



DESIGNED	BHS
CHECKED	KFA
DRAWN	MJB
CHECKED	GSP

INTERIOR GIRDER MOMENT TABLE - WESTBOUND

	0.4 Span 1	Pier 1	0.5 Span 2	Pier 2	0.6 Span 3
Is (10 ⁶ mm ⁴)	12058	12058	12714	21612	16058
Ic (n) (10 ⁶ mm ⁴)	23114	---	24351	---	33545
Ic (3n) (10 ⁶ mm ⁴)	17479	---	18272	---	24171
Ss (10 ³ mm ³)	17226	17226	18163	29934	27983
Sc (n) (10 ³ mm ³)	21448	---	23055	---	34605
Sc (3n) (10 ³ mm ³)	19737	---	20990	---	31905
Z (10 ³ mm ³)	---	---	---	---	---
φ (kN/m)	13.37	23.02	13.75	24.96	14.25
Mφ (kN-m)	932	2358	704	4579	2025
sφ (kN/m)	9.65	---	9.65	---	9.65
Msφ (kN-m)	713	---	668	---	1518
M ₁ (kN-m)	1189	776	1249	1246	1917
M (Imp) (kN-m)	266	164	250	241	359
5/8[M ₁ +M(Imp)] (kN-m)	2426	1566	2498	2479	3794
Ma (kN-m)	5292	5101	5031	9174	9539
Mu (kN-m)	6765	---	5603	---	10851
fsφ non-comp (MPa)	54	137	39	153	72
fsφ comp (MPa)	36	---	32	---	48
fs ₃ (L+Imp) (MPa)	113	91	108	83	110
fs (Overload) (MPa)	203	228	179	236	230
fs (Total) (MPa)	---	296	---	306	---
VR (kN)	167	---	189	---	200

INTERIOR GIRDER MOMENT TABLE - EASTBOUND

	0.4 Span 1	Pier 1	0.5 Span 2	Pier 2	0.6 Span 3
Is (10 ⁶ mm ⁴)	12058	12058	12058	14430	13239
Ic (n) (10 ⁶ mm ⁴)	23114	---	23114	---	24713
Ic (3n) (10 ⁶ mm ⁴)	17479	---	17479	---	18781
Ss (10 ³ mm ³)	17226	17226	17226	20439	18832
Sc (n) (10 ³ mm ³)	21448	---	21448	---	23099
Sc (3n) (10 ³ mm ³)	19737	---	19737	---	21328
Z (10 ³ mm ³)	---	---	---	---	---
φ (kN/m)	13.37	23.02	13.37	24.44	13.58
Mφ (kN-m)	852	2573	870	3058	1172
sφ (kN/m)	9.65	---	9.65	---	9.65
Msφ (kN-m)	672	---	792	---	910
M ₁ (kN-m)	1186	792	1270	933	1383
M (Imp) (kN-m)	265	167	254	191	291
5/8[M ₁ +M(Imp)] (kN-m)	2418	1598	2540	1874	2790
Ma (kN-m)	5125	5423	5463	6412	6335
Mu (kN-m)	6605	---	7086	---	7107
fsφ non-comp (MPa)	49	149	51	150	62
fsφ comp (MPa)	34	---	40	---	43
fs ₃ (L+Imp) (MPa)	113	93	118	92	121
fs (Overload) (MPa)	196	242	209	241	226
fs (Total) (MPa)	---	315	---	314	---
VR (kN)	186	---	189	---	185

INT GIRDER RXN TABLE - WESTBOUND

	W Abut	Pier 1	Pier 2	Pier 3
Rφ (kN)	275	839	1157	412
R ₁ (kN)	192	284	320	225
Imp. (kN)	43	60	62	42
R (Total) (kN)	510	1183	1539	679

INT GIRDER RXN TABLE - EASTBOUND

	W Abut	Pier 1	Pier 2	Pier 3
Rφ (kN)	265	873	948	311
R ₁ (kN)	192	284	289	206
Imp. (kN)	43	60	59	43
R (Total) (kN)	500	1217	1296	560

NOTES:

NTR denotes notch toughness requirements.

All dimensions are in millimeters (mm) except as noted.

All splice plate material shall be AASHTO M 270M, Grade 345W.

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. ROUTE 80/94 (BORMAN EXPRESSWAY)
 OVER LITTLE CALUMET RIVER & N.I.C.T.D. R.O.W.
FRAMING DETAILS - UNIT 1 (2 OF 3)
 SECTION 2626.2-R-1
 LAKE COUNTY, INDIANA
 STATION 8+470.000
 STRUCTURE NO. I-80-1-8460 (EB & WB)
 DATE 07/05 (016-1003 & 016-1004)

AMERICAN
 CONSULTING ENGINEERS