

FDOT Fertilization within the Okeechobee BMAP boundary in 2003

Location ¹ Number	Okeechobee County Location Description	Length (mi)	Fertizer (Tons)	Fertilizer ² (lbs)	Nitrogen ³ (lbs)	Phosphorus ⁴ (lbs)
1	SR 78	5	1.70	3,390	542	271
2	SR 15 N	32	14.50	28,996	4,639	2,320
3	SR 15 S	12	5.24	10,470	1,675	838
4	SR 710	10	4.55	9,104	1,457	728
5	SR 700	18	12.71	25,416	4,067	2,033
6	SR 70	20	7.65	15,300	2,448	1,224
Total Applied Fertilizer within Okeechobee County in 2003		97	46	92,676	14,828	7,414

Location ¹ Number	Highlands County Location Description	Length (mi)	Fertizer (Tons)	Fertilizer ² (lbs)	Nitrogen ³ (lbs)	Phosphorus ⁴ (lbs)
1	SR 25 S	30	54.29	108,588	17,374	8,687
2	SR 25 N	18	15.33	30,654	4,905	2,452
3	SR 700	25	17.83	35,668	5,707	2,853
4	SR 66	9	6.79	13,588	2,174	1,087
5	SR 64	3	2.24	4,482	717	359
6	SR 70	36	13.49	26,986	4,318	2,159
7	SR 17	8	2.85	5,698	912	456
Total Applied Fertilizer within Highlands County in 2003		129	113	225,664	36,106	18,053

1. Locations and other info on fertilizer taken from scope of services for FDOT Contract No. E1D60 and E1C73.
2. Amount of fertilizer = Area of project (acres) x Spread Rate (300 lbs/acre) *per Section ME570-50.2*
3. Pounds of Nitrogen calculated by converting 16-8-8 fertilizer (16% Nitrogen)
4. Pounds of Phosphorus calculated by converting 16-8-8 fertilizer (8% Phosphorus)
5. The last fertilizing cycle within the Okeechobee BMAP was completed in 2003.

Average TN Application within Okeechobee BMAP

Total Applied Nitrogen (Okeechobee County)	14,828 lbs
Total Applied Nitrogen (Highlands)	36,106 lbs
Total TN Application within FDOT ROW	50,934 lbs

Average TN Application per Year

Average TN Application per Contract	50,934 lbs
Divided by Average Length of Contract (<i>See Table A</i>)	2.0 years
Average TN Application per Year	25,467 lbs

TN Removal Credit for Discontinuing Fertilization

Average TN Application per Year	25,467 lbs
Anticipated Percent of Nitrogen Washout ^A	36.3 %
TN Removal Credit ^B	9,245 lbs =

Table A

Recent Fertilizer Contracts

Contract	Year
E1D60	2003
E1B83	2001
E1B48	2000
Avg Contract	1.3 years

4193 kg/year

- A. Anticipated percent of applied Nitrogen to wash out from stormwater runoff was calculated to be 36.3%.
(*See Evaluation of Pollution Levels Due to the Use of Consumer Fertilizers under Florida Conditions*)
- B. This method of calculating the TN Removal Credit was used by FDOT District 1 as a part of the Caloosahatchee BMAP
- C. The Estimated TN Washout is the mass of fertilizer expected to be carried downstream from FDOT Right of Way.

Average TP Application within Caloosahatchee BMAP

Total Applied Phosphorus (Okeechobee County)	7,414 lbs
Total Applied Phosphorus (Highlands County)	18,053 lbs
Total TN Application within FDOT ROW	25,467 lbs

Average TP Application per Year

Average TP Application per Contract	25,467 lbs
Divided by Average Length of Contract (<i>See Table A</i>)	2.0 years
Average TN Application per Year	12,734 lbs

TN Removal Credit for Discontinuing Fertilization

Average TN Application per Year	12,734 lbs
Anticipated Percent of Nitrogen Washout ^A	36.3 %
TN Removal Credit ^B	4,622 lbs =

2097 kg/year

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

FINANCIAL PROJECT NO(S). 41292817201 & 412901117201
CONTRACT NO. E1D60
CONTRACT CALENDAR DAYS 60
COUNTY(IES) HIGHLANDS AND OKEECHOBEE _____

DISTRICT ONE

INTENT AND SCOPE: The work specified in this contract consists of:
FERTILIZER APPLICATION

The 2000 Edition of the Florida Department of Transportation Standard Specifications shall be amended in accordance with the following:

TABLE OF CONTENTS

Maintenance Special Provisions	N/A
Standard Maintenance Special Provisions	2
Special Provisions	7
Supplemental Specifications	14
Attachment Pages	37

I hereby certify this contract package has been properly prepared by me, or under my direct supervision, in accordance with procedures adopted by the Florida Department of Transportation. The Maintenance Special Provisions (page(s) N/A) were developed by me or under my direct supervisio

ME102
MAINTENANCE OF TRAFFIC
(REV. 03-17-00)

The work specified in this Section will be governed by Section 102 of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction and revisions thereto current at the time of contract letting, except as amended by the following:

Subarticle 102-1.4 (Page 105) is expanded by the following:

If the Contractor's Worksite Traffic Supervisor is not an employee of the Contractor, a written and executed subcontract with the designated Worksite traffic Supervisor must be submitted to the Department for approval.

Subarticle 102-3.1 (Pages 106-107). The first paragraph is expanded as follows:

In addition to the Manual on Uniform Traffic Control Devices (MUTCD), the requirements of the Department's Design Standards and revisions thereto current at the time of contract letting, shall apply to the minimum traffic control standards.

Subarticle 102-8.5 (Page 115) is deleted and the following substituted:

Payment will be made under the items specified in the Bid Price Proposal.

Article 102-8 (pages 115) is expanded by the addition of the following new subarticles:

102-8.6 When No Separate Item is Shown in the Proposal: When the proposal does not include a separate pay item for Maintenance of Traffic, all work and incidental costs specified as being covered under this Section will be included in the contract unit price for the work being performed and no separate payment will be made.

102-8.7 Partial Payment: When the proposal includes a separate pay item for Maintenance of Traffic - Lump Sum, partial payment will be based on the percentage of contract amount earned for work completed and accepted by the Department.

SECTION ME570-50
FERTILIZING
(REV. 07-31-01)

ME570-50.1 Description.

Fertilize as required for the enhancement of the growth of healthy turf as called for in the plans or Work Document issued by the Engineer.

ME570-50.2 Materials.

Use material for the fertilizer meeting the requirements of Section 982, with the sole exception that the chemical designation of the fertilizer shall be 16 - 8 - 8.

Spread the fertilizer at a rate of 300 pounds per acre.

Material may be sampled and tested at any time as determined by the Engineer.

ME570-50.3 Equipment and Application.

ME570-50.3.1 Fertilizer Spreader: Use a device capable of uniformly distributing the material at the specified rate. Use appropriate equipment and methods to prevent the fertilizer from being broadcast on the roadway or on vehicles.

ME570-50.3.2 Application of Fertilizer: The Department will not permit fertilizing operations when wind velocities exceed 15 miles per hour. Apply fertilizer by hand on steep slopes or other areas where machine spreading may not be practical.

ME570-50.4 Method of Measurement.

The quantities to be paid for will be for the net weight in tons of fertilizer applied.

The number of sacks used will determine the weight of the fertilizer. If bulk fertilizer is used, furnish weight tickets showing gross weight, tare weight, and net weight to the Engineer for every load distributed.

Failure to provide weight tickets from Florida Department of Agriculture certified scales will result in no payment for those loads.

ME570-50.5 Basis of Payment.

Price and payment will be full compensation for all work and materials specified including all incidentals necessary to complete the work.

Payment will be made under the items specified in the Bid Price Proposal.

SPECIAL PROVISIONS

The following Special Provisions apply to this contract:

PROPOSAL REQUIREMENTS AND CONDITIONS.

(REV 7-27-00) (1-03)

ARTICLE 2-2 (of the Supplemental Specifications). Beginning with the third paragraph to the end of Article 2-2, the text is deleted.

EXAMINATION OF PLANS, SPECIFICATIONS, SPECIAL PROVISIONS AND SITE OF WORK.

(REV 4-19-99) (1-02)

ARTICLE 2-4 (of the Supplemental Specifications) is expanded by the following:

Prior to letting, direct questions through ROBERT HERNADEZ, at Phone Number 863-519-2279.

MMS Activity Report

7/17/2003

7:06:16 AM

Page # 1

Cont Id	Prj Nbr	Dist#	CostCtr	End Date	Est#	Act#	Act Desc	Brdg ID	Act Qty	Act Cost
E1D60	41290117201	01	191	2003/07/14	0001	435	Fertilizer		46.338	\$8,016.47
E1D60	41292817201	01	191	2003/07/14	0001	435	Fertilizer		112.832	\$19,519.94

Total Amount:

\$27,536.41

Charlie's Lawn Maintenance

3650 S. E. 36TH AVE
Okeechobee, FL 34974 1-800-600-GRAS
1-863-763-5407,
E-MAIL charlies@okeechobee.com

Invoice

DATE	INVOICE #
6/30/2003	16763

BILL TO
D.O.T. (E1D60) 4722 KENILWORTH BLVD SEBRING, FL 33870

CONTRACT #
E1D60

FIN. PROJECT #
41292817201 & 41...

ITEM	QUANTITY	DESCRIPTION	RATE	AMOUNT
570-50	112.832	HIGHLANDS COUNTY FERTILIZER (SLOW RELEASE)	173.00	19,519.94
570-50	46.338	OKEECHOBEE COUNTY FERTILIZER (SLOW RELEASE)	173.00	8,016.47
RECEIVED JUL 14 2003 <i>Accepted 7/15/03</i> SEBRING MAINTENANCE <i>SH</i> <i>Jml.</i>			Total	\$27,536.41

ORIGINAL INVOICE AS RECEIVED

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
CONTRACT MAINTENANCE WORK DOCUMENT

375-020-05
 MAINTENANCE
 06/01

Page 2 of 2

DATE ISSUED 5/15/2003

WORK ACTIVITY FERTILIZER OKEECHOBEE

*DATE RECEIVED SAME DAY FAX

CONTRACT NUMBER E1D60

DATE WORK BEGAN 5-29-03

JOB NUMBER 412928-1-72-01(h)&412901-1-72-01(O)

UNIT DESCRIPTION TONS

ITEM NO.	LOCATION	WORK DESCRIPTION		*DATE COMPLETED	WORK UNITS	
				****DATE ACCEPTED	EST	ACTUAL
570-50	SR 78 91010	VARIOUS LOCATIONS 11.300 ACRES M.P. 0.00-4.781	TONS	<u>6-30-03</u> <u>h</u>	1.695	<u>1.695</u>
570-50	SR 15 N 91020	VARIOUS LOCATIONS 96.655 ACRES M.P. 0.00-31.696	TONS	<u>6-30-03</u> <u>h</u>	14.498	<u>14.498</u>
570-50	SR 15 S 91050	VARIOUS LOCATIONS 34.901 ACRES M.P. 0.00-11.994	TONS	<u>6-30-03</u> <u>h</u>	5.235	<u>5.235</u>
570-50	SR 710 91060	VARIOUS LOCATIONS 30.345 ACRES M.P. 0.00-9.922	TONS	<u>6-30-03</u> <u>h</u>	4.552	<u>4.552</u>
570-50	SR 700 91090	VARIOUS LOCATIONS 84.720 ACRES M.P. 0.00-17.727	TONS	<u>6-30-03</u> <u>h</u>	12.708	<u>12.708</u>
570-50	SR 70 91070	VARIOUS LOCATIONS 51.000 ACRES M.P. 0.00-20.131	TONS	<u>6-30-03</u> <u>h</u>	7.65	<u>7.650</u>
UNITS ACCOMPLISHED:				TOTAL	46.338	<u>46.338</u>
PRIMARY _____ INTERSTATE _____ TOLL _____						

REMARKS: SEE ATTACHED SPECIFIC LOCATION SHEETS

- * Contractor Must Initial Date Received.
- ** If there are multiple Item Numbers per location that exceed the capacity of this form, use this space to assign a location number and attach "Work Document Pay Item Extension" Form with necessary pay item information.
- *** Contractor Must Date & Initial When Completed.
- **** Inspector Must Date & Initial When Accepted.

CERTIFIED CORRECT: SIGNATURES ON
 MATERIAL COMPLIANCE FAX COPY IN FILE
 CONTRACTOR NAME _____

VERIFIED
 INSPECTOR
 MATERIAL SOURCE

[Signature]

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
CONTRACT MAINTENANCE WORK DOCUMENT

375-020-05
 MAINTENANCE
 05/01

Page 1 of 2

DATE ISSUED 5/15/2003

WORK ACTIVITY Fertilizer HIGHLANDS CO.

*DATE RECEIVED SAME DAY FAX

CONTRACT NUMBER E1D60

DATE WORK BEGAN _____

JOB NUMBER 412928-1-72-01(H)&412901-1-72-01(O)

UNIT DESCRIPTION TONS

ITEM NO.	LOCATION	WORK DESCRIPTION		*DATE COMPLETED	WORK UNITS	
				****DATE ACCEPTED	EST	ACTUAL
570-50	SR 25 S 09010	VARIOUS LOCATIONS 361.96 ACRES M.P. 0.00-29.862	TONS	6-30-03 / <i>hfb</i>	54.294	54.294
570-50	SR 25 N 09030	VARIOUS LOCATIONS 102.178 ACRES M.P. 0.00-18.041	TONS	6-30-03 / <i>hfb</i>	15.327	15.327
570-50	SR 700 09110	VARIOUS LOCATIONS 118.89 ACRES M.P. 0.00-24.521	TONS	6-30-03 / <i>hfb</i>	17.834	17.834
570-50	SR 66 09140	VARIOUS LOCATIONS 45.294 ACRES M.P. 0.00-9.342	TONS	6-30-03 / <i>hfb</i>	6.794	6.794
570-50	SR 64 09080	VARIOUS LOCATIONS 14.943 ACRES M.P. 0.00-3.082	TONS	6-30-03 / <i>hfb</i>	2.241	2.241
570-50	SR 70 09060	VARIOUS LOCATIONS 89.951 ACRES M.P. 0.00-36.334	TONS	6-30-03 / <i>hfb</i>	13.493	13.493
570-50	SR 17 09040	VARIOUS LOCATIONS 18.996 ACRES M.P. 1.302-9.138	TONS	6-30-03 / <i>hfb</i>	2.849	2.849
UNITS ACCOMPLISHED:				TOTAL	112.832	112.832
PRIMARY	INTERSTATE	TOLL				

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MATERIAL COMPLIANCE SIGNATURES ON FAX COPY IN FILE
 CONTRACTOR NAME _____

VERIFIED
 INSPECTOR
 MATERIAL SOURCE

[Signature]