









EROSION PREVENTION AND SEDIMENT CONTROL

QUICK REFERENCE

OCTOBER 2019











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# 2013 SCDOT CONSTRUCTION GENERAL PERMIT (PERMIT NO. SCR160000)

https://www.scdot.org/business/pdf/stormwater/ General\_Permit\_Storwater\_Discharge.pdf



South Carolina

NPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION CONSTRUCTION ACTIVITIES

In compliance with the provisions of the SC Pollution Control Act (S.C. Code Sections 48-1-10 et seq., 1976) and with the provisions of the Clean Water Act, 33 U.S.C. §1251 et. seq., (hereafter CWA or the Act, as amended by the Water Quality Act of 1987, P.L. 104, Operators of construction activities that are described in Section 1.3 of this National Pollutant Discharge Elimination System (NPDES) Permit, except for those activities excluded from authorization of discharge in Section 1.3.C of this Permit, are authorized to discharge pollutants to Surface Waters of the State in accordance with the conditions and requirements set forth herein. Permit coverage is required from the "commencement of construction activities" until "final stabilization" as defined in Appendix A.

Ann R. Clark

Ann R. Clark, Director
Stormwater, Construction, Agricultural, and Dams Permitting Division
Bureau of Water

 Permit No.:
 SCR160000
 Issued:
 October 15, 2012

 Effective:
 January 1, 2013
 Expires:
 December 31, 2017

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https://www.scdot.org/business/pdf/2007 full specbook.pdf

 The 2007 Standard Specifications for Highway Construction are available at the SCDOT Publications office in Room G-19 in the SCDOT Headquarters Building, 955

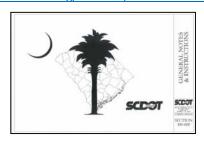
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### **SCDOT STANDARD DRAWINGS**

https://www.scdot.org/business/standard-drawings.aspx



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### **SCDOT REFERENCES**

### **SUPPLEMENTAL TECHNICAL SPECIFICATIONS**

https://www.scdot.org/business/road-technical-specs.aspx

ВМР	Spec. No. (Rev. Date)
SEEDING	SC-M-810-4 (07/17)
SEDIMENT TUBES	SC-M-815-1 (03/08)
SILT FENCE SYSTEMS	SC-M-815-2 (07/18)
COMPOST	SC-M-815-3 (04/11)
INLET STRUCTURE FILTERS	SC-M-815-8 (07/17)
ROLLED EROSION CONTROL PRODUCTS	SC-M-815-9 (07/17)
STABILIZED CONSTRUCTION ENTRANCE	SC-M-815-10 (07/18)
HYDRAULIC EROSION CONTROL PRODUCTS	SC-M-815-11 (04/11)
SEDIMENT TUBES FOR DITCH CHECKS	SC-M-815-12 (04/11)
STORMWATER MANUFACTURED TREATMENT DEVICES (MTDs)	SC-M-815-13 (07/15)
DEWATERING BAGS	SC-M-815-15 (11/11)
PERIMETER CONTROL	SC-M-815-17 (07/18)
FLOATING SKIMMER	SC-M-815-14 (01/18)
POROUS BAFFLES	SC-M-815-16 (08/13)
HYDRAULIC BIOTIC SOIL AMENDMENTS (HBSAs)	SC-M-815-18 (07/17)
ENHANCED STACKED DITCH CHECKS	SC-M-815-19 (07/17)

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### **SEDIMENT BASIN**



Sediment Basin information can be found in the SCDOT Stormwater Quality Design Manual in Section 3.2.2.2.

Design information on Surface Outlet and Baffle Sediment Basins can be found in Appendix A of the Stormwater Quality Design Manual. The design criteria is determined using the charts or graphs on SCDOT Standard Drawings 815-305-03, 815-305-04, and 815-305-05.

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### STORMWATER MANAGEMENT PROGRAM

### STORMWATER QUALITY DESIGN MANUAL

https://www.scdot.org/business/pdf/stormwater/ SCDOT SWQDM.pdf



### POLLUTION PREVENTION PLAN CHECKLIST

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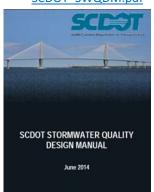


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### **GRASS REFERENCES**

### TEMPORARY VS. PERMANENT GRASSING

### **TEMPORARY COVER:**

- Where land disturbing activities have temporarily ceased and will not resume for a period exceeding 14 days, initiate temporary cover by seeding or mulch within 7 days.
- Initiate temporary cover by seeding within 45 days if the Project will not be worked for a period longer than 60 days.
- Summary table for temporary cover of all unstabilized areas:

Days	Action Required		
14	Maximum allowable time for unstabilized ceased land disturbing activities.		
21	Must have initiated temporary cover by mulch or seeding.		
45	If initial temporary cover was by mulch only, must initiate temporary cover by seeding.		
60	Temporary cover by seeding application complete.		

### **PERMANENT COVER:**

 Where land disturbing activities have permanently ceased and will not resume for a period exceeding 14 days, initiate permanent cover with seeding within 7 days.

# PERMANENT GRASSING FOR NON PERMITTED RESURFACING PROJECTS:

- Projects consisting of improving shoulders with a width < 6 feet due to backfill from resurfacing or upgrading deficient shoulders. No NOI required.
- Require application of HECP Type 3 with minimum application rate of 2,000 pounds per acre.
- Soil samples are not required, but may be done.

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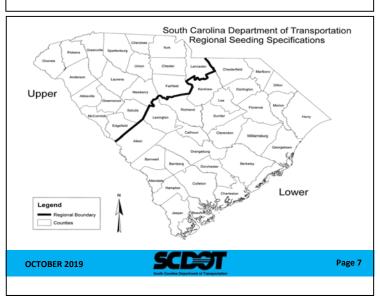
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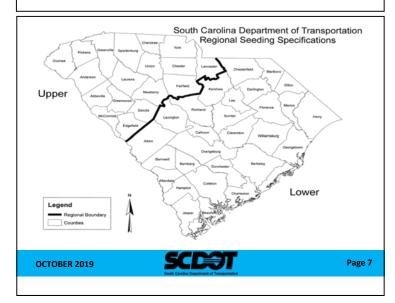
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PERENNIAL SEED TYPE	PLANTING DATES	RATE (LBS/ACRE)
Carpet Grass/Centipedegrass Combo (Turf Type)	March—August	15 10
Bermuda hulled (Turf Type)	March—August	50
Bahiagrass (Turf Type)	March—August	30
Tall Fescue (Turf Type-Upstate Only)	September—April	75
Weeping Love Grass	January—December	10
Sericea Lespedeza (Unscarified Seed)	January—December	80
White Clover	Feb.—April & Aug.—Nov.	5
ANNUAL SEED TYPE	PLANTING DATES	TEMPORARY COVER RATE (LBS/ACRE)
Crimson Clover	August—March	20
Browntop Millet	March—August	40
Rye Grain	August—April	110
Hairy Vetch	September—April	50



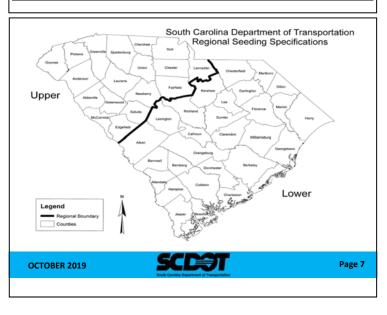
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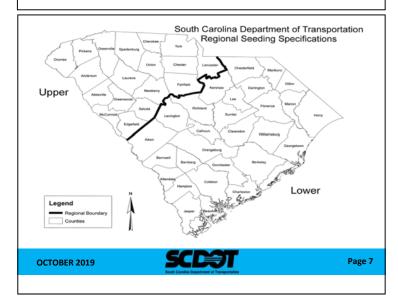
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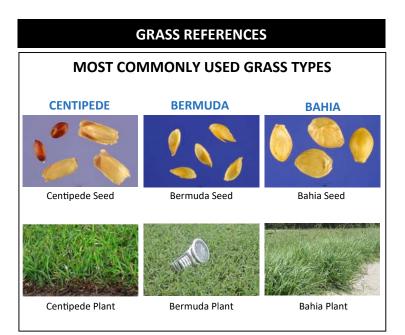
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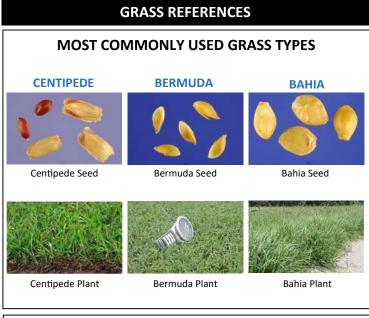




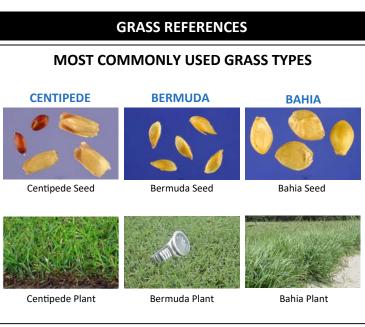
# CENTIPEDE BERMUDA BAHIA Centipede Seed Bermuda Seed Bahia Seed Centipede Plant Bermuda Plant Bahia Plant

**GRASS REFERENCES** 



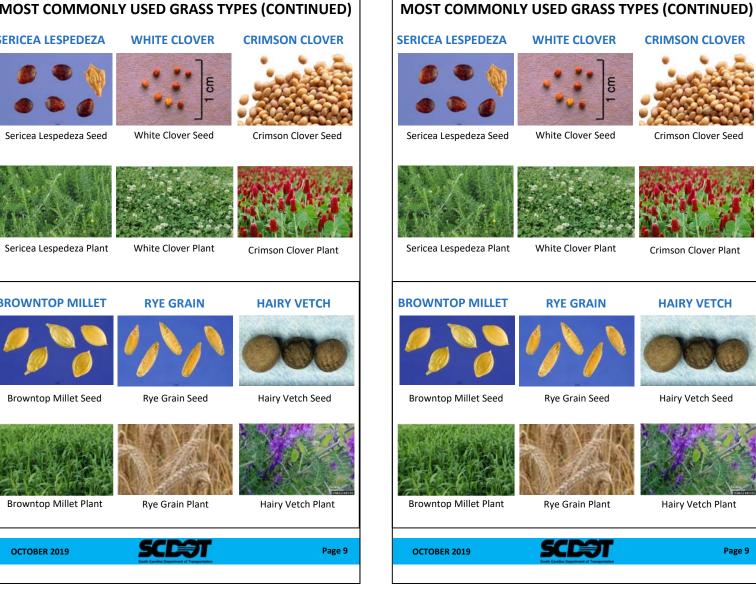




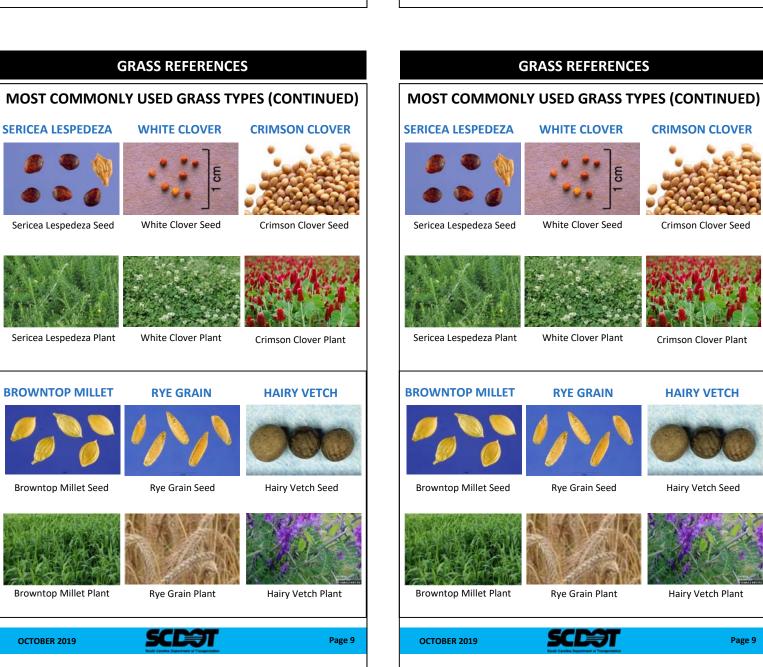




# **GRASS REFERENCES MOST COMMONLY USED GRASS TYPES (CONTINUED)** SERICEA LESPEDEZA WHITE CLOVER **CRIMSON CLOVER** White Clover Seed Sericea Lespedeza Seed Crimson Clover Seed Sericea Lespedeza Plant White Clover Plant Crimson Clover Plant **BROWNTOP MILLET RYE GRAIN HAIRY VETCH**



**GRASS REFERENCES** 



### **GRASS REFERENCES**

### **FERTILIZER RATES (LBS.)**

- Used for permanent cover applications.
- Assume a 10-10-10 mix to calculate the estimated bid quantities for the 3 components of granular fertilizer.
- Calculate the quantity by assuming an application rate of 1,000 lb./acre for fertilizer.



For example, if a project has a quantity of 3.5 acres of permanent cover, calculate the estimated fertilizer quantity as follows:

FERTILIZER (NITROGEN) = 0.10 X 1,000lb/acre X 3.5 acre = 350 lb.

FERTILIZER (PHOSPHORIC ACID) = 0.10 X 1,000lb/acre X 3.5 acre = 350 lb.

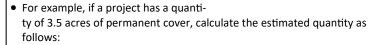
FERTILIZER (POTASH) = 0.10 X 1,000lb/acre X 3.5 acre = 350 lb.

The first number in the mix is nitrogen (N), the second number is phosphoric acid (P), and the third number is potash (K).

The numbers on the bag are %'s, so 10% is equal to 0.10 in the calculation.

### AGRICULTURAL LIME (LBS.)

- Used for permanent cover applications.
- Calculate the quantity by assuming an application rate of 2,000 lb./acre.



Agricultural Lime =  $2,000 \text{ lb./acre} \times 3.5 \text{ acre} = 7,000 \text{ lb.}$ 

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Page 10



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OCTOBER 2019 Page 10

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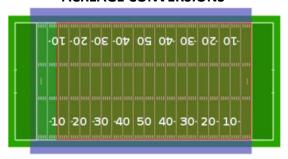
Agricultural Lime = <u>2,000 lb./acre</u> X <u>3.5 acre</u> = <u>7,000 lb.</u>





### **MULCH REFERENCES**

### **ACREAGE CONVERSIONS**



The area of one acre (red) superimposed on a football field (green) and soccer field (blue).

1 Acre = 43,560 ft<sup>2</sup> = 4,840 yd<sup>2</sup> = 4,046.87 m<sup>2</sup>

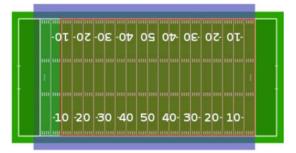
### **MULCH (HYDROSEEDING) TANK CHART**

	Mulch Type	Pounds Per Acre	No. Bags Per Acre	No. Tanks Per Acre
	1	2000	40	8
500 Gallon Tank = 5 Bags	2	2500	50	10
Per Tank (50 lbs. bags)	3	3000	60	12
	4	3500	70	14
	1	2000	40	4
1000 Gallon Tank= 10 Bags Per Tank (50 lbs. bags)	2	2500	50	5
	3	3000	60	6
	4	3500	70	7

OCTOBER 2019 Page 11

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	1	2000	40	4
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	3	3000	60	6
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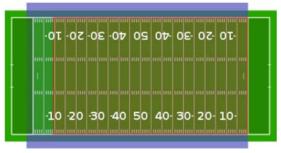
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### **MULCH REFERENCES**

### **SCDOT MULCH APPLICATION RATES**

Mulch is required for all temporary and permanent cover applications. Depending on the steepness of the slope, select appropriate mulches.

The maximum allowable continuous slope length for HECP and ECB applications is 50 feet. Slope interruption devices or TRMs are required for slope length longer than 50 feet. At the discretion of the RCE, use slope interruption devices on slope lengths less than 50 feet when slope erosion is observed.

Mu	ılch	Applicable Slopes	Min. Application Rate (lbs/acre- dry)	No. of 50 Pound Bags Per Acre
HECP Type 1 - Tracer under RECP		Per RECP	1,000	20
HECP Type 1		≤ 4:1	2,000	40
HECP Type 2		4:1 < S ≤ 3:1	2,500	50
НЕСР Туре 3		3:1 < S ≤ 2:1	3,000	60
HECD Turns 4		2:1 < S ≤ 1:1	3,500	70
HECP Type 4		> 1:1	4,000 (temp cover only)	80

When site constraints exceed the acceptable application for mulch, use Rolled Erosion Control Products (RECPs); Erosion Control Blankets (ECB) or Turf Reinforce Matting (TRM) as appropriate per specifications.

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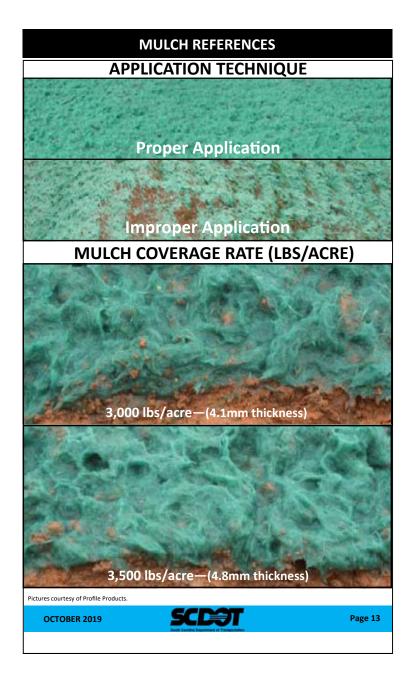
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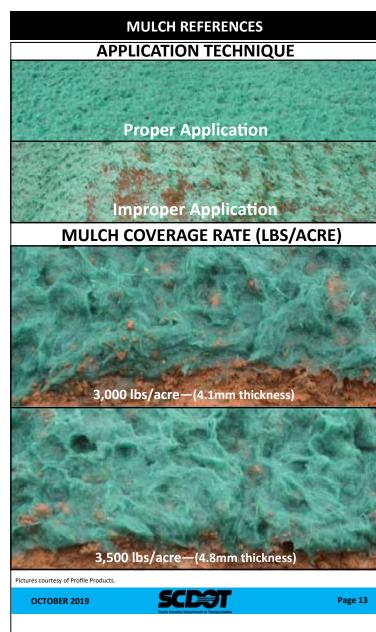
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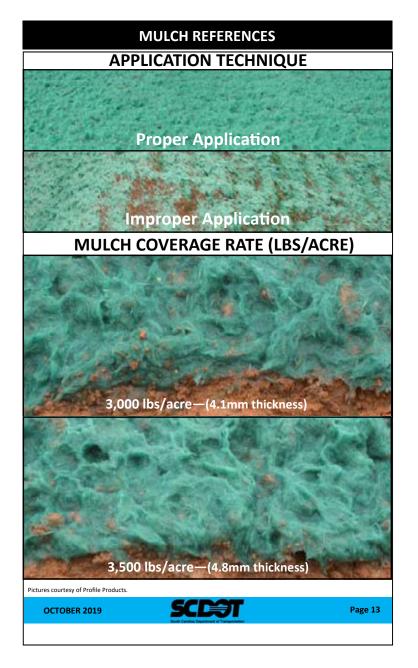
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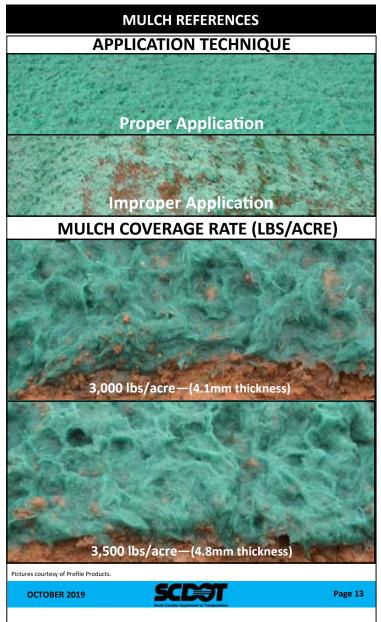
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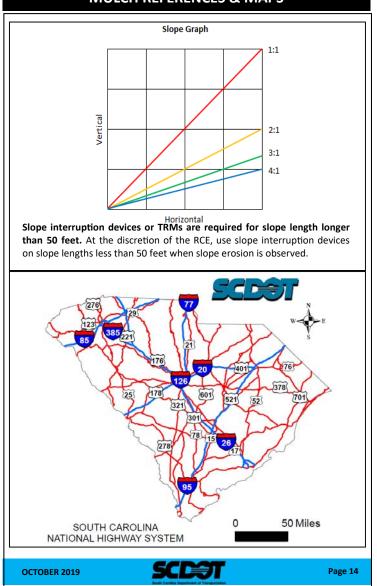




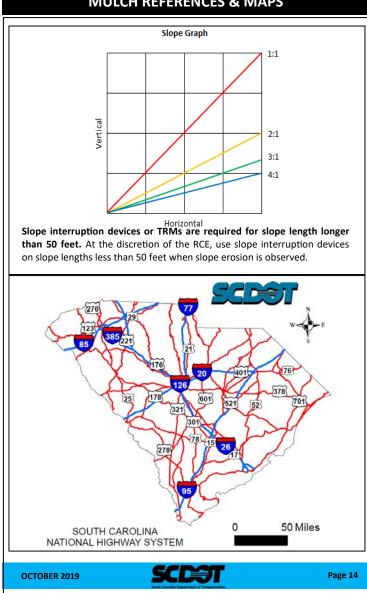




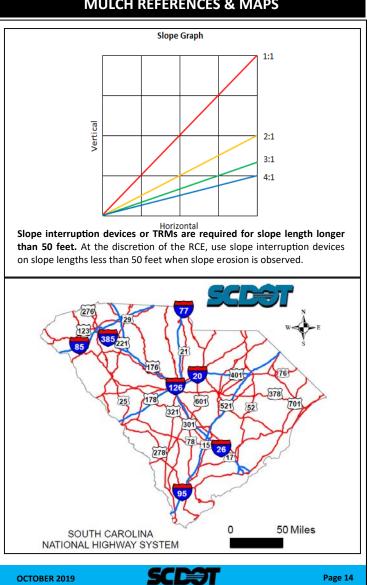
### **MULCH REFERENCES & MAPS**



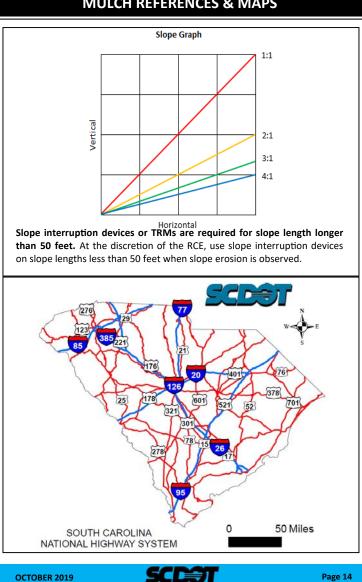
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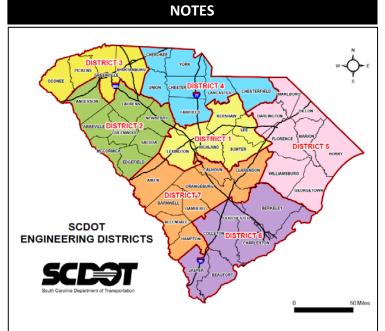


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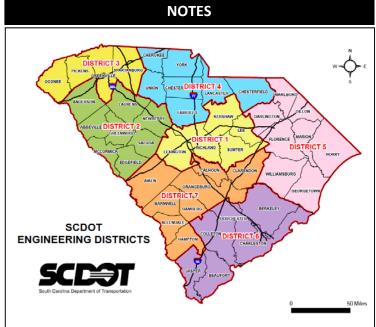
DISTRICT	DISTRICT OFFICE PHONE NUMBER
1	803-737-6660
2	864-227-6971
3	864-241-1010
4	803-377-4155
5	843-661-4710
6	843-740-1667
7	803-531-6850

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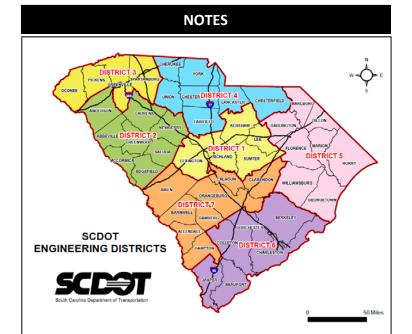
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# **NOTES CONTACT SCDOT** Phone: 855-GO-SCDOT (855-467-2368) toll free or 803-737-1200

Monday through Friday, 8:30 AM-5:00 PM Mail: South Carolina Department of Transportation Attn: Customer Service Center 955 Park Street P.O. Box 191 Columbia, SC 29201-3959

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	Attn: Customer Service Center		Att	n: Customer Service Ce	nter
	955 Park Street			955 Park Street	
	P.O. Box 191			P.O. Box 191	
	Columbia, SC 29201-3959		C	Columbia, SC 29201-395	59
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	South Carolina Department of Transportation		



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