

DISTRICT 10 - BRIDGE DEPARTMENT

MUSKINGUM DRIVE, BOX 658, MARIETTA OHIO 45750

COUNTY: MRG ROUTE: 266 SECTION: 11.46

SHEET 1 OF 2

WEARING COURSE REMOVED

$$(24')(24.25') / 9 = 64.61 \text{ SQ YD}$$

CLASS GC1 CONCRETE, RETAINING/WINGWALL

$$(7.33')(10')(1') / 27 = 2.71 \text{ CY}$$

$$\frac{1}{2}(3.33' + 7.33')(10')(1') / 27 = 1.97 \text{ CY}$$

$$4.68 \times 2 = 9.36 \text{ CY}$$

CLASS GC1 CONCRETE, FOOTING

$$(5.75')(35.32')(1.5') / 27 = 11.29 \text{ CY}$$

$$(5.75')(8.58')(1.5') / 27 = 2.74 \text{ CY}$$

$$(29.58')(1.5')(1') / 27 = 1.64 \text{ CY}$$

$$(10.08')(1.5')(1') / 27 = 0.56 \text{ CY}$$

$$(21')(1.5')(1.17') / 27 = 1.37 \text{ CY}$$

$$(21')(0.5')(0.5') / 27 = 0.19 \text{ CY}$$

$$17.79 \times 2 = 35.58 \text{ CY}$$

CLASS GC1 CONCRETE, HEADWALL

$$(22')(1')(1') / 27 \times 2 = 1.63 \text{ CY}$$

SEALING OF CONCRETE SURFACES

$$(32.08')(1') / 9 = 3.56 \text{ SY}$$

$$(15')(1') / 9 = 0.17 \text{ SY}$$

$$\frac{1}{2}(1.5' + 6.5')(10') / 9 = 4.44 \text{ SY}$$

$$\frac{1}{2}(6.5' + 2.5')(10') / 9 = 5 \text{ SY}$$

$$(25')(1') / 9 = 0.28 \text{ SY}$$

$$(10')(1') / 9 = 1.11 \text{ SY}$$

$$(10.77')(1') / 9 = 1.20 \text{ SY}$$

$$(32.08')(1') / 9 = 3.56 \text{ SY}$$

$$(22')(1') / 9 = 2.44 \text{ SY}$$

$$(21')(1.5') / 9 = 3.50 \text{ SY}$$

$$(21')(1') / 9 = 2.33 \text{ SY}$$

$$(10.34')(1') / 9 = 1.15 \text{ SY}$$

$$(20')(1.17') / 9 = 2.60 \text{ SY}$$

$$(45.65')(2') / 9 = 10.14 \text{ SY}$$

$$41.48 \times 2 = 82.96 \text{ SY}$$

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SHEET 2 OF 2

TYPE 2 WATERPROOFING

$$(6.33')(40')/9 = 29.54 \times 2 = 59.08 \text{ SY}$$

TYPE 3 WATERPROOFING

$$(24')(40')/9 = 106.67 \text{ SY}$$

1" PEJF

$$(1')(7.33') \times 4 = 29.32 \text{ SF}$$

POROUS BACKFILL

$$(5.83')(10')(1.5')/27 = 3.24 \text{ CY}$$

$$\frac{1}{2} (5.83' + 1.83')(10')(1.5')/27 = 2.13 \text{ CY}$$

$$5.37 \times 2 = 10.74 \text{ CY}$$

LOW STRENGTH MORTAR BACKFILL

$$(6.33')(2')(4')/27 = 19.22 \text{ CY}$$

$$\frac{1}{2} (6.33')(9.50')(4')/27 = 45.66 \text{ CY}$$

$$64.88 \times 2 = 129.76 \text{ CY}$$

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SHEET 1 OF 3

WEARING COURSE REMOVED

$$(17.2')(26')/9 = 49.69 \text{ SY}$$

CLASS QCI CONCRETE, WINGWALL

$$\frac{1}{2}(4.5' + 6.5')(8')(1')/27 = 1.63 \text{ CY}$$

$$\frac{1}{2}(5.5' + 6.5')(8')(1')/27 = 1.78 \text{ CY}$$

$$\frac{1}{2}(5.5' + 6.5')(8')(1')/27 = 1.78 \text{ CY}$$

$$\frac{1}{2}(4' + 6.5')(8')(1')/27 = 1.56 \text{ CY}$$

$$4[(.4145F)(8')] / 27 = 0.49 \text{ CY}$$

$$\underline{\hspace{1cm}} \\ 7.24 \text{ CY}$$

CLASS QCI CONCRETE, FOOTING

$$\frac{1}{2}(7.375' + 9.76')(5.75')(1.5')/27 = 2.74 \text{ CY}$$

$$\frac{1}{2}(16.92' + 21.69')(5.75')(1.5')/27 = 6.17 \text{ CY}$$

$$\frac{1}{2}(7.375' + 9.76')(5.75')(1.5')/27 = 2.74 \text{ CY}$$

$$\frac{1}{2}(7.375' + 8')(1.5')(1')/27 = 0.43 \text{ CY}$$

$$\frac{1}{2}(16.92' + 18.17')(1.5')(1')/27 = 0.97 \text{ CY}$$

$$\frac{1}{2}(7.375' + 8')(1.5')(1')/27 = 0.43 \text{ CY}$$

$$\frac{1}{2}(1.5' + 2.17')(1.8')(1')/27 = 1.22 \text{ CY}$$

$$\underline{\hspace{1cm}} \\ 14.70 \times 2 = 29.40 \text{ CY}$$

CLASS QCI CONCRETE, HEADWALL

$$(1')(0.5')(18')/27 = 0.33 \times 2 = 0.66 \text{ CY}$$

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SHEET 2 OF 3

SEALING OF CONCRETE SURFACES

$$\frac{1}{2}(0.75' + 5.5')(8')/9 = 2.78 \text{ SY}$$

$$(0.75')(1')/9 = 0.08 \text{ SY}$$

$$(0.75')(8')/9 = 0.67 \text{ SY}$$

$$(0.5')(18')/9 = 1.00 \text{ SY}$$

$$\frac{1}{2}(1.5' + 5.5')(8')/9 = 3.11 \text{ SY}$$

$$(1.5')(1')/9 = 0.17 \text{ SY}$$

$$(0.75')(8')/9 = 0.67 \text{ SY}$$

$$(8.25' + 0.21' + 18' + 0.21' + 8.06')(1')/9 = 3.86 \text{ SY}$$

$$(18')(1.5')/9 = 3.00 \text{ SY}$$

$$(1')(4')/9 \times 2 = 0.89 \text{ SY}$$

$$\frac{1}{2}(1')(1')/9 \times 4 = 0.22 \text{ SY}$$

$$(37.66')(2')/9 = 8.37 \text{ SY}$$

$$24.82 \text{ SY}$$

$$\frac{1}{2}(1' + 5.5')(8')/9 = 2.89 \text{ SY}$$

$$(1')(1')/9 = 0.11 \text{ SY}$$

$$(1')(8')/9 = 0.89 \text{ SY}$$

$$(0.5')(18')/9 = 1.00 \text{ SY}$$

$$\frac{1}{2}(0.5' + 5.5')(8')/9 = 2.67 \text{ SY}$$

$$(0.5')(1')/9 = 0.06 \text{ SY}$$

$$(0.5')(8')/9 = 0.44 \text{ SY}$$

$$(8.06' + 0.21' + 18' + 0.21' + 8.38')(1')/9 = 3.87 \text{ SY}$$

$$(18')(1.5')/9 = 3.00 \text{ SY}$$

$$(1')(4')/9 \times 2 = 0.89 \text{ SY}$$

$$\frac{1}{2}(1')(1')/9 \times 4 = 0.22 \text{ SY}$$

$$(37.66')(2')/9 = 8.37 \text{ SY}$$

$$24.41 \text{ SY}$$

$$24.82 + 24.41 = 49.23 \text{ SY}$$

TYPE 2 WATERPROOFING

$$(46')(6')/9 \times 2 = 61.33 \text{ SY}$$

TYPE 3 WATERPROOFING

$$(20')(44')/9 = 97.78 \text{ SY}$$

1" PEJF

$$(1')(6.5') \times 4 = 26 \text{ SF}$$

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SHEET 3 OF 3

POROUS BACKFILL

$$\frac{1}{2}(3' + 5.25')(9.87')(1.5')/27 = 2.26 \text{ CY}$$

$$\frac{1}{2}(4' + 5.25')(9.87')(1.5')/27 = 2.54 \text{ CY}$$

$$\frac{1}{2}(4' + 5.25')(9.87')(1.5')/27 = 2.54 \text{ CY}$$

$$\frac{1}{2}(2.5' + 5.25')(9.87')(1.5')/27 = 2.18 \text{ CY}$$

$$9.46 \text{ CY}$$

LOW STRENGTH MORTAR BACKFILL

$$(2')(6')(44')/27 = 19.56 \text{ CY}$$

$$\frac{1}{2}(6')(9')(44')/27 = 47.00 \text{ CY}$$

$$(2')(6')(44')/27 = 19.56 \text{ CY}$$

$$83.12 \text{ CY}$$

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