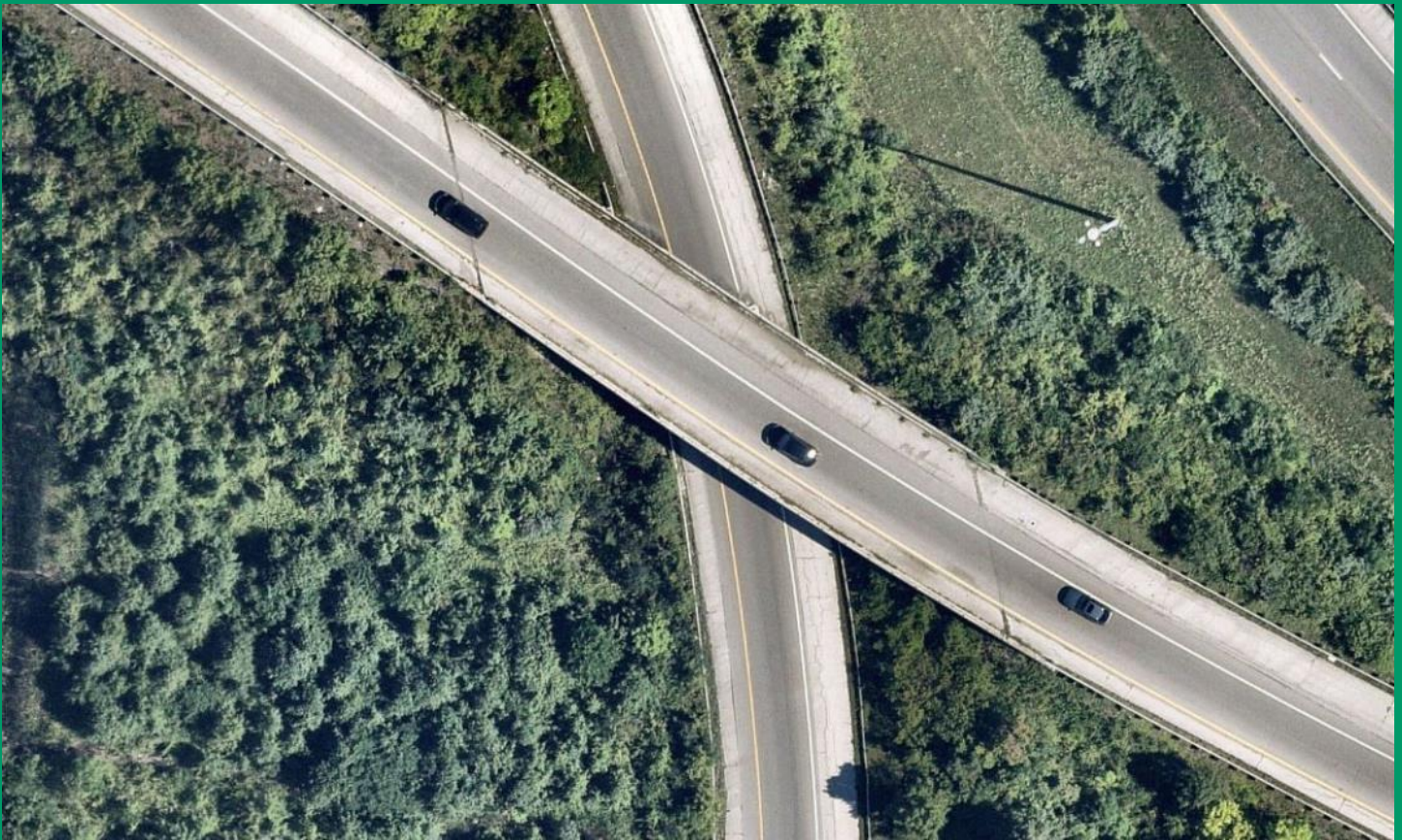


FRA-00270-25.990A (SFN 2511460)

STRUCTURE ESTIMATED QUANTITIES

FRA-071/270-28.27/25.99A - PID No. 105435

RAMP K (IR-270 WB to IR-71 SB) over
RAMP O (IR-71 NB to IR-270 WB)



Submitted to:
Ohio Department of Transportation, District 6
September 2024

CALC:	SLL	DATE:	6/17/2024
CHECKED:	IS	DATE:	6/25/2024

ESTIMATED QUANTITIES					STRUCTURE FILE NUMBER: 2511460				
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENTS	PIERS	SUPERSTRUCTURE	GENERAL	SEE SHEET
202	11203	LS	LS	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN				LS	
202	22900	134	SY	APPROACH SLAB REMOVED				134	
202	23500	913	SY	WEARING COURSE REMOVED			913		
203	35110	25	CY	GRANULAR MATERIAL, TYPE B	25				
503	11101	LS	LS	COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN				LS	
503	21100	578	CY	UNCLASSIFIED EXCAVATION				578	
505	11100	LS	LS	PILE DRIVING EQUIPMENT MOBILIZATION				LS	
507	00500	4,500	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN	4,500				
507	00550	4,860	FT	12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED	4,860				
509	10000	116,515	LB	EPOXY COATED REINFORCING STEEL	34,714	7,341	74,460		
509	30020	7,592	FT	NO. 4 DEFORMED GFRP REINFORCEMENT			7,592		
511	33500	2	EACH	SEMI-INTEGRAL DIAPHRAGM GUIDE	2				
511	34446	253	FT	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK			253		
511	34450	75	CY	CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)			75		
511	41012	33	CY	CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS		33			
511	44112	130	CY	CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING	130				
511	46512	167	CY	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	167				
512	10100	1,009	SY	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	145	367	497		
512	10600	50	FT	CONCRETE REPAIR BY EPOXY INJECTION		50			
512	33000	72	SY	TYPE 2 WATERPROOFING	72				
512	74000	114	SY	REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES		114			
513	10260	259,000	LB	STRUCTURAL STEEL MEMBERS, LEVEL 3			259,000		
513	20000	6,165	EACH	WELDED STUD SHEAR CONNECTORS			6,165		
514	00060	2,500	SF	FIELD PAINTING STRUCTURAL STEEL, INTERMEDIATE COAT			2,500		
514	00066	2,500	SF	FIELD PAINTING STRUCTURAL STEEL, FINISH COAT			2,500		
516	10010	100	FT	ARMORLESS PREFORMED JOINT SEAL				100	
516	13600	17	SF	1" PREFORMED EXPANSION JOINT FILLER				17	
516	13900	224	SF	2" PREFORMED EXPANSION JOINT FILLER	224				
516	14020	107	FT	SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL				107	
516	44200	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE)		6			
				(11.5"x13"x2.168" WITH 12.5"x18"x1.5" LOAD PLATE)					
516	44201	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN	12				
				(10"x12"x3.128" WITH 11"x18"x1.5" LOAD PLATE)					
516	44201	6	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN		6			
				(11.5"x13"x2.168" WITH 12.5"x18"x1.5" LOAD PLATE)					
518	20000	78	SY	PREFABRICATED GEOCOMPOSITE DRAIN	78				
518	21200	16	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	16				

518	40000	142	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	142				
518	40010	71	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	71				
SPECIAL	51900100	850	SF	COMPOSITE FIBER WRAP SYSTEM (SEE PROPOSAL NOTE)		850			
519	11101	24	SF	PATCHING CONCRETE STRUCTURE, AS PER PLAN		24			
523	20001	2	EACH	DYNAMIC LOAD TESTING, AS PER PLAN	2				
523	20501	2	EACH	RESTRIKE, AS PER PLAN	2				
526	30010	229	SY	REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17")				229	
526	90030	100	FT	TYPE C INSTALLATION				100	
601	20000	818	SY	CRUSHED AGGREGATE SLOPE PROTECTION				818	
840	23001	209	CY	SELECT GRANULAR BACKFILL, AS PER PLAN	209				
863	00100	1,840	SY	GEOGRID, TYPE P1	1,840				
867	00100	LS	LS	TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL				LS	



Made by: SLL	Date: 6/10/24	Project No: P402200080
Checked by: IS	Date: 6/25/24	Sheet No: 2 of 47
Back Ck by:	Date:	
Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

202 Ext.: 11203 Unit: LS
Item Description: PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN
Member Location : _____

PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT
SPAN, AS PER PLAN = LUMP

LUMP

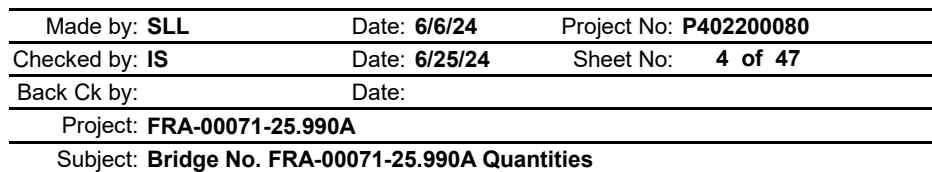


Made by: SLL	Date: 6/24/24	Project No: P402200080
Checked by: IS	Date: 6/25/24	Sheet No: 3 of 47
Back Ck by:	Date:	
Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

202 Ext.: 22900 Unit: SY
Item Description: APPROACH SLAB REMOVED
Member Location :

Existing Rear Approach Slab Removed		
From Original Plans	600.00 SF (25' Long x 24' Wide)	
Existing Forward Approach Slab Removed		
From Original Plans	600.00 SF (25' Long x 24' Wide)	
Total		
	1,200.00 SF	
	133.33 SY	
Total		133.33
TOTAL		134 SY



202 Ext.: 23500 Unit: SY
Item Description: WEARING COURSE REMOVED
Member Location :

Existing Wearing Course Removed						
Via Calculation	Begin STA.	End. STA.	Length	Width	Area	
Forward Approach			25.00	24.00	600.00	
Deck	1,152.23	967.60	184.63	38.00	7,015.94	
Rear Approach			25.00	24.00	600.00	
			Total		8,215.94	
					Total (SY)	913
TOTAL						913 SY



Made by: SLL	Date: 6/11/24	Project No: P402200080
Checked by: IS	Date: 6/25/24	Sheet No: 5 of 47
Back Ck by:	Date:	
Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

203 Ext.: 35110 Unit: CY
Item Description: GRANULAR MATERIAL, TYPE B
Member Location :

Location	Area	Width	Vol (CF)	Vol (CY)	Sheet	
RA Back	9.00	37.33	336.00	12.44	15	
FA Back	9.00	37.33	336.00	12.44	15	
Total				24.89		24.89
Total: 0.00						0.00 FT
TOTAL						25 CY



Made by: SLL	Date: 6/17/24	Project No: P402200080
Checked by: IS	Date: 6/25/24	Sheet No: 6 of 47
Back Ck by:	Date:	
Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

503 Ext.: 11101 Unit: LS
Item Description: COFFERDAMS AND EXCAVATION BRACING, AS PER PLAN
Member Location :

COFFERDAMS AND EXCAVATION BRACING	<u>LUMP</u>
	LUMP

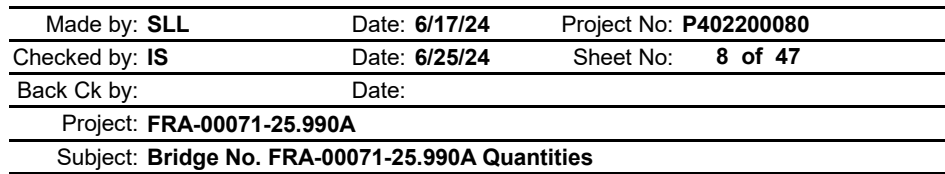


Made by: SLL	Date: 6/10/24	Project No: P402200080
Checked by: IS	Date: 6/25/24	Sheet No: 7 of 47
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Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

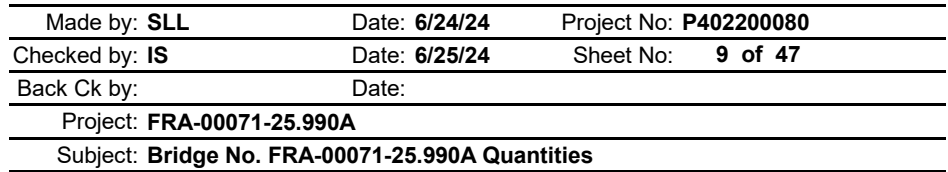
Bridge No. FRA-00071-25.990A Quantities

503 Ext.: 21100 Unit: CY
Item Description: UNCLASSIFIED EXCAVATION, AS PER PLAN
Member Location :

Length	Width	Depth	Vol (CF)	Vol (CY)		
40.00	15.00	14.00	8,400.00	311.11	R Abut	
40.00	15.00	12.00	7,200.00	266.67	F Abut	
Total				577.78		577.78
Unclassified Excavation from abutments only. Depth is from existing grade to bottom of existing footing Footprint is 1 foot around all sides						
						577.78 CY

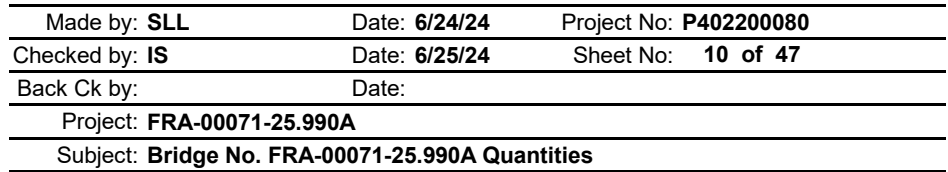


	<i>Total</i>	Lump
Pile Driving Equipment Mobilization Lump Sum		
TOTAL		Lump



507 Ext.: 00500 Unit: FT
 Item Description: 12" CAST-IN-PLACE REINFORCED CONCRETE PILES, DRIVEN
 Member Location :

[illegible]



507 Ext.: 00550 Unit: FT
 Item Description: 12" CAST-IN-PLACE REINFORCED CONCRETE PILES, FURNISHED
 Member Location : _____

[illegible]



Made by: SLL	Date: 6/17/24	Project No: P402200080
Checked by: BTA	Date:	Sheet No: 11 of 47
Back Ck by:	Date:	
Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

509 Ext.: 10000 Unit: LB
Item Description: EPOXY COATED STEEL REINFORCEMENT
Member Location :

Abutments			
Rear	16756.00	Abut	34714.0
Forward	17958.00	Piers	7341.0
Piers		Super	74460.0
Pier 1	3572.00		
Pier 2	3769.00		
Superstructure			
Rear Dia	3016.00		
Fwd Dia	3399.00		
Deck Slab	56727.00		
Railing	11318.00		
Total	116515.00		
TOTAL			116515 LB

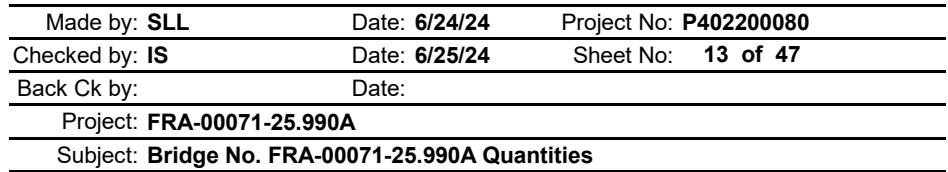


Made by: SLL	Date: 6/17/24	Project No: P402200080
Checked by: BTA	Date:	Sheet No: 12 of 47
Back Ck by:	Date:	
Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

509 Ext.: 30020 Unit: FT
Item Description: NO. 4 DEFORMED GFRP REINFORCEMENT
Member Location :

GFRP Reinforcement			
Railing			
Total	7592.00	FT	7,592.00
Total			0.00
TOTAL			7592 FT



511	Ext.: 33500	Unit: EACH
Item Description: SEMI-INTEGRAL DIAPHRAGM GUIDE		
Member Location :		

Item	Count	Sheet
Diaphragm Guide	2.00	20
Total	2.00	



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Back Ck by:	Date:	
Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

511 Ext.: 34446 Unit: CY
Item Description: CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK
Member Location :

Deck Concrete										
via .dwg Area										
	Area	Length	Vol CF	Vol CY						
Transverse Section Area	28.86	184.47	5,323.67	197.17						
	Height	Width	Length	Vol CF	Vol CY					
Plan View Area Strips										
1	0.97	3.07	184.47	548.76	20.32					
2	0.71	5.19	184.47	678.36	25.12					
3	1.00	1.31	184.47	241.34	8.94					
4	0.71	5.19	184.47	678.36	25.12					
5	1.00	1.31	184.47	241.34	8.94					
6	0.71	5.19	184.47	678.36	25.12					
7	1.00	1.31	184.47	241.34	8.94					
8	0.71	5.19	184.47	678.36	25.12					
9	1.00	1.31	184.47	241.34	8.94					
10	0.71	5.19	184.47	678.36	25.12					
11	0.97	3.07	184.47	548.76	20.32					
Total					202.03	202.0	CY			
Diaphragm	Length	Width	Height	Area	Vol (CF)	Vol (CY)				
RA	3.00	51.24	3.54	181.62	643.76	23.84				
FA	3.00	56.76	3.59	203.58	730.17	27.04				
Total					50.89	50.89	CY			



Made by: SLL	Date: 6/10/24	Project No: P402200080
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Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

511 Ext.: 34450 Unit: CY
Item Description: CLASS QC2 CONCRETE WITH QC/QA, BRIDGE DECK (PARAPET)
Member Location :

Parapet Concrete					
	Area	Length	Vol CF	Vol CY	
Transverse Section Area	4.08	489.44	1,998.54	74.02	74
TOTAL					75 CY



Made by: SLL	Date: 6/5/24	Project No: P402200080
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Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

511 Ext.: 41012 Unit: CY

Item Description: CLASS QC1 CONCRETE WITH QC/QA, PIER ABOVE FOOTINGS

Member Location :

Pier 1 Concrete						
Cap Concrete:						
Piece	Height	Length	Width	Vol (CF)	Vol (CY)	
1	2.08	58.17	3.00	363.83	13.48	
Cap Conc via Bluebeam						
	Area (SF)	Width (FT)	Vol (CF)	Vol (CY)		
	132.47	3.00	397.41	14.72		14.72
Pier 2 Concrete						
Cap Concrete:						
Piece	Height	Length	Width	Vol (CF)	Vol (CY)	
1	2.59	58.21	3.00	451.41	16.72	
Cap Conc via Bluebeam						
	Area (SF)	Width (FT)	Vol (CF)	Vol (CY)		
	158.21	3.00	474.63	17.58		17.58
TOTAL						33 CY



Made by: SLL	Date: 6/11/24	Project No: P402200084
Checked by: IS	Date: 6/25/24	Sheet No: 17 of 47
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Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

511

Ext.:

44112

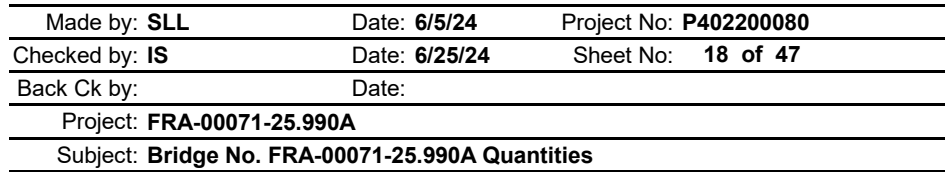
Unit:

CY

Item Description: CLASS QC1 CONCRETE WITH QC/QA, ABUTMENT NOT INCLUDING FOOTING

Member Location :

REAR ABUTMENT						
Piece	Length	Height	Area	Depth	Vol (CF)	Vol (CY)
RA WW L	17.00	11.27	166.91	1.50	250.37	9.27
RA	51.75	6.81	352.24	3.00	1,056.73	39.14
RA WW R	21.00	11.08	208.72	1.50	313.09	11.60
FA WW L	18.00	12.19	190.59	1.50	285.89	10.59
FA	60.52	7.09	429.29	3.00	1,287.88	47.70
FA WW R	20.00	11.31	200.82	1.50	301.23	11.16
Total					129.45	129.45
TOTAL						130 CY



511 Ext.: 46512 Unit: CY
 Item Description: CLASS QC1 CONCRETE WITH QC/QA, FOOTING
 Member Location :

Printed: 9/9/2024 at 11:30 AM c:\transystems\pw_local\transyscorp-pw1\la-e_slleung\d1418270\FRA-00071-25.990A Quantity Calculations Ramp K Over O - SLL



Made by: SLL	Date: 6/10/24	Project No: P402200080
Checked by: IS	Date: 6/25/24	Sheet No: 19 of 47
Back Ck by:	Date:	
Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

512 Ext.: 10100 Unit: SY
Item Description: SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)
Member Location :

Location	Count	Height	Width/Dia	Area (SF)	Area (SY)	Sheet
P1 Col	5	16.21	3.00	763.88	84.88	21
P2 Col	5	18.02	3.00	849.17	94.35	22
P1 Cap	2	5.58	58.17	821.78	91.31	21
P2 Cap	2	5.91	58.21	862.15	95.79	22
Deck	1	369.24	1.64	603.86	67.10	33
Parapet	1	489.44	7.90	3,864.71	429.41	
RA	1	6.50	51.75	336.38	37.38	
FA	1	6.50	60.52	393.39	43.71	
RA WW L	1	7.50	17.00	127.50	14.17	
FA WW L	1	7.50	18.00	135.00	15.00	
RA WW R	1	7.50	21.00	157.50	17.50	
FA WW R	1	7.50	20.00	150.00	16.67	
Total				1,007.26		
						Piers 367.00
						Abutments 145.00
						Super 497.00
TOTAL						1009 SY



Made by: SLL	Date: 6/4/24	Project No: P402200080
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Back Ck by:	Date:	
Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

512 Ext.: 10600 Unit: FT
Item Description: CONCRETE REPAIR BY EPOXY INJECTION
Member Location :

Concrete Repair By Epoxy Injection		50
Total	50.00 FT	
Piers		0.00
TOTAL		50 FT

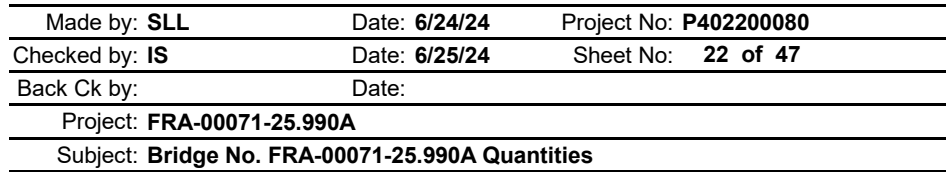


Made by: SLL	Date: 6/10/24	Project No: P402200080
Checked by: IS	Date: 6/25/24	Sheet No: 21 of 47
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Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

512 Ext.: 33000 Unit: SY
Item Description: TYPE 2 WATERPROOFING
Member Location :

Location	Count	Width	Length	Area (SF)	Area (SY)	Sheet
RA WW	2.00	3.00	20.00	120.00	13.33	
FA WW	2.00	3.00	20.00	120.00	13.33	
RA	1.00	3.00	9.97	29.91	3.32	
FA	1.00	3.00	10.16	30.48	3.39	
RA Diaph	1.00	3.00	54.24	162.72	18.08	
FA Diaph	1.00	3.00	59.76	179.28	19.92	
Total					71.38 SY	71.38
TOTAL						72 SY



512 Ext.: 74000 Unit: SY
 Item Description: REMOVAL OF EXISTING COATINGS FROM CONCRETE SURFACES
 Member Location :

Location	Radius	Height	Area (SF)	Area (SY)
Pier 2 C1	1.50	18.02	169.83	18.87
Pier 2 C2	1.50	18.02	169.83	18.87
Pier 2 C3	1.50	18.02	169.83	18.87
Pier 2 C4	1.50	18.02	169.83	18.87
Pier 2 C5	1.50	18.02	169.83	18.87
Total			849.17	94.35

Piers	18.87
TOTAL	114 SY

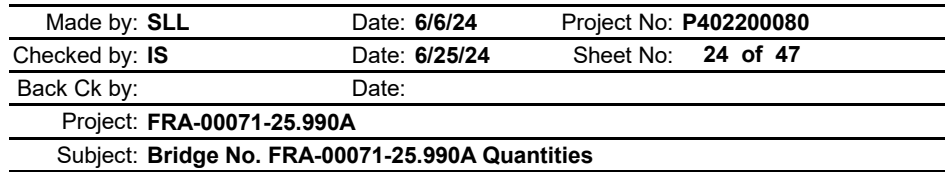


Made by: SLL	Date: 6/5/24	Project No: P402200080
Checked by: IS	Date: 6/25/24	Sheet No: 23 of 47
Back Ck by:	Date:	
Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

513 Ext.: 10300 Unit: LB
Item Description: STRUCTURAL STEEL MEMBERS, LEVEL 3
Member Location :

Member	Weight	
B1	36,404.03	
B2	36,534.89	
B3	36,681.45	
B4	36,822.78	
B5	36,969.34	
B6	37,119.05	
Bearing Stiffeners	800.06	
Intermediate Diaphragm	18,033.60	
Pier Diaphragm	4,975.90	
Intermediate Plates	2,210.17	
Field Splices	4,214.83	
Bolts	7,522.98	Total
Total	258,289.10	258,289.10 LB
Notes		
Bolts are calculated as 3% of structural steel weight		
TOTAL		259000 LB

[illegible]



Made by: SLL	Date: 6/5/24	Project No: P402200080
Checked by: IS	Date: 6/25/24	Sheet No: 25 of 47
Back Ck by:	Date:	
Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

514

Ext.: 00060

Unit: SF

Item Description: FIELD PAINTING OF STRUCTURAL STEEL, INTERMEDIATE COAT

Member Location :

Location	Count	Length	Width	Area	(SF)
B1 W	1.00	175.95	2.62	460.10	
B1 Brg Stiff	4.00	0.50	2.62	5.23	
B1 Brg Stiff	2.00	2.62	0.05	0.27	
B1 Bot FL	1.00	175.95	1.31	230.93	
B1 Bot FL	1.00	175.95	1.25	220.45	
B1 W-6"	1.00	175.95	0.50	87.97	
B1 FS W	2.00	6.00	2.12	25.38	
B1 Top FL	1.00	175.95	0.63	110.19	
B1 FS T FL	1.00	6.00	0.63	3.76	
B1 Bot FL	2.00	175.95	0.10	33.72	
B6 W	1.00	179.44	2.62	469.24	
B6 Brg Stiff	4.00	0.50	2.62	5.23	
B6 Brg Stiff	2.00	2.62	0.05	0.27	
B6 Bot FL	1.00	179.44	1.31	235.52	
B6 Bot FL	1.00	179.44	1.25	224.83	
B6 W-6"	1.00	179.44	0.50	89.72	
B6 FS W	2.00	6.00	2.12	25.38	
B6 Top FL	1.00	179.44	0.63	112.38	
B6 FS T FL	1.00	6.00	0.63	3.76	
B6 Bot FL	2.00	179.44	0.10	34.39	
B2-5W 1'	8.00	1.00	2.62	20.92	
B2-5BF 1'	4.00	1.00	1.31	5.25	
B2-5BF 1'	8.00	1.00	0.10	0.77	
B2-5BF 1'	8.00	1.00	0.63	5.01	
Total				2,410.67	
Total					2,500.00
TOTAL					2500 SF



Made by: SLL	Date: 6/5/24	Project No: P402200080
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Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

514 Ext.: 00066 Unit: SF
Item Description: FIELD PAINTING STRUCTURAL STEEL, FINISH COAT
Member Location :

Location	Count	Length	Width	Area	(SF)
B1 W	1.00	175.95	2.62	460.10	
B1 Brg Stiff	4.00	0.50	2.62	5.23	
B1 Brg Stiff	2.00	2.62	0.05	0.27	
B1 Bot FL	1.00	175.95	1.31	230.93	
B1 Bot FL	1.00	175.95	1.25	220.45	
B1 W-6"	1.00	175.95	0.50	87.97	
B1 FS W	2.00	6.00	2.12	25.38	
B1 Top FL	1.00	175.95	0.63	110.19	
B1 FS T FL	1.00	6.00	0.63	3.76	
B1 Bot FL	2.00	175.95	0.10	33.72	
B6 W	1.00	179.44	2.62	469.24	
B6 Brg Stiff	4.00	0.50	2.62	5.23	
B6 Brg Stiff	2.00	2.62	0.05	0.27	
B6 Bot FL	1.00	179.44	1.31	235.52	
B6 Bot FL	1.00	179.44	1.25	224.83	
B6 W-6"	1.00	179.44	0.50	89.72	
B6 FS W	2.00	6.00	2.12	25.38	
B6 Top FL	1.00	179.44	0.63	112.38	
B6 FS T FL	1.00	6.00	0.63	3.76	
B6 Bot FL	2.00	179.44	0.10	34.39	
B2-5W 1'	8.00	1.00	2.62	20.92	
B2-5BF 1'	4.00	1.00	1.31	5.25	
B2-5BF 1'	8.00	1.00	0.10	0.77	
B2-5BF 1'	8.00	1.00	0.63	5.01	
Total				2,410.67	
Total					2500.00
TOTAL					2500 SF



Made by: SLL	Date: 6/17/24	Project No: P402200080
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Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

516 Ext.: 10010 Unit: FT
Item Description: ARMORLESS PREFORMED JOINT SEAL
Member Location :

Width of Slab Along Skew		
RA	46.64	
FA	52.81	
Total	99.45	
		99 FT
TOTAL		100 FT



Made by: SLL	Date: 6/11/24	Project No: P402200080
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Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

516 Ext.: 13600 Unit: SF
Item Description: 1" PREFORMED EXPANSION JOINT FILLER
Member Location :

Location	Height	Width	Area	Sheet	
Rear App			4.08	42	
Rear App			4.08	42	
For App			4.08	43	
For App			4.08	43	
		Total	16.32		16
TOTAL					17 SF



Made by: SLL	Date: 6/11/24	Project No: P402200080
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Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

516 Ext.: 13900 Unit: SF
Item Description: 2" PREFORMED EXPANSION JOINT FILLER
Member Location :

Location	Height	Width	Area	Sheet	
RA Diaph M	7.00	4.25	29.75	37,38	
RA Diaph L	4.67	4.18	19.52	37,38	
RA Diaph R	4.62	4.18	19.31	37,38	
FA Diaph M	7.00	4.49	31.43	37,38	
FA Diaph L	4.70	4.18	19.65	37,38	
FA Diaph R	4.69	4.18	19.60	37,38	
RA WW L	1.42	12.82	18.16	13,14	
RA WW R	1.42	16.82	23.83	13,14	
FA WW L	1.42	13.82	19.58	17,18	
FA WW R	1.42	15.82	22.41	17,18	
Total			223.24		223
TOTAL					224 SF



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Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

516 Ext.: 14020 Unit: FT
Item Description: SEMI-INTEGRAL ABUTMENT EXPANSION JOINT SEAL
Member Location :

See Sheet 35,36		
3' Width	Length	
RA	49.97	
FA	56.15	
Total	106.11	106
TOTAL		107 FT



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Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

516 Ext.: 44200 Unit: EACH
Item Description: ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE)
Member Location :

Elastomeric Bearing with Internal Laminates and Load Plate (Neoprene) (11.5x13"x2.168" with 12.5"x18"x1.5" Load Plate)			
Location	Number	Sheet	
Pier 1	6.00	24.00	
Total	6.00		6.00
			6.00



Made by: SLL	Date: 6/4/24	Project No: P402200080
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Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

516

Ext.: 44201

Unit: EA

Item Description: ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN

Member Location :

Elastomeric Bearing with Internal Laminates and Load Plate (Neoprene), APP
(10"x12"x3.128" with 11"x18"x1.5" Load Plate)

Location	Number	Sheet
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RA	6.00	23.00
----	------	-------

FA	6.00	23.00
----	------	-------

Total	12.00	
--------------	-------	--

12.00

TOTAL

12

EA



Made by: SLL	Date: 6/4/24	Project No: P402200080
Checked by: IS	Date: 6/25/24	Sheet No: 33 of 47
Back Ck by:	Date:	
Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

516

Ext.: 44201

Unit: EA

Item Description: ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE), AS PER PLAN

Member Location :

Elastomeric Bearing with Internal Laminates and Load Plate (Neoprene), APP
(11.5"x13"x2.168" with 12.5"x24"x1.5" Load Plate)

Location	Number	Sheet
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Pier 2	6.00	25.00
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Total	6.00	
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6.00

Pier

0.00

TOTAL

6

EA



Made by: SLL	Date: 6/10/24	Project No: P402200080
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Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

518 Ext.: 20000 Unit: SY
Item Description: PREFABRICATED GEOCOMPOSITE DRAIN
Member Location :

Location	Height	Width	Area (SF)	Area (SY)	
RA Left	9.23	17.00	156.90	17.43	
RA Right	9.23	21.00	193.81	21.53	
FA Left	9.23	18.00	166.13	18.46	
FA Right	9.23	20.00	184.58	20.51	
Total				77.94	
TOTAL					78 SY



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Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

518 Ext.: 21200 Unit: CY
Item Description: POROUS BACKFILL WITH GEOTEXTILE FABRIC
Member Location :

Location	Length	Width	Depth	Vol (CF)	Vol (CY)	Sheet	
RA	17.00	1.00	1.00	17.00	0.63	12	
RA	51.75	3.00	1.00	155.25	5.75	12	
RA	21.00	1.00	1.00	21.00	0.78	12	
FA	18.00	1.00	1.00	18.00	0.67	16	
FA	60.52	3.00	1.00	181.56	6.72	16	
FA	20.00	1.00	1.00	20.00	0.74	16	
Total					15.29		15.29
TOTAL							16 CY



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Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

518 Ext.: 40000 Unit: FT
Item Description: 6" PERFORATED CORRUGATED PLASTIC PIPE
Member Location :

Location	Length	Sheet	
RA	29.00	12.00	
RA	40.00	12.00	
FA	31.00	16.00	
FA	42.00	16.00	
Total	142.00		142.00
TOTAL			142 FT



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Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

518 Ext.: 40000 Unit: FT
Item Description: 6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS
Member Location :

Location	Length	Sheet	
RA	17.00	12.00	
RA	17.00	12.00	
FA	17.00	16.00	
FA	19.50	16.00	
Total	70.50		70.50
TOTAL			71 FT



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Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

SPECIAL Ext.: 51900100 Unit: SF
Item Description: COMPOSITE FIBER WRAP SYSTEM (SEE PROPOSAL NOTE)
Member Location : _____

Location	Radius	Height	Area	
Pier 2 C1	1.50	18.02	169.83	
Pier 2 C2	1.50	18.02	169.83	
Pier 2 C3	1.50	18.02	169.83	
Pier 2 C4	1.50	18.02	169.83	
Pier 2 C5	1.50	18.02	169.83	
	Total		849.17	849.17
TOTAL				850 SF



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Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

519 Ext.: 11101 Unit: SF
Item Description: PATCHING CONCRETE STRUCTURE, AS PER PLAN
Member Location :

Location	Length	Width	Area (SF)	Sheet	
P1 W C5	8.00	3.00	24.00	21.00	24.00
				TOTAL	24 SF



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Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

523 Ext.: 20001 Unit: EACH
Item Description: DYNAMIC LOAD TESTING, AS PER PLAN
Member Location :

Location	Count	
RA	1.00	
FA	1.00	
Total	2.00	2.00
*1 per substructure unit		
TOTAL		2 EACH



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Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

523 Ext.: 20501 Unit: EACH
Item Description: RESTRIKE, AS PER PLAN
Member Location :

Location	Count	
RA	1.00	
FA	1.00	
Total	2.00	2.00
*1 per substructure unit		
Total:		0.00
TOTAL		2 EACH



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Project: FRA-00071-25.990A		
Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

526 Ext.: 30010 Unit: SY
Item Description: REINFORCED CONCRETE APPROACH SLABS WITH QC/QA (T=17")
Member Location :

	Length (FT)	Width (FT)	Area (SF)	Area (SY)	
REAR APPROACH SLAB	34.00	30.00	1,020.00	113.33	
FORWARD APPROACH SLAB	34.00	30.53	1,038.06	115.34	
Total				228.67	228.67
TOTAL					229 SY



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Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

526 Ext.: 90030 Unit: FT
Item Description: TYPE C INSTALLATION
Member Location :

	Length (FT)	Sheet	
REAR SLEEPER SLAB	46.64	42	
FORWARD SLEEPER SLAB	52.81	43	
Total	99.45	Total	99.45
TOTAL			100 FT



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Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

601 Ext.: 20000 Unit: SY
Item Description: CRUSHED AGGREGATE SLOPE PROTECTION
Member Location :

Rear Abutment		
Length	Width	Area
42.00	80.00	3,360.00
Forward Abutment		
Length	Width	Area
50.00	80.00	4,000.00
Total		7,360.00 SF 817.78 SY
TOTAL		818 SY



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Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

840 Ext.: 23001 Unit: CY
Item Description: SELECT GRANULAR BACKFILL, AS PER PLAN
Member Location :

Rear Abutment						
Layer	Length	Width	Depth	Vol (CF)		Vol (CY)
1	16.00	37.33	1.00	597.33	22.12	
2	20.50	37.33	1.00	765.33	28.35	
3	20.50	37.33	1.00	765.33	28.35	
4	10.50	37.33	1.00	392.00	14.52	
5	8.00	37.33	1.00	298.67	11.06	
Total					104.40	104.40
Forward Abutment						
Layer	Length	Width	Depth	Vol (CF)		Vol (CY)
1	16.00	37.33	1.00	597.33	22.12	
2	20.50	37.33	1.00	765.33	28.35	
3	20.50	37.33	1.00	765.33	28.35	
4	10.50	37.33	1.00	392.00	14.52	
5	8.00	37.33	1.00	298.67	11.06	
Total					104.40	104.40
</						



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Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

863 Ext.: 00100 Unit: SY
Item Description: GEOGRID, TYPE P1
Member Location :

TYPE P1 GEOGRID REINFORCEMENT					
REAR ABUTMENT					
Layer	Length	Width	Area (SF)	Area (SY)	
1	29.75	57.00	1,695.75	188.42 Top	
2	34.75	57.00	1,980.75	220.08	
3	34.75	57.00	1,980.75	220.08	
4	24.25	57.00	1,382.25	153.58	
5	21.75	57.00	1,239.75	137.75 Bottom	
TOTAL				919.92	919.92
FORWARD ABUTMENT					
Layer	Length	Width	Area (SF)	Area (SY)	
1	29.75	57.00	1,695.75	188.42 Top	
2	34.75	57.00	1,980.75	220.08	
3	34.75	57.00	1,980.75	220.08	
4	24.25	57.00	1,382.25	153.58	
5	21.75	57.00	1,239.75	137.75 Bottom	
TOTAL				919.92	919.9
TOTAL					1840 SY



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Subject: Bridge No. FRA-00071-25.990A Quantities		

Bridge No. FRA-00071-25.990A Quantities

867 Ext.: 00100 Unit: LS
Item Description: TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL
Member Location :

TEMPORARY WIRE FACED MECHANICALLY STABILIZED EARTH WALL	
LS	LS
TOTAL	LS LS