

SOIL SERIES INFORMATION

A project specific soil survey and geotechnical investigation was performed for this project and can be made available upon request. Soil characteristics have been given full consideration in the hydrologic analysis, the design of channels and linings, selection of temporary BMP's, design of energy dissipaters, and in the selection of permanent vegetation and fertilizers.

The following is a summary of the soils that are expected to be found on the project site:

EROSION HAZARD (US 1) - SUMMARY BY MAP UNIT - TOOMBS COUNTY, GEORGIA (GA647)							
Map unit symbol	Map unit name	EROSION FACTOR		Component name (percent)	HYDROLOGIC GROUP	Acres in AOI	Percent of AOI
		Kf	T				
A1C	Alley loamy coarse sand, 2 to 8 percent slopes	0.15	4	Alley (100%)	B	25.2	1.3
Aq	Ardilla loamy sand	0.15	5	Ardilla (100%)	C	6.4	0.3
CnB	Carnegie loamy sand, 2 to 5 percent slopes	0.28	3	Carnegie (100%)	C	0.0	0.0
CoC2	Carnegie sandy loam, 5 to 8 percent slopes, eroded	0.28	3	Carnegie (100%)	C	9.6	0.5
CqB	Cowarts loamy sand, 2 to 5 percent slopes	0.15	4	Cowarts (100%)	C	27.3	1.4
CqC	Cowarts loamy sand, 5 to 8 percent slopes	0.15	4	Cowarts (100%)	C	7.0	0.4
DaB	Dathan loamy sand, 1 to 5 percent slopes	0.15	5	Dathan (100%)	B	64.0	3.4
FsB	Fuquay loamy sand, 1 to 5 percent slopes	0.15	5	Fuquay (100%)	B	115.3	6.1
GrD	Grady soils	0.24	5	Grady (100%)	D	8.8	0.5
LTC	Lakeland and Troup soils, 0 to 8 percent slopes	0.10	5	Lakeland (60%) Troup (40%)	A	72.5	3.8
Obs	Oster and Bibb soils	0.15	5	Oster (60%) Bibb (40%)	D/A D	135.0	7.2
Oh	Ocilla loamy sand	0.10	5	Ocilla (95%) Pelham (5%)	C	55.9	3.0
PI	Pelham loamy sand	0.10	5	Pelham (100%)	B/D	169.7	9.0
Se	Stillson loamy sand	0.10	5	Stillson (100%)	B	6.4	0.3
TqA	Tifton loamy sand, 0 to 2 percent slopes	0.10	4	Tifton (100%)	B	153.5	8.1
TqB	Tifton loamy sand, 2 to 5 percent slopes	0.10	4	Tifton (100%)	B	198.4	10.5
TuC2	Tifton sandy loam, 5 to 8 percent slopes, eroded	0.17	4	Tifton (100%)	B	3.7	0.2
W	Water					3.9	0.2
WwE	Wagram and Troup soils, 8 to 17 percent slopes	0.15	5	Wagram (60%) Troup (40%)	A	4.6	0.2
Subtotals for Soil Survey Area						1067.0	56.5%
Totals for Area of Interest (AOI)						1886.8	100.0%

The ratings in this interpretation indicate the hazard of soil loss from unsurfaced roads and trails. The ratings are based on soil erosion factor K, slope, and content of rock fragments.

The ratings are both verbal and numerical. The hazard is described as "slight," "moderate," or "severe." A rating of "slight" indicates that little or no erosion is likely; "moderate" indicates that some erosion is likely, that the roads or trails may require occasional maintenance, and that simple erosion-control measures are needed; and "severe" indicates that significant erosion is expected, that the roads or trails require frequent maintenance, and that costly erosion-control measures are needed.

EROSION HAZARD (US 1) - SUMMARY BY MAP UNIT - EMANUEL COUNTY, GEORGIA (GA107)							
Map unit symbol	Map unit name	EROSION FACTOR		Component name (percent)	HYDROLOGIC GROUP	Acres in AOI	Percent of AOI
		Kf	T				
BoB	Bonifay sand, 1 to 5 percent slopes	0.10	5	Bonifay (100%)	A	42.9	2.3
BoC	Bonifay sand, 5 to 8 percent slopes	0.10	5	Bonifay (100%)	A	32.8	1.7
CoB2	Carnegie sandy loam, 2 to 5 percent slopes, eroded	0.28	3	Carnegie (100%)	C	7.2	0.4
CoC2	Carnegie sandy loam, 5 to 8 percent slopes, eroded	0.28	3	Carnegie (100%)	C	4.6	0.2
CoB	Cowarts loamy sand, 2 to 5 percent slopes	0.15	4	Cowarts (100%)	C	32.5	1.7
C1C2	Cowarts sandy loam, 5 to 8 percent slopes, eroded	0.24	4	Cowarts (100%)	C	21.4	1.1
DoB	Dathan loamy sand, 5 to 8 percent slopes	0.15	5	Dathan (100%)	B	76.3	4.0
D1C2	Dathan sandy loam, 5 to 8 percent slopes, eroded	0.24	5	Dathan (100%)	B	15.6	0.8
FuB	Fuquay loamy sand, 1 to 5 percent slopes	0.15	5	Fuquay (100%)	B	99.9	5.3
KFA	Kinston and Bibb soils, frequently flooded	0.37	5	Kinston (55%) Bibb (45%)	B/D	56.3	3.0
LaB	Lakeland sand, 0 to 8 percent slopes	0.10	5	Lakeland (100%)	A	17.6	0.9
NaB	Nankin loamy sand, 2 to 5 percent slopes	0.17	3	Nankin (100%)	C	13.0	0.7
NkB2	Nankin sandy loam, 2 to 5 percent slopes, eroded	0.28	3	Nankin (100%)	C	0.1	0.0
OdA	Ocilla loamy sand, 0 to 2 percent slopes	0.10	5	Ocilla (95%) Pelham (5%)	C	0.1	0.0
PeA	Pelham loamy sand, 0 to 2 percent slopes, occasionally flooded	0.10	5	Pelham (100%)	B/D	60.6	3.2
Re	Remberl sandy loam, ponded	0.20	5	Remberl (100%)	D	4.2	0.2
SuC	Susquehanna sandy loam, 2 to 8 percent slopes	0.28	5	Susquehanna (100%)	D	23.0	1.2
TfA	Tifton loamy sand, 0 to 2 percent slopes	0.10	4	Tifton (100%)	B	18.5	1.0
TfB	Tifton loamy sand, 2 to 5 percent slopes	0.10	4	Tifton (100%)	B	274.2	14.5
TnC2	Tifton sandy loam, 5 to 8 percent slopes, eroded	0.17	4	Tifton (100%)	B	14.7	0.8
W	Water					4.5	0.2
Subtotals for Soil Survey Area						819.9	43.5%
Totals for Area of Interest (AOI)						1886.8	100.0%

Numerical ratings indicate the severity of individual limitations. The ratings are shown as decimal fractions ranging from 0.01 to 1.00. They indicate gradations between the point at which a soil feature has the greatest negative impact on the specified aspect of forestland management (1.00) and the point at which the soil feature is not a limitation (0.00).

Due to the size and scope of this project and the nature of soil series maps, it is not reasonably possible to identify the precise locations of the above referenced soils on the plans. The NRCS soil survey and soil series maps for the project area are also available online at <http://websoilsurvey.nrcs.usda.gov/>.

EROSION HAZARD (ROAD, TRAIL) - SUMMARY BY RATING VALUE		
Rating	Acres in AOI	Percent of AOI
Slight (0.20-0.28)	71.8	100%
Null or Not Rated	0.0	0.0%
Totals for Area of Interest	71.8	100%

SEDIMENT STORAGE

SEDIMENT BASINS WILL BE UTILIZED AT ALL OUTFALL LOCATIONS EXCEPT AS NOTED:

Sediment basins will be utilized at all outfall locations except as noted below:

Sta 46+20 LT: A Sediment Basin is not used at this location due to the negligible amount of runoff. The disturbed area within the drainage area is 1.03 acres. The disturbance activities consist of roadway construction overlay. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location.

Sta 168+00 RT: A Sediment Basin is not used at this location due to the site specific constraints. The basin would have to be placed in an area of ESA - Wetland. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location.

Sta 181+60 RT: A Sediment Basin is not used at this location due to the developed nature of the location. The earthwork associated with constructing a large basin would negate any benefits it is designed to provide. The disturbance activities consist of roadway construction widening. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location.

Sta 200+90 RT: A Sediment Basin is not used at this location due to the impractical size of the required basin. The amount of water contributing to the basin from disturbed area is 0.29 acres. The disturbance activities consist of roadway widening construction and overlay. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location.

Sta 216+70 LT: A Sediment Basin is not used at this location due to the site specific constraints. The basin would have to be placed in an area of ESA - Wetland. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location.

Sta 291+50 RT: A Sediment Basin is not used at this location due to the site specific constraints. The basin would have to be placed in an area of ESA - Wetland. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location.

Sta 291+50 RT: A Sediment Basin is not used at this location due to the extremely flat terrain. The disturbed area within the drainage area is 1.87 acres. The disturbance activities consist of roadway widening construction and overlay. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location.

Sta 298+90 RT: A Sediment Basin is not used at this location due to site specific constraints. The basin would have to be disturb an existing pond to be created. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location.

Sta 63+50 RT Racket Town Rd: A Sediment Basin is not used at this location due to the developed nature of the location. The disturbance activities consist of roadway widening construction and overlay. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location.

Sta 329+00 RT: A Sediment Basin is not used at this location due to site specific constraints. The basin would have to be placed in an area of ESA - Wetland. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location.

Sta 394+70 LT: A Sediment Basin is not used at this location due to site specific constraints. The basin would have to be placed in an area of ESA - Wetland. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location.

Sta 431+50 LT: A Sediment Basin is not used at this location due to the site specific constraints. The basin would have to be placed in an area of ESA - Wetland. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location.

Sta 460+25 LT: A Sediment Basin is not used at this location due to the site specific constraints. The basin would have to be placed in an area of ESA - Wetland. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location.

Sta 490+90 LT: A Sediment Basin is not used at this location due to the site specific constraints. The basin would have to be placed in an area of ESA - Wetland. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location.

Sta 515+40 RT: A Sediment Basin is not used at this location due to site specific constraints. The basin would have to be disturb an existing pond to be created. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location.

Sta 571+50 RT: A Sediment Basin is not used at this location due to site specific constraints. The basin would have to be placed in an area of ESA - Wetland. BMP's as shown on the erosion control plans will be adequate to control sediment runoff at this location.

DISCHARGES INTO, OR WITHIN ONE LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS, ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT.

All outfalls are either located further than 1 linear mile upstream or outside of the watershed of an Impaired Stream Segment that has been listed for criteria violated, "Bio F" (Impaired Fish Community) and/or "Bio M" (Impaired Macro Invertebrate Community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff).

REVISION DATES

6/8/2011	

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

OFFICE: PROGRAM DELIVERY

ESPC GENERAL NOTES

US I/SR 4 WIDENING
TOOMBS/EMANUEL COUNTIES

DRAWING No.
51-001a

GEORGIA
DEPARTMENT
OF
TRANSPORTATION



- Engineering
- Architecture
- Planning
- Construction Management

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