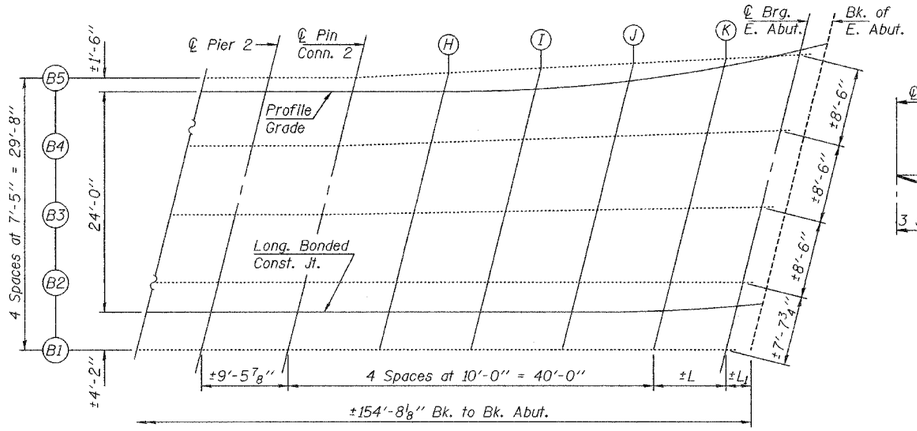
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

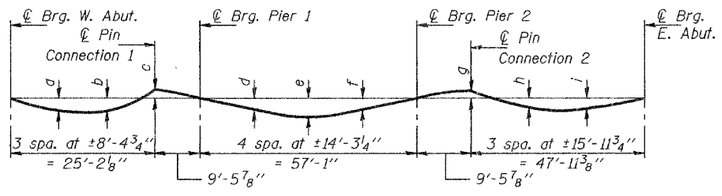
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 94	*	COOK	30	5
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 2
15 SHEETS

Contract Number: 60E12
* 1111-700 HB-BR

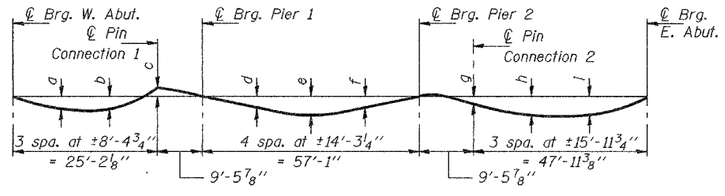


ELEVATIONS LOCATION PLAN



DEAD LOAD DEFLECTION DIAGRAM - BEAMS 2-4

(Includes weight of concrete only)



DEAD LOAD DEFLECTION DIAGRAM - BEAMS 1 & 5

(Includes weight of concrete only)

NOTE:
The above deflections are not to be used in the field if the Engineer is working from the grade elevations adjusted for dead load deflections as shown below.
If the Engineer is working from the grade elevations adjusted for dead load deflections, the elevations shown below shall be adjusted as follow: Shoot top of steel or bottom of top flange elevations at locations shown prior to and after removal of deck. Use the difference in these two elevations to adjust for the grade elevations adjusted for dead load deflection.
i.e. Theoretical Grade Elevations Adjusted for Dead Load Deflection = Top of steel after deck removal - Top of steel before deck removal + Theoretical Grade Elevation Adjusted for Dead Load Defelction shown in tables.

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Pier 2	1604.981	28.167	605.866	605.866
Pin Connection 2	1614.468	28.167	605.833	605.840
H	1624.465	28.167	605.794	605.821
I	1634.156	28.183	605.760	605.798
J	1642.669	28.554	605.726	605.761
K	1651.125	29.445	605.687	605.706
℄ Brg. E. Abut.	1657.773	30.517	605.653	605.653
Bk. E. Abut.	1660.055	30.963	605.640	605.640

LONGITUDINAL BONDED CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Pier 2	1606.022	24.000	605.906	605.906
Pin Connection 2	1615.509	24.000	605.873	605.875
H	1625.509	24.000	605.883	605.853
I	1635.106	24.026	605.800	605.830
J	1643.804	24.461	605.765	605.794
K	1652.450	25.292	605.726	605.742
℄ Brg. E. Abut.	1659.450	25.945	605.694	605.694
Bk. E. Abut.	1661.884	26.162	605.684	605.684

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Pier 2	1606.838	20.750	605.937	605.937
Pin Connection 2	1616.325	20.750	605.904	605.900
H	1626.321	20.750	605.684	605.877
I	1635.874	20.798	605.831	605.854
J	1644.722	21.284	605.795	605.818
K	1653.497	22.310	605.753	605.766
℄ Brg. E. Abut.	1660.382	23.503	605.717	605.717
Bk. E. Abut.	1662.743	23.992	605.703	605.703

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Pier 2	1608.695	13.333	606.008	606.008
Pin Connection 2	1618.182	13.333	605.974	605.970
H	1628.176	13.166	605.937	605.950
I	1637.744	13.090	605.904	605.927
J	1646.982	13.531	605.867	605.890
K	1656.144	14.535	605.825	605.838
℄ Brg. E. Abut.	1663.523	15.764	605.786	605.786
Bk. E. Abut.	1665.996	16.263	605.773	605.773

BEAM 4

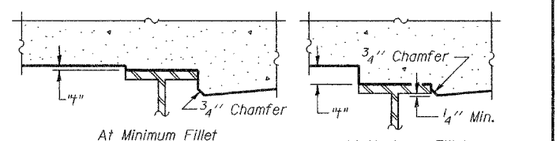
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Pier 2	1610.551	5.917	606.078	606.078
Pin Connection 2	1620.039	5.917	606.045	606.041
H	1630.029	5.579	606.009	606.022
I	1639.780	5.411	605.977	606.000
J	1649.440	5.819	605.938	605.961
K	1659.020	6.816	605.895	605.908
℄ Brg. E. Abut.	1666.946	8.099	605.854	605.854
Bk. E. Abut.	1669.540	8.612	605.839	605.839

PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Pier 2	1612.030	0.000	606.135	606.135
Pin Connection 2	1621.517	0.000	606.102	606.107
H	1631.517	0.000	606.062	606.075
I	1641.517	0.000	606.027	606.050
J	1651.517	0.000	605.992	606.015
K	1661.517	0.000	605.957	605.970
℄ Brg. E. Abut.	1670.957	0.000	605.924	605.924
Bk. E. Abut.	1673.982	0.000	605.914	605.914

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Pier 2	1612.408	-1.500	606.149	606.149
Pin Connection 2	1621.895	-1.500	606.116	606.121
H	1631.879	-2.006	606.082	606.107
I	1642.003	-2.237	606.048	606.085
J	1652.124	-1.847	606.009	606.043
K	1662.157	-0.840	605.964	605.982
℄ Brg. E. Abut.	1670.688	0.516	605.920	605.920
Bk. E. Abut.	1673.412	1.049	605.905	605.905



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

FILLET HEIGHTS

DIMENSION L

Length	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Profile Grade	Long. Bonded Const. Jt.
L	7'-11¼"	7'-11¼"	8'-1⅞"	8'-4⅝"	8'-7½"	9'-5¼"	8'-1½"
L1	2'-9"	2'-9"	2'-9⅛"	2'-9¼"	2'-9½"	3'-0¼"	2'-10"

TABLE OF DIMENSIONS

Beam	a	b	c	d	e	f	g	h	i
1	1/16"	1/16"	0	1/16"	1/8"	1/16"	1/16"	7/16"	3/8"
2-4	1/16"	1/16"	1/8"	3/16"	1/4"	3/16"	1/16"	1/4"	1/4"
5	1/8"	1/16"	1/16"	1/8"	3/16"	1/16"	1/16"	3/8"	3/8"

DESIGNED	ATH	
CHECKED	VHV	
DRAWN	Steffen	
CHECKED	ATH	VHV

MAY 16, 2008
EXAMINED — ENGINEER OF STRUCTURAL SERVICES
PASSED — ENGINEER OF BRIDGES AND STRUCTURES

TOP OF SLAB ELEVATIONS
EAST BOUND STRUCTURE
115th ST. OVER FAI RT. 94
COOK COUNTY
SN 016-2042

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