



Bars along B: 4Y25  
Bars along D: 4Y25  
Min N case: 1.0D-1.4Wy  
Nmin = 2050.271  
Mc = = 742.852

Bars along B: 5Y25  
Bars along D: 5Y25  
Max N case: 1.4D+1.6L  
Nmax = 4269.010  
Mc = = 824.681

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Beam (LHS): TBX1  
B = 300 D = 450  
fcu = 40 Cov = 25.0  
Hogging moment capacity:  
Compression zone:  
2Y25  
Tension zone:  
2Y25  
Mb = = 150.997

Beam (RHS): TBX2  
B = 300 D = 450  
fcu = 40 Cov = 25.0  
Sagging moment capacity:  
Compression zone:  
2Y25  
Tension zone:  
2Y25  
Mb = = 150.997

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$\Sigma Mc = 742.852 + 824.681 = 1567.532$   
 $1.2 \times \Sigma Mb = (150.997 + 150.997) \times 1.2 = 362.394$   
 **$\Sigma Mc \geq 1.2 \Sigma Mb$**

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Check column splice location in Y-Y

Upper column:  
B = 500 D = 500  
fcu = 60 Cov = 25.0  
Bars along B: 4Y25  
Bars along D: 4Y25  
Min N case: 1.0D-1.4Wy  
Nmin = 2050.271  
Mc = = 742.852

Lower column:  
B = 500 D = 500  
fcu = 60 Cov = 25.0  
Bars along B: 5Y25  
Bars along D: 5Y25  
Max N case: 1.4D+1.6L  
Nmax = 4269.010  
Mc = = 824.681

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Beam (RHS): TBY5  
B = 300 D = 550  
fcu = 40 Cov = 25.0  
Hogging moment capacity:  
Compression zone:  
3Y25  
Tension zone:  
5Y25  
Mb = = 466.327

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$\Sigma Mc = 742.852 + 824.681 = 1567.532$   
 $1.2 \times \Sigma Mb = 466.327 \times 1.2 = 559.592$   
 **$\Sigma Mc \geq 1.2 \Sigma Mb$ , Checking in both direction have been satisfied,  
splice joint can be located just above floor level.**