DISTRICT 10 - BRIDGE DEPARTMENT

MUSKINGUM DRIVE, BOX 658, MARIETTA OHIO 45750

COUNTY: NOB ROUTE: 78 SECTION: 1.08 SHEET 1 OF 3

CALCULATED BY: DATE:

CHECKED BY: DATE:

CLASS QC1 CONCRETE, RETAINING WALL/WINGWALL

INLET: ½(9.5' + 13.5')(17.42')(1.25')/27 = 9.27 CY

½(9' + 13.5')(19.75')(1.25')/27 = 10.29 CY

(0.65 SQ FT)(13.5')/27 = 0.33 CY

OUTLET: ½(11.5' + 13.5')(17.42')(1.25')/27 = 10.08 CY

½(9.5' + 13.5')(19.75')(1.25')/27 = 10.52 CY

(0.65 SQ FT)(13.5')/27 = 0.33 CY

40.82 CU YD

CLASS QC1 CONCRETE, FOOTING

INLET: ½(35.58' + 40.24')(11.25')(2')/27 = 31.59 CY

½(17.75' + 22.41')(11.25')(2')/27 = 16.73 CY

½(35.58' + 36.20')(1.5')(2')/27 = 3.99 CY

½(17.75' + 18.37')(1.5')(2')/27 = 2.01 CY

(20')(4.83')(1')/27 = 3.58 CY

OUTLET: ½(35.58' + 40.24')(11.25')(2')/27 = 31.59 CY

½(17.75' + 22.41')(11.25')(2')/27 = 16.73 CY

½(35.58' + 36.20')(1.5')(2')/27 = 3.99 CY

½(17.75' + 18.37')(1.5')(2')/27 = 2.01 CY

(20')(4.83')(1')/27 = 3.58 CY

115.80 CU YD

CLASS QC1 CONCRETE, HEADWALL

INLET: (20')(1.5')(1.25')/27 = 1.39 CY

OUTLET: (20')(1.5')(1.25')/27 = 1.39 CY

2.78 CU YD

WEARING COURSE REMOVED

(32')(22.33')/9 = 79.41 SQ YD

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COUNTY: NOB ROUTE: 78 SECTION: 1.08 SHEET 2 OF 3

SEALING OF CONCRETE SURFACES

INLET: ½(12.5' + 0.36')(17.5')/9 = 12.50 SY
(0.36')(1.25')/9 = 0.05 SY
(1.25')(17.87')/9 = 2.48 SY
(0.36')(17.5')/9 = 0.70 SY
½(12.5' + 0.91')(19.75')/9 = 14.71 SY
(0.91')(1.25')/9 = 0.13 SY
(1.25')(20.26')/9 = 2.81 SY
(0.91')(19.75')/9 = 2.00 SY
(20')(1.25')/9 = 2.78 SY
(20')(2.5')/9 = 5.56 SY
2[(10')(1')/9] = 2.22 SY
4[½(1')(1')/9] = 0.22 SY
2×[(2)(8') + (2)(16') + (4)(1.41')]/9 = 11.92 SY
58.08 SY

OUTLET: ½(12.5' + 0.94')(17.5')/9 = 13.07 SY
(0.94')(1.25')/9 = 0.13 SY
(1.25')(17.53')/9 = 2.43 SY
(0.94')(17.5')/9 = 1.83 SY
½(12.5' + 0.61')(19.75')/9 = 14.38 SY
(0.61')(1.25')/9 = 0.08 SY
(1.25')(20.15')/9 = 2.80 SY
(0.14')(19.75')/9 = 0.31 SY
(20')(1.25')/9 = 2.78 SY
(20')(2.5')/9 = 5.56 SY
2[(10')(1')/9] = 2.22 SY
2[½(1')(1')/9] = 0.22 SY
2×[(2)(8') + (2)(16') + 4(1.41')]/9 = 11.92 SY
57.73 SY

TOTAL: 58.08 + 57.73 = 115.81 SQ YD

TYPE 2 WATERPROOFING

(52.5')(12')/9 × 2 = 140 SQ YD

TYPE 3 WATERPROOFING

(50.5')(22')/9 = 123.44 SQ YD

1" PEJF

4 × (13.5')(1.25') = 67.50 SQ FT

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COUNTY: NOB ROUTE: 78 SECTION: 1.08 SHEET 3 OF 3

POROUS BACKFILL

INLET : ½(12.5' + 8.14')(17.5')(1.5')/27 = 10.03 CY

½(12.5' + 7.54')(19.75')(1.5')/27 = 10.99 CY

(12.5')(1.74')(1.5')/27 = 1.21 CY

OUTLET : ½(12.5' + 9.56')(17.5')(1.5')/27 = 10.72 CY

½(12.5' + 7.86')(19.75')(1.5')/27 = 11.17 CY

(12.5')(1.74')(1.5')/27 = 1.21 CY

45.33 CU YD

LOW STRENGTH MORTAR BACKFILL

(2')(12')(50.5')/27 = 44.89 CY

½(12')(12')(50.5')/27 = 134.67 CY

½(2' + 9')(12')(38')/27 = 92.89 CY

(9')(12')(12.5')/27 = 50 CY

322.45 CU YD

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