

## Estimated Quantities RIC-30-9.26

### RETAINING WALL 10B - CIP CANTILEVER ON SPREAD FOOTING

ITEM	EXT.	QUANTITY	UNIT	DESCRIPTION
503	11100	LUMP		COFFERDAMS AND EXCAVATION BRACING
503	21101	152	CY	UNCLASSIFIED EXCAVATION, AS PER PLAN
509	10000	35,280	LB	EPOXY COATED REINFORCING STEEL
511	34448	33	CY	CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET)
511	46012	111	CY	CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING
511	46510	214	CY	CLASS QC1 CONCRETE, FOOTING
512	10100	349	SY	SEALING OF CONCRETE SURFACES (EPOXY URETHANE)
512	33000	21	SY	TYPE 2 WATERPROOFING
516	13600	36	SF	1" PREFORMED EXPANSION JOINT FILLER
518	21200	115	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC
518	40000	162	FT	6" PERFORATED CORRUGATED PLASTIC PIPE
518	40010	40	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS
<b>503</b>	<b>21101</b>	<b>152</b>	<b>CY</b>	<b>UNCLASSIFIED EXCAVATION, AS PER PLAN</b>
Sta. 238+00 to Sta. 238+50		2	FT	Average Height
sta. 239+50 to Sta. 240+00		9	FT	Footing width plus 2 ft
		50.64	FT	FOOTING LENGTH along curve
		1165	CU FT	Cut Volume (includes 2'x2.5' shear key)
Sta. 238+50 to Sta. 239+50		2	FT	Average Height
		11	FT	Footing width plus 2 ft
		108.59	FT	FOOTING LENGTH along curve
		2932	CU FT	Cut Volume (includes 2'x2.5' shear key)
		4097	CU FT	TOTAL CUT VOLUME
		<b>152</b>	<b>CY</b>	<b>Unclassified Excavation VOLUME</b>
<b>509</b>	<b>10000</b>	<b>35280</b>	<b>LB</b>	<b>EPOXY COATED REINFORCING STEEL</b>
		29079	lb	retaining wall
		6201	lb	parapet
		35280	lb	total
<b>511</b>	<b>10100</b>	<b>33</b>	<b>CY</b>	<b>CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET)</b>
STEM 1		4.08	SQ FT	Parapet Area, SBR-1-13
		213.59	FT	Length along curve

		872	CU FT	Parapet Volume
		<b>32.30</b>	<b>CY</b>	<b>TOTAL PARAPET VOLUME</b>
<b>511</b>	<b>46012</b>	<b>111</b>	<b>CY</b>	<b>CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING</b>
STEM 1		7.05	FT	STEM HEIGHT
		1.5	FT	STEM WIDTH
		50.58	FT	STEM LENGTH along curve
		534.92	CU FT	STEM VOLUME
STEM 2		10.35	FT	STEM HEIGHT
		1.5	FT	STEM WIDTH
		81.46	FT	STEM LENGTH along curve
		1264.64	CU FT	STEM VOLUME
STEM 3		11.93	FT	STEM HEIGHT
		1.5	FT	STEM WIDTH
		27.18	FT	STEM LENGTH along curve
		486.33	CU FT	STEM VOLUME
STEM 4		9.76	FT	STEM HEIGHT
		1.5	FT	STEM WIDTH
		27.18	FT	STEM LENGTH along curve
		397.87	CU FT	STEM VOLUME
STEM 5		7.6	FT	STEM HEIGHT
		1.5	FT	STEM WIDTH
		27.18	FT	STEM LENGTH along curve
		309.82	CU FT	STEM VOLUME
		2994	CU FT	TOTAL STEM VOLUME
		<b>111</b>	<b>CU YD</b>	<b>WALL VOLUME</b>
<b>511</b>	<b>46510</b>	<b>214</b>	<b>CY</b>	<b>CLASS QC1 CONCRETE, FOOTING</b>
Sta. 238+00 to Sta. 238+50		2.5	FT	FOOTING HEIGHT
		7	FT	FOOTING WIDTH
		50.64	FT	FOOTING LENGTH along curve
		886	CU FT	FOOTING VOLUME
Sta. 239+50 to Sta. 240+00		2.5	FT	FOOTING HEIGHT
		8	FT	FOOTING WIDTH
		54.36	FT	FOOTING LENGTH along curve
		1087	CU FT	FOOTING VOLUME
Sta. 238+50 to Sta. 239+50		2.5	FT	FOOTING HEIGHT
		9	FT	FOOTING WIDTH

		108.59	FT	FOOTING LENGTH along curve
		2443	CU FT	FOOTING VOLUME
STEP 2, 3		2.5	FT	FOOTING HEIGHT
		9	FT	FOOTING WIDTH
		2	FT	FOOTING LENGTH
		2	EACH	Number of steps
		90	CU FT	FOOTING VOLUME
STEP 1		2.5	FT	FOOTING HEIGHT
		7	FT	FOOTING WIDTH
		2	FT	FOOTING LENGTH
		1	EACH	Number of steps
		35	CU FT	FOOTING VOLUME
STEP 4,5,6,7		2.5	FT	FOOTING HEIGHT
		8	FT	FOOTING WIDTH
		2	FT	FOOTING LENGTH
		4	EACH	Number of steps
		160	CU FT	FOOTING VOLUME
Shear Key		2.5	FT	FOOTING HEIGHT
		2	FT	FOOTING WIDTH
		213.59	FT	FOOTING LENGTH along curve
		1067.95	CU FT	FOOTING VOLUME
		5770	CU FT	TOTAL FOOTING VOLUME
		214	CU YD	FOOTING VOLUME
<b>512</b>	<b>10101</b>	<b>349</b>	<b>SQ YD</b>	<b>SEALING OF CONCRETE SURFACES (EPOXY URETHANE)</b>
STEM 1		12.47	FT	Exposed Stem Ht plus Parapet
		50.58	FT	STEM LENGTH along curve
		630.77	SQ FT	Sealing Area
STEM 2		15.77	FT	Exposed Stem Ht plus Parapet
		81.46	FT	STEM LENGTH along curve
		1284.60	SQ FT	Sealing Area
STEM 3		17.02	FT	Exposed Stem Ht plus Parapet
		27.18	FT	STEM LENGTH along curve
		462.55	SQ FT	Sealing Area
STEM 4		15.02	FT	Exposed Stem Ht plus Parapet
		27.18	FT	STEM LENGTH along curve

		408.20	SQ FT	Sealing Area
STEM 5		13.02	FT	Exposed Stem Ht plus Parapet
		27.18	FT	STEM LENGTH along curve
		353.84	SQ FT	Sealing Area
		3140	SQ FT	TOTAL SEALING AREA
		<b>349</b>	<b>SY</b>	<b>SEALING AREA</b>
<b>512</b>	<b>33000</b>	<b>21</b>	<b>SY</b>	<b>TYPE 2 WATERPROOFING</b>
		7.04	FT	Contraction Joint
		7.11	FT	Expansion Joint
		9.34	FT	Contraction Joint
		11.57	FT	Contraction Joint
		11.61	FT	Contraction Joint
		9.70	FT	Expansion Joint
		7.61	FT	Contraction Joint
		63.98	FT	Total Stem Height
		3.00	FT	Width
		191.9454	SQ FT	Area
		<b>21</b>	<b>SY</b>	<b>Area</b>
<b>516</b>	<b>13600</b>	<b>36</b>	<b>SF</b>	<b>1" PREFORMED EXPANSION JOINT FILLER</b>
		10.61	FT	Expansion Joint
		1.5	FT	Width
		15.92	SQ FT	Area
		13.20	FT	Expansion Joint
		1.5	FT	Width
		19.80	SQ FT	Area
		<b>36</b>	<b>SF</b>	<b>Total Area</b>
<b>518</b>	<b>21200</b>	<b>115</b>	<b>CY</b>	<b>POROUS BACKFILL WITH GEOTEXTILE FABRIC</b>
STEM 1		5.08	FT	Height
		2	FT	Width
		50.58	FT	Length along curve
		513.98	CU FT	Backfill Volume
STEM 2		8.36	FT	Height
		2	FT	Width
		81.46	FT	Length along curve
		1362.65	CU FT	Backfill Volume
STEM 3		9.62	FT	Height
		2	FT	Width
		27.18	FT	Length along curve

		522.65	CU FT	Backfill Volume
STEM 4		7.6	FT	Height
		2	FT	Width
		27.18	FT	Length along curve
		413.09	CU FT	Backfill Volume
STEM 5		5.6	FT	Height
		2	FT	Width
		27.18	FT	Length along curve
		304.38	CU FT	Backfill Volume
		3117	CU FT	TOTAL BACKFILL VOLUME
		115	CU YD	<b>BACKFILL VOLUME</b>
<b>518</b>	<b>40000</b>	<b>162</b>	<b>FT</b>	<b>6" PERFORATED CORRUGATED PLASTIC PIPE</b>
		162	FT	Length of the wall along the curve
<b>518</b>	<b>40010</b>	<b>40</b>	<b>FT</b>	<b>6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS</b>
		40	FT	Outlet to catch basin