or flood resistant enclosure usable solely for parking~~
5 ~~of vehicles, building access, or storage of mobile equipment or of property that is not flood~~
6 ~~damageable in an area other than a basement.~~

7 ~~(25) "Manufactured home" means a structure, transportable in one (1) or more sections,~~
8 ~~that is built on a permanent chassis and designed for use with or without a permanent foundation~~
9 ~~when connected to utilities, but does not include recreational vehicles placed on a site for less than~~
10 ~~180 consecutive days.~~

11 ~~(26) "National Flood Insurance Program", or "NFIP", means a federal program which~~
12 ~~makes available flood insurance protection to property owners in flood prone areas.~~

13 ~~(27) "No impact" means a certification by a licensed engineer that an encroachment shall~~
14 ~~not result in any increase in the base flood elevation, floodwater elevations, and floodway width~~
15 ~~during the occurrence of the base flood discharge, referred to as "No Impact Certification".~~

16 ~~(28) "NAVD 1988" means a vertical control, as corrected in 1988, used as a reference for~~
17 ~~establishing varying elevations within the floodplain.~~

18 ~~(29) "NGVD 1929" means a vertical control, as corrected in 1929, used as a reference for~~
19 ~~establishing varying elevations within the floodplain.~~

20 ~~(30) "Nonsubstantial improvement" means any combination of repairs, reconstruction,~~
21 ~~alteration, or improvement to a structure in which the cumulative cost does not exceed fifty (50)~~
22 ~~percent of the present market value of the structure.~~

23 ~~(31) "100-year flood" means a flood of a magnitude having a one (1) percent chance of~~

1 ~~occurring in any given year.~~

2 ~~(32) "Permit" means written approval for any construction across, along, or adjacent to a~~
3 ~~stream subject to the provisions of KRS 151.250.~~

4 ~~(33) "Profile" means a graph or elevation plot of the water surface or channel bottom~~
5 ~~against distance along the stream.~~

6 ~~(34) "Recreational vehicle" means a vehicle that is:~~

7 ~~(a) Built on a single chassis;~~

8 ~~(b) 400 square feet or less when measured at the largest horizontal projection;~~

9 ~~(c) Designed to be self propelled or permanently towable by a light duty truck; and~~

10 ~~(d) Designed primarily not for use as a permanent dwelling but as temporary living quarters~~
11 ~~for recreational, camping, travel, or seasonal use.~~

12 ~~(35) "Regulatory floodway" means the stream channel and that portion of adjacent land~~
13 ~~area that is required to pass flood flows without raising the base flood crest elevation by more than~~
14 ~~one (1) foot.~~

15 ~~(36) "Stream" is defined in KRS 151.100(3).~~

16 ~~(37) "Structure" means an object constructed or installed which may be an obstruction to~~
17 ~~flood flows such as buildings, manufactured homes, towers, smokestacks, and overhead~~
18 ~~transmission lines.~~

19 ~~(38) "Substantial damage" means damage of any origin sustained by a structure whereby~~
20 ~~the cost of restoring the structure to before damaged conditions would equal or exceed fifty (50)~~
21 ~~percent of the market value of the structure before the damage occurred.~~

22 ~~(39) "Substantial improvement" means any combination of repairs, reconstruction,~~
23 ~~alteration, or improvements to a structure, taking place during a one (1) year period, in which the~~

1 cumulative cost equals or exceeds fifty (50) percent of the market value of the structure, excluding
2 periodic maintenance and upkeep that does not increase the value of the structure.

3 (40) "Wet flood proofing" means modifying the uninhabited portions of a house, such as a
4 crawlspace so that floodwaters may get in but will not cause significant damage.

5 Section 2. Applicability. This administrative regulation shall apply to all construction
6 across, along, or adjacent to a stream (i.e., the base floodplain) or in the floodway of a stream for
7 which a construction permit is required pursuant to KRS 151.250, 44 C.F.R. Part 60, and 44 C.F.R.
8 64.3, except for the construction of dams as defined in KRS 151.100.

9 Section 3. General Provisions.

10 (1) This administrative regulation shall constitute minimum criteria for the issuance of
11 permits for stream construction pursuant to KRS 151.250, 44 C.F.R. Part 60, and 44 C.F.R. 64.3.

12 (2) The applicant shall properly complete an appropriate application form, incorporated by
13 reference in Section 9 of this administrative regulation, with all pertinent information and submit
14 it to the cabinet.

15 (3) Any construction limits specified in the permit shall be plainly staked or otherwise
16 marked on the site.

17 (4) Public notification.

18 (a) As part of the stream construction permit issuance procedure, each applicant shall
19 provide notice to all parties who may incur additional flood-related damages as a result of the
20 construction for which a permit has been requested, except as provided in subparagraph 3 of this
21 paragraph.

22 1. For those projects that may have flooding impacts beyond the local area of the
23 construction, the applicant shall publish a notice in the newspaper having greatest circulation in

1 ~~the area of the proposed construction.~~

2 ~~a. This notice shall provide:~~

3 ~~(i) The name and address of the applicant;~~

4 ~~(ii) The location, nature, and extent of the proposed construction; and~~

5 ~~(iii) The address and telephone number of the Division of Water and stating the comments~~
6 ~~and objections shall be directed to the division.~~

7 ~~b. The notice shall be run for period of three (3) consecutive days or printings of the~~
8 ~~newspaper; however, for weekly newspapers or areas where newspapers are printed less~~
9 ~~frequently, the cabinet may reduce this requirement to two (2) consecutive printings upon written~~
10 ~~request of the applicant.~~

11 ~~c. The public notice required in subparagraph 1 of this paragraph shall be at least three (3)~~
12 ~~column inches in size and shall be large enough that all of the information required in subparagraph~~
13 ~~1 of this paragraph is easily readable.~~

14 ~~2. If the cabinet determines that flood impacts will be localized, the applicant may obtain~~
15 ~~and submit affidavits from all parties who reside, own property, or have other legitimate property~~
16 ~~interests in the affected areas. This affidavit shall contain a complete description of the proposed~~
17 ~~construction, a place for concerned parties to sign indicating that they have read the statement and~~
18 ~~that they understand that a permit application is being submitted to the cabinet, and the name and~~
19 ~~address of the cabinet representative to whom statements of concern or request for hearing may be~~
20 ~~addressed.~~

21 ~~3. For construction projects that will have negligible flood impacts (e.g. placement of~~
22 ~~electrical utility power poles or transmission towers if no fill is included or minor stream bank~~
23 ~~restoration), the cabinet may waive the public notification requirement after receipt of a written~~

1 request from the applicant to do so.

2 4. The cabinet shall notify all persons filing comments or objections to the issuance of any
3 permit of their right to be heard pursuant to the provisions of KRS 151.182(2).

4 (b) Proof that the notice was published or the original of the completed affidavit shall be
5 provided to the cabinet before the application shall be considered complete; however, technical
6 review of the application by the cabinet may proceed before proof is provided. Issuance of the
7 permit shall not proceed until sufficient proof of notice is submitted.

8 (c) If the cabinet determines any of the conditions of paragraph (a) of this subsection are
9 not met by the initial notice or affidavit, it may require that the applicant place another notice or
10 provide another affidavit which does so. The application shall not be considered complete until
11 the applicable public notification provisions of this subsection are satisfied.

12 (5) The permit shall become effective on the date of issuance and shall remain valid for a
13 period of one (1) year. Extensions may be requested in writing on a year by year basis and shall
14 be granted if:

15 (a) The scope of work and ownership has not changed; and

16 (b) There is no change in BFE or regulatory floodway.

17 (6) The permittee shall provide the cabinet with written notification that construction was
18 completed in accordance with approved plans and specifications not later than ninety (90) days
19 after completion of construction. If any of the provisions of the permit are not met, the cabinet may
20 revoke the permit pursuant to KRS 151.125.

21 (7) If any watercourse, channel relocation, or realignment, and any encroachment that
22 causes a change in base flood elevations takes place, all supporting technical data shall be
23 submitted to FEMA in order to obtain the appropriate Letter of Map Change (LOMC) to officially

1 ~~amend the FIRM in a given community.~~

2 ~~(8) Any substantial improvement that increases the current market value of the structure~~
3 ~~by more than fifty (50) percent shall be considered as new construction. The market value of the~~
4 ~~structure shall be:~~

5 ~~(a) The appraised fair market value of the structure prior to the start of the initial repair or~~
6 ~~improvement; or~~

7 ~~(b) If damage has occurred, the fair market value of the structure prior to the damage.~~

8 ~~(9) Substantial improvement shall be considered to occur when the first alteration of any~~
9 ~~wall, ceiling, floor, or other structural part of the building commences, whether or not that~~
10 ~~alteration affects the external dimensions of the structure. The term does not; however, include~~
11 ~~any project for substantial or nonsubstantial improvement of a structure required to comply with~~
12 ~~existing health, sanitary, or safety code specifications which are solely necessary to ensure safe~~
13 ~~living conditions.~~

14 ~~Section 4. Uses of Regulatory Floodway.~~

15 ~~(1) Except as provided in subsection 2 of this section, all encroachments, including fill,~~
16 ~~new construction, substantial improvements, and other development is prohibited unless~~
17 ~~certification with supporting technical data by a licensed engineer is provided, that demonstrates~~
18 ~~that the encroachments shall have "no impact" or not result in any increase in flood levels during~~
19 ~~occurrence of the base flood discharge.~~

20 ~~(2) The following activities or structures shall be permitted for land within the regulatory~~
21 ~~floodway limits of a stream if they do not result in increases in flood elevations:~~

22 ~~(a) Open space uses having no appreciable flood damage potential such as those associated~~
23 ~~with agriculture, silviculture, recreation, parking, storage yards, and certain sand and gravel~~

operation;

(b) ~~Certain structures, such as aerial utility crossings, that are related to allowable open space uses if the structures are designed, constructed and placed on the lot so as to offer no obstruction to flood flows;~~

(c) ~~Structures necessary for navigation and waterborne freight handling, for transportation or utility crossings, if every effort has been made to reduce the impact of all of those facilities on flooding and if the facilities considered alone or in conjunction with permissible development above and below it and on the opposite side of the stream do not create an increase in flood elevations in excess of that which is appropriate for determination of the floodway boundaries at that site pursuant to Section 5 of this administrative regulation;~~

(d) ~~Dredging or other removal of material from between the stream banks and the regulatory floodway, if disposal of the dredged material is outside of the regulatory floodway;~~

(e) ~~Recreational vehicles may be permitted in the regulatory floodway for a period of no more than 180 days if the vehicle is placed so that it can be moved easily in case of imminent flooding; and~~

(f) ~~Other activities exempted by 401 KAR 4:020 and 4:050.~~

~~Section 5. Determining Regulatory Floodway Boundaries.~~

(1) ~~The regulatory floodway boundaries shall include the stream channel and that portion of the adjacent land areas required to pass the base flood discharge without increasing the water surface elevation at any point more than one (1) foot. If the stream flow is supercritical, or if velocity is so high that backwater considerations are not possible or appropriate, the determination of regulatory floodway boundaries shall be based on a one (1) foot maximum allowable rise in the energy grade line. If making these calculations, the cabinet shall use methods which consider equal~~

1 conveyance losses on opposite sides of the stream.

2 (2) For stream segments for which a local government has used methods comparable to
3 those specified in this section to define floodway boundaries and has adopted these boundaries by
4 ordinance or for which the Federal Emergency Management Agency (FEMA) has developed a
5 Flood Insurance Study (FIS), Flood Hazard Boundary Maps (FHBM), Flood Boundary and
6 Floodway Maps (FBFM), mapped floodway boundaries and areas of shallow flooding, the cabinet
7 shall consider these designated floodway boundaries to define the regulatory floodway. If both
8 locally determined floodway boundaries and FEMA maps are available, the more stringent shall
9 apply for purposes of this administrative regulation.

10 (3) Notwithstanding any other provisions of this administrative regulation, in areas
11 containing one (1) or more houses or commercial or industrial buildings that may be affected by
12 flooding or at other locations if the one (1) foot increase in base flood elevation (BFE) allowable
13 in determining regulatory floodway boundaries would create an undue increase in flood damages,
14 the cabinet may impose a more stringent limitation on the floodway determination.

15 (4) Base flood flow information shall be determined by one (1) of the following methods,
16 which are listed in descending order of preference:

17 (a) The base flood flow frequency curve for gauged sites on unregulated streams shall be
18 obtained from the district office of the U.S. Geological Survey or the appropriate U.S. Army Corps
19 of Engineers district office. This data shall be used to provide the best discharge estimates for the
20 site under consideration. Peak discharges for ungauged sites on a gauged stream may consider both
21 the gauged site information and information from an appropriate regional estimate, if available.
22 The transfer technique for establishing discharges at the ungauged location shall be by
23 interpolation or extrapolation methods in keeping with best engineering practices. For gauged

1 ~~streams with regulated flows, peak discharges shall be obtained from the agency responsible for~~
2 ~~regulating the flow.~~

3 ~~(b) For ungauged streams one (1) of the following shall be used:~~

4 ~~1. "Estimating the Magnitude of Peak Flows for Streams in Kentucky for Selected~~
5 ~~Recurrence Intervals", U.S. Geological Survey, Water Resources Investigations Report 03-4180,~~
6 ~~incorporated by reference in Section 9 of this administrative regulation;~~

7 ~~2. Natural Resources Conservation Service "National Engineering Handbook, Part 630:~~
8 ~~Hydrology", incorporated by reference in Section 9 of this administrative regulation; or~~

9 ~~3. The cabinet may approve the use of other generally accepted methods in keeping with~~
10 ~~best engineering practices.~~

11 ~~(5) For areas below dams or impounding structures, flood routings shall be determined as~~
12 ~~if the dam or impounding structure does not exist.~~

13 ~~(6) In performing the calculations for regulatory floodway boundaries, the cabinet shall use~~
14 ~~standard engineering practices.~~

15 ~~(a) The applicant shall provide cross sections for determining floodway boundaries at any~~
16 ~~proposed construction site if FEMA maps are not available. All cross sections shall be referenced~~
17 ~~to mean sea level, in either the NGVD 1929 or NAVD 1988 vertical datum, and shall have vertical~~
18 ~~error tolerances of no more than plus or minus five tenths (0.5) foot. Cross sections elevations~~
19 ~~shall be taken at those points which represent significant breaks in slope and at points where~~
20 ~~hydraulic characteristics of the base floodplain change. Each cross section shall extend across the~~
21 ~~entire base floodplain and shall be in the number and at the locations specified by the cabinet.~~
22 ~~Submitted cross sections shall be in a tabular, electronic format. If necessary to ensure that~~
23 ~~significant flood damage will not occur, the cabinet may require additional cross sections or~~

specific site elevations which extend beyond those needed for making routine regulatory floodway boundary calculations.

(b) Roughness values for use in regulatory floodway computations shall be calibrated from existing flood information, if possible. If the information is not available, the cabinet shall base these values on the professional judgment of the cabinet's staff in keeping with best engineering practices. The cabinet may require the applicant to provide photographs or other information if it is helpful in making this determination.

(c) Slope values used for regulatory floodway boundary calculations shall be based on flood profiles if available.

(d) Conveyance loss shall be calculated through an equal loss method.

Section 6. Placement of Flood-damageable Property in Floodplain.

(1) In order to minimize or prevent the harmful effects of stream flooding, the cabinet shall not issue permits for the placement or construction of flood-damageable property in the base floodplains of streams, unless the placement or construction conforms to the requirements of the following subsection.

(2) In issuing construction permits pursuant to KRS 151.250 for the placement of flood-damageable property within the base flood inundation area the cabinet shall require the following:

(a) All new construction and substantial improvements of residential structures within the base floodplain shall have the lowest floor (including basement) elevated to at least the base flood elevation;

(b) All new construction and substantial improvements of existing construction and nonresidential structures within the base floodplain shall meet the following conditions:

1. The lowest floor (including basement) shall be elevated to the base flood elevation or

1 above; or

2 2. ~~Together with attendant utility and sanitary facilities, shall be designed with the~~
3 ~~application of dry flood proofing techniques, so that below the base flood level the structure is~~
4 ~~properly flood proofed with walls substantially impermeable to the passage of water and with~~
5 ~~structural components having the capability of resisting hydrostatic and hydrodynamic loads and~~
6 ~~effects of buoyancy;~~

7 (c) ~~New construction or substantial improvements of existing construction or elevated~~
8 ~~structures that include fully enclosed areas formed by foundation and other exterior walls below~~
9 ~~the base flood elevation shall be designed with the application of wet flood proofing techniques to~~
10 ~~preclude finished living space and designed to allow for entry and exit of floodwaters to~~
11 ~~automatically equalize hydrostatic flood forces on exterior walls.~~

12 1. ~~Opening sizes for complying with this requirement shall meet the following minimum~~
13 ~~criteria:~~

14 a. ~~Provide a minimum of two (2) openings having a total net area of not less than one (1)~~
15 ~~square inch for every square foot of enclosed area subject to flooding;~~

16 b. ~~The bottom of all openings shall be no higher than one (1) foot above foundation interior~~
17 ~~grade, which shall be equal in elevation to or higher than the exterior foundation grade; and~~

18 c. ~~Opening may be equipped with screens, louvers, valves, or other coverings or devices~~
19 ~~provided they permit the automatic flow of floodwaters in both directions.~~

20 2. ~~The interior portion of the enclosed areas shall not be partitioned or finished into separate~~
21 ~~rooms.~~

22 (d) ~~The floor elevation or the flood proofing certification shall be provided by the permittee~~
23 ~~after the lowest floor is completed. Upon placement of the lowest floor, or flood proofing by~~

1 ~~whatever construction means, the permit holder or owners shall submit to the Division of Water a~~
2 ~~certification of the elevation of the lowest floor or flood proofed elevation, using the FEMA~~
3 ~~Elevation or Floodproofing Certificate, whichever is applicable, as built, in relation to mean sea~~
4 ~~level. The document shall be prepared and certified by or under the direct supervision of a licensed~~
5 ~~land surveyor or engineer. If flood proofing is used for a particular building, the certification shall~~
6 ~~be prepared by or under the direct supervision of a licensed engineer. Any work undertaken prior~~
7 ~~to submission of the certification shall be at the permit holder's or owner's risk. The Division of~~
8 ~~Water shall review the floor elevation survey data submitted. Deficiencies detected by the cabinet's~~
9 ~~review shall be corrected by the permit holder or owner immediately and prior to further~~
10 ~~progressive work being performed. Failure to submit the survey or failure to make the required~~
11 ~~corrections, shall be cause to issue a stop work order for the project; and~~

12 (e) ~~All manufactured homes, except in an existing manufactured home park or subdivision,~~
13 ~~shall be elevated to the base flood elevation and properly anchored to resist flotation, collapse, or~~
14 ~~lateral movement. If placed in an existing manufactured home park or subdivision the home shall~~
15 ~~be elevated no less than three (3) feet above grade, and properly anchored. Any manufactured~~
16 ~~home placed in an existing manufactured home park or subdivision on which a manufactured home~~
17 ~~has incurred substantial damage equal to or exceeding fifty (50) percent of its predamaged market~~
18 ~~value as a result of a flood shall be elevated to the base flood elevation and properly anchored. The~~
19 ~~expansion of an existing manufactured home park or subdivision constitutes new construction and~~
20 ~~placement in that newly developed area shall conform to both base flood elevation and anchoring~~
21 ~~requirements.~~

22 Section 7. Construction Materials. ~~All materials used in projects shall be stable and inert,~~
23 ~~shall be free from pollutants and floatable objects, and shall meet all appropriate engineering~~

standards applicable to the construction project.

Section 8. ~~Variances and Exceptions.~~

~~(1) Encroachments which cause a backwater effect of more than one (1) foot may be allowed by the cabinet if:~~

~~(a) The applicant owns the entire affected property on both sides of the stream;~~

~~(b) The amount of backwater at the nearest upstream property line is no more than considerations in Section 5 of this administrative regulation would allow; and~~

~~(c) The cabinet has reasonable assurances that none of the applicant's property within the area of the excessive backwater shall be subdivided and sold. Reasonable assurances shall include:~~

~~1. Zoning considerations that would preclude subdivision of the property;~~

~~2. Deed restrictions that would preclude subdivision of the property;~~

~~3. Restrictive floodplain construction easements identifying the Commonwealth of Kentucky as owner of the easement; or~~

~~4. All structures built in these areas shall have their lowest floor elevation at or above the altered elevation or be flood proofed to that elevation.~~

~~(2) The cabinet may allow regulatory floodway boundaries to be shifted by changing allocation of conveyance losses. The cabinet may redesignate the regulatory floodway boundary on one (1) side of a stream to be closer to the stream channel if a permanent flooding easement is provided for a compensating area on the opposite side. This easement shall include that area extending from the top of the opposite stream bank to whatever distance away from the stream that is required to compensate for the proposed streamward shift of the floodway boundary. The easement shall specify the Commonwealth as owner of the easement rights and shall prohibit the placement of any obstruction on the property. The easement shall be filed of record in the county~~

1 where the property is located and the grantor shall provide proof to the cabinet that the easement
2 has been recorded. If regulatory floodway boundary changes are approved by the cabinet, the
3 applicant shall be responsible for having changes made to the appropriate FEMA boundary maps.

4 (3) If an area along a stream is incorrectly indicated within the designated floodway on the
5 FEMA map, an applicant may submit an independent hydraulic analysis performed by a qualified
6 licensed engineer that demonstrates the area is not within the designated floodway. The applicant
7 shall be responsible for obtaining all site-specific information for the analysis including, if
8 necessary, the information used for the initial FEMA study. The cabinet shall review the analysis
9 and, if the mapped information is incorrect, it may issue a permit based on the revised information.
10 The cabinet's permit shall reflect the boundaries determined by the corrected analysis. The
11 applicant shall be responsible for submitting the revised information to FEMA. After review,
12 FEMA may develop Letters of Map Change (LOMC) to amend or revise the affected FIRM,
13 FBFM, or FIS. LOMCs include the following categories:

14 (a) A Conditional Letter of Map Amendment (CLOMA), which is FEMA's comment on
15 whether a proposed project would be excluded from the Special Flood Hazard Area (SFHA) shown
16 on the effective National Flood Insurance Program (NFIP) map.

17 (b) A Conditional Letter of Map Revision (CLOMR), which is FEMA'S comment on a
18 proposed project that would affect the hydrologic or hydraulic characteristics of a flooding source
19 and thus result in the modification of the existing regulatory floodway or effective Base Flood
20 Elevations.

21 (c) A Conditional Letter of Map Revision based on Fill (CLOMR-F), which is FEMA'S
22 comment on whether a proposed project involving the placement of fill would exclude an area
23 from the SFHA shown on the NFIP map.

1 ~~(d) A Letter of Map Amendment (LOMA), which is an official amendment, by letter, to an~~
2 ~~effective NFIP map. A LOMA establishes a property's location in relation to the SFHA.~~

3 ~~(e) A Letter of Map Revision (LOMR), which is an official revision, by letter, to an~~
4 ~~effective NFIP map.~~

5 ~~(f) A Letter of Map Revision based on Fill (LOMR-F), which is an official revision, by~~
6 ~~letter, to an effective NFIP map.~~

7 ~~(4) Exceptions to Section 6 of this administrative regulation may be allowed for the~~
8 ~~reconstruction, rehabilitation, or restoration of historic structures if the proposed repair,~~
9 ~~rehabilitation, or restoration will not preclude the structure's continued designation as a historic~~
10 ~~structure and the exception is the minimum necessary to preserve historic character and design of~~
11 ~~the structure.~~

12 ~~(5) Exceptions may be allowed for the requirement of a hydraulic or hydrologic study for~~
13 ~~the replacement or reconstruction of county or city bridges, if:~~

14 ~~(a) The new bridge, as designed, will be capable of passing as much or more flow at the~~
15 ~~base flood level; and~~

16 ~~(b) There are no significant changes in the elevation and grades of the existing approaches~~
17 ~~and roadway which may be within the base floodplain.~~

18 ~~(6) Exceptions may be allowed for the requirement of a hydraulic study for a new clear~~
19 ~~span bridge, if the deck abutments are recessed within the stream banks with no approach fill and~~
20 ~~if the chord depths, including curbs, are no greater than eighteen (18) inches.~~

21 ~~(7) Exceptions may be allowed for the requirement of a hydraulic study for low water~~
22 ~~crossings, if the structure is constructed in accordance with the cabinet's standard low water~~
23 ~~crossing template found in document DOW 84-01, incorporated by reference in Section 9 of this~~

1 ~~administrative regulation.~~

2 ~~Section 9. Incorporation by Reference.~~

3 ~~(1) The following material is incorporated by reference:~~

4 ~~(a) "Estimating the Magnitude of Peak Flows for Streams in Kentucky for Selected~~
5 ~~Recurrence Intervals, U.S. Geological Survey, Water Resources Investigations Report 03-4180,~~
6 ~~2003",~~

7 ~~(b) "National Engineering Handbook, Part 630: Hydrology, Natural Resources~~
8 ~~Conservation Service, July 2001";~~

9 ~~(c) "Kentucky Model Flood Damage Prevention Ordinance, 2004";~~

10 ~~(d) "Kentucky Division of Water Policy Document DOW 84-01, 5/18/1984"; and~~

11 ~~(e) "Application for Permit to Construct Across or Along a Stream and/or Water Quality~~
12 ~~Certification, DOW 7116, January 2004".~~

13 ~~(2) This material may be inspected, copied, or obtained, subject to applicable copyright~~
14 ~~law, at the Kentucky Division of Water, 300 Sower Boulevard, Frankfort, Kentucky 40601,~~
15 ~~Monday through Friday, 8 a.m. to 4:30 p.m].~~