

ESTIMATED QUANTITIES

SFN: 7802625

ITEM 202-11203: PORTIONS OF STRUCTURE REMOVED,
OVER 20 FOOT SPAN, AS PER PLAN

LUMP

ITEM 202-22900: APPROACH SLAB REMOVED, SY

$$\text{AREA} = 2(40.0)25.0 \div 9 = 222.22 \text{ SY}$$

222 SY

ITEM 202-23500: WEARING COURSE REMOVED, SY

$$\text{APPROACH SLAB AREA} = 2(40.0)25.0 \div 9 = 222.22 \text{ SY}$$

$$\text{BRIDGE DECK AREA} = 40.0(28.44) \div 9 = 126.40 \text{ SY}$$

348.62 SY

349 SY

ITEM 503-11100: COFFERDAMS AND EXCAVATION
BRACING

LUMP

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PROJECT TRU-46-11.20 PROJ. NO. 21-079 PG. 2 OF 10
COMP. BY HK DATE 11-6-2023 CHKD. BY ACB DATE 3/21/24
SUBJECT TRU-46-1120 OVER BIG RUN
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ITEM 503-21101: UNCLASSIFIED EXCAVATION

LUMP

ITEM 509-10000: EPOXY COATED STEEL REINFORCEMENT, LB

SUPERSTRUCTURE: 3635 LB

SUBSTRUCTURE: 140 LB

TOTAL : 3775 LB

3775 LB

ITEM 509-20001: CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING CONCRETE REINFORCEMENT AS PER PLAN

50 LB

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ITEM 511-31610: CLASS QC2 CONCRETE,
SUPERSTRUCTURE, CY

$$Vol = 40.375(28.44)0.679 \div 27 = 28.88 \text{ CY}$$

29 CY

ITEM 511-44100: CLASS QC1 CONCRETE, ABUTMENT
NOT INCLUDING FOOTING, CY

$$REAR: 2.34(2.09) + 2.26(3.28) = 12.30 \text{ CF}$$

$$FWD: 2.21(2.09) + 2.52(3.28) = 12.88 \text{ CF}$$
$$\underline{25.18 \text{ CF}}$$

$$Vol = 25.18 \div 27 = 0.93 \text{ CY}$$

1 CY

ITEM 512-10100: SEALING OF CONCRETE SURFACES
(EPOXY-URETHANE), SY

$$\text{SUPERSTRUCTURE: } 26.075(2.545 + 2.646) = 135.36 \text{ SF}$$

$$\text{AREA} = 135.36 \div 9 = 15.04 \text{ SY}$$

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PROJECT TRU-46-11.20 PROJ NO 21-079 PG 4 OF 10
COMP BY HK DATE 11-7-2023 CHKD BY ACB DATE 3/21/24
SUBJECT TRU-46-1120 OVER BIG RUN
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ITEM 512-10100: SEALING OF CONCRETE SURFACES
(EPOXY-URETHANE), SY, CONT.

$$\begin{aligned} \text{REAR ABUTMENT: } & 17.495(44.66) - 1.76(41.25) \\ & + 17.86(29.8) - 0.5(8.17)28.0 - 0.5(8.35)29.8 \\ & + 17.13(28.04) - 0.5(9.96)26.0 - 0.5(5.92)28.04 \\ & + 2.0(29.17 + 27.84) + 5.35 + 4.30 = 1393.685F \end{aligned}$$

$$\begin{aligned} \text{FORWARD ABUTMENT: } & 18.075(45.11) - 1.9(41.25) \\ & + 17.57(25.8) - 0.5(11.28)24.0 - 0.5(5.04)25.8 \\ & + 18.58(30.04) - 0.5(10.72)28.0 - 0.5(6.61)30.04 \\ & + 2.0(26.52 + 29.98) + 5.35 + 4.30 = 1421.35F \\ & \underline{\hspace{10em}} \\ & 2815.035F \end{aligned}$$

$$\text{AREA} = 2815.03 \div 9 = 312.78 \text{ SY}$$

$$\text{TOTAL} = 15.04 + 312.78 = 327.82 \text{ SY}$$

328 SY

ITEM 512-10601: CONCRETE REPAIR BY EPOXY
INJECTION, AS PER PLAN, FT

33 FT

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PROJECT TRU-46-11.20 PROJ NO 21-079 PG. 5 OF 10
COMP BY HK DATE 11-8-2023 CHKD BY ACB DATE 3/21/24
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ITEM 512-33000: TYPE 2 WATERPROOFING, SY

$$\text{AREA} = 4(3)3 \div 9 = 4.0 \text{ SY}$$

4 SY

ITEM 512-74000: REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES, SY

313 SY

ITEM 515-12030: PRESTRESSED CONCRETE COMPOSITE BOX BEAM MEMBERS LEVEL 1, CB17-4B, 28', EA

10 EACH

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ITEM 515-38000: HIGH EARLY STRENGTH KEYWAY
GROUT, FT

$$\text{LENGTH} = 9.0(28.4375) = 255.94 \text{ FT}$$

256 FT

ITEM 516-13600: 1" PREFORMED EXPANSION JOINT
FILLER, SF

$$1.875(2.34 + 2.26 + 2.21 + 2.52) = 17.49 \text{ SF}$$

18 SF

ITEM 516-14020: SEMI-INTEGRAL ABUTMENT
EXPANSION JOINT SEAL, FT

$$\text{LENGTH} = 2(43.936) = 87.87'$$

88 FT

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ITEM 516 - 41100: $\frac{1}{8}$ " PREFORMED BEARING PAD, EACH

$$\# = 2(10) = 20 \text{ EACH}$$

20 EACH

ITEM 516 - 44001: ELASTOMERIC BEARING WITH
INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE),
AS PER PLAN, EACH (1.209" X 6" X 9" W/ $\frac{1}{16}$ " (AVG) X 7" X 10"
LOAD PLATE)

$$\# = 10(4) = 40.0 \text{ EACH}$$

40 EACH

ITEM 517 - 70100: RAILING (THREE STEEL TUBE
BRIDGE RAILING), FT

$$\text{PAY LIMIT} = 2(18.0 + 16.0) = 68.0 \text{ FT}$$

68 FT

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ITEM 518 - 21200: POROUS BACKFILL WITH
GEOTEXTILE FABRIC, CY

$$VOL = 2.0(1.5)(44,396 + 44,927) \div 27 = 9.92 \text{ CY}$$

10 CY

ITEM 518 - 22300: SPECIAL-STEEL DRIP STRIP, FT

$$LENGTH = 2(26.075) = 52.15 \text{ FT}$$
$$+ 2 \times 4 \text{ Posts} \times 2 \text{ sides} = 16 \text{ FT}$$

69 FT

ITEM 519 - 11101: PATCHING CONCRETE STRUCTURE,
AS PER PLAN, SF

6 SF

ITEM 844 - 10001: CONCRETE PATCHING WITH GALVANIC ANODE
PROTECTION, AS PER PLAN, SF

664 SF

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ITEM 526-30000: REINFORCED CONCRETE
APPROACH SLABS (T=15"), SY

$$\text{AREA} = 2(40.0)25.0 \div 9 = 222.2 \text{ SY}$$

222 SY

ITEM 526-30020: TYPE B INSTALLATION, SY

$$\text{AREA} = 2(5.0)40.56 \div 9 = 45.06 \text{ SY}$$

45 SY

ITEM 441-70101: 1 1/2" ASPHALT CONCRETE SURFACE
COURSE, TYPE 1, (449), AS PER PLAN PG 70-22M, CY

$$\text{VOL} = 2(1.5 \div 12)40.0(25.0) \div 27 = 18.52 \text{ CY}$$

19 CY

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<u>ITEM 407-20000: NON-TRACKING TACK COAT</u>	
#GAL = 0.07 (222.25Y) = 15.55 GAL	16 GAL
<u>ITEM 407-13900: TACK COAT, 702.13</u>	
#GAL = 0.08 (222.25Y) = 17.78 GAL.	18 GAL
<u>ITEM 601-32100: ROCK CHANNEL PROTECTION, TYPE B WITH FILTER, CY</u>	
REAR ABUT: 2.5 (5.833) 44.9 (2) ÷ 27 = 48.5 CY	49 CY
<u>ITEM 625-33000: STRUCTURE GROUNDING SYSTEM EACH</u>	
	1 EACH
<u>ITEM 202-98000: REMOVAL MISC.: CHANNEL CLEANOUT, LUMP</u>	
	LUMP