11-18-05 Letting, Item 031

CONTRACT NO. 62952

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
3578	1327 F	COOK	16	1

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

FAU ROUTE 3578 (IL ROUTE 7) (SOUTHWEST HIGHWAY)
OVER US ROUTE 45 (LA GRANGE RD./96TH AVE.)
SECTION 1327 F
PROJECT: ACBRM-3578 (006)
BEAM AND BEARING FABRICATION

COOK COUNTY
C-91-205-05

FOR INDEX OF SHEETS, SEE SHEET NO. 2

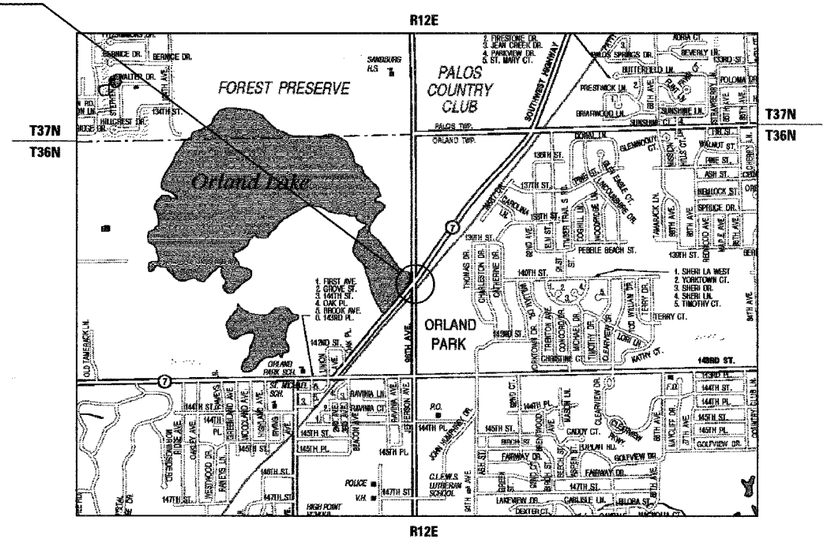
TRAFFIC DATA:

	2004	2020
ADT IL. RTE. 7	12,700	14,000
POSTED SPEED LIMIT IL. RTE. 7: 45 MPH		
DESIGN SPEED LIMIT IL. RTE. 7: 45 MPH		

PROJECT LOCATED IN:

- ORLAND PARK

BRIDGE OVER US RTE 45
STA. 1516 + 85.79
BEAM AND BEARING FABRICATION
EXIST. STRUCTURE NO. 016-0465
PROP. STRUCTURE NO. 016-2847



LOCATION MAP

0 1500' 3000'
1" = 1500'

N

D-91-111-04

LOCATION OF SECTION INDICATED THUS: -

100' 200' 300' — 1" = 100'
10' 20' 30' — 1" = 10'
50' 100' — 1" = 50'
50' 100' — 1" = 40'
50' 100' — 1" = 30'
50' 100' — 1" = 20'

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123

CONTRACT NO. 62952

FAU ROUTE 3578 SECTION: 1327F COOK COUNTY

IDOT CONSULTANT PROJECT MANAGER: MANAR NASHIF 847-705-4523 (DISTRICT 1)

STATE OF ILLINOIS
JOEL J. TARBE
5051
OAK BROOK
PROFESSIONAL ENGINEER

DATE SIGNED: 8-17-05
EXP. DATE: 11-30-06

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Aug 19 2005
DISTRICT ENGINEER
October 14, 2005
ENGINEER OF DESIGN AND ENVIRONMENT
October 14, 2005
DEPUTY DIRECTOR, DIVISION OF HIGHWAYS

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONSULTING ENGINEERS & LAND SURVEYORS
Bollinger, Lach & Associates, Inc.
1010 JORIE BLVD · OAK BROOK, IL 60523 · 630 990 1385

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CONTRACT NO. 62952

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 F	COOK	16	2
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS

GENERAL NOTES

Fasteners shall be high strength bolts. Bolts $^{7}/_{8}$" diameter, open holes $^{15}/_{16}$" diameter, unless otherwise noted.

Calculated weight of Structural Steel = AASTHO M270 Gr. 50 250,500 Pounds
AASTHO M270 Gr. 36 18,700 Pounds

The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the tension flanges, webs and all splice plate material except fill plates.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $^{1}/_{8}$ inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two $^{1}/_{8}$" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type 1 Elastomeric Bearings, two $^{1}/_{8}$" adjusting shim shall be provided for each bearing and placed as detailed.

The Inorganic zinc rich primer/Acrylic/Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be reddish brown, Munsell No 2.5YR 3/4. See Special Provision for "Cleaning and Painting New Metal Structures." Only shop painting is included in this contract. Field coats will be supplied under a separate contract.

SUMMARY OF QUANTITIES

			CONSTRUCTION TYPE CODE IL 7 OVER U.S. 45		
CODE NUMBER	ITEM	UNIT	URBAN-X271-2A TOTAL QUANTITY	100% ORLAND PARK	80% FED. 20% STATE
50300410	Furnishing Elastomeric Bearing Assembly, Type 1	Each	14		14
50300475	Storage of Elastomeric Bearing Assemblies	C. Day	30		30
50500205	Furnishing Structural Steel	L. Sum	1	0.56	0.44
50500455	Storage of Structural Steel	C. Day	30		30

DESIGNED	JJI
CHECKED	SRT
DRAWN	MD
CHECKED	SRT

Bollinger, Lach & Associates, Inc.

INDEX OF SHEETS, GENERAL NOTES & SUMMARY OF QUANTITIES

BEAM AND BEARING FABRICATION
IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327F
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

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IndexSheetsGeneralNotes.dgn 8/29/2005 9:37:51 AM

CONTRACT NO. 62952

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 F	COOK	16	3
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

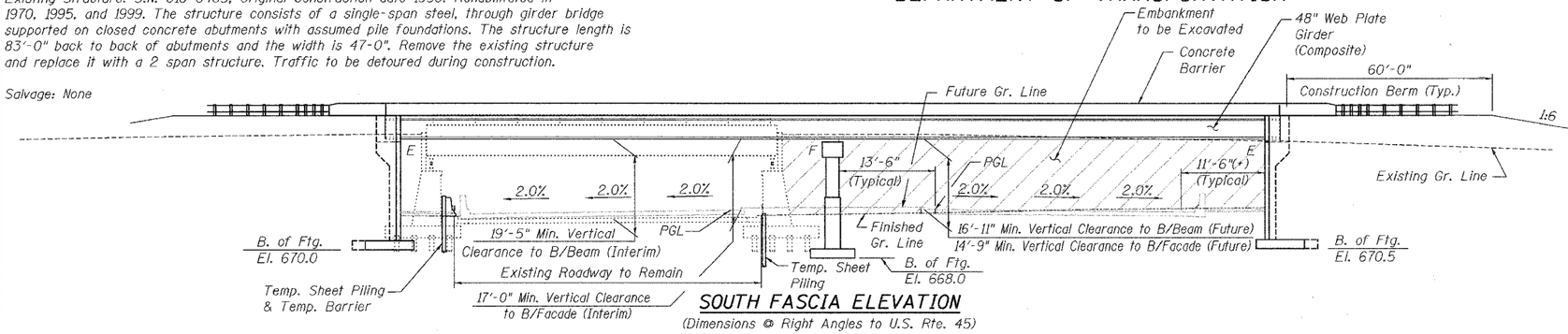
SHEET NO. 1
14 SHEETS

Bench Mark: Top of Brass Disk in West Curb of US Rte. 45 (LaGrange Rd.) Approximately 675' North of the Centerline of IL Rte. 7 (Southwest Highway). Elev. 689.07.

Existing Structure: S.N. 016-0465, Original Construction date 1930. Rehabilitated in 1970, 1995, and 1999. The structure consists of a single-span steel, through girder bridge supported on closed concrete abutments with assumed pile foundations. The structure length is 83'-0" back to back of abutments and the width is 47-0". Remove the existing structure and replace it with a 2 span structure. Traffic to be detoured during construction.

Salvage: None

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



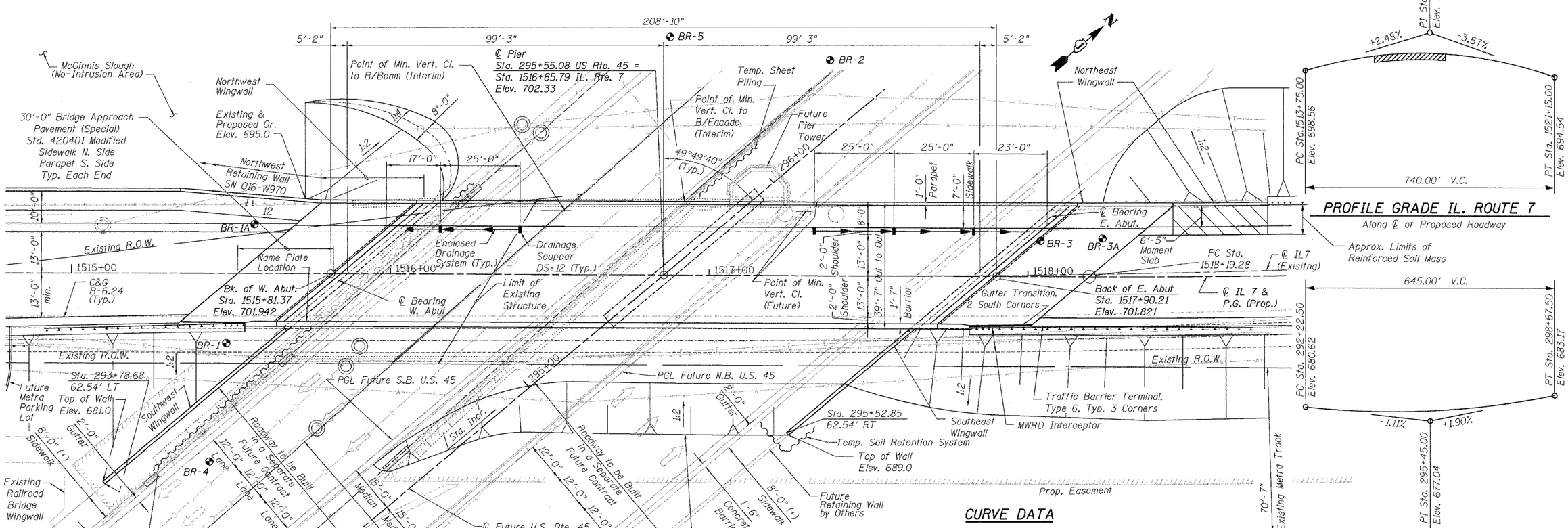
SOUTH FASCIA ELEVATION
(Dimensions ⊗ Right Angles to U.S. Rte. 45)

DESIGN SPECIFICATIONS
AASHTO (2002)

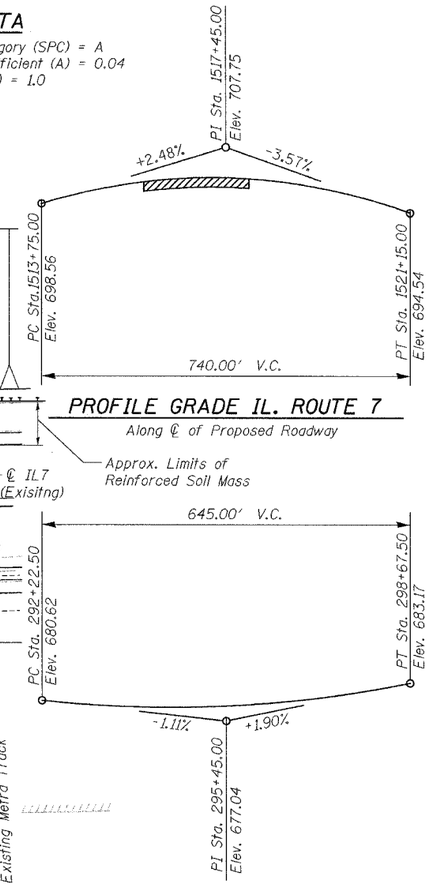
LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04
Site Coefficient (S) = 1.0

DESIGN STRESSES
FIELD UNITS
f'_c = 3,500 psi
f_y = 60,000 psi (Reinforcement)
f_y = 50,000 psi (Structural Steel) (M270 Gr. 50)
PRECAST UNITS
f'_c = 4,500 psi (Precast Face Panels)



PLAN

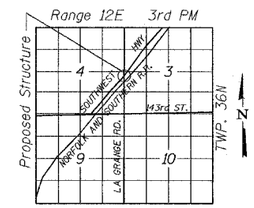


PROFILE GRADE IL. ROUTE 7
Along ℄ of Proposed Roadway

PROFILE GRADE U.S. ROUTE 45
Along Future PGL of N.B. and S.B. Lanes

LEGEND
⊙ Indicates Boring Location
▨ Reinforced Soil Mass

CURVE DATA
IL. 7 (Southwest Highway)
Δ = 8° 08' 26" (LT)
D = 1° 59' 38"
R = 2,873.70'
T = 204.49'
L = 408.30'
E = 7.27'
S.E. = 2.46%
T.R. = 48.00'
S.E. RUN = 59.00'
P.C. STA = 1518+19.28
P.T. STA = 1522+27.58
PI STA. = 1520+23.77
S.E. attained from Sta. 1518+50.00 to Sta. 1522+27.58



LOCATION SKETCH

DESIGNED	SRT
CHECKED	JJI
DRAWN	GM
CHECKED	JJI

Bollinger, Lach & Associates, Inc.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
JOEL J. THOE
5051
OAK BROOK
STRUCTURAL ENGINEER
LICENSED

DATE SIGNED: 8-29-05
EXP. DATE: 11-30-06

GENERAL PLAN

BEAM AND BEARING FABRICATION
IL 7 (SOUTHWEST HIGHWAY) OVER US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327F
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

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CONTRACT NO. 62952

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 F	COOK	16	4
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 2
14 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATION 1516+85.79
BUILT BY
STATE OF ILLINOIS
FAU RT. 3578 SEC. 1327B
LOADING HS20
STR. NO. 016-2847

NAME PLATE
See Std. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
~~Removal and Disposal of Unsuitable Material~~	~~Cu. Yd.~~			
Porous Granular Embankment (Special)	Cu. Yd.			
Removal of Existing Structures	Each			
Structure Excavation	Cu. Yd.			
Concrete Structures	Cu. Yd.			
Concrete Superstructure	Cu. Yd.			
Bridge Deck Grooving	Sq. Yd.			
Elastomeric Bearing Assembly, Type I	Each			
Neoprene Expansion Joint, 2"	Foot			
Protective Coat	Sq. Yd.			
Erecting Structural Steel	L. Sum			
Furnishing & Erecting Structural Steel	L. Sum			
Stud Shear Connectors	Each			
Reinforcement Bars, Epoxy Coated	Pound			
Aluminum Railing, Type L	Foot			
Temporary Sheet Piling	Sq. Ft.			
Name Plates	Each			
Bar Splicers	Each			
Bridge Seat Sealer	Sq. Ft.			
Geocomposite Wall Drain	Sq. Ft.			
Drainage Scuppers, DS-12	Each			
Temporary Soil Retention System	Sq. Ft.			
Drainage System	L. Sum			
Protective Shield	Sq. Yd.			
~~Mechanically Stabilized Earth Retaining Wall~~	~~Sq. Ft.~~			
Furnishing Elastomeric Bearing Assembly, Type I	Each	14	-	14
Storage of Elastomeric Bearing Assemblies	C. Day	-	-	30
Furnishing Structural Steel	L. Sum	1	-	1
Storage of Structural Steel	C. Day	-	-	30

GENERAL NOTES

Fasteners shall be high strength bolts. Bolts $\frac{7}{8}$" diameter, open holes $\frac{15}{16}$" diameter, unless otherwise noted.

Calculated weight of Structural Steel = AASTHO M270 Gr. 50 Pounds
AASTHO M270 Gr. 36 Pounds

Field welding of construction accessories will not be permitted to beams or girders.

Anchor bolts shall be set before bolting diaphragms over supports.

The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the tension flanges, webs and all splice plate material except fill plates.

Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 60.

The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two $\frac{1}{8}$" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type I Elastomeric Bearings, two $\frac{1}{8}$" adjusting shim shall be provided for each bearing and placed as detailed.

The concrete for bridge floors finished according to Article 503.17 of the Standard Specifications, shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The finishing machine, when required, shall be set parallel to the skew for striking off and screeding the concrete.

Bridge Seat Sealer shall be applied to the seat area of the abutments.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

All construction joints shall be bonded.

The Inorganic zinc rich primer/Acrylic/Acrylic Point System shall be used for shop, and field painting of new structural steel except where otherwise noted. The color of the final finish coat for all interior steel surfaces shall be gray, Munsell No 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be reddish brown, Munsell No 2.5YR 3/4.
See Special Provision for "Cleaning and Painting New Metal Structures".

DESIGNED	SRT
CHECKED	JJI
DRAWN	GM
CHECKED	JJI

Bollinger, Lach & Associates, Inc.

GENERAL NOTES AND
TOTAL BILL OF MATERIAL

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327F
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

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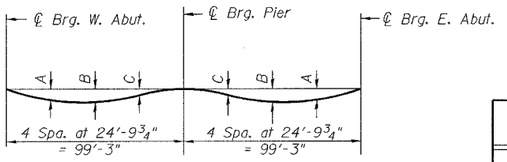
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 F	COOK	16	5
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 3
14 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



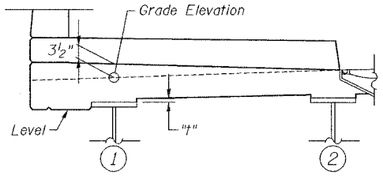
DEAD LOAD DEFLECTION DIAGRAM

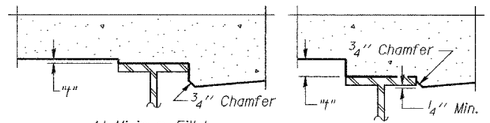
(Includes weight of concrete only.)

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 on sheets 4 and 5 of 14.

GIRDER NO.	DEFLECTION (in)		
	A	B	C
1	1 1/4	1 1/2	5/8
2 thru 7	3/4	7/8	3/8

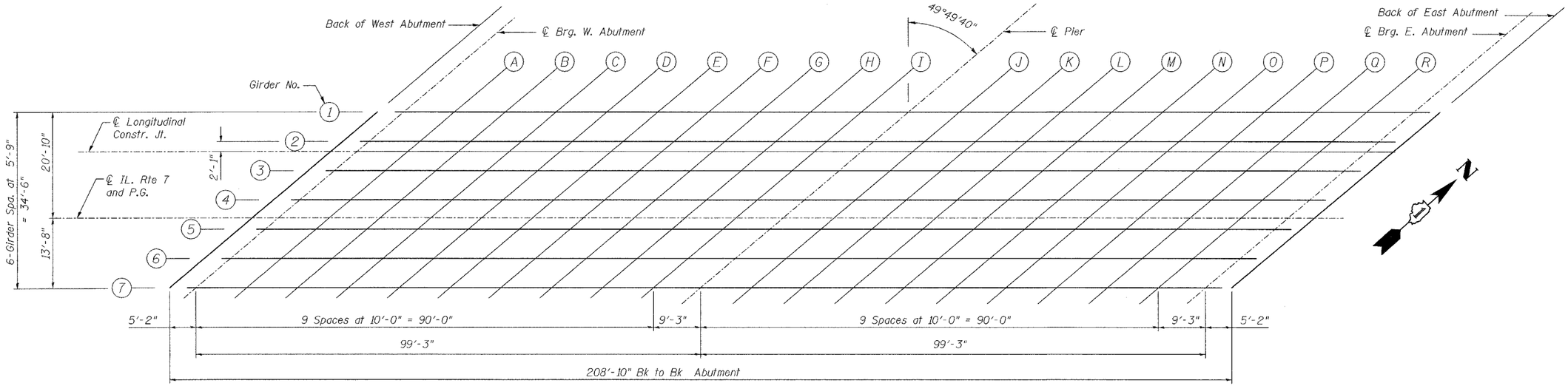
TABLE OF DEAD LOAD DEFLECTIONS





To determine "t": After all structural steel has been erected, elevations of the top flanges of the girders shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 4 and 5 of 14, minus slab thickness, equals the fillet heights "t" above top flange of girders.

FILLET HEIGHTS



PLAN

DESIGNED	JJI
CHECKED	SRT
DRAWN	GM
CHECKED	SRT

E-S 10-22-04

Bollinger, Lach & Associates, Inc.

FOR INFORMATION ONLY
NOT PART OF THIS CONTRACT

TOP OF SLAB ELEVATIONS

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327F
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

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CONTRACT NO. 62952

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 F	COOK	16	6
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 4
14 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM #1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1516+06.047	-20.833	701.697	701.697
CL BRG. W. ABUT	1516+11.213	-20.833	701.726	701.726
A	1516+21.213	-20.833	701.778	701.826
B	1516+31.213	-20.833	701.820	701.910
C	1516+41.213	-20.833	701.855	701.972
D	1516+51.213	-20.833	701.882	702.010
E	1516+61.213	-20.833	701.900	702.022
F	1516+71.213	-20.833	701.911	702.012
G	1516+81.213	-20.833	701.913	701.982
H	1516+91.213	-20.833	701.907	701.942
I	1517+01.213	-20.833	701.892	701.901
CL PIER	1517+10.467	-20.833	701.872	701.872
J	1517+20.467	-20.833	701.842	701.852
K	1517+30.467	-20.833	701.804	701.842
L	1517+40.467	-20.833	701.757	701.829
M	1517+50.467	-20.833	701.703	701.805
N	1517+60.467	-20.833	701.640	701.763
O	1517+70.467	-20.833	701.569	701.697
P	1517+80.467	-20.833	701.490	701.605
Q	1517+90.467	-20.833	701.402	701.489
R	1518+00.467	-20.833	701.307	701.352
CL BRG. E. ABUT	1518+09.720	-20.833	701.211	701.211
BK. E. ABUT.	1518+14.887	-20.833	701.155	701.155

BEAM #2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1515+99.236	-15.083	701.769	701.769
CL BRG. W. ABUT	1516+04.403	-15.083	701.802	701.802
A	1516+14.403	-15.083	701.859	701.888
B	1516+24.403	-15.083	701.907	701.961
C	1516+34.403	-15.083	701.947	702.017
D	1516+44.403	-15.083	701.980	702.056
E	1516+54.403	-15.083	702.004	702.076
F	1516+64.403	-15.083	702.020	702.079
G	1516+74.403	-15.083	702.027	702.068
H	1516+84.403	-15.083	702.027	702.047
I	1516+94.403	-15.083	702.018	702.022
CL PIER	1517+03.656	-15.083	702.003	702.003
J	1517+13.656	-15.083	701.978	701.983
K	1517+23.656	-15.083	701.945	701.967
L	1517+33.656	-15.083	701.905	701.947
M	1517+43.656	-15.083	701.856	701.916
N	1517+53.656	-15.083	701.798	701.871
O	1517+63.656	-15.083	701.733	701.809
P	1517+73.656	-15.083	701.659	701.728
Q	1517+83.656	-15.083	701.578	701.630
R	1517+93.656	-15.083	701.488	701.515
CL BRG. E. ABUT	1518+02.909	-15.083	701.397	701.397
BK. E. ABUT.	1518+08.076	-15.083	701.344	701.344

LONGITUDINAL CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1515+96.769	-13.000	701.795	701.795
CL BRG. W. ABUT	1516+01.935	-13.000	701.828	701.828
A	1516+11.935	-13.000	701.887	701.916
B	1516+21.935	-13.000	701.938	701.991
C	1516+31.935	-13.000	701.980	702.050
D	1516+41.935	-13.000	702.014	702.090
E	1516+51.935	-13.000	702.040	702.112
F	1516+61.935	-13.000	702.058	702.117
G	1516+71.935	-13.000	702.068	702.108
H	1516+81.935	-13.000	702.069	702.089
I	1516+91.935	-13.000	702.062	702.067
CL PIER	1517+01.189	-13.000	702.049	702.049
J	1517+11.189	-13.000	702.027	702.032
K	1517+21.189	-13.000	701.996	702.018
L	1517+31.189	-13.000	701.957	701.999
M	1517+41.189	-13.000	701.910	701.971
N	1517+51.189	-13.000	701.855	701.928
O	1517+61.189	-13.000	701.792	701.868
P	1517+71.189	-13.000	701.720	701.789
Q	1517+81.189	-13.000	701.640	701.692
R	1517+91.189	-13.000	701.552	701.580
CL BRG. E. ABUT	1518+00.442	-13.000	701.464	701.464
BK. E. ABUT.	1518+05.609	-13.000	701.411	701.411

BEAM #3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1515+92.425	-9.333	701.838	701.838
CL BRG. W. ABUT	1515+97.592	-9.333	701.874	701.874
A	1516+07.592	-9.333	701.936	701.965
B	1516+17.592	-9.333	701.990	702.044
C	1516+27.592	-9.333	702.036	702.106
D	1516+37.592	-9.333	702.074	702.150
E	1516+47.592	-9.333	702.103	702.175
F	1516+57.592	-9.333	702.125	702.184
G	1516+67.592	-9.333	702.138	702.178
H	1516+77.592	-9.333	702.143	702.163
I	1516+87.592	-9.333	702.140	702.144
CL PIER	1516+96.845	-9.333	702.130	702.130
J	1517+06.845	-9.333	702.111	702.116
K	1517+16.845	-9.333	702.084	702.105
L	1517+26.845	-9.333	702.048	702.090
M	1517+36.845	-9.333	702.005	702.065
N	1517+46.845	-9.333	701.953	702.026
O	1517+56.845	-9.333	701.893	701.969
P	1517+66.845	-9.333	701.825	701.894
Q	1517+76.845	-9.333	701.749	701.801
R	1517+86.845	-9.333	701.665	701.692
CL BRG. E. ABUT	1517+96.098	-9.333	701.580	701.580
BK. E. ABUT.	1518+01.265	-9.333	701.529	701.529

BEAM #4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1515+85.614	-3.583	701.903	701.903
CL BRG. W. ABUT	1515+90.781	-3.583	701.941	701.941
A	1516+00.781	-3.583	702.009	702.039
B	1516+10.781	-3.583	702.069	702.123
C	1516+20.781	-3.583	702.120	702.190
D	1516+30.781	-3.583	702.164	702.240
E	1516+40.781	-3.583	702.199	702.271
F	1516+50.781	-3.583	702.226	702.285
G	1516+60.781	-3.583	702.245	702.285
H	1516+70.781	-3.583	702.255	702.275
I	1516+80.781	-3.583	702.258	702.262
CL PIER	1516+90.034	-3.583	702.253	702.253
J	1517+00.034	-3.583	702.239	702.245
K	1517+10.034	-3.583	702.218	702.240
L	1517+20.034	-3.583	702.188	702.230
M	1517+30.034	-3.583	702.150	702.211
N	1517+40.034	-3.583	702.104	702.177
O	1517+50.034	-3.583	702.050	702.126
P	1517+60.034	-3.583	701.988	702.057
Q	1517+70.034	-3.583	701.917	701.969
R	1517+80.034	-3.583	701.838	701.866
CL BRG. E. ABUT	1517+89.287	-3.583	701.758	701.758
BK. E. ABUT.	1517+94.454	-3.583	701.710	701.710

PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1515+81.370	0.000	701.942	701.942
CL BRG. W. ABUT	1515+86.537	0.000	701.982	701.982
A	1515+96.537	0.000	702.053	702.082
B	1516+06.537	0.000	702.116	702.170
C	1516+16.537	0.000	702.171	702.241
D	1516+26.537	0.000	702.218	702.294
E	1516+36.537	0.000	702.257	702.329
F	1516+46.537	0.000	702.287	702.346
G	1516+56.537	0.000	702.309	702.350
H	1516+66.537	0.000	702.323	702.344
I	1516+76.537	0.000	702.329	702.334
CL PIER	1516+85.790	0.000	702.328	702.328
J	1516+95.790	0.000	702.318	702.323
K	1517+05.790	0.000	702.300	702.321
L	1517+15.790	0.000	702.273	702.315
M	1517+25.790	0.000	702.239	702.300
N	1517+35.790	0.000	702.196	702.269
O	1517+45.790	0.000	702.146	702.222
P	1517+55.790	0.000	702.087	702.156
Q	1517+65.790	0.000	702.020	702.072
R	1517+75.790	0.000	701.944	701.972
CL BRG. E. ABUT	1517+85.043	0.000	701.867	701.867
BK. E. ABUT.	1517+90.210	0.000	701.821	701.821

DESIGNED	JJI
CHECKED	SRT
DRAWN	GM
CHECKED	SRT

Bollinger, Lach & Associates, Inc.

FOR INFORMATION ONLY
NOT PART OF THIS CONTRACT

TOP OF SLAB ELEVATIONS

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327F
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

W:\IL 7\Structural\Bridge\BEAM & BEARING PLANS\Top of slab elev.dgn

CONTRACT NO. 62952

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 F	COOK	16	7
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 5
14 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM #5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1515+78.803	2.167	701.964	701.964
CL BRG. W. ABUT	1515+83.970	2.167	702.005	702.005
A	1515+93.970	2.167	702.079	702.108
B	1516+03.970	2.167	702.144	702.198
C	1516+13.970	2.167	702.201	702.271
D	1516+23.970	2.167	702.250	702.326
E	1516+33.970	2.167	702.291	702.363
F	1516+43.970	2.167	702.323	702.383
G	1516+53.970	2.167	702.348	702.388
H	1516+63.970	2.167	702.364	702.384
I	1516+73.970	2.167	702.372	702.376
CL PIER	1516+83.223	2.167	702.372	702.372
J	1516+93.223	2.167	702.364	702.370
K	1517+03.223	2.167	702.348	702.370
L	1517+13.223	2.167	702.324	702.366
M	1517+23.223	2.167	702.292	702.353
N	1517+33.223	2.167	702.252	702.324
O	1517+43.223	2.167	702.203	702.279
P	1517+53.223	2.167	702.146	702.215
Q	1517+63.223	2.167	702.081	702.133
R	1517+73.223	2.167	702.008	702.035
CL BRG. E. ABUT	1517+82.476	2.167	701.933	701.933
BK. E. ABUT.	1517+87.643	2.167	701.888	701.888

BEAM #6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1515+71.992	7.917	702.022	702.022
CL BRG. W. ABUT	1515+77.159	7.917	702.066	702.066
A	1515+87.159	7.917	702.145	702.174
B	1515+97.159	7.917	702.216	702.269
C	1516+07.159	7.917	702.278	702.348
D	1516+17.159	7.917	702.333	702.409
E	1516+27.159	7.917	702.379	702.451
F	1516+37.159	7.917	702.417	702.476
G	1516+47.159	7.917	702.447	702.488
H	1516+57.159	7.917	702.469	702.489
I	1516+67.159	7.917	702.482	702.487
CL PIER	1516+76.412	7.917	702.488	702.488
J	1516+86.412	7.917	702.486	702.491
K	1516+96.412	7.917	702.475	702.497
L	1517+06.412	7.917	702.457	702.499
M	1517+16.412	7.917	702.430	702.490
N	1517+26.412	7.917	702.395	702.468
O	1517+36.412	7.917	702.352	702.428
P	1517+46.412	7.917	702.301	702.370
Q	1517+56.412	7.917	702.241	702.293
R	1517+66.412	7.917	702.174	702.201
CL BRG. E. ABUT	1517+75.666	7.917	702.104	702.104
BK. E. ABUT.	1517+80.832	7.917	702.062	702.062

BEAM #7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
BK. W. ABUT.	1515+65.181	13.667	702.075	702.075
CL BRG. W. ABUT	1515+70.348	13.667	702.122	702.122
A	1515+80.348	13.667	702.207	702.236
B	1515+90.348	13.667	702.283	702.337
C	1516+00.348	13.667	702.351	702.421
D	1516+10.348	13.667	702.412	702.488
E	1516+20.348	13.667	702.463	702.536
F	1516+30.348	13.667	702.507	702.566
G	1516+40.348	13.667	702.543	702.583
H	1516+50.348	13.667	702.570	702.590
I	1516+60.348	13.667	702.589	702.593
CL PIER	1516+69.601	13.667	702.600	702.600
J	1516+79.601	13.667	702.603	702.608
K	1516+89.601	13.667	702.598	702.620
L	1516+99.601	13.667	702.585	702.627
M	1517+09.601	13.667	702.564	702.624
N	1517+19.601	13.667	702.535	702.607
O	1517+29.601	13.667	702.497	702.573
P	1517+39.601	13.667	702.451	702.520
Q	1517+49.601	13.667	702.398	702.450
R	1517+59.601	13.667	702.336	702.363
CL BRG. E. ABUT	1517+68.855	13.667	702.271	702.271
BK. E. ABUT.	1517+74.021	13.667	702.232	702.232

DESIGNED	JJI
CHECKED	SRT
DRAWN	GM
CHECKED	SRT

Bollinger, Lach & Associates, Inc.

FOR INFORMATION ONLY
NOT PART OF THIS CONTRACT

TOP OF SLAB ELEVATIONS

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327F
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

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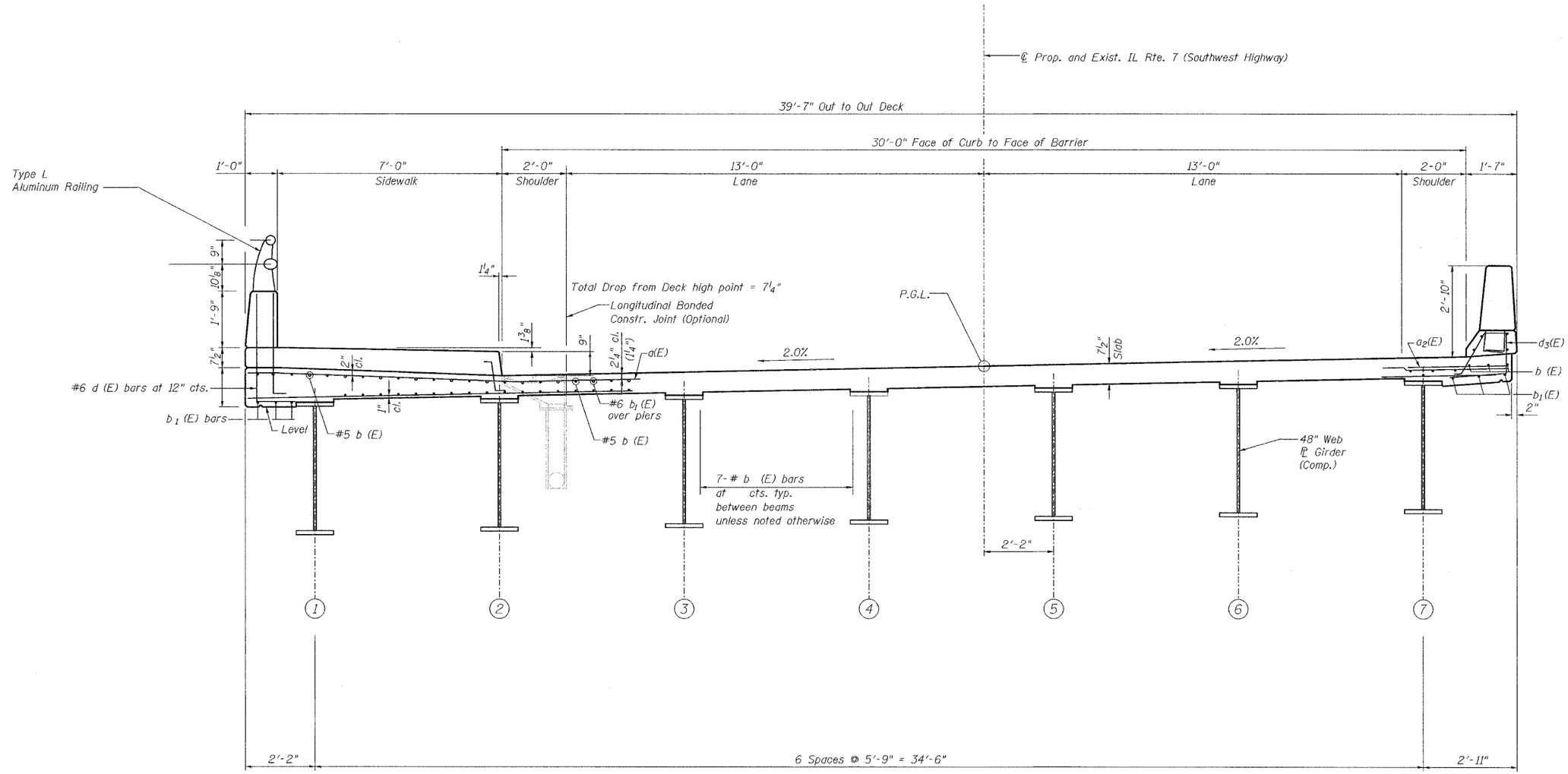
CONTRACT NO. 62952

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 F	COOK	16	8
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 6
14 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



CROSS SECTION

Looking Upstation (Northeast)

DESIGNED	SRT
CHECKED	JJI
DRAWN	GM
CHECKED	JJI

Bollinger, Lach & Associates, Inc.

Notes:
See Sheet of for drainage system and Bill of Material.
Reinforcement bars designated (E) shall be epoxy coated.
See Sheet of for parapet reinforcement.

FOR INFORMATION ONLY
NOT PART OF THIS CONTRACT

SUPERSTRUCTURE CROSS SECTION

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327B
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

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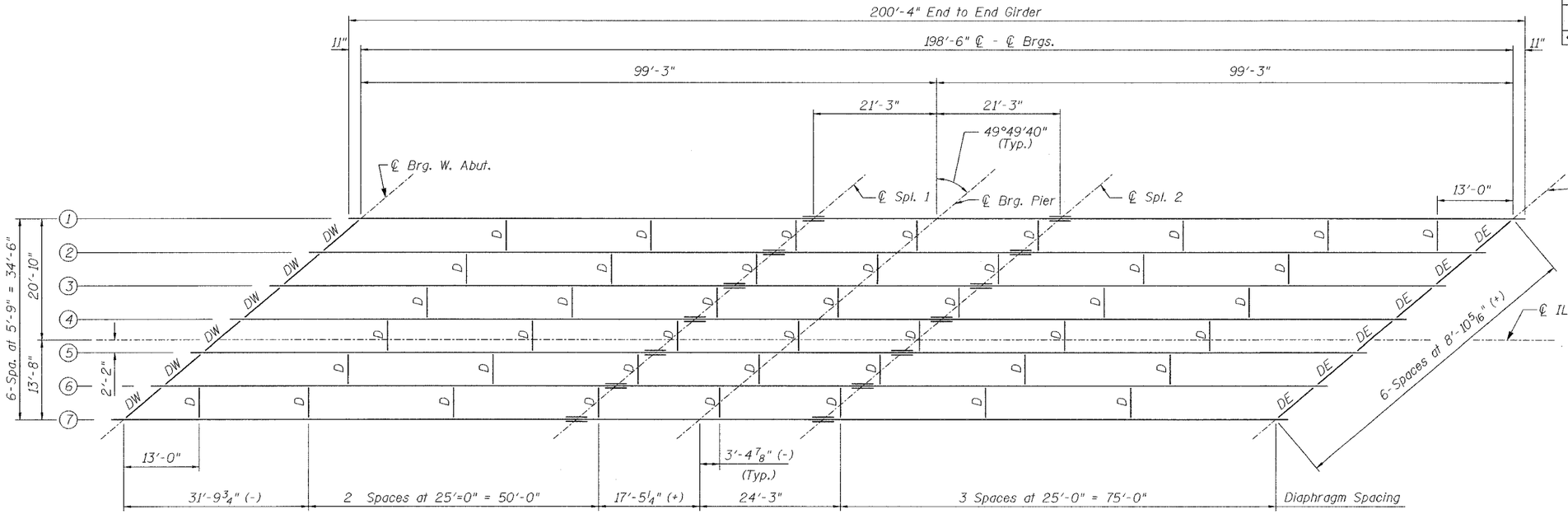
CONTRACT NO. 62952

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 F	COOK	16	9
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 7
14 SHEETS

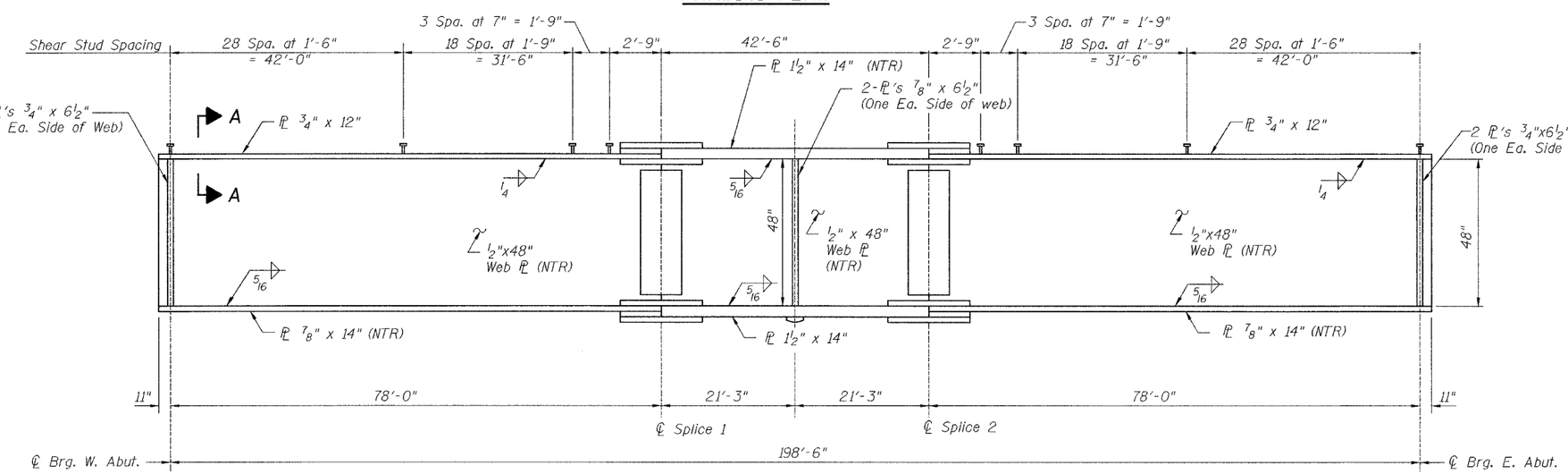


NOTES:

Structural Steel for Girders. Splice Plates and Bearing Stiffeners shall conform to the requirements of AASHTO M270 Grade 50.

All Splice Plates except fill plates shall conform to Zone 2 Notch Toughness Requirement.

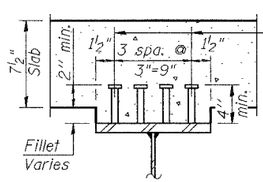
FRAMING PLAN



GIRDER ELEVATION

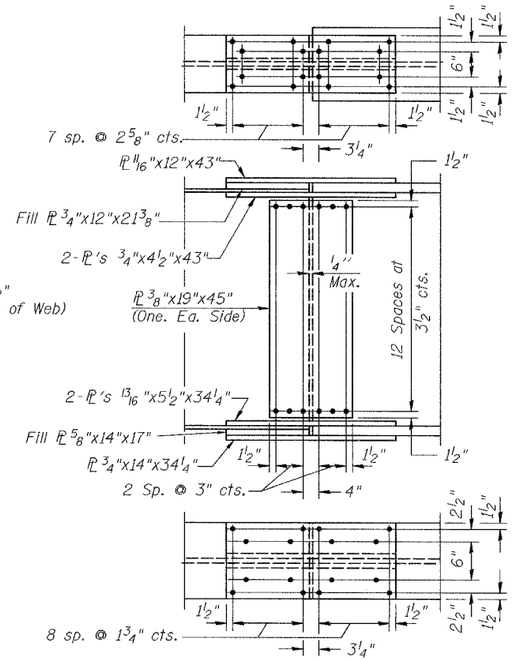
"NTR" denotes plates to which notch toughness requirements are applicable.

SHEAR STUDS
NOT PART OF THIS CONTRACT



3/4"ϕ Granular or solid flux filled headed studs automatically end welded to flange. (No. Req'd. = 400 Studs/Girder)

SECTION A-A



FIELD SPLICE DETAIL

DESIGNED	SRT
CHECKED	JJI
DRAWN	GM
CHECKED	JJI

Bollinger, Lach & Associates, Inc.

G-1

10-22-04

STRUCTURAL STEEL FRAMING PLAN

IL 7 (SOUTHWEST HIGHWAY) OVER US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327F
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

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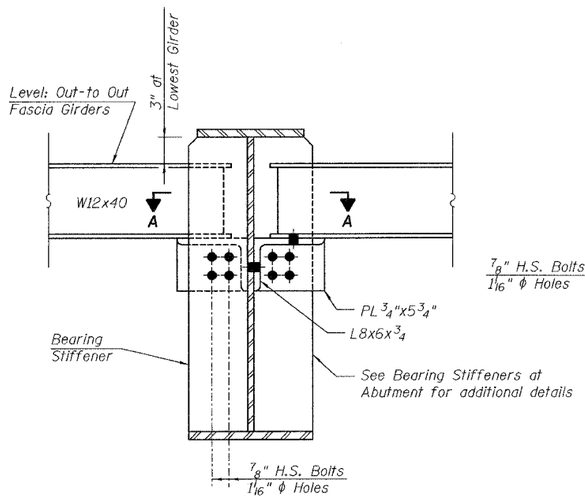
CONTRACT NO. 62952

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 F	COOK	16	10
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

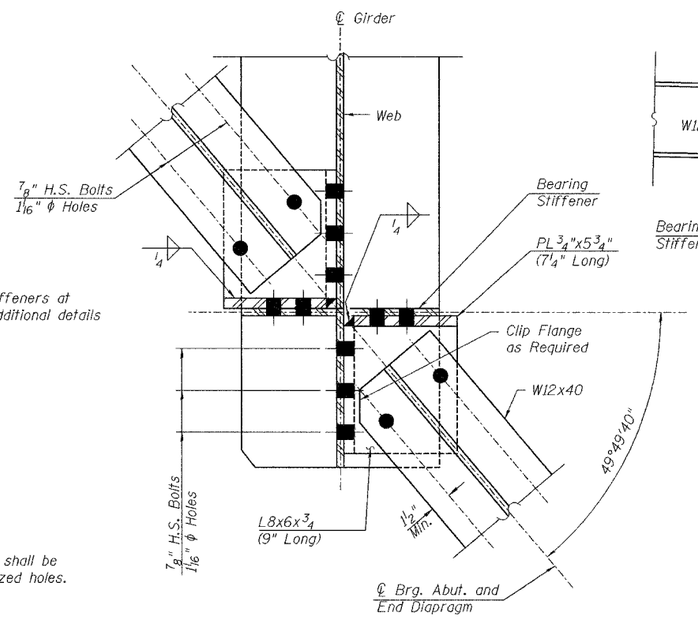
SHEET NO. 8
14 SHEETS



END DIAPHRAGM DW

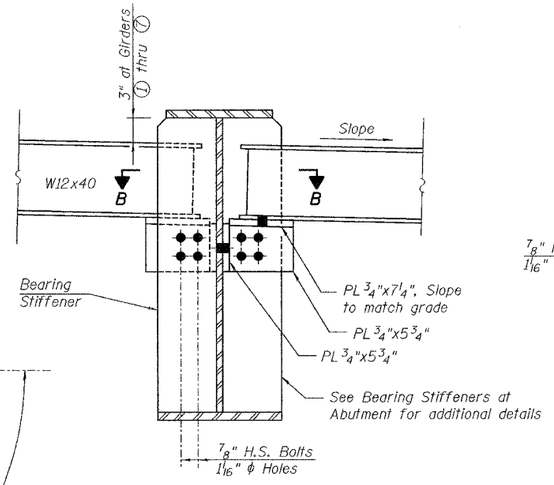
W. Abut.
(6 Required)

Note: Two hardened washers shall be required over all oversized holes.



SECTION A-A

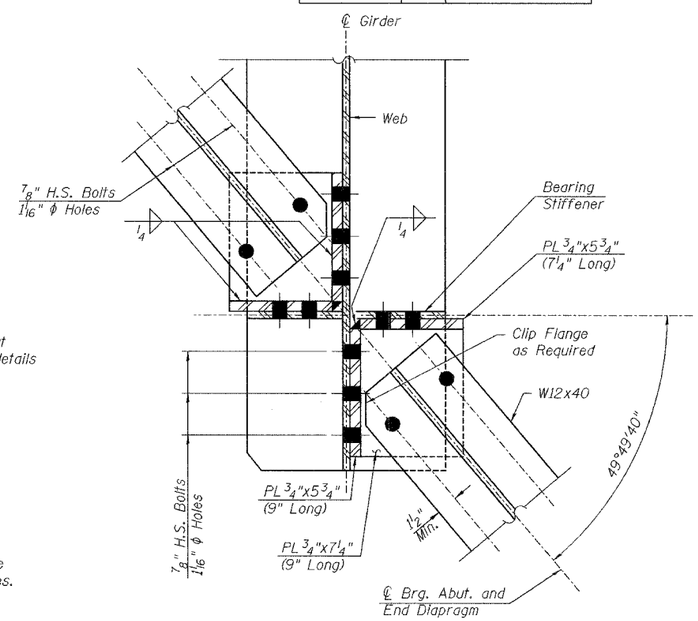
W. Abut.



END DIAPHRAGM DE

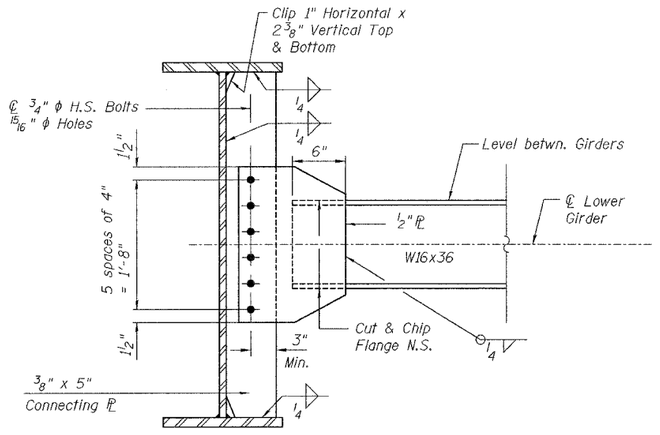
E. Abut.
(6 Required)

Note: Two hardened washers shall be required over all oversized holes.



SECTION B-B

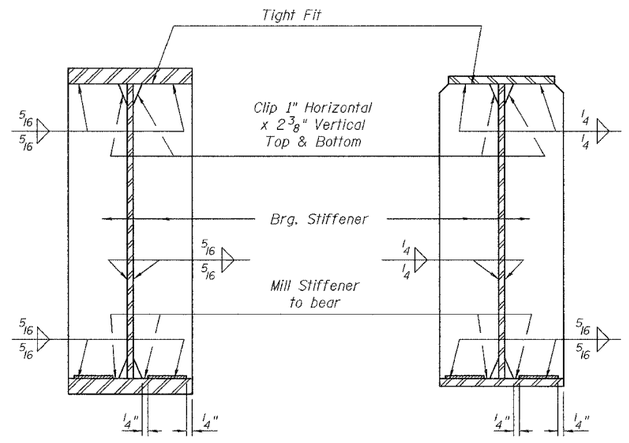
E. Abut.



DIAPHRAGM D

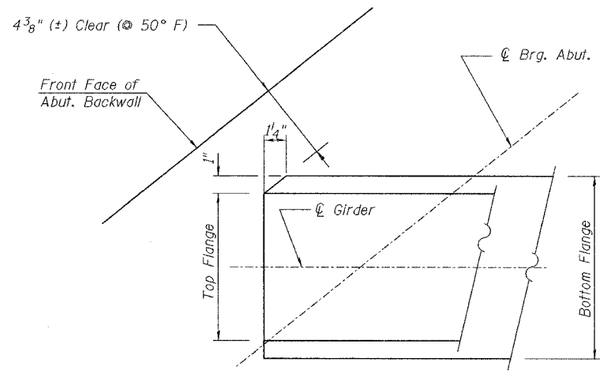
(44 Required)

Note: Two hardened washers shall be required over all oversized holes.



BEARING STIFFENER AT PIER

BEARING STIFFENER AT ABUTMENT



TYPICAL FLANGE CLIPPING DETAILS

Bearing stiffner not shown for clarity.

DESIGNED	SRT
CHECKED	JJI
DRAWN	GM
CHECKED	JJI

STRUCTURAL STEEL DETAILS

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327F
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

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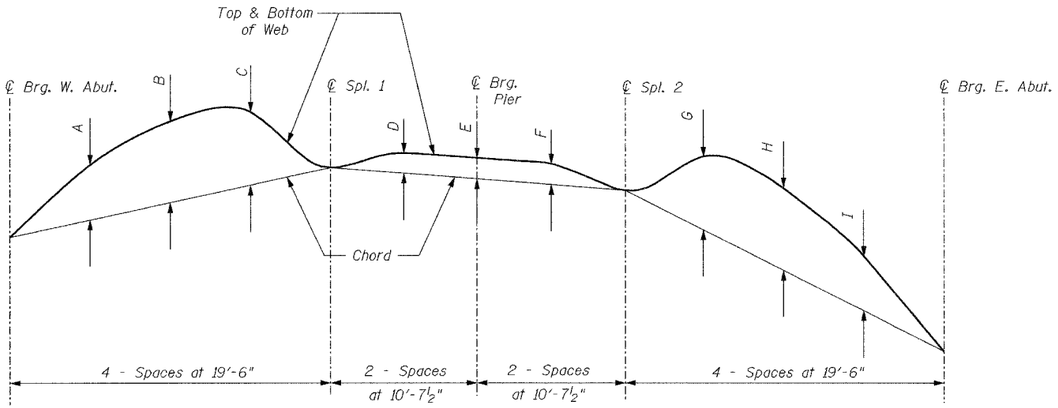
CONTRACT NO. 62952

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 F	COOK	16	11
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 9
14 SHEETS

TOP OF WEB ELEVATIONS
(For Fabrication Only)

GIRDER NO.	℄ BRG. W. ABUT.	℄ SPLICE 1	℄ BRG. PIER	℄ SPLICE 2	℄ BRG. E. ABUT.
1	700.976	701.076	701.059	700.965	700.461
2	701.052	701.188	701.190	701.101	700.647
3	701.124	701.301	701.317	701.238	700.830
4	701.191	701.412	701.440	701.373	701.008
5	701.255	701.520	701.560	701.504	701.183
6	701.316	701.623	701.675	701.632	701.354
7	701.372	701.725	701.787	701.757	701.521



CAMBER DIAGRAM

Girder	A	B	C	D	E	F	G	H	I
1	1 13/16"	2 11/16"	2 1/2"	1/2"	7/16"	1/2"	2 1/2"	2 11/16"	1 13/16"
2-7	1 5/8"	2 3/8"	2 1/4"	9/16"	9/16"	9/16"	2 1/4"	2 3/8"	1 5/8"

CAMBER TABLE

GIRDER MOMENT TABLE					
		GIRDER 1		INTERIOR GIRDER	
		0.4 Sp. 1	Pier	0.4 Sp. 1	Pier
Is	(in^4)	17,131	30,344	17,131	30,344
Ic(n)	(in^4)	48,774	-	42,955	-
Ic(3n)	(in^4)	37,979	-	30,808	-
Ss	(in^3)	741	1190	741	1190
Sc(n)	(in^3)	1114	-	1050	-
Sc(3n)	(in^3)	1003	-	946	-
Z	(in^3)	-	-	-	-
w℄	(K/ft.)	0.98	2.18	0.75	1.24
M℄	('K)	594	2666	455	1615
s℄	(K/ft.)	* 1.20	-	0.49	-
Ms℄	('K)	917	-	365	-
M$_L$	('K)	658	500	653	522
M (Imp)	('K)	145	110	144	115
$\frac{5}{3}$(M$_L$ + I)	('K)	1338	1017	1328	1062
Ma	('K)	3704	4788	2792	3480
Mu	('K)	4122	-	4079	-
fs℄ non-comp	(k.s.i.)	9.6	26.9	7.4	16.3
fs℄ (comp)	(k.s.i.)	11.0	-	4.6	-
fs$\frac{5}{3}$ (L + I)	(k.s.i.)	14.4	10.3	15.2	10.7
fs (Overload)	(k.s.i.)	35.0	37.2	27.2	27.0
fs (Total)	(k.s.i.)	-	48.4	-	35.1
VR	(K)	95.7		95.9	

*Bridge designed for an additional s℄ of 1.27 K/Ft from a future decorative north facade, applied along the north edge of deck. Girder 1 designed for 0.7 K/Ft of this load.

REACTION TABLE					
		GIRDER 1		INTERIOR GIRDER	
		Abut.	Pier	Abut.	Pier
R℄	(K)	81.3	270.1	45.2	155.6
R$_L$	(K)	33.2	53.6	33.2	53.9
Imp.	(K)	7.3	11.8	7.3	11.9
R (Total)	(K)	121.8	335.5	85.7	221.4

Is and Ss are the moment of inertia and section modulus of the steel section used in computing fs (Total & Overload).

Ic and Sc are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.

Ic (3n) and Sc (3n) are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads.

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℄ + Ms℄ + $\frac{5}{3}$(M$_L$ + I)].

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℄ + Ms℄ + $\frac{5}{3}$(M$_L$ + I).

fs (Total) (Non-compact section) is the sum of the stresses due to 1.3[M℄ + Ms℄ + $\frac{5}{3}$(M$_L$ + I)].

DESIGNED	SRT
CHECKED	JJI
DRAWN	GM
CHECKED	JJI

Bollinger, Lach & Associates, Inc.

I-2-G

10-22-04

GIRDER DETAILS

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327F
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

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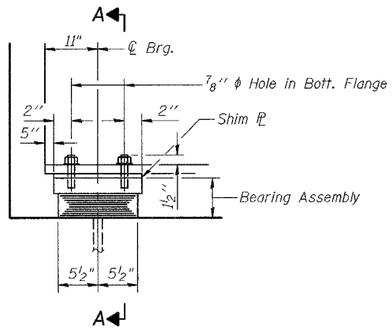
CONTRACT NO. 62952

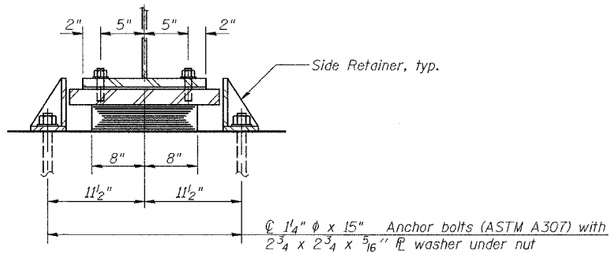
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 F	COOK	16	12
FED. ROAD DIST. NO. 9		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 10
14 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

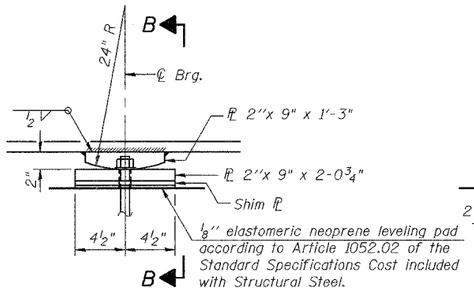


ELEVATION AT ABUT.



SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.



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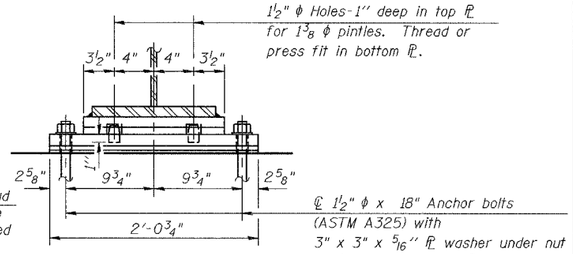
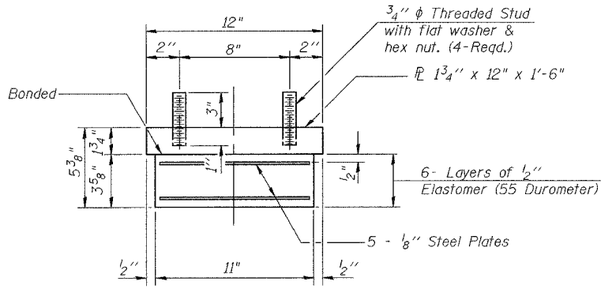


SECTION B-B

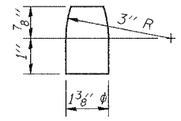
FIXED BEARING

Notes:
Anchor bolts at fixed bearings may be built into the masonry.
See sheet 11 for Anchor Bolt installation.

Structural steel for bearing plates shall conform to the requirements of AASTHO M270 Gr. 50.



BEARING ASSEMBLY



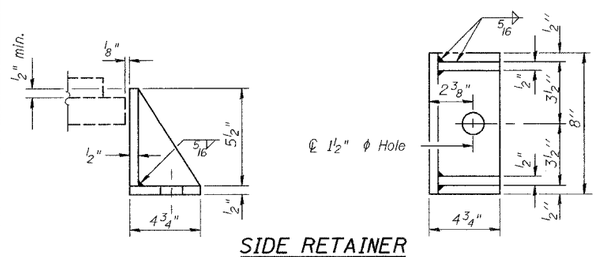
PINTLE
M270 Gr. 50

Note:
Shim plates shall not be placed under Bearing Assembly.

SHIM PLATES

	Girder						
Location	1	2	3	4	5	6	7
West Abutment	-	-	-	-	-	-	11/16"
Pier 1	-	-	-	-	-	-	-
East Abutment	-	-	-	-	-	-	-

Weight included with Structural Steel



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.
Weight included with Structural Steel.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	14

ANCHOR BOLTS
NOT PART OF THIS CONTRACT

DESIGNED	JJI
CHECKED	SRT
DRAWN	MD
CHECKED	SRT

Bollinger, Lach & Associates, Inc.

I-2-E1

10-22-04

BEARINGS

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327F
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

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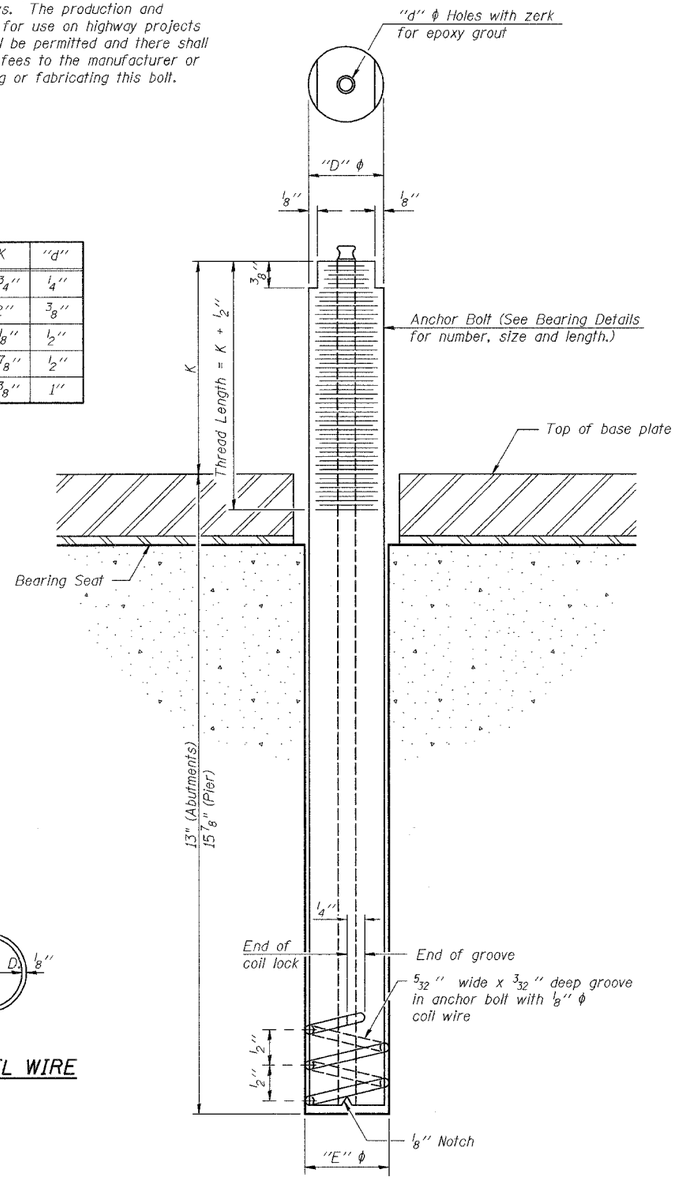
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 F	COOK	16	13
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

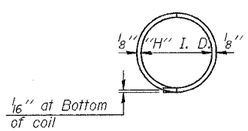
SHEET NO. 11
14 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

D	E	H	K	"d"
1"	1 1/8"	13/16"	1 3/4"	1/4"
1 1/4"	1 3/8"	1 1/16"	2"	3/8"
1 1/2"	1 5/8"	1 5/16"	2 1/8"	1/2"
2"	2 1/8"	1 13/16"	2 7/8"	1/2"
2 1/2"	2 5/8"	2 5/16"	3 3/8"	1"



ILLINOIS COIL-LOCK ANCHOR BOLT



PLAN-COIL WIRE

MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.

The coil wire shall be made of any suitable soft steel wire.

The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.

The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.

2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.

The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:

1. *A threaded rod stud with nut and washer of the type specified.*
2. *A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.*

Location	Type	
	ASTM A307	ASTM A325
W.Abut	14-1 1/4" ϕ X 15"	
Pier		14-1 1/2" ϕ X 18"
E. Abut	14-1 1/4" ϕ X 15"	

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted.

Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.

The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for Furnishing and Erecting Structural Steel.

DESIGNED	
CHECKED	
DRAWN	MD
CHECKED	JJI

Bollinger, Lach & Associates, Inc.

ABB-1 10-22-04

FOR INFORMATION ONLY
NOT PART OF THIS CONTRACT

ANCHOR BOLTS

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327F
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

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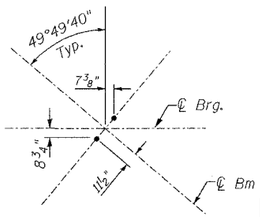
CONTRACT NO. 62952

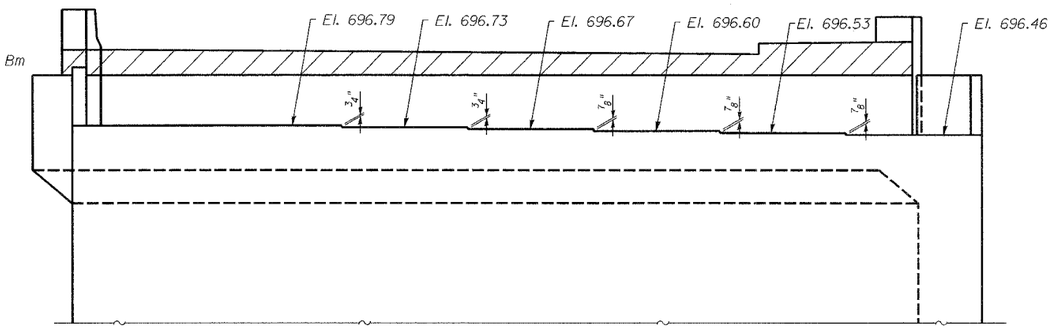
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 F	COOK	16	14
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 12
14 SHEETS

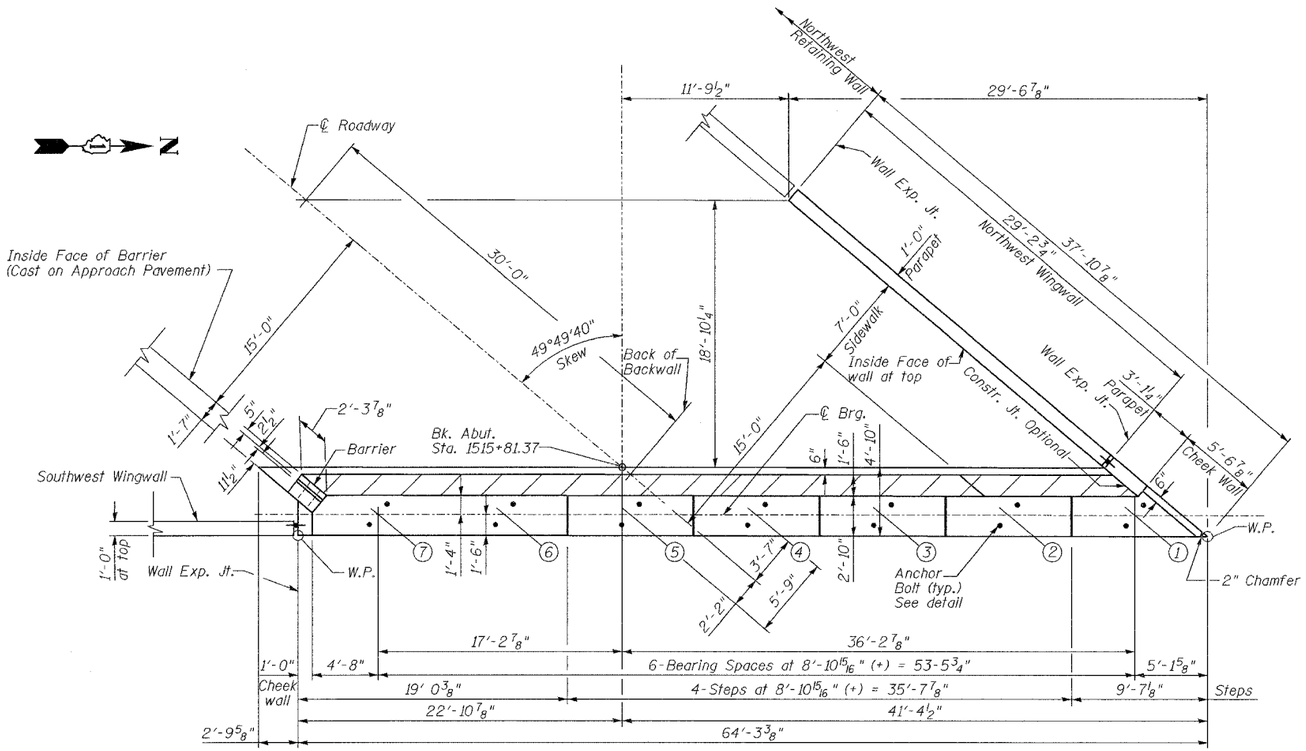
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ANCHOR BOLT LOCATION



PARTIAL ELEVATION



TOP PLAN

DESIGNED	JJI
CHECKED	SRT
DRAWN	MD
CHECKED	SRT

Bollinger, Lach & Associates, Inc.

FOR INFORMATION ONLY
NOT PART OF THIS CONTRACT

WEST ABUTMENT

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327F
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

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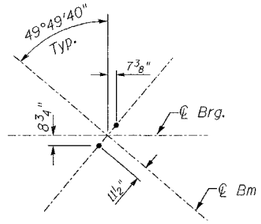
CONTRACT NO. 62952

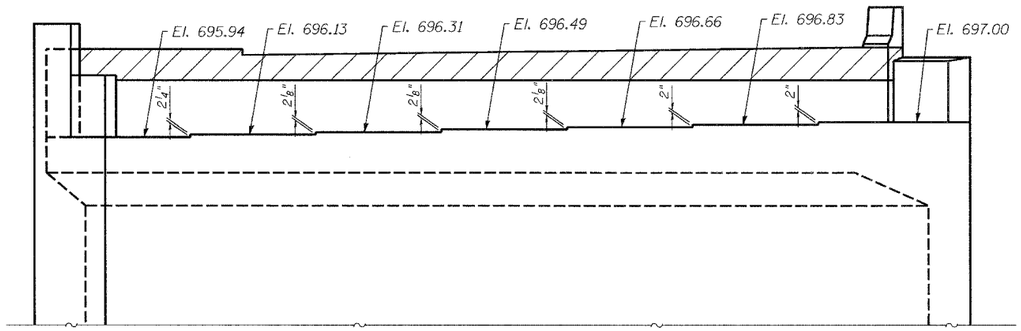
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 F	COOK	16	15
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 13
14 SHEETS

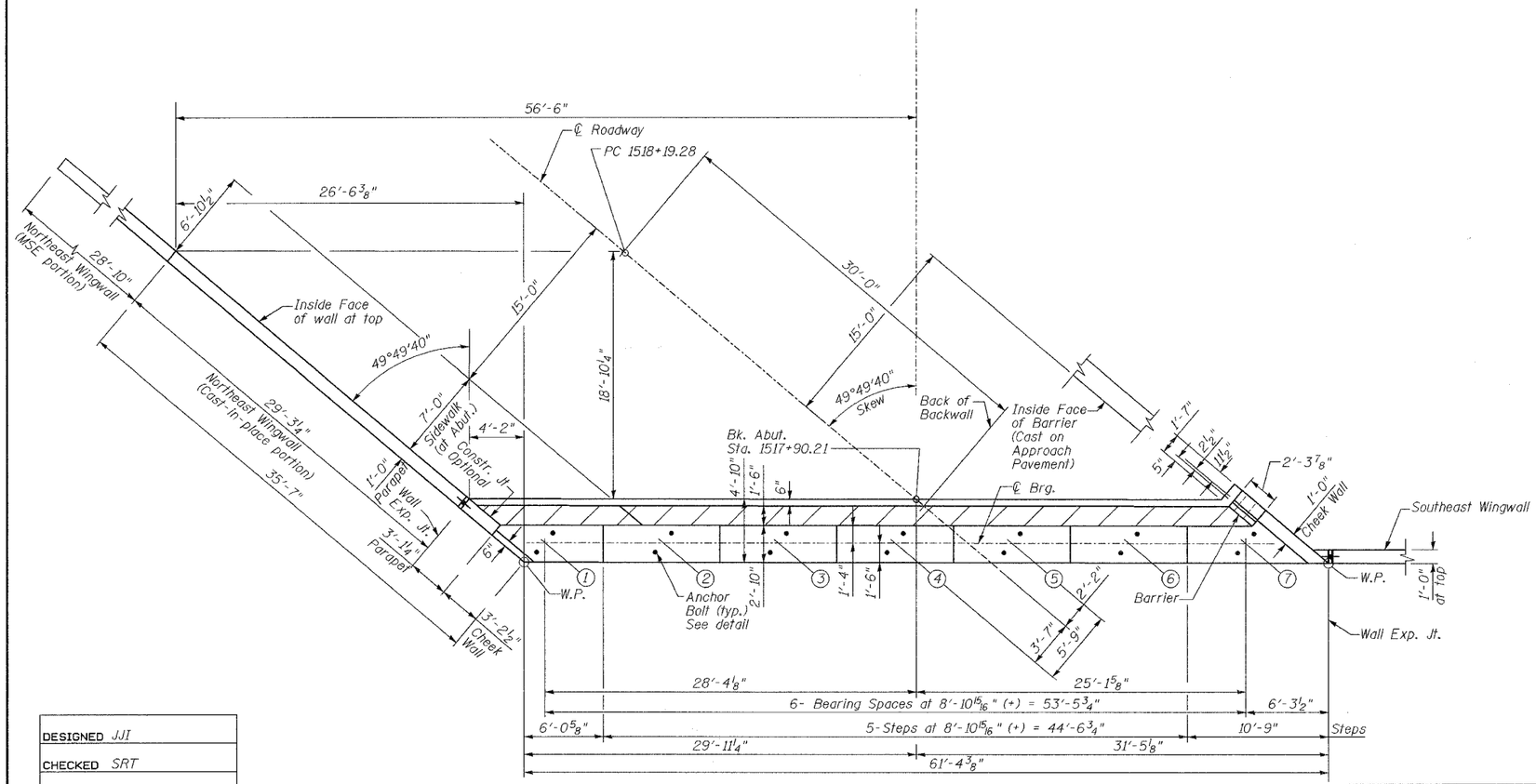
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ANCHOR BOLT LOCATION



PARTIAL ELEVATION



TOP PLAN

DESIGNED	JJI
CHECKED	SRT
DRAWN	MD
CHECKED	SRT

Bollinger, Lach & Associates, Inc.

FOR INFORMATION ONLY
NOT PART OF THIS CONTRACT

EAST ABUTMENT

IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327F
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

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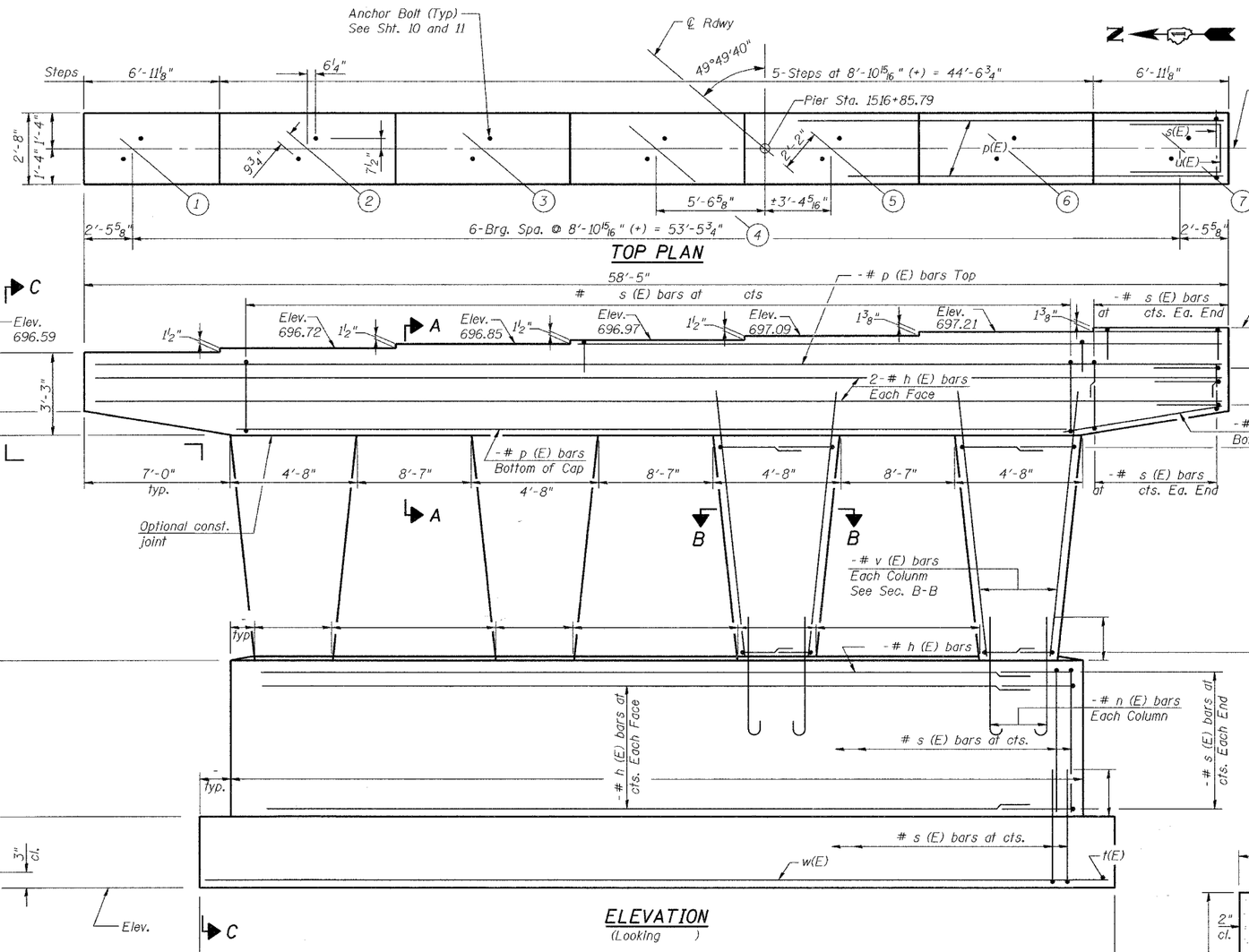
CONTRACT NO. 62952

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 3578	1327 F	COOK	16	16
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 14
14 SHEETS

Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.



Bar	A	B

Bar	No.	Size	Length	Shape
h (E)				
h (E)				
n (E)				
p (E)				
p (E)				
p (E)				
s (E)				
s (E)				
s (E)				
s (E)				
s (E)				
t (E)				
u (E)				
v (E)				
w (E)				
Structure Excavation			Cu. Yd.	
Concrete Structures			Cu. Yd.	
Reinforcement Bars, Epoxy Coated			Pound	

Reinforcement Bars designated (E) shall be epoxy coated.

DESIGNED	JJI
CHECKED	SRT
DRAWN	MD
CHECKED	SRT

Bollinger, Lach & Associates, Inc.

P-6 10-22-04

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IL 7 (SOUTHWEST HIGHWAY) OVER
US 45 (LA GRANGE ROAD)
F.A.U. ROUTE 3578 SECTION 1327F
COOK COUNTY
STA. 1516+85.79
STRUCTURE NUMBER 016-2847

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