

Kansas Administrative Regulations

Kansas Department of Agriculture—Division of Water Resources

Article 42.—Design of Stream Obstructions

5-42-1. Stream obstructions; plans and specifications.

(a) The plans required for a permit for a stream obstruction pursuant to K.S.A. 82a-301, and amendments thereto, shall include the following:

(1) A general location map or aerial photograph showing the stream, location of the proposed obstruction, sufficient detail to locate the proposed construction site, section lines, a bar scale, a north arrow, property lines with the names and addresses of adjoining landowners and any other landowners whose land may be hydraulically affected by the proposed stream obstruction, drainage area, and any other prominent features;

(2) a detailed plan view fully describing the obstruction and the site;

(3) the following topographical information, which shall be provided from streambed elevation to the limits specified in subsection (b):

(A) A profile of the streambed and both banks;

(B) a contour map with a contour interval of no more than two feet; or

(C) cross sections perpendicular to the stream and at intervals of no more than five times the width of the channel;

(4) an elevation view showing the obstruction on a cross section of the stream and the valley up to the post project design flood elevation at the site;

(5) at least one permanent benchmark shall be conveniently located for use after construction. The location, description, and elevation of the permanent benchmark to which all elevations are referred shall be shown on the plans. 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 shall be required for all stream obstructions on perennial streams and all other streams where base flood elevations have been

determined and are shown on flood insurance rate maps. An assumed project datum shall be acceptable on all other stream obstruction projects;

(6) details of the manner in which the obstruction is to be tied into the bed and banks of the streams;

(7) the land for which easements or rights-of-way are to be acquired if the proposed obstruction affects land other than that owned by the applicant; and

(8) unless it is clear that the impact of the proposed project will be contained within the channel or limited to property under the control of the applicant, a hydraulic analysis determining the preproject and postproject water surface elevations for the 50 percent-chance flood and the one percent-chance flood shall be prepared and submitted to the chief engineer.

(b)(1) If it is clear that the impact of the proposed stream obstruction will be contained within the channel or limited to property under the control of the applicant, the topographical information upstream of the stream obstruction required in paragraph

(a)(3) shall be required to either of the following, whichever is lower:

(A) The elevation of the highest point on the proposed obstruction; or

(B) the elevation of the one percent-chance flood water surface.

The applicant shall not be required to show topographical information for any property not under the control of the applicant.

(2) If it is not clear that the impact of the proposed project will be contained within the channel or limited to property under the control of the applicant, the topographical information upstream of the stream obstruction required in paragraph (a)(3) shall be provided from streambed elevation up to the elevation of the one percent-chance flood water surface upstream of the stream obstruction.

(3) The topographical information required in paragraph (a)(3) and subsection (b) shall be provided downstream of each proposed stream obstruction for a distance equal to five times the width of the channel at the proposed site of the stream obstruction or 50 feet downstream from the toe of the stream obstruction, whichever is greater.

(c) Each application for a permit to construct a stream obstruction shall include the following specifications:

(1) Each major element in the construction of the obstruction;

(2) the minimum quality of workmanship that is acceptable to construct the obstruction;

(3) the minimum quality of materials that is acceptable to construct the obstruction;
and

(4) the materials proposed to be used to construct the obstruction.

(d) The specifications shall meet the following requirements:

(1) Be clear, legible, and shown in sufficient detail to assure that the work can be properly constructed; and

(2) be shown on the plans, in the design report, or on a separate document.

(e) If the Kansas department of transportation (KDOT) standard construction specifications meet all of the requirements of this regulation and are to be enforced during construction, referencing those specifications on the plans shall be sufficient to comply with this regulation.

(f) If the standard construction specifications of a city or county in Kansas meet the following requirements, then referencing those specifications on the plans shall be sufficient to comply with this regulation:

(1) Meet all the requirements of this regulation;

(2) are to be enforced during construction; and

(3)(A) Have been provided to the chief engineer; or

(B) are readily available at no cost from the city or county that utilizes the specifications.

(Authorized by K.S.A. 2006 Supp. 82a-303a; implementing K.S.A. 2006 Supp. 82a-301, 82a-302, and 82a-303a; effective May 1, 1987; amended, T-5-12-30-91, Dec. 30, 1991; amended April 27, 1992; amended May 18, 2007.)

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