



Project: JAC-32-11.744L Bridge Repair
 Bridge: JAC-32-11.74L

Date: 6/27/24
 By: SRB
 Checked: MS
 Date: 6/27/2024

QUANTITY COMPUTATIONS

DESCRIPTION: PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (MAIN MEMBERS)

ITEM NO. 202E11201
 QUANTITY 1
 UNIT LS

DESCRIPTION: PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (SECONDARY MEMBERS)

ITEM NO. 202E11501
 QUANTITY 6
 UNIT EACH

DESCRIPTION: CONCRETE REPAIR BY EPOXY INJECTION

ITEM NO. 512E10600
 QUANTITY 70
 UNIT FT

DESCRIPTION: STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN

ITEM NO. 513E10001
 QUANTITY 1
 UNIT LS

DESCRIPTION: STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN

ITEM NO. 513E10201
 QUANTITY 492
 UNIT LB

Stiffener Plate Thickness	0.88	in
Stiffener Plate Height	33.94	in
Stiffener Plate Width	4.00	in
Number of Stiffener Plates	4	
Weight of Stiffener Plates	134.74	lbs
Angle Leg 1 Length	3.00	in
Angle Leg 2 Length	2.69	in
Angle Thickness	0.31	in
Angle Area	1.78	sq in
Crossframe Diagonal Length	9.97	ft
Number of Crossframe Diagonals	4	
Weight of Crossframe Diagonals	241.29	lbs
Crossframe Strut Length	9.56	ft
Number of Crossframe Struts	2	
Weight of Crossframe Struts	115.69	lbs
Total Weight	491.72	lbs

DESCRIPTION: STRUCTURAL STEEL MISC.: REPAIR OF DAMAGED MAIN MEMBER, COMPLETE PENETRATION WELDING

ITEM NO. 513E95000
 QUANTITY 19
 UNIT FT

Crossframe spacing	14.17	ft
Distance from Crossframe to Repla	0.50	ft
Length of Replacement	13.17	ft
Depth of Web Welded	1.90	ft
Width of Flange	1.01	ft
Length of Weld	18.99	ft

DESCRIPTION: STRUCTURAL STEEL MISC.: REPAIR OF DAMAGED MEMBERS, COPE HOLES

ITEM NO. 513E95030
 QUANTITY 4
 UNIT EACH

DESCRIPTION: FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN (THREE COAT)

ITEM NO. 514E20001
 QUANTITY 308
 UNIT SF

Area of Painting on Beam 5	1.00	sq ft
Length of Painting on Beam 1	41.50	ft
Perimeter of Painting on Beam 1	5.96	ft
Area of Painting on Beam 1	247.18	sq ft
Angle Outer Leg Length	3.00	in
Angle Inner Leg Length	2.69	in
Angle Thickness	0.31	in
Angle Perimeter	12.00	in
Crossframe Diagonal Length	9.97	ft
Number of Crossframe Diagonals	4	
Surface Area of Crossframe Diagonals	39.90	sq ft
Crossframe Strut Length	9.56	ft
Number of Crossframe Struts	2	
Surface Area of Crossframe Struts	19.13	sq ft
Total Painting Area	307.21	sq ft

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

ITEM NO. 516E47001
 QUANTITY 1
 UNIT LS

DESCRIPTION: DAMAGE ASSESSMENT

ITEM NO. 849E10000
 QUANTITY 1
 UNIT LS

DESCRIPTION: SURFACE PREPARATION

ITEM NO. 849E10500
 QUANTITY 1
 UNIT LS

DESCRIPTION: REPAIRING DAMAGED MEMBERS BY GRINDING

ITEM NO. 849E10600
 QUANTITY 4
 UNIT HOUR

Length of Heat Straightening	39.29	ft
Number of Hours of Grinding	3.93	hours

DESCRIPTION: STRAIGHTENING DAMAGED MEMBERS

ITEM NO. 849E10700
 QUANTITY 1
 UNIT LS