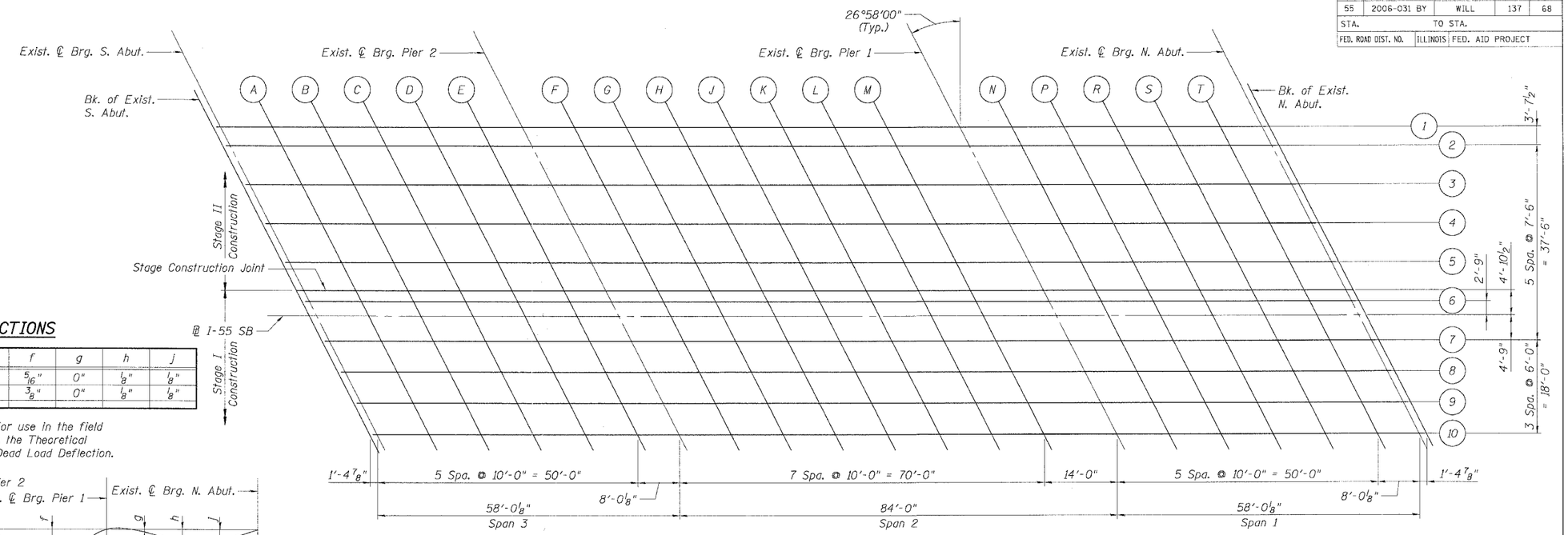
CONTRACT NO. 60B85

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	2006-031 BY	WILL	137	68
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

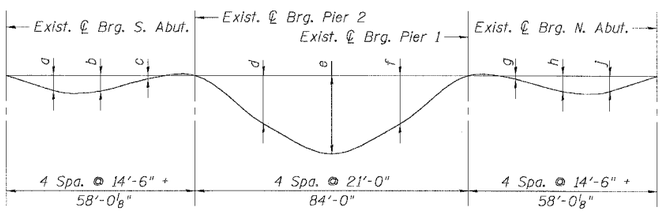


PLAN

BEAM DEFLECTIONS

BEAMS	a	b	c	d	e	f	g	h	j
1-2	⅛"	⅛"	0"	5/16"	½"	5/16"	0"	⅛"	⅛"
3-10	⅛"	⅛"	0"	⅜"	⅝"	⅜"	0"	⅛"	⅛"

* The above deflections are not for use in the field if the Engineer is working from the Theoretical Grade Elevations Adjusted for Dead Load Deflection.

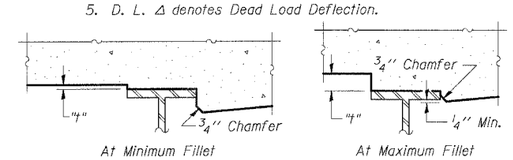


DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Notes:

1. Bk. S. Abut. denotes Back of Existing South Abutment
2. ℄ S. Abut. denotes Existing ℄ Bearing of South Abutment
3. ℄ Pier 2 denotes Existing ℄ Bearing of Pier 2
4. Work this sheet with Sht. SA-6.
5. D. L. Δ denotes Dead Load Deflection.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown above, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

BEAM 1

Location	Station	Offset	Theoretical Grade Elevation	Elevation Adjusted for D. L. Δ
Bk. S. Abut.	166+52.67	-36.38	578.82	578.82
CL S. Abut.	166+54.07	-36.38	578.83	578.83
A	166+64.07	-36.38	578.86	578.87
B	166+74.07	-36.38	578.89	578.91
C	166+84.07	-36.38	578.92	578.93
D	166+94.07	-36.38	578.94	578.95
E	167+04.07	-36.38	578.96	578.96
CL Pier 2	167+12.08	-36.38	578.97	578.97
F	167+22.08	-36.38	578.99	579.01
G	167+32.08	-36.38	579.00	579.04
H	167+42.08	-36.38	579.00	579.07
J	167+52.08	-36.38	579.01	579.09
K	167+62.08	-36.38	579.01	579.08
L	167+72.08	-36.38	579.00	579.06
M	167+82.08	-36.38	579.00	579.03
CL Pier 1	167+96.08	-36.38	578.98	578.98
N	168+06.08	-36.38	578.96	578.96
P	168+16.08	-36.38	578.95	578.95
R	168+26.08	-36.38	578.92	578.94
S	168+36.08	-36.38	578.90	578.91
T	168+46.08	-36.38	578.87	578.88
CL N. Abut.	168+54.09	-36.38	578.84	578.84
Bk. N. Abut.	168+55.49	-36.38	578.84	578.84

BEAM 2

Location	Station	Offset	Theoretical Grade Elevation	Elevation Adjusted for D. L. Δ
Bk. S. Abut.	166+54.51	-32.75	578.90	578.90
CL S. Abut.	166+55.92	-32.75	578.91	578.91
A	166+65.92	-32.75	578.94	578.95
B	166+75.92	-32.75	578.97	578.99
C	166+85.92	-32.75	579.00	579.01
D	166+95.92	-32.75	579.02	579.02
E	167+05.92	-32.75	579.04	579.04
CL Pier 2	167+13.93	-32.75	579.05	579.05
F	167+23.93	-32.75	579.06	579.08
G	167+33.93	-32.75	579.07	579.12
H	167+43.93	-32.75	579.08	579.14
J	167+53.93	-32.75	579.08	579.15
K	167+63.93	-32.75	579.08	579.15
L	167+73.93	-32.75	579.08	579.13
M	167+83.93	-32.75	579.07	579.10
CL Pier 1	167+97.93	-32.75	579.05	579.05
N	168+07.93	-32.75	579.04	579.04
P	168+17.93	-32.75	579.02	579.02
R	168+27.93	-32.75	578.99	579.01
S	168+37.93	-32.75	578.97	578.98
T	168+47.93	-32.75	578.94	578.95
CL N. Abut.	168+55.94	-32.75	578.91	578.91
Bk. N. Abut.	168+57.34	-32.75	578.91	578.91

BEAM 3

Location	Station	Offset	Theoretical Grade Elevation	Elevation Adjusted for D. L. Δ
Bk. S. Abut.	166+58.33	-25.25	579.07	579.07
CL S. Abut.	166+59.73	-25.25	579.08	579.08
A	166+69.73	-25.25	579.11	579.12
B	166+79.73	-25.25	579.14	579.16
C	166+89.73	-25.25	579.16	579.18
D	166+99.73	-25.25	579.18	579.19
E	167+09.73	-25.25	579.20	579.20
CL Pier 2	167+17.74	-25.25	579.21	579.21
F	167+27.74	-25.25	579.22	579.25
G	167+37.74	-25.25	579.23	579.29
H	167+47.74	-25.25	579.24	579.32
J	167+57.74	-25.25	579.24	579.33
K	167+67.74	-25.25	579.24	579.32
L	167+77.74	-25.25	579.23	579.30
M	167+87.74	-25.25	579.22	579.26
CL Pier 1	168+01.74	-25.25	579.20	579.20
N	168+11.74	-25.25	579.19	579.19
P	168+21.74	-25.25	579.17	579.17
R	168+31.74	-25.25	579.14	579.16
S	168+41.74	-25.25	579.11	579.13
T	168+51.74	-25.25	579.08	579.09
CL N. Abut.	168+59.75	-25.25	579.05	579.05
Bk. N. Abut.	168+61.16	-25.25	579.05	579.05

BEAM 4

Location	Station	Offset	Theoretical Grade Elevation	Elevation Adjusted for D. L. Δ
Bk. S. Abut.	166+62.15	-17.75	579.21	579.21
CL S. Abut.	166+63.55	-17.75	579.21	579.21
A	166+73.55	-17.75	579.24	579.26
B	166+83.55	-17.75	579.27	579.29
C	166+93.55	-17.75	579.29	579.31
D	167+03.55	-17.75	579.31	579.32
E	167+13.55	-17.75	579.33	579.33
CL Pier 2	167+21.56	-17.75	579.34	579.34
F	167+31.56	-17.75	579.35	579.37
G	167+41.56	-17.75	579.36	579.41
H	167+51.56	-17.75	579.36	579.44
J	167+61.56	-17.75	579.36	579.45
K	167+71.56	-17.75	579.36	579.44
L	167+81.56	-17.75	579.35	579.42
M	167+91.56	-17.75	579.34	579.38
CL Pier 1	168+05.56	-17.75	579.32	579.32
N	168+15.56	-17.75	579.30	579.30
P	168+25.56	-17.75	579.28	579.29
R	168+35.56	-17.75	579.25	579.27
S	168+45.56	-17.75	579.23	579.24
T	168+55.56	-17.75	579.19	579.20
CL N. Abut.	168+63.57	-17.75	579.16	579.16
Bk. N. Abut.	168+64.97	-17.75	579.16	579.16

SHT. SA-5 OF 21

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAI ROUTE 55 (OVER CSX RR AND SUNNYLAND DRAIN)
BRIDGE WIDENING
SB I-55 OVER CSX RAILROAD, S.N. 099-0312
STA. 167+72.58, SECTION 2006-031 BY
WILL COUNTY

SCREED PLAN, TOP OF SLAB ELEVATIONS, DEADLOAD DEFLECTION DIAGRAM

SCALE: DRAWN BY MDB
DATE 07/07/06 CHECKED BY MJK

TENG
TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
CHICAGO, ILLINOIS

PLOT DATE = $DATE$
FILE NAME = $FILEL$
PLOT SCALE = $SCALE$
USER NAME = $USER$

S:\DOCUMENT\82361501\STRUCT\DGN\SP091A003.SHT
SP091A002.DGN
DARCZAK
7-18-2006 8:03:45