MAD-71-09.590 Bridge Quantity Calculations

PID: 107630

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN

ITEM NO.	202E11203
QUANTITY	1
UNIT	LUMP

Deck Concrete Removal

Width (ft)	Length (ft)	#	Area (SF)	
30.83	291	1	8972.5	
		Total=	8972.5	SF

assume	$20.00	SF	Total=	$179,449.81

Abutment Concrete Removal

	Width (ft)	Length (ft)	Top EL	Bot EL	Height	#	Volume	
Abutment Backwalls (Rear)	25	1.75	934.67	930.14	4.53	1	7.34	CY
Abutment Backwalls (Forward)	25	1.75	934.72	930.22	4.50	1	7.29	CY

	Area (SF)	Width (ft)			
Abutment Wingwalls (Rear)	95	1.5	2	10.56	CY
Abutment Wingwalls (Forward)	95	1.5	2	10.56	CY
Rail(Rear)	1.5	13	4	2.89	CY
Curb	0	0	2	0.00	CY
Curb w/walk	5	13	2	4.81	CY
			Abutments Total =	43.45	CY
assume	$200	CY	Cost=	$8,689.35	

Pier Concrete Removal	Width (ft)	Length (ft)	Height	#	Volume
	0	0	3.5	0	0.00
assume	$250	CY		Cost=	$0.00

Total Cost = $188,139.16

Say =

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: APPROACH SLAB REMOVED

ITEM NO.	202E22900
QUANTITY	156
UNIT	SY

	Area (ft^2)	#		
APPROACH SLAB REMOVED	700	2	156	SY
		TOTAL=	**156**	**SY**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: GRANULAR MATERIAL, TYPE B

ITEM NO.	204E30010
QUANTITY	20
UNIT	CY

	Width (ft)	Area (sq ft)	Volume	#		
GRANULAR MATERIAL	31.3334	8.5	9.86	2	20	CY
				TOTAL=	**20**	**CY**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: GEOTEXTILE FABRIC

ITEM NO.	204E50000
QUANTITY	313
UNIT	SY

	Width	Length	Area	#		
GEOTEXTILE FABRIC	31.3334	45	156.67	2	313	SY
				TOTAL=	**313**	**SY**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: UNCLASSIFIED EXCAVATION, AS PER PLAN

ITEM NO.	503E21101
QUANTITY	535
UNIT	CY

Abutments	area (SF)	top el	bot el	width (ft)	Length (ft)		CF	CY
RA, Left Wingwall Footing	7.3125				13.6667		99.94	3.70
RA, Right Wingwall Footing	7.3125				13.1458		96.13	3.56
FA, Right Wingwall Footing	7.3125				13.6667		99.94	3.70
FA, Left Wingwall Footing	7.3125				13.1458		96.13	3.56
Wingwall 1 Area to Porous		927.06	922.44	4.5	10.6667		221.76	8.21
Wingwall 2 Area to Porous		927.06	922.44	4.5	10.6667		221.76	8.21
Wingwall 3 Area to Porous		927.06	922.44	4.5	10.6667		221.76	8.21
Wingwall 4 Area to Porous		927.06	922.44	4.5	10.6667		221.76	8.21
Wingwall 1 Area to Ground		934.33	927.89	3.5	17.67		250.43	9.28
Wingwall 2 Area to Ground		934.33	927.89	3.5	17.67		250.43	9.28
Wingwall 3 Area to Ground		934.33	927.89	3.5	17.67		250.43	9.28
Wingwall 4 Area to Ground		934.33	927.89	3.5	17.67		250.43	9.28
						Abut Total=	2280.88	85.00
			Height (ft)	width (ft)	Length (ft)	#		
Under Approach slab			1	8	31.33	2	501.28	18.57
			1	1.5	31.33	2	47.00	1.74
			5.5	24.5	31.33	2	8443.44	312.72
			5.5	4.5	31.33	2	775.42	28.72
						Abut Total=		362
Piers	area (SF)	top el	bot el	Height	Vol (CY)	#		
Piers 1 & 3	182.7544	913.5	912.29	1.21	8.190106	6		49.14
Pier 2	196.0366	914	912.29	1.71	12.41565	3		37.25
						Pier Total =		87

TOTAL= 535.00 **CY**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: EPOXY COATED REINFORCING STEEL

ITEM NO.	509E10000
QUANTITY	103072
UNIT	LB

		Total	
Superstructure	79443	79443	LB
Bridge Railing (Superstructure)	15715	15715	LB
Abutments	3552	3552	LB
Pier	0	0	LB
Abutment End Diaphragm	4362	4362	LB
	TOTAL=	**103072**	**LB**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: UNCOATED REINFORCING STEEL

ITEM NO.	509E25000
QUANTITY	642
UNIT	LB

		Total	
Abutments	642	642	LB
	TOTAL=	**642**	**LB**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: No. 4 GFRP DEFORMED BARS

ITEM NO.	509E30020
QUANTITY	10588
UNIT	FT

	Total
Total from Reinforcing Steel List	10588

TOTAL= 10588 FT

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT, AS PER

ITEM NO.	510E10000
QUANTITY	164
UNIT	EACH

	Dowel Holes	#	TOTAL
REAR ABUTMENT (Left Wingwall)	36	1	36
REAR ABUTMENT (Right Wingwall)	38	1	38
FORWARD ABUTMENT (Left Wingwall)	36	1	36
FORWARD ABUTMENT (Right Wingwall)	38	1	38
REAR ABUTMENT (Diaphragm Guide)	8	1	8
FORWARD ABUTMENT (Diaphragm Guide)	8	1	8
	ABUTMENTS (TOTAL)		164

TOTAL= 164 EACH

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: SEMI-INTEGRAL DIAPHRAGM GUIDE, AS PER PLAN

ITEM NO.	511E33501
QUANTITY	2
UNIT	EACH

	#
REAR ABUTMENT	1
FORWARD ABUBMENT	1
TOTAL=	**2** **EACH**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: CLASS QC2 CONCRETE, WITH QC/QA, SUPERSTRUCTURE, AS PER PLAN

ITEM NO.	511E34413
QUANTITY	31
UNIT	CY

	Length (ft)	*Width (ft)*	*Height (ft)*	#	Total (CF)	Total (CY)
Diaphragm	32.63	3.75	3.42	2	837.0	31
					TOTAL =	**31** **CY**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: CLASS QC2 CONCRETE, WITH QC/QA, BRIDGE DECK

ITEM NO.	511E34446
QUANTITY	267
UNIT	CY

	Slab Length (ft)	*Width (ft)*	*Thickness (ft)*	*Flange Area (ft^2)*	#	Total (CF)	Total (CY)
Deck	293.68	31.33	0.7083		1	6518.1	241
Haunches-Interior	293.68	1.00	0.2500		2	146.8	5
Haunches-Fascia	293.68	4.17	0.2396	0.07833	2	540.3	20

TOTAL = 267 CY

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET), AS PER PLAN

ITEM NO.	511E34451
QUANTITY	103
UNIT	CY

Bridge Parapet

		Area parapet (ft)	Length (ft)	#	CF
Bridge	LEFT	4.09	293.68	2	2402

		Area (ft)	Length along app. Slab (ft)	#	
Approach Slab	LEFT	4.09	11	2	90
	RIGHT	4.09	11	2	90
Transition 1	LEFT	3.51	14	2	98
Transition 2	RIGHT	3.51	14	2	98
				TOTAL=	103
				TOTAL=	**103** **CY**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: CLASS QC1 CONCRETE, ABUTMENT INCLUDING FOOTING

ITEM NO.	511E46210
QUANTITY	31
UNIT	CY

Abutment Concrete

		Area (ft^2)	Ht (ft.)	Width (ft)	Len (ft)	#	Total (CF)		
Left Wingwall	(Rear)	67.0363	4.0	1.50	16.6667	1	100.55		
Right Wingwall	(Rear)	66.76178	4.0	1.50	16.8333	1	100.14		
Left Wingwall	(Forward)	66.76178	4.0	1.50	16.8333	1	100.14		
Right Wingwall	(Forward)	67.0363	4.0	1.50	16.6667	1	100.55		
Breastwall Extension	(Rear)		5.535	2.25	7.6	1	94.31		
Breastwall Extension	(Forward)		5.535	2.25	7.6	1	94.31		
Footing			2.25	2.25	23.2	2	234.56		
						Abutment Total=	824.58	30.54	
							TOTAL=	**31.0**	**CY**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed: GTB
Date: 3/22/2022
Checked: RG
Date: 3/25/2022

DESCRIPTION: SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

ITEM NO. 512E10100
QUANTITY 1002
UNIT SY

		Sealing Ht (ft)	Width (ft)	Face Area (SF)	#	Area (SF)	Area (SY)
REAR	STEM FACE	6.66	32.63		1	217.37	24.2
	Left Wingwall	17.17	1.50	63.04	1	88.79	9.9
	Right Wingwall	17.33	1.50	61.20	1	87.20	9.7
				Rear Abutment Total=		393.4	43.7
FORWARD	STEM FACE	6.66	32.63		1	217.37	24.2
	Left Wingwall	17.33	1.50	62.05	1	88.05	9.8
	Right Wingwall	17.17	1.50	63.87	1	89.62	10.0
				Forw. Abutment Total=		395.0	43.9
				Abutments Total=		788.4	87.60

		Ht (ft)	Width (ft)	#	Area (SF)	Area (SY)
PIER 1	COLUMNS	14.54	9.42	3	410.9	45.7
	CAP FACES	3.50	28	2	196.0	21.8
	CAP ENDS	3.50	3	2	21.0	2.3
PIER 2	COLUMNS	14.97	9.42	3	423.1	47.0
	CAP FACES	3.50	28	2	196.0	21.8
	CAP ENDS	3.50	3	2	21.0	2.3
PIER 3	COLUMNS	14.54	9.42	3	410.9	45.7
	CAP FACES	3.50	28	2	196.0	21.8
	CAP ENDS	3.50	3	2	21.0	2.3
				PIERS TOTAL=	1895.9	210.7

Superstructure

	Perimeter (ft)	Length (ft)	#	Area (SF)	Area (SY)
LEFT-Parapets	9.51	293.69	1	2792.43	310.3
LEFT-Approach Parapets	7.89	10.9167	2	172.34	19.1
LEFT-Approach Parapet Transition	7.08	14	2	198.24	22.0
			Left Total=	3163.01	351.4
RIGHT-Parapets	9.51	293.69	1	2792.43	310.3
RIGHT-Approach Parapets	7.89	10.9167	2	172.34	19.1
RIGHT-Approach Parapets	7.08	14	2	198.24	22.0
			Right Total=	3163.01	351.4
			Super Total=	6326.03	702.89

TOTAL= 9010.29 1002.0 SY

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: TYPE 2 WATERPROOFING

ITEM NO.	512E33000
QUANTITY	8
UNIT	SY

	Length (ft)	Height (ft)	#		Area (SF)
Wingwalls	5.50	3.00	4.00		66.00
				Total=	66.00

TOTAL = 8 SY

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: WELDED STUD SHEAR CONNECTORS

ITEM NO.	513E20000
QUANTITY	2904
UNIT	EACH

	SHEAR STUD	# of rows	# of beams	Total
BEAM	242	3	4	2904

TOTAL= 2904 EACH

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: STRUCTURAL STEEL,MISC.: 2" DIA. FIELD DRILLED HOLES

ITEM NO.	513E95030
QUANTITY	24
UNIT	EACH

	# HOLES	#	Total
BEAM	6	4	24

TOTAL= 24 EACH

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION:	ITEM NO.	QUANTITY	UNIT
SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL	514E00050	0	0
FIELD PAINTING STRUCTURAL STEEL, PRIME COAT	514E00056	0	0
FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT	514E00060	0	0
FIELD PAINTING STRUCTURAL STEEL, FINISH COAT	514E00066	0	0
GRINDING FINS, TEARS, SLIVER ON EXISTING STRUCTURAL STEEL	514E00504	19	MNHR
FINAL INSPECTION REPAIR	514E10000	12	EACH

	Length (ft)	bf (in)	d (in)	Perim. (in)	#		Area (SF)
Beams	289	12	36	108	4		10404.00
3X3X5/16 Crossframes	24.92			9.3125	75		1450.42
						Total=	11854.42
Grinding Fins, Tears, Slivers on Exist. Steel	289				4	19	MNHR
Final Inspection Repair	8.00	4				12.00	EACH

Rounded up to account for bottom moment plates

TOTAL =

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: ARMORLESS PREFORMED JOINT SEAL

ITEM NO.	516E10010
QUANTITY	70
UNIT	LF

	Length (Ft.)	#		Length
REAR ABUTMENT	33.80	1.00		33.8
FORWARD ABUTMENT	33.80	1.00		33.8
			ABUTMENT TOTAL=	67.6
			TOTAL =	**70.0** **LF**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: 1" PREFORMED EXPANSION JOINT FILLER

ITEM NO.	516E13600
QUANTITY	20
UNIT	SF

	Area (SF)	#		Area	
REAR ABUTMENT	4.08	2.00		8.2	SF
FORWARD ABUTMENT	4.08	2.00		8.2	SF
			ABUTMENT TOTAL=	16.3	SF
			TOTAL =	**20.0**	**SF**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: 2" PREFORMED EXPANSION JOINT FILLER

ITEM NO.	516E13900
QUANTITY	140
UNIT	SF

	Length	*height*	#		Area	
REAR WINGWALLS	13.00	1.25	2		32.5	SF
FORWARD WINGWALLS	13.00	1.25	2		32.5	SF
DIAPHRAGM END (REAR)	3.75	4.70	2		35.3	SF
DIAPHRAGM END (FORWARD)	3.75	4.70	2		35.3	SF
				ABUTMENT TOTAL=	135.5	SF
				TOTAL =	**140.0**	**SF**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL

ITEM NO.	516E14020
QUANTITY	65
UNIT	FT

	Length	#	Total (FT)
Rear abutment	32.50	1	33
Forward Abutment	32.50	1	33
		TOTAL =	**65** **FT**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: ELASTOMERIC BEARINGS WITH INTERNAL LAMINATES (11"x14"x2.948") AND LOAD PLATE (12"x15"x1.5") (NEOPRENE), AS PER PLAN

ITEM NO.	516E44101
QUANTITY	8
UNIT	EA

	# BRGS	#	Total
Abutments	4	2	8
		TOTAL =	**8** **EA**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN

ITEM NO.	516E47001
QUANTITY	8000
UNIT	LUMP

	# BRGS	#	Cost per Jacking PT	Total
Abutments	4	2	$ 1,000.00	8000

TOTAL = $8,000

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: POROUS BACKFILL WITH GEOTEXTILE FABRIC

ITEM NO.	518E21201
QUANTITY	32
UNIT	CY

	Top EL.	*Bott. EL.*	*Height (ft)*	*width*	*length*	*#*		
REAR ABUTMENT	928.89	924.44	4.45	2	32.50	1	289.25	10.71
FORWARD ABUTMENT	928.78	924.44	4.34	2	32.50	1	282.10	10.45
WINGWALL (REAR ABUTMENT)	928.89	924.44	4.45	2	7.63	2	135.72	5.03
WINGWALL (FWD ABUTMENT)	928.78	924.44	4.34	2	7.63	2	132.37	4.90
					ABUTMENTS TOTAL=			31.09

TOTAL = 32.0 CY

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: 6" PERFORATED CORRUGATED PLASTIC PIPE

ITEM NO.	518E40000
QUANTITY	65
UNIT	FT

	Length	#	Total (FT)
Rear Abutment	32.50	1	33
Forward Abutment	32.50	1	33
		TOTAL =	**65** **FT**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: 6" NON-PERFORATED CORRUGATED PLASTIC PIPE INCLUDING SPECIALS, AS PER PLAN

ITEM NO.	518E40011
QUANTITY	48
UNIT	FT

	Length	#	Total (FT)
Rear Abutment	12	2	24
Forward Abutment	12	2	24
		TOTAL =	**48** **FT**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: COMPOSITE FIBER WRAP SYSTEM

ITEM NO.	519E00100
QUANTITY	1248
UNIT	SF

	Column Perimeter	Height	#	Total	Total (SF)
PIER 1	9.425	14.54	3	411.17	412
PIER 2	9.425	14.97	3	423.25	424
PIER 3	9.425	14.54	3	411.17	412
				TOTAL =	**1248** **SF**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=15")

ITEM NO.	526E25010
QUANTITY	175
UNIT	SY

	Width (ft)	Len (ft)	#		Total (SF)	Total (SY)
Rear	31.3334	25	1		783.34	87.0
Forward	31.3334	25	1		783.34	87.0
				Total=	1566.7	**174.1**

TOTAL = 175.0 SY

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: TYPE C INSTALLATION, AS PER PLAN

ITEM NO.	526E90031
QUANTITY	66
UNIT	FT

	Len (ft)	#	Total Length (FT)
Rear Sleeper Slab	32.63	1	32.6
Forward Sleeper Slab	32.6300	1	32.6
		TOTAL	**65.3**
		TOTAL =	**66.0** **FT**

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: CRUSHED AGGREGATE SLOPE PROTECTION, AS PER PLAN

ITEM NO.	601E20001
QUANTITY	100
UNIT	SY

Use Contingeny Quantity of 100 SY

TOTAL = 100.0 SY

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: VANDAL PROTECTION FENCE, 6' STRAIGHT, COATED FABRIC

ITEM NO.	607E39900
QUANTITY	570
UNIT	FT

	Len (ft)	#	Total Length (FT)
Vandal Fence Length	285	2	570.0

TOTAL = 570.0 FT

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: STRUCTURE GROUNDING SYSTEM

ITEM NO.	625E33000
QUANTITY	1
UNIT	EACH

No. on each End	#	Total
1	1	1.0

TOTAL = 1.0 EACH

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: SELECT GRANULAR BACKFILL

ITEM NO.	840E23000
QUANTITY	227
UNIT	CY

	Width (ft)	Area (sq ft)	Volume	#		
SELECT GRANULAR BACKFILL	31.3334	97.5	113.15	2	226	CY

TOTAL = 227.0 CY

BG Engineering Group

Project: MAD/PIC-71-4.56/0.00
Bridge: MAD-00071-09.590
Client: ODOT District 6

QUANTITY COMPUTATIONS

Designed:	GTB
Date:	3/22/2022
Checked:	RG
Date:	3/25/2022

DESCRIPTION: GEOGRID, TYPE P1

ITEM NO.	863E00100
QUANTITY	971
UNIT	SY

	Width (ft)	Length (ft)	Area	#		
GEOGRID, TYPE P1	31.3334	139.4	485.32	2	971	SY

TOTAL = 971.0 SY