

Saluda County Roads & Bridges

Road Acceptance

Requirements for acceptance to County road system:

- (a) The roadway must have a public use. It should border along property owned by at least two separate property owners per one-half mile, be a through road that serves at least two property owners, or be included in a new subdivision.
- (b) The roadway must connect to at least one federal, state, county, or municipal roadway.
- (c) Roadways which have been continuously maintained by the county period of 18 years or longer are classified as county roads so long as they meet the public use requirement of subsection (a).

Technical specifications:

- (a) **Right-of-way.** Maximum of 66-foot width, (33 feet from the center of the roadway from both sides), must be tendered by all property owners along the roadway. Additional easements or right-of-way along all outfall ditches carrying water from the drainage system running either parallel or perpendicular to the roadbed (including rights-of-way, easements, etc.) must provide the county permanent access to the roadbed and drainage systems for the purpose of maintenance and/or improvements. It is the responsibility of the property owner to remove, at owner's expense, any fence, building, or manmade obstruction along the right-of-way before acceptance by this county.
- (b) **Ditches.** Ditch lines parallel to the roadbed must be 40 feet from the bottom of the one ditch to the bottom of the other; front and back slopes must be constructed with 2:1 slopes (4:1 front slope is preferred), with a minimum depth of 1.5 feet below the shoulder break. (Discretion may be used by inspector at grade break.)
- (c) **Culvert pipes.** All concrete culvert pipes must meet state contract specifications, including applications of other types of pipes. The sideline pipe minimum is 15 inches; the cross line pipe minimum is 18 inches. All pipes with a diameter greater than 15 inches must be rip-rapped at both ends. Pipe sizes larger than above minimums must be determined by the NRCS or the Superintendent, Roads and Bridges. Use of recommended pipe sizes does not relieve the property owner of the responsibility to build a road that drains properly.

- (d) **Sub-base.** A width of 23 feet, achieving approximately 95 percent compaction, is required for the sub-base. No base shall be placed down until the sub-base has been tested and approved by the county. No debris shall be present in any sub-base materials.
- (e) **Wear surface.** The wear surface must have a width of 22 feet with 23 feet of six inches stone base in uniform depth with compacted CR-14 stone; the tolerance for depth less than six inches is ½ inch. The stone mix must meet state department of highways and public transportation standards and must be compacted firm, approximately 95 percent. The slope from the centerline to the edge of the wear surface must be 48:1.
- (f) **Shoulders.** Shoulders are to be at a slope of 12:1. There must be a width of five feet extending from the edge of the wear surface to the top edge of the front slope of the ditch.
- (g) **Debris.** All debris must be removed within the lines of construction, and all fill materials must be free of debris.
- (h) **Vegetation.** A permanent stand of year round vegetation must be established on all disturbed areas outside the wear surface. Stripped topsoil with small pieces of debris can be placed on the shoulder slopes to enhance growth of vegetation after the county approves the sub-base construction. Materials must be place so that they do not wash and fill the drainage systems.
- (i) **Intersections.** Adequate site easements must be provided at curves and intersections.
- (j) **Cul-de-sacs.** Cul-de-sacs must have a minimum radius of 40 feet, plus standard shoulder width. All dead end roads must have cul-de-sacs.
- (k) **Testing.** The property owner must provide a list of independent testing services to the county for county selection. The property owner must pay for all gradation testing and necessary retesting. Once the firm is selected, the property owner must coordinate tests as follows:
- (1) **Compaction of sub-base.** A loaded tandem axle dump truck must be used to proof roll, with representatives of the county and property owner present. All areas where pumping is observed must be corrected and retested prior to placing stone.

- (2) Gradation of wear surface materials.** Samples must be taken from the site within 30 days of placement, with a minimum of one sample per 1,000 linear feet, and with a minimum of one sample for a road less than 1,000 linear feet. The testing service must certify to the county that the stone meets state specifications for CR-14 prior to acceptance of the road.
- (3) Depth of wear surface materials.** The county and property owner must jointly measure depth of materials from points across the width of the wear surface at no less than 500 linear foot intervals.
- (l) Minimum design standards for new subdivision roads.** Prior to acceptance into the county system, all roads located in new subdivision developments must be paved according to the following county specifications. All phases of construction must be monitored by an official with the Saluda County Roads and Bridges Department.
- (1)** The wear surface must have a width of 22 feet with 23 feet of six inches in uniform depth with compacted CR-14 stone; the tolerance for depth less than six inches is $\frac{1}{2}$ inches. The stone mix must meet state department of highways and public transportation standards and must be compacted firm, approximately 95 percent. The slope from the centerline to the edge of the wear surface must be 48:1. The slope from the edge of the shoulder to the inside edge of the ditch must be 12:1. Must have a minimum of 66 feet right-of-way.
- (2)** As a minimum, storm drainage pipes within the road right-of-way shall be constructed of reinforced concrete pipe and sized to pass the flows generated by a ten year SCS type II storm event. The engineering department may require design for larger events on specific projects where there exists a significantly increased risk of property damage. Storm sewer lines shall be installed beyond the limits of the pavement, except for cross line pipes which shall run at no less than a 45 degree angle intersecting the roadway centerline.
- (3)** Roadway base shall be a minimum of six inches of macadam base course meeting the requirements of Section 305 of the South Carolina Department of Transportation Standard Specifications for Highway Construction, 1986 Edition with prime coat omitted. As an alternate, the developer may elect to substitute a 3.5-inch-thick asphalt hot mix aggregate base meeting the requirements of Section 402 of the SCDOT 1986 standards.

- (4) Roadway surface or pavement shall be an average of 200 pounds per square yard and a minimum of 175 pounds per square yard at any point of asphaltic surface course meeting the requirements of Section 403 of the SCDOT 1986 Standards. Areas determined to be substandard in thickness upon inspection by the county inspector shall be overlaid with an additional 100 pounds per square yard across the entire width of the roadway 25 feet beyond the substandard area.
- (5) The governing authority may require that compacting tests or proof-rolling be performed on the sub-base, base, or surface course as determined by the county inspector. The sub-base in all areas will be compacted to no less than 95 percent maximum density as determined by AASHTO T-99 SCDOT T-25, or SCDOT T-29 test methods and shall show no more than ¼-inch deflection over a ten-foot span when subjected to a load of 18,000 pounds on a single axle. If minor surface compaction occurs during a specific test, the test may be immediately repeated to remove the effect of one-time surface consolidations. Where deflections exceed this amount, the inspector may require additional sub-base removal and replacement until the deflection limits are met. The cost of all compaction tests and/or proof rolling shall be the responsibility of the developer or owner.
- (6) Permits are required for any and all underground utility placement. Permits must be issued before placement of any underground utilities. All underground utilities (water or sewer mains, telephone cables, cable TV, and gas mains) are to be installed beyond the limits of the roadway pavement. Taps, cable drops, and cross lines shall cross at no less than a 45 degree angle to the road centerline.
- (7) An as-built drawing as to the location of utilities and other underground materials as to size and quantity will be drawn and presented to the county.
- (8) Topsoil removed during grading shall be preserved and used to establish permanent grass sod along the right-of-way.

Limitations concerning county road maintenance.

- (a) Regardless of what is depicted on technical drawings, the county will accept and maintain only the portions of the road that has been developed as specified in the previous section. The county does not complete roads nor associated drainage systems for private property owners and is not responsible to individuals for misrepresentations by developers.
- (b) County maintenance does not extend to private property.

- (c) It is the responsibility of the private property owner to provide right-of-way for sufficient turn-around at the end of a county-maintained portion of a roadway.

Roads shall be open.

No roadway maintained by the county shall be barricaded in any way, nor shall any sign be posted with a message of “Private”, “Posted”, “Keep Out”, or any similar message. Roadways shall remain open at all times for public use, subject to federal, state, and local law.

Conditional acceptance.

All roadways accepted by the county will be conditionally accepted for a two-year period. If at any time during this period any of the above criteria for acceptance ceases to exist, the roadway may revert to the original owner. The roadways shall revert to the original owner if obvious engineering deficiencies surface and are not corrected by the original owner, or if there is only one property owner of record along a road in a new subdivision by the end of the two-year period. Original owners hold the county harmless from claims of other property owners in event the property reverts. The original owner holds the county harmless for any damages alleged to have resulted from county maintenance operations unless gross negligence or intentional damages are substantiated during the two-year period.

Acceptance of extension.

An extension to any county-maintained roadway may be accepted into the county system for maintenance when the extension satisfies the criteria in this article.

Waiver of technical specifications standards.

The minimum technical specifications standards established in this article may be waived to accept a substandard state dirt road if the highway department elects to let a contract to pave and subsequently accept a county road into its maintenance system. It is understood that the state generally requires an exchange of equal road mileage for maintenance purposes between the respective road systems.

The Saluda County Roads and Bridges Department may see fit to deviate from the road ordinance when dealing with projects being performed on existing county roads.

Private Roads

Preliminary plat.

“Private road subdivisions” shall follow the same submission and platting procedures as outlined in the Saluda County Subdivision Regulations for standard subdivisions. However, because the roads are proposed to be privately maintained, the review process is altered slightly. The Saluda County Planning Commission is authorized by those regulations to approve such a project only upon its satisfaction as to the physical and legal provisions for maintenance of the roads in the subdivision. The commission requires a review of the preliminary plat drawings and documents by the staff of Saluda County to determine compliance with the following guidelines:

(1) Road Layout.

- (a) “Through roads” which connect existing roads are not allowed.
- (b) Road alignments which create inadequate sight distances are prohibited.
- (c) Requirements for road names, signs, and layout shall be the same as found in the Saluda County Subdivision Regulations and/or approved by the Saluda County Planning Commission.
- (d) Roads right-of-way shall be of sufficient width to allow adequate maintenance of any proposed road to include associated utilities and storm drainage systems. In most cases this will require a minimum 50-foot width on the roadway and 100-foot diameter on any cul-de-sacs; however, the applicant may submit alternate designs utilizing narrower roadways and reduced rights-of-way. Projects proposed with less right-of-way must receive a variance from the Commission by demonstrating the ability to accommodate road, utility, storm drainage maintenance and accessibility for emergency vehicles.
- (e) Road right-of-way shall not conflict with previously executed public rights-of-way (utility, rail, or road).

(2) Road design.

- (a) Roads shall be designed so that maintenance costs to future residents shall be minimal. Sufficient engineering drawings and documents must be submitted in order for this determination to be made.
- (b) Dead end roads shall terminate in a turnaround which meets the minimum criteria published by the planning commission.

- (c) Roads across pond dams are strongly discouraged.
- (d) No roads shall be located in a special flood hazard area without meeting the requirements of the Saluda County Flood Damage Prevention Ordinance.
- (e) Roads proposed to be paved must be designed to meet the standards of Saluda County for sub-base, base, road width, and pavement materials. Within a paved road subdivision there are no limits on the number of lots or length of the roadway.
- (f) The following are the minimum standards for all roads proposed to be paved:
- (1) Access must be from an existing publicly maintained unpaved road unless the subdivision is being proposed to settle family affairs.
 - (2) Maximum road length shall be 1,500 feet.
 - (3) There shall be no more than ten lots using the roadway for access.
 - (4) Slopes shall be designed such that the calculated storm water velocities on the roadway surface and in the roadside ditches are less than 2.5 feet per second for sandy loam soils and 4.0 feet per second for clay soils.
 - (5) If the project is proposed to use an existing unpaved road surface, the following criteria must be met:
 - The geometric layout shall be considered safe by the planning staff.
 - The road surface shall be smooth and compacted, free from holes and/or ponding water.
 - The road area shall be sloped or graded in such a manner that surface water will be directed away from the roadway.
 - (6) If the project is proposed to use a new unpaved road surface, then the following criteria must be met:
 - The geometric layout/design shall conform to the minimum standards for Saluda County.
 - The road surface shall be graded to conform to a farm-to-market type cross section.
 - The road surface shall be free of debris and compacted to 95% of standard density.

(3) Storm drainage system.

- (a)** The project shall be designed to properly handle storm drainage entering and leaving the site.
- (b)** Sediment and erosion control measures shall be required on all grading.
- (c)** Open ditches will be allowed outside the road right-of-way when the proposed ditch section has side slopes which are 3/1 or flatter. Steeper slopes may be allowed if there is a good stand of grass.
- (d)** Steeper side sloped may be allowed on major drainage channels as identified in the Saluda County Sediment Control and Storm Drainage Ordinance or left in their natural condition with appropriate easement.

If these guidelines are met, the project can proceed without planning commission review. Projects proposed with other than the above standards must receive a variance from the commission. The proposed designs must demonstrate the ability to ensure road, utility, and storm drainage maintenance, and to accommodate access by service vehicles, school buses, and emergency vehicles.

Conditions of approval:

Private road subdivision approval granted by the commission or staff will remain valid for up to five years from the date of issuance. An approval is transferrable to a subsequent landowner(s) provided that all conditions of the approval are met.

Road maintenance agreement:*

A road maintenance agreement must be approved before a "Preliminary Plat Approval" can be given to a project. If these provisions are incorporated into a master deed or other document containing covenants and restriction for the subdivision, that document may be submitted in addition to a road agreement. The developer should also note that this agreement should contain certain provisions which are considered essential by the commission. The planning commission also requires that a property owners association be chartered with the Secretary of State for South Carolina for the purpose of implementing this agreement and by-laws be developed for the operation of that association.

Final plat:

“Final Plat Approval” of a “private road subdivision” can be given only after completion of the following items. This approval is required before any property can be conveyed and therefore allows the plat of the project to be recorded in the office of the clerk of court. The road maintenance agreement must be recorded with the plat at which time the planning department will require verification that the restrictions are being placed on the property owners adjoining the road.

- (1) Construction of the road and storm drainage system must be permitted by South Carolina Department of Health and Environmental Control (SCDHEC) and then a copy of the approval to construct letter issued by SCDHEC must be submitted to the county planning department.
- (2) If utilized, completion of any water and sewer systems.
- (3) Installation of traffic control and street name signs indicating each road to be a “privately maintained road.” Installation standards for these signs should be obtained from the office of roads and bridges.