

SOIL CONSERVATION SERVICE  
KENTUCKY  
STANDARD AND SPECIFICATIONS  
FOR  
ACCESS ROAD  
(560)

Definition

A travelway constructed as part of a conservation plan.

Scope

This standard applies to vehicular and equipment roads constructed to provide access to farms, ranches, fields, conservation systems, structures, woodlands, and recreation areas.

Purpose

To provide a fixed route for travel for moving livestock, produce, equipment, and supplies; and to provide access for proper operation, maintenance, and management of conservation enterprises while controlling runoff to prevent erosion and maintain or improve water quality.

Conditions Where Practice Applies

Where access is needed from a private or public road or highway to a conservation enterprise or measure, or where travelways are needed in a planned land use area.

Design Criteria

Location

Roads will be located to serve the purpose intended, to facilitate the control and disposal of water, to utilize topographic features and to include scenic vistas where adaptable.

Gradient and Vertical and Horizontal Alignment

The gradient and alignment shall be adapted to the level of development of the conservation plan of which it is a part.

Gradient - Sustained grades shall not exceed 8 percent.  
A 12 percent grade may be used for short distances.

Vertical Alignment - The length of vertical curves in feet shall not be less than 7 times the algebraic difference of the intersection grades in percent.

Horizontal Alignment - The minimum radius of curvature of centerline shall be:

- 40 feet for cars only
- 50 feet for cars with trailers up to 30 feet long
- 80 feet for cars with trailers over 30 feet long

#### Width

The minimum width of the roadbed is 14 feet for one-way traffic and 20 feet for two-way traffic. The two-way traffic width shall be increased approximately 4 feet for trailer traffic.

The minimum tread width is 10 feet for one-way traffic and 15 feet for two-way traffic. The tread width for two-way traffic shall be increased approximately 5 feet for trailer traffic.

Road width on curves shall be adjusted as follows:

- 40 to 59-foot curve radius, widen 4 feet
- 60 to 74-foot curve radius, widen 3 feet
- 75 to 100-foot curve radius, widen 2 feet

The minimum shoulder width is 2 feet on each side of the tread width.

#### Side Slopes

All cuts and fills shall have side slopes that are stable for the soil or soil material involved.

#### Drainage

Culverts, bridges, or grade dips shall be provided at all natural drainageways. Design of these structures shall be in keeping with sound engineering practice for the class of vehicle or equipment used on the road.

Roadside ditches shall be adequate to provide surface drainage for the roadway and deep enough, as needed, to serve as outlets for subsurface drainage.

Roadbed drainage shall be provided at all seeps and in areas of high water table. The size, depth, spacing and outlets of roadbed drains shall be such as to keep the water table a minimum of 24 inches below the surface.

#### Erosion Control Measures

Needed erosion control measures shall be provided for road ditches cut slopes, fill slopes and cross drains.

#### Base Course

All roads to be paved shall have a 6-inch base course of gravel, crushed stone, or other approved material.

#### Surfacing

Access roads shall be given a wearing course or surface treatment when required by traffic needs, climate, erosion control, or dust control. The type of treatment will depend on local conditions, available materials and the existing road base. Where these factors or the volume of traffic are not a problem, no special treatment of the surface is required. Sound engineering practice will be followed to insure that the road will meet the requirements of its intended use and maintenance requirements will be in line with operating budgets.

All paving shall be in accord with Kentucky State Highway Department specifications for a similar class road.

Gravel surfacing shall have a minimum thickness of 4 inches.

#### Intersection with Public Highways

Traffic safety shall be a prime factor in selecting the angle of intersection with public highways. Preferably the angle should be not less than 85 degrees and the clear sight distance to each side shall not be less than 300 feet where site conditions permit.

#### Vegetative Treatment

Vegetation shall be established by seeding, sodding, or planting to stabilize the cut and fill slopes, ditches, and other disturbed areas for the control of erosion and sediment production. All of the vegetative treatment will be done in accordance with the Critical Area Planting and Mulching Specifications.

#### Plans

Access roads will be constructed in accordance to plans based on adequate investigation and surveys. The plan will show location, grade, cross section, drainage structures, erosion control measures, foundation soils, surface soils, wearing course, and traffic control signs.

#### Specification

All trees, stumps, roots, brush, weeds and other objectionable material shall be removed from the area that will be required for the roadway including shoulders and ditches, and from similar areas required for side road approaches and inlet and outlet ditches. All suitable materials shall be excavated from the roadbed areas and the space refilled with approved material before making fill upon it or before placing surfacing thereon.

The roadbed shall be graded to the required elevations for subgrade preparation and that portion of the roadbed on which subgrade is to be prepared shall be loosened to a depth of six inches and all stones, roots and other objectionable material removed and disposed of. The subgrade shall then be compacted to the required density.

Aggregate for the subbase shall be clean and free from deleterious substances and shall be of such quality that it will bind readily to form stable subbase to the lines, grades and cross-section shown on the plans.

Placement of the surface course shall be in accordance with the Kentucky Highway Department construction practice for the surface material used on similar class road.

Construction operations shall be carried out in such a manner that erosion and air and water pollution will be minimized and held within legal limitations. The completed job shall present a workmanlike finish.

Approval of plans and specifications shall be in accordance with the Engineering Job Classification and Approval Chart for Kentucky.

Any deviations from this standard shall be approved by the appropriate Soil Conservation Service Engineer.