Bridge 0.710 Quantities

Wearing Course Removed (8”)

36+72.60 to 37+05.60

33x23/9 = 84.33

Use 85 S.Y.

Asphalt Surface Course, Type 1 (446), PG70-22M

36+72.60 to 37+05.60

(33x23x1.25)/12)/27 = 2.93

Use 3 C.Y.

Asphalt Int. Course, Type 1 (449)

36+72.60 to 37+05.60

CADD End Area: 15 Sq Ft.

(33x15)/27 = 18.33

Use 19 C.Y.

Tack Coat

36+72.60 to 37+05.60

Under surface course

(33x23)/9x0.055 = 4.64

Under Int. Course (446) Lift 1

(33x23)/9x0.055 = 4.64

Under Int. Course (446) Lift 2

(33x23)/9x0.055 = 4.64

On Box Culvert

(33x23)/9x0.070 = 5.90

Total = 19.82

Use 20 Gal.

Type 3 Waterproofing

36+72.60 to 37+05.60

((1+33+1)x(23))/9 = 89.44

Use 90 S.Y

Culvert 04.550 Quantities

Wearing Course Removed, As Per Plan

239+73.49 to 239+87.49

14'x42'/9 = 65.33

Use 66 S.Y.

Asphalt Surface Course, Type 1 (446), PG70-22M

239+73.49 to 239+87.49

(14x32x1.25/12)/27 = 1.73

Use 2 C.Y.

Asphalt Int. Course, Type 2 (446)

239+73.49 to 239+87.49

(14x32x3.75)/12)/27 = 5.19

Use 6 C.Y. (Rounded up for notch on left)

Asphalt Int. Course, Type 2 (449)

239+73.49 to 239+87.49

CADD End Area = 22.07

(14x22.07)/27 = 11.44

Use 12 C.Y.

Tack Coat

239+73.49 to 239+87.49

Under surface course

(14x32)/9x0.055 = 2.74

Under Int. Course (446) Lift 1

(14x32)/9x0.055 = 2.74

Under Int. Course (446)

(14x32)/9x0.055 = 2.74

Under Int. course (449) Lift 1

(14x22.36)/9x0.055 = 1.91

Under Int. course (449) Lift 2

(14x22.36)/9x0.055 = 1.91

Under Int. course (449)

(14x22.36)/9x0.055 = 1.91

On Box Culvert

(14x34.5)/9x0.070 = 3.76

Total = 17.71

Use 18 Gal.

Asphalt Base, PG64-22 (449)

239+73.49 to 239+87.49

CADD End Area = 22.40

(14x22.40)/27 = 11.61

Use 12 C.Y.

Embankment

239+73.49 to 239+87.49

CADD End Area = 6.12

(14x6.12)/27 =3.17

Use 4 C.Y.

Guardrail

Ex. 5GR (P.19) – 37.5 (Guardrail Type 5 With Tubular Backup As Per Plan)

Ex. 2GR (P.19) – 37.5 (Guardrail Type 5 With Double Rails)

43.75’ MGS Long Span @ Structure – Both Sides

Type 3 Waterproofing

239+73.49 to 239+87.49

((1+14+1)x(44-1-1))/9 = 74.67

Use 75 S.Y

LSM

Left: (([2+(2+3)]/2)2)(44-1-1) /27 = 10.89

Right: (([2+(2+3)]/2)2)(44-1-1) /27 = 10.89

Use 22 C.Y.

Culvert 05.080 Quantities

Wearing Course Removed, As Per Plan

239+73.49 to 239+87.49

14'x38'/9 = 59.11

Use 60 S.Y.

Asphalt Surface Course, Type 1 (446), PG70-22M

239+73.49 to 239+87.49

(14x38x1.25/12)/27 = 2.05

Use 2 C.Y.

Asphalt Int. Course, Type 2 (446)

239+73.49 to 239+87.49

CADD End Area = 12.20

(14x12.20)/27 = 6.33

Use 7 C.Y.

Asphalt Int. Course, Type 2 (449)

239+73.49 to 239+87.49

CADD End Area = 13.65

(14x13.65)/27 = 7.08

Use 7 C.Y.

Tack Coat

239+73.49 to 239+87.49

Under surface course

(14x38)/9x0.055 = 3.25

Under Int. Course (446) Lift 1

(14x38)/9x0.055 = 3.25

Under Int. Course (446)

(14x38)/9x0.055 = 3.25

Under Int. course (449) Lift 1

(14x38)/9x0.055 = 3.25

On Box Culvert

(14x38)/9x0.070 = 4.14

Total = 17.14

Use 18 Gal.

Guardrail

Ex. 5GR (P.19) – 37.5 (Guardrail Type 5 With Tubular Backup As Per Plan)

Ex. 2GR (P.19) – 37.5 (Guardrail Type 5 With Double Rails)

Type 3 Waterproofing

239+73.49 to 239+87.49

((1+14+1)x(40-1-1))/9 = 67.56

Use 68 S.Y

LSM

Left: (([2+(2+3)]/2)2)(44-1-1) /27 = 10.89

Right: (([2+(2+3)]/2)2)(44-1-1) /27 = 10.89

Use 22 C.Y.

Bridge 05.560 Quantities

Wearing Course Removed

291+91.80 to 293+12.10

(70.22'+25+25) x40'/9 = 534.31

Use 534 S.Y.

Asphalt Surface Course, Type 1 (446), PG70-22M

291+91.80 to 293+12.10

((70.22'+25+25) x40x1.25/12)/27 = 18.55

Use 19 C.Y.

Tack Coat

291+91.80 to 293+12.10

Under surface course

(70.22'+25+25 x 40)/9x0.055 = 29.39

Use 30 Gal

Bridge 06.990 Quantities

Asphalt Surface Course, Type 1 (446), PG70-22M

366+57.10 to 368+35.90

((128.82+25+25)x32x1.25/12)/27 = 21.97

Use 22 C.Y.

Asphalt Int. Course, Type 2 (446)

366+57.10 to 368+35.90

(128.82x32x1.75)/12)/27 = 22.27

Use 23 C.Y.

Asphalt Int. Course, Type 2 (449) (Approach Slabs)

366+57.10 to 368+35.90

(25+25)x32x(2.75+1.75/2)/12/27 = 11.11

Use 12 C.Y.

Tack Coat

366+57.10 to 368+35.90

Under surface course

((128.82+25+25)x32)/9x0.055 = 34.81

On Bridge Deck

(128.82+25+25)x32)/9x0.070 = 44.51

Total = 79.32

Use 80 Gal.

Concrete Patching

366+57.10 to 368+35.90

(15.09+22.05+18.55+18.78+32+8.48+8.84+60.81+5.25+9)/9 = (22.09 CAD Area)

Use 22 S.Y.

Guardrail

Ex. 5GR (P.19) – 37.5 (Guardrail Type 5 With Tubular Backup As Per Plan)

Ex. 2GR (P.19) – 37.5 (Guardrail Type 5 With Double Rails)

Type 3 Waterproofing

366+57.10 to 368+35.90

((128.82+25+25)x32)/9 = 564.59

Use 565 S.Y

Bridge 07.150 Quantities

Wearing Course Removed

239+73.49 to 239+87.49

(25'x32'/9) x 2 = 177.78

Use 178 S.Y.

Culvert 10.920 Quantities

Wearing Course Removed, As Per Plan

526+70.70 to 526+92.70

14'x40'/9 = 62.22

Use 63 S.Y.

Asphalt Surface Course, Type 1 (446), PG70-22M

526+70.70 to 526+92.70

(14x40x1.25/12)/27 = 2.16

Use 3 C.Y.

Asphalt Int. Course, Type 2 (446)

526+70.70 to 526+92.70

(14x40x3.75)/12)/27 = 6.48

Use 7 C.Y.

Asphalt Int. Course, Type 2 (449)

526+70.70 to 526+92.70

CADD End Area = 28.23

(14x28.23)/27 = 14.64

Use 15 C.Y.

Tack Coat

526+70.70 to 526+92.70

Under surface course

(14x40)/9x0.055 = 3.42

Under Int. Course (446)

(14x40)/9x0.055 = 3.42

Under Int. Course (446) Lift 1

(14x40)/9x0.055 = 3.42

Under Int. course (449) Lift 1

(14x27.625)/9x0.055 = 3.42

On Box Culvert

(14x40)/9x0.070 = 4.36

Total = 18.04

Use 18 Gal.

Guardrail

Ex. 5GR (P.19) – 37.5 (Guardrail Type 5 With Tubular Backup As Per Plan)

Ex. 2GR (P.19) – 37.5 (Guardrail Type 5 With Double Rails)

Type 3 Waterproofing

526+70.70 to 526+92.70

((1+14+1)x(42-1-1))/9 = 71.11

Use 72 S.Y

LSM

Left: (([2+(2+3)]/2)2)(42) /27 = 10.89

Right: (([2+(2+3)]/2)2)(42) /27 = 10.89

Use 22 C.Y.

Bridge 11.570 Quantities

Wearing Course Removed (Approach Slabs)

606+96.70 to 607+79.20

(20x36/9)x2 = 160

Use 160 S.Y.

Concrete Patching (Approach Slabs)

606+96.70 to 607+79.20

((.75x.75)+(8x3.5)+(3x3))/9 = 4.17

Use 5 S.Y.

Asphalt Surface Course, Type 2 446), PG70-22M (Approach Slabs)

606+96.70 to 607+79.20

(20x36x1.25/12)/27 = 2.78

Use 3 C.Y.

Tack Coat

606+96.70 to 607+79.20

Under surface course

(14x36)/9x0.055 = 3.08

Total = 3.08

Use 3 Gal.