



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

REVISION HISTORY

Stage 1 Plans:	COMP. BY	<u>CJS / PAT</u>	DATE	<u>4/15/2020</u>	Final Plans:	REVISED BY	<u>VS</u>	DATE	<u>8/8/2023</u>
	CHECKED BY	<u>PAT / JAM</u>	DATE	<u>4/28/2020</u>		CHECKED BY	<u>JDA</u>	DATE	<u>8/9/2023</u>
Stage 3 Plans:	REVISED BY	<u>PAT</u>	DATE	<u>8/3/2020</u>	Pre-bid Question	REVISED BY	<u>JDA</u>	DATE	<u>3/11/2024</u>
	CHECKED BY	<u>JAM</u>	DATE	<u>8/5/2020</u>	Revisions:	CHECKED BY	<u>JG</u>	DATE	<u>3/18/2024</u>
Stage 3R Plans:	REVISED BY	<u>PAT</u>	DATE	<u>1/14/2021</u>	Addendum 4	REVISED BY	<u>JDA</u>	DATE	<u>3/27/2024</u>
	CHECKED BY	<u>MHK</u>	DATE	<u>1/14/2021</u>	Revisions:	CHECKED BY	<u>JG</u>	DATE	<u>3/29/2024</u>
Addendum 5	COMP. BY	<u>JG</u>	DATE	<u>4/4/2024</u>					
Revisions:	CHECKED BY	<u>JDA</u>	DATE	<u>4/4/2024</u>					

The initials and dates listed in the sheet header reflect the most recent revision of the estimated quantity calculations.

BRIDGE PARAPET DATA

Per Standard Drawing BR-1-13:

Area of standard 42" BR-1 cross-section = 474.50 sq in
 Volume of 42" BR-1 14' transition section = 1.71 cy

The existing exterior parapets are 1" wider than BR-1 (9" at top vs 8") and include a 1'-2.25" depth x 2" width fascia. On the superstructure, the existing parapet includes an additional area of 1.25" depth x 19" width at the bottom below the wearing surface. Therefore, adjust values from BR-1-13 as follows:

Area of exterior parapet (abutment) +	474.50	sq in +	(	<u>42.00</u>	x	<u>1.00</u>	+	<u>14.25</u>	x	<u>2.00</u>) +	
Area of wingwall to exist. C.J. =			(	<u>8.75</u>	x	<u>19.00</u>	+	<u>1.25</u>	x	<u>2.00</u>	) =	713.75 4.96
												sq in sf
Volume of exterior parapet 14' transition +	1.71	cy +	(	<u>0.29</u>	x	<u>14.00</u>	+	<u>0.20</u>	x	<u>10.00</u>	) / 27 +	
Volume of wingwall to exist. C.J. =			(	<u>1.15</u>	x	<u>14.00</u>	+	<u>0.02</u>	x	<u>14.00</u>	) / 27 =	2.54
												cy
Area of exterior parapet (superstructure) =				<u>19.00</u>	x	<u>4.25</u>	+	<u>15.50</u>	x	<u>10.00</u>		
			+	<u>10.50</u>	x	<u>29.00</u>	+	<u>2.00</u>	x	<u>14.25</u>	=	568.75 3.95
												sq in sf

The existing median parapets are 50" height as measured from top of wearing surface, plus a 1.25" depth x 17" width at the bottom below the wearing surface.

Area of median parapet (superstructure) =	<u>18.00</u>	x	<u>4.25</u>	+	<u>14.50</u>	x	<u>10.00</u>	+	<u>10.00</u>	x	<u>19.00</u>	=	547.88 3.80
		+	<u>9.00</u>	x	<u>18.00</u>	-	<u>0.50</u>	x	<u>51.25</u>				sq in sf
Area of median parapet (abutment) =	<u>38.00</u>	x	<u>3.00</u>	+	<u>31.00</u>	x	<u>10.00</u>	+	<u>22.00</u>	x	<u>19.00</u>	=	1202.00 8.35
		+	<u>20.00</u>	x	<u>18.00</u>	-	<u>0.00</u>	x	<u>50.00</u>				sq in sf

ITEM 201 - CLEARING AND GRUBBING

This item paid as a **LUMP SUM**.

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

This item paid as a **LUMP SUM**.



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
 Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

ITEM 202 - APPROACH SLAB REMOVED

General:

	No.		Length (ft)		Width (ft)					
West Abutment, at Ramp C-7:	1	x	25.00	x	36.05	/	9	=	100.14	SY
West Abutment, at Mainline:	1	x	25.00	x	147.17	/	9	=	408.80	SY
East Abutment:	1	x	25.00	x	216.60	/	9	=	601.66	SY
Abutment B-C:	1	x	25.00	x	25.38	/	9	=	70.49	SY
Abutment C-B:	1	x	25.00	x	49.26	/	9	=	136.83	SY

Total: 1317.93 SY

Compare, 1986 Substructure Plans, Sheet 18/193, quantity: 1341.00 SY

Total for General: Say: 1341 SY

Total for ITEM 202 - APPROACH SLAB REMOVED: 1341 SY

ITEM 202 - CONCRETE SLOPE PROTECTION REMOVED

General:

	No.		Length (ft)		Width (ft)					
East side of Independence Road, at Pier 14R south column:	1	x	15.00	x	30.00	/	9	=	50.00	SY

Total: 50.00 SY

Total for General: Say: 50 SY

Total for ITEM 202 - CONCRETE SLOPE PROTECTION REMOVED: 50 SY

ITEM 202 - VANDAL PROTECTION FENCE REMOVED AND RESET

Superstructure:

	No.		Length (ft)							
West Abutment, at Ramp C-7:	1	x	10.00	=	10.00	FT				
West Abutment, at Mainline:	1	x	10.00	=	10.00	FT				
Abutment B-C:	1	x	10.00	=	10.00	FT				
Joint 6 at Pier 23C-B:	2	x	10.00	=	20.00	FT				
East Abutment:	2	x	10.00	=	20.00	FT				
Abutment C-B:	2	x	10.00	=	20.00	FT				

Total: 90.00 FT

Total for Superstructure: Say: 90 FT

Total for ITEM 202 - VANDAL PROTECTION FENCE REMOVED AND RESET: 90 FT

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING

This item paid as a LUMP SUM.

ITEM 503 - UNCLASSIFIED EXCAVATION

West Abutment:

	Number		Length (ft)		Width (ft)		Height (ft)				
End of Wingwall for Parapet Work:	1	x	5.00	x	1.00	x 0.5 x (	1.00	+	1.00	) /	27 = 0.19 CY
Other Quantity?	0	x	0.00	x	0.00	x 0.5 x (	0.00	+	0.00	) /	27 = 0.00 CY

Total: 0.19 CY

Total for West Abutment: Say: 0 CY

East Abutment:

	Number		Length (ft)		Width (ft)		Height (ft)				
End of Wingwall for Parapet Work:	2	x	5.00	x	1.00	x 0.5 x (	1.00	+	1.00	) /	27 = 0.37 CY
Other Quantity?	0	x	0.00	x	0.00	x 0.5 x (	0.00	+	0.00	) /	27 = 0.00 CY

Total: 0.37 CY

Total for East Abutment: Say: 0 CY



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

Abutment B-C:

	Number		Length (ft)		Width (ft)			Height (ft)						
End of Wingwall for Parapet Work:	1	x	5.00	x	1.00	x 0.5 x (	1.00	+	1.00	) /	27	=	0.19	CY
Other Quantity?	0	x	0.00	x	0.00	x 0.5 x (	0.00	+	0.00	) /	27	=	0.00	CY

Total: 0.19 CY

Total for Abutment B-C: Say: 0 CY

Abutment C-B:

	Number		Length (ft)		Width (ft)			Height (ft)						
End of Wingwall for Parapet Work:	2	x	5.00	x	1.00	x 0.5 x (	1.00	+	1.00	) /	27	=	0.37	CY
Other Quantity?	0	x	0.00	x	0.00	x 0.5 x (	0.00	+	0.00	) /	27	=	0.00	CY

Total: 0.37 CY

Total for Abutment C-B: Say: 0 CY

Total for ITEM 503 - UNCLASSIFIED EXCAVATION: 0 CY

ITEM 509 - EPOXY COATED REINFORCING STEEL

West Abutment:	=	3,052	LB
East Abutment:	=	3,749	LB
Abutment B-C:	=	769	LB
Abutment C-B:	=	1,715	LB
Piers:	=	0	LB
Superstructure:	=	6,011	LB
Total:		15,296	LB

Total for ITEM 509 - EPOXY COATED REINFORCING STEEL: 15,296 LB

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

West Abutment:	Say:	250	LB
East Abutment:	Say:	250	LB
Abutment B-C:	Say:	125	LB
Abutment C-B:	Say:	125	LB
Piers:	Say:	250	LB
Superstructure:	Say:	1,000	LB
Total:		2,000	LB

Total for ITEM 509 - CONCRETE REINFORCEMENT, REPLACEMENT OF EXISTING REINFORCEMENT, AS PER PLAN: 2,000 LB

ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT

		Number		Number		Number		Number					
West Abutment:	See Sheets 17-19/116:	82		78	+	76	+	226	=	462	EACH		
East Abutment:	See Sheets 42-45/116:	142	+	92	+	94	+	120	=	448	EACH		
Abutment B-C:	See Sheet 46/116:							52	=	52	EACH		
Abutment C-B:	See Sheet 47/116:							100	=	100	EACH		

Total: 1062 EACH

Total for ITEM 510 - DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT: 1062 EACH



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

ITEM 511 - CLASS QC2 CONCRETE, BRIDGE DECK

	Number		Length (ft)		Width (ft)		Depth (ft)					
Deck Reconstruction at West Abutment Joint, Left:	1	x	145.83	x	2.08	x	0.76	/	27	=	8.51	CY
Deck Reconstruction at West Abutment Joint, Right:	1	x	78.33	x	2.08	x	0.76	/	27	=	4.57	CY
Deck Reconstruction at East Abutment Joint, Left:	1	x	114.48	x	2.08	x	0.71	/	27	=	6.28	CY
Deck Reconstruction at East Abutment Joint, Right:	1	x	95.70	x	2.08	x	0.71	/	27	=	5.25	CY
Deck Reconstruction at Abutment B-C Joint:	1	x	26.92	x	2.08	x	0.78	/	27	=	1.62	CY
Deck Reconstruction at Abutment C-B Joint:	1	x	53.74	x	2.08	x	0.73	/	27	=	3.04	CY
Deck Reconstruction at Joint 6:	1	x	34.25	x	4.17	x	0.78	/	27	=	4.12	CY
Total:											33.38	CY
Total for Superstructure:										Say:	<u>33</u>	CY
Total for ITEM 511 - CLASS QC2 CONCRETE, BRIDGE DECK:											<u>33</u>	CY

ITEM 511 - CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET)

	No.		Length (ft)		Area (sf)							
Exterior Parapet, Reconstruction at Abutment Joints:	8	x	2.21	x	3.95	/	27	=	2.58	CY		
Median Parapet, Reconstruction at Abutment Joints:	4	x	2.21	x	3.80	/	27	=	1.24	CY		
Exterior Parapet, Reconstruction at Joint 6:	2	x	4.29	x	3.95	/	27	=	1.26	CY		
Total:											5.08	CY
Total for ITEM 511 - CLASS QC2 CONCRETE, BRIDGE DECK (PARAPET):											<u>5</u>	CY

ITEM 511 - CLASS QC1 CONCRETE, ABUTMENT

West Abutment:

Parapet Transition Reconstruction (Right Wingwall only, Left Wingwall to remain):					No.		Vol (cy)						
					1	x	2.54	=	2.54	CY			
Parapet Reconstruction, Left Wingwall (for abutment joint):			No.		Length (ft)		Area (sf)						
Parapet Reconstruction, Right Wingwall (beyond transition):			1	x	1.50	x	4.96	/	27	=	0.28	CY	
Parapet Reconstruction, Median:			1	x	1.00	x	4.96	/	27	=	0.18	CY	
			1	x	1.25	x	8.35	/	27	=	0.39	CY	
Top of Backwall Reconstruction:		Number		Length (ft)		Width (ft)		Depth (ft)					
		1	x	223.98	x	1.25	x	1.33	/	27	=	13.83	CY
Total:											17.21	CY	
Total for West Abutment:										Say:	<u>17</u>	CY	

East Abutment :

Parapet Transition Reconstruction (Left & Right Wingwall):					No.		Vol (cy)						
					2	x	2.54	=	5.08	CY			
Parapet Reconstruction, Left Wingwall (beyond transition):			No.		Length (ft)		Area (sf)						
Parapet Reconstruction, Right Wingwall (beyond transition):			1	x	2.86	x	4.96	/	27	=	0.53	CY	
Parapet Reconstruction, Median:			1	x	8.51	x	4.96	/	27	=	1.56	CY	
			1	x	1.25	x	8.35	/	27	=	0.39	CY	
Top of Backwall Reconstruction:		Number		Length (ft)		Width (ft)		Depth (ft)					
		1	x	219.48	x	1.25	x	1.33	/	27	=	13.55	CY
Total:											21.11	CY	
Total for West Abutment:										Say:	<u>21</u>	CY	



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
 Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

Abutment B-C:

Parapet Transition Reconstruction (Left Wingwall only):	No.				Vol (cy)	=	2.54	CY		
	1	x			2.54	=	2.54	CY		
Parapet Reconstruction, Left Wingwall (beyond transition):	No.		Length (ft)	Area (sf)	/	27	=	0.93	CY	
	1	x	5.08	4.96	/	27	=	0.93	CY	
Parapet Reconstruction, Right Wingwall (for abutment joint):	No.		Length (ft)	Area (sf)	/	27	=	0.28	CY	
	1	x	1.50	4.96	/	27	=	0.28	CY	
Top of Backwall Reconstruction:	Number		Length (ft)	Width (ft)	Depth (ft)	/	27	=	1.74	CY
	1	x	28.13	1.25	1.33	/	27	=	1.74	CY
Total:									5.49	CY
Total for Abutment B-C:									Say: <u>5</u>	CY

Abutment C-B:

Parapet Transition Reconstruction (Left & Right Wingwall):	No.				Vol (cy)	=	5.08	CY		
	2	x			2.54	=	5.08	CY		
Parapet Reconstruction, Left Wingwall (beyond transition):	No.		Length (ft)	Area (sf)	/	27	=	0.93	CY	
	1	x	5.04	4.96	/	27	=	0.93	CY	
Parapet Reconstruction, Right Wingwall (for abutment joint):	No.		Length (ft)	Area (sf)	/	27	=	2.66	CY	
	1	x	14.50	4.96	/	27	=	2.66	CY	
Top of Backwall Reconstruction:	Number		Length (ft)	Width (ft)	Depth (ft)	/	27	=	3.27	CY
	1	x	53.03	1.25	1.33	/	27	=	3.27	CY
Total:									11.95	CY
Total for Abutment C-B:									Say: <u>12</u>	CY

Total for ITEM 511 - CLASS QC1 CONCRETE, ABUTMENT: 55 CY

ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

West Abutment:

	Number		Length (ft)		Perim, Width or Height (ft)					
North Wingwall Parapet, full height section:	1	x	3.64	x 0.5 x (	9.26	+	9.26	) /	9	= 3.74 SY
North Wingwall Parapet, 10' transition section:	1	x	10.00	x 0.5 x (	9.26	+	7.76	) /	9	= 9.45 SY
North Wingwall Parapet, 2.5' transition section:	1	x	2.50	x 0.5 x (	7.76	+	5.79	) /	9	= 1.88 SY
North Wingwall Parapet, 1.5' transition section:	1	x	1.50	x 0.5 x (	5.79	+	4.33	) /	9	= 0.84 SY
North Wingwall Exterior face below parapet:	1	x	10.64	x 0.5 x (	3.50	+	0.00	) /	9	= 2.07 SY
South Wingwall Parapet, full height section:	1	x	6.00	x 0.5 x (	9.26	+	9.26	) /	9	= 6.17 SY
South Wingwall Parapet, 10' transition section:	1	x	10.00	x 0.5 x (	9.26	+	7.76	) /	9	= 9.45 SY
South Wingwall Parapet, 2.5' transition section:	1	x	2.50	x 0.5 x (	7.76	+	5.79	) /	9	= 1.88 SY
South Wingwall Parapet, 1.5' transition section:	1	x	1.50	x 0.5 x (	5.79	+	4.33	) /	9	= 0.84 SY
South Wingwall Exterior face below parapet:	1	x	8.00	x 0.5 x (	3.61	+	0.00	) /	9	= 1.60 SY
Backwall :	1	x	223.98	x 0.5 x (	4.62	+	4.64	) /	9	= 115.10 SY
Seat:	1	x	223.98	x 0.5 x (	2.00	+	2.00	) /	9	= 49.77 SY
Breastwall:	1	x	223.98	x 0.5 x (	1.00	+	1.25	) /	9	= 28.00 SY
Total:										230.81 SY
Total for West Abutment:										Say: <u>231</u> SY



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

East Abutment:

	Number		Length (ft)		Width or Height (ft)						
North Wingwall Parapet, full height section:	1	x	2.86	x 0.5 x (	9.28	+	9.28	) /	9	=	2.95 SY
North Wingwall Parapet, 10' transition section:	1	x	10.00	x 0.5 x (	9.28	+	7.76	) /	9	=	9.46 SY
North Wingwall Parapet, 2.5' transition section:	1	x	2.50	x 0.5 x (	7.76	+	5.79	) /	9	=	1.88 SY
North Wingwall Parapet, 1.5' transition section:	1	x	1.50	x 0.5 x (	5.79	+	4.33	) /	9	=	0.84 SY
North Wingwall Exterior face below parapet:	1	x	10.86	x 0.5 x (	6.04	+	0.00	) /	9	=	3.65 SY
South Wingwall Parapet, full height section:	1	x	8.51	x 0.5 x (	9.32	+	9.32	) /	9	=	8.81 SY
South Wingwall Parapet, 10' transition section:	1	x	10.00	x 0.5 x (	9.32	+	7.76	) /	9	=	9.49 SY
South Wingwall Parapet, 2.5' transition section:	1	x	2.50	x 0.5 x (	7.76	+	5.79	) /	9	=	1.88 SY
South Wingwall Parapet, 1.5' transition section:	1	x	1.50	x 0.5 x (	5.79	+	4.33	) /	9	=	0.84 SY
South Wingwall Exterior face below parapet:	1	x	12.51	x 0.5 x (	7.00	+	0.00	) /	9	=	4.87 SY
Backwall :	1	x	219.48	x 0.5 x (	6.80	+	6.88	) /	9	=	166.93 SY
Seat:	1	x	219.48	x 0.5 x (	2.00	+	2.00	) /	9	=	48.77 SY
Breastwall:	1	x	219.48	x 0.5 x (	1.00	+	1.25	) /	9	=	27.43 SY
Total:											287.82 SY
Total for East Abutment:										Say:	<u>288</u> SY

Abutment B-C:

	Number		Length (ft)		Width or Height (ft)						
North Wingwall Parapet, full height section:	1	x	5.08	x 0.5 x (	9.38	+	9.38	) /	9	=	5.30 SY
North Wingwall Parapet, 10' transition section:	1	x	10.00	x 0.5 x (	9.38	+	7.76	) /	9	=	9.52 SY
North Wingwall Parapet, 2.5' transition section:	1	x	2.50	x 0.5 x (	7.76	+	5.79	) /	9	=	1.88 SY
North Wingwall Parapet, 1.5' transition section:	1	x	1.50	x 0.5 x (	5.79	+	4.33	) /	9	=	0.84 SY
North Wingwall Exterior face below parapet:	1	x	13.08	x 0.5 x (	6.22	+	0.00	) /	9	=	4.52 SY
South Wingwall Parapet:	1	x	5.93	x 0.5 x (	9.38	+	9.38	) /	9	=	6.18 SY
South Wingwall Exterior face below parapet & above seat:	1	x	5.93	x 0.5 x (	7.15	+	7.12	) /	9	=	4.70 SY
South Wingwall Exterior face below seat:	1	x	8.00	x 0.5 x (	8.82	+	8.62	) /	9	=	7.75 SY
Backwall :	1	x	28.13	x 0.5 x (	7.14	+	7.15	) /	9	=	22.33 SY
Seat:	1	x	28.13	x 0.5 x (	2.00	+	2.00	) /	9	=	6.25 SY
Breastwall:	1	x	28.13	x 0.5 x (	1.10	+	8.72	) /	9	=	15.34 SY
Total:											84.62 SY
Total for Abutment B-C:										Say:	<u>85</u> SY

Abutment C-B:

	Number		Length (ft)		Width or Height (ft)						
North Wingwall Parapet, full height section:	1	x	5.04	x 0.5 x (	9.34	+	9.34	) /	9	=	5.23 SY
North Wingwall Parapet, 10' transition section:	1	x	10.00	x 0.5 x (	9.34	+	7.76	) /	9	=	9.50 SY
North Wingwall Parapet, 2.5' transition section:	1	x	2.50	x 0.5 x (	7.76	+	5.79	) /	9	=	1.88 SY
North Wingwall Parapet, 1.5' transition section:	1	x	1.50	x 0.5 x (	5.79	+	4.33	) /	9	=	0.84 SY
North Wingwall Exterior face below parapet:	1	x	6.04	x 0.5 x (	4.30	+	0.00	) /	9	=	1.44 SY
South Wingwall Parapet, full height section:	1	x	14.50	x 0.5 x (	9.34	+	9.34	) /	9	=	15.05 SY
South Wingwall Parapet, 10' transition section:	1	x	10.00	x 0.5 x (	9.34	+	7.76	) /	9	=	9.50 SY
South Wingwall Parapet, 2.5' transition section:	1	x	2.50	x 0.5 x (	7.76	+	5.79	) /	9	=	1.88 SY
South Wingwall Parapet, 1.5' transition section:	1	x	1.50	x 0.5 x (	5.79	+	4.33	) /	9	=	0.84 SY
South Wingwall Exterior face below parapet:	1	x	14.50	x 0.5 x (	7.63	+	0.00	) /	9	=	6.14 SY
Backwall :	1	x	53.03	x 0.5 x (	6.94	+	6.98	) /	9	=	41.01 SY
Seat:	1	x	53.03	x 0.5 x (	2.00	+	2.00	) /	9	=	11.78 SY
Breastwall:	1	x	53.03	x 0.5 x (	1.00	+	1.25	) /	9	=	6.63 SY
Total:											111.74 SY
Total for Abutment C-B:										Say:	<u>112</u> SY



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

Piers:

Notes: Seal All Surfaces, Including Tops of Cap: Piers 4L, 4R, 9L, 9R, 12L, 12R, 15L, 15R, 20L, 20R
 Seal All Surfaces, Excluding Tops of Cap: Piers 13L, 13R, 14L, 14R
 Seal Columns Only: Piers 7L, 7R, 8R
 Seal Repair Areas Only, Cap & Column: Piers 6L, 6R, 10L, 10R
 Seal Repair Areas Only, Cap: Piers 7L, 7R

	Number		Length (ft)		Width or Height (ft)							
Pier 4L, Cap Top:	1	x	99.88	x 0.5 x (	4.00	+	4.00	) /	9	=	44.39 SY
Pier 4L, Cap Face:	2	x	12.50	x 0.5 x (	6.00	+	9.09	) /	9	=	20.96 SY
Pier 4L, Cap Face:	2	x	74.88	x 0.5 x (	9.09	+	9.09	) /	9	=	151.25 SY
Pier 4L, Cap Face:	2	x	12.50	x 0.5 x (	9.09	+	6.00	) /	9	=	20.96 SY
Pier 4L, Cap End:	1	x	6.00	x 0.5 x (	4.00	+	4.00	) /	9	=	2.67 SY
Pier 4L, Cap End:	1	x	6.00	x 0.5 x (	4.00	+	4.00	) /	9	=	2.67 SY
Pier 4L, Cap Bottom:	1	x	12.88	x 0.5 x (	4.00	+	4.00	) /	9	=	5.72 SY
Pier 4L, Cap Bottom:	2	x	59.88	x 0.5 x (	4.00	+	4.00	) /	9	=	53.22 SY
Pier 4L, Cap Bottom:	1	x	12.88	x 0.5 x (	4.00	+	4.00	) /	9	=	5.72 SY
Pier 4L, Column Face:	2	x	31.87	x 0.5 x (	5.00	+	5.00	) /	9	=	35.41 SY
Pier 4L, Column Face:	2	x	32.19	x 0.5 x (	5.00	+	5.00	) /	9	=	35.77 SY
Pier 4L, Column Face:	2	x	32.51	x 0.5 x (	5.00	+	5.00	) /	9	=	36.12 SY
Pier 4L, Column Side:	2	x	31.87	x 0.5 x (	4.00	+	5.99	) /	9	=	35.38 SY
Pier 4L, Column Side:	2	x	32.19	x 0.5 x (	4.00	+	6.01	) /	9	=	35.81 SY
Pier 4L, Column Side:	2	x	32.51	x 0.5 x (	4.00	+	6.03	) /	9	=	36.24 SY
Pier 4R, Cap Top:	1	x	69.88	x 0.5 x (	4.00	+	4.00	) /	9	=	31.06 SY
Pier 4R, Cap Face:	2	x	12.50	x 0.5 x (	6.00	+	9.00	) /	9	=	20.83 SY
Pier 4R, Cap Face:	2	x	44.88	x 0.5 x (	9.00	+	9.00	) /	9	=	89.75 SY
Pier 4R, Cap Face:	2	x	12.50	x 0.5 x (	9.00	+	6.00	) /	9	=	20.83 SY
Pier 4R, Cap End:	1	x	6.00	x 0.5 x (	4.00	+	4.00	) /	9	=	2.67 SY
Pier 4R, Cap End:	1	x	6.00	x 0.5 x (	4.00	+	4.00	) /	9	=	2.67 SY
Pier 4R, Cap Bottom:	1	x	12.85	x 0.5 x (	4.00	+	4.00	) /	9	=	5.71 SY
Pier 4R, Cap Bottom:	1	x	34.88	x 0.5 x (	4.00	+	4.00	) /	9	=	15.50 SY
Pier 4R, Cap Bottom:	1	x	12.85	x 0.5 x (	4.00	+	4.00	) /	9	=	5.71 SY
Pier 4R, Column Face:	2	x	32.60	x 0.5 x (	5.00	+	5.00	) /	9	=	36.22 SY
Pier 4R, Column Face:	2	x	32.79	x 0.5 x (	5.00	+	5.00	) /	9	=	36.43 SY
Pier 4R, Column Side:	2	x	32.60	x 0.5 x (	4.00	+	6.04	) /	9	=	36.36 SY
Pier 4R, Column Side:	2	x	32.79	x 0.5 x (	4.00	+	6.05	) /	9	=	36.61 SY
Pier 7L, Column Face:	2	x	62.23	x 0.5 x (	6.00	+	6.00	) /	9	=	82.97 SY
Pier 7L, Column Face:	2	x	62.39	x 0.5 x (	6.00	+	6.00	) /	9	=	83.19 SY
Pier 7L, Column Side:	2	x	62.23	x 0.5 x (	4.50	+	8.39	) /	9	=	89.12 SY
Pier 7L, Column Side:	2	x	62.39	x 0.5 x (	4.50	+	8.40	) /	9	=	89.42 SY
Pier 7R, Column Face:	2	x	59.34	x 0.5 x (	5.00	+	5.00	) /	9	=	65.93 SY
Pier 7R, Column Face:	2	x	59.34	x 0.5 x (	5.00	+	5.00	) /	9	=	65.93 SY
Pier 7R, Column Side:	2	x	59.34	x 0.5 x (	4.00	+	7.71	) /	9	=	77.20 SY
Pier 7R, Column Side:	2	x	59.34	x 0.5 x (	4.00	+	7.71	) /	9	=	77.20 SY
Pier 8R, Column Face:	2	x	66.29	x 0.5 x (	5.00	+	5.00	) /	9	=	73.66 SY
Pier 8R, Column Face:	2	x	66.29	x 0.5 x (	5.00	+	5.00	) /	9	=	73.66 SY
Pier 8R, Column Side:	2	x	66.29	x 0.5 x (	4.00	+	8.14	) /	9	=	89.44 SY
Pier 8R, Column Side:	2	x	66.29	x 0.5 x (	4.00	+	8.14	) /	9	=	89.44 SY
Pier 9L, Cap Top:	1	x	67.33	x 0.5 x (	5.00	+	5.00	) /	9	=	37.41 SY
Pier 9L, Cap Face:	2	x	21.00	x 0.5 x (	18.43	+	22.93	) /	9	=	96.51 SY
Pier 9L, Cap Face:	2	x	25.33	x 0.5 x (	22.93	+	22.67	) /	9	=	128.36 SY
Pier 9L, Cap Face:	2	x	21.00	x 0.5 x (	22.67	+	18.17	) /	9	=	95.29 SY
Pier 9L, Cap End:	1	x	18.43	x 0.5 x (	5.00	+	5.00	) /	9	=	10.24 SY
Pier 9L, Cap End:	1	x	18.17	x 0.5 x (	5.00	+	5.00	) /	9	=	10.09 SY
Pier 9L, Cap Bottom:	1	x	21.48	x 0.5 x (	5.00	+	5.00	) /	9	=	11.93 SY
Pier 9L, Cap Bottom:	1	x	21.48	x 0.5 x (	5.00	+	5.00	) /	9	=	11.93 SY
Pier 9L, Stem Face:	(Ignore Corner Bevel)	2	x	61.79	x 0.5 x (25.33	+	25.33) /	9	=	347.85 SY
Pier 9L, Stem Side:	(Ignore Corner Bevel)	2	x	61.79	x 0.5 x (5.00	+	8.86) /	9	=	95.17 SY



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
 Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

Pier 9R, Cap Top:	1	x	67.33	x 0.5 x (	4.50	+	4.50	) /	9	=	33.67	SY
Pier 9R, Cap Face:	2	x	14.00	x 0.5 x (	9.00	+	12.46	) /	9	=	33.38	SY
Pier 9R, Cap Face:	2	x	39.33	x 0.5 x (	12.46	+	12.18	) /	9	=	107.69	SY
Pier 9R, Cap Face:	2	x	14.00	x 0.5 x (	12.18	+	9.00	) /	9	=	32.95	SY
Pier 9R, Cap End:	1	x	9.00	x 0.5 x (	4.50	+	4.50	) /	9	=	4.50	SY
Pier 9R, Cap End:	1	x	9.00	x 0.5 x (	4.50	+	4.50	) /	9	=	4.50	SY
Pier 9R, Cap Bottom:	1	x	14.42	x 0.5 x (	4.50	+	4.50	) /	9	=	7.21	SY
Pier 9R, Cap Bottom:	1	x	23.33	x 0.5 x (	4.50	+	4.50	) /	9	=	11.67	SY
Pier 9R, Cap Bottom:	1	x	14.36	x 0.5 x (	4.50	+	4.50	) /	9	=	7.18	SY
Pier 9R, Column Face:	2	x	62.55	x 0.5 x (	8.00	+	8.00	) /	9	=	111.20	SY
Pier 9R, Column Face:	2	x	62.22	x 0.5 x (	8.00	+	8.00	) /	9	=	110.61	SY
Pier 9R, Column Side:	2	x	62.55	x 0.5 x (	4.50	+	8.41	) /	9	=	89.72	SY
Pier 9R, Column Side:	2	x	62.22	x 0.5 x (	4.50	+	8.39	) /	9	=	89.10	SY
Pier 12L, Cap Top:	1	x	67.33	x 0.5 x (	4.50	+	4.50	) /	9	=	33.67	SY
Pier 12L, Cap Face:	2	x	14.00	x 0.5 x (	9.00	+	12.22	) /	9	=	33.01	SY
Pier 12L, Cap Face:	2	x	39.33	x 0.5 x (	12.22	+	12.00	) /	9	=	105.85	SY
Pier 12L, Cap Face:	2	x	14.00	x 0.5 x (	12.00	+	9.00	) /	9	=	32.67	SY
Pier 12L, Cap End:	1	x	9.00	x 0.5 x (	4.50	+	4.50	) /	9	=	4.50	SY
Pier 12L, Cap End:	1	x	9.00	x 0.5 x (	4.50	+	4.50	) /	9	=	4.50	SY
Pier 12L, Cap Bottom:	1	x	14.37	x 0.5 x (	4.50	+	4.50	) /	9	=	7.18	SY
Pier 12L, Cap Bottom:	1	x	23.33	x 0.5 x (	4.50	+	4.50	) /	9	=	11.67	SY
Pier 12L, Cap Bottom:	1	x	14.32	x 0.5 x (	4.50	+	4.50	) /	9	=	7.16	SY
Pier 12L, Column Face:	2	x	76.40	x 0.5 x (	8.00	+	8.00	) /	9	=	135.82	SY
Pier 12L, Column Face:	2	x	75.69	x 0.5 x (	8.00	+	8.00	) /	9	=	134.56	SY
Pier 12L, Column Side:	2	x	76.40	x 0.5 x (	4.50	+	9.28	) /	9	=	116.93	SY
Pier 12L, Column Side:	2	x	75.69	x 0.5 x (	4.50	+	9.23	) /	9	=	115.47	SY
Pier 12R, Cap Top:	1	x	67.33	x 0.5 x (	4.50	+	4.50	) /	9	=	33.67	SY
Pier 12R, Cap Face:	2	x	14.00	x 0.5 x (	9.00	+	12.42	) /	9	=	33.32	SY
Pier 12R, Cap Face:	2	x	39.33	x 0.5 x (	12.42	+	12.00	) /	9	=	106.72	SY
Pier 12R, Cap Face:	2	x	14.00	x 0.5 x (	12.00	+	9.00	) /	9	=	32.67	SY
Pier 12R, Cap End:	1	x	9.00	x 0.5 x (	4.50	+	4.50	) /	9	=	4.50	SY
Pier 12R, Cap End:	1	x	9.00	x 0.5 x (	4.50	+	4.50	) /	9	=	4.50	SY
Pier 12R, Cap Bottom:	1	x	14.41	x 0.5 x (	4.50	+	4.50	) /	9	=	7.21	SY
Pier 12R, Cap Bottom:	1	x	23.33	x 0.5 x (	4.50	+	4.50	) /	9	=	11.67	SY
Pier 12R, Cap Bottom:	1	x	14.32	x 0.5 x (	4.50	+	4.50	) /	9	=	7.16	SY
Pier 12R, Column Face:	2	x	75.41	x 0.5 x (	8.00	+	8.00	) /	9	=	134.06	SY
Pier 12R, Column Face:	2	x	74.81	x 0.5 x (	8.00	+	8.00	) /	9	=	133.00	SY
Pier 12R, Column Side:	2	x	75.41	x 0.5 x (	4.50	+	9.21	) /	9	=	114.90	SY
Pier 12R, Column Side:	2	x	74.81	x 0.5 x (	4.50	+	9.18	) /	9	=	113.67	SY
Pier 13L, Cap Top:	(Do Not Seal)	0	x	67.33	x 0.5 x (4.50	+	4.50) /	9	=	0.00	SY
Pier 13L, Cap Face:		2	x	13.00	x 0.5 x (7.78	+	10.78) /	9	=	26.81	SY
Pier 13L, Cap Face:		2	x	41.33	x 0.5 x (10.78	+	10.48) /	9	=	97.64	SY
Pier 13L, Cap Face:		2	x	13.00	x 0.5 x (10.48	+	7.48) /	9	=	25.94	SY
Pier 13L, Cap End:		1	x	7.78	x 0.5 x (4.50	+	4.50) /	9	=	3.89	SY
Pier 13L, Cap End:		1	x	7.48	x 0.5 x (4.50	+	4.50) /	9	=	3.74	SY
Pier 13L, Cap Bottom:		1	x	13.34	x 0.5 x (4.50	+	4.50) /	9	=	6.67	SY
Pier 13L, Cap Bottom:		1	x	29.33	x 0.5 x (4.50	+	4.50) /	9	=	14.67	SY
Pier 13L, Cap Bottom:		1	x	13.34	x 0.5 x (4.50	+	4.50) /	9	=	6.67	SY
Pier 13L, Column Face:		2	x	67.95	x 0.5 x (6.00	+	6.00) /	9	=	90.60	SY
Pier 13L, Column Face:		2	x	74.19	x 0.5 x (6.00	+	6.00) /	9	=	98.92	SY
Pier 13L, Column Side:		2	x	67.95	x 0.5 x (4.50	+	8.75) /	9	=	100.01	SY
Pier 13L, Column Side:		2	x	74.19	x 0.5 x (4.50	+	9.14) /	9	=	112.41	SY
Pier 13R, Cap Top:	(Do Not Seal)	0	x	67.33	x 0.5 x (4.50	+	4.50) /	9	=	0.00	SY
Pier 13R, Cap Face:		2	x	13.00	x 0.5 x (7.79	+	10.79) /	9	=	26.84	SY
Pier 13R, Cap Face:		2	x	41.33	x 0.5 x (10.79	+	10.52) /	9	=	97.87	SY
Pier 13R, Cap Face:		2	x	13.00	x 0.5 x (10.52	+	7.52) /	9	=	26.06	SY
Pier 13R, Cap End:		1	x	7.79	x 0.5 x (4.50	+	4.50) /	9	=	3.89	SY
Pier 13R, Cap End:		1	x	7.52	x 0.5 x (4.50	+	4.50) /	9	=	3.76	SY
Pier 13R, Cap Bottom:		1	x	13.34	x 0.5 x (4.50	+	4.50) /	9	=	6.67	SY
Pier 13R, Cap Bottom:		1	x	29.33	x 0.5 x (4.50	+	4.50) /	9	=	14.67	SY
Pier 13R, Cap Bottom:		1	x	13.34	x 0.5 x (4.50	+	4.50) /	9	=	6.67	SY
Pier 13R, Column Face:		2	x	68.69	x 0.5 x (6.00	+	6.00) /	9	=	91.59	SY
Pier 13R, Column Face:		2	x	76.99	x 0.5 x (6.00	+	6.00) /	9	=	102.65	SY
Pier 13R, Column Side:		2	x	68.69	x 0.5 x (4.50	+	8.79) /	9	=	101.46	SY
Pier 13R, Column Side:		2	x	76.99	x 0.5 x (4.50	+	9.31) /	9	=	118.15	SY



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

Pier 14L, Cap Top:	(Do Not Seal)	0	x	72.34	x 0.5 x (	4.50	+	4.50	) /	9	=	0.00	SY
Pier 14L, Cap Face:		2	x	13.00	x 0.5 x (	7.76	+	10.76	) /	9	=	26.75	SY
Pier 14L, Cap Face:		2	x	46.34	x 0.5 x (	10.76	+	10.44	) /	9	=	109.17	SY
Pier 14L, Cap Face:		2	x	13.00	x 0.5 x (	10.44	+	7.44	) /	9	=	25.83	SY
Pier 14L, Cap End:		1	x	7.76	x 0.5 x (	4.50	+	4.50	) /	9	=	3.88	SY
Pier 14L, Cap End:		1	x	7.44	x 0.5 x (	4.50	+	4.50	) /	9	=	3.72	SY
Pier 14L, Cap Bottom:		1	x	13.34	x 0.5 x (	4.50	+	4.50	) /	9	=	6.67	SY
Pier 14L, Cap Bottom:		1	x	34.34	x 0.5 x (	4.50	+	4.50	) /	9	=	17.17	SY
Pier 14L, Cap Bottom:		1	x	13.34	x 0.5 x (	4.50	+	4.50	) /	9	=	6.67	SY
Pier 14L, Column Face:		2	x	49.81	x 0.5 x (	6.00	+	6.00	) /	9	=	66.41	SY
Pier 14L, Column Face:		2	x	50.90	x 0.5 x (	6.00	+	6.00	) /	9	=	67.87	SY
Pier 14L, Column Side:		2	x	49.81	x 0.5 x (	4.50	+	7.61	) /	9	=	67.04	SY
Pier 14L, Column Side:		2	x	50.90	x 0.5 x (	4.50	+	7.68	) /	9	=	68.89	SY
Pier 14R, Cap Top:	(Do Not Seal)	0	x	67.33	x 0.5 x (	4.50	+	4.50	) /	9	=	0.00	SY
Pier 14R, Cap Face:		2	x	13.00	x 0.5 x (	7.81	+	10.81	) /	9	=	26.90	SY
Pier 14R, Cap Face:		2	x	41.33	x 0.5 x (	10.81	+	10.57	) /	9	=	98.19	SY
Pier 14R, Cap Face:		2	x	13.00	x 0.5 x (	10.57	+	7.57	) /	9	=	26.20	SY
Pier 14R, Cap End:		1	x	7.81	x 0.5 x (	4.50	+	4.50	) /	9	=	3.91	SY
Pier 14R, Cap End:		1	x	7.57	x 0.5 x (	4.50	+	4.50	) /	9	=	3.78	SY
Pier 14R, Cap Bottom:		1	x	13.34	x 0.5 x (	4.50	+	4.50	) /	9	=	6.67	SY
Pier 14R, Cap Bottom:		1	x	29.33	x 0.5 x (	4.50	+	4.50	) /	9	=	14.67	SY
Pier 14R, Cap Bottom:		1	x	13.34	x 0.5 x (	4.50	+	4.50	) /	9	=	6.67	SY
Pier 14R, Column Face:		2	x	54.58	x 0.5 x (	6.00	+	6.00	) /	9	=	72.77	SY
Pier 14R, Column Face:		2	x	60.33	x 0.5 x (	6.00	+	6.00	) /	9	=	80.44	SY
Pier 14R, Column Side:		2	x	54.58	x 0.5 x (	4.50	+	7.91	) /	9	=	75.27	SY
Pier 14R, Column Side:		2	x	60.33	x 0.5 x (	4.50	+	8.27	) /	9	=	85.61	SY
Pier 15L, Cap Top:		1	x	74.23	x 0.5 x (	4.00	+	4.00	) /	9	=	32.99	SY
Pier 15L, Cap Face:		2	x	12.50	x 0.5 x (	6.00	+	9.44	) /	9	=	21.44	SY
Pier 15L, Cap Face:		2	x	49.23	x 0.5 x (	9.44	+	9.13	) /	9	=	101.58	SY
Pier 15L, Cap Face:		2	x	12.50	x 0.5 x (	9.13	+	6.00	) /	9	=	21.01	SY
Pier 15L, Cap End:		1	x	6.00	x 0.5 x (	4.00	+	4.00	) /	9	=	2.67	SY
Pier 15L, Cap End:		1	x	6.00	x 0.5 x (	4.00	+	4.00	) /	9	=	2.67	SY
Pier 15L, Cap Bottom:		1	x	12.96	x 0.5 x (	4.00	+	4.00	) /	9	=	5.76	SY
Pier 15L, Cap Bottom:		1	x	39.23	x 0.5 x (	4.00	+	4.00	) /	9	=	17.44	SY
Pier 15L, Cap Bottom:		1	x	12.89	x 0.5 x (	4.00	+	4.00	) /	9	=	5.73	SY
Pier 15L, Column Face:		2	x	43.56	x 0.5 x (	5.00	+	5.00	) /	9	=	48.40	SY
Pier 15L, Column Face:		2	x	42.57	x 0.5 x (	5.00	+	5.00	) /	9	=	47.30	SY
Pier 15L, Column Side:		2	x	43.56	x 0.5 x (	4.00	+	6.72	) /	9	=	51.90	SY
Pier 15L, Column Side:		2	x	42.57	x 0.5 x (	4.00	+	6.66	) /	9	=	50.42	SY
Pier 15R, Cap Top:		1	x	67.33	x 0.5 x (	4.00	+	4.00	) /	9	=	29.93	SY
Pier 15R, Cap Face:		2	x	12.50	x 0.5 x (	6.00	+	9.28	) /	9	=	21.22	SY
Pier 15R, Cap Face:		2	x	42.33	x 0.5 x (	9.28	+	9.11	) /	9	=	86.50	SY
Pier 15R, Cap Face:		2	x	12.50	x 0.5 x (	9.11	+	6.00	) /	9	=	20.99	SY
Pier 15R, Cap End:		1	x	6.00	x 0.5 x (	4.00	+	4.00	) /	9	=	2.67	SY
Pier 15R, Cap End:		1	x	6.00	x 0.5 x (	4.00	+	4.00	) /	9	=	2.67	SY
Pier 15R, Cap Bottom:		1	x	12.92	x 0.5 x (	4.00	+	4.00	) /	9	=	5.74	SY
Pier 15R, Cap Bottom:		1	x	32.33	x 0.5 x (	4.00	+	4.00	) /	9	=	14.37	SY
Pier 15R, Cap Bottom:		1	x	12.88	x 0.5 x (	4.00	+	4.00	) /	9	=	5.72	SY
Pier 15R, Column Face:		2	x	44.41	x 0.5 x (	5.00	+	5.00	) /	9	=	49.34	SY
Pier 15R, Column Face:		2	x	47.57	x 0.5 x (	5.00	+	5.00	) /	9	=	52.86	SY
Pier 15R, Column Side:		2	x	44.41	x 0.5 x (	4.00	+	6.78	) /	9	=	53.17	SY
Pier 15R, Column Side:		2	x	47.57	x 0.5 x (	4.00	+	6.97	) /	9	=	58.00	SY
Pier 20L, Cap Top:		1	x	67.33	x 0.5 x (	4.00	+	4.00	) /	9	=	29.93	SY
Pier 20L, Cap Face:		2	x	12.50	x 0.5 x (	6.00	+	9.26	) /	9	=	21.19	SY
Pier 20L, Cap Face:		2	x	42.33	x 0.5 x (	9.26	+	8.76	) /	9	=	84.76	SY
Pier 20L, Cap Face:		2	x	12.50	x 0.5 x (	8.76	+	6.00	) /	9	=	20.50	SY
Pier 20L, Cap End:		1	x	6.00	x 0.5 x (	4.00	+	4.00	) /	9	=	2.67	SY
Pier 20L, Cap End:		1	x	6.00	x 0.5 x (	4.00	+	4.00	) /	9	=	2.67	SY
Pier 20L, Cap Bottom:		1	x	12.92	x 0.5 x (	4.00	+	4.00	) /	9	=	5.74	SY
Pier 20L, Cap Bottom:		1	x	32.33	x 0.5 x (	4.00	+	4.00	) /	9	=	14.37	SY
Pier 20L, Cap Bottom:		1	x	12.80	x 0.5 x (	4.00	+	4.00	) /	9	=	5.69	SY
Pier 20L, Column Face:		2	x	7.73	x 0.5 x (	5.00	+	5.00	) /	9	=	8.59	SY
Pier 20L, Column Face:		2	x	17.93	x 0.5 x (	5.00	+	5.00	) /	9	=	19.92	SY
Pier 20L, Column Side:		2	x	7.73	x 0.5 x (	4.00	+	4.48	) /	9	=	7.29	SY
Pier 20L, Column Side:		2	x	17.93	x 0.5 x (	4.00	+	5.12	) /	9	=	18.17	SY



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

Pier 20R, Cap Top:	1	x	75.13	x 0.5 x (	4.00	+	4.00	) /	9	=	33.39	SY
Pier 20R, Cap Face:	2	x	12.50	x 0.5 x (	6.00	+	9.03	) /	9	=	20.88	SY
Pier 20R, Cap Face:	2	x	50.13	x 0.5 x (	9.03	+	8.87	) /	9	=	99.69	SY
Pier 20R, Cap Face:	2	x	12.50	x 0.5 x (	8.87	+	6.00	) /	9	=	20.65	SY
Pier 20R, Cap End:	1	x	6.00	x 0.5 x (	4.00	+	4.00	) /	9	=	2.67	SY
Pier 20R, Cap End:	1	x	6.00	x 0.5 x (	4.00	+	4.00	) /	9	=	2.67	SY
Pier 20R, Cap Bottom:	1	x	12.86	x 0.5 x (	4.00	+	4.00	) /	9	=	5.72	SY
Pier 20R, Cap Bottom:	1	x	40.13	x 0.5 x (	4.00	+	4.00	) /	9	=	17.83	SY
Pier 20R, Cap Bottom:	1	x	12.83	x 0.5 x (	4.00	+	4.00	) /	9	=	5.70	SY
Pier 20R, Column Face:	2	x	34.65	x 0.5 x (	5.00	+	5.00	) /	9	=	38.50	SY
Pier 20R, Column Face:	2	x	51.17	x 0.5 x (	5.00	+	5.00	) /	9	=	56.86	SY
Pier 20R, Column Side:	2	x	34.65	x 0.5 x (	4.00	+	6.17	) /	9	=	39.14	SY
Pier 20R, Column Side:	2	x	51.17	x 0.5 x (	4.00	+	7.20	) /	9	=	63.67	SY

	From Sheet	Location No.	Concrete Repair Area		Sealing Area (+1' All Around)							
			Length (ft)	Length (ft)	Length (ft)	Length (ft)						
Pier 6L & Pier 6R:	22/116	1	2.00	x 4.00	3.00	x 5.00	/	9	=	1.67	SY	
Pier 7L & Pier 7R:	24/116	3	6.00	x 6.75	7.00	x 7.75	/	9	=	6.03	SY	
Pier 10L & Pier 10R:	29/116	1	1.00	x 1.00	2.00	x 2.00	/	9	=	0.44	SY	
Pier 10L & Pier 10R:	29/116	2	3.00	x 5.00	4.00	x 6.00	/	9	=	2.67	SY	
Pier 10L & Pier 10R:	30/116	1	1.00	x 1.00	2.00	x 2.00	/	9	=	0.44	SY	

Contingency for Sealing Repair Areas Above: Add: 50% = 5.63 SY

Total: 8425.58 SY

Total for Piers: Say: **8426** SY

Superstructure:

	Number		Length (ft)		Perimeter (ft)							
Unit 1L North Parapet:	1	x	246.05	x	9.51	/	9	=	259.98	SY		
Unit 1L North Median Barrier:	1	x	241.79	x	5.11	/	9	=	137.26	SY		
Unit 1L North Median Barrier, less neoprene seal to remain:	-1	x	241.79	x	0.13	/	9	=	-3.36	SY		
Unit 1R South Median Barrier:	1	x	241.79	x	5.11	/	9	=	137.26	SY		
Unit 1R South Median Barrier, less neoprene seal to remain:	-1	x	241.79	x	0.25	/	10	=	-6.04	SY		
Unit 1R South Parapet:	1	x	241.79	x	9.51	/	9	=	255.47	SY		
Unit 2L North Parapet:	1	x	689.13	x	9.51	/	9	=	728.12	SY		
Unit 2L North Median Barrier:	1	x	687.44	x	5.11	/	9	=	390.26	SY		
Unit 2L North Median Barrier, less neoprene seal to remain:	-1	x	687.44	x	0.13	/	9	=	-9.55	SY		
Unit 2R South Median Barrier:	1	x	738.44	x	5.11	/	9	=	419.21	SY		
Unit 2R South Median Barrier, less neoprene seal to remain:	-1	x	738.44	x	0.25	/	9	=	-20.51	SY		
Unit 2R South Parapet:	1	x	738.48	x	9.51	/	9	=	780.27	SY		
Unit 3L North Parapet:	1	x	785.16	x	9.51	/	9	=	829.59	SY		
Unit 3L North Median Barrier:	1	x	778.46	x	5.11	/	9	=	441.93	SY		
Unit 3L North Median Barrier, less neoprene seal to remain:	-1	x	778.46	x	0.13	/	9	=	-10.81	SY		
Unit 3R South Median Barrier:	1	x	763.67	x	5.11	/	9	=	433.53	SY		
Unit 3R South Median Barrier, less neoprene seal to remain:	-1	x	763.67	x	0.25	/	9	=	-21.21	SY		
Unit 3R South Parapet:	1	x	756.20	x	9.51	/	9	=	798.99	SY		
Unit 4L North Parapet:	1	x	527.97	x	9.51	/	9	=	557.84	SY		
Unit 4L North Median Barrier:	1	x	526.50	x	5.11	/	9	=	298.89	SY		
Unit 4L North Median Barrier, less neoprene seal to remain:	-1	x	526.50	x	0.13	/	9	=	-7.31	SY		
Unit 4R South Median Barrier:	1	x	490.49	x	5.11	/	9	=	278.45	SY		
Unit 4R South Median Barrier, less neoprene seal to remain:	-1	x	490.49	x	0.25	/	9	=	-13.62	SY		
Unit 4R South Parapet:	1	x	485.58	x	9.51	/	9	=	513.06	SY		
Unit 5L North Parapet:	1	x	659.24	x	9.51	/	9	=	696.54	SY		
Unit 5L North Median Barrier:	1	x	658.67	x	5.11	/	9	=	373.92	SY		
Unit 5L North Median Barrier, less neoprene seal to remain:	-1	x	658.67	x	0.13	/	9	=	-9.15	SY		
Unit 5R South Median Barrier:	1	x	658.67	x	5.11	/	9	=	373.92	SY		
Unit 5R South Median Barrier, less neoprene seal to remain:	-1	x	658.67	x	0.25	/	9	=	-18.30	SY		
Unit 5R South Parapet:	1	x	651.98	x	9.51	/	9	=	688.87	SY		



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

Unit 6L North Parapet:	1	x	504.10	x	9.51	/	9	=	532.63	SY
Unit 6L North Median Barrier:	1	x	563.89	x	5.11	/	9	=	320.12	SY
Unit 6L North Median Barrier, less neoprene seal to remain:	-1	x	563.89	x	0.13	/	9	=	-7.83	SY
Unit 6R South Median Barrier:	1	x	563.89	x	5.11	/	9	=	320.12	SY
Unit 6R South Median Barrier, less neoprene seal to remain:	-1	x	563.89	x	0.25	/	9	=	-15.66	SY
Unit 6R North and South Inside Parapet:	1	x	312.95	x	9.51	/	9	=	330.66	SY
Unit 6R South Parapet:	1	x	389.92	x	9.51	/	9	=	411.98	SY
Unit 6CB North Parapet:	1	x	575.11	x	9.51	/	9	=	607.66	SY
Unit 6CB South Parapet:	1	x	585.79	x	9.51	/	9	=	618.94	SY

Total: 12392.13 SY

Total for Superstructure: Say: 12392 SY

General:

	Number		Length (ft)		Perimeter (ft)					
Approach Slab Median Barrier, West Abutment:	1	x	20.00	x	10.05	/	9	=	22.34	SY
Approach Slab Median Barrier, East Abutment:	1	x	20.00	x	10.05	/	9	=	22.34	SY

Total: 44.68 SY

Total for General: Say: 45 SY

Total for ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE): 21,579 SY

ITEM 512 - CONCRETE REPAIR BY EPOXY INJECTION

West Abutment:

See Tables on Sheets 17/116 - 19/116: $\text{Length (ft)} \quad 0.0 + \text{Length (ft)} \quad 1.5 + \text{Length (ft)} \quad 0.0 = 1.5 \text{ FT}$

Total: 1.5 FT

Total for West Abutment: Say: 2 FT

East Abutment:

See Tables on Sheets 42/116 - 45/116: $\text{Length (ft)} \quad 6.0 + \text{Length (ft)} \quad 30.8 + \text{Length (ft)} \quad 33.0 + \text{Length (ft)} \quad 0.0 = 69.8 \text{ FT}$

Total: 69.8 FT

Total for East Abutment: Say: 70 FT

Abutment B-C:

See Table on Sheet 46/116: $\text{Length (ft)} \quad 0.0 = 0.0 \text{ FT}$

Total: 0.0 FT

Total for Abutment B-C: Say: 0 FT

Abutment C-B:

See Tables on Sheets 47/116 - 48/116: $\text{Length (ft)} \quad 35.6 + \text{Length (ft)} \quad 0.0 = 35.6 \text{ FT}$

Total: 35.6 FT

Total for Abutment C-B: Say: 36 FT



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

Piers:

		Length (ft)		Length (ft)	=	
Pier 4L/4R:	See Table on Sheet 20/116:			223.5	=	223.5 FT
Pier 5L/5R:	See Table on Sheet 21/116:			129.8	=	129.8 FT
Pier 6L/6R:	See Tables on Sheets 22/116 & 23/116:	75.0	+	109.3	=	184.3 FT
Pier 7L/7R:	See Tables on Sheets 24/116 & 25/116:	234.0	+	207.5	=	441.5 FT
Pier 8R:	See Table on Sheet 26/116:			39.0	=	39.0 FT
Pier 9L/9R:	See Tables on Sheets 27/116 & 28/116:	208.3	+	97.5	=	305.8 FT
Pier 10L/10R:	See Tables on Sheets 29/116 & 30/116:	293.6	+	334.5	=	628.1 FT
Pier 11L/11R:	See Table on Sheet 31/116:			37.5	=	37.5 FT
Pier 12L/12R:	See Table on Sheet 32/116:			361.5	=	361.5 FT
Pier 13L/13R:	See Table on Sheet 33/116:			52.5	=	52.5 FT
Pier 16L/16R:	See Table on Sheet 34/116:			12.0	=	12.0 FT
Pier 17L/17R:	See Table on Sheet 35/116:			19.5	=	19.5 FT
Pier 18L/18R:	See Table on Sheet 36/116:			24.0	=	24.0 FT
Pier 19L/19R:	See Table on Sheet 37/116:			49.5	=	49.5 FT
Pier 20L/20R:	See Table on Sheet 38/116:			46.5	=	46.5 FT
Pier 21L/21R:	See Table on Sheet 39/116:			24.0	=	24.0 FT
Pier 22L/22R:	See Table on Sheet 40/116:			24.0	=	24.0 FT
Pier 23L/23R, 27C-B:	See Table on Sheet 41/116:			12.0	=	12.0 FT

Total: 2614.9 FT

Total for Piers: Say: 2615 FT

Total for ITEM 512 - CONCRETE REPAIR BY EPOXY INJECTION: 2723 FT

ITEM 512 - REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES

West Abutment:

	Area (sy)	-	Area (sy)	=	
Area calculated for sealing, less new parapets:	230.81	-	18.35	=	212.46 SY
Total:					212.46 SY
Total for West Abutment:					Say: <u>212</u> SY

East Abutment:

	Area (sy)	-	Area (sy)	=	
Area calculated for sealing, less new parapets:	287.82	-	41.03	=	246.78 SY
Total:					246.78 SY
Total for East Abutment:					Say: <u>247</u> SY

Abutment B-C:

	Area (sy)	-	Area (sy)	=	
Area calculated for sealing, less new parapets:	84.62	-	17.55	=	67.07 SY
Total:					67.07 SY
Total for Abutment B-C:					Say: <u>67</u> SY

Abutment C-B:

	Area (sy)	-	Area (sy)	=	
Area calculated for sealing, less new parapets:	111.74	-	44.73	=	67.01 SY
Total:					67.01 SY
Total for Abutment C-B:					Say: <u>67</u> SY

Superstructure:

	Area (sy)	-	Area (sy)	=	
Area calculated for sealing, less new parapets:	12392.13	-	29.47	=	12362.66 SY
Total:					12362.66 SY
Total for Superstructure:					Say: <u>12363</u> SY

Total for ITEM 512 - REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES: 12956 SY



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF

Superstructure:

	Number		Length (ft)		Weight (lb/ft)	=	
End Crossframes (using L4x4x3/8") at West Abutment, Left:	17	x	20.33	x	9.80	=	3387.68 LB
End Crossframes (using L4x4x3/8") at West Abutment, Right:	8	x	21.51	x	9.80	=	1686.35 LB
End Crossframes (using L4x4x3/8") at East Abutment, Left:	12	x	28.43	x	9.80	=	3342.82 LB
End Crossframes (using L4x4x3/8") at East Abutment, Right:	10	x	29.42	x	9.80	=	2883.51 LB
End Crossframes (using L4x4x3/8") at Abutment B-C:	3	x	29.71	x	9.80	=	873.56 LB
End Crossframes (using L4x4x3/8") at Abutment C-B:	4	x	32.63	x	9.80	=	1278.93 LB
End Crossframes (using L4x4x3/8") at Joint 6:	3	x	30.22	x	9.80	=	888.46 LB
Contingency for Crossframe Gusset Plates, add 10%:						=	1434.13 LB

Total: 15775.45 LB

Total for Superstructure: Say: 15,800 LB

Total for ITEM 513 - STRUCTURAL STEEL MEMBERS, LEVEL UF: 15,800 LB

ITEM 513 - STRUCTURAL STEEL, MISC.: INSPECTION SAFETY CABLE SYSTEM REPAIR

This item paid as a LUMP SUM.

ITEM 513 - STRUCTURAL STEEL, MISC.: FINGER JOINT EXPANSION PLATE REPAIR

Superstructure:

Total for Superstructure: Repair at Joint 2L: Say: 1 EACH

Total for ITEM 513 - STRUCTURAL STEEL, MISC.: FINGER JOINT EXPANSION PLATE REPAIR: 1 EACH

ITEM 513 - STRUCTURAL STEEL, MISC.: FINGER JOINT SINGLE FINGER REPAIR

Superstructure:

Total for Superstructure: Repairs at Joints 2R, 3L & 3R: Say: 3 EACH

Total for ITEM 513 - STRUCTURAL STEEL, MISC.: FINGER JOINT SINGLE FINGER REPAIR: 3 EACH

ITEM 513 - STRUCTURAL STEEL, MISC.: STRUCTURAL STEEL, MISC.: REPLACE LOOSE OR MISSING BOLT

Superstructure:

Total for Superstructure: Estimate per Framing Plan plus Contingency: Say: 125 EACH

Total for ITEM 513 - STRUCTURAL STEEL, MISC.: STRUCTURAL STEEL, MISC.: REPLACE LOOSE OR MISSING BOLT: 125 EACH

ITEM 514 - SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL

ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT

ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT

Superstructure:

		Number		Perimeter (ft)		Length (ft)	=	
Girder Ends at West Abutment:	W36x135	27	x	8.80	x	10.00	=	2376.45 SF
Girder Ends at East Abutment:	Plate Girders	24	x	13.15	x	10.00	=	3155.00 SF
Girder Ends at Abutment B-C:	Plate Girders	4	x	13.31	x	10.00	=	532.50 SF
Girder Ends at Abutment C-B:	Plate Girders	5	x	13.63	x	10.00	=	681.25 SF
Girder Ends at Joint 1, Unit 1:	W36x150	23	x	8.82	x	10.00	=	2029.27 SF
Cross Beam at Joint 1, Unit 1:	W36x150	1	x	8.82	x	164.00	=	1446.96 SF
Girder Ends at Joint 1, Unit 2:	Plate Girders	7	x	20.17	x	10.00	=	1411.88 SF
Girder Ends at Joint 1, Unit 2:	Plate Girders	5	x	19.20	x	10.00	=	960.21 SF
Stringer Ends at Joint 1, Unit 2:	W18x46	10	x	4.43	x	10.00	=	443.08 SF



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
 Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

Girder Ends at Joint 2, Unit 2:	Plate Girders		1	x	21.81	x	10.00	=	218.13	SF
Girder Ends at Joint 2, Unit 2:	Plate Girders		4	x	20.32	x	10.00	=	812.92	SF
Girder Ends at Joint 2, Unit 2:	Plate Girders		5	x	19.20	x	10.00	=	960.00	SF
Stringer Ends at Joint 2, Unit 2:	W18x46	X-Frames: 8	8	x	4.43	x	10.00	=	354.47	SF
Girder Ends at Joint 2, Unit 3:	Plate Girders		4	x	21.15	x	10.00	=	845.83	SF
Girder Ends at Joint 2, Unit 3:	Plate Girders		6	x	22.69	x	10.00	=	1361.25	SF
Stringer Ends at Joint 2, Unit 3:	W18x46	X-Frames: 8	8	x	4.43	x	10.00	=	354.47	SF
Girder Ends at Joint 3, Unit 3:	Plate Girders		4	x	21.15	x	10.00	=	845.83	SF
Girder Ends at Joint 3, Unit 3:	Plate Girders		6	x	22.69	x	10.00	=	1361.25	SF
Stringer Ends at Joint 3, Unit 3:	W18x46	X-Frames: 8	8	x	4.43	x	10.00	=	354.47	SF
Girder Ends at Joint 3, Unit 4:	Plate Girders		2	x	20.31	x	10.00	=	406.25	SF
Girder Ends at Joint 3, Unit 4:	Plate Girders		3	x	21.33	x	10.00	=	640.00	SF
Girder Ends at Joint 3, Unit 4:	Plate Girders		2	x	19.38	x	10.00	=	387.50	SF
Girder Ends at Joint 3, Unit 4:	Plate Girders		3	x	19.92	x	10.00	=	597.50	SF
Stringer Ends at Joint 3, Unit 4:	W18x46	X-Frames: 8	8	x	4.43	x	10.00	=	354.47	SF
Girder Ends at Joint 4, Unit 4:	Plate Girders		2	x	20.17	x	10.00	=	403.33	SF
Girder Ends at Joint 4, Unit 4:	Plate Girders		3	x	21.21	x	10.00	=	636.25	SF
Girder Ends at Joint 4, Unit 4:	Plate Girders		2	x	19.19	x	10.00	=	383.75	SF
Girder Ends at Joint 4, Unit 4:	Plate Girders		3	x	19.75	x	10.00	=	592.50	SF
Stringer Ends at Joint 4, Unit 4:	W18x46	X-Frames: 8	9	x	4.43	x	10.00	=	398.78	SF
Girder Ends at Joint 4, Unit 5:	Plate Girders	X-Frames: 18	20	x	13.20	x	10.00	=	2640.42	SF
Girder Ends at Joint 5, Unit 5:	Plate Girders	X-Frames: 17	19	x	13.21	x	10.00	=	2510.21	SF
Girder Ends at Joint 5, Unit 6:	Plate Girders		18	x	13.17	x	10.00	=	2369.79	SF
Girder Ends at Joint 5, Unit 6:	Plate Girders	X-Frames: 19	3	x	13.69	x	10.00	=	410.63	SF
Girder Ends at Joint 6, Unit 6:	Plate Girders		4	x	13.78	x	10.00	=	551.04	SF
Girder Ends at Joint 6, Unit 6CB:	Plate Girders		5	x	13.73	x	10.00	=	686.46	SF
End Crossframes at West Abutment, Left:			17	x	1.33	x	20.33	=	460.91	SF
End Crossframes at West Abutment, Right:			8	x	1.33	x	21.51	=	229.44	SF
End Crossframes at East Abutment, Left:			12	x	1.33	x	28.43	=	454.81	SF
End Crossframes at East Abutment, Right:			10	x	1.33	x	29.42	=	392.31	SF
End Crossframes at Abutment B-C:			3	x	1.33	x	29.71	=	118.85	SF
End Crossframes at Abutment C-B:			4	x	1.33	x	32.63	=	174.00	SF
End Crossframes at Joint 6:			3	x	1.33	x	30.22	=	120.88	SF
For Crossframes at Rollers and Misc. Area, add 20% (and refine calculations at Stage 3):								=	7285.05	SF
Subtotal:									43710.32	SF
Prop. Crossframes:	Deduct for prime coat in the shop:							=	-1951.20	SF
Subtotal, Deductions for Surface Prep and Prime Coat:									-1951.20	SF
Total for Superstructure, Existing (for Surface Preparation and Prime Coat):								Say:	<u>41,800</u>	SF
Total for Superstructure, Existing and Proposed (for Intermediate Coat and Finish Coat):								Say:	<u>43,800</u>	SF
Total for ITEM 514 - SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL:									<u>41,800</u>	SF
Total for ITEM 514 - FIELD PAINTING OF EXISTING STRUCTURAL STEEL, PRIME COAT:									<u>41,800</u>	SF
Total for ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT:									<u>43,800</u>	SF
Total for ITEM 514 - FIELD PAINTING STRUCTURAL STEEL, FINISH COAT:									<u>43,800</u>	SF

ITEM 514 - GRINDING FINNS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL

Total for Superstructure:								Say:	<u>40</u>	MNHR
Total for ITEM 514 - GRINDING FINNS, TEARS, SLIVERS ON EXISTING STRUCTURAL STEEL:									<u>40</u>	MNHR

ITEM 514 - FINAL INSPECTION REPAIR

Total for Superstructure:	Per CMS 514.21, 1 location per 150' of beam lines + 5% of crossframes.							Say:	<u>27</u>	EACH
Total for ITEM 514 - FINAL INSPECTION REPAIR:									<u>27</u>	EACH



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

ITEM 516 - STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL

Superstructure:

	Length (ft)		Length (ft)		Length (ft)	=	
West Abutment Left:	1.25	+	142.61	+	1.25	=	145.11 FT
West Abutment Right:	1.25	+	75.17	+	1.25	=	77.67 FT
East Abutment Left:	1.25	+	110.68	+	1.25	=	113.18 FT
East Abutment Right:	1.25	+	91.61	+	1.25	=	94.11 FT
Abutment B-C:	1.25	+	23.75	+	1.25	=	26.25 FT
Abutment C-B:	1.25	+	49.26	+	1.25	=	51.76 FT

Total: 508.07 FT

Total for Superstructure: Say: 508 FT

Total for ITEM 516 - STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL: 508 FT

ITEM 516 - STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN

Superstructure:

	Length (ft)		Length (ft)		Length (ft)	=	
Expansion Joint 6:	1.25	+	31.91	+	1.25	=	34.41 FT

Total: 34.41 FT

Total for Superstructure: Say: 34 FT

Total for ITEM 516 - STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN: 34 FT

ITEM 516 - RESET BEARING, AS PER PLAN

Superstructure:

Total for Superstructure: Floating bearings at West Abutment: Say: 3 EACH

Total for ITEM 516 - RESET BEARING, AS PER PLAN: 3 EACH

ITEM 516 - JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

This item paid as a **LUMP SUM**.

ITEM 518 - STRUCTURE DRAINAGE, MISC.: DRAINAGE TROUGH SYSTEM, EXPANSION JOINT 1

Superstructure:

		Length (ft)	=	
Joint 1L:	See Sheet 83/116:	101.79	=	101.79 FT
Joint 1R:	See Sheet 83/116:	70.85	=	70.85 FT

Total: 172.65 FT

Total for Superstructure: Say: 173 FT

Total for ITEM 518 - STRUCTURE DRAINAGE, MISC.: DRAINAGE TROUGH SYSTEM, EXPANSION JOINT 1: 173 FT

ITEM 518 - STRUCTURE DRAINAGE, MISC.: DRAINAGE TROUGH SYSTEM, EXPANSION JOINT 2

Superstructure:

		Length (ft)	=	
Joint 2L:	See Sheet 85/116:	67.33	=	67.33 FT
Joint 2R:	See Sheet 85/116:	67.33	=	67.33 FT

Total: 134.67 FT

Total for Superstructure: Say: 135 FT

Total for ITEM 518 - STRUCTURE DRAINAGE, MISC.: DRAINAGE TROUGH SYSTEM, EXPANSION JOINT 2: 135 FT



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

ITEM 518 - STRUCTURE DRAINAGE, MISC.: DRAINAGE TROUGH SYSTEM, EXPANSION JOINT 3

Superstructure:

			Length (ft)		
Joint 3L:	See Sheet 86/116:		67.33	=	67.33 FT
Joint 3R:	See Sheet 86/116:		67.33	=	67.33 FT
Total:					134.67 FT
Total for Superstructure:				Say:	<u>135</u> FT

Total for ITEM 518 - STRUCTURE DRAINAGE, MISC.: DRAINAGE TROUGH SYSTEM, EXPANSION JOINT 3: 135 FT

ITEM 518 - STRUCTURE DRAINAGE, MISC.: DRAINAGE TROUGH SYSTEM, EXPANSION JOINT 4

Superstructure:

			Length (ft)		
Joint 4L:	See Sheet 88/116:		75.91	=	75.91 FT
Joint 4R:	See Sheet 88/116:		67.33	=	67.33 FT
Total:					143.24 FT
Total for Superstructure:				Say:	<u>143</u> FT

Total for ITEM 518 - STRUCTURE DRAINAGE, MISC.: DRAINAGE TROUGH SYSTEM, EXPANSION JOINT 4: 143 FT

ITEM 518 - STRUCTURE DRAINAGE, MISC.: DRAINAGE TROUGH SYSTEM, EXPANSION JOINT 5

Superstructure:

			Length (ft)		
Joint 5L:	See Sheet 89/116:		67.74	=	67.74 FT
Joint 5R:	See Sheet 89/116:		75.92	=	75.92 FT
Total:					143.66 FT
Total for Superstructure:				Say:	<u>144</u> FT

Total for ITEM 518 - STRUCTURE DRAINAGE, MISC.: DRAINAGE TROUGH SYSTEM, EXPANSION JOINT 5: 144 FT

ITEM 518 - STRUCTURE DRAINAGE, MISC.: 10" GALVANIZED STEEL PIPE, INCLUDING SPECIALS

Superstructure:

				COMP. BY	<u>P. Trana</u>	DATE	<u>6/30/2020</u>
				CHECKED BY	<u>JFM</u>	DATE	<u>7/7/2020</u>
<u>Pier 2C-7:</u>	Length (ft)	Length (ft)	Length (ft)				
	5.52	+	22.35	+	14.36	=	42.23 FT
							USE 45 FT

Pier 4L/4R:

		Number	Length (ft)	+	Number	Length (ft)	=	
Install new trough collectors to pier. (these pipes run diagonally from trough to face of pier)	Joint 1L & 1R:	3	x 13.28	+	2	x 13.28	=	66.38 FT

		Length (ft)	+	Length (ft)	+	Length (ft)	=	
Install new downspouts on pier 4L (these pipes run down the pier)	Left Scupper pipe:	1.75	+	1.58	+	10.72	=	14.04 FT
	Left Trough pipe:	2.00	+	5.79	+	2.91	=	10.70 FT
	Pipe at left column (cl):	25.42	+	1.14	+	4.71	=	31.26 FT
	Pipe at left column (side):	3.22	+	19.36			=	22.58 FT
	Center Trough Pipe:	2.00	+	1.22	+	27.27	=	30.49 FT
	Righth Trough pipe:	2.00	+	4.74			=	6.74 FT
	Righth Scupper pipe:	1.75	+	1.58	+	11.60	=	14.93 FT
	Pipe at right column (cl):	25.42	+	1.14	+	4.71	=	31.26 FT
	Pipe at righth column (side):	3.22	+	19.36			=	22.58 FT



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
 Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

Install new downspouts on pier 4R (these pipes run down the pier)	Left Scupper pipe:	Length (ft)	1.75	+	Length (ft)	1.58	+	Length (ft)	11.60	=	14.93	FT		
	Left Trough pipe:	Length (ft)	2.00	+	Length (ft)	5.30				=	7.30	FT		
	Pipe at left column (cl):	Length (ft)	25.42	+	Length (ft)	1.14	+	Length (ft)	4.71	=	31.26	FT		
	Pipe at left column (side):	Length (ft)	3.22	+	Length (ft)	19.36				=	22.58	FT		
	Righth Trough pipe:	Length (ft)	2.00	+	Length (ft)	1.00	+	Length (ft)	1.58	+	11.83	=	16.41	FT
	Righth Scupper pipe:	Length (ft)	1.75	+	Length (ft)	1.58	+	Length (ft)	11.62	=	14.95	FT		
	Pipe at right column (cl):	Length (ft)	25.42	+	Length (ft)	1.14	+	Length (ft)	4.71	=	31.26	FT		
	Pipe at righth column (side):	Length (ft)	3.22	+	Length (ft)	19.36				=	22.58	FT		
TOTAL PIER 4L/4R:											=	412.23	FT	
USE:											=	415	FT	

Pier 5L/5R:

Pier 5L:	Length (ft)	11.87	+	Length (ft)	37.26	+	Length (ft)	14.36	=	63.50	FT	USE	65	FT
Pier 5R:	Length (ft)	11.93	+	Length (ft)	37.27	+	Length (ft)	14.36	=	63.56	FT	USE	65	FT

Pier 9L/9R:

Install new trough collectors to pier. (these pipes run diagonally from trough to face of pier)	Joint 2L & 2R:	Number	2	x	Length (ft)	25.36	+	Number	2	x	Length (ft)	18.74	=	88.21	FT
---	----------------	--------	---	---	-------------	-------	---	--------	---	---	-------------	-------	---	-------	----

Install new downspouts on pier 9L (these pipes run down the pier)	Left Scupper pipe:	Length (ft)	1.75	+	Length (ft)	0.83	+	Length (ft)	1.58	+	Length (ft)	20.78	=	24.93	FT
	Left Trough pipe:	Length (ft)	2.00	+	Length (ft)	4.01							=	6.01	FT
	Pipe at wall, left:	Length (ft)	2.00	+	Length (ft)	56.79	+	Length (ft)	14.36	=	73.15	FT			
	Righth Trough pipe:	Length (ft)	2.00	+	Length (ft)	1.34	+	Length (ft)	1.06	=	4.40	FT			
	Righth Scupper pipe:	Length (ft)	1.75	+	Length (ft)	1.09	+	Length (ft)	1.58	+	20.78	=	25.19	FT	
	Pipe at wall, righth:	Length (ft)	11.69	+	Length (ft)	56.79	+	Length (ft)	14.36	=	82.85	FT			

Install new downspouts on pier 9R (these pipes run down the pier)	Left Scupper pipe:	Length (ft)	1.75	+	Length (ft)	1.14	+	Length (ft)	22.57	=	25.46	FT
	Left Trough pipe:	Length (ft)	2.00	+	Length (ft)	5.71				=	7.71	FT
	Pipe at wall, left:	Length (ft)	-3.00	+	Length (ft)	57.55	+	Length (ft)	14.36	=	68.91	FT
	Righth Trough pipe:	Length (ft)	2.00	+	Length (ft)	1.14	+	Length (ft)	5.66	=	8.80	FT
	Righth Scupper pipe:	Length (ft)	1.75	+	Length (ft)	1.33	+	Length (ft)	22.57	=	25.65	FT
	Pipe at wall, righth:	Length (ft)	8.34	+	Length (ft)	57.22	+	Length (ft)	14.36	=	79.92	FT

TOTAL PIER 9L/9R: = 521.21 FT
USE: = 525 FT

Pier 10L/10R:

Pier 10L:	Length (ft)	18.97	+	Length (ft)	59.68	+	Length (ft)	14.36	=	93.01	FT	USE	95	FT
Pier 10R:	Length (ft)	18.97	+	Length (ft)	59.11	+	Length (ft)	14.36	=	92.44	FT	USE	95	FT

Pier 12L/12R:

Install new trough collectors to pier. (these pipes run diagonally from trough to face of pier)	Joint 3L & 3R:	Number	2	x	Length (ft)	26.60	+	Number	2	x	Length (ft)	26.60	=	106.41	FT
---	----------------	--------	---	---	-------------	-------	---	--------	---	---	-------------	-------	---	--------	----

Install new downspouts on pier 12L (these pipes run down the pier)	Left Trough pipe:	Length (ft)	2.00	+	Length (ft)	1.60	+	Length (ft)	22.50	=	26.10	FT
	Righth Trough pipe:	Length (ft)	2.00	+	Length (ft)	1.14	+	Length (ft)	12.61	=	15.75	FT
	Pipe at column, left:	Length (ft)	3.84	+	Length (ft)	70.69	+	Length (ft)	14.36	=	88.89	FT

Install new downspouts on pier 12R (these pipes run down the pier)	Left Trough pipe:	Length (ft)	2.00	+	Length (ft)	1.92	+	Length (ft)	38.00	=	41.92	FT
	Righth Trough pipe:	Length (ft)	2.00	+	Length (ft)	10.00				=	12.00	FT
	Pipe at column, left:	Length (ft)	2.85	+	Length (ft)	69.81	+	Length (ft)	14.36	=	87.02	FT

TOTAL PIER 12L/12R: = 378.10 FT
USE: = 380 FT



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

Pier 15L/15R:

Install new trough collectors to pier. (these pipes run diagonally from trough to face of pier)	Joint 4L & 4R:	Number	x	Length (ft)	+	Number	x	Length (ft)	=	53.14	FT
		2		13.29		2		13.29			
Install new downspouts on pier 15L (these pipes run down the pier)	Left Scupper pipe:	1.75	+	0.78	+	1.80	+	12.48	=	16.81	FT
	Left Trough pipe:	2.00	+	5.00					=	7.00	FT
	Pipe at column, left:	2.00	+	37.57	+	24.36			=	63.93	FT
	Righth Trough pipe:	2.00	+	1.92	+	17.88			=	21.80	FT
	Righth Scupper pipe:	1.75	+	0.78	+	1.58	+	11.83	=	15.94	FT
	Pipe at column, righth:	2.19	+	38.56	+	14.36			=	55.11	FT
Install new downspouts on pier 15R (these pipes run down the pier)	Left Scupper pipe:	1.75	+	0.78	+	1.58	+	10.72	=	14.82	FT
	Left Trough pipe:	2.00	+	0.78	+	1.58	+	11.69	=	16.05	FT
	Pipe at column, left:	2.00	+	42.57	+	14.36			=	58.93	FT
	Righth Trough pipe:	2.00	+	5.42					=	7.42	FT
	Righth Scupper pipe:	1.75	+	0.78	+	1.58	+	12.21	=	16.32	FT
	Pipe at column, righth:	2.19	+	39.41	+	24.36			=	65.96	FT
									TOTAL PIER 9L/9R:	413.24	FT
									USE:	415	FT

Pier 20L/20R:

Install new trough collectors to pier. (these pipes run diagonally from trough to face of pier)	Joint 5L & 5R:	Number	x	Length (ft)	+	Number	x	Length (ft)	=	73.22	FT
		4		8.14		5		8.14			
Install new downspouts on pier 20R (these pipes run down the pier)	Left Scupper pipe:	1.75	+	0.50	+	1.58	+	11.83	=	15.66	FT
	Left 1 Trough pipe:	2.00	+	3.03					=	5.03	FT
	Left 2 Trough pipe:	2.00	+	5.97					=	7.97	FT
	Left 3 Trough pipe:	2.00	+	1.70	+	2.04	+	22.45	=	28.19	FT
	Pipe at left column (cl):	2.58	+	39.17	+	1.14	+	4.71	=	47.60	FT
	Pipe at left column (side):	3.22	+	44.36					=	47.58	FT
	Righth 1 Trough pipe:	2.00	+	1.88	+	1.58	+	7.34	=	12.80	FT
	Righth 2 Trough pipe:	2.00	+	2.92					=	4.92	FT
	Righth Scupper pipe:	1.75	+	0.50	+	1.58	+	11.60	=	15.43	FT
	Pipe at right column (cl):	2.66	+	22.15	+	1.14	+	4.71	=	30.66	FT
	Pipe at righth column (side):	3.22	+	39.36					=	42.58	FT
Install new downspouts on pier 20L (these pipes run down the pier)	Left Scupper pipe:	1.75	+	0.50	+	1.58	+	12.05	=	15.88	FT
	Left 1 Trough pipe:	2.00	+	2.67					=	4.67	FT
	Left 2 Trough pipe:	2.00	+	6.83					=	8.83	FT
	Left 3 Trough pipe:	2.00	+	5.84					=	7.84	FT
	Righth 1 Trough pipe:	2.00	+	2.16	+	2.15	+	37.86	=	44.17	FT
	Pipe at left column (cl):	2.47	+	15.73	+	1.14	+	4.71	=	24.05	FT
	Pipe at left column (side):	3.22	+	39.36					=	42.58	FT
									TOTAL PIER 4L/4R:	479.64	FT
									USE:	480	FT

<u>Pier 23-CB:</u>	Length (ft)	+	Length (ft)	+	Length (ft)	=	67.77	FT	USE	70	FT
	6.54		41.86		19.36						
<u>Pier 24-CB:</u>	Length (ft)	+	Length (ft)	+	Length (ft)	=	61.53	FT	USE	65	FT
	5.17		37.00		19.36						
<u>Pier 25-CB:</u>	Length (ft)	+	Length (ft)	+	Length (ft)	=	72.15	FT	USE	75	FT
	5.04		32.75		34.36						

East Abutment:

From existing plans:	P-112	P-114	P-115	P-116							
E. Abut. Pipes:	Length (ft)	+	Length (ft)	+	Length (ft)	+	Length (ft)	=	177.00	FT	USE 180 FT
	44.00		46.00		43.00		44.00				

Total for Superstructure: 2970 FT

Total for ITEM 518 - STRUCTURE DRAINAGE, MISC.: 10" GALVANIZED STEEL PIPE, INCLUDING SPECIALS: 2970 FT



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
 Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

ITEM 518 - STRUCTURE DRAINAGE, MISC.: SCUPPER CLEANOUT

Superstructure:

Total for Superstructure: Scuppers on bridge: Say: 35 EACH

Total for ITEM 518 - STRUCTURE DRAINAGE, MISC.: SCUPPER CLEANOUT: 35 EACH

ITEM 518 - STRUCTURE DRAINAGE, MISC.: SCUPPER GRATE REPLACEMENT

Superstructure:

Total for Superstructure: Scuppers needing grate replacement: Say: 1 EACH

Total for ITEM 518 - STRUCTURE DRAINAGE, MISC.: SCUPPER GRATE REPLACEMENT: 1 EACH

ITEM 518 - STRUCTURE DRAINAGE, MISC.: BRIDGE DRAINAGE SYSTEM CLEANING

This item paid as a **LUMP SUM**.

ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=13")

General:

	Number		Length (ft)		Width (ft)				
West Abutment (Mainline, Gore, and Ramp C-7) (weighted average width):	1	x	20.00	x	225.10	/	9	=	500.21 SY
East Abutment (weighted average width):	1	x	20.00	x	177.75	/	9	=	395.00 SY
Abutment B-C (weighted average width):	1	x	20.00	x	26.85	/	9	=	59.67 SY
Abutment C-B (weighted average width):	1	x	20.00	x	34.68	/	9	=	77.06 SY

Total: 1031.94 SY

Total for ITEM 526 - REINFORCED CONCRETE APPROACH SLABS (T=13"): 1,032 SY

ITEM 526 - TYPE A INSTALLATION

	Number		Length (ft)		Length (ft)		Length (ft)		
West Abutment (Mainline, Extension and Ramp C-7):	1	x (	78.91	+	67.29	+	38.37	) =	184.56 FT
East Abutment:	1	x (	0.00	+	105.76	+	115.77	) =	221.53 FT
Abutment B-C:	1	x (	0.00	+	0.00	+	25.43	) =	25.43 FT
Abutment C-B:	1	x (	0.00	+	0.00	+	49.26	) =	49.26 FT

Total: 480.77 FT

Total for ITEM 526 - TYPE A INSTALLATION: 481 FT

ITEM 601 - CONCRETE SLOPE PROTECTION

General:

	No.		Length (ft)		Width (ft)				
East side of Independence Road, at Pier 14R south column:	1	x	30.00	x	15.00	/	9	=	50.00 SY

Total: 50.00 SY

Total for General: Say: 50 SY

Total for ITEM 601 - CONCRETE SLOPE PROTECTION: 50 SY

ITEM SPECIAL - MAINTAIN EXISTING LIGHTING

This item paid as a **LUMP SUM**.



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
 Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

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

West Abutment:

See Tables on Sheets 17/116 - 19/116:	Area (sf)		Area (sf)		Area (sf)	=	0.0	SF
	0.0	+	0.0	+	0.0			
Total:							0.0	SF
Total for West Abutment:							Say: <u>0</u>	SF

East Abutment:

See Tables on Sheets 42/116 - 45/116:	Area (sf)		Area (sf)		Area (sf)		Area (sf)	=	14.3	SF
	14.3	+	0.0	+	0.0	+	0.0			
Total:									14.3	SF
Total for East Abutment:							Say: <u>15</u>			SF

Abutment B-C:

See Table on Sheet 46/116:					Area (sf)	=	0.0	SF
					0.0			
Total:							0.0	SF
Total for Abutment B-C:							Say: <u>0</u>	SF

Abutment C-B:

See Tables on Sheets 47/116 - 48/116:			Area (sf)		Area (sf)	=	54.0	SF
			54.0	+	0.0			
Total:							54.0	SF
Total for Abutment C-B:							Say: <u>54</u>	SF

Piers:

Pier 4L/4R:	See Table on Sheet 20/116:	Area (sf)		Area (sf)	=	0.0	SF
Pier 5L/5R:	See Table on Sheet 21/116:			0.0	=	0.0	SF
Pier 6L/6R:	See Tables on Sheets 22/116 & 23/116:	12.0	+	0.0	=	12.0	SF
Pier 7L/7R:	See Tables on Sheets 24/116 & 25/116:	66.8	+	0.0	=	66.8	SF
Pier 8R:	See Table on Sheet 26/116:			3.0	=	3.0	SF
Pier 9L/9R:	See Tables on Sheets 27/116 & 28/116:	506.3	+	0.0	=	506.3	SF
Pier 10L/10R:	See Tables on Sheets 29/116 & 30/116:	24.0	+	1.5	=	25.5	SF
Pier 11L/11R:	See Table on Sheet 31/116:			0.0	=	0.0	SF
Pier 12L/12R:	See Table on Sheet 32/116:			0.0	=	0.0	SF
Pier 13L/13R:	See Table on Sheet 33/116:			1.5	=	1.5	SF
Pier 16L/16R:	See Table on Sheet 34/116:			0.0	=	0.0	SF
Pier 17L/17R:	See Table on Sheet 35/116:			24.0	=	24.0	SF
Pier 18L/18R:	See Table on Sheet 36/116:			1.5	=	1.5	SF
Pier 19L/19R:	See Table on Sheet 37/116:			1.5	=	1.5	SF
Pier 20L/20R:	See Table on Sheet 38/116:			0.0	=	0.0	SF
Pier 21L/21R:	See Table on Sheet 39/116:			0.0	=	0.0	SF
Pier 22L/22R:	See Table on Sheet 40/116:			5.3	=	5.3	SF
Pier 23L/23R, 27C-B:	See Table on Sheet 41/116:			7.5	=	7.5	SF
Total:						654.8	SF
Total for Piers:						Say: <u>655</u>	SF

Total for ITEM 844 - CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION, AS PER PLAN:

724 SF



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
 Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

ITEM 848 - MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2.50" THICK)

ITEM 848 - SURFACE PREPARATION USING HYDRODEMOLITION, AS PER PLAN

ITEM 848 - EXISTING CONCRETE OVERLAY REMOVED

ITEM 848 - EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN

Superstructure:

	Length (ft)	Width (ft)	Area (sf)					
Deck Area per Inventory Data:			= 547,964	/	9	=	60884.9	SY
Deduct Exterior Parapets:	8133.4	x 1.58	= -12,878	/	9	=	-1430.9	SY
Deduct Median Parapets:	6905.7	x 1.50	= -10,359	/	9	=	-1150.9	SY
Deduct at West Abutment Joint:	(145.83 + 78.33)	x 2.08	= -467	/	9	=	-51.9	SY
Deduct at East Abutment Joint:	(114.48 + 95.70)	x 2.08	= -438	/	9	=	-48.7	SY
Deduct at Abutment B-C Joint:	26.9	x 2.08	= -56	/	9	=	-6.2	SY
Deduct at Abutment C-B Joint:	53.7	x 2.08	= -112	/	9	=	-12.4	SY
Deduct at Joints 1, 4 & 5:	(169.65 + 140.24 + 140.66)	x 1.71	= -770	/	9	=	-85.5	SY
Deduct at Joints 2 & 3:	(131.67 + 131.67)	x 2.13	= -560	/	9	=	-62.2	SY
Deduct at Joint 6:	34.3	x 4.17	= -143	/	9	=	-15.9	SY

Total: 522182 SF 58020.3 SY

Total for Superstructure: Say: **58030** SY

Total for ITEM 848 - MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION, AS PER PLAN (2.50" THICK): **58030** SY

Total for ITEM 848 - SURFACE PREPARATION USING HYDRODEMOLITION, AS PER PLAN: **58030** SY

Total for ITEM 848 - EXISTING CONCRETE OVERLAY REMOVED: **58030** SY

Total for ITEM 848 - EXISTING CONCRETE OVERLAY REMOVED, AS PER PLAN: **58030** SY

ITEM 848 - MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY

Superstructure:

	Percent	Area (sf)	Depth (ft)					
Deck Slab:	20%	x 522182	x 0.10	/	27	=	402.92	CY

Total: 402.92 CY

Total for Superstructure: Say: **403** CY

Total for ITEM 848 - MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY: **403** CY

ITEM 848 - HAND CHIPPING

Superstructure:

	Percent	Area (sf)						
Deck Slab:	5%	x 522182	/	9	=	2901.01	SY	

Total: 2901.01 SY

Total for Superstructure: Say: **2902** SY

Total for ITEM 848 - HAND CHIPPING: **2902** SY

ITEM 848 - TEST SLAB

This item paid as a LUMP SUM.



CLIENT ODOT District 12
 PROJECT CUY-490-01.00 / PID 25622
 SUBJECT Bridge No. CUY-490-0100
Estimated Quantity Calculations

PROJECT NO. 2022-1001-00
 COMP. BY JDA DATE 4/4/2024
 CHECKED BY JG DATE 4/4/2024

ITEM 848 - FULL DEPTH REPAIR

Superstructure:

Deck Slab:	From Stage 3 with additional 30%	Factor 1.30	x	Volume (CY) 50.00	=	65.00	CY
Total:						65.00	CY
Total for Superstructure:					Say:	<u>65</u>	CY
Total for ITEM 848 - FULL DEPTH REPAIR:						<u>65</u>	CY

ITEM 848 - FULL DEPTH REPAIR, AS PER PLAN

Superstructure:

Deck Slab:	10 CY as assigned by the District				=	10.00	CY
Total:						10.00	CY
Total for Superstructure:					Say:	<u>10</u>	CY
Total for ITEM 848 - FULL DEPTH REPAIR, AS PER PLAN:						<u>10</u>	CY