

FISCAL YEAR	COUNTY	COUNTY HIGHWAY	TOTAL SHEETS	SHEET NO.
2007	DUPAGE	*	241	15
CONTRACT NUMBER 83908				
SECTION 97-00084-00-BR				
* FAU 3549/ FAU 1432				

	GIRDER MOMENT TABLE	
	INT. GIRDER 7	EXT. GIRDER 9
	0.5 Span	0.5 Span
I_s	17,114	18,119
$I_c (n)$	46,864	48,760
$I_c (3n)$	34,324	35,103
S_s	984	1,112
$S_c (n)$	1,346	1,500
$S_c (3n)$	1,246	1,386
ϕ	0.918	0.824
$M\phi$	980	1,072*
$s\phi$	0.989	0.892
$M_s\phi$	1,055	1,147
M_t	880	909*
$M (Imp)$	203	209*
$^5_3[M_t + M(Imp)]$	1,805	1,863
M_a	4,996	5,307
M_u	6,353	6,841
$fs\phi$ non-comp (k.s.i.)	12.0	11.6
$fs\phi$ comp (k.s.i.)	10.2	9.9
$fs^5_3(\phi + Imp)$ (k.s.i.)	16.1	14.9
fs (Overload) (k.s.i.)	38.3	36.4
VR	51	49

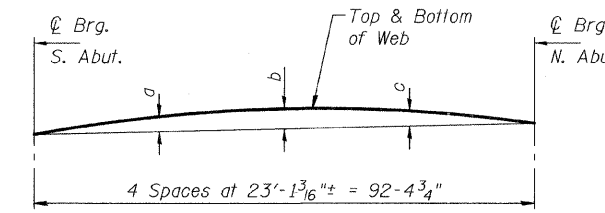
I_s and S_s are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).
 $I_c(n)$ and $S_c(n)$ are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.
 $I_c(3n)$ and $S_c(3n)$ are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads. (see AASHTO 10.38)
 VR is the maximum Live Load + Impact shear range in span.
 M_a (Applied Moment) = $1.3[M\phi + M_s\phi + ^5_3(M_t + M(Imp))]$.
 The Plastic Moment capacity (M_u) is computed according to AASHTO 10.50.1.1.
 fs (Overload) is the sum of the stresses due to $M\phi + M_s\phi + ^5_3(M_t + M(Imp))$.

* Values include additional dead load and live load from Beams 12 and 14.

	GIRDER REACTION TABLE			
	INT. GIRDER 7		EXT. GIRDER 9	
	S. Abut.	N. Abut.	S. Abut.	N. Abut.
$R\phi$	88	88	111	87
R_t	41	41	40	40
Imp.	10	10	9	9
R (Total)	139	139	160	136

Notes:

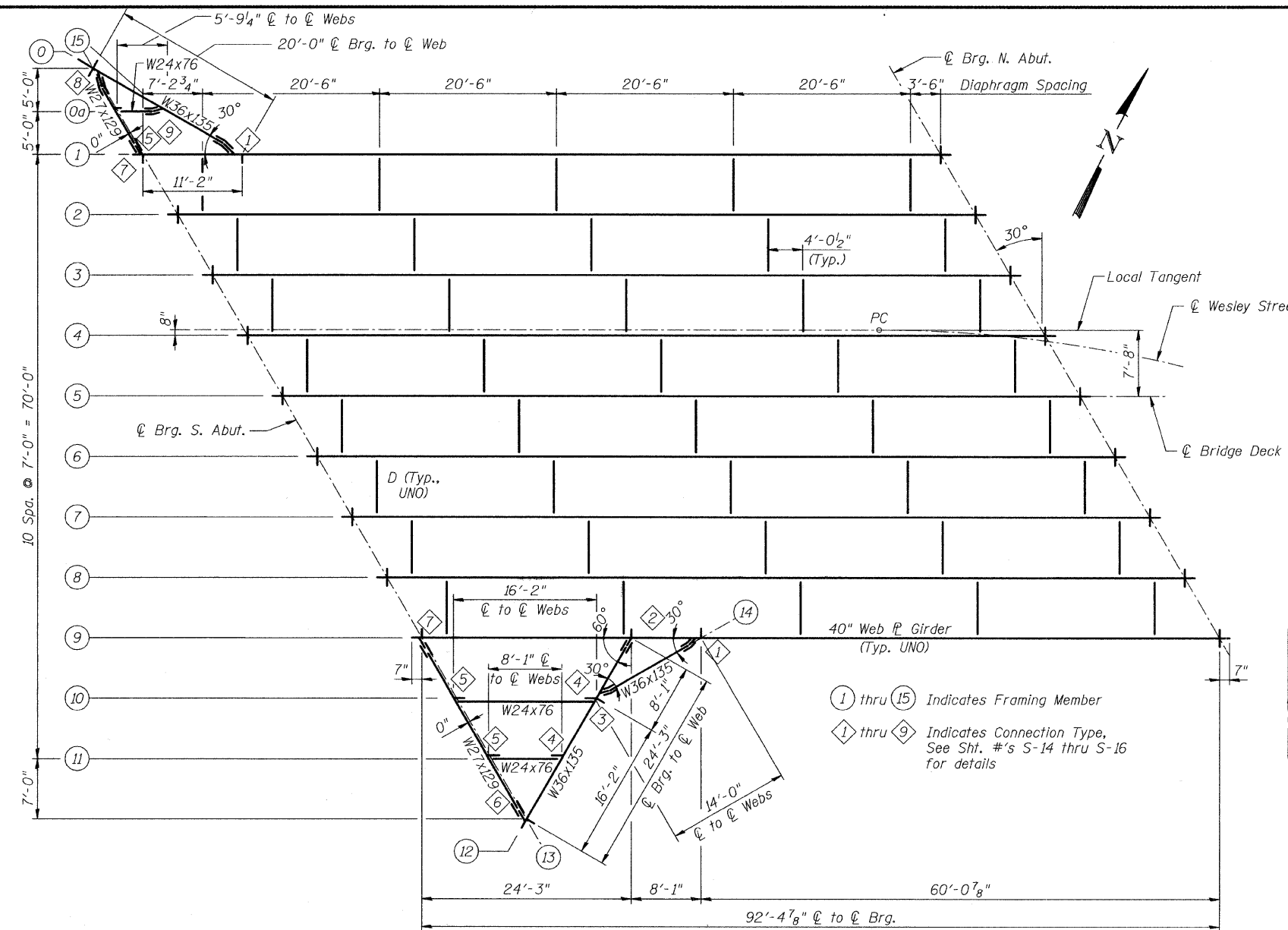
- "NTR" denotes plates to which notch toughness requirements (Zone 2) are applicable.
- All webs, flanges, bearing stiffeners and connection plates shall be M270 Gr.50.



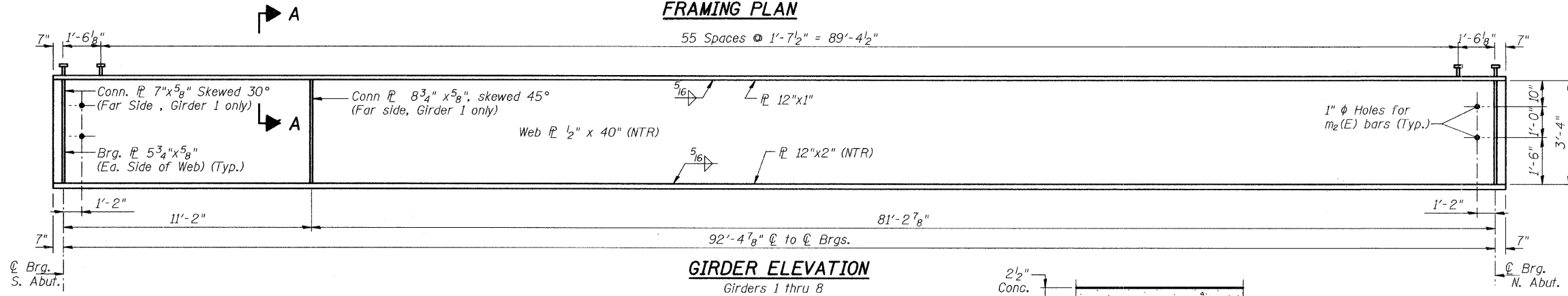
CAMBER DIAGRAM
Girders 1 thru 9
See Table

CAMBER DIMENSIONS			
Girder(s)	a	b	c
1-5	6 1/4"	8 1/2"	6 1/2"
6	6 3/4"	9 1/4"	7"
7	7 1/8"	10 1/8"	8 1/4"
8	7 1/2"	11"	9 1/8"
9	8 1/4"	11 1/8"	9 3/4"

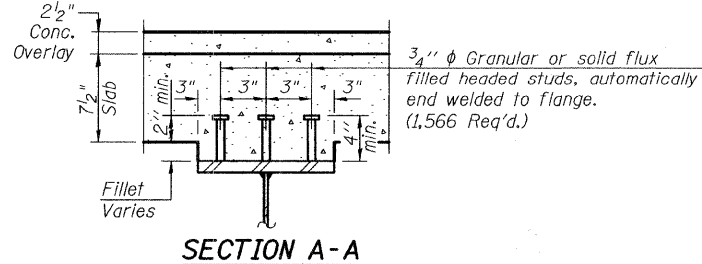
Location	TOP OF WEB ELEVATIONS (For FABRICATION ONLY)								
	Girder Numbers								
© Brg S. Abut.	775.35	775.33	775.31	775.28	775.17	775.06	774.94	774.81	774.68
© Brg N. Abut.	775.59	775.41	775.22	775.01	774.73	774.36	773.94	773.49	773.04



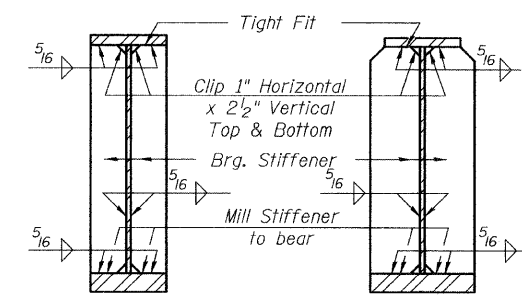
FRAMING PLAN



GIRDER ELEVATION
Girders 1 thru 8



SECTION A-A



SECTION AT ABUTMENT

CITY OF WHEATON
MANCHESTER ROAD/ WESLEY STREET
OVER UNION PACIFIC RAILROAD

FRAMING PLAN

DRAWN	JM	SHEET NO.
CHECKED	VEVS	S-12
APPROVED	BSK	
DATE	06/04/2008	
SCALE	NONE	

