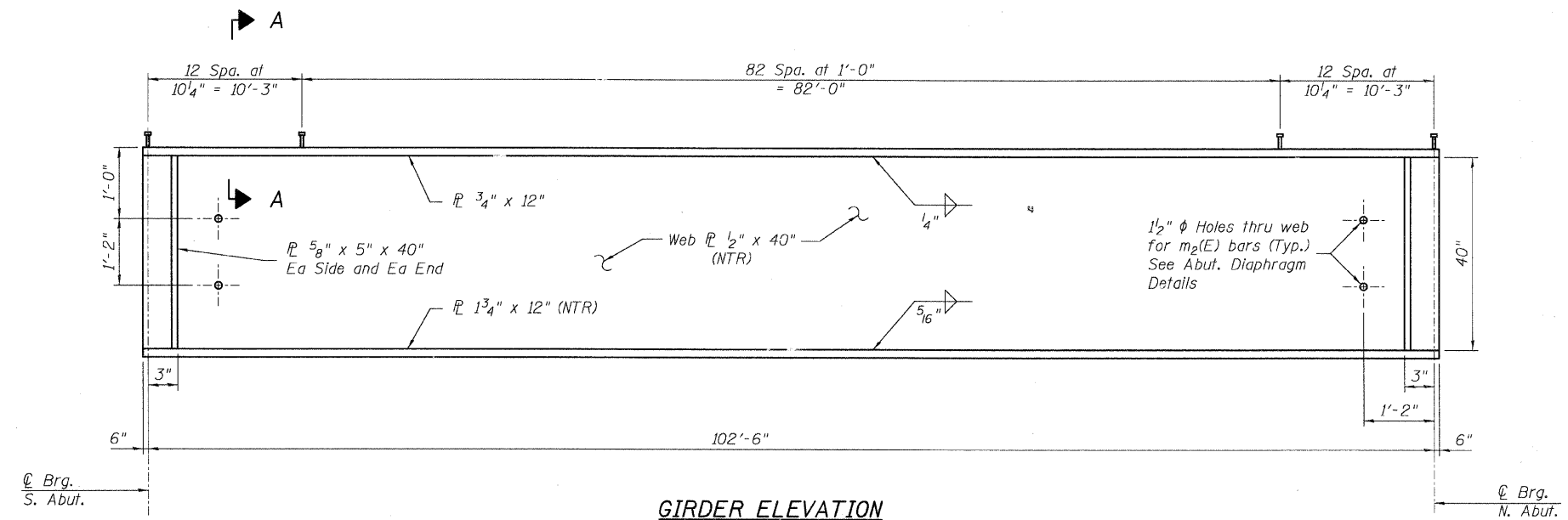


FRAMING PLAN

GIRDER NO.	℄ S. ABUT.	℄ N. ABUT.
Girder 1	691.87	691.95
Girder 2	692.01	692.11
Girder 3	692.12	692.24
Girder 4	692.11	692.25
Girder 5	691.98	692.13
Girder 6	691.81	691.97

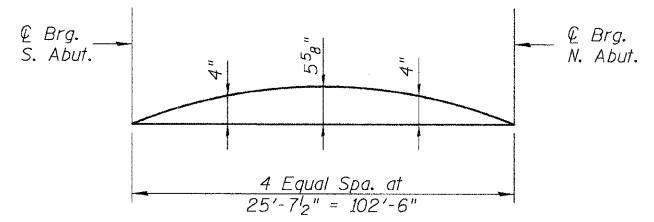
Property	Value
I_s	(in ⁴) 14,259
I_c (n)	(in ⁴) 40,651
I_c (3n)	(in ⁴) 28,759
S_s	(in ³) 856.4
S_c (n)	(in ³) 1,186.9
S_c (3n)	(in ³) 1,090.6
Z	(in ³) -----
ϕ	(k/ft.) 0.933
$M\phi$	(k) 1,225
$s\phi$	(k/ft.) 0.510
$Ms\phi$	(k) 670
$M\ddagger$	(k) 1,046
M (Imp)	(k) 230
$^5_3[M\ddagger + M(\text{Imp})]$	(k) 2,127
Ma	(k) 5,229
Mu	(k) 5,692
$fs\phi$ non-comp (k.s.i.)	17.2
$fs\phi$ (comp) (k.s.i.)	7.4
$fs^5_3(\ddagger + \text{Imp})$ (k.s.i.)	21.5
fs (Overload) (k.s.i.)	46.1
fs (Total) (k.s.i.)	-----
VR	(k) 59.1

Reaction	Value (k)
$R\phi$	73.9
$R\ddagger$	48.5
Imp.	10.7
R (Total)	133.1

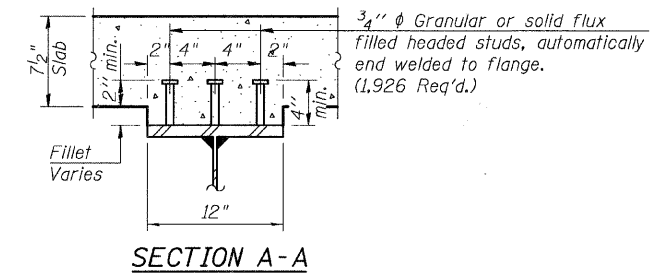


GIRDER ELEVATION
"NTR" denotes plates to which Notch Toughness Requirements are applicable

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.
 Z is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.
 Ma (Applied Moment) = $1.3[M\phi + Ms\phi + ^5_3(M\ddagger + M(\text{Imp}))]$.
The Plastic Moment capacity (Mu) is computed according to AASHTO 10.48.1 and 10.50.1.1.
 fs (Overload) is the sum of the stresses due to $M\phi + Ms\phi + ^5_3(M\ddagger + M(\text{Imp}))$.
 fs (Total) (Non-compact section) is the sum of the stresses due to $1.3[M\phi + Ms\phi + ^5_3(M\ddagger + M(\text{Imp}))]$.



CAMBER DIAGRAM
Camber includes correction for deflection due to the weight of the concrete deck slab and structural steel.



SECTION A-A

NOTES:
All materials shall be AASHTO M270 Grade 50.
"NTR" indicates members to which Notch Toughness Requirements are applicable.
See Sheet S-9 for typical girder elevation and framing details.

DESIGNED	MGH
CHECKED	AEU
DRAWN	WJH
CHECKED	RGD

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WILL COUNTY DEPARTMENT OF HIGHWAYS
STEEL FRAMING PLAN
CEDAR ROAD OVER
JACKSON CREEK
WILL COUNTY
SECTION NO. 01-00056-15-BR
STRUCTURE NO. 099-3381
DATE 4-10-2009

COMPANY NAME: SEC GROUP, INC.
CLIENT: WILL COUNTY
PROJECT: CEDAR ROAD OVER JACKSON CREEK
DATE: 4/10/09