fishbeck
Engineers | Architects | Scientists | Constructors

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DESIGN:	BMG	**DATE:**	9/6/22	**UPDATE:**	BMG	**DATE:**	9/9/22
CHECK:	TLC	**DATE:**	9/8/22	**RECHECK:**	JPC	**DATE:**	9/28/22
STRUCTURE:	HAM-00562-01.210			**SFN:**	3113884	**PID:**	102886

ITEM: 513E10201 **PAY UNIT:** LB
SUBJECT: ESTIMATED QUANTITIES
DESCRIPTION: STRUCTURAL STEEL MEMBERS, LEVEL UF, AS PER PLAN
SUPPLEMENTAL DESCRIPTION:

				SUBTOTAL	TOTAL
End Crossframe at Abutments					
Angle Wt. =	9.8	lb/ft	*L4x4x3/8*		
Beam Spacing =	9.55	ft	(includes skew)		
Web Depth =	31.38	in			
Horiz. Angle Length =	9.55	ft			
Dia. Angle 1 Length =	4.12	ft	*√([Beam Spa./3]^2+Beam Depth^2)*		
# angles =	2	each			
Dia. Angle 2 Length =	3.06	ft	*√([Beam Spa./6]^2+Beam Depth^2)*		
# angles =	2	each			
Total Angle Length =	23.91	ft			
Diaphragm Wt. =	234.3	lb/diaphragm			
# diaphragm =	16	each			
Total Wt. =	3750	lb		3,750	3,750
End Crossframe at Hinges (same height as abutments at hinge)					
Angle Wt. =	9.8	lb/ft	*L4x4x3/8*		
Beam Spacing =	9.55	ft	(includes skew)		
Web Depth =	31.38	in			
Horiz. Angle Length =	9.55	ft			
Dia. Angle 1 Length =	4.12	ft	*√([Beam Spa./3]^2+Beam Depth^2)*		
# angles =	2	each			
Dia. Angle 2 Length =	3.06	ft	*√([Beam Spa./6]^2+Beam Depth^2)*		
# angles =	2	each			
Total Angle Length =	23.91	ft			
Diaphragm Wt. =	234.3	lb/diaphragm			
# diaphragm =	32	each			
Total Wt. =	7500	lb		7,500	11,250
Gusset plates and weld					
Assume 5% for additional weight of gusset plates and connection material					
Wt =	563	lb		563	11,813
SPECIAL INSTRUCTIONS: CHECK UNIT OF MEASURE				**TOTAL**	**11,813**