



## **APPLICATION REQUIREMENTS FOR NEW WIRELESS TELECOMMUNICATIONS FACILITIES AND CO-LOCATIONS THAT INCREASE THE HEIGHT OF THE STRUCTURE SITE PLAN APPROVAL**

This application is to be completed in full and submitted with seven complete sets of the site plan, additional items on the attached checklist, Functional Performance Standards, Functional Performance Standards Compliance Guaranty, a completed Notice of Intent (NOI) and the appropriate nonrefundable administrative fee. A Building Permit may also be required. Building Permit applications must be reviewed separately by the Codes Division. A separate fee may also be required for Building Permits. The site plan shall include the following information:

- Name and location of development with vicinity map showing major roadways;
- Name, address and telephone number of developer and surveyor, engineer or person preparing site plan;
- Tax parcel number, date, scale and zoning of the property;
- Shape and dimensions of lot and location of existing or proposed driveway(s);
- Proposed location, dimensions, setbacks and intended use of buildings/structures, height and square footage of all buildings/structures; number of floors of each building; and principle type of construction of buildings/structures (metal, concrete block, etc.);
- Current land uses of property on all sides of development;
- Delineate requirements for landscaping and bufferyards; indicate the required bufferyards, plan unit multiplier, total number of required plants, specific plant type and minimum planting size (Planning staff will provide assistance in this determination when requested);
- Proposed location of any fence;
- Proposed location of exterior light devices and/or sources with area(s) to be illuminated; and

The following notes must appear on all site plans:

- "All bufferyard areas not devoted to plants shall be seeded with lawn grass or suitable ground cover."
- "Owner shall be responsible for the perpetual care, maintenance and replacement of all required plant materials."

**PROPOSED USE(S) OF TOWER/ANTENNA (I.E. NEW, CO-LOCATE INCREASING HEIGHT OF TOWER, ETC.):**

---

**APPLICANT NAME:** \_\_\_\_\_ **PHONE #:** \_\_\_\_\_

**ADDRESS OF APPLICANT:** \_\_\_\_\_

**TOWER OWNER NAME:** \_\_\_\_\_ **PHONE #:** \_\_\_\_\_

**ADDRESS OF TOWER OWNER:** \_\_\_\_\_

**ADDRESS/LOCATION OF DEVELOPMENT:** \_\_\_\_\_

---

**TAX PARCEL NUMBER OF DEVELOPMENT:** \_\_\_\_\_

**Note: Review and approval of this site plan may require at least 30 working days. Failure to provide any of the previously noted information may delay approval of the site plan.**

**I hereby submit the following for review and approval: (check all which are applicable)**

- Seven site plans
- Functional Performance Standards
- Functional Performance Standards Compliance Guaranty
- Notice of Intent (NOI) Form
- Development Permit Review Fee (\$10,000.00)

**SIGNATURE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**NAME (Printed):** \_\_\_\_\_ **TITLE:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

**PHONE #:** \_\_\_\_\_

## ADDITIONAL ITEMS REQUIRED FOR SITE PLAN APPROVAL

- The application must provide documentation to verify it has the right to proceed as proposed on the site. This requires an executed copy of the lease with the owner or a signed letter of agency acknowledging authorization for the applicant to erect a tower or co-locate on the site. If the applicant owns the site, a copy of the ownership documents is required.

The application shall include the following statements in writing:

- "The proposed wireless telecommunications facility shall be maintained in a safe manner, and in compliance with all conditions of the permit, without exception, unless specifically granted relief by the County in writing, as well as all applicable and permissible local codes, ordinances, and regulations, including any and all applicable and permissible local codes, ordinances, and regulations, including any and all applicable County, State and federal laws, rules, and regulations."
- "The construction of the wireless telecommunications facility is legally permissible, including, but not limited to the fact that the applicant is authorized to do business in the State and County."

An application for a new wireless telecommunications facility or for a co-location that increases the height of a structure shall contain the following information:

### Documentation of Need for Facility

- A description and explanation of the specific objective(s) of the new facility or material modification of the existing wireless facility, expressly including and explaining the purpose and need for the facility, such as coverage and/or capacity needs or requirements and the specific geographic area of intended coverage; and
- Technical documentation that demonstrates the need for the facility. Such documentation shall include a propagation study of the proposed site and all adjoining planned, proposed or existing sites that illustrates any significant gaps in coverage. If a capacity issue is involved, include an analysis of the current and projected usage in the serve area.

### Ownership and Management

- The name, address and phone number of the person preparing the application;
- The name, address, and phone number of the property owner and the applicant, including the legal name of the applicant. If the owner of the facility is different than the applicant, the owner's name and all necessary contact information shall be provided;
- The postal address and tax map parcel number of the property; and
- A copy of the FCC license applicable for the intended use of the facility.

### Zoning and Planning

- The zoning district or designation in which the property is situated;
- The size of the property on which the structure to be attached is located, stated both in square feet and acres, and a survey showing the location and dimensions of all lot lines, fall zone, and the location, size and height of

all existing structures located within 110% of the fall zone on the property on which the structure is located that is the subject of the application and on those portions of adjacent properties which are located within the fall zone;

- If attaching to an existing wireless telecommunications facility identifying all users and attachments to the wireless telecommunications facility and all related fixtures, structures, appurtenances and apparatus, including height above pre-existing grade, materials, color and lighting;
- If attaching to a building or other structure, a site plan and elevation drawing showing the proposed attachments and all related fixtures, structures, appurtenances and apparatus, including height above the roof or balustrade, whichever is appropriate;
- The azimuth, size and center line height location of all proposed and existing antennas on the supporting structure;
- The type, location, and dimensions of all proposed and existing landscaping and fencing;
- The number, type and design of the telecommunications tower(s) and antenna(s) proposed and the basis for the calculation of the wireless telecommunications facility's capacity to accommodate multiple users; and
- The applicant shall disclose in writing any agreement in existence prior to submission or during the application that would limit or preclude the ability of the applicant to share any new wireless telecommunication facility that it constructs.

### **Safety**

- If attaching to an existing tower, the age, make, model, type (guyed, self-supporting lattice or monopole) and manufacturer of the tower and the structural design characteristics, certified by a Professional Civil or Structural Engineer licensed in the State of South Carolina, certifying the tower's capability to safely accommodate the applicant's antennas without change or modification;
- If any material modification of the tower or other structure is needed, a detailed narrative explaining what changes are needed, why they are needed, and who will be responsible for such changes;
- If attaching to an existing structure other than a tower, a structural report signed and sealed by a Professional Civil or Structural Engineer licensed to do business in the State of South Carolina certifying the structural adequacy of the structure to accommodate the proposed wireless facility(s), including any equipment shelter, unless the equipment shelter is located on the ground floor or lowest floor of a building;
- A statement certifying that the proposed telecommunications facility will be operated in compliance with the FCC's current (Radio Frequency) RF emissions standards;
- The applicant will provide a written copy of an analysis completed by a qualified individual or organization to determine if the proposed new wireless telecommunications facility is in compliance with Federal Aviation Administration Regulation Part 77 and if it requires lighting. This analysis shall also be required for any existing structure or building where the application increases the height of the structure or building. If this analysis determines that an FAA determination is required, the FAA determination shall be provided prior to the issuance of any building permit for the facility;
- In the case of a new wireless communications facility, the applicant shall submit a written report demonstrating

its meaningful efforts to secure shared use of the existing wireless communications facilities or the use of other structures within the County that are at or above the surrounding tree height or the tallest obstruction within one (1) mile of the proposed wireless communications facility. Copies of such requests and responses for shared use shall be provided to the County in the application, along with any letters of rejection;

- The applicant shall examine the feasibility of designing the proposed wireless telecommunications facility to accommodate future demand for additional commercial applications. The wireless communications facility shall be structurally designed to accommodate at least three (3) additional antenna arrays equal to those of the applicant. This requirement may be waived, provided that the applicant, in writing, certifies that the provisions of future shared usage of the wireless communications facility is not technologically feasible, is commercially impracticable, or creates an unnecessary and unreasonable burden;
- The applicant shall provide certification from a professional civil or structural engineer licensed in the State that the telecommunications facility is designed and will be constructed to meet all County, State, and Federal structural requirements for loads, including wind and ice loads and including but not limited to all applicable ANSI (American National Standards Institute) guidelines;
- If the proposal is for a co-location or modification on an existing tower, the applicant is to provide signed documentation of the tower condition in the form of an ANSI Report as per Annex E, Tower Maintenance and Inspection Procedures, ANSI/TIA/EIA-222F or the most recent version. The inspection report must be performed every three (3) years for a guyed tower and five (5) years for monopole and self-supporting towers;
- If the application is for a new tower, a new antenna attachment to an existing structure other than a tower, or a material modification to an existing structure, the applicant shall furnish a Visual Impact Assessment, which shall include digital pictorial representations of “before and after” (digital photo simulations) views from key viewpoints inside of the County as may be appropriate and required, including but not limited to state highways and other major roads; state and local parks; other public lands; historic districts; preserves and historic sites normally open to the public; and from any other location where the site is visible to a large number of visitors, travelers or residents. The applicant shall provide a map showing the locations of where the digital pictures were taken and the distance from the proposed structure;
- The applicant shall demonstrate and provide in writing and/or by drawing how it shall effectively screen from view the base and all related equipment and structures of the proposed wireless facility;
- The wireless facility and any and all accessory or associated facilities shall maximize the use of building materials, colors and textures designed to blend with structure to which it may be affixed and/or to harmonize with the natural surroundings. This shall include the utilization of stealth or camouflage or concealment as feasible; and
- At a wireless telecommunications facilities site an access road shall be provided to assure adequate emergency and service access.

The owner of any wireless telecommunications facility approved pursuant to this Chapter shall negotiate in good faith for the shared use of the proposed wireless telecommunications facility by other wireless service providers and/or local government in the future, and shall:

1. Respond within 60 days to a request for information from a potential shared-use applicant; and
2. Negotiate in good faith concerning future requests for shared use of such wireless communications facility by other telecommunications providers; and

3. Allow shared use of the wireless communications facility if another telecommunications provider agrees in writing to commercially reasonable terms; and
4. Allow Aiken County to share the wireless telecommunications facility for emergency services and government use at no cost.

All utilities at a wireless telecommunications facility site shall be installed underground and in compliance with all laws, ordinances, rules and regulations of the County, State, or United States including specifically, but not limited to the NFPA Life Safety Code and the National Electrical Code where appropriate.

All wireless telecommunications facilities shall be constructed, operated, maintained, repaired, provided for removal of, modified or restored in strict compliance with all current applicable technical, safety and safety-related codes adopted by the County, State, or United States, including but not limited to the most recent editions of the ANSI Code, National Electrical Safety Code and the National Electrical Code, as well as accepted and responsible workmanlike industry practices and recommended practices of the National Association of Tower Erectors. The codes referred to are codes that include, but are not limited to, construction, building, electrical, fire, safety, health, and land use codes. In the event of a conflict between or among any of the preceding, the more stringent shall apply.

There shall be a pre-application meeting for all intended applications. The purpose of the pre-application meeting will be to address issues that will help to expedite the review and permitting process.

#### **Shared Use of Wireless Telecommunications Facilities and Other Structures**

- The applicant shall submit a comprehensive report inventorying all existing wireless telecommunications facilities and other suitable structures within one (1) mile of the location of any proposed new wireless telecommunications facility, unless the applicant can show that some other distance is more appropriate and reasonable, and demonstrate conclusively why an existing wireless telecommunications facility or other suitable structure cannot be used.

The County, as opposed to the construction of a new wireless telecommunications facility, requires wireless facilities to be located on existing wireless telecommunications facilities or other structures without increasing the height of the wireless telecommunications facility or structure, unless such is proven to be technologically impracticable.

An applicant intending to locate on an existing wireless telecommunications facility or other suitable structure shall be required to document the intent of the existing owner to permit its use by the applicant.

#### **Visibility of Wireless Telecommunications Facilities**

Wireless telecommunications facilities shall not be artificially lighted or marked except as required by law.

All new wireless telecommunications facilities, including but not limited to towers shall utilize stealth or camouflage techniques and technology to the extent such is commercially or technologically practicable.

Towers shall be galvanized and/or painted with a rust-preventative paint of an appropriate color to harmonize with the surroundings and shall be maintained in accordance with the requirements of this Section 24-3.5.

If lighting is required, it shall be provided pursuant to current Federal regulations and guidelines.

If attached to a building, all antennas shall be mounted on the facade of the building and camouflaged so as to match the color and, if possible given the facts and circumstances involved.

In the event a wireless telecommunications facility that is lighted is materially modified, at the time of the modification the County may require that the tower be retrofitted with the lighting technology currently required by FAA regulations and guidelines.

### **Security of Wireless Telecommunications Facilities**

All wireless telecommunications facilities and antennas shall be located, fenced or otherwise secured in a manner that prevents unauthorized access. Specifically:

All antennas, towers and other supporting structures, including guy anchor points and wires, shall be made inaccessible to individuals and constructed or shielded in such a manner that they cannot be climbed or collided with; and

Transmitters and telecommunications control points shall be installed in such a manner that they are readily accessible only to persons authorized to operate or service them.

### **Setbacks**

- All wireless telecommunications facilities shall be setback from abutting parcels, existing structures including habitable (residential) buildings, and right-of-way of roads and streets by the greater of the following distances: the fall zone plus 10%, or the existing setback requirement of the zoning district, whichever is greater. Any accessory structure shall be located so as to comply with the applicable minimum setback requirements for the property and zoning district in which it is situated; and
- There shall be no development or construction of habitable (residential) buildings within the fall zone or setback area set forth in the immediately-preceding Section 24-3.5.13(A). The applicant shall provide written proof that the owner of property on which tower is proposed to be erected has been notified of this limiting provision regarding habitable (residential) buildings. Such proof of notification of this limiting provision shall be in the form of a written and properly-executed agreement between the applicant and the owner of the property, or in other form which is approved by the Planning and Development Director.

### **Removal and Performance Security**

- The applicant and the owner of record of any wireless telecommunications facility shall, at its cost and expense, be required to execute and file with the County a bond or other form of security acceptable to the County as to type of security and the form and manner of execution, in an amount of at least \$75,000.00 for a wireless telecommunications facility and \$25,000 for a co-location on an existing wireless telecommunications facility or other structure and with such sureties as are deemed sufficient by the County to assure the faithful performance of the terms and conditions of this Section 24-3.5 and conditions of any permit issued pursuant to this Section 24-3.5. The full amount of the bond or security shall remain in full force and effect throughout the term of the permit and/or until any necessary site restoration is completed to restore the site to a condition comparable to that which existed prior to the issuance of the original permit.

### **Liability Insurance**

- A holder of a permit for wireless telecommunications facilities shall secure and at all times maintain public

liability insurance for bodily injures, death and property damage, umbrella insurance coverage, automobile insurance coverage, and workers compensation insurance for the duration of the permit in amount as set forth below:

Commercial general liability covering bodily injures, death and property damage: One million dollars (\$1,000,000) per occurrence/two million dollars (\$2,000,000) aggregate; and

Automobile Coverage: One million dollars (\$1,000,000) per occurrence/two million dollars (\$2,000,000) aggregate; and

Three million dollars (\$3,000,000) umbrella coverage; and

Workers compensation in statutory amounts.

For wireless telecommunications facility on property owned or leased by the County, the commercial general liability insurance policy shall specifically include all of the County and its officers, officials, appointees, employees, attorneys, agents and consultants as additional insured(s).

The insurance policies shall be issued by an agent or representative of an insurance company licensed to do business in the State and with a Best's rating of at least A.

The insurance policies shall contain an endorsement obligating the insurance company to furnish the county with at least thirty (30) days prior written notice in advance of the cancellation of the insurance.

Renewal or replacement policies or certificates shall be delivered to the county at least fifteen (15) days before the expiration of the insurance that such policies are to renew or replace.

Before construction of a permitted wireless telecommunications facility is initiated, but in no case later than fifteen (15) days after the issuance of the permit, the holder of the permit shall deliver to the county a copy of each of the policies or certificates representing the insurance in the required amount.

A certificate of insurance that states that it is informational purposes only and does not confer rights upon the county shall be deemed to not comply with this Section.

### **Compliance State and Federal Laws and Regulations**

Application fees for wireless telecommunication facilities will be as follows:

- Towers and co-locations that increase the height of the structure: \$10,000.



## AIKEN COUNTY LAND MANAGEMENT REGULATIONS FUNCTIONAL PERFORMANCE STANDARDS

### Section 24 - 3.3 Manufacturing, Commercial, and Other Nonresidential Uses

The following performance standards are designed to ensure that all permitted manufacturing, commercial, and other nonresidential uses listed in Table 1, Permitted Uses, produce no injurious or obnoxious elements related to the operation of such uses beyond the premises.

Please indicate whether the following standards apply by checking the appropriate space below.

**(1) Vibration:**  **Applicable**  **Not Applicable**

No vibration shall be produced which is transmitted through the ground and is discernible without the aid of instruments at any point beyond the lot line; nor shall any vibration produced exceed the following particle velocity levels, measured with a vibration monitor in inches per second at the nearest:

- a) Residential property line: 0.02
- b) Nonresidential property line: 0.10

Vibration emanating from construction activities between 7:00 A.M. and 9:00 P.M. shall be exempt from these regulations.

**(2) Fire and explosives:**  **Applicable**  **Not Applicable**

All activities and all storage of flammable and explosive materials shall be provide with adequate safety devices against the hazards of fire and explosion, including adequate firefighting and fire suppression equipment, as prescribed in the International Building Codes.

**(3) Noise:**  **Applicable**  **Not Applicable**

All noise shall be muffled so as not to be objectionable due to intermittence, beat frequency or shrillness. In no event shall the sound pressure level of noise radiated continuously from a facility exceed at the lot line the following values in any octave band or frequency. Sound pressure level shall be measured with a sound level meter and an octave band analyzer that conform to specifications published by the American Standards Association.

Frequency Band (Cycles Per Second)	Sound Pressure Levels (In Decibels)	
	At Residential Lot Line	At Non-Residential Lot Line
0 – 75	72	79
75 – 150	67	74
150 – 300	59	66
300 – 600	52	59
600 – 1200	46	53
1200 – 2400	40	47
2400 – 4800	34	41
4800 – 10000	32	39

**(4) Air pollution:**  **Applicable**  **Not Applicable**

The emission of visible smoke, dust, dirt, fly ash, particulate matter from any pipes, vents, or other openings, or from any other source into the air, shall comply with the regulations of the South Carolina Department of Health and Environmental Control.

**(5) Odor:**  **Applicable**  **Not Applicable**

When an industrial plant is operating at close to maximum production the odors emissions, measured at the property line, shall not exceed a D/T (Dilution Threshold) of 100. Odor samples shall be taken and tested by an independent, qualified, odor-testing laboratory using ASTM (American Society of Testing and Materials) method of E79-91.

**(6) Glare:**  **Applicable**  **Not Applicable**

There shall be no direct or sky-reflected glare, whether from floodlights, high temperature processing, combustion, welding or otherwise, so as to be visible in any residence.

**(7) Fumes and vapors:**  **Applicable**  **Not Applicable**

There shall be no emission of any fumes or vapors of a noxious, toxic, or corrosive nature, which can cause damage or irritation to health, animals, vegetation, or to any form of property.

**(8) Heat, cold, dampness or movement of air:**  **Applicable**  **Not Applicable**

Activities which would produce an adverse impact on the temperature, motion, or humidity of the atmosphere beyond the lot line shall not be permitted.

**(9) Toxic matter:**  **Applicable**  **Not Applicable**

The applicant of a permit for any facility which would utilize toxic matter in the process of manufacturing, fabricating, assembling, packaging, or any related activity, shall provide with the application a certificate from the South Carolina Department of Health and Environmental Control, indicating compliance with the rules and regulations of such agency.

**(10) Exterior illumination:**  **Applicable**  **Not Applicable**

All outdoor light fixtures shall be fully shielded and installed in such a way that no light is emitted above a horizontal plane running through the lowest part of the fixture. Low-pressure sodium should be used wherever possible. The pattern of light pooling from each light source shall be carefully considered to avoid throwing light onto adjacent properties. Light sources visible in residential or medical areas shall not exceed 0.1-foot candles. Light sources visible in other areas shall not exceed 0.5-foot candles. Measurements shall be in a vented plane at the property line.

**(11) Compliance guarantee:**  **Applicable**  **Not Applicable**

The applicant of a permit for any manufacturing or processing plant or commercial or other nonresidential use which could produce any of the above "injurious or obnoxious elements" shall acknowledge in writing his or her understanding of the performance standards applicable to the proposed use and shall submit with the permit application an agreement to conform with such standards at all times. Any violation of the agreement shall constitute a violation of this chapter and shall be treated accordingly. Enforcement of this agreement may be precipitated by complaint from any person allegedly aggravated by failure of the industrial use to comply with the provisions of this section. Where there is a potential problem in meeting any one of the performance criteria in this section, the applicant shall be required to mitigate to the satisfaction of the Planning and Development Director any potential adverse impacts of such operation and/or request a variance before the board of appeals, in accord with the provisions of Article 10.



www.aikencountysc.gov

Aiken County
Planning and Development Department
1930 University Parkway, Suite 2800
Aiken, SC 29801
(803) 642-1520

FUNCTIONAL PERFORMANCE STANDARDS COMPLIANCE GUARANTY
FOR MANUFACTURING, COMMERCIAL, & NON-RESIDENTIAL USES

This is to acknowledge that I, \_\_\_\_\_, as

[ ] Owner [ ] Executive Officer of \_\_\_\_\_
(Business Name)

have been provided a questionnaire concerning Chapter 24, Section 3.3 of the Land Management Regulations, Aiken County Code of Ordinances, which requires that certain performance standards governing manufacturing, commercial, and other nonresidential uses are designed to prevent potential injurious or obnoxious elements related to such operations from extending beyond the premises. I understand the requirements of said provisions of Section 3.3 of the Aiken County Code, that have indicated the specific functional performance standards, if any, which are applicable to my proposed development, and agree to conduct the business located at \_\_\_\_\_
(Address)

in compliance with such applicable standards at all times. I also understand that any violation of this Guaranty shall constitute a violation of Section 3.3, Land Management Regulations, and shall be treated accordingly, unless and until remedied to the satisfaction of Aiken County.

\_\_\_\_\_
Date

\_\_\_\_\_
Owner/Executive Officer

\_\_\_\_\_
Name (printed)

Sworn to me before this \_\_\_\_\_
day of \_\_\_\_\_, 20\_\_\_\_\_

Notary Public of: \_\_\_\_\_

My Commission expires on: \_\_\_\_\_



www.aikencountysc.gov

Aiken County
Stormwater Division
1930 University Parkway, Suite 3300
Aiken, SC 29801
(803) 642-1535

STORM WATER MANAGEMENT PERMIT APPLICATION
FOR LAND DISTURBING ACTIVITIES (NOI) ON PROJECTS LESS THAN ONE ACRE

Date: Project Description/ Site Name:

I. Project Information

Project Owner (company or person):
Permit Contact (if owner is company): Company EIN:
Mailing Address: City: State: Zip:
Phone: (Day) Cell: FAX:

II. Property Information

Site Location (street address, nearest intersection, etc.):
City/Town (if in limits): Tax Map # (list all):

III. Site Information

A. Disturbed area (to the nearest tenth of an acre): acres Total area:
B. Is this project part of a Larger Common Plan for Development or Sale (LCP)? Yes No
If yes and the total disturbed area of this project and the LCP is equal to or greater than one acre then you must apply for permit coverage under the NPDES General Permit SCR100000.
C. Start Date: (MM/DD/YYYY) Completion Date:
D. Is this NOI being submitted in response to a Notice to Comply issued by S.C. DHEC or Aiken County? Yes No
E. Type of Activity (check all that apply):
Commercial Residential: Single-family Linear (Roads, utility lines, etc.) Other:
Institutional Residential: Multi-family Site Preparation (No new impervious)
F. Are there any flooding problems downstream or adjacent to this site?

IV. Waterbody Information

A. Nearest receiving waterbody(s): Distance to this waterbody (feet):

V. Signatures and Certifications: DO NOT SIGN IN BLACK INK!

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

I hereby certify that all land-disturbing construction and associated activity pertaining to this site shall be accomplished pursuant to and in keeping with the terms and conditions of the approved plans and SCR100000. I also certify that a responsible person will be assigned to the project for day-to-day control. I hereby grant authorization to the Department of Health and Environmental Control and/or the local implementing agency the right of access to the site at all times for the purpose of on-site inspections during the course of construction and to perform maintenance inspections following the completion of the land-disturbing activity. (See Section 122.22 of S.C. Reg. 61-9 for signatory authority information.)

Printed Name of Project Owner/Operator

Signature of Project Owner/ Operator

Date

# EROSION AND SEDIMENT CONTROL FOR HOME BUILDER



## **Erosion is a costly problem**

Eroding construction sites are a leading cause of water quality problem in South Carolina. For every acre under construction, about a dump truck and a half of soil washes into a nearby lake or stream unless the contractor uses erosion controls.

## **Problems caused by this sediment includes:**

**Local Taxes or Fees-** Cleaning up sediment in street, storm drains and ditches adds extra cost to county budget.

**Dredging-** The expense of dredging sediment from lakes, and detention ponds is a heavy burden for both the County and private property owners.

**Lower property values-** Neighboring property values are damaged when a lake or stream fill with sediment. Shallow areas encourage weed growth and create boating hazards.

**Poor fishing-** Muddy water drives away fish that rely on sight to feed. As it settles sediment smother gravel beds where fish like small mouth bass find food and lay their eggs.

**Nuisance growth of weeds and algae-** sediment carries fertilizer that fuel algae and weed growth.

## **Preserving Existing Vegetation**

- Wherever possible, preserve existing trees, shrubs and other vegetation.
- To prevent root damage, do not grade, place soil piles, or park vehicles near trees marked for preservation.
- Place plastic mesh buffer/tree save barriers around trees at drip line, to protect the root area below their branches

## **Controlling Erosion and Sedimentation**

Erosion control is important for all construction sites. The material needed are easy to find and relatively inexpensive- silt fence, stakes, rock slope drains grass seed, mulch or geo-textiles. Putting these materials to use is a straight forward process. Only a few controls are needed on most sites, however all erosion controls must be maintained daily.

- Use of a silt fence
- Use of a construction exit
- Temporary mulching / grassing
- Slope drains on all vertical slopes
- Rip rap at the outflow end of all storm drain and basins shall be installed.

## **Penalties**

- Court imposed penalties for violations carry a maximum fine of \$1000 and/or up to 30 days in jail.

## **Soil piles**

- Locate away from any down slope, street, driveway, stream, lake, wetland, ditch, or drainage way.
- Stabilize with mulch and /or vegetation. Temporary seed such as annual rye or winter wheat is recommended for topsoil piles.

## **State Water Buffers**

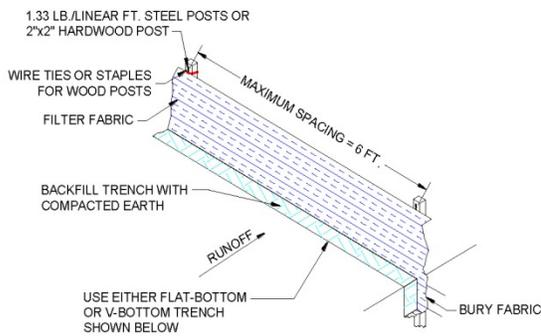
- Land disturbing (clearing, grubbing or grading) within 50 feet of the banks of **ALL** creek, streams, ponds, lakes, and wetlands must have two rows of state approved silt fence 10 feet apart with steel post spaced a maximum 6-feet centers with wire backing.

## **Sediment Cleanup**

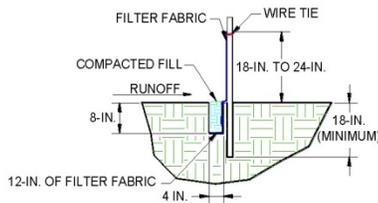
- By the end of each work day, sweep or scrape up soil tracked onto the road. Stabilize with mulch and/or vegetation on all areas at finish grade while maintaining normal erosion controls.

### Silt Fence

- Install prior to land disturbance
- Install on down slope side of site parallel to contour of land.
- Extend ends up slope enough to allow water to pond behind fence.
- Bury fabric/silt fence in trench 8 inches deep with 4 inch lip.
- Leave no gaps. Overlap section of silt fence, or twist ends of silt fence together.
- Inspect and repair daily. Remove sediment if deposits reach half the fence height.
- Use 2 rows of state approved silt fence adjacent to state waters, lakes, wetlands, and streams.



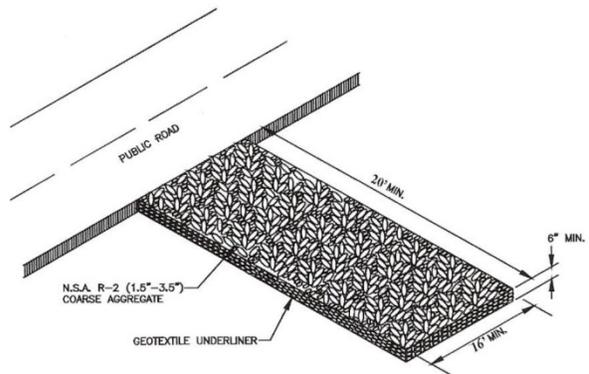
### SILT FENCE INSTALLATION



### FLAT-BOTTOM TRENCH DETAIL

### Home Building Construction Entrance/Exist Pad

- Install a construction Entrance/Exist Pad using 1.5 to 3.5 inch diameter aggregate.
- Lay stone 6 inches thick, at least 20 feet long from the back of curb or edge of pavement, and a minimum 16 feet wide.
- Use geo-textile underliner for entire pad.
- Use to prevent tracking mud onto the road by all vehicles.
- Must be maintained daily throughout construction.



**All Home Builder / Owners involved in residential construction in Aiken County must fill out and sign a Notice of Intent (NOI). This NOI is required by Aiken County and the Department of Health and Environmental Control (DHEC).**