



CALCULATIONS

Project: 2022-0438
PID No. 117244
GAL-850-(0.22)(3.52)

Submittal: Final
Date: Dec 15, 2025
By: EAT
Checked: ZS

CFN 1831326 Quantity Calculations

ITEM 202E11201 PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (LS)

LUMP SUM

TOTAL LUMP

ITEM 503E11100 COFFERDAMS AND EXCAVATION BRACING (LS)

LUMP SUM

TOTAL LUMP

ITEM 503E21100 UNCLASSIFIED EXCAVATION (CY)
WINGWALL FOOTING

RA 2.17 X 25.15 X 6.75 = 368.32 CU. FT. /27= 13.64 CU. YD.

FA 2.17 X 25.15 X 6.75 = 368.32 CU. FT. /27= 13.64 CU. YD.

27.28

TOTAL 27 CU. YD.

ITEM 509E10000 EPOXY COATED REINFORCING STEEL (LB)

FOOTING 1742 LB

HEADWALL 174 LB

WINGWALLS 746 LB

2662 LB

TOTAL 2662 LB



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ITEM		511E46010 CLASS QC1 CONCRETE, RETAINING/WINGWALL NOT INCLUDING FOOTING (CY)									
IN	3.50	X	4.00	X	1.00	=	14.00	CF			
	3.00	X	2.00	X	1.00	=	6.00	CF			
	4.00	X	10.00	X	1.00	=	40.00	CF			
	2.50	X	5.00	X	1.00	=	12.50	CF			
	6.50	X	0.27	X	1.00	=	<u>1.74</u>	CF			
							74.24		/27=	2.75	CY
OUT	3.50	X	4.00	X	1.00	=	14.00	CF			
	3.00	X	2.00	X	1.00	=	6.00	CF			
	4.00	X	10.00	X	1.00	=	40.00	CF			
	2.50	X	5.00	X	1.00	=	12.50	CF			
	6.50	X	0.27	X	1.00	=	<u>1.74</u>	CF			
							74.24		/27=	<u>2.75</u>	CY
										5.50 CY	
TOTAL										<u>6</u>	CY



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ITEM		511E46510 CLASS QC1 CONCRETE, FOOTING (CY)									
IN	1.50	X	4.75	X	9.55	=	68.07	CF			
	1.50	X	4.75	X	13.05	=	93.01	CF			
	1.50	X	4.75	X	1.27	=	9.07	CF			
	0.67	X	1.67	X	9.33	=	10.37	CF			
	0.32	X	0.74	X	9.33	=	2.22	CF			
	0.07	X	0.74	X	9.33	=	0.47	CF			
	KEY	2.50	X	1.50	X	9.55	=	35.83	CF		
2.50		X	1.50	X	13.05	=	48.95	CF			
2.50		X	1.50	X	0.40	=	1.51	CF			
							<u>269.49</u>		/27=	9.98	CY
OUT	1.50	X	4.75	X	9.55	=	68.07	CF			
	1.50	X	4.75	X	13.05	=	93.01	CF			
	1.50	X	4.75	X	1.27	=	9.07	CF			
	0.67	X	1.67	X	9.33	=	10.37	CF			
	0.21	X	0.74	X	9.33	=	1.41	CF			
	0.07	X	0.74	X	9.33	=	0.47	CF			
	KEY	2.50	X	1.50	X	9.55	=	35.83	CF		
2.50		X	1.50	X	13.05	=	48.95	CF			
2.50		X	1.50	X	0.40	=	1.51	CF			
							<u>268.68</u>		/27=	<u>9.95</u>	19.93 CY
								TOTAL	20 CY		

ITEM		511E46610 CLASS QC1 CONCRETE, HEADWALL (CY)									
IN	1.17	X	9.33	X	1.00	=	10.89	CF			
OUT	1.17	X	9.33	X	1.00	=	10.89	CF			
							<u>21.78</u>	CF	/27=	0.81	CY
								TOTAL	1 CY		

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ITEM	512E10100 SEALING OF CONCRETE SURFACES (EPOXY-URETHANE) (SY)										
IN	0.50	X	10.31	+	0.50	X	9.87	=	10.09	SQ. FT.	
	0.50	X	5.00	+	0.50	X	2.00	=	3.50	SQ. FT.	
	1.00	X	10.31	+	1.00	X	0.27	=	10.58	SQ. FT.	
	1.00	X	9.33	+	1.00	X	5.00	=	14.33	SQ. FT.	
	1.25	X	10.00	+	0.50	X	10.00	=	17.50	SQ. FT.	
					1.42	X	10.00	=	14.15	SQ. FT.	
	1.50	X	4.00	+	0.50	X	4.00	=	8.00	SQ. FT.	
					1.17	X	4.00	=	4.66	SQ. FT.	
	0.67	X	8.00	+	0.67	X	9.33	=	11.56	SQ. FT.	
					4.00	X	0.50	=	2.00	SQ. FT.	
	2.00	X	6.00	+	2.00	X	6.00	=	24.00	SQ. FT.	
	2.00	X	2.00	+	2.00	X	2.00	=	8.00	SQ. FT.	
			4.00	X	2.00	X	1.41	=	11.31	SQ. FT.	
									139.68	/9=	15.52 SQ.YD.
OUT	0.50	X	10.31	+	0.50	X	9.87	=	10.09	SQ. FT.	
	0.50	X	5.00	+	0.50	X	2.00	=	3.50	SQ. FT.	
	1.00	X	10.31	+	1.00	X	0.27	=	10.58	SQ. FT.	
	1.00	X	9.33	+	1.00	X	5.00	=	14.33	SQ. FT.	
	1.25	X	10.00	+	0.50	X	10.00	=	17.50	SQ. FT.	
					1.41	X	10.00	=	14.15	SQ. FT.	
	1.50	X	4.00	+	0.50	X	4.00	=	8.00	SQ. FT.	
					1.16	X	4.00	=	4.66	SQ. FT.	
	0.67	X	8.00	+	0.67	X	9.33	=	11.56	SQ. FT.	
					4.00	X	0.50	=	2.00	SQ. FT.	
	2.00	X	6.00	+	2.00	X	6.00	=	24.00	SQ. FT.	
	2.00	X	2.00	+	2.00	X	2.00	=	8.00	SQ. FT.	
			4.00	X	2.00	X	1.41	=	11.31	SQ. FT.	
									139.68	/9=	15.52 SQ.YD.
											<u>31.04 SQ. YD.</u>
									<u>TOTAL</u>		<u>31 SQ.YD.</u>



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ITEM	512E33000 TYPE 2 WATERPROOFING (SY)										
IN	6.50	X	10.00	+	6.50	X	10.00	=	130.00	SF	
					9.00	X	11.33	=	102.00	SF	
									232.00	SF/9=	25.78 SY
OUT	6.50	X	10.00	+	6.50	X	10.00	=	130.00	SF	
					9.00	X	11.33	=	102.00	SF	
									232.00	SF/9=	25.78 SY
											51.56 SY
TOTAL											52 SY

ITEM	516E13600 1" PREFORMED EXPANSION JOINT FILLER (SF)										
IN	1.00	X	6.50	+	1.00	X	6.50	=	13.00	SF	
OUT	1.00	X	6.50	+	1.00	X	6.50	=	13.00	SF	
									26.00		
TOTAL											26 SF



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	ITEM	518E21200 POROUS BACKFILL WITH GEOTEXTILE FABRIC (CY)								
IN	1.5	X	1.25	X	11.45	=	21.47	CF		
	1.5	X	2.50	X	11.45	=	42.95	CF		
	1.5	X	1.50	X	4.08	=	9.19	CF		
	1.5	X	2.00	X	4.08	=	<u>12.25</u>	CF		
							85.86	CF	/27	3.18 CY
OUT	1.5	X	1.25	X	11.45	=	21.47	CF		
	1.5	X	2.50	X	11.45	=	42.95	CF		
	1.5	X	1.50	X	4.08	=	9.19	CF		
	1.5	X	2.00	X	4.08	=	<u>12.25</u>	CF		
							85.86	CF	/27	3.18 CY
										<u>6.36 CY</u>
							<u>TOTAL</u>			<u>6 CY</u>

	ITEM	611E94800 8' X 4' CONDUIT, TYPE A, 706.05 (FT)		
INLET	8.00			FT.
OUTLET	<u>8.00</u>			FT.
	16.00			FT.
			<u>TOTAL</u>	<u>16 FT</u>