A2B ENGINEERING, LLC CONSULTING ENGINEERS	Subject: Girder Bracing Design					
	Comp by:	MLS	Date:	09/13/18	Sheet Number:	of
	Check by:	PRS	Job Number:	135-17-1		

Analysis No. =	1	
Description =	Bridge 1	
Left Girder Height =	54	[in]
Right Girder Height =	54	[in]
Girder Spacing =	7	[ft]
Distance from top of left girder to bracing =	12	[in]
Distance from bot. of left girder to bracing =	12	[in]
Distance from bot. of right girder to bracing =	12	[in]
Distance from bot. of right girder to bracing =	12	[in]
Overturning Moment =	90	[ft*kip]
Horizontal Force =	8	[kip]
Brace E =	29000	[ksi]
Brace A =	5	[in^2]
Brace I =	50	[in^4]
Brace Type =	HDPB 5'-9'	
Lines of horizontal Bracing per brace line =	2	
Lines of diagonal bracing per brace line =	3	

	Member		
	1	2	3
Tensile Strength	9.934	10.335	10.137
Max Tension	17.209	7.655	2.126
Compressive Strength	9.577	9.934	9.801
Max Compression	-3.442	-1.531	-0.427

Lines of bracing required =	2
Stiffness =	9186853.933
Check =	OK