



Beaufort County Public Works
Stormwater Infrastructure
Project Summary

Project Summary: Twickenham Plantation Road and Swallowtail Lane

Project #: 2007-98

Completed: Mar-10

Narrative Description of Project:

Project improved 9,101 L.F. of drainage system. Shinn cut 7,866 L.F. of outfall ditch, workshelf and 727 L.F. of roadside ditch. Grubbed 400 L.F. of workshelf. Constructed 7,066 L.F. of outfall ditch and workshelf. Cleaned out 1,053 L.F. of outfall ditch and 835 L.F. of roadside ditch. Installed (8) access pipes, (7) bleeder pipes and (5) crossline pipes. Upsized (1) crossline pipe to correct elevation. Extended (1) access pipe. Jetted (1) crossline pipe. Installed rip rap, handseeded and hydroseeded for erosion control.

Material Cost, Rental Equipment Summary, and Labor

Material	Unit	Cost/Unit	Qty	Cost
15" RCP Pipe	linear feet	\$9.62	56.0	\$538.72
18" RCP Pipe	linear feet	\$11.47	176.0	\$2,018.72
24" RCP Pipe	linear feet	\$17.86	72.0	\$1,285.92
36" RCP Pipe	linear feet	\$37.43	160.0	\$5,988.80
36" RCP Elliptical Pipe	linear feet	\$46.07	64.0	\$2,948.48
15" HDPE Pipe	linear feet	\$6.22	20.0	\$124.40
36" HDPE Pipe	linear feet	\$26.41	40.0	\$1,056.40
Fill Dirt	ton	\$1.00	1,585.5	\$1,585.45
Rip Rap	ton	\$47.08	93.2	\$4,387.39
#57 Stone	ton	\$34.78	112.6	\$3,916.58
Recycled Concrete	ton	\$1.00	241.0	\$240.98
Filter Blanket	sy	\$0.63	159.7	\$100.62
Turf Staples	each	\$0.03	265.0	\$7.95
Silt Fence	sy	\$0.78	158.3	\$123.46
Silt Fence w/ Stakes	sy	\$0.49	25.7	\$12.58
10-10-10 Fertilizer	bag	\$11.72	2.0	\$23.44
Hydrogel	cup	\$2.82	2.0	\$5.64
Hydromulch	bale	\$12.22	4.0	\$48.88
Hydromax Liquid Fertilizer	cup	\$2.54	2.0	\$5.08
Annual Rye Grass Seed	bag	\$19.21	3.0	\$57.63
Pin Flag	each	\$0.06	160.0	\$9.60
4ft Flagger	each	\$0.34	52.0	\$17.68
Flagging Tape	roll	\$1.87	0.04	\$0.07
Debris Disposal	ton	\$16.00	104.2	\$1,666.88
Water	gallon	\$0.01	2,250	\$22.50

Site Photographs

Before



During



After



Twickenham Plantation Rd/Swallowtail Lane Project Summary Con't

Project #: 2007-98

Material Cost, Rental Equipment Summary, and Labor

Material	Unit	Cost/Unit	Qty	Cost
Portable Toilet Service				\$214.78
Off Road Truck Rental				\$8,070.85
Gas	gallon	\$2.59	717.6	\$1,858.58
Diesel	gallon	\$2.57	8,813.5	\$22,650.70
Labor	hours		4,885.5	\$171,258.39
Total Cost of Materials, Rental Equip., and Labor				\$230,247.14

Note: Labor cost includes the employee's salary plus fringe benefits.

Equipment Cost

Item	Asset No.	Cost/Hour	Hrs.	Cost
Shinn Cutter	22943	\$31.34	98.0	\$3,071.32
CAT 325 Excavator	16649	\$22.51	33.0	\$742.83
Volvo 290 Excavator	22870	\$49.56	68.0	\$3,370.08
Volvo 330 Excavator	22993	\$65.72	342.0	\$22,476.24
Komatsu Urban Excavator	19325	\$24.26	22.0	\$533.72
Komatsu Mini Excavator	23000	\$18.65	24.0	\$447.60
CAT Dozer	23125	\$35.50	193.0	\$6,851.50
Dresser/Dozer	17014	\$23.48	65.0	\$1,526.20
953 CAT Track Loader	14688	\$24.00	6.0	\$144.00
JD Loader 444J	23271	\$29.75	51.0	\$1,517.25
Bobcat T200	22782	\$17.40	11.0	\$191.40
Bobcat T300	22847	\$20.10	22.0	\$442.20
Lowboy	23118	\$34.64	23.0	\$796.72
Vacuum Truck	22812	\$20.30	4.5	\$91.35
Hydroseeder	18909	\$7.35	5.0	\$36.75
Dump Trucks		\$16.68	736.5	\$12,284.82
Pickup Trucks		\$4.17	1,620.0	\$6,755.40
Total Equipment Cost				\$61,279.38

Cost/hour excludes fuel cost.

Total Cost: \$291,526.52

Site Photographs

Before



During



After



Project: Twickenham
Plantation Road
Map 1

Activity: Drainage
Maintenance














Project #:
2007-98

Township:
Sheldon

Completed:
March 2010

Legend

Drainage Type

-  River
-  Stream
-  Outfall
-  Lateral
-  Lateral Pipe
-  Roadside
-  Roadside Pipe
-  Crossline
-  D/W
-  Access
-  Piped
-  Bleeder
-  Parcels

Installed rip rap on
pipe installations.

Installed twin
crossline pipes.

Installed (1) access pipe
and (1) crossline pipe.

Installed (2) access pipes
and (4) bleeder pipes.

Installed (3) acces pipes, (1)
crossline pipe and (3) bleeder
pipes.

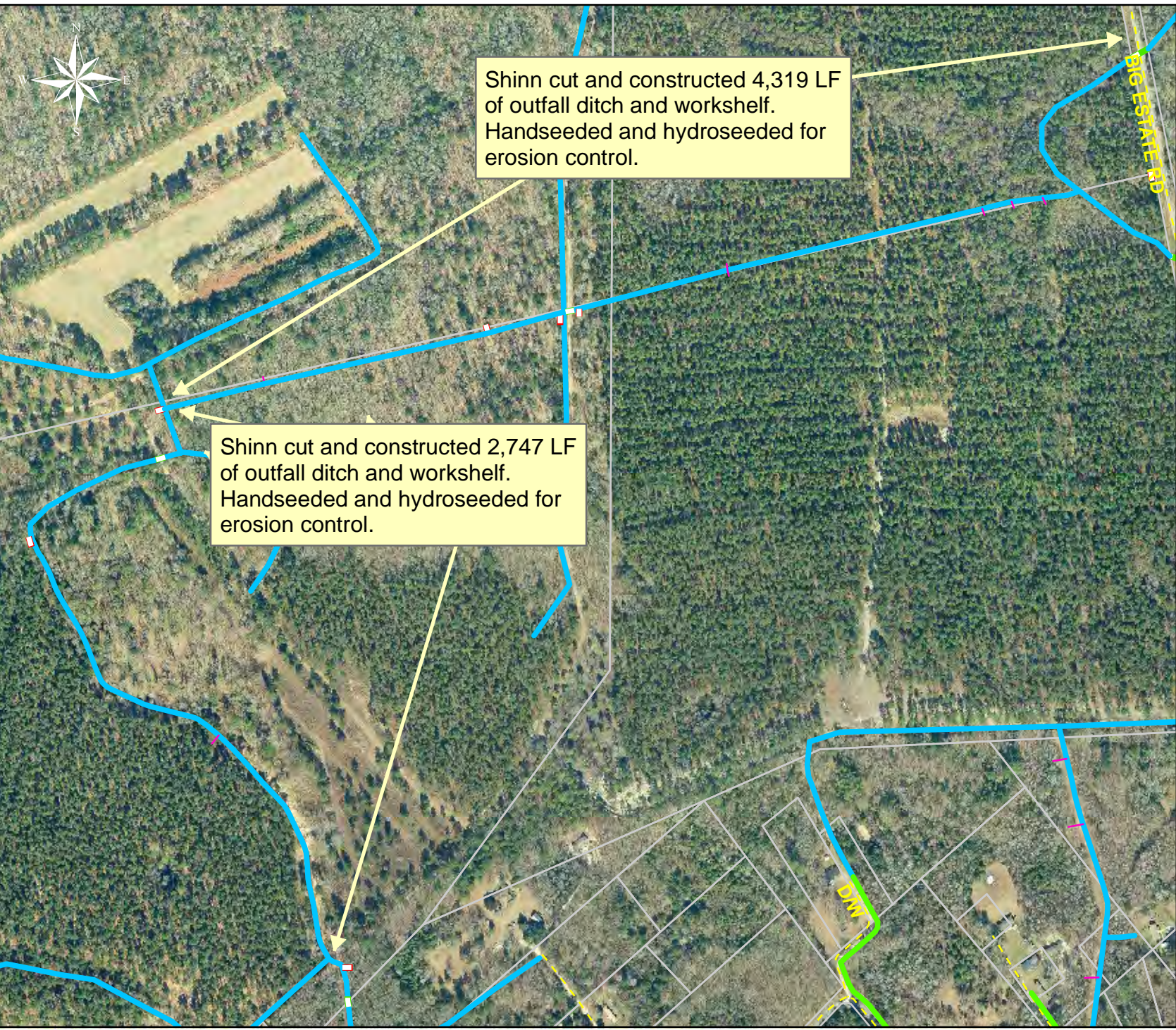
Jetted (1)
crossline pipe.

Installed and extended (1)
access pipe. Installed (1)
crossline pipe.

0 285 570 1,140 1,710 2,280
Feet

1 inch = 715 feet

Prepared By: BC Stormwater Management Utility
Date Print: 6/29/11
File: C:/sethdata/projects/projectmaps/Twickenham Map 1



Shinn cut and constructed 4,319 LF of outfall ditch and workshelf. Handseeded and hydroseeded for erosion control.

Shinn cut and constructed 2,747 LF of outfall ditch and workshelf. Handseeded and hydroseeded for erosion control.

Project: Twickenham
Plantation Road
Map 2

Activity: Drainage
Maintenance

Project #:
2007-98

Township:
Sheldon

Completed:
March 2010

- Legend**
- Drainage Type**
- River
 - Stream
 - Outfall
 - Lateral
 - Lateral Pipe
 - Roadside
 - Roadside Pipe
 - Crossline
 - D/W
 - Access
 - Piped
 - Bleeder
 - Parcels



1 inch = 510 feet

Project:
Swallowtail Lane

Activity: Drainage
Maintenance












Project #:
2007-98

Township:
Sheldon

Completed:
March 2010

Legend

Drainage Type

-  River
-  Stream
-  Outfall
-  Lateral
-  Roadside
-  Roadside Pipe
-  Crossline
-  D/W
-  Access
-  Piped
-  Bleeder



0 45 90 180 270 360
Feet

1 inch = 192.15 feet

Prepared By: BC Stormwater Management Utility
Date Print: 6/29/11
File: C:\sethdata\project\projectmap\Swallowtail Ln 2007-98