SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

Project Survey Report

SR-46-103 York County

Thu Apr 14 10:15:03 2005

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Mainline SR-46-103 Oak Park Road 50+00.00 - 76+00.00

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Tracking Information Survey Options

File #:46.169B.01 Units: English

Pin #: 31919 North Orientation: Grid

Item #: 0 State Plane Coor: Yes

County: York Vertical Datum: NAVD-88

Data Files Survey Totals

Data File: 4631919.NEW Alignments: 3

Report File: 4631919.DOC Length: 0.751 MI

Station Equalities:

Reference Points: 0

Data Points: 1236

Survey Crew Members

James P. Hinson A.E. III

Charles L. Johnson A.E. II

Floyd A. Sweatt, Jr. A.E. II

Daryl Strong E.T. III

Marcus L. Williamson E.T. III

James S. Yarborough E.T. II

Joe O. Ellis E.T. II

Durwood B. Frazer E.T. II

Closure of Traverse 1 / 90,000

Survey Started: 3-28-05 Survey Ended: 4-14-05

Comments:

Add ? to Northing for State Plane Coordinates

Add ? to Easting for State Plane Coordinates

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Section Index

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Controls Points 1 - 29

Topography Points 1000 - 1401

Break Lines Points 20000 - 20804

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Control Points

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1, 1117469.81968, 1966775.98530, 559.06573,CP 1 8 INCH NAIL

2, 1117687.47365, 1967326.71865, 543.84259,CP 2 8 INCH NAIL

3, 1117915.38227, 1967897.17240, 540.51123,CP 3 8 INCH NAIL

4, 1117906.82808, 1968420.07393, 536.37915,CP 4 8 INCH NAIL

5, 1117872.67987, 1969233.69403, 549.93701,CP 5 8 IN NAIL

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Summary of Horizontal Alignments

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Alg 01: MAINLINE SR-46-103 50+00.00 - 76+00.00 0.492 MI

6 (POT) POINT ON TANGENT 50+00.00

7 (POT) POINT ON TANGENT 60+00.13

8 (POT) POINT ON TANGENT 61+37.23

9 (PC) POINT OF CURVE 61+63.41

10 (POC) POINT ON CURVE 61+95.19

11 (PI) POINT OF INTERSECTION 63+04.02

12 (PT) POINT OF TANGENCY 64+40.40

14 (POT) POINT ON TANGENT 66+91.62

15 (POT) POINT ON TANGENT 76+00.00

Alg 02: Creek Traverse 20+00.00 - 30+58.51 0.200 MI

16 (POT) POINT ON TANGENT 20+00.00

17 (PI) POINT OF INTERSECTION 20+73.27

18 (PI) POINT OF INTERSECTION 22+14.76

19 (PI) POINT OF INTERSECTION 23+59.63

20 (PI) POINT OF INTERSECTION 25+07.63

21 (PI) POINT OF INTERSECTION 25+71.77

22 (PI) POINT OF INTERSECTION 26+49.24

23 (PI) POINT OF INTERSECTION 29+24.02

24 (POT) POINT ON TANGENT 30+58.51

Alg 03: Outfall 10+00.00 - 13+05.40 0.058 MI

25 (POT) POINT ON TANGENT 10+00.00

26 (POT) POINT ON TANGENT 13+05.40

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Details of Alignment 1 - MAINLINE SR-46-103

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6 POT Sta. = 50+00.0000 Bearing = N 68^00'15" E 1000.1268'

N = 1117448.11662 E = 1966770.74002

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7 POT Sta. = 60+00.1268 Bearing = N 68^00'15" E 137.1055'

N = 1117822.70331 E = 1967698.06864

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8 POT Sta. = 61+37.2323 Bearing = N 68^00'15" E 26.1811'

N = 1117874.05470 E = 1967825.19439

Equality: Sta = 25+71.7733 Aln = #2 PN = 21 PI

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9 PC Sta. = 61+63.4134 Bearing = N 68^00'15" E SEE NEXT

N = 1117883.86055 E = 1967849.46980

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10 POC Sta. = 61+95.1890

N = 1117895.04132 E = 1967879.21004

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11 PI Sta. = 63+04.0163

N = 1117936.52186 E = 1967979.83839

Delta = 24^16'09" Right Chord = 274.9227

Radius = 653.9269 External = 14.9450

Degree = 08^45'42" Back = S 68^00'15" W

ArcLength= 276.9888 Ahead = S 87^43'36" E

Tangent = 140.6029 ChordBear= N 80^08'20" E

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12 PT Sta. = 64+40.4022 Bearing = S 02^16'24" W 653.9270'

N = 1117930.94451 E = 1968120.33065

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13 RP

N = 1117277.53221 E = 1968094.39110

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14 POT Sta. = 66+91.6207 Bearing = S 87^43'36" E 908.3793'

N = 1117920.97934 E = 1968371.35145

Equality: Sta = 10+00.0000 Aln = #3 PN = 25 POT

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15 POT Sta. = 76+00.0000

N = 1117884.94633 E = 1969279.01578

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Details of Alignment 2 - Creek Traverse

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16 POT Sta. = 20+00.0000 Bearing = S 54^28'32" E 73.2679'

N = 1118370.23205 E = 1967851.73902

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17 PI Sta. = 20+73.2679 Bearing = S 07^59'49" E 141.4952'

N = 1118327.65965 E = 1967911.36937

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18 PI Sta. = 22+14.7631 Bearing = S 42^02'42" W 144.8624'

N = 1118187.54038 E = 1967931.05389

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19 PI Sta. = 23+59.6255 Bearing = S 11^23'22" W 148.0051'

N = 1118079.96263 E = 1967834.03777

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20 PI Sta. = 25+07.6305 Bearing = S 18^31'47" E 64.1428'

N = 1117934.87222 E = 1967804.80991

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21 PI Sta. = 25+71.7733 Bearing = S 18^31'47" E 77.4708'

N = 1117874.05470 E = 1967825.19439

Equality: Sta = 61+37.2323 Aln = #1 PN = 8 POT

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22 PI Sta. = 26+49.2441 Bearing = S 26^00'44" W 274.7809'

N = 1117800.60011 E = 1967849.81449

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23 PI Sta. = 29+24.0250 Bearing = S 48^59'58" E 134.4854'

N = 1117553.65464 E = 1967729.30536

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24 POT Sta. = 30+58.5104

N = 1117465.42308 E = 1967830.80178

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Details of Alignment 3 - Outfall

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25 POT Sta. = 10+00.0000 Bearing = N 19^37'49" E 305.4027'

N = 1117920.97934 E = 1968371.35145

Equality: Sta = 66+91.6207 Aln = #1 PN = 14 POT

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26 POT Sta. = 13+05.4027

N = 1118208.63210 E = 1968473.95118

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