DISTRICT 10 - PRODUCTION

MUSKINGUM DRIVE, BOX 658, MARIETTA OHIO 45750

COUNTY: GAL ROUTE: 141 SECTION: 12.46

DATE: _____ DATE: _____

CALCULATED BY: _____ CHECKED BY: _____

ITEM 202- WEARING COURSE REMOVED

(211.67')(24')/9 = 564.45 SQ YD

ITEM 511- QC2 CONCRETE, SUPERSTRUCTURE

(27.67')(209.29')(8½"/12)/27 = 151.93 CY

2(2.81')(209.29')(9½"/12)/27 = 34.49 CY

3(0.96')(209.29')(2"/12)/27 = 3.72 CY

2(0.53')(209.29')(2"/12)/27 = 1.37 CY

TOTAL = 191.51 CY

ITEM 511- QC1 CONCRETE, PIER

PIER 1: (4.42')(2.58')(2.15')/27 = 0.91 CY

(6')(2.58')(2.07')/27 = 1.19 CY

(4')(2.58')(2.07')/27 = 0.79 CY

(6')(2.58')(2.07')/27 = 1.19 CY

(4.42')(2.58')(2.15')/27 = 0.91 CY

4.99 CY

PIER 2: (4.42')(2.58')(2.18')/27 = 0.92 CY

(6')(2.58')(2.11')/27 = 1.21 CY

(4')(2.58')(2.18')/27 = 0.80 CY

(6')(2.58')(2.11')/27 = 1.21 CY

(4.42')(2.58')(2.18')/27 = 0.92 CY

5.06 CY

TOTAL = 4.99 + 5.06 = 10.05 CU YD

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COUNTY: GAL ROUTE: 141 SECTION: 12.46

DATE: _____ DATE: _____

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ITEM 511 - QC1 CONCRETE, ABUTMENT

REAR ABUTMENT : (1.78')(1.38')(2') /27 = 0.84 CY

(1.78')(6')(2') /27 = 0.79 CY

(1.78')(4')(2') /27 = 0.53 CY

(1.78')(6')(2') /27 = 0.79 CY

(1.78')(6.38')(2') /27 = 0.84 CY

½(4.96' + 5.96')(3')(2') /27 = 1.21 CY

(5.96')(2.63')(2') /27 = 1.16 CY

½(0.83')(0.83')(5.96') /27 = 0.08 CY

½(5.96' + 5.89')(15.17')(1.50') /27 = 4.99 CY

½(5.89' + 6.03')(15.17')(1.50') /27 = 5.02 CY

½(0.83')(0.83')(6.03') /27 = 0.08 CY

(6.03')(2.63')(2') /27 = 1.17 CY

½(6.03' + 5.03')(3')(2') /27 = 1.23 CY

17.96 CY

DEDUCT AS SEAT : (0.5')(1.5')(27.67') /27 = 0.77 CY

FWD ABUTMENT : (1.82')(6.38')(2') /27 = 0.86 CY

(1.82')(6')(2') /27 = 0.81 CY

(1.82')(4')(2') /27 = 0.54 CY

(1.82')(6')(2') /27 = 0.81 CY

(1.82')(6.38')(2') /27 = 0.86 CY

½(5.03' + 6.03')(3')(2') /27 = 1.23 CY

(6.03')(2.63')(2') /27 = 1.17 CY

½(0.83')(0.83')(6.03') /27 = 0.08 CY

½(6.03' + 5.84')(15.17')(1.5') /27 = 5.00 CY

½(5.84' + 6.03')(15.17')(1.5') /27 = 5.00 CY

½(.83')(.83')(6.03') /27 = 0.08 CY

(6.03')(2.63')(2') /27 = 1.17 CY

½(6.03' + 5.03')(3')(2') /27 = 1.23 CY

(19')(3')(0.5') /27 = 1.06 CY

DEDUCT AS SEAT : (0.5')(1.5')(27.67') /27 = 0.77 CY

19.13 CY

TOTAL ABUTMENT = 17.96 + 19.13 = 37.09 CU YD

DISTRICT 10 - PRODUCTION

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COUNTY: GAL ROUTE: 141 SECTION: 12.46

DATE: _____ DATE: _____

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ITEM 512 - SEALING OF CONCRETE SURFACES

SUPER : 2(1.5' + 0.5')(209.29') / 9 = 93.02 SY

REAR ABUTMENT : (7.08')(2') / 9 = 1.57 SY

½(7.08' + 8.08')(3') / 9 = 2.53 SY

(8.08')(3.17') / 9 = 2.85 SY

½(8.08' + 8.30')(13.83') / 9 = 12.59 SY

½(8.30' + 8.08')(13.83') / 9 = 12.59 SY

(8.08')(3.17') / 9 = 2.85 SY

½(8.08' + 7.08')(3') / 9 = 2.53 SY

(7.08')(2') / 9 = 1.57 SY

(28.75')(2') / 9 = 6.39 SY

(4.18')(2') / 9 = 0.93 SY

(4.18')(2') / 9 = 0.93 SY

(5.79')(2') / 9 = 1.29 SY

(5.79')(2') / 9 = 1.29 SY

(7.18')(1') / 9 = 0.80 SY

(7.18')(1') / 9 = 0.80 SY

51.51 SY

FORWARD ABUTMENT : (6.99')(2') / 9 = 1.55 SY

½(6.99' + 7.99')(3') / 9 = 2.50 SY

(7.99')(3.17') / 9 = 2.66 SY

½(7.99' + 8.21')(13.83') / 9 = 12.45 SY

½(8.21' + 7.99')(13.83') / 9 = 12.45 SY

(7.99')(3.17') / 9 = 2.66 SY

½(7.99' + 6.99')(3') / 9 = 2.50 SY

(6.99')(2') / 9 = 1.55 SY

(28.75')(2') / 9 = 6.39 SY

(4.21')(2') / 9 = 0.94 SY

(4.21')(2') / 9 = 0.94 SY

(5.79')(2') / 9 = 1.29 SY

(5.79')(2') / 9 = 1.29 SY

(7.18')(1') / 9 = 0.80 SY

(7.18')(1') / 9 = 0.80 SY

50.77 SY

TOTAL ABUTMENT = 51.51 + 50.77 = 102.28 SQ YD

DISTRICT 10 - PRODUCTION

MUSKINGUM DRIVE, BOX 658, MARIETTA OHIO 45750

COUNTY: GAL ROUTE: 141 SECTION: 12.96

DATE: DATE:

CALCULATED BY: CHECKED BY:

ITEM 512 - SEALING OF CONCRETE SURFACES

PIER 1 :

2 (12.25')(27.37') / 9 = 74.40 SY

2 (12.73')(25') / 9 = 70.72 SY

2 × π × 2.21' × 24.98' / 9 = 38.54 SY

(27.33')(3.67') / 9 = 11.14 SY

2 (2.18')(2.58') / 9 = 1.25 SY

2 (24.83')(2.36') / 9 = 13.02 SY

209.07 SY

PIER 2 :

(12.25')(27.33') / 9 = 37.20 SY

(0.84')(27.33') / 9 = 2.55 SY

2 (12.73')(25') / 9 = 70.72 SY

2 × π × 2.21' × 24.98' / 9 = 38.54 SY

(27.33')(3.67') / 9 = 11.14 SY

2 (2.18')(2.58') / 9 = 1.25 SY

2 (24.83')(2.36') / 9 = 13.02 SY

174.42 SY

PIER TOTAL = 209.07 + 174.42 = 383.49 SQ YD

ITEM 512 - TYPE B WATERPROOFING

REAR ABUTMENT : (42.02')(3') / 9 = 14.01 SY

FORWARD ABUTMENT : (42.02')(3') / 9 = 14.01 SY

TOTAL = 28.02 SQ YD

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COUNTY: GAL ROUTE: 141 SECTION: 12.46

DATE: DATE:

CALCULATED BY: CHECKED BY:

ITEM 518 - POROUS BACKFILL

REAR ABUTMENT : $\frac{1}{2}(5.10' + 1.10')(3')(3.5)/27 = 2.18$ CY

$(6.10')(1.83')(3.5)/27 = 1.45$ CY

$(6.10')(1.33')(2')/27 = 0.60$ CY

$(6.28')(27.67')(2')/27 = 12.87$ CY

$(6.10')(1.33')(2')/27 = 0.60$ CY

$(6.10')(1.83')(3.5)/27 = 1.45$ CY

$\frac{1}{2}(6.10' + 5.10')(3')(3.5)/27 = 2.18$ CY

21.33 CY

FORWARD ABUTMENT : $\frac{1}{2}(5.20' + 6.20')(3')(3.5)/27 = 2.22$ CY

$(6.20')(1.83')(3.5')/27 = 1.47$ CY

$(6.20')(1.33')(2')/27 = 0.61$ CY

$(6.28')(27.67')(2')/27 = 12.87$ CY

$(6.20')(1.33')(2')/27 = 0.61$ CY

$(6.20')(1.83')(3.5')/27 = 1.47$ CY

$\frac{1}{2}(6.2' + 5.20')(3')(3.5)/27 = 2.22$ CY

21.47 CY

TOTAL = 21.33 + 21.47 = 42.80 CU YD

ITEM 526 - REINFORCED CONCRETE APPROACH SLAB

$2(25')(27.67')/9 = 153.72$ SQ YD