

BRIDGE ESTIMATED QUANTITIES - REBID

Calculated By: TML Date: 5/6/2021 Job No.:
 Checked By: Date: Bridge No.:
 Project: Morris Suspension Bridge SFN:

BRIDGE ESTIMATED QUANTITIES - CONTRACTED WORK					CALC'D BY:	TML
					CHCK'D BY:	PJP
ITEM	EXTENSION	QUANTITY	UNIT	DESCRIPTION		
203	10000	676	CU YD	EXCAVATION		
203	20000	645	CU YD	EMBANKMENT		
509	10000	4,400	LB	EPOXY COATED REINFORCING STEEL		
511	42510	14	CU YD	CLASS QC1 CONCRETE, TOWER, REAR		
511	42510	9	CU YD	CLASS QC1 CONCRETE, TOWER, FORWARD		
511	45710	22	CU YD	CLASS QC1 ABUTMENT, STAY CABLE FOUNDATIONS, SOUTH		
511	45710	22	CU YD	CLASS QC1 ABUTMENT, STAY CABLE FOUNDATIONS, NORTH		
512	10050	268	SQ FT	SEALING OF CONCRETE SURFACES (NON-EPOXY)		
513	10260	2,180	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3, TOWER, WEATHERING STEEL		
513	95030	4	EACH	STRUCTURAL STEEL, MISC.: TOWER BOTTOM PLATE ASSEMBLY, INCLUDES BASE PLATE AND EMBEDDED ANCHOR PLATES		
513	95030	4	EACH	STRUCTURAL STEEL, MISC.: TOWER TOP PLATE ASSEMBLY		
513	95030	8	EACH	STRUCTURAL STEEL, MISC.: STAY CABLE FOUNDATION, INCLUDES BASE PLATE AND STAY CABLE PLATES		
513	95030	2	EACH	STRUCTURAL STEEL, MISC.: STAINLESS STEEL CLOSED BODY TURNBUCKLE, 5/8" STABILIZING WIRE ROPE, INCLUDING END ATTACHMENTS AND PINS/BOLTS		
513	95030	8	EACH	STRUCTURAL STEEL, MISC.: STAINLESS STEEL CLOSED BODY TURNBUCKLE, 5/8" STAY CABLE WIRE ROPE, INCLUDING END ATTACHMENTS AND PINS/BOLTS		
513	95030	2	EACH	STRUCTURAL STEEL, MISC.: STAINLESS STEEL CLOSED BODY TURNBUCKLE, 3/4" MAIN CABLE WIRE ROPE, INCLUDING END ATTACHMENTS AND PINS/BOLTS		
513	95030	38	EACH	STRUCTURAL STEEL, MISC.: PREFABRICATED MAIN CABLE TO SUSPENDER CONNECTOR		
513	95030	16	EACH	STRUCTURAL STEEL, MISC.: STAINLESS STEEL ANCHOR BOLT, 7/8" DIA., INCLUDES NUTS AND LOCK WASHERS		
530	SPECIAL	2	EACH	5/8" WIRE ROPE STABILIZING CABLE, INCLUDING END TERMINATIONS AND PINS/BOLTS		
530	SPECIAL	8	EACH	5/8" WIRE ROPE STAY CABLE, INCLUDING END TERMINATIONS AND PINS/BOLTS		
530	SPECIAL	2	EACH	3/4" WIRE ROPE MAIN CABLE, INCLUDING END TERMINATIONS AND PINS/BOLTS		
530	SPECIAL	38	EACH	5/16" WIRE ROPE SUSPENDER CABLE, LENGTH VARIES, INCLUDING END TERMINATIONS		
530	SPECIAL	34	EACH	3/8" STAINLESS STEEL U-BOLT, INCLUDING LOCK NUTS AND WASHERS, STABILIZING CABLE		
530	SPECIAL	160	EACH	1/4" TIMBER CARRIAGE BOLTS INCLUDING LOCK NUTS AND WASHERS		
530	SPECIAL	300	EACH	#10 TIMBER SCREWS, 3" LONG, WEBBING AND EDGE BOARD		
530	SPECIAL	550	SQ FT	EXPANDED MESH WEBBING, INCLUDING CONNECTIONS AND MISCELLANEOUS COMPONENTS		
530	SPECIAL	150	FT	1 1/2" POLYPROPYLENE ROPE HANDRAIL, INCLUDING ALL CONNECTORS		
530	SPECIAL	130	FBM	TIMBER FLOOR BEAMS, 3"x6" ROUGH SAWN WHITE OAK, NO. 2		
530	SPECIAL	400	FBM	TIMBER DECKING, 2"x8" ROUGH SAWN WHITE OAK, NO. 2		
530	SPECIAL	75	FBM	TIMBER EDGE BOARD, 1"x6" ROUGH SAWN WHITE OAK, NO. 2		
614	18002	1	LS	MAINTAINING TRAFFIC, MISC.: TRAIL CLOSURE		
624	10000	1	LUMP	MOBILIZATION		
823	15000	1	LS	STORM WATER POLLUTION PREVENTION PLAN		
823	30000	1	EA	EROSION CONTROL		
					Contingency	

BRIDGE ESTIMATED QUANTITIES - REBID

Calculated By: TML	Date: 5/6/2021	Job No.:
Checked By:	Date:	Bridge No.:
Project: Morris Suspension Bridge		SFN:

203	10000	676	CU YD	EXCAVATION
	stay foundation	8.00	ft	foundation width+6"
		6.50	ft	foundation length+6"
		7.00	ft	depth of excavation
		1.50	:1	layback
		29.00	ft	top width
		27.50	ft	top length
		52.00	sq ft	bottom area
		797.50	sq ft	top area
		2973.25	cu ft	footing volume
		4.00	ea	foundations
		11893.00	cu ft	subtotal
	rear tower	7.50	ft	width+6"
		11.50	ft	length+6"
		6.33	ft	depth of excavation
		1.50	:1	layback
		26.50	ft	top width
		30.50	ft	top length
		86.25	sq ft	bottom area
		808.24	sq ft	top area
		2832.55	cu ft	footing volume
		1.00	ea	tower foundations
		2832.55	cu ft	subtotal
	fwd tower	5.50	ft	width+6"
		11.50	ft	length+6"
		7.25	ft	depth of excavation
		1.50	:1	layback
		27.25	ft	top width
		33.25	ft	top length
		63.25	sq ft	bottom area
		906.06	sq ft	top area
		3513.76	cu ft	footing volume
		1.00	ea	tower foundations
		3513.76	cu ft	subtotal
		18239.31	cu ft	total
		676.00	cu yd	total

BRIDGE ESTIMATED QUANTITIES - REBID

Calculated By: TML	Date: 5/6/2021	Job No.:
Checked By:	Date:	Bridge No.:
Project: Morris Suspension Bridge		SFN:

203	20000	645	CU YD	EMBANKMENT
		18239.31	cu ft	excavation total
		621.00	cu ft	tower cap
		1185.00	cu ft	stay foundations
return to orig		16433.31	cu ft	total to original grade
rear tower		93.00	sq ft	area from CAD, ramp behind rear tower
		29.00	ft	length
		3.21	ft	average height
		5.00	ft	path width - full height
		2.00	:1	slope
		651.00	cu ft	additional path fill
		13.28	sq ft	area from CAD, in front of rear tower
		10.00	ft	length in front of tower
		132.80	cu ft	additional fill in front of tower
		783.80	cu ft	subtotal rear tower
		20%		add for grading around tower
		940.56	cu ft	total at rear tower
fwd tower		1.75	sq ft	area from CAD, in front of forward tower
		10.00	ft	length in front of tower
		17.50	cu ft	additional fill in front of tower
		20%		add for grading around tower
		21.00	cu ft	total at fwd tower
		17394.87	cu ft	total
		645.00	cu yd	total
509	10000	4,400	LB	EPOXY COATED REINFORCING STEEL
		1105.00	lb	rear stay foundation
		1316.00	lb	rear stay foundation
		780.00	lb	fwd stay foundation
		1105.00	lb	fwd stay foundation
		4400.00	lbs	total
511	42510	14	CU YD	CLASS QC1 CONCRETE, TOWER, REAR
Rear Tower - pedestal		2.00	ft	width
		10.00	ft	height
		10.00	ft	length
		200.00	cu ft	volume
Rear Tower - footing		7.00	ft	width
		2.00	ft	height
		11.00	ft	length
		154.00	cu ft	volume
		354.00	cu ft	volume
		14.00	cu yd	total

BRIDGE ESTIMATED QUANTITIES - REBID

Calculated By: TML	Date: 5/6/2021	Job No.:
Checked By:	Date:	Bridge No.:
Project: Morris Suspension Bridge		SFN:

511	42510	9	CU YD	CLASS QC1 CONCRETE, TOWER, FORWARD
Rear Tower - pedestal		2.00	ft	width
		6.08	ft	height
		10.00	ft	length
		121.67	cu ft	volume
Rear Tower - footing		5.00	ft	width
		2.00	ft	height
		11.00	ft	length
		110.00	cu ft	volume
		231.67	cu ft	volume
		9.00	cu yd	total
511	45710	22	CU YD	CLASS QC1 ABUTMENT, STAY CABLE FOUNDATIONS, SOUTH
		39.50	sq ft	cross section area (from CAD)
		7.50	ft	length
		296.25	cu ft	volume/location
		2.00	ea	number
		592.50	cu ft	total volume
		22.00	cu yd	total
511	45710	22	CU YD	CLASS QC1 ABUTMENT, STAY CABLE FOUNDATIONS, NORTH
		39.50	sq ft	cross section area (from CAD)
		7.50	ft	length
		296.25	cu ft	volume/location
		2.00	ea	number
		592.50	cu ft	total volume
		22.00	cu yd	total
512	10050	268	SQ FT	SEALING OF CONCRETE SURFACES (NON-EPOXY)
stay foundation		4.00	ft	perimeter
		7.50	ft	length
		30.00	sq ft	area
		2.00	ea	foundations
		60.00	sq ft	sealing area
rear tower		4.00	ft	height
		10.00	ft	length
		2.00	ft	width
		116.00	sq ft	sealing area
forward tower		3.00	ft	height
		10.00	ft	length
		2.00	ft	width
		92.00	sq ft	sealing area
		268.00	sq ft	total

BRIDGE ESTIMATED QUANTITIES - REBID

Calculated By:	TML	Date:	5/6/2021	Job No.:	
Checked By:		Date:		Bridge No.:	
Project:	Morris Suspension Bridge			SFN:	

513	10260	2,180	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3, TOWER, WEATHERING STEEL
		12.67	ft	column height
		32.58	plf	HSS7x7x0.375
		2.00	ea	columns/tower
		825.36	lb	column weight
		6.42	ft	brace length
		12.21	plf	HSS4x4x0.25
		1.00	ea	braces/tower
		78.35	lb	brace weight
		903.71	lb	total member steel per tower
		2.00	ea	towers
		1807.42	lb	total member steel
		20%		add for misc plates and connections
		370.00	lb	
		2180.00	lb	total
530	SPECIAL	550	SQ FT	EXPANDED MESH WEBBING, INCLUDING CONNECTIONS AND MISCELLANEOUS COMPONENTS
		3.50	ft	height
		1.08	ea	width
		3.66	ft	hypotenuse length
		75.00	ft	length along deck
		2.00	ea	sides
		550.00	cu yd	total
530	SPECIAL	130	FBM	TIMBER FLOOR BEAMS, 3"x6" ROUGH SAWN WHITE OAK, NO. 2
		3.00	in	depth
		6.00	in	width
		4.33	ft	length
		20.00	ea	floor beams
		129.99	fbm	total
530	SPECIAL	400	FBM	TIMBER DECKING, 2"x8" ROUGH SAWN WHITE OAK, NO. 2
		2.00	in	depth
		8.00	in	width
		8.00	ft	length
		10.67	fbm	board feet per timber
		75.00	ft	total length
		4.00	ea	decking wide
		37.50	ea	total number
		400.00	fbm	total
530	SPECIAL	75	FBM	TIMBER EDGE BOARD, 1"x6" ROUGH SAWN WHITE OAK, NO. 2
		1.00	in	depth
		6.00	in	width
		75.00	ft	length
		2.00	ea	sides
		75.00	fbm	board feet
		75.00	fbm	total