



CLIENT ODOT District 8
 PROJECT Bridge No. GRE-0072-0771
 SUBJECT Estimated Quantity Calculations

PROJECT NO. 2121-1002-00
 COMP. BY MHK DATE 1/17/2022
 CHECKED BY TDA DATE 1/19/2022

REVISION HISTORY

Stage 2 Plans: REVISIED BY JAM DATE 7/5/2022
 CHECKED BY JDA DATE 7/6/2022

Final Plans: REVISIED BY VS DATE 8/1/2023
 CHECKED BY MJL DATE 8/11/2023

Stage 3 Plans: REVISIED BY JAM DATE 2/23/2023
 CHECKED BY JG DATE 2/23/2023

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

ITEM 202 - STRUCTURE REMOVED, OVER 20 FOOT SPAN

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

Estimate the existing deck area by using the original plans and use the "May 2013 ODOT Procedures for Estimating" spreadsheet to estimate a structure removed cost.

Estimated Lump Sum Cost: **2.877** sf x **\$ 27.65** / sf = \$ 79,562.03 Say: **\$ 80,000.00** LS

ITEM 202 - APPROACH SLAB REMOVED

General:

	Number		Length (ft)		Width (ft)					
Rear Approach Slab:	1	x	15.00	x	37.00	/	9	=	61.67	SY
Forward Approach Slab:	1	x	15.00	x	37.00	/	9	=	61.67	SY

Total: 123.33 SY

Total for General: Say: **124** SY

Total for ITEM 202 - APPROACH SLAB REMOVED:

124 SY

ITEM 202 - WEARING COURSE REMOVED

General:

	Number		Length (ft)		Width (ft)					
Rear Approach Slab:	1	x	15.00	x	36.00	/	9	=	60.00	SY
Forward Approach Slab:	1	x	15.00	x	36.00	/	9	=	60.00	SY

Total: 120.00 SY

Total for General: Say: **120** SY

Total for ITEM 202 - WEARING COURSE REMOVED:

120 SY

ITEM 503 - COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN

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

Estimate temporary shoring required to estimate a cost.

Rear Abutment:

	Number		Length (ft)		Height (ft)					
Left Wingwall:	1	x	22.00	x 0.5 x (	8.00	+	8.00	) =	176.00	SF

Total: 176.00 SF

Total for Rear Abutment: Say: **176** SF

Forward Abutment:

	Number		Length (ft)		Height (ft)					
Left Wingwall, North of Wingwall:	1	x	22.00	x 0.5 x (	8.00	+	8.00	) =	176.00	SF
Left Wingwall, NW of Wingwall:	1	x	13.00	x 0.5 x (	8.00	+	8.00	) =	104.00	SF

Total: **280.00** SF

Total for Forward Abutment: Say: **280** SF

Total Cofferdams and Excavation Bracing for Structure: Say: **460** SF

Estimated Lump Sum Cost: 460 sf x **\$ 30.00** / sf = \$ 13,800.00 Say: **\$ 20,000.00** LS



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ITEM 503 - UNCLASSIFIED EXCAVATION

Rear Abutment:

	Number		Length (ft)		Width (ft)		Height (ft)					
Abutment Footing:	1	x	101.73	x	6.50	x	0.5 x (11.11 + 11.11)	/	27	=	272.09	CY
Total:											272.09	CY
Total for Rear Abutment:											Say: <u>273</u>	CY

Forward Abutment:

	Number		Length (ft)		Width (ft)		Height (ft)					
Abutment Footing:	1	x	101.73	x	6.50	x	0.5 x (10.95 + 10.95)	/	27	=	268.17	CY
Total:											268.17	CY
Total for Forward Abutment:											Say: <u>269</u>	CY

Total for ITEM 503 - UNCLASSIFIED EXCAVATION: 542 CY

ITEM 509 - GALVANIZED STEEL REINFORCEMENT

Rear Abutment:											11,766	LB
Forward Abutment:											11,532	LB
Piers:											5,866	LB
Superstructure:											55,942	LB
Total:											85,106	LB

Total for ITEM 509 - GALVANIZED STEEL REINFORCEMENT: 85,106 LB

ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE

Superstructure:

	Number		Length (ft)		Width (ft)		Depth (ft)							
Deck Slab:	1	x	66.44	x	50.33	x	1.17	/	27	=	144.51	CY		
Sidewalk:	2	x	66.44	x	7.00	x	0.73	/	27	=	25.12	CY		
Pier Diaphragm, Interior:	2	x	56.58	x	3.50	x	0.84	/	27	=	12.37	CY		
Pier Diaphragm, Exterior:	4	x	-2.52	x	3.50	x	0.50	/	27	=	-0.65	CY		
End Diaphragm:	2	x	60.43	x	2.25	x	3.18	/	27	=	32.01	CY		
End Diaphragm, Deduct Approach Slab:	2	x	-41.56	x	0.50	x	1.27	/	27	=	-1.95	CY		
End Diaphragm, Outside of Sidewalk:	4	x	2.02	x	1.00	x	0.79	/	27	=	0.24	CY		
Pier Diaphragm, Ends:	2	x	0.50	x	3.14	x	1.75	x	1.75	/	27	=	0.36	CY

Total:											211.99	CY
Total for Superstructure:											Say: <u>212</u>	CY

Total for ITEM 511 - CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE: 212 CY



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ITEM 511 - CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS, AS PER PLAN

Piers:

	Number		Length (ft)		Width (ft)		Height (ft)					
Cap, Interior:	2	x	53.08	x	3.50	x	3.00	/	27	=	41.29	CY
Cap, Ends:	2	x	3.00	x (	3.14	x	1.75	x	1.75	) /	27	= 2.14 CY
Pier 1 Columns:	4	x	2.14	x (	3.14	x	1.75	x	1.75	) /	27	= 3.05 CY
Pier 2 Columns:	4	x	2.01	x (	3.14	x	1.75	x	1.75	) /	27	= 2.86 CY

Total: 49.34 CY

Total for Piers: Say: 50 CY

Total for ITEM 511 - CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS, AS PER PLAN: 50 CY

ITEM 511 - CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING, AS PER PLAN

Rear Abutment:

	Number		Length (ft)		Width (ft)		Height (ft)					
Abutment Seat:	1	x	60.61	x	2.25	x 0.5 x (	5.56	+	5.56	) /	27	= 28.08 CY
Footing:	1	x	99.73	x	4.50	x 0.5 x (	3.00	+	3.00	) /	27	= 49.86 CY
Left Wingwall, Sloped:	1	x	15.00	x	2.25	x 0.5 x (	9.35	+	2.85	) /	27	= 7.62 CY
Left Wingwall, Level:	1	x	1.55	x	2.25	x 0.5 x (	9.35	+	9.35	) /	27	= 1.21 CY
Right Wingwall, Sloped:	1	x	21.00	x	2.25	x 0.5 x (	9.49	+	4.85	) /	27	= 12.55 CY
Right Wingwall, Level:	1	x	1.55	x	2.25	x 0.5 x (	9.49	+	9.49	) /	27	= 1.23 CY

Total: 100.56 CY

Total for Rear Abutment: Say: 101 CY

Forward Abutment:

	Number		Length (ft)		Width (ft)		Height (ft)					
Abutment Seat:	1	x	60.61	x	2.25	x 0.5 x (	5.33	+	5.33	) /	27	= 26.92 CY
Footing:	1	x	99.73	x	4.50	x 0.5 x (	3.00	+	3.00	) /	27	= 49.86 CY
Left Wingwall, Sloped:	1	x	21.00	x	2.25	x 0.5 x (	9.41	+	4.85	) /	27	= 12.48 CY
Left Wingwall, Level:	1	x	1.55	x	2.25	x 0.5 x (	9.41	+	9.41	) /	27	= 1.22 CY
Right Wingwall, Sloped:	1	x	15.00	x	2.25	x 0.5 x (	9.12	+	2.85	) /	27	= 7.48 CY
Right Wingwall, Level:	1	x	1.55	x	2.25	x 0.5 x (	9.12	+	9.12	) /	27	= 1.18 CY

Total: 99.14 CY

Total for Forward Abutment: Say: 100 CY

Total for ITEM 511 - CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT INCLUDING FOOTING, AS PER PLAN: 201 CY

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

Superstructure:

	Number		Length (ft)		Perim. (ft)							
Sidewalk:	2	x	66.44	x	6.58	/	9	=	97.20	SY		

Total: 97.20 SY

Total for Superstructure: Say: 98 SY

Total for ITEM 512 - SEALING OF CONCRETE SURFACES (NON-EPOXY): 98 SY



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

Rear Abutment:

Abutment Seat, Front: $1 \times 60.61 \times 0.5 \times (4.21 + 4.21) / 9 = 28.35 \text{ SY}$

Left Wingwall, Front Sloped: $1 \times 15.00 \times 0.5 \times (8.00 + 1.50) / 9 = 7.92 \text{ SY}$
 Left Wingwall, Front Level: $1 \times 2.20 \times 0.5 \times (8.00 + 8.00) / 9 = 1.95 \text{ SY}$
 Left Wingwall, Top Sloped: $1 \times 16.35 \times 0.5 \times (2.25 + 2.25) / 9 = 4.09 \text{ SY}$
 Left Wingwall, Top Level: $1 \times 1.55 \times 0.5 \times (2.25 + 2.25) / 9 = 0.39 \text{ SY}$
 Left Wingwall, Back: $1 \times 16.35 \times 0.5 \times (0.50 + 0.50) / 9 = 0.91 \text{ SY}$
 Left Wingwall, End: $1 \times 2.25 \times 0.5 \times (1.50 + 0.50) / 9 = 0.25 \text{ SY}$

Right Wingwall, Front Sloped: $1 \times 21.00 \times 0.5 \times (8.14 + 3.50) / 9 = 13.58 \text{ SY}$
 Right Wingwall, Front Sloped, Deduct Sloped Ground: $1 \times -5.89 \times 0.5 \times (2.99 + 0.00) / 9 = -0.98 \text{ SY}$
 Right Wingwall, Front Level: $1 \times 0.91 \times 0.5 \times (8.14 + 8.14) / 9 = 0.82 \text{ SY}$
 Right Wingwall, Top Sloped: $1 \times 21.51 \times 0.5 \times (2.25 + 2.25) / 9 = 5.38 \text{ SY}$
 Right Wingwall, Top Level: $1 \times 1.55 \times 0.5 \times (2.25 + 2.25) / 9 = 0.39 \text{ SY}$
 Right Wingwall, Back: $1 \times 21.51 \times 0.5 \times (0.50 + 0.50) / 9 = 1.19 \text{ SY}$
 Right Wingwall, End: $1 \times 2.25 \times 0.5 \times (1.50 + 0.50) / 9 = 0.25 \text{ SY}$

Total: **64.49 SY**

Total for Rear Abutment: **Say: 65 SY**

Forward Abutment:

Abutment Seat, Front: $1 \times 60.61 \times 0.5 \times (3.98 + 3.98) / 9 = 26.81 \text{ SY}$

Left Wingwall, Front Sloped: $1 \times 21.00 \times 0.5 \times (8.06 + 3.50) / 9 = 13.49 \text{ SY}$
 Left Wingwall, Front Sloped, Deduct Sloped Ground: $1 \times -5.88 \times 0.5 \times (1.88 + 0.00) / 9 = -0.61 \text{ SY}$
 Left Wingwall, Front Level: $1 \times 0.91 \times 0.5 \times (8.06 + 8.06) / 9 = 0.81 \text{ SY}$
 Left Wingwall, Top Sloped: $1 \times 21.49 \times 0.5 \times (2.25 + 2.25) / 9 = 5.37 \text{ SY}$
 Left Wingwall, Top Level: $1 \times 1.55 \times 0.5 \times (2.25 + 2.25) / 9 = 0.39 \text{ SY}$
 Left Wingwall, Back: $1 \times 21.49 \times 0.5 \times (0.50 + 0.50) / 9 = 1.19 \text{ SY}$
 Left Wingwall, End: $1 \times 2.25 \times 0.5 \times (3.50 + 0.50) / 9 = 0.50 \text{ SY}$

Right Wingwall, Front Sloped: $1 \times 15.00 \times 0.5 \times (7.77 + 1.50) / 9 = 7.72 \text{ SY}$
 Right Wingwall, Front Level: $1 \times 2.20 \times 0.5 \times (7.77 + 7.77) / 9 = 1.90 \text{ SY}$
 Right Wingwall, Top Sloped: $1 \times 16.26 \times 0.5 \times (2.25 + 2.25) / 9 = 4.06 \text{ SY}$
 Right Wingwall, Top Level: $1 \times 1.55 \times 0.5 \times (2.25 + 2.25) / 9 = 0.39 \text{ SY}$
 Right Wingwall, Back: $1 \times 16.26 \times 0.5 \times (0.50 + 0.50) / 9 = 0.90 \text{ SY}$
 Right Wingwall, End: $1 \times 2.25 \times 0.5 \times (1.50 + 0.50) / 9 = 0.25 \text{ SY}$

Total: **63.17 SY**

Total for Forward Abutment: **Say: 64 SY**

Piers:

Cap, Sides: $4 \times 53.08 \times 0.5 \times (3.00 + 3.00) / 9 = 70.78 \text{ SY}$
 Cap, Bottom: $2 \times 53.08 \times 0.5 \times (3.50 + 3.50) / 9 = 41.29 \text{ SY}$

Cap, Vertical Ends: $4 \times 3.00 \times 5.50 / 9 = 7.33 \text{ SY}$

Pier 1, Columns: $4 \times 4.79 \times 11.00 / 9 = 23.41 \text{ SY}$
 Pier 2, Columns: $4 \times 4.66 \times 11.00 / 9 = 22.77 \text{ SY}$

Cap, Horizontal Ends: $2 \times 3.14 \times 1.75 \times 1.75 / 9 = 2.14 \text{ SY}$

Pier 1, Deduct Columns From Cap Bottom: $-4 \times 3.14 \times 1.75 \times 1.75 / 9 = -4.28 \text{ SY}$
 Pier 2, Deduct Columns From Cap Bottom: $-4 \times 3.14 \times 1.75 \times 1.75 / 9 = -4.28 \text{ SY}$

Total: **159.16 SY**

Total for Pier: **Say: 160 SY**



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Superstructure:

	Number		Length (ft)		Perim. (ft)					
Railings, Interior Panel Sides & Top:	2	x	55.86	x	5.00	/	9	=	62.07	SY
Railings, End Panel Sides & Top:	4	x	5.00	x	8.00	/	9	=	17.78	SY
Railings, End Panel Interior End:	4	x	1.00	x	1.50	/	9	=	0.67	SY
Railings, End Panel Exterior End:	4	x	1.00	x	3.50	/	9	=	1.56	SY
Deck Fascias & Overhangs:	2	x	62.40	x	2.63	/	9	=	36.40	SY
Pier Diaphragms, Interior Sides:	4	x	56.58	x	0.84	/	9	=	21.21	SY
Pier Diaphragms, Exterior Sides:	8	x	-2.52	x	0.50	/	9	=	-1.12	SY
Pier Diaphragms, Vertical Ends:	4	x	0.50	x	5.50	/	9	=	1.22	SY
End Diaphragms, Front Face:	2	x	60.43	x	2.01	/	9	=	27.01	SY
End Diaphragms, Front Face, Outside of Sidewalk:	4	x	1.15	x	0.79	/	9	=	0.41	SY
End Diaphragms, Front Face, Deduct Edge Beam:	4	x	-6.35	x	0.33	/	9	=	-0.94	SY
End Diaphragms, Top Face:	4	x	2.02	x	1.00	/	9	=	0.90	SY
End Diaphragms, Back Face:	4	x	1.15	x	0.50	/	9	=	0.26	SY

Total: 167.42 SY

Total for Superstructure: Say: 168 SY

Total for ITEM 512 - SEALING OF CONCRETE SURFACES (EPOXY-URETHANE): 457 SY

ITEM 516 - 2" PREFORMED EXPANSION JOINT FILLER

Superstructure:

	Number		Width (ft)		Height (ft)				
Rear Abutment, Between End Diaphragm and Left Wingwall:	1	x	2.60	x	3.79	=			9.85 SF
Rear Abutment, Between End Diaphragm and Right Wingwall:	1	x	2.60	x	3.93	=			10.21 SF
Forward Abutment, Between End Diaphragm and Left Wingwall:	1	x	2.60	x	4.08	=			10.60 SF
Forward Abutment, Between End Diaphragm and Right Wingwall:	1	x	2.60	x	3.79	=			9.85 SF

Total: 40.50 SF

Total for Superstructure: Say: 41 SF

Total for ITEM 516 - 2" PREFORMED EXPANSION JOINT FILLER: 41 SF

ITEM 516 - SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL

Superstructure:

	Number		Length (ft)			
Horizontal at Abutment Seat:	2	x	63.81	=		127.63 FT
Rear Abutment, Vertical at Left Wingwall:	1	x	4.54	=		4.54 FT
Rear Abutment, Vertical at Right Wingwall:	1	x	4.68	=		4.68 FT
Forward Abutment, Vertical at Left Wingwall:	1	x	4.83	=		4.83 FT
Forward Abutment, Vertical at Right Wingwall:	1	x	4.54	=		4.54 FT

Total: 146.22 FT

Total for Superstructure: Say: 146 FT

Total for ITEM 516 - SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL: 146 FT



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ITEM 516 - 1" ELASTOMERIC BEARING PAD

Superstructure:

	Number		Length (ft)		Width (ft)	=		
Abutments:	2	x	60.81	x	0.67	=	81.08	SF
Piers:	2	x	54.42	x	0.67	=	72.56	SF
Total:							153.64	SF
Total for Superstructure:						Say:	<u>154</u>	SF

Total for ITEM 516 - 1" ELASTOMERIC BEARING PAD: 154 SF

ITEM 517 - RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING)

Superstructure:

	Number		Length (ft)	=		
Deck:	2	x	65.86	=	131.73	FT
Total for Superstructure:					131.73	FT

Total for ITEM 517 - RAILING (CONCRETE PARAPET WITH TWIN STEEL TUBE RAILING): 132 FT

ITEM 518 - POROUS BACKFILL WITH GEOTEXTILE FABRIC

Rear Abutment:

	Number		Length (ft)		Width (ft)		Height (ft)			
Behind Abutment Seat:	1	x	60.61	x	2.00	x	7.46	/	27	= 33.51 CY
Behind Left Wingwall, Sloped:	1	x	15.00	x	2.00	x	4.60	/	27	= 5.11 CY
Behind Left Wingwall, Level:	1	x	0.91	x	2.00	x	7.85	/	27	= 0.53 CY
Behind Right Wingwall, Sloped:	1	x	21.00	x	2.00	x	5.67	/	27	= 8.82 CY
Behind Right Wingwall, Level:	1	x	2.20	x	2.00	x	7.99	/	27	= 1.30 CY

Total: 49.27 CY

Total for Rear Abutment: Say: 50 CY

Forward Abutment:

	Number		Length (ft)		Width (ft)		Height (ft)			
Behind Abutment Seat:	1	x	60.61	x	2.00	x	7.31	/	27	= 32.81 CY
Behind Left Wingwall, Level:	1	x	2.20	x	2.00	x	7.91	/	27	= 1.29 CY
Behind Left Wingwall, Sloped:	1	x	21.00	x	2.00	x	5.63	/	27	= 8.76 CY
Behind Right Wingwall, Level:	1	x	0.91	x	2.00	x	7.62	/	27	= 0.51 CY
Behind Right Wingwall, Sloped:	1	x	15.00	x	2.00	x	4.48	/	27	= 4.98 CY

Total: 48.35 CY

Total for Forward Abutment: Say: 49 CY

Total for ITEM 518 - POROUS BACKFILL WITH GEOTEXTILE FABRIC: 99 CY



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ITEM 518 - 6" PERFORATED CORRUGATED PLASTIC PIPE

Rear Abutment:

	Number		Length (ft)		Length (ft)		Length (ft)		
Behind Abutment:	1	x (	49.61	+	49.61	+	0.00	) =	99.23 FT
Total:									99.23 FT
Total for Rear Abutment:									Say: <u>99</u> FT

Forward Abutment:

	Number		Length (ft)		Length (ft)		Length (ft)		
Behind Abutment:	1	x (	49.61	+	49.61	+	0.00	) =	99.23 FT
Total:									99.23 FT
Total for Forward Abutment:									Say: <u>99</u> FT

Total for ITEM 518 - 6" PERFORATED CORRUGATED PLASTIC PIPE: 198 FT

ITEM 518 - 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS

Rear Abutment:

	Number		Length (ft)		Length (ft)		Length (ft)		
Outlets to Slope:	1	x (	14.00	+	14.00	+	0.00	) =	28.00 FT
Total:									28.00 FT
Total for Rear Abutment:									Say: <u>28</u> FT

Forward Abutment:

	Number		Length (ft)		Length (ft)		Length (ft)		
Outlets to Slope:	1	x (	14.00	+	14.00	+	0.00	) =	28.00 FT
Total:									28.00 FT
Total for Forward Abutment:									Say: <u>28</u> FT

Total for ITEM 518 - 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS: 56 FT

ITEM 524 - DRILLED SHAFTS, 36" DIAMETER, INTO BEDROCK, AS PER PLAN

Rear Abutment:

			Length (ft)		Number				
Drilled Shafts:			10.00	x	10	=			100.00 FT
Total:									100.00 FT
Total for Rear Abutment:									Say: <u>100</u> FT

Forward Abutment:

			Length (ft)		Number				
Drilled Shafts:			10.00	x	10	=			100.00 FT
Total:									100.00 FT
Total for Forward Abutment:									Say: <u>100</u> FT

Piers:

			Length (ft)		Number				
Pier 1 Drilled Shafts:			10.00	x	4	=			40.00 FT
Pier 2 Drilled Shafts:			10.00	x	4	=			40.00 FT
Total:									80.00 FT
Total for Piers:									Say: <u>80</u> FT

Total for ITEM 524 - DRILLED SHAFTS, 36" DIAMETER, INTO BEDROCK, AS PER PLAN: 280 FT



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ITEM 524 - DRILLED SHAFTS, 42" DIAMETER, ABOVE BEDROCK, AS PER PLAN

Rear Abutment:

Drilled Shafts:	Length (ft)		Number					
	11.65	x		10	=		116.50	FT
Total:							116.50	FT
Total for Rear Abutment:							Say: <u>117</u>	FT

Forward Abutment:

Drilled Shafts:	Length (ft)		Number					
	11.65	x		10	=		116.50	FT
Total:							116.50	FT
Total for Forward Abutment:							Say: <u>117</u>	FT

Piers:

Pier 1 Drilled Shafts:	Length (ft)		Number					
	16.15	x		4	=		64.60	FT
Pier 2 Drilled Shafts:	16.15	x		4	=		64.60	FT
Total:							129.20	FT
Total for Piers:							Say: <u>129</u>	FT

Total for ITEM 524 - DRILLED SHAFTS, 42" DIAMETER, ABOVE BEDROCK, AS PER PLAN: 363 FT

ITEM 526 - REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=12"), AS PER PLAN

General:

	Number		Length (ft)		Width (ft)				
Rear Approach Slab:	1	x	15.00	x	36.00	/	9	=	60.00 SY
Forward Approach Slab:	1	x	15.00	x	36.00	/	9	=	60.00 SY
Total:									120.00 SY
Total for General:							Say: <u>120</u>		SY

Total for ITEM 526 - REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=12"), AS PER PLAN: 120 SY

ITEM 526 - TYPE A INSTALLATION

General:

Rear Approach Slab:	=	41.57	FT
Forward Approach Slab:	=	41.57	FT
Total:		83.14	FT
Total for General:		Say: <u>84</u>	FT

Total for ITEM 526 - TYPE A INSTALLATION: 84 FT

ITEM 530 - SPECIAL - STRUCTURES: PRECONSTRUCTION CONDITION SURVEY

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

Estimate unit cost from ODOT historical bid data.

Estimated Lump Sum Cost: Say: \$ 4,180.00 LS

ITEM 530 - SPECIAL - STRUCTURAL SURVEY AND MONITORING OF VIBRATION

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

Estimate unit cost from ODOT historical bid data.

Estimated Lump Sum Cost: Say: \$ 10,000.00 LS



CLIENT ODOT District 8
 PROJECT Bridge No. GRE-0072-0771
 SUBJECT Estimated Quantity Calculations

PROJECT NO. 2121-1002-00
 COMP. BY MHK DATE 1/17/2022
 CHECKED BY TDA DATE 1/19/2022

ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C WITH FILTER

Rear Abutment:

Abutment Slope:	5.0 :1 slope	Factor	1.02	x	CADD Area (sq ft)	1,148.00	x	CADD Depth (ft)	2.00	/	27	= 86.72 CY
Total:												86.72 CY
Total for Rear Abutment:												Say: <u>87</u> CY

Forward Abutment:

Abutment Slope:	5.0 :1 slope	Factor	1.02	x	CADD Area (sq ft)	1,199.36	x	CADD Depth (ft)	2.00	/	27	= 90.60 CY
Total:												90.60 CY
Total for Forward Abutment:												Say: <u>91</u> CY

Total for ITEM 601 - ROCK CHANNEL PROTECTION, TYPE C WITH FILTER: 178 CY

ITEM 690 - SPECIAL - CONSULTANT FOR QUALITY CONTROL INCLUDING TESTING AND INSPECTION

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

Estimate unit cost from ODOT historical bid data.

Estimated Lump Sum Cost: Say: \$ 25,000.00 LS

ITEM 846 - POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM

General:

Rear Approach Slab:		Number	1	x	Height (ft)	0.25	x	Length (ft)	41.57	x	Width (ft)	1.67 = 17.32 CF
Forward Approach Slab:			1	x		0.25	x		41.57	x		1.67 = 17.32 CF
Total:												34.64 CF
Total for General:												Say: <u>35</u> CF

Total for ITEM 846 - POLYMER MODIFIED ASPHALT EXPANSION JOINT SYSTEM: 35 CF

ITEM 894 - THERMAL INTEGRITY PROFILING (TIP) TEST

Rear Abutment:

Total for Rear Abutment: 10 = 10 EACH

Forward Abutment:

Total for Forward Abutment: 10 = 10 EACH

Piers:

Total for Piers: 8 = 8 EACH

Total for ITEM 894 - THERMAL INTEGRITY PROFILING (TIP) TEST: 28 EACH