

Kansas Administrative Regulations

Kansas Department of Agriculture—Division of Water Resources

Article 45.—Design of Levees

5-45-2. Levees and floodplain fills; plans and specifications.

Plans for a levee or a floodplain fill must be submitted on clearly legible prints (maximum size 24 inches by 36 inches) of the original tracings which are capable of reproduction. Plans for a levee or a floodplain fill shall include: (a) A general location map or aerial photograph showing:

- (1) the stream;
- (2) location of the proposed levee or floodplain fill;
- (3) floodway limits where available;
- (4) floodplain limits where available;
- (5) section lines;

(6) property lines with names and addresses of adjoining landowners and any other landowners whose land may be hydraulically affected by the proposed levee or floodplain fill;

- (7) drainage area;
- (8) a bar scale;
- (9) a north arrow;
- (10) existing and proposed surface drainage flow patterns; and
- (11) any other prominent features;

(b) a detailed plan view fully describing the levee or floodplain fill and the site, including:

- (1) the design flood elevation and frequency;
- (2) the base flood or floodplain limits where available;
- (3) floodway limits where available;
- (4) two-foot ground contours of the levee or floodplain fill and areas with local drainage problems; and

(5) the area reserved for environmental mitigation with a description of any necessary environmental mitigation measures to be implemented, if those measures may affect the hydraulics used to evaluate the project;

(c) a profile showing the proposed elevation of the top and base of the levee or floodplain fill, the design flood, the base flood, the stream bed and both banks;

(d) an elevation view at the most hydraulically restrictive location in the valley affected by the project, showing the levee or floodplain fill on a cross section of the stream and the valley up to the post project base flood elevation at the site. This cross section shall show:

(1) the stream;

(2) floodway limits where available;

(3) floodplain limits where available;

(4) base flood elevation; and

(5) design flood elevation;

(e) at least one permanent benchmark conveniently located for use after construction. The benchmark shall be placed where it is not likely to be destroyed. A three foot minimum length of pipe or steel driven flush with the ground in an area which is unlikely to be disturbed may be used. Wood or plastic stakes, nails or marks in trees shall not be considered as permanent benchmarks. The location and description of the benchmark shall be shown on the plans. They shall be properly referenced so they can be easily found in the field. The location, description and elevation of the permanent benchmark shall be shown on the plans. The benchmark may be a benchmark identified in the community's flood insurance rate map if the benchmark is less than 500 feet from the fill. Reference to the national geodetic vertical datum of 1988, or other acceptable national vertical datum, to a tolerance of plus or minus one half foot is required for all levees and floodplain fills on perennial streams. Reference to a tolerance of 0.05 foot is required where detailed floodplain data are available. Project datum is acceptable on all other levee and floodplain fill projects; and

(f) the land for which easements or rights-of-way have been acquired when the proposed levee or floodplain fill will affect land other than that owned by the applicant.

(Authorized by and implementing K.S.A. 1991 Supp. 24-126; effective May 1, 1987; amended, T-5-12-30-91, Jan. 1, 1992; amended April 27, 1992.)

***** Authenticated Kansas Administrative Regulation *****