*TOP OF BEAM ELEVATIONS

Beam Number	CL Brg. W. Abut	CL Brg. E. Abut
1	610.80	610.77
2	610.94	610.94
3	611.04	611.06
4	611.04	611.06
5	610.89	610.97
6	610.72	610.83

*For fabrication only

INTERIOR GIRDER MOMENT TABLE

		0.5 Sp.
I_s	(in⁴)	12,100
$I_c(n)$	(in⁴)	36,010
$I_c(3n)$	(in⁴)	25,244
S_s	(in³)	664
$S_c(n)$	(in³)	1,061
$S_c(3n)$	(in³)	937
Z	(in³)	767
$DC1$	(k/')	1.003
M_{DC1}	('k)	982
$DC2$	(k/')	0.150
M_{DC2}	('k)	147
DW	(k/')	0.375
M_{DW}	('k)	367
$M_{LL + IM}$	('k)	1,459
M_u (Strength I)	('k)	4,505
* $\phi_f M_n$	('k)	5,072
f_s DC1	(ksi)	17.6
f_s DC2	(ksi)	1.88
f_s DW	(ksi)	4.7
f_s 1.3(LL+IM)	(ksi)	21.45
f_s (Service II)	(ksi)	45.62
f_s (Total)(Strength I)	(ksi)	-
V_f	(k)	60.20

* Compact sections

INTERIOR GIRDER REACTION TABLE

		Abut.
R_{DC1}	(k)	45.32
R_{DC2}	(k)	6.64
R_{DW}	(k)	16.59
$R_{LL + IM}$	(k)	99.85
R_{Total}	(k)	168.40

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in.⁴ and in.³).

$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) due to short-term composite live loads (in.⁴ and in.³).

$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in.⁴ and in.³).

Z: Plastic Section Modulus of the steel section in non-composite areas. Omit line in Moment Table if not used in design calculations (in.³).

$DC1$: Un-factored non-composite dead load (kips/ft.).

M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).

$DC2$: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

$M_{LL + IM}$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).
$1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{LL + IM}$

$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).

f_s (Service II): Sum of stresses as computed from the moments below (ksi).
$M_{DC1} + M_{DC2} + M_{DW} + 1.3 M_{LL + IM}$

f_s (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).
$1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{LL + IM}$

V_f: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MOMENT TABLE
STRUCTURE NO. 037-0174
SHEET NO. 13 OF 20 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
585	128 BR	HENRY	106	57

CONTRACT NO. 64C20
ILLINOIS FED. AID PROJECT