AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 503E21100 - UNCLASSIFIED EXCAVATION **UNIT: CY**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
184			

Per ODOT CMS 503.09, method of measurment is:

Bounded on the bottom by the bottom plans of the footing, crossbeam, or wall.

Bounded on the top by the surface of the existing ground

(fill, if excavation is performed prior to embankment placement).

Bounded on the sides by 1 foot outside the outer edge of the footing, crossbeam, or wall.

Rear Abutment Excavation

B/ Footing Elevation	=	1016.26				
Ex. Ground Elevation	=	1024.10				
Footing Width	=	3 ft	0.0 in	=	3.0 ft	
Offset from Footing	=	1 ft	0.0 in	=	1.0 ft	
Abutment Length	=	61 ft	0.0 in	=	61.0 ft	
Subtotal Volume	=	2470 ft^3				
Subtotal Volume	=	91.47 yd^3				

Fwd Abutment Excavation

B/ Footing Elevation	=	1015.49				
Ex. Ground Elevation	=	1023.42				
Footing Width	=	3 ft	0.0 in	=	3.0 ft	
Offset from Footing	=	1 ft	0.0 in	=	1.0 ft	
Abutment Length	=	61 ft	0.0 in	=	61.0 ft	
Subtotal Volume	=	2498 ft^3				
Subtotal Volume	=	92.52 yd^3				

Total Volume (Rounded) = **184.00** yd^3

Sheet 1 of 1 Subtotal: 184 CY

Total All Sheets: 184 CY

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 507E00801 - 18" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN, AS PER PLAN **UNIT: FT**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
720	945		

Rear Abutment Piles						
Number of Piles	=	8.00				
Bottom of Footing Elevation	=	1016.26				
Pile Tip Elevation	=	979.50				
Embedment into Footing	=	2 ft	0.0 in	=	2.0 ft	
Driven Length per Pile	=	40.00 ft				
Subtotal Length	=	320.00 ft				
Pier 1 Piles						
Number of Piles	=	9.00				
Bottom of Footing Elevation	=	1020.02				
Pile Tip Elevation	=	981.00				
Embedment into Footing	=	1 ft	6.0 in	=	1.5 ft	
Driven Length per Pile	=	45.00 ft				
Subtotal Length	=	405.00 ft				
Pier 2 Piles						
Number of Piles	=	9.00				
Bottom of Footing Elevation	=	1019.67				
Pile Tip Elevation	=	962.80				
Embedment into Footing	=	1 ft	6.0 in	=	1.5 ft	
Driven Length per Pile	=	60.00 ft				
Subtotal Length	=	540.00 ft				
Forward Abutment Piles						
Number of Piles	=	8.00				
Bottom of Footing Elevation	=	1015.49				
Pile Tip Elevation	=	970.80				
Embedment into Footing	=	2 ft	0.0 in	=	2.0 ft	
Driven Length per Pile	=	50.00 ft				
Subtotal Length	=	400.00 ft				
Abutments Total Length	=	720.00 ft				
Piers Total Length	=	945.00 ft				
Total Length	=	**1665.00** ft				

Sheet 1 of 1 Subtotal: 1665 FT

Total All Sheets: 1665 FT

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 507E00850 - 18" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED **UNIT: FT**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
800	1,035		

Rear Abutment Piles						
Number of Piles	=	8.00				
Driven Length per Pile	=	40.00				
Additional Order Length	=	5 ft	0.0 in	=		5.0 ft
Subtotal Length	=	360.00 ft				
Pier 1 Piles						
Number of Piles	=	9.00				
Driven Length per Pile	=	45.00				
Additional Order Length	=	5 ft	0.0 in	=		5.0 ft
Subtotal Length	=	450.00 ft				
Pier 2 Piles						
Number of Piles	=	9.00				
Driven Length per Pile	=	60.00				
Additional Order Length	=	5 ft	0.0 in	=		5.0 ft
Subtotal Length	=	585.00 ft				
Forward Abutment Piles						
Number of Piles	=	8.00				
Driven Length per Pile	=	50.00				
Additional Order Length	=	5 ft	0.0 in	=		5.0 ft
Subtotal Length	=	440.00 ft				
Abutments Total Length	=	800.00 ft				
Piers Total Length	=	1035.00 ft				
Total Length	=	**1835.00** ft				

Sheet 1 of 1 Subtotal: 1835 FT

Total All Sheets: 1835 FT

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 509E10000 - EPOXY COATED REINFORCING STEEL **UNIT: LB**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
8,954	2,648	55,631	

Abutment Rebar

Abutment Total = **8,954** lb

Pier Rebar

Pier Total = **2,648** lb

Superstructure Rebar

Superstructure Total = **55,631** lb

Total Weight = **67,233** lb

Sheet 1 of 1 Subtotal: 67233 LB

Total All Sheets: 67233 LB

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 511E32212 - CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE **UNIT: CY**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
		249	

Bridge Limits	=	86 ft	6.625 in	=	86.552 ft		
Deck Width	=	45 ft	0.0 in	=	45.0 ft		
Deck Thickness	=	1 ft	6.0 in	=	1.5 ft		
Slab Volume	=	5842.27 ft^3					
Sidewalk Min Thickness	=	0 ft	8.0 in	=	0.667 ft		
Sidewalk Max Thickness	=	0 ft	10.875 in	=	0.906 ft		
Sidewalk Width	=	6 ft	0.0 in	=	6.0 ft		
Railing Width	=	1 ft	0.0 in	=	1.0 ft		
Overhang Width	=	0 ft	2.0 in	=	0.167 ft		
Sidewalk Volume	=	487.83 ft^3					
End Diaphragm Thickness	=	2 ft	3.0 in	=	2.25 ft		
End Diaphragm Height	=	1 ft	6.0 in	=	1.5 ft		
End Diaphragm Width	=	46 ft	7.0 in	=	46.583 ft		
Number of Abutments	=	2 ea					
End Diaphragm Volume	=	314.44 ft^3					
Side Diaphragm Thickness	=	2 ft	3.0 in	=	2.25 ft		
Side Diaphragm Avg Height	=	3 ft	2.22 in	=	3.185 ft		
Side Diaphragm Width	=	1 ft	6.0 in	=	1.5 ft		
Number of Abutments	=	2 ea					
Side Diaphragm Volume	=	21.50 ft^3					
Side Diaphragm Thickness	=	2 ft	3.0 in	=	2.25 ft		
Side Diaphragm Avg Height	=	3 ft	2.22 in	=	3.185 ft		
Side Diaphragm Width	=	1 ft	0.0 in	=	1.0 ft		
Number of Abutments	=	2 ea					
Side Diaphragm Volume	=	14.33 ft^3					
Crown Min Height	=	0 ft	0.0 in	=	0.0 ft		
Cross Slope	=	1.11%					
Left of Crown Width	=	26 ft	11.0 in	=	26.917 ft		
Crown Max Height	=	0 ft	3.5905 in	=	0.299 ft		
Right of Crown Width	=	19 ft	8.0 in	=	19.667 ft		
Crown Right Height	=	0 ft	0.9671 in	=	0.081 ft		
Crown Thickness	=	1 ft	9.0 in	=	1.75 ft		
Number of Abutments	=	2 ea					
Crown Volume	=	27.17 ft^3					
Superstucture Volume	=	6707.53 ft^3					
Superstucture Volume	=	248.43 yd^3					
Superstucture Volume (rounded)	=	**249.00** yd^3					

Sheet 1 of 1 Subtotal: 249 CY

Total All Sheets: 249 CY

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 511E42510 - CLASS QC1 CONCRETE, PIER CAP **UNIT: CY**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
	22		

Pier Height	=	2 ft	0.0 in	=	2.0 ft	
Pier Cap Width	=	45 ft	0.0 in	=	45.0 ft	
Pier Cap Thickness	=	3 ft	0.0 in	=	3.0 ft	
Slab Volume	=	270.00 ft^3				
Crown Min Height	=	0 ft	0.0 in	=	0.0 ft	
Cross Slope (along skew)	=	1.11%				
Left of Crown Width	=	26 ft	2.125 in	=	26.177 ft	
Crown Max Height	=	0 ft	3.4918 in	=	0.291 ft	
Right of Crown Width	=	18 ft	11.125 in	=	18.927 ft	
Crown Right Height	=	0 ft	0.9671 in	=	0.081 ft	
Crown Thickness	=	3 ft	0.0 in	=	3.0 ft	
Crown Volume	=	21.97 ft^3				
Volume per Pier	=	291.97 ft^3				
Number of Piers	=	2 ea				
Piers Total Volume	=	583.95 ft^3				
Piers Total Volume	=	21.63 yd^3				
Piers Volume (rounded)	=	**22.00** yd^3				

Sheet 1 of 1 Subtotal: 22 CY

Total All Sheets: 22 CY

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 511E43510 - CLASS QC1 CONCRETE, ABUTMENT INCLUDING FOOTING **UNIT: CY**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
61			

Footing Width	=	61 ft	0.0 in	=	61.0 ft		
Footing Height	=	3 ft	0.0 in	=	3.0 ft		
Footing Thickness	=	3 ft	0.0 in	=	3.0 ft		
Footing Volume	=	549.00 ft^3					
Stem Width	=	61 ft	0.0 in	=	61.0 ft		
Stem Height	=	1 ft	6.0 in	=	1.5 ft		
Stem Thickness	=	2 ft	3.0 in	=	2.25 ft		
Stem Volume	=	205.88 ft^3					
Wingwall Min Height (Avg.)	=	1 ft	1.5 in	=	1.125 ft		
Wingwall Max Height (Avg.)	=	3 ft	2.22 in	=	3.185 ft		
Wingwall Thickness	=	2 ft	3.0 in	=	2.25 ft		
Wingwall Slope Widths							
Left Rear	=	3 ft	11.625 in	=	3.969 ft		
Right Rear	=	4 ft	1.0 in	=	4.083 ft		
Left Forward	=	4 ft	9.625 in	=	4.802 ft		
Right Forward	=	4 ft	1.0 in	=	4.083 ft		
Wingwall Level Widths (Average)							
Left Rear	=	1 ft	5.625 in	=	1.469 ft		
Right Rear	=	2 ft	2.0 in	=	2.167 ft		
Left Forward	=	1 ft	2.875 in	=	1.24 ft		
Right Forward	=	1 ft	7.375 in	=	1.615 ft		
Wingwall Areas							
Left Rear	=	29.77 ft^3					
Right Rear	=	35.33 ft^3					
Left Forward	=	32.17 ft^3					
Right Forward	=	31.37 ft^3					
Rear Abutment Volume	=	819.97 ft^3					
Forward Abutment Volume	=	818.41 ft^3					
Total Abutment Volume	=	1638.38 ft^3					
Total Abutment Volume	=	60.68 yd^3					
Total Abutment Volume	=	61.00 yd^3					

Sheet 1 of 1 Subtotal: 61 CY

Total All Sheets: 61 CY

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 512E10050 - SEALING OF CONCRETE SURFACES (NON-EPOXY) **UNIT: SY**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
		65	31

Superstructure Curb/Sidewalk						
Bridge Limits	=	86 ft	6.625 in	=	86.552 ft	
Sidewalk Width	=	6 ft	0.0 in	=	6.0 ft	
Curb Height	=	0 ft	8.0 in	=	0.667 ft	
Sidewalk Sealed Width	=	6 ft	8.0 in	=	6.667 ft	
Superstructure Sealed Area	=	577.01 ft^2				
Superstructure Sealed Area	=	64.11 yd^2				
Total SSTR Sealed Area (rounded)	=	65.00 yd^2				
Approach Slab Curb/Sidewalk						
Rear Approach Slab Limits	=	20 ft	6.625 in	=	20.552 ft	
Forward Approach Slab Limits	=	20 ft	6.0 in	=	20.5 ft	
Sidewalk Width	=	6 ft	0.0 in	=	6.0 ft	
Curb Height (Avg.)	=	0 ft	7.0 in	=	0.583 ft	
Sidewalk Sealed Width	=	6 ft	7.0 in	=	6.583 ft	
Superstructure Sealed Area	=	270.26 ft^2				
Superstructure Sealed Area	=	30.03 yd^2				
Total SSTR Sealed Area (rounded)	=	31.00 yd^2				

Sheet 1 of 1 Subtotal: 96 SY

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 512E10100 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) **UNIT: SY**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
22		118	37

Stem Width	=	61 ft	0.0 in	=	61.0 ft		
Stem Exposed Height (min)	=	0 ft	6.0 in	=	0.5 ft		
Stem Thickness	=	2 ft	3.0 in	=	2.25 ft		
Stem Sealed Area	=	30.50 ft^2					
Wingwall Min Height (Avg.)	=	1 ft	1.5 in	=	1.125 ft		
Wingwall Max Height (Avg.)	=	3 ft	2.22 in	=	3.185 ft		
Wingwall Thickness	=	2 ft	3.0 in	=	2.25 ft		
Wingwall Back Exposed Area	=	0 ft	6.0 in	=	0.5 ft		
Stem/Wingwall End Sealed Area	=	4.78 ft^2					
Wingwall Sloped Widths							
Left Rear	=	3 ft	11.625 in	=	3.969 ft		
Right Rear	=	4 ft	1.0 in	=	4.083 ft		
Left Forward	=	4 ft	9.625 in	=	4.802 ft		
Right Forward	=	4 ft	1.0 in	=	4.083 ft		
Wingwall Level Widths (Average)							
Left Rear	=	1 ft	5.625 in	=	1.469 ft		
Right Rear	=	2 ft	2.0 in	=	2.167 ft		
Left Forward	=	1 ft	2.875 in	=	1.24 ft		
Right Forward	=	1 ft	7.375 in	=	1.615 ft		
Wingwall Front Sealed Area							
Left Rear	=	13.23 ft^2					
Right Rear	=	15.70 ft^2					
Left Forward	=	14.30 ft^2					
Right Forward	=	13.94 ft^2					
Wingwall Top Sealed Area							
Left Rear	=	13.37 ft^2					
Right Rear	=	15.17 ft^2					
Left Forward	=	14.55 ft^2					
Right Forward	=	13.92 ft^2					
Wingwall Back Sealed Area							
Left Rear	=	2.97 ft^2					
Right Rear	=	3.37 ft^2					
Left Forward	=	3.23 ft^2					
Right Forward	=	3.09 ft^2					
Rear Abutment Sealed Area	=	99.08 ft^2					
Forward Abutment Sealed Area	=	98.32 ft^2					
Total Abutment Sealed Area	=	197.40 ft^2					
Total Abutment Sealed Area	=	21.93 yd^2					
Total Abutment Sealed Area (rounded)	=	22.00 yd^2					**Sheet 1 of 2 Subtotal: 22 SY**

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 512E10100 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) **UNIT: SY**

Superstructure				
Bridge Limits	=	86 ft	6.625 in	= 86.552 ft
Deck Thickness	=	1 ft	6.0 in	= 1.5 ft
Deck Underside Sealed Width	=	0 ft	6.0 in	= 0.5 ft
Sidewalk Offset	=	0 ft	2.0 in	= 0.167 ft
Sidewalk Fascia Depth	=	0 ft	10.875 in	= 0.906 ft
Railing Height	=	2 ft	0.0 in	= 2.0 ft
Railing Width	=	1 ft	0.0 in	= 1.0 ft
Left Fascia Sealed Perimeter	=	8 ft	2.875 in	= 8.24 ft
Right Fascia Sealed Perimeter	=	2 ft	0.0 in	= 2.0 ft
Fascias Sealed Area	=	886.26 ft^2		
End Diaphragm Height	=	1 ft	6.0 in	= 1.5 ft
End Diaphragm Width	=	46 ft	7.0 in	= 46.583 ft
Number of Abutments	=	2 ea		
End Diaphragm Area	=	139.75 ft^2		
Side Diaphragm Height	=	3 ft	2.22 in	= 3.185 ft
Right Side Diaphragm Width	=	1 ft	6.0 in	= 1.5 ft
Left Side Diaphragm Width	=	1 ft	0.0 in	= 1.0 ft
Number of Abutments	=	2 ea		
Side Diaphragm Area	=	15.93 ft^2		
Crown Min Height	=	0 ft	0.0 in	= 0.0 ft
Cross Slope (along skew)	=	1.11%		
Left of Crown Width	=	26 ft	11.0 in	= 26.917 ft
Crown Max Height	=	0 ft	3.5905 in	= 0.299 ft
Right of Crown Width	=	19 ft	8.0 in	= 19.667 ft
Crown Right Height	=	0 ft	0.9671 in	= 0.081 ft
Number of Abutments	=	2 ea		
Crown Area	=	15.52 ft^2		
Superstructure Sealed Area	=	1057.46 ft^2		
Superstructure Sealed Area	=	117.50 yd^2		
Total SSTR Sealed Area (rounded)	=	118.00 yd^2		
Approach Slab Railings				
Rear Approach Slab Railing Length	=	13 ft	6.625 in	= 13.552 ft
Forward Approach Slab Railing Length	=	13 ft	6.0 in	= 13.5 ft
Barrier Transition Length	=	6 ft	6.0 in	= 6.5 ft
Exposed Approach Slab Thickness	=	0 ft	6.0 in	= 0.5 ft
Sidewalk Offset	=	0 ft	2.0 in	= 0.167 ft
Sidewalk Fascia Depth (Avg.)	=	0 ft	10.0 in	= 0.833 ft
Railing Height	=	2 ft	0.0 in	= 2.0 ft
Railing Width	=	1 ft	0.0 in	= 1.0 ft
Transition Height	=	3 ft	6.0 in	= 3.5 ft
Railing Sealed Perimeter	=	7 ft	0.0 in	= 7.0 ft
Transition Sealed Perimeter	=	10 ft	0.0 in	= 10.0 ft
Approach Slab Railings Sealed Area	=	329.36 ft^2		
Approach Slab Railings Sealed Area	=	36.60 yd^2		
Total AS Railing Sealed Area (rounded)	=	37.00 yd^2		

Sheet 2 of 2 Subtotal: 155 SY

Total All Sheets: 177 SY

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

#N/A **#N/A**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
		39	

Bridge Limits	=	86 ft	6.625 in	=	86.552 ft	
HMWM Width	=	2 ft	0.0 in	=	2.0 ft	
Number of Phase Lines	=	2				
HMWM Area	=	346.21 ft^2				
HMWM Area	=	38.47 yd^2				
HMWM Area (rounded)	=	39.00 yd^2				

#

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AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 512E33000 - TYPE 2 WATERPROOFING **UNIT: SY**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
1		2	

Stem Height	=	1 ft	6.0 in	=	1.5 ft	
Approach Slab Seat Height	=	1 ft	6.0 in	=	1.5 ft	
Number of Abutment Phase Lines	=	1				
Number of Deck Phase Lines	=	2				
Waterproofing Width	=	3 ft	0.0 in	=	3.0 ft	
Number of Abutments	=	2				
Waterproofing Area	=	27.00 ft^2				
Waterproofing Area	=	3.00 yd^2				
Waterproofing Area (rounded)	=	3.00 yd^2				

Sheet 1 of 1 Subtotal: 3 SY

Total All Sheets: 3 SY

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 516E13200 - 1/2" PREFORMED EXPANSION JOINT FILLER **UNIT: SF**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
		74	

PEJF Length	=	49 ft	3.75 in	=	49.313 ft	
PEJF Width	=	0 ft	9.0 in	=	0.75 ft	
Number of Abutments	=	2				
PEJF Area	=	73.97 ft^2				
PEJF Area (rounded)	=	74.00 ft^2				

Sheet 1 of 1 Subtotal: 74 SF

Total All Sheets: 74 SF

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 516E13600 - 1" PREFORMED EXPANSION JOINT FILLER **UNIT: SF**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
		95	

PEJF Length	=	49 ft	3.75 in	=	49.313 ft	
PEJF Width	=	0 ft	8.0 in	=	0.667 ft	
Avg PEJF Height	=	3 ft	2.22 in	=	3.185 ft	
PEJF Width	=	2 ft	3.0 in	=	2.25 ft	
Number of Abutments	=	2				
PEJF Area	=	94.42 ft^2				
PEJF Area (rounded)	=	95.00 ft^2				

Sheet 1 of 1 Subtotal: 95 SF

Total All Sheets: 95 SF

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 516E14014 - INTEGRAL ABUTMENT EXPANSION JOINT SEAL **UNIT: FT**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
121			

Wingwall Max Height (Avg.)	=	3 ft	2.22 in	=	3.185 ft		
Clear from Top of Wingwall	=	0 ft	9.0 in	=	0.75 ft		
Seal Extension beyond Joint	=	1 ft	6.0 in	=	1.5 ft		
Abutment Seat Length	=	49 ft	3.75 in	=	49.313 ft		
Number of Vertical Joints	=	2					
Number of Abutments	=	2					
Joint Seal Length	=	120.37 ft					
Joint Seal Length (rounded)	=	121.00 ft					

Sheet 1 of 1 Subtotal: 121 FT

Total All Sheets: 121 FT

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 517E70000 - RAILING (TWIN STEEL TUBE) **UNIT: FT**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
		91	

End Post to End Post Length	=	85 ft	3.0 in	=	85.25 ft	
Additional Length per End	=	2 ft	5.5 in	=	2.458 ft	
TST Length	=	90.17 ft				
TST Length (rounded)	=	91.00 ft				

Sheet 1 of 1 Subtotal: 91 FT

Total All Sheets: 91 FT

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 517E75120 - RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING) **UNIT: FT**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
		87	40

Bridge Limits	=	86 ft	6.625 in	=	86.552 ft	
Rear Approach Slab	=	20 ft	0.0 in	=	20.0 ft	
Forward Approach Slab	=	20 ft	0.75 in	=	20.063 ft	
TST Length (Superstructure)	=	86.55 ft				
TST Length (Approach Slabs)	=	40.06 ft				
Total Length (rounded)	=	127.00 ft				

Sheet 1 of 1 Subtotal: 127 FT

Total All Sheets: 127 FT

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 518E21200 - POROUS BACKFILL WITH GEOTEXTILE FABRIC **UNIT: CY**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
53			

Porous Backfill Thickness	=	2 ft	0.0 in	=	2.0 ft		
Footing Width	=	61 ft	0.0 in	=	61.0 ft		
Footing Height	=	3 ft	0.0 in	=	3.0 ft		
Footing Area	=	183.00 ft^2					
Stem Width	=	61 ft	0.0 in	=	61.0 ft		
Stem Height	=	1 ft	6.0 in	=	1.5 ft		
Stem Area	=	91.50 ft^2					
Wingwall Min Height	=	1 ft	1.5 in	=	1.125 ft		
Wingwall Max Height (Avg.)	=	3 ft	2.22 in	=	3.185 ft		
Top of Backfill Depth Below T/ W.W.	=	1 ft	6.0 in	=	1.5 ft		
Wingwall Slope Widths							
Left Rear	=	3 ft	11.625 in	=	3.969 ft		
Right Rear	=	4 ft	1.0 in	=	4.083 ft		
Left Forward	=	4 ft	9.625 in	=	4.802 ft		
Right Forward	=	4 ft	1.0 in	=	4.083 ft		
Wingwall Level Widths (Average)							
Left Rear	=	1 ft	5.625 in	=	1.469 ft		
Right Rear	=	2 ft	2.0 in	=	2.167 ft		
Left Forward	=	1 ft	2.875 in	=	1.24 ft		
Right Forward	=	1 ft	7.375 in	=	1.615 ft		
Wingwall Area							
Left Rear	=	5.07 ft^2					
Right Rear	=	6.33 ft^2					
Left Forward	=	5.23 ft^2					
Right Forward	=	5.40 ft^2					
End Diaphragm Height	=	1 ft	6.0 in	=	1.5 ft		
End Diaphragm Width (Along CL Abut)	=	46 ft	7.0 in	=	46.583 ft		
Superstructure Area	=	69.88 ft^2					
Rear Abutment Volume	=	711.55 ft^3					
Forward Abutment Volume	=	710.01 ft^3					
Total Backfill Volume	=	1421.56 ft^3					
Total Abutment Volume	=	52.65 yd^3					
Total Abutment Volume	=	53.00 yd^3					

Sheet 1 of 1 Subtotal: 53 CY

Total All Sheets: 53 CY

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 518E40000 - 6" PERFORATED CORRUGATED PLASTIC PIPE **UNIT: FT**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
122			

Abutment Length	=	61 ft	0.0 in	=	61.0 ft
Number of Abutments	=	2			
Pipe Length	=	122.00 ft			
Pipe Length (rounded)	=	122.00 ft			

Sheet 1 of 1 Subtotal: 122 FT

Total All Sheets: 122 FT

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 518E40011 - 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS, AS PER PLAN **UNIT: FT**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
80			

Assumed Length per Corner	=	20 ft	0.0 in	=	20.0 ft
Number of Corners per Abutment	=	2			
Number of Abutments	=	2			
Pipe Length	=	80.00 ft			
Pipe Length (rounded)	=	80.00 ft			

Sheet 1 of 1 Subtotal: 80 FT

Total All Sheets: 80 FT

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 523E20000 - DYNAMIC LOAD TESTING **UNIT: EACH**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
1	2		

Abutment Dynamic Load Tests	=	1	ea
Pier Dynamic Load Tests	=	2	ea
Total	=	3	ea

Sheet 1 of 1 Subtotal: 3 EACH

Total All Sheets: 3 EACH

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 526E15011 - REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=13"), AS **UNIT: SY**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
			200

Approach Slab Length	=	20 ft	0.0 in	=	20.0 ft		
Approach Slab Width	=	45 ft	0.0 in	=	45.0 ft		
Approach Slab Area	=	900.00 ft^2					
Number of Approach Slabs	=	2					
Approach Slab Area	=	1800.00 ft^2					
Approach Slab Area	=	200.00 yd^2					
Approach Slab Area (rounded)	=	**200.00** yd^2					

Sheet 1 of 1 Subtotal: 200 SY

Total All Sheets: 200 SY

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 526E90010 - TYPE A INSTALLATION **UNIT: FT**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
			94

Approach Slab Width	=	45 ft	0.0 in	=	45.0 ft	
Skew	=	15 °				
Number of Approach Slabs	=	2				
Type A Installation Length	=	93.17 ft				
Type A Installation Length (rounded)	=	94.00 ft				
						Sheet 1 of 1 Subtotal: 94 FT
						Total All Sheets: 94 FT

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 518E22300 - STEEL DRIP STRIP **UNIT: FT**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
			107

Bridge Limits	=	86 ft	6.625 in	=	86.552 ft	
Number of Sides	=	1				
Lower Drip Strip Length	=	86.55 ft				
Upper Drip Strip Length at GR Post	=	1 ft	6.0 in	=	1.5 ft	
Number of Posts	=	13				
Upper Drip Strip Length	=	19.50 ft				
Drip Strip Length	=	106.05 ft				
Drip Strip Length (rounded)	=	107.00 ft				

Sheet 1 of 1 Subtotal: 107 FT

Total All Sheets: 107 FT

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 846E00110 - POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM **UNIT: CF**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
			39

Approach Slab Width	=	45 ft	0.0 in	=	45.0 ft		
PMAEJ Thickness	=	0 ft	3.0 in	=	0.25 ft		
PMAEJ Width	=	1 ft	8.0 in	=	1.667 ft		
Number of Approach Slabs	=	2					
Skew	=	15 °					
Total PMAEJ Volume	=	38.82 cf					
Total PMAEJ Volume	=	39.00 cf					

Sheet 1 of 1 Subtotal: 39 CF

Total All Sheets: 39 CF

AECOM

Project WAY-250-19.26 | **Computed By** KSC | **Date** 8/9/18

Description Stage 2/3 Estimated Quantities | **Checked By** TMR | **Date** 8/28/18

ITEM 601E32104 - ROCK CHANNEL PROTECTION, TYPE B WITH GEOTEXTILE FABRIC **UNIT: CY**

ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL
			400

Rear Abutment RCP Area (From CAD)	=	2,190.00	ft^2
Forward Abutment RCP Area (From CAD)	=	2,125.00	ft^2
RCP Thickness	=	2.50	ft
RCP Volume	=	10,787.50	ft^3
RCP Volume	=	399.54	yd^3
RCP Volume (rounded)	=	**400.00**	yd^3

Sheet 1 of 1 Subtotal: 400 CY

Total All Sheets: 400 CY