

**AN ORDINANCE**

AN ORDINANCE TO AMEND CHAPTER 18, ARTICLE 6, PERMITS FOR ENCROACHMENT, OF THE 1976 GREENVILLE COUNTY CODE, AS AMENDED; TO REPEAL ORDINANCES AND POLICIES THAT ARE INCONSISTENT HEREWITH; AND TO REPEAL ORDINANCE NO. 2320 AND 2420.

BE IT ORDAINED BY THE GREENVILLE COUNTY COUNCIL THAT

**Section 1. Findings**

The County of Greenville has the responsibility of maintaining the right-of-way of county roadways to preserve the operational safety, integrity, and function of the highway facility. Since the manner in which utilities and other encroachments cross or otherwise occupy county roadway right-of-way can materially affect the safe operation, maintenance, and appearance of the highway, it is necessary that such use and occupancy be authorized and reasonably regulated.

No opening shall be made in any county roadway, nor shall any encroachment be placed therein or thereover, nor shall any structure encroachment which has been so placed, be changed or removed, except in accordance with a permit from the County of Greenville. No roadway shall be dug up for laying or placing pipes, sewers, poles or wires, or for other purposes, and no trees shall be planted or removed or obstructions placed thereon, without this written permit. The work shall be done in accordance with the permit issued by the County Engineering/Maintenance Division (referred to as the "Division"), and the entire expense of replacing the roadway in as good condition as before shall be paid by the permittee.

The ordinance herein has been outlined in the interest of developing and preserving safe roadsides and of minimizing possible interference and impairment to the roadway, its structures, appearance, operation and maintenance.

It is in the public interest for utility facilities and other encroachments to be accommodated on the right-of-way of county roadways, when such use and occupancy does not interfere with the free and safe flow of traffic or otherwise impair the roadway or its scenic appearance, and does not conflict with the provisions of Federal, State or Local Laws or this accommodation ordinance.

**Section 2. Encroachment Permit**

**Sec.18-61. Application**

This ordinance applies to all individually, publicly, and privately owned utilities, including, but not limited to electric, communication, gas, oil, petroleum products, chemical, water, steam, sewage, drainage, and all other uses or facilities that are to be accommodated, adjusted or relocated within county road rights-of-way. Further, it applies to any and all uses of county road rights-of-way for public, private or governmental purposes.

**Sec. 18-62. Scope**

This ordinance provides regulations for location, installation, adjustment, and maintenance of utilities and other uses of county road right-of-way.

Where law or orders of public authority or industry codes prescribe a higher degree of protection than provided by this ordinance, the higher degree of protection shall prevail. For conditions not specifically addressed in this ordinance, SCDOT (South Carolina Department of Transportation), "Policy for Accommodating Utilities on Highway Rights-of Way", shall govern.

All work shall be designed and constructed in accordance with sound engineering principles and other accepted standards including, but not limited to, the Greenville County Land Development Regulations, the State of South Carolina Department of Transportation Standard Specifications, Policies, Procedures, and Manuals for Highway Use and Construction, American Association of State Highway and Transportation Official's Guidelines (AASHTO), the Greenville County Stormwater Management Ordinance & Design Manual, other related Greenville County Ordinances, and other applicable ordinances or portions of standards applicable to the size, type, and location of the encroachment being made.

**Sec. 18-63. Definitions**

For the purposes of this encroachment ordinance, the following definitions apply:

*APPLICANT* - The Permittee or Duly Authorized Agent responsible for the construction or other activity.

*AVERAGE DAILY TRAFFIC* - The average 24-hour volume, being the total volume during a stated period divided by the number of days in that period. Unless otherwise stated, the period is a year. The term is commonly abbreviated as ADT.

*BACKFILL* - Replacement of suitable material compacted as specified around and over a pipe, conduit, casing, or gallery.

*BEDDING* - Organization of soil or other suitable material to support a pipe, conduit, casing or gallery.

*BOND* - Surety in an amount satisfactory to the Division that may include, but not be limited to a performance bond, or cash.

*BRIDGE* - A structure, including supports, erected over a depression or an obstruction, such as water, a highway or railway and having a length measured along the center or roadway of more than twenty (20') feet between abutments or the extreme ends of the opening for multiple boxes.

*CARRIER* - Pipe directly enclosing a transmitted fluid (liquid or gas).

*CASING* - A large pipe enclosing a carrier.

*CLASSES OF ROADS* -

Road Class	Description	ADT Count
<i>Arterial</i>	Serves major centers of Activity	18,000
<i>Minor Arterial</i>	Interconnects to smaller areas of activity	10,000 -18,000

<i>Major Collector</i>	Connects on both ends with collector and/or arterial roads.	4,000-10,000
<i>Minor Collector</i>	Serves multiple neighborhoods, connects to busier roads	1,250 – 4000
<i>Local Residential</i>	Res. street contained within the neighborhood it serves.	750 - 1,250
<i>Residential Access</i>	Res. street which augments the local residential street.	250 – 750
<i>Residential Sub Access</i>	Cul-de-sac or low volume road	Less than 250
<i>Non-residential</i>	Zoned commercial, Services, Office or Industrial use	

**CLEAR ROADSIDE POLICY** - The policy employed to increase safety, improve traffic operation, and enhance the appearance of roadway by designing, constructing, and maintaining county roadsides as free as practical from physical obstructions above the ground such as trees, drainage structures, massive sign supports, utility poles and other ground-mounted obstructions.

**CLEAR ZONE** - The roadside border area, starting at the edge of the traveled way, free of above ground obstructions and available for use by errant vehicles, is referred to as the clear zone.

**COATING** - Material applied to or wrapped around a pipe.

**COMMON DRIVE** - A driveway providing primary access to more than one piece of property. Common drives may be required by the Division to prevent multiple encroachments; flag lot situations for example.

**CONDUIT** - A natural or artificial channel through which something (as a fluid) is conveyed or a pipe, tube, or tile for protecting wires or cables.

**CONTRACTOR OR SUBCONTRACTOR** - A Contractor or Subcontractor shall be one who for a fixed price, commission, fee, or wage undertakes or offers to undertake construction of superintending of construction of any building, highway, sewer, grading, improvement, reconstruction, structure or part thereof. Anyone who engages or offers to engage in such undertaking in this State shall be deemed to have engaged in the business of specialty contracting in this State.

**CORPORATION** - All private or public corporations, business trusts, joint stock companies or associations, domestic or foreign, their lessees, assignees, trustees, receivers or other successors in interest, having any of the powers or privileges or corporations not possessed by individuals or partnerships.

**COVER** - Depth of top of pipe, conduit, casing, or gallery below grade of roadway, ditch, or ground surface.

*CULVERT* - Any structure not classified as a bridge that provides an opening under the roadway.

*DIRECT BURIAL* - The burial of utility lines by means of a "plow" type mechanism that breaks the ground, places the utility line, and closes the break in the ground in a single operation.

*DIVISION* - County of Greenville, Engineering/Maintenance Division.

*DUCT* – An enclosed tubular runway for protecting wires or cables.

*DULY AUTHORIZED AGENT* - In all cases the Permittee may elect to appoint a licensed contractor or subcontractor to act as his agent for purposes of posting the bond required and for the performance of all work related to the Permit to ensure compliance with County Specifications.

*ELECTRICAL UTILITY* - Persons, firms and corporations, their lessees, assignees, trustees, receivers or other successors in interest owning or operating in this State equipment or facilities for generating, transmitting, delivering or furnishing electricity for street, railway or other public uses or for the production of light, heat or power to or for the public for compensation, including an electric cooperative or a consolidated political subdivision and all persons, firms, corporations or municipalities to the extent their business, property, rates, transactions and operations are outside corporate limits of a municipality.

*EMERGENCY CUT* - When a road must be cut due to a break in any utility main line, which constitutes a danger to the public; or the roadbed where the road has to be cut without prior notification to the division.

*ENCASEMENT* - Structural element surrounding a pipe.

*ENCROACHMENT* - Any disturbance or use of county road rights-of-way for purposes other than that required by the Greenville County Engineering/Maintenance Division for maintaining a roadway, drainage improvements, signage, and other appurtenances thereto for the safety of the traveling public.

*FLAG LOT* - A parcel connected to the right-of-way by a long narrow strip, which is contiguous to the parcel with a 20' minimum width.

*FLOWABLE FILL* – A low-grade concrete-type aggregate mix that can be poured into an excavation for backfill with the capability of being re-excavated. In addition, it provides an incompressible, settlement free, stable backfill surface without mechanical compactive effort. (Using flowable fill in trench excavations allows backfilling without any compactive effort and effectively mitigates the potential for future trench failures due to improper or inadequate compaction.)

*GALLERY* - An underpass for two or more utility lines.

*GROUNDED* - Electrical conductor connected to earth or some extended conducting body, which serves instead of the earth.

*GROUT* - A cement mortar or slurry of fine sand.

*HIGHWAY, STREET, OR ROAD* - A general term denoting a public way for purposes of vehicular travel, including the entire area within the right-of-way.

*JETTING* - To place (as a pile) in the ground by means of a jet of water.

*LICENSED CONTRACTOR OR SUBCONTRACTOR* - Shall be a contractor or subcontractor who is certified or licensed in the State of South Carolina in one of the following areas: General Contractor, Mechanical Contractor, Homebuilder, Master Plumber, or certified by SCDHEC as a utility contractor.

*LOCAL SERVICE ROAD* - Localized arterial and spur roads which provide land access and socioeconomic benefits to abutting properties.

*LONGITUDINAL* - Relating to length or the lengthwise dimension.

*MANHOLE* - An opening in an underground system which workmen or others may enter for the purpose of making installations, inspections, repairs, connections, and tests.

*MUNICIPAL PAVEMENTS* - Road rights-of-way, which contain a standard pavement section with curbing. The right-of-way may also contain a sidewalk and/or additional pavement width to accommodate parking.

*PAVED ROAD* - Road surface, which is asphalt, concrete or surface treated.

*PERMIT* - The document by which the Division regulates and/or gives approval for the use of road rights-of-way for utilities or other private/public purposes.

*PERMITTEE* - The utility company, individual property owner, person, firm or corporation responsible for the on-going maintenance of the disturbed areas, pipes, conduits or other encroachments and their appurtenances installed within County rights-of-way.

*PERSON* - Includes all individuals, partnerships or associations, cooperatives, lessees, assignees, trustees, receivers or other successors in interest, other than corporations.

*PRESSURE* - Internal pressure in PSI (pounds per square inch).

*PROJECT* - A project shall mean a graphic representation that indicates a particular pattern or lays out clearly distinguished sections with attention to the relations and proportions devised for achieving an end, i.e., the project shall be any group of construction or similar activity that achieves a specific goal within a specified time frame. The project shall not be so construed as to be inclusive of a master plan being developed incrementally.

*PUBLIC* - Means the public generally, or any limited portion of the public, including a person or corporation.

*PUBLIC UTILITY* - Persons, firms, and corporations furnishing or supplying in any manner, gas, electricity, heat (other than by means of electricity), water, sewer collection, and sewage disposal service, or any of them, to the public of any portion thereof, for compensation.

*PUDDLING* - An earthy mixture of clay, sand or gravel, worked while wet into a compacted mass that becomes impervious to water when dry.

*RIGHT-OF-WAY* - A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to transportation purposes, and under control of the Division.

*RIGID PIPE* - Pipe designed for diametric deflection of less than 1%.

**ROAD CUTS** - A squared off 90-degree straight angle relative to the shoulder, coming across parallel with the edge of pavement, which is then removed. These cuts are done under an approved encroachment permit and shall be repaired as stipulated in the permit.

**ROADWAY** - The paved or unpaved traveled way of any County right-of-way that is normally used for purposes of vehicle travel.

**SERVICE CONNECTION** - Any cable, pipe, or other conduit installed for the purpose of providing utility or other service to an individual parcel from the cable, pipe, or conduit functioning as a trunk, main, or lateral of the utility or other services which may be located within public road rights-of-way.

**SLEEVE** - Short casing through pier or abutment of highway structure.

**SPECIFICATIONS** - The requirements for the use of road rights-of-way and the construction of any improvements thereon, as set forth in this document, any referenced document to the Greenville County Subdivision Regulations, provisions of the Greenville County Code and policy or practice of the Division. Unless otherwise provided for herein, the applicable portions of the Latest Edition of Standard Specifications for Highway Construction adopted by the South Carolina Department of Transportation shall govern.

**SUBCONTRACTOR** - See contractor or Licensed Contractor.

**TELEPHONE UTILITY** - Persons, firms and corporations, their lessees, assignees, trustees, receivers or other successors in interest owning or operating in this State equipment or facilities for the transmission of intelligence by telephone for hire, including all things incident thereto and related to the operation of telephones.

**TRAVELED WAY** - The portion of the roadway for the movement of vehicles, exclusive of shoulders and auxiliary lanes.

**TRENCH** - A narrow open excavation.

**VENT** - Appurtenance to discharge gaseous contaminants from casings.

## **Section 18-64.            General Provisions**

### **(a) Permit Duration**

Applications for Encroachment Permits shall be made not less than two (2) working days prior to the start of construction. In the case of an emergency cut, permittee shall notify the Division immediately and submit a full encroachment permit within seven (7) working days following the date of the emergency. The County Engineer or his/her designee shall have sole discretion in determining whether an emergency situation existed and how it shall be repaired.

Encroachment permits will begin on the date of Division approval stated on the permit and will expire one (1) year from that date. Those working under an expired permit shall be fined in the same manner as an individual working without a permit. If no work has begun, encroachment permits shall expire three months (90 Days) from the date the permit was approved. Extensions of time may be granted by the Division upon request, and will be considered on a case-by-case basis with the Division reserving the right to deny any or all extensions.

The Division reserves the right to refuse issuance of a permit to any applicant if any monies are due and outstanding as a result of charges made against the applicant or its duly authorized agent for inadequacies in performance of work related to previous permits. The Division also reserves the right to increase the amount of the bond required based on prior poor performance by any permittee or licensed contractor, including but not limited to failure to make proper repairs and maintain the installation.

(b) Exemptions

(1) It shall not be necessary to make application for or obtain an Encroachment Permit for repairs to, maintenance of, or new installations to be made inside existing pits, manholes, conduits, ducts, pipes or vaults. However, this paragraph shall not be interpreted to include any excavation operations requiring a disturbance of the surface surrounding such installations.

(2) It shall not be necessary to make application for or to obtain an Encroachment Permit for adjustments to manhole covers, valves, inlets and other protective coverings situated within pavements when such work is done at the request of the Division to accommodate pavement resurfacing and repairs being performed by the Division. No fees shall be charged for permits for work requested by the Division.

(3) Encroachment permits for landscaping purposes are not required; however, no trees, shrubbery or other natural obstructions in height over two and one half (2 1/2') feet shall be placed within the right-of-way in a manner so as to obstruct the sight distances for traveling vehicles. Those property owners encroaching on County rights-of-way for landscaping purposes do so at their own risk. The County is not responsible for the replacement of any such features should it become necessary to regrade the ditch lines, widen pavements, or maintain the Division's clear roadside policy.

(4) Aerial utility line crossings over public right-of-way which do not require any disturbance of property within the County right-of-way shall not require an Encroachment Permit; provided that the minimum vertical clearances specified herein are maintained. Placement of a utility pole on County right-of-way requires a permit; however subsequent attachments to that pole would not require a new permit, provided that the minimum vertical clearances specified herein are maintained.

(5) It shall not be necessary to obtain an Encroachment permit for the installation of a mailbox. The location and construction of all mailboxes shall conform to the rules and regulations of the U. S. Postal Service and the following minimum requirements:

(A) The roadside face of the mailbox shall be offset not less than one (1') foot from the face of any curbing or the edge of any paved roadway, shoulder or valley gutter, or similar paved surface. Where mountable curb types are present, the roadside face of the mailbox shall be no closer than one (1') foot to the back of the mountable curb.

(B) Wherever possible, the roadside face of the mailbox shall be no closer than four (4') feet to the edge of any paved surface.

(C) Under no condition shall a mailbox be permitted to obstruct any sidewalk.

**Section 18-65. Encroachment**

(a) General Requirements

(1) All work shall be done in accordance with provisions of the permit issued. The expense of restoring the roadway and adjacent areas within the right-of-way shall be paid for by the permittee.

(2) All work within the rights-of-way shall be designed and constructed in accordance with appropriate Federal, State, and local standards. Local standards shall include, but not be limited to, requirements of the Planning Commission, Building Standards Dept., Engineering/Maintenance Division and the Soil Conservation District. Permits shall not be issued or may be revoked for work that is not done in accordance with sound engineering and construction principles.

(3) In the event the permittee fails to properly provide back-filling and pavement restoration, in addition to all other penalties provided for herein, the Division reserves the right to perform or have such operations performed and to charge all associated costs (including but not limited to labor, material, equipment, supervisory and administrative) to the permittee.

(4) The permittee shall notify the Division when backfilling operations will occur. In all cases where weather conditions permit, pavement must be restored within ten (10) working days after backfilling has been completed. Temporary gravel surfaces will be maintained at the permittee's expense.

(5) Steel plates shall be used to cover cuts in roadways with over 500 vehicles a day (ADT) until it can be restored. Restoration shall be done within seven days from the beginning of construction.

(6) In any case where settlement occurs after the permittee has completed the pavement restoration or other restoration work is improper or incomplete, the Division shall give the permittee written notice and require that the problem be corrected within ten (10) working days after receipt of such notice. Should the permittee fail to timely correct the problems, in addition to all other penalties provided for herein, the Division reserves the right to correct or have the problems corrected and to charge all associated costs (including but not limited to labor, materials, equipment, supervisory, and administrative) to the permittee.

(7) All manholes/water valves and similar coverings or devices used for servicing or marking locations of various utilities within the pavement shall be mounted flush with the surrounding pavement. Reflective markers, buttons, etc., normally installed as delineators in the pavement must be recessed within the pavement where practical, or be of such design, and constructed of such materials so as not to create a hazard for traffic or maintenance equipment when projecting above the surface of the roadway.

(8) Safe and efficient traffic flow is an important consideration in the review of Application for Encroachment Permits. A traffic control plan shall be submitted along with the application for encroachment if permittee deems it necessary to restrict access or detour traffic because of any condition. This plan shall conform to The South Carolina Manual on Uniform Traffic Control Devices (SCMUTCD), latest edition, and shall be subject to approval by the County Engineer or his/her designated representative. The permittee shall provide, erect and maintain all necessary barricades, lights, danger signals, signs and other control devices. Qualified flaggers and watchmen shall be



provided by the permittee where necessary to maintain a safe and efficient work area. The Division reserves the right to require daily closure of trench excavations. Notification of all emergency service providers shall be the responsibility of the Permittee. Any major road closures or detours shall be advertised in a newspaper of general circulation within the county as determined by the Division and shall be the responsibility of the Permittee.

(9) When the conditions required by this Ordinance cannot be met, the Division reserves the right to require additional protection of the roadway and the public. Such additional requirements may include, but not be limited to, new requirements for larger pipe sizes, higher quality / strength of conduits, increased backfilling requirements up to and including concrete encasement, and increased thickness of pavement / driveways.

(10) The erection of any structure within the right-of-way shall generally be prohibited. The erection of signage at entrances to subdivisions shall be in accordance with current regulations of the Greenville County Planning Commission. All zoning requirements must be met.

(11) Sprinkler and irrigation systems shall not be installed within the County right of way unless specifically approved by the Division. All such approved sprinkler and irrigation systems shall be accompanied by an appropriate under drain system to remove excess water in the sub-grade for the protection of the pavement. All sprinkler systems, including those adjacent to the County right of way shall be constructed so as not to cause water to be cast or stand upon the pavement.

(b) Safety and Convenience

(1) Traffic controls for construction and maintenance operations shall conform to applicable portions of the SCMUTCD, latest edition. All excavations off the pavement or shoulders shall be properly barricaded and marked at all times. During daylight hours, if any part of the pavement or shoulders is necessarily occupied by equipment, trench or other obstructions, the applicant will furnish all proper warning signs and lights, and as many flagmen as may be deemed necessary by the Division to direct one-way traffic where necessary. Not more than 1000 feet of one-way traffic shall exist during construction. The utility shall make every effort to warn the traveling public of any emergency nighttime excavation or pavement obstruction, and shall provide all necessary signs, lights, and flagmen.

(2) All construction and maintenance operations shall be planned to keep traffic interference to an absolute minimum. On roadways with a peak hour volume of 400 vehicles per lane for two-lane roadways or 450 vehicles per lane for four-lane roadways, no work interfering with traffic operations shall be performed and no obstructions will be allowed during the peak hours unless said work is of an emergency nature. All work shall be planned to minimize the closure of intersecting streets, roads, approaches, or other access points.

(3) Except in emergencies, the full width of pavement will be maintained free of all obstructions and in a safe condition for traffic during the hours of darkness. Any excavation in the shoulder area shall be barricaded, covered or backfilled, and marked by the proper warning signs and lights. No equipment shall be parked in the shoulder area at night except as an additional protection to the excavation. Any such equipment shall be well lighted.

(c) Location

(1) Utility lines should be located to minimize later adjustments to accommodate planned future roadway improvements and to permit servicing such lines without interference to roadway traffic.

(2) In expanding areas along Arterial and Collector roadways, it is expected that utilities will normally install distribution or feeder line crossings, spaced as needed to serve consumers in a general area along either or both sides of the roadway, so as to minimize the need for crossings for service connections.

(3) Longitudinal installations should be located so as to provide a safe environment for traffic operations and preserve space for future roadway improvements.

(4) To the extent feasible and practical, utility line crossings of the roadway should be normal to the roadway alignment.

(5) Where practical, manholes are not to be located in the pavement or shoulder of any roadway. Exceptions may be made on streets at locations where manholes are essential parts of existing lines that are permitted to remain in place under existing roadways. However, such installations should: (1) Be designed and located in a manner that will cause the least interference to other utilities and future roadway expansion and (2) not be placed in the wheel path of vehicles. This subsection shall apply to all roads with traffic counts over 1000 vehicles per day (ADT). Exemptions will be granted to this Ordinance on less traveled residential roads on a case-by-case basis, provided the installations are constructed in accordance with sound engineering principles and the detrimental effects to the traveling public can be minimized.

(6) The horizontal and vertical location of utility lines within the road right-of-way should conform with the clear roadside policies applicable for the type of roadway and specific conditions for the particular roadway section involved.

(7) Utility lines shall not be permitted to be installed within any stormwater culvert. Any and all utilities, including cable television lines, placed in culverts will be removed at the owners expense; all penalties and fines apply. Nor shall the effective capacity of any catch basin, manhole, headwall, or other appurtenances be impeded in their function by utility lines or other encroachments.

(8) In all cases, full consideration shall be given to sound engineering principles, overall economic aspects, protection of the integrity and scenic appearance of the roadway, maintenance operations and the safety of roadway traffic.

(d) Design

The Permittee is responsible for the design of the facility to be installed within the road right-of-way or attached to a roadway structure. The Division will be responsible for review and approval of the proposal with respect to the location, construction materials, procedures, and the manner of attachment and/or installation. All utility installations should be of durable materials relatively free from routine servicing and maintenance, and as a minimum, meet the following requirements and latest revisions thereto:

(1) Electric power and communication facilities shall conform to the National Electrical Safety Code.

(2) Water lines shall conform to the specifications of the American Water Works Association and the State Department of Health and Environmental Control.

(3) Sewer lines shall conform to the regulations of the State Department of Health & Environmental Control.

(4) Pressure pipelines shall conform to the applicable sections of the American National Standards Institute (ANSI); Title 49 CFR, Parts 191, 192, 193, 195 and applicable industry codes.

(5) Liquid petroleum pipelines shall conform to the applicable recommended practice of the American Petroleum Institute for pipeline crossings under railroads and highways.

Any pipeline carrying hazardous materials shall conform to the rules and regulations of the U. S. Department of Transportation governing the transportation of such materials. No sewage or other obnoxious drainage matter shall be run into any roadway storm drainage structure or ditch. New installations or adjustments of existing utility lines, particularly those located underground or attached to structures, should be planned so as to minimize hazards and interference with roadway traffic when additional facilities are installed at some future date.

(e) Conditions of Encroachment

The following general conditions and stipulations are given concerning the use and occupancy of roadway right-of-way by Encroachment Permit:

(1) All requests to perform work within county rights-of-way shall be made on forms provided by the Division, be signed by a duly authorized representative of the person, firm or corporation, and be submitted to the Division.

(2) Full information, including a plan, shall be given as to the character of work to be done. A cross-section of the roadway will be required for all crossings (See Figures 1 and 2). The plan shall include the accurate location of the work with reference to the nearest intersection(s) or other permanent landmark, street address of residence served by the installed utility (if applicable), along with the type, size, depth, and lengths of all cable, conduits and appurtenances.

(3) All facilities should be kept in a good state of repair.

(4) If, in the opinion of the Division, it should ever become necessary to move or remove the encroachment, or any part thereof, contemplated herein, on account of change in location of the roadway, widening of the roadway, or for any other sufficient reason, such moving or removing shall be done on demand of the Division at the expense of the Permittee. If and when the encroachment contemplated herein shall be moved or removed, either on the demand of the Division or at the option of the Permittee all work in connection with the construction, maintenance, moving or removing of the encroachment contemplated herein shall be done by and at the expense of the Permittee.

(f) Unexpected Conditions

Where subsurface conditions are found different than those, which could have reasonably been expected to exist, then at the discretion of the Division, permits may be secured without penalty under the following conditions:

(1) If the work was not anticipated to encroach upon County right-of-way and the timely completion of the work is essential to the scope, nature, and timely completion of the Project, and when delays may be encountered that may create undue hardship, then work on the project may proceed. Permits must be applied for before the end of the next full working day.

(2) Work under these conditions shall not require a disturbance of more than 200 square feet of area within the road right-of-way.

(3) Where Encroachment Permits are secured in advance and the subsurface conditions may require a modification of the drawings for the project, the Division shall be notified of the modifications within five (5) working days following the date that the additional disturbance is required. For large projects where the length of construction is in excess of 30 days, permit modifications can be made on a regular monthly basis at approximate 30-day intervals. Major modifications of a project design or location shall require approval prior to initiating any construction.

(g) Insurance

Permittee shall maintain during the life of this encroachment permit public liability and property damage insurance, in an amount not less than One Million Dollars (\$1,000,000) as shall protect permittee and any subcontractor from claims for personal injury, including accidental death, as well as from claims for property damage, which may arise from operations under this encroachment permit, whether such operations be by permittee or by any subcontractor or by anyone directly or indirectly employed by either.

At the discretion of the Assistant County Administrator for Public Works or the County Engineer, a Permittee may not be required to submit a Certificate of Insurance on projects that are not permitted by a utility company or require a licensed and bonded contractor. This waiver shall not be construed to relieve the Permittee of any liability for property damage claims or bonding requirements covered under Subsection (j)(4).

(h) Liability For Personal Injuries and Property Damage

Permittee assumes the sole responsibility for the safety and protection of the premises and of employees and other persons, and assumes liability for any injury or damage occurring on account of the performance of work under this encroachment permit, whether due to the negligence, faults or defaults of permittee or not. Such liability of permittee under this encroachment permit is absolute and is not dependent upon any question of negligence on its part or on the part of its agents, servants or employees, and neither the approval by the engineers or the chief engineer of the methods of doing the work nor the failure of the engineers or the chief engineer to call attention to improper or inadequate methods or require a change in methods, nor the neglect of the engineers or the chief engineer to direct the permittee to take any particular precautions or to refrain from doing any particular thing shall excuse the permittee in case of any such injury to person or damage to property.

(i) Indemnity Against Liability

Permittee shall indemnify Greenville County, its agents, officials and employees, against all injuries, deaths, loss, damages, claims, patent claims, suits, liabilities, judgments, costs and expenses, that may in any way accrue against Greenville County in consequence of the granting of this encroachment permit or that may in any way result from that grant, whether or not it shall be alleged or determined that the act was caused through negligence or omission of the permittee or permittee's employees, of the subcontractor or subcontractor's employees, if any, and the permittee shall, at permittee's own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising from or incurred in connection with that activity, and, if any judgment shall be rendered against Greenville County in any such action, the permittee shall, at permittee's own expense, satisfy and discharge that judgment. Permittee expressly understands and agrees that any performance bond or insurance protection required by this contract, or otherwise provided by permittee, shall in no way limit the responsibility to indemnify, keep and save harmless and defend Greenville County as here provided. Insurance coverage specified herein constitutes the minimum requirements and requirements shall in no way lessen or limit the liability of permittee. Permittee shall procure and maintain, at his own cost and expense, any additional kinds and amounts of insurance, which, in his own judgment, may be necessary to properly protect the interest of the work. The permittee agrees to hold the County harmless for any damage to persons or property, which may arise during the progress of or by reason of the work performed.

(j) Bonding or Financial Guarantee Requirements

(1) Bonds or cash equivalent (cash, certified check) for all longitudinal installations and for crossing pipes, installed in unpaved roadways or unpaved areas, shall be required in the following amounts: A minimum Two Hundred (\$200.00) Dollar bond or cash equivalent for the initial fifty (50') feet of each encroachment, plus an additional One Hundred (\$100.00) Dollar bond or cash equivalent for each additional fifty (50') feet, or portion thereof, per encroachment.

(2) Utility companies and licensed contractors/subcontractors shall be required to post a continuous Five Thousand (\$5,000) Dollar performance bond or cash equivalent upon which an unlimited number of permits may be issued annually. All bonds shall remain in effect for one (1) year after the completion of the construction work. All bonds shall be released and returned to the Permittee if the work remains in an acceptable condition or is satisfactorily corrected one (1) year after completion.

(3) Licensed and bonded contractors/subcontractors or utility companies shall be required to perform all work in, on, under or over roadways.

(4) Permits shall not be issued to licensed and bonded contractors/sub-contractors for work that is not related to the certification or license they may hold.

(5) Misc. Bonds: Any person, firm, corporation, organization or public utility wishing to encroach on county rights-of-way for purposes other than those generally addressed herein shall post not less than a One Hundred (\$100.00) Dollar bond or cash equivalent for such work. A minimum Three Hundred (\$300.00) Dollar bond or cash equivalent is required for curb cuts for driveways. A One Thousand (\$1,000.00) Dollar minimum bond or cash equivalent is required for connection of new streets associated with subdivision developments onto existing roads when permittee is not adequately bonded with the Greenville County Planning Commission.

(6) Exemptions: Any telephone, public or electrical utility shall be exempt from all bonding requirements, provided they have on file with the Division an active Cooperative Agreement for the Encroachment Enforcement Program.

(k) Penalties and Other Relief

Any person, firm, corporation, public utility, or agent, who shall violate the provisions of this Ordinance shall be guilty of a misdemeanor and, shall be punished within the jurisdictional limits of magistrate's court. Each such person, firm, corporation, public utility, or agent shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of this article is committed, or continued.

Greenville County may also seek injunctive relief, impose civil fees, or may institute any other appropriate action in courts of competent jurisdiction to enforce the provisions of this Ordinance.

(l) Permit Provisions

In addition to the conditions of encroachments listed above, the following provisions are given concerning the use and occupancy of the highway right-of-way by permit:

(1) No permit shall be issued until the applicant has deposited with the Division a check, money order, or bond in an amount sufficient to meet the requirements of the Division.

(2) Permits shall not be issued to individuals for work in, on, under or over pavements. Licensed and bonded contractors/subcontractors or utility companies shall be required to perform all work in, on, under or over roadways. The issuance of permits to individuals shall be restricted to situations where the nature of the encroachment is such that a licensed and bonded contractor/ subcontractor is not required to ensure and protect the integrity of the roadway and the safety of the public. Permits to individuals shall not be issued if the excavation, grading, and restoration require compaction of fill, erosion protection measures, and other activities that would place at risk the integrity and stability of the right-of-way.

(3) The Division reserves the right at any time to cancel the permit should the applicant fail to comply with the terms and conditions under which it was granted.

(4) The location of all existing utility facilities shall be determined in advance of an excavation by the contractor and the necessary precautions taken by him to safeguard them from damage during the execution of the work. Anyone starting any operation that includes excavating, boring, pile driving, blasting or digging must report this information to area utility operators at least three (3) working days in advance. A toll free call to Palmetto Utility Protection Service (PUPS) will have most utilities located in one call. Other non-participating utilities must be notified individually by the contractor.

(5) The costs of repairing any damage to existing pipes, driveways, culverts, and/or other existing appurtenances shall be borne by the applicant. Where cuts, replacements or resurfacing repairs are made to existing pavements the required bond shall remain in effect for one (1) year following the date of completion of all work, however this does not relieve the permittee of the responsibility of any maintenance required during the lifetime of the encroachment.

(6) In an emergency where immediate action is necessary for protection of the public, to minimize property damage, or to restore essential utility service, the Utility may, at its sole risk and responsibility, repair its facilities provided appropriate safety methods and devices are used to

provide adequate warning and protection to persons and property. The utility assumes full responsibility for its operations, and ensures the Division harmless from liability in all respects. In all such cases, a confirming permit shall be prepared and submitted to the Division within seven (7) working days, and shall contain complete information concerning the matter.

(7) On any road cut, the entire cut area shall be resurfaced 5' past outer limits of the cut. If the pavement edge is closer than 5' to the cut, the resurfacing shall stop at the pavement edge. This ordinance will be effective for any permittee, including all emergency cuts, covered under the cooperative agreement.

## **Section 18-66. Fee Schedule**

The initial permit fee for all longitudinal and transverse installations within the road rights-of-way shall be required in the following amounts:

### (a) Linear Feet

A permit fee of Thirty Five (\$35.00) Dollars for the initial 20,000 lineal feet of each encroachment plus an additional Thirty Five (\$35.00) Dollar permit fee for each additional 20,000 lineal feet or portions thereof.

### (b) Non-Linear

When a project is such that a lineal measurement cannot accurately describe the amount of disturbance, the permit fee shall be determined in accordance with the following:

(1) A minimum Thirty Five (\$35.00) Dollar permit fee for disturbance of up to five (5) acres and an additional Thirty Five (\$35.00) Dollars for each additional five (5) acres of disturbance or portions thereof, per encroachment.

(2) All permit fees as enumerated above, may be waived by the Division for telephone, public or electrical utilities who participate in the cooperative agreement for the encroachment permit in the Encroachment Enforcement Program.

### (c) Newly Paved Roads

If it becomes necessary to cut any road, which has been resurfaced within three years of the permit application date, a fee of \$335.00 shall apply for the first year, \$235.00 for the second and \$135.00 for the third. Restoration of the cut shall entail compaction reports from a 3rd party geo-technical firm confirming 95% compaction. The restoration patch shall be done using an infrared paving process or an overlay of the entire roadway at the discretion of the County Engineer.

### (d) General Fee

A general fee of Ten (\$10.00) Dollars is surcharged on all Building Permits issued by the Building Standards Department for new construction. This fee entitles a permittee to construct one driveway connection to any existing or proposed county road without a bond. The general Ten (\$10.00) Dollar fee does not cover any additional Encroachment Permits required for all utility connections or any other work required within the confines of Greenville County rights-of-way.

(e) Fee Authority

Any subsequent increase or decrease in the permit fee shall be determined by Greenville County Council at the time it adopts its operating ordinary and capital budgets.

(f) Penalty Fee

Failure to obtain an encroachment permit prior to the start of construction, other than an emergency as defined in Sec. 18-64(a), shall constitute a violation of this ordinance. Violations under this subsection shall result as follows:

Violators shall submit a permit with all required information and documentation at Suite 3800, County Square.

(1)(a) First time violators will be subject to a double permit fee.

(b) The second violation in any twelve-month period will result in a permit fee of \$135.00.

(c) Three or more violations in any twelve-month period will result in the violator being required to comply with the provisions of Section 18-65 (j) (2) of this ordinance for "Bonding or Financial Guarantee Requirements".

(2) Any person, firm, corporation, public utility, or agent, previously bonded pursuant to Section 18-65 (j) (2), who proceeds to commit three or more violations in any twelve-month period will be subject to the Division accessing their right to increase the amount of the bond.

(g) Encroachment Enforcement Program

(1) Generally

Under a Cooperative Agreement, participating telephone, public or electrical utilities may agree to take responsibility for enforcement of the Encroachment Permit Ordinance when listed on the permit as the permittee. The participating utility will also verify that each contractor/sub-contractor has obtained an Encroachment Permit before a permit or authorization will be issued from that utility agency for any work to be done on their system. Participating utilities will assist the Division in enforcement of the Encroachment Permit Ordinance by providing notice to the Division of any suspected or unauthorized activity.

(2) Revocation

Upon termination or revocation of the Cooperative Agreement by the Division, any participating utility shall be deemed non-performing. Upon determination by the Division that the agency is non-performing, all usual fee and bonding requirements as required in this ordinance shall be applicable.

(3) Cooperative Agreement Fee

Those utilities which maintain active Cooperative Agreements with the County shall be exempt from fees and bonds as otherwise provided for herein. An annual fee shall be imposed on each utility signing this agreement as follows:

1 – 10	encroachments per year -	NO FEE
11 – 20	encroachments per year -	\$100
21 – 30	encroachments per year -	\$200
31 – 40	encroachments per year -	\$300
41 – 50	encroachments per year -	\$400
51 or more	encroachments per year -	\$500



This fee includes any encroachment and is not limited to just road cuts. Multiple cuts, taps, etc. on 1 permit are considered separate encroachments.

(4) Non-Compliance

Any utility working within a right-of-way without an encroachment permit shall be deemed to be in non-compliance of the cooperative agreement. If a utility is cited three times in a year for non-compliance, they shall be struck from the cooperative agreement list and required to pay fines, fees, bonds and post insurance certificates for all work for a period of no less than three years. These exemptions in no way relieve a participating utility from securing permits and complying with all other provisions contained herein. The Cooperative Agreement does not relieve the utility from paying fees associated with cutting newly paved roads or complying with emergency cut requirements outlined in this document.

(h) Inspections

Inspections will be made on an as needed basis on each permit. A final inspection 9 (nine) months after the completion of construction shall be required before Greenville County shall release the bond required by the provisions of this Ordinance. Emergency cuts will be inspected immediately after receipt of the permit and again after 9 (nine) months.

**Section 18-67. Pipelines**

(a) Backfill Requirements

(1) The following backfilling specification is required in connection with any work performed within road rights-of-way:

After conduit pipe or other underground facility is installed, it is to be backfilled as indicated in Figure 3. All backfill material shall be free from particles larger than six (6) inches and free from cinders, ashes, refuse, vegetable or other organic material. The backfill material shall be deposited in the trench for its full width, in lifts appropriate to the type of compaction equipment used. In all cases, contractor must achieve 95% compaction (Standard Proctor) for the entire length, depth, and width of the installation. This method shall be followed until the top of the trench is reached. Backfilling shall be compacted to a minimum of 95% of the maximum density. In areas outside the construction and maintenance limits of the roadway, but within County right-of-way, compaction to the density of 90% of maximum density is sufficient. Care shall be taken to compact the material under the haunches of the conduit pipe or other facility, to place the backfill evenly on each side, and to avoid displacement of conduit. All material and compaction requirements shall be in accordance with Division Specifications and subject to Division approval. No jetting or puddling will be permitted.

(2) In all cases, where utilities must be placed in the right of way for over 500', the contractor must provide compaction reports from a 3<sup>rd</sup> party geo technical firm, or fill trench with either SC #57 stone or Flowable Fill.

(3) Aggregate base course and/or aggregate shoulder stone is to be placed on the shoulder at a thickness equal to six (6") inches or its original thickness, whichever is greater. Paved shoulders shall be re-paved in kind.

(4) Backfilling shall not be performed in freezing or wet weather except by permission of the Engineer and backfilling with frozen material will not be permitted. No backfilling shall be made where the material already in the trench is frozen.

(b) Blasting

Blasting will not be permitted within road right-of-way unless it is established that there is no feasible alternate. Each case must include provisions for adequate protection of the roadway facility, the safety of the traveling public and nearby residents, and be approved individually by the County Engineer.

(c) Restrictions Against Varied Use

Permits for pipeline installation shall, if applicable, specify the type of transmittant and the maximum working pressures. When it is anticipated that there will be a change in the type of transmittant or an increase in the maximum working pressure specified in the permit, the utility must give the Division advance notice and obtain approval for such changes.

(d) Longitudinal Installations

(1) To the greatest extent possible, longitudinal installations will not be permitted. Where necessary to connect to existing structures, conduits or appurtenances located within a traveled way, longitudinal installations will be permitted to the maximum lengths necessary to remove additions or extensions of existing services from within the traveled way.

(2) Only public utility companies may occupy the County's right-of-way longitudinally along the roadway. Perpendicular crossings may be permitted to private companies or individuals. No private individuals or companies shall be allowed to place any utility parallel with the roadway. All installations that run parallel with the pavement shall be the direct responsibility of the utility. On longitudinal installations, other than in municipal pavement sections, pipelines should be parallel to the pavement preferable at or adjacent to the right-of-way line.

(3) The nearest edge of trench should be a minimum of two (2') feet or more beyond the slope, ditch or curb line, when practical. Where possible to do so for any length of 500-feet, or more, a greater distance will be expected. The minimum required depth of cover on all longitudinal lines shall be twenty-four (24") inches. The trench should not be deeper than the distance from the edge of the pavement, curb, paved shoulder, toe of slope, or ditch, as may govern, to the nearest edge of the trench without using a bulkhead. (See Figure 2.) Material excavated or plowed from the trench shall not be stockpiled or stored within two (2') feet of the pavement edge or in a highway ditch line.

(4) Municipal pavement sections will be handled on an individual basis in a manner consistent with the prevailing limitations and conditions. Whenever practical, pipelines should be placed under the sidewalk. If the sidewalk location is not practical, pipelines should be placed under the parking lane. Placing of pipelines under the traveled lanes is discouraged and will only be considered as a last resort.

(5) Where longitudinal installations cannot be avoided within a paved roadway, the appropriate methods of pavement repair as detailed in the Appendix will be required. Where the length of a longitudinal installation exceeds fifty (50') lineal feet, as measured along the centerline of the disturbance, the surface restoration of the roadway in whole or in part as defined hereinafter shall be required to a point not less than twenty-five (25') feet beyond each end of the disturbed pavement. If the longitudinal installation lies within the outer twenty-five (25%) percent of the paved roadway width on either side of the centerline, the surface restoration of the roadway to one-half (1/2) width shall be required. Care should be taken not to create uneven pavement situations that can be detrimental to

traffic. If the longitudinal disturbance occurs within the center fifty (50%) percent of the roadway width, full width surface restoration will be required to the limits herein before specified.

(6) Where the trench patch is within the roadway, the County Engineer may require partial or full width resurfacing of the roadway for a distance up to 50 feet beyond each end of the trench patch. The application rate for the hot laid asphalt surface course shall be not less than 195 lbs./sy.

(e) Crossings

(1) All crossings should be located as near to a right angle to the road centerline as practical, based on economic consideration of alternates. Locations which are generally unsuitable for pipeline crossings include deep cuts; near footings of bridges and retaining walls; at cross drains where flow of water or stream bed may be obstructed; or within basins of an underpass drained by a pump if pipeline carries a liquid.

(2) No pipe, conduit or other facility shall be placed inside any drainage pipe or culvert. No pipe, conduit, or other facility shall be placed across the ends of any drainage pipe or culvert in a manner that will obstruct the free flow of water. All existing pipes, conduits or other facilities located within existing drainage pipes or culverts shall be allowed to remain in place. Any change in the drainage characteristics of the area which may occur in the future and cause existing pipes, conduits, etc. within existing drainage pipes or culverts to create an obstruction to the free flow of water shall be removed at the expense of the owner of such pipes, conduits or other facilities.

(3) Open trenching will not be employed, except when approved by the County Engineer or his/her representative. The County reserves the right to require all utility lines and service lines to be bored, to preserve the integrity of the existing pavement and to prevent the disruption to traffic or protection of pedestrians on heavily congested road ways. Where crossings have to be made by open trench, pavement cuts and replacements shall be made in accordance with "Repaving Pipe Trenches" (See Figure 3A and 3B).

(4) The minimum required depth of cover for a crossing is twenty-four (24") inches. For cover over pipes, commonly specified surfaces are the top of pavement, natural ground, or the flow line of drainage ditches. A protective coating is considered part of the pipe. When the carrier is encased, cover is measured from top of the casing. The critical control for cover on a pipeline crossing is the low point in the highway cross-section, usually the bottom of the longitudinal ditch.

(5) Markers, vents, drains, and shut-offs are appurtenances to pipeline installation. Major pipeline crossings shall be identified by permanent markers. These markers shall furnish sufficient information to enable identification and contact of the owner. Casing pipe over four (4) inches in diameter shall be sealed and, if carrying combustibles, provided with a screened vent on each end. Vent standpipes and location markers should be located and constructed outside the clear zone, so as not to interfere with maintenance of the highway nor to be concealed by vegetation; preferably they should stand on a fence or right-of-way line, or in a protected location such as behind guardrail.

## **Section 18-68. Electric and Communication Lines**

### (a) Overhead

#### (1) General

A consideration for locating poles, guys and related facilities along the highway is the width of the space between the edge of shoulder or curb line and the right-of-way line and its availability and suitability for accommodating such facilities. The safety, maintenance, efficiency, and appearance of the highway are enhanced by keeping this space as free as practical from encroachment by obstacles above the ground. Poles, guys, or other facilities shall not be located in a highway median. Where the road makes a curve, the conductor overhangs the road without crossing from one side to the other, all crossing, and longitudinal clearance criteria must be met. In all construction details not specifically covered herein, the current requirements of the National Electrical Safety Code shall govern.

#### (2) Type of Construction

(A) Longitudinal installations within highway right-of-way should be limited to single pole type of construction. Joint-use single pole construction is encouraged, as indicated by Rule 222 of Part 2 of the National Electrical Safety Code, at locations where more than one utility or type of facility is involved. This is of particular significance at locations where right-of-way widths approach the minimum needed for safe operations or maintenance requirements, or where separate installations may require extensive removal or alteration of trees.

(B) Self-supporting poles or towers and/or dead-end construction should be employed at all highway crossings of overhead lines. The prime concern is the safety and appearance of the crossing. It is necessary to assure that structures will not fall or allow conductors to drop on the roadway and become a hazard. The National Electrical Safety Code, Section 24 through 26, sets forth the strengths required for grades of construction for different situations. Construction that complies with this part of the Code will meet the division's requirements. No lines shall be attached to trees or any other items not specifically designed and constructed for carrying them.

#### (3) Vertical Clearance

The minimum vertical clearance for overhead electrical and communication lines shall conform to the current National Electrical Safety Code (See Figures 1 and 4). Cable television lines and individual television lead-in wires shall not be placed above existing power lines.

#### (4) Location

(A) Poles and related facilities should be located at the right-of-way line, or as near the right-of-way line as possible, outside of all intersecting radii and the Division's maintenance operating areas. As a minimum, the poles should be located outside the applicable clear zone for the highway section involved. This location is to be consistent with the standards applied to the elimination of other obstacles. On curbed sections in urban areas, the utilities should be located as far as practical behind the face of the curb and, where feasible behind the sidewalk. Exception to these clearances may be made where poles and guys can be placed at locations behind guardrails, deep drainage ditches, toe or top of steep slopes, retaining walls and other similarly protected locations, or where they are of a breakaway type design. The nature and extent of highway development and the ruggedness of the terrain

being traversed are controlling factors for locating poles, guys and related facilities near the right-of-way line.

(B) Location of overhead utility installations on roadways with narrow right-of-way or on urban streets with abutting improvements are special cases which must be resolved in a manner consistent with the prevailing limitations and conditions. Before locating the utility at other than the right-of-way line, consideration should be given to designs employing self-supporting, armless, single pole construction, with vertical alignment of wires or cables, or other techniques permitted by government or industry codes that are conducive to a safe traffic environment.

(C) Where irregular shaped portions of the right-of-way are involved, variances in location from the right-of-way line may be allowed as necessary to maintain a reasonably uniform alignment for longitudinal installations.

#### (5) Service Drops and Guy Wire

Guy wires to ground anchors and stub poles should not be placed between a pole and the traveled way where they encroach upon the clear zone. No poles, stubs for guys, or anchors should be located in such a manner as to interfere with highway maintenance activities. An installation, made in accordance with an approved permit or utility agreement, covers future construction of service drops and guy wires where no poles or stubs are to be located within the roadway right-of-way, and the installation conforms with this manual.

#### (b) Underground

##### (1) General

All the regulations previously outlined for pipelines shall be applied to underground installations of electric and communication lines, except as indicated below.

##### (2) Crossings

Buried cable crossings under paved roads will require conduit if diameter of the bore is in excess of three (3") inches. In all cases, the conduit will be extended a minimum of two (2') feet beyond the edge of the roadway; however, if the entire right-of-way is being crossed, then the conduit limits shall be the same as required for pipeline encasement (See Figure 2). Buried cable crossings shall be marked in conformance with the requirements for pipeline crossing.

##### (3) Longitudinal Installations

The burial of cable along the edge of pavement may be by direct burial or trenching methods, maintaining a minimum offset of three (3') feet where the width of the shoulder permits. A minimum depth of twenty-four (24") inches below the lowest point of the typical road cross section is required unless the existence of rock prohibits. If rock or hard shale is encountered, and upon the approval of the County Engineer, the depth of direct burial may be reduced to sixteen (16) inches.

##### (4) Backfill Requirements

Backfilling of the direct burial furrow shall be done with suitable material free from rock or large lumps, which could create a void during compaction. Unless otherwise specified by the County Engineer, the spoil removed by the plow will be placed over the furrow and tracked down by the plow, this operation being repeated until the area of the furrow is thoroughly compacted. Where trenching methods are used, backfilling will be done in accordance with the requirements shown under pipelines.

(c) Installations on Roadway Structures

(1) General

Attaching utility lines to a roadway structure can materially affect the safe operation of traffic, the structure, and the efficiency of maintenance. Where it is feasible and reasonable to locate utility lines elsewhere, attachments to roadway structures will not be permitted. However, where other locations prove to be extremely difficult and unreasonably expensive, consideration will be given for attaching the utility line to a roadway structure. The method should conform to logical engineering considerations for preserving the highway, its safe operation, maintenance and appearance. The following considerations apply:

- (A) Since roadway structure designs and site conditions vary, the adoption of standardized methods to accommodate utility facilities on structures is not feasible. Each proposed attachment will be considered on its individual merits.
- (B) Attachment of a pipeline carrying a combustible transmittant will not be permitted. Consideration may be given if applicant demonstrates that no feasible alternative exists and, further, provided that the elevation of the installation is above the fifty (50) year floodplain elevation.
- (C) Attachment of a utility will not be considered unless the structure in question is adequate to support the additional load and can accommodate the facility without compromising roadway features, including reasonable ease of bridge maintenance.
- (D) Manholes will not be allowed in bridge decks.
- (E) Installations that would inhibit access to any structural part for painting or repair will not be allowed.
- (F) The installation must maintain minimum appropriate vertical clearances.
- (G) Support rollers, saddles and hangers, should be padded or coated to muffle vibrations.
- (H) Electric and communication lines shall be insulated, grounded, and carried in protective conduit from point of exit.

(2) Existing Bridges

An application for the placement of any installation on an existing bridge shall be accompanied by a complete description and plans. This information must include the weight per lineal foot of each line and details of the proposed method of attachment. The following conditions apply:

- (A) As a general rule, welding to main steel members or anchoring to the concrete deck, parapet, or sidewalk will not be approved.
- (B) All installations shall be placed below the elevation of the bridge floor.
- (C) Trenching in the vicinity of piers or abutments shall be kept at a minimum of two and a half (2-1/2) times the depth of the trench to prevent under cutting or sloughage of material from under the footing into the trench. An application involving reduction of existing waterway area will not be approved.

### (3) New Bridges

The placement of utility lines or other facilities on new bridges will be approved only in accordance with the following conditions:

- (A) The applicant is responsible for obtaining any desired information regarding the Division's proposed construction schedule.
- (B) Applicant shall submit complete plans and specifications of their proposed installation, including the weight per lineal foot and detail drawings, prior to the Division's completion of plans and specifications for the proposed bridge or drainage structure.
- (C) The applicant shall bear all related engineering and construction costs incurred by the Division.

## **Section 18-69. Stormwater Culverts**

Where culverts are required to maintain the integrity of roadside drainage, the minimum culvert diameter and slope shall be determined by the Division. The minimum number of inlets and/or manholes required for proper operation and maintenance shall be established by the Division. The responsibility for maintenance of all culverts remains with the Permittee. The Division shall maintain only culverts that are essential to the protection of a County-maintained road or bridge. All stormwater conduits installed under driveways or within County rights-of-way shall conform to applicable specifications stated in Figure 6. Minimum cover for stormwater culverts shall be as recommended by the manufacturer for the size, type, and quality of pipe utilized. All stormwater culverts shall be designed in accordance with the County Stormwater Management Design Manual.

## **Section 18-70. Driveways**

### (a) Generally

It shall generally be prohibited for a commercial driveway to enter a road that is exclusively residential. The County Engineer may grant exceptions if the property's only access is the residential road or if a second entrance on the residential road improves the safety of the motoring public. If an exception is granted, the County Engineer may condition the approval by requiring road improvements including (but not limited to) road widening, shoulder improvements, turn lanes, drainage work, and the like.

### (b) Standards

(1) Driveway installations shall conform to the details indicated on Figures 5A, 5B, and 6 of the Appendix. Other details regarding driveways shall conform to the SCDOT Manual entitled "Standards for Driveway Entrances to Highways" (latest edition), or any replacement document when adopted.

(2) On corner lots, driveway entrances shall not be constructed within twenty-five (25') feet of the intersection of the rights-of-way including any sight triangles on any residential type road. Nor shall entrances be constructed within forty (40') feet of the intersection of the rights-of-way on any collector or residential type road intersecting with any collector or arterial road.

(3) Where multiple flag-lots are two (2) or three (3) deep, a single easement must be established to create a minimum twenty (20') feet shared access for these lots. This shared access may not serve more than three (3) lots. On easements needed for more than three (3) flag lots the minimum allowances for street entrances shall apply.

(4) No concrete will be allowed except if a concrete curb is present on the intersecting road and a construction joint is placed at the street junction. In addition, there shall be a six (6") inch thickness within the right-of-way.

### **Section 18-71. Preservation, Restoration and Cleanup**

#### (a) Disturbed Areas

The size of the disturbed area shall be kept to a minimum. Construction methods, erosion control, and revegetation must be in accordance with The South Carolina Department of Transportation (SCDOT) specifications and County ordinances pertaining thereto. Adequate measures shall be taken to prevent erosion and to restore vegetation along the length of the construction area. Unsatisfactory restoration work shall be promptly corrected by the applicant. If necessary, unsatisfactory restoration work will be accomplished by the Division and billed to the permittee. Issuance of an Encroachment Permit does not relieve the Permittee from complying with other applicable Federal, State or Local laws, rules or regulations.

#### (b) Drainage

Care must be taken to avoid disturbing existing drainage facilities. Underdrains shall be provided where necessary. No jetting or puddling shall be permitted under the roadway.

#### (c) Trees and Vegetation

When it becomes necessary to remove trees and vegetation for installation of the proposed facility, the Permittee shall minimize the amount of vegetation disturbed. Where the root systems of trees are substantially damaged by the Permittee's activities, the tree(s) shall be removed during the construction activity. Trees that die within one (1) year of the Permittee's construction activity shall be removed at the Permittee's expense.

### **Section 3. Repeal**

Ordinance Numbers 2320 and 2420 are hereby repealed. All ordinances or parts of ordinances in conflict with this Ordinance, or inconsistent with its provisions, are hereby repealed or superseded to the extent necessary to give this Ordinance full force and effect.



**Section 4. Severability**

Severability is intended throughout and within the provisions of this Ordinance. If any section, subsection, sentence, clause, phrase or portion of this Ordinance is held to be invalid or unconstitutional by a court of competent jurisdiction, then that decision shall not affect the validity of the remaining portions of this Ordinance.

**Section 5. Effective Date**

This ordinance shall become effective on the date of its adoption.

**DONE IN REGULAR MEETING THIS 1<sup>st</sup> DAY OF APRIL, 2003.**

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Phyllis Henderson, Chairman  
Greenville County Council

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Steven Stewart  
County Administrator

Attest:

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Theresa Kizer,  
Clerk to Council