06-17-11 LETTING ITEM 137

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	1
	ILLINOIS	CONTRACT NO. 60N01		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

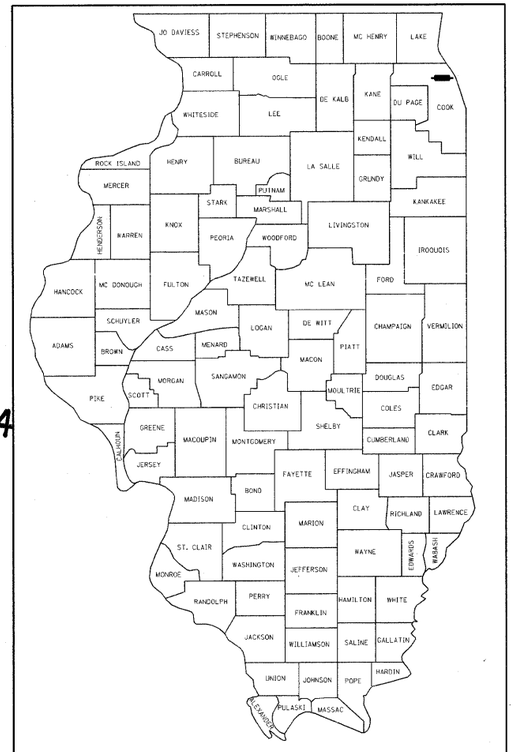
FAI 90/94 (DAN RYAN EXPRESSWAY) (I-90/94)
SECTION 2010–127–BP
CERMAK ROAD TO CANAL STREET
BRIDGE PAINTING
COOK COUNTY

PROJECT: IM-000S(856)054

FOR INDEX OF SHEETS, SEE SHEET NO. 2

IMPROVEMENT LOCATED IN THE CITY OF CHICAGO

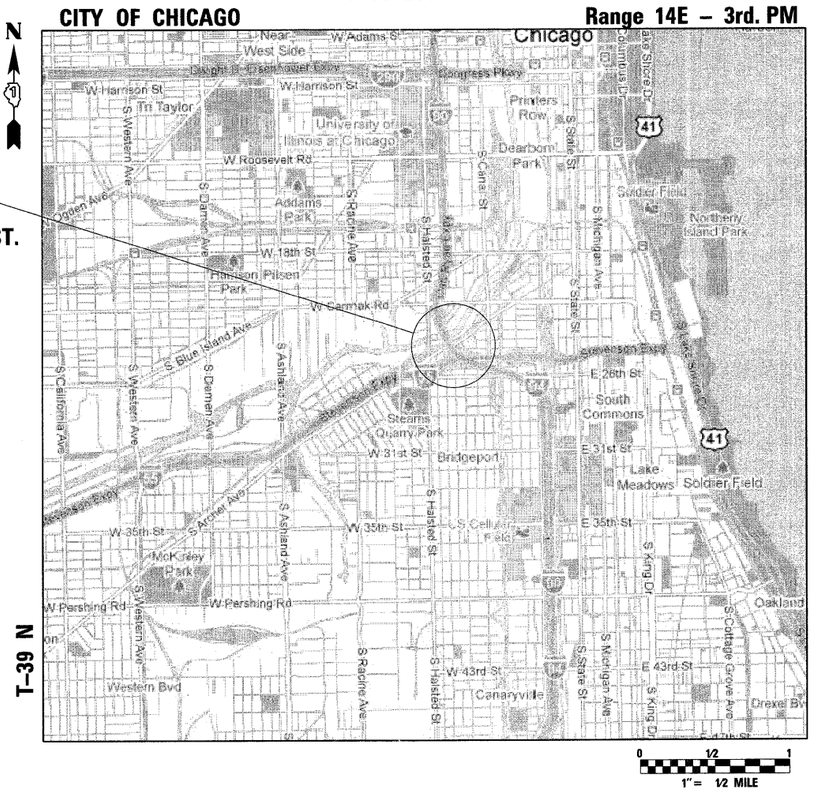
D–91–207–11



LOCATION OF SECTION INDICATED THUS: –

C–91–207–11

CITY OF CHICAGO — Range 14E – 3rd. PM



IMPROVEMENT LOCATION
I–90/94 (DAN RYAN EXPY.)
FROM CERMAK RD. TO CANAL ST.
VARIOUS STRUCTURES

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1–800–892–0123
OR 811

PROJECT MANAGER: MR. ISSAM RAYYAN, P.E. (847) 705–4178
PROJECT ENGINEER: MR. ROBERT T. BORO, P.E. (847) 705–4237

CONTRACT NO. 60N01

STATE OF ILLINOIS — JAMES M. HAMELKA — 81-6116 — REGISTERED STRUCTURAL ENGINEER — CHICAGO, ILLINOIS

COLLINS ENGINEERS, INC.
JAMES M. HAMELKA
NO. 81-6116
EXPIRES 11-30-2012

JAMES M. HAMELKA — 062-056236 — LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

COLLINS ENGINEERS, INC.
JAMES M. HAMELKA
NO. 062-056236
EXPIRES 11-30-2011

COLLINS ENGINEERS INC
123 N. WACKER DR., SUITE 300
CHICAGO, IL 60606
(312) 704-9300
ILLINOIS PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-000993

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED May 13 **20** 11
Jane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 13 **20** 11
Scott E. Stitt, P.E. for
acting ENGINEER OF DESIGN AND ENVIRONMENT

May 13 **20** 11
Christine M. Reed for
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

STATE STANDARDS

701101–02	OFF–ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106–02	OFF–ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701400–05	FREEWAY/EXPRESSWAY, APPROACH TO LANE CLOSURE
701401–06	FREEWAY/EXPRESSWAY, LANE CLOSURE
701411–07	LANE CLOSURE, MULTILANE, AT ENRANCE OR EXIT RAMP, FOR SPEEDS > 45 MPH
701501–06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701606–07	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701801–04	LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901–01	TRAFFIC CONTROL DEVICES

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS AND STATE STANDARDS

SCALE: NTS | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	2
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

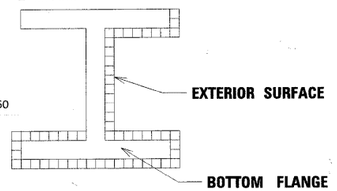
@FILE1@

GENERAL NOTES

~~BEFORE STARTING ANY EXCAVATION THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800 892–0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES 48 HOURS NOTIFICATION IS REQUIRED.~~

1. BEFORE STARTING ANY EXCAVATION IN THE CITY OF CHICAGO, THE CONTRACTOR SHALL CALL "C.U.A.N." AT (312) 744–7000 OR FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES FOR THE CITY OF CHICAGO.
3. WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPERATIONS, THE CONTRACTOR SHALL EXCERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS & CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION & ORDERING OF MATERIALS.
5. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.
6. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705–4470 FOR ARTERIALS OR (847) 705–4151 FOR EXPRESSWAYS A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
7. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
8. DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS.
9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT AND PRESERVE THE EXISTING BRIDGE LIGHTING AT ANY LOACATIONS THAT LIGHTING IS ENCOUNTERED ADJACENT TO AN AREA TO BE CLEANED AND PAINTED.
10. THE "ARTERIAL ROAD INFORMATION SIGN (TC–22)" IS APPLICABLE ONLY TO ARTERIAL ROADS AND SHALL NOT BE APPLIED TO EXPRESSWAYS.
11. ALL BRIDGE PLAN SHEETS EXCERPTED FROM EXISTING PLANS. INFORMATION THAT DOES NOT PERTAIN TO THIS CONTRACT (E.G. STEEL REPAIRS, MEMBER REPLACEMENT) MAY BE SHOWN ON THE EXISTING PLAN SHEETS.
12. THE CONTRACTOR SHALL OBTAIN COAST GUARD APPROVAL TO OCCUPY NAVIGABLE WATERS, IF REQUIRED, FOR THE PROPOSED WORK. A WORK PLAN SHALL BE PREPARED BY THE CONTRACTOR, REVIEWED AND APPROVED BY THE ENGINEER AND BE SUBMITTED BY THE ENGINEER TO THE COAST GUARD AT THE ADDRESS LISTED BELOW FOR APPROVAL.

BRIDGE ADMINISTRATOR
US COAST GUARD
NINTH COAST DISTRICT
1240 E. NINTH ST.
CLEVELAND, OH 44199-2060



FASCIA BEAM PAINTING DETAIL

FIGURE 1

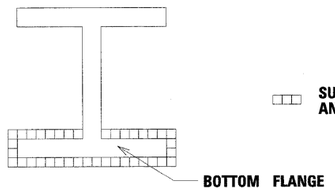


FIGURE 2

SURFACE TO BE CLEANED AND PAINTED

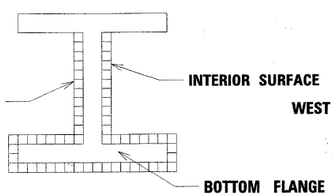


FIGURE 3

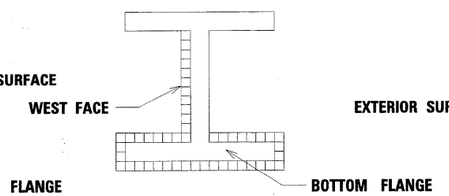


FIGURE 4

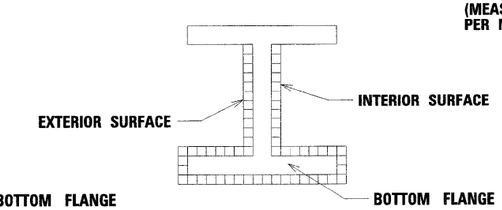


FIGURE 5

GENERAL NOTES FOR PAINT

1. CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL SHALL BE AS SPECIFIED IN THE SPECIAL PROVISION FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES".
2. A MINIMUM OF ELEVEN (11) AIR MONITORS WILL BE REQUIRED THROUGHOUT PROJECT LOCATIONS, TO MONITOR ABRASIVE BLASTING OPERATIONS FOR ALL STRUCTURES. SEE SPECIAL PROVISION FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUE." SEE LOCATION MAP FOR POTENTIAL LOCATIONS.
3. THE AREAS DESIGNATED TO BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10 SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF PAINT SYSTEM 1 – OZ/E/U. 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.
4. ALL ITEMS (SUCH AS, BUT NOT LIMITED TO: CONDUITS, BRACKETS AND DECK DRAINS) ATTACHED TO THE OUTSIDE OF THE FASCIA BEAMS SHOULD BE CLEANED AND PAINTED.
5. ALL LOCATIONS, EXCEPT LOCATION 7 (016–1046): ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL WITHIN FIVE (5) FT. (MEASURED ALONG THE BEAM) OF EITHER SIDE OF ALL EXPANSION JOINTS, SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10. THE EXTERIOR SURFACES AND TOP AND BOTTOM OF THE BOTTOM FLANGE OF THE FASCIA BEAMS (SEE FIGURE 1) SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10.
6. LOCATION 2 (016–1115): ALL STEEL PIERS FROM GROUND TO DECK, PLUS FIVE (5) FT. OF STEEL EITHER SIDE OF EACH STEEL PIER, SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10. ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL WITHIN TEN (10) FT. (MEASURED ALONG THE BEAM) OF EITHER SIDE OF PIERS NO. 13 AND 14, SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10. IN SPAN 14 (BETWEEN PIERS 13 AND 14), THE INSIDE FACES AND BOTTOM FLANGE (SEE FIGURE 3) OF BEAMS 10 AND 11 FROM WEST SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10.
7. LOCATIONS 3 (016–1070), 4 (016–1114), AND 5 (016–1066): IN SPAN 3 (BETWEEN PIERS 1A AND 2), THE INSIDE FACES AND BOTTOM FLANGE (SEE FIGURE 3) OF BEAMS 15, 16, 23, AND 24 FROM WEST, SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10. IN SPAN 3, THE WEST FACE AND BOTTOM FLANGE (SEE FIGURE 4) OF BEAM 7 FROM WEST, SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10. AT PIER 22, ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL WITHIN TEN (10) FT. (MEASURED ALONG THE BEAM) OF EITHER SIDE OF PIER 22, SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10.
8. LOCATION 6 (016–1140): IN SPAN B7 (BETWEEN PIERS 16 AND 17), ALL BOTTOM FLANGES (SEE FIGURE 2) SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10.
9. LOCATION 7 (016–1046): ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL WITHIN FIVE (5) FT. (MEASURED ALONG THE BEAM) OF EITHER SIDE OF THE DECK JOINT AT PIERS 53 AND 5, SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10. THE INSIDE FACE AND BOTTOM FLANGE (SEE FIGURE 5) OF THE SOUTH FASCIA BEAMS OF SPANS 8 (BETWEEN PIERS 59 AND 60) AND 9 (BETWEEN PIERS 58 AND 59), SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10. ALL BOTTOM FLANGES (SEE FIGURE 2) OF SPAN 7 (BETWEEN PIERS 60 AND 61), SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10. IN SPANS 15 THROUGH 17 (BETWEEN PIERS 53 AND 5), THE EXTERIOR SURFACES AND TOP AND BOTTOM OF THE BOTTOM FLANGE OF THE FASCIA BEAMS (SEE FIGURE 1) SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10.
10. LOCATION 8 (016–1059): ALL BOTTOM FLANGES (SEE FIGURE 2) OF SPANS 9 (BETWEEN PIERS 37 AND 38) AND 12 (BETWEEN PIERS 34 AND 35) SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10.
11. LOCATION 9 (016–1047): ALL BOTTOM FLANGES (SEE FIGURE 2) IN SPAN E4 (BETWEEN PIERS 26 AND 27) SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10. ALL STEEL IN SPAN E8 (BETWEEN PIERS 22 AND 25) SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10. ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL WITHIN TEN (10) FT. (MEASURED ALONG THE BEAM) OF EITHER SIDE OF THE DECK JOINT AT PIER 24, SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10.
12. LOCATION 10 (016–1062): ALL BOTTOM FLANGES (SEE FIGURE 2) IN SPAN F9 (BETWEEN PIERS 69 AND 70) SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10.
13. LOCATION 11 (016–1050): ALL BEAMS, BEARINGS AND OTHER STRUCTURAL STEEL WITHIN TEN (10) FT. (MEASURED ALONG THE BEAM) OF EITHER SIDE OF THE DECK JOINT AT PIER 82, SHALL BE CLEANED PER NEAR WHITE BLAST CLEANING SSPC–SP10.

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	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND GENERAL NOTES FOR PAINT

SCALE: NTS | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	3
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

$FILE$

SUMMARY OF QUANTITIES

URBAN
90% FED./10% STATE

CODE	ITEM	UNIT	TOTAL QUANTITY	CONSTR. TYPE CODE SAFETY – 0014
50606701	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 1	L SUM	1	1
50606702	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 2	L SUM	1	1
50606703	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 3	L SUM	1	1
50606704	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 4	L SUM	1	1
50606705	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 5	L SUM	1	1
50606706	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 6	L SUM	1	1
50606707	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 7	L SUM	1	1
50606708	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 8	L SUM	1	1
50606709	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 9	L SUM	1	1
50606710	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 10	L SUM	1	1
50606711	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 11	L SUM	1	1
Z0007112	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	L SUM	1	1
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	15	15
67100100	MOBILIZATION	L SUM	1	1
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1
Z0026346	NIGHTTIME WORK ZONE LIGHTING	L SUM	1	1
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	124.2	124.2
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1
X7011015	TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)	L SUM	1	1

Rev

FILE NAME =

USER NAME = rgail
PLOT SCALE = 1.0000 ' / IN.
PLOT DATE = 3/28/2011

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DATE - MARCH, 2011

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

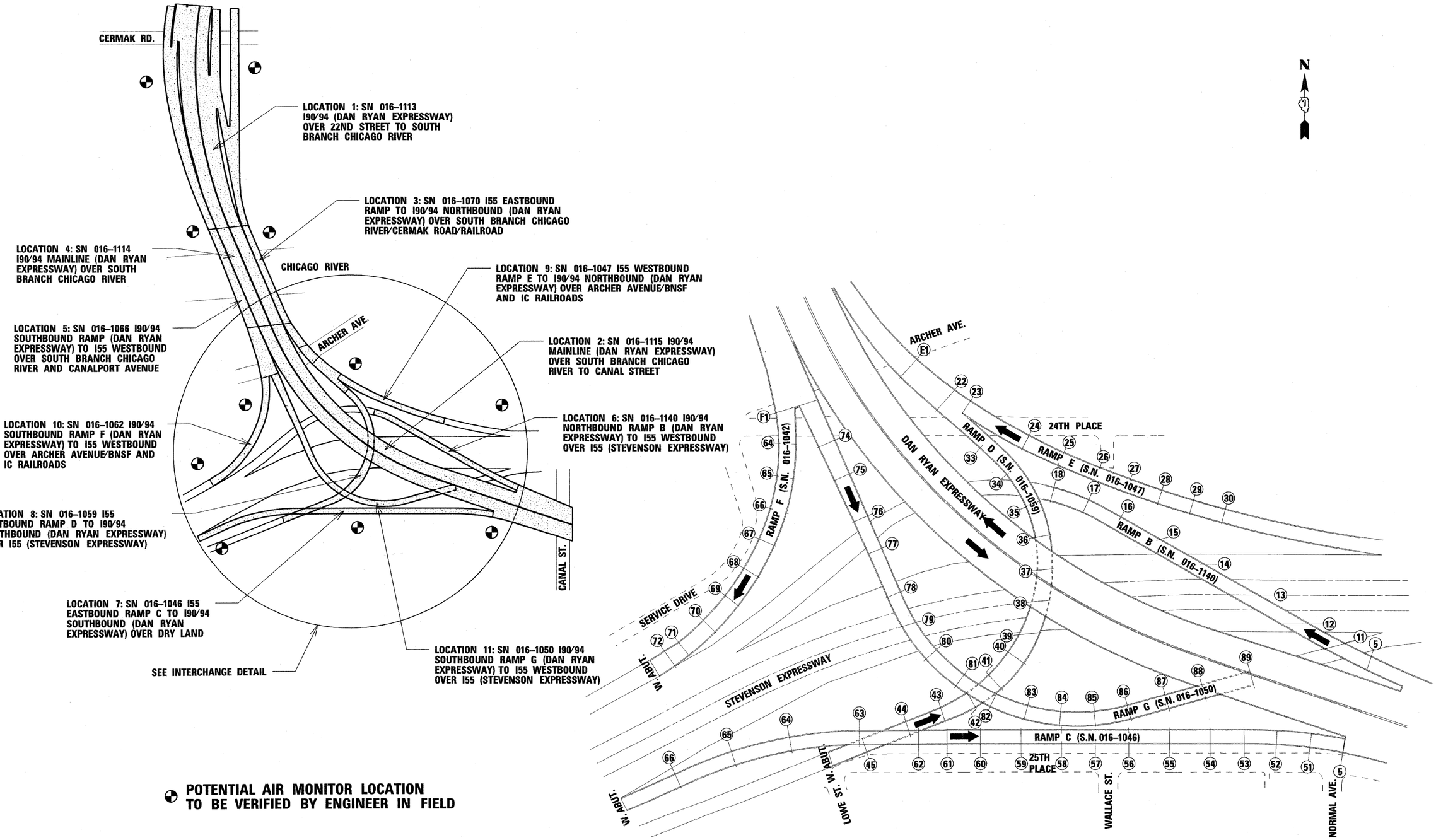
SCALE: NTS | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	4
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

$FILE$

SCHEDULE OF QUANTITIES

	LOCATION										
	SN 016-1113	SN 016-1115	SN 016-1070	SN 016-1114	SN 016-1066	SN 016-1140	SN 016-1046	SN 016-1059	SN 016-1047	SN 016-1062	SN 016-1050
ITEM	1	2	3	4	5	6	7	8	9	10	11
MOBILIZATION	0.28	0.34	0.07	0.05	0.02	0.03	0.02	0.04	0.04	0.06	0.05
TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	0.34	0.41					0.02	0.05	0.05	0.07	0.06
TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	0.27	0.67								0.06	
TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	0.39	0.47							0.06	0.08	
TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS)			0.31	0.23	0.09	0.14					0.23
TEMPORARY INFORMATION SIGNING (SQ FT)	21.4	102.8									
RAILROAD PROTECTIVE LIABILITY INSURANCE		0.59	0.12	0.09	0.03				0.07	0.10	
CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES	0.28	0.34	0.07	0.05	0.02	0.03	0.02	0.04	0.04	0.06	0.05
NIGHTTIME WORK ZONE LIGHTING			0.31	0.23	0.09	0.14					0.23



INTERCHANGE DETAIL

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LOCATION MAP	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -			94	2010-127-BP	COOK	160	6
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	PLOT DATE = 4/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS / SHEET NO. 1 OF 1 SHEETS / STA. / TO STA.			ILLINOIS	FED. AID PROJECT	

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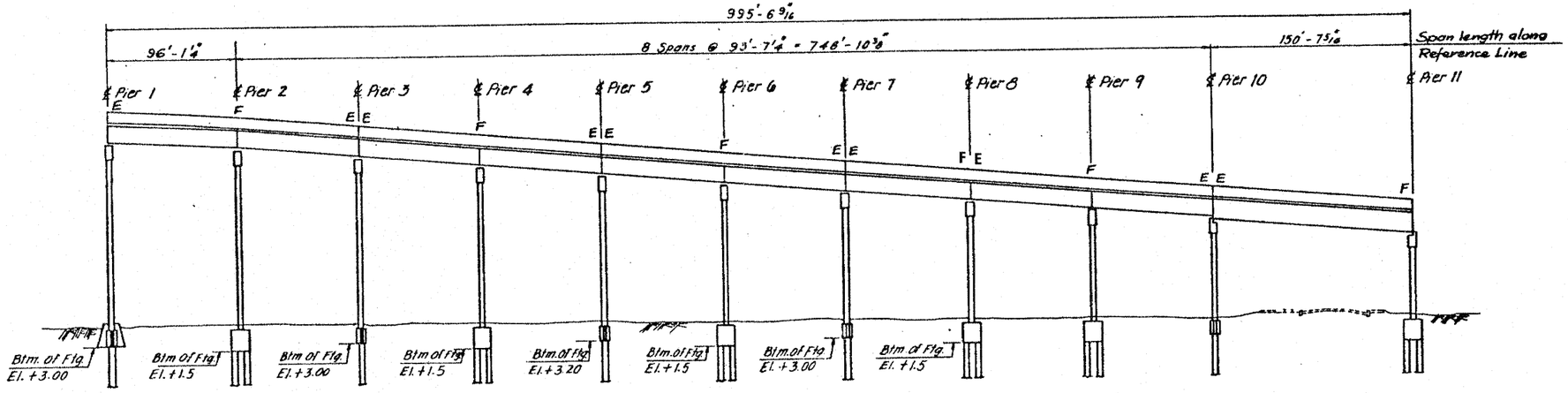
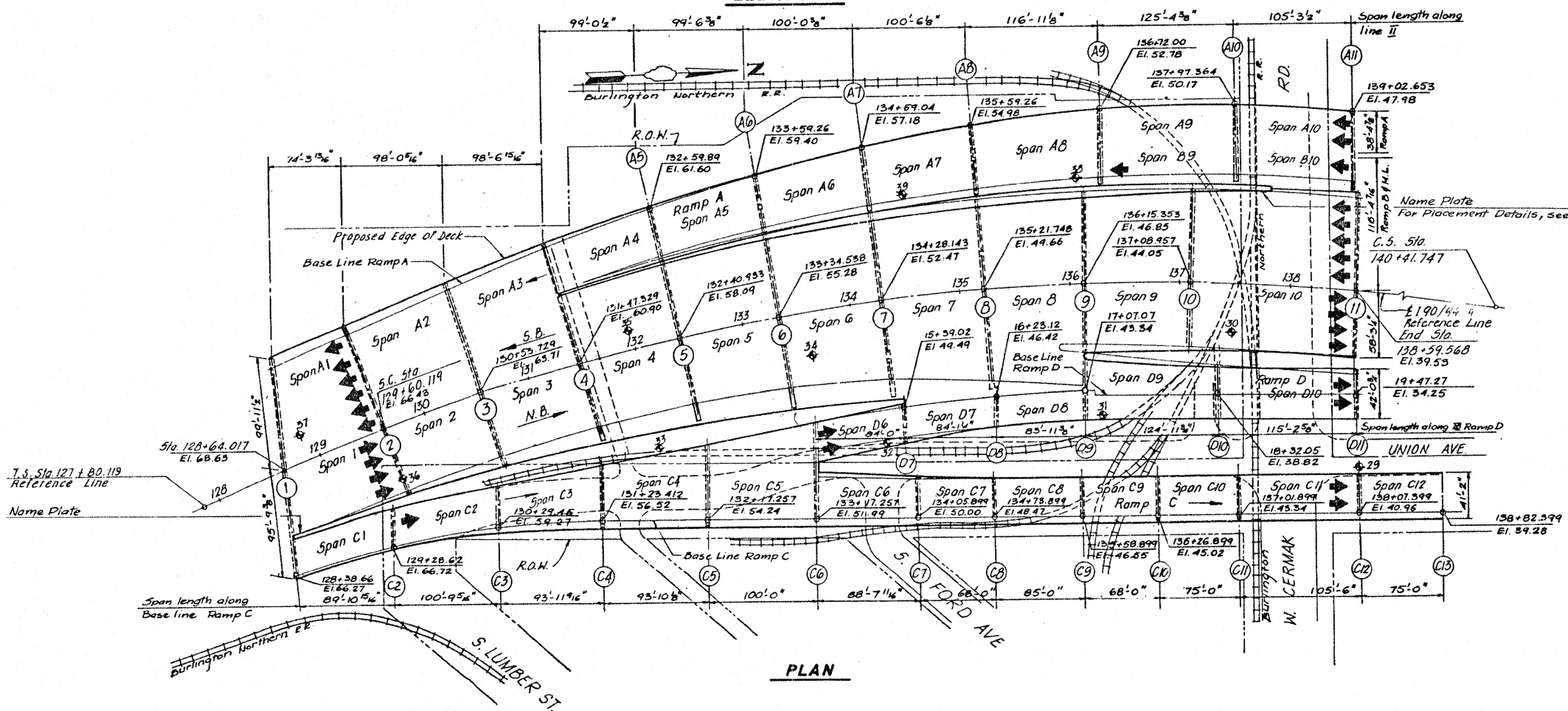


ELEVATION



PLAN

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**GENERAL PLAN AND ELEVATION – LOCATION 1 STRUCTURE NO. 016–1113**	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -			94	2010-127-BP	COOK	160	7
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -						CONTRACT NO. 60N01	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS / SHEET NO. 1 OF 40 SHEETS / STA. / TO STA.			ILLINOIS	FED. AID PROJECT	

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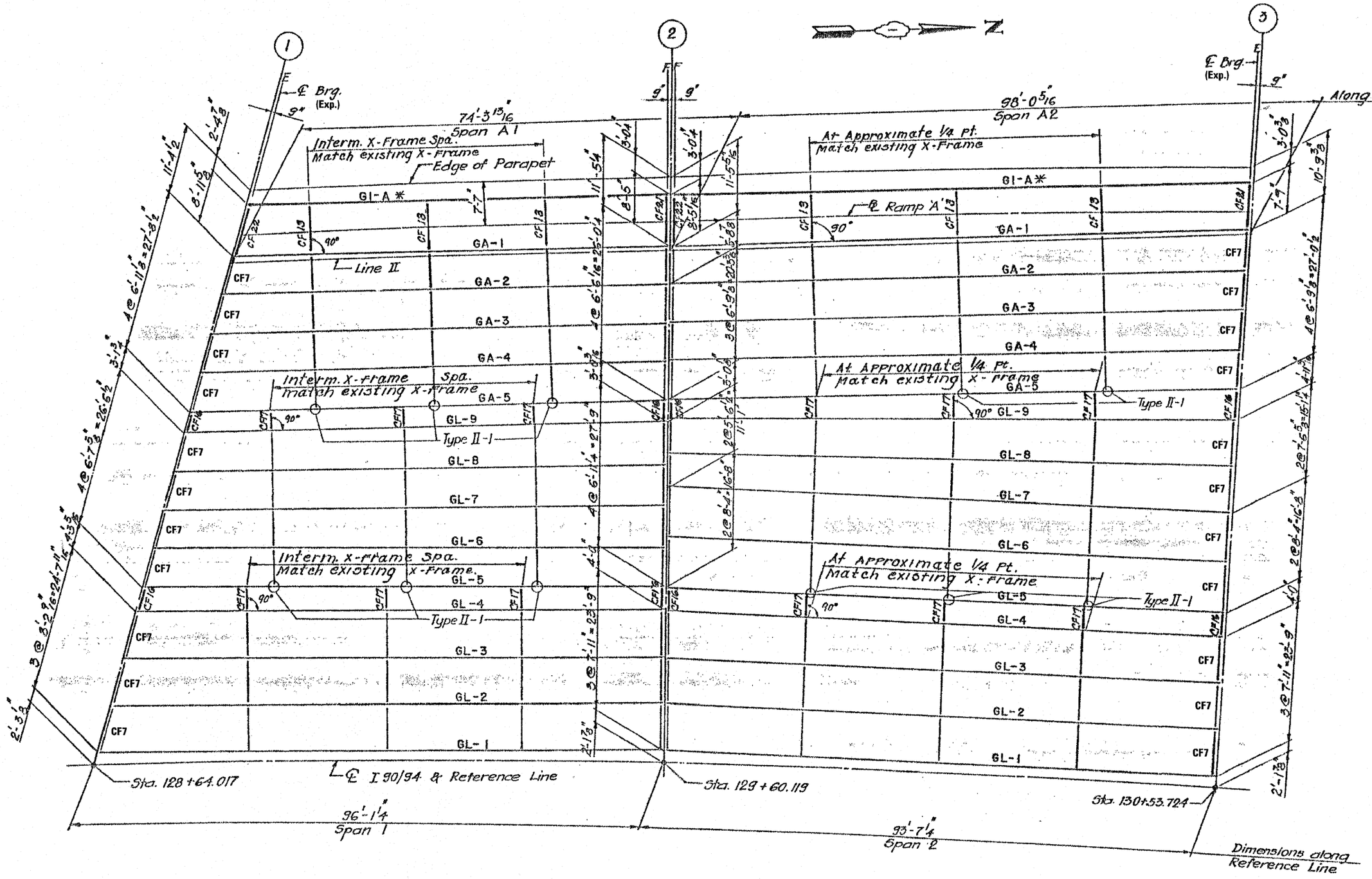


PLAN — SPANS 1 & 2 (S.B.)

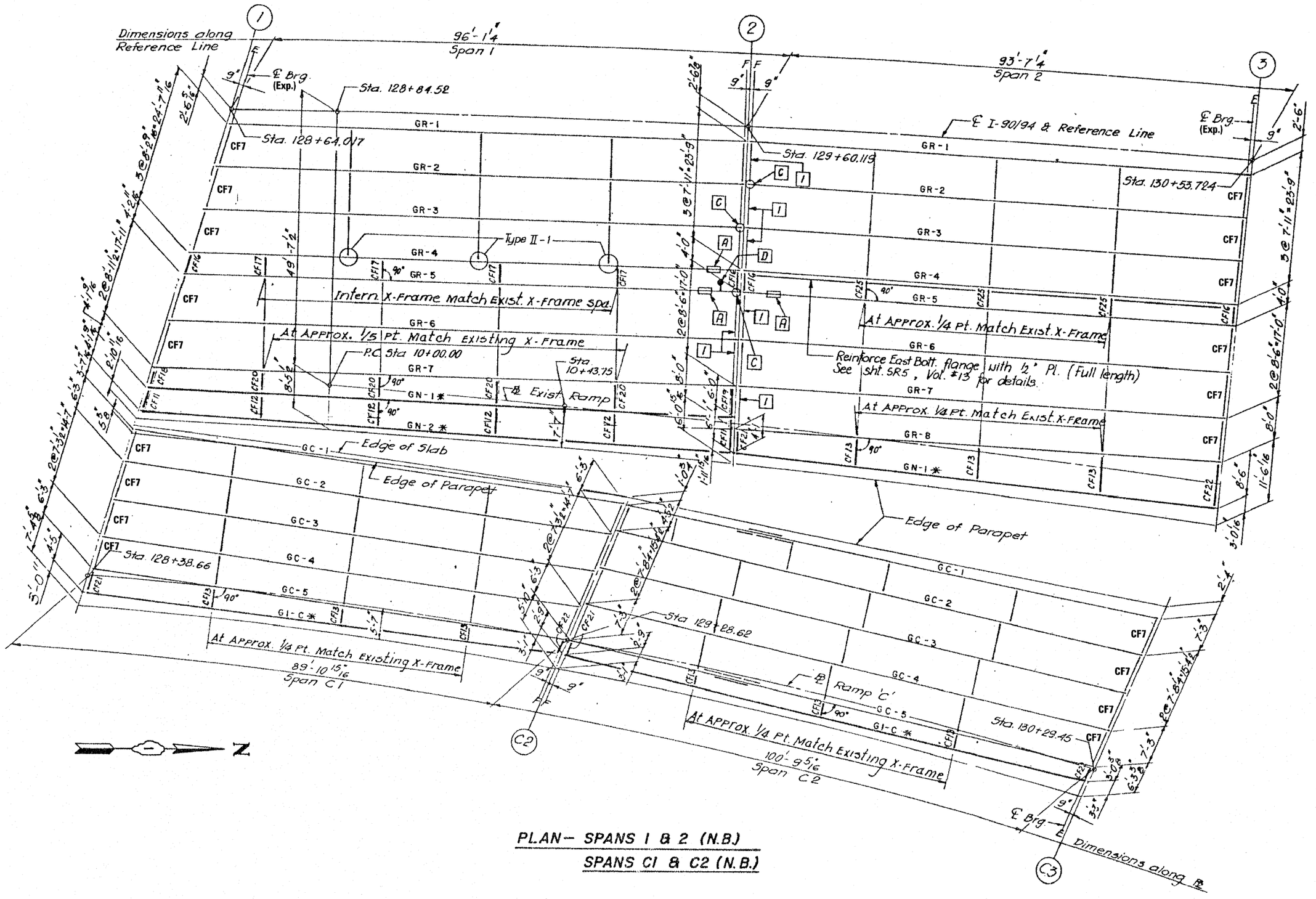
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN SPANS 1 & 2 – LOCATION 1
STRUCTURE NO. 016-1113

SCALE: NTS | SHEET NO. 2 OF 40 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	8
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			



PLAN – SPANS 1 & 2 (N.B.)
SPANS C1 & C2 (N.B.)

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN SPANS 1, 2, C1 & C2 – LOCATION 1 STRUCTURE NO. 016-1113			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160	9
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -							CONTRACT NO. 60N01		
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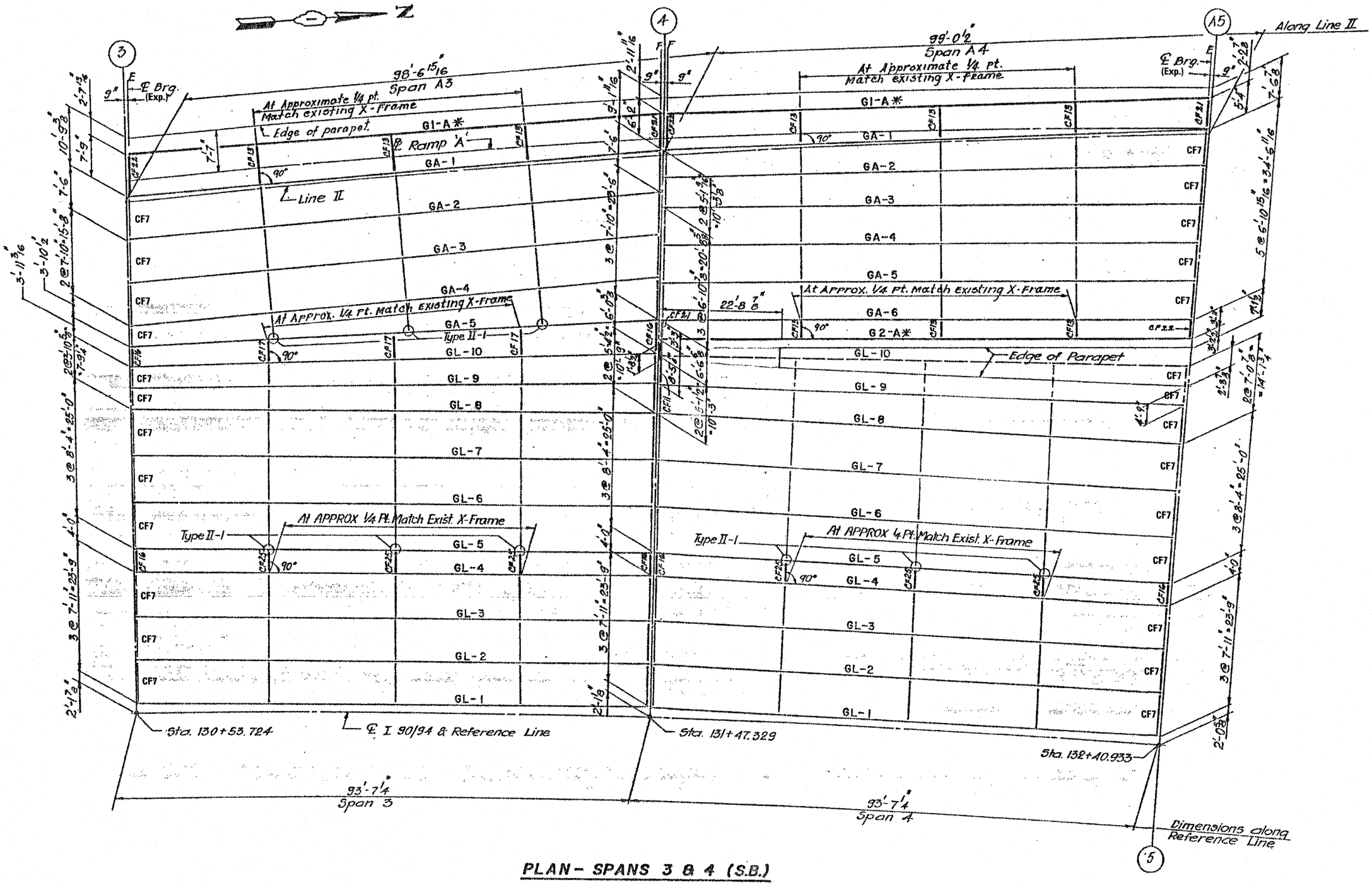
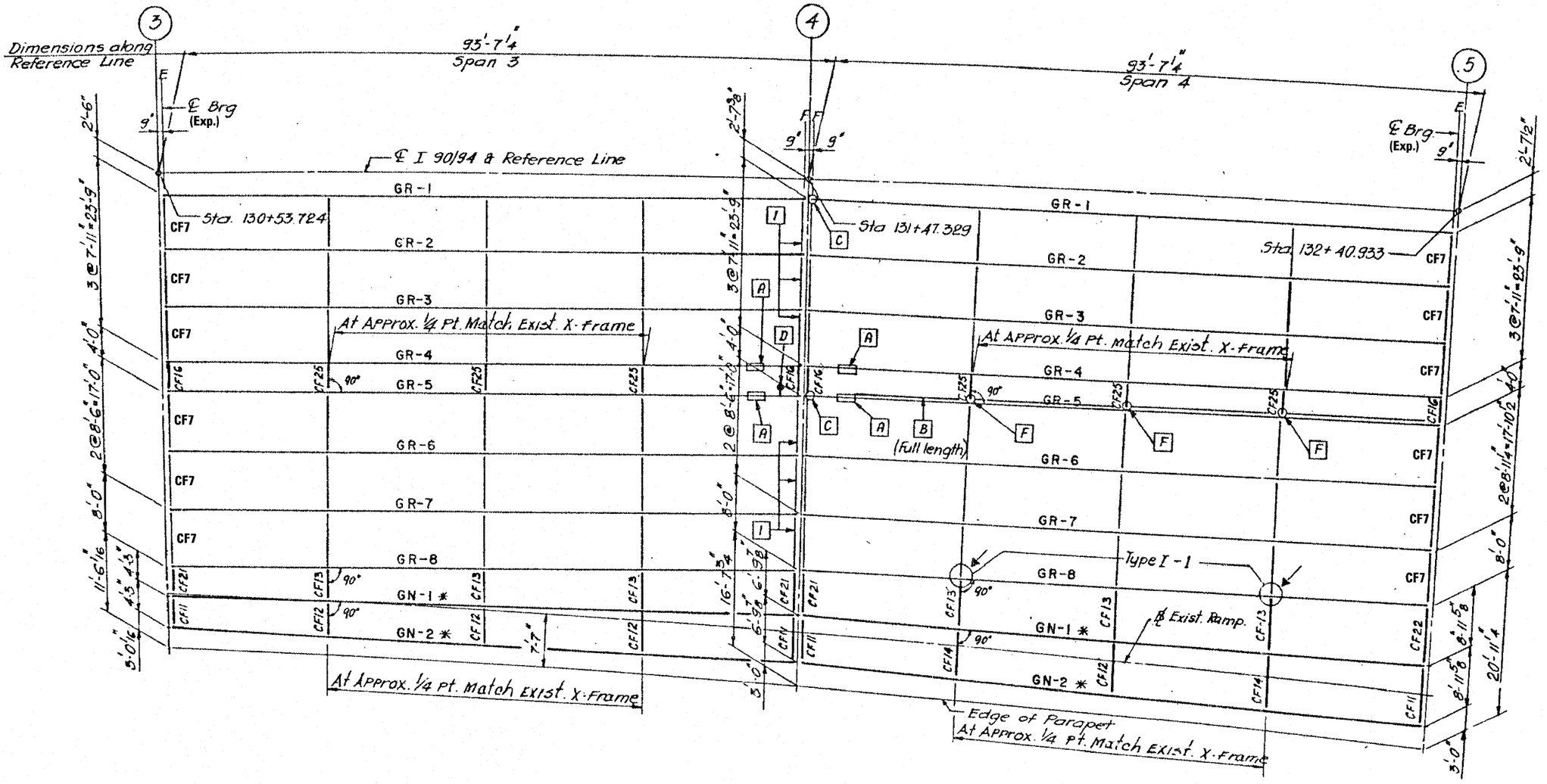


PLAN - SPANS 3 & 4 (S.B.)

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN SPANS 3 & 4 – LOCATION 1 STRUCTURE NO. 016-1113			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160	10
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -							CONTRACT NO. 60N01		
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 4 OF 40 SHEETS	STA. TO STA.			ILLINOIS FED. AID PROJECT		

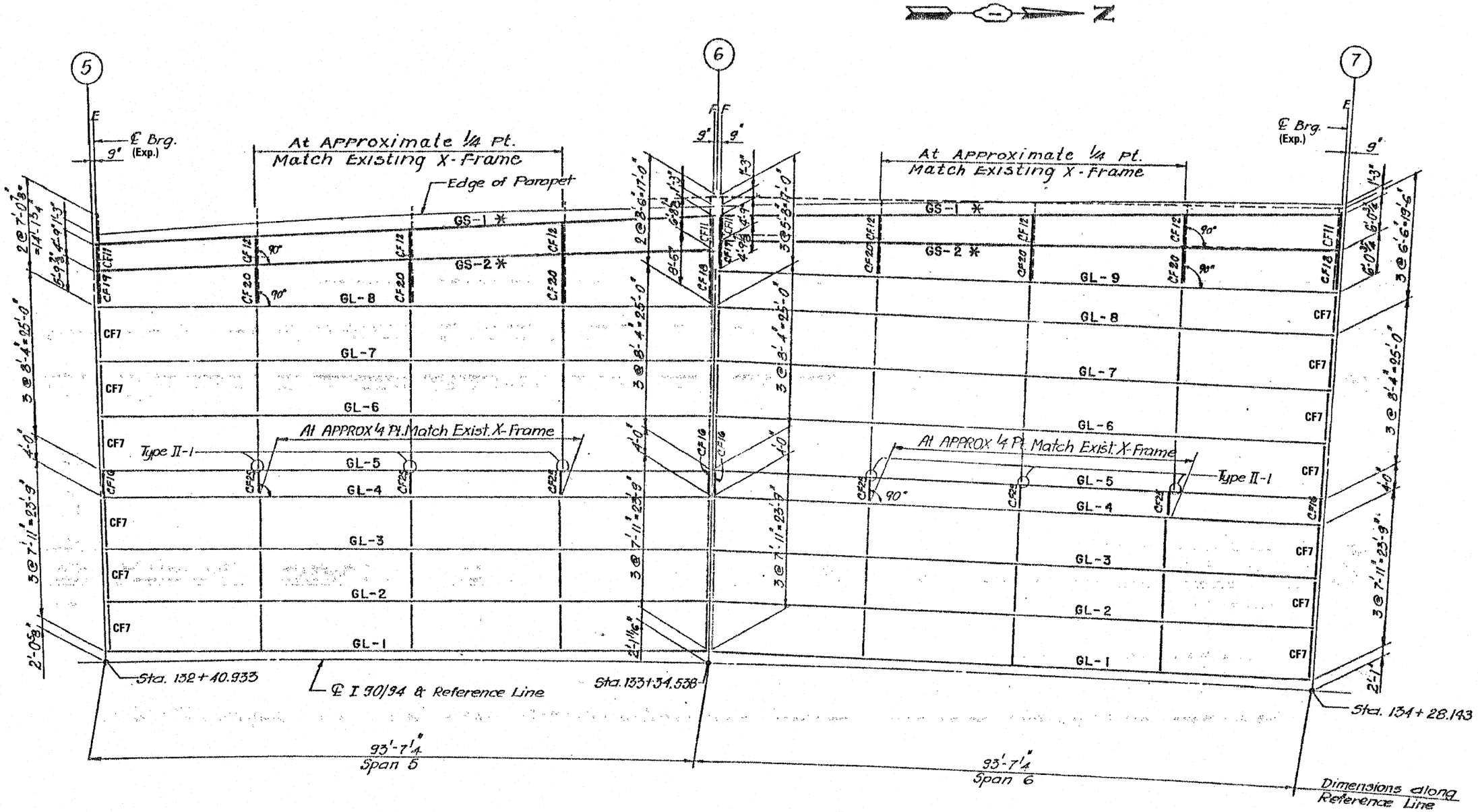
@FILE1@



PLAN — SPANS 3 & 4 (N.B.)

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN SPANS 3 & 4 – LOCATION 1 STRUCTURE NO. 016-1113			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160 / 11
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -							CONTRACT NO. 60N01	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 5 OF 40 SHEETS	STA. TO STA.			ILLINOIS FED. AID PROJECT	

8FILELS



PLAN – SPANS 5 & 6 (S.B.)

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN SPANS 5 & 6 – LOCATION 1 STRUCTURE NO. 016-1113			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160	12
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -							CONTRACT NO. 60N01		
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 6 OF 40 SHEETS	STA. TO STA.			ILLINOIS FED. AID PROJECT		

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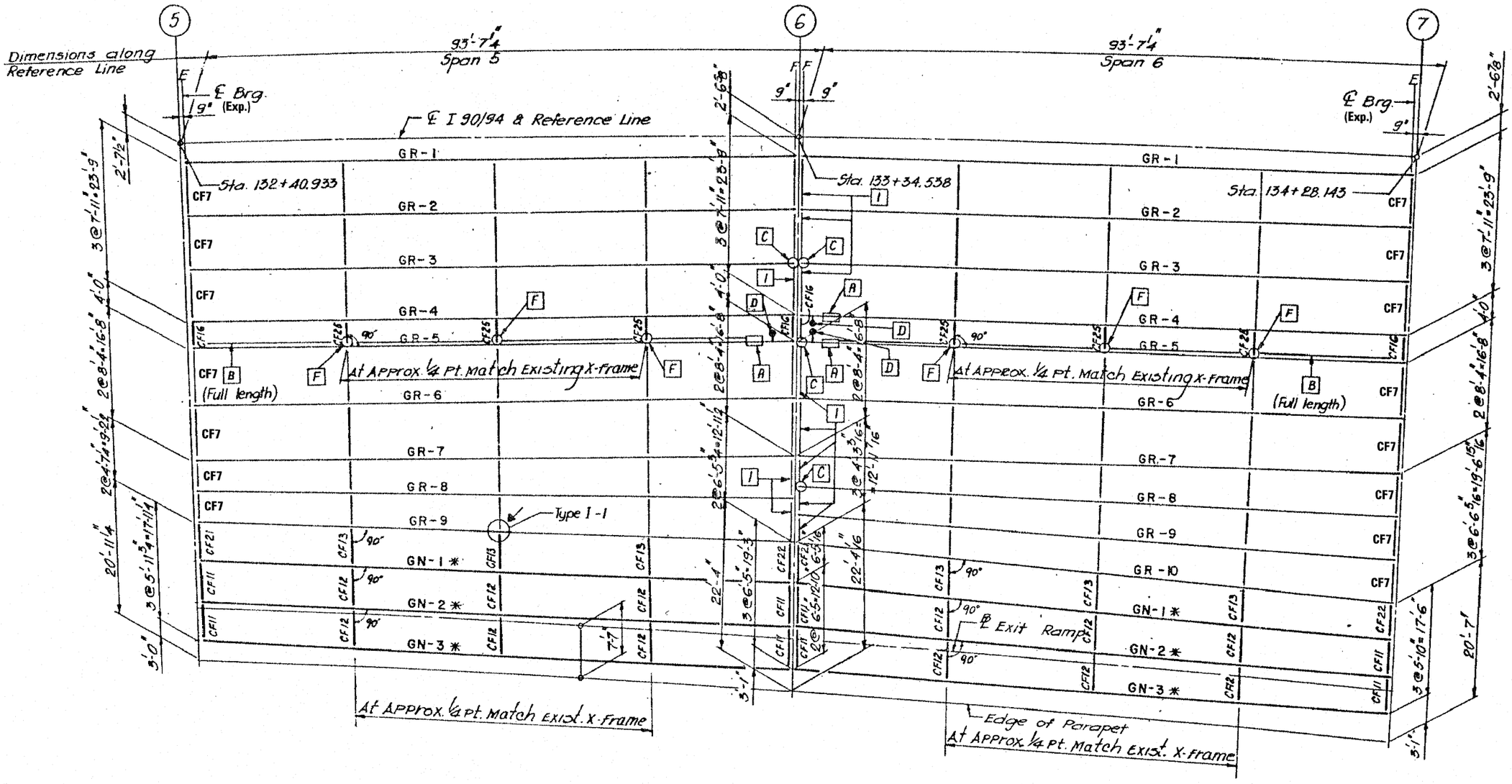

PLAN – SPANS 5 & 6 (N.B)

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN SPANS 5 & 6 – LOCATION 1 STRUCTURE NO. 016–1113	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -			94	2010-127-BP	COOK	160	13
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -						CONTRACT NO. 60N01	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS SHEET NO. 7 OF 40 SHEETS STA. TO STA.			ILLINOIS	FED. AID PROJECT	

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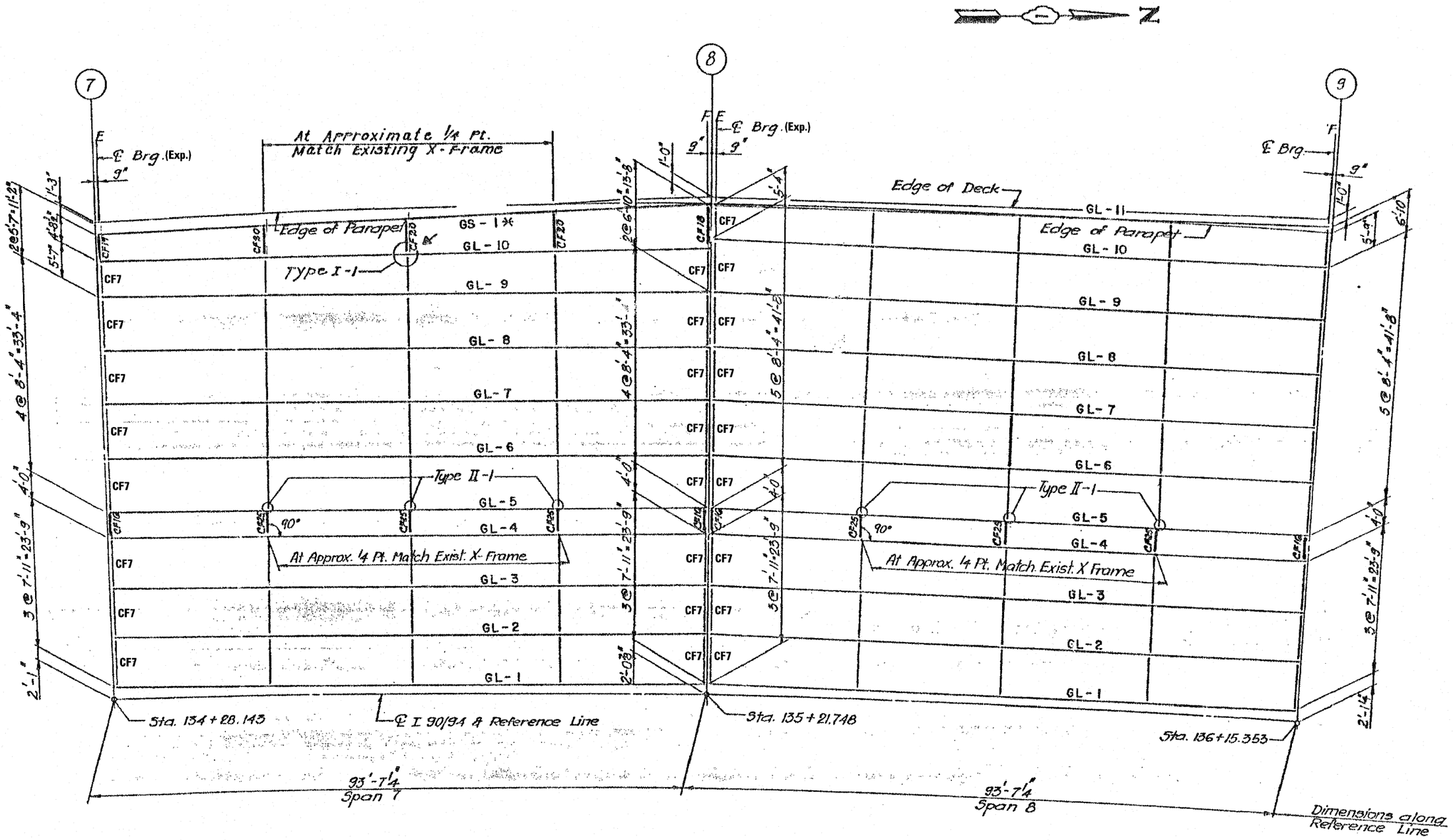

PLAN – SPANS 7 & 8 (S.B.)

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN SPANS 7 & 8 – LOCATION 1 STRUCTURE NO. 016–1113			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160	14
	PLOT SCALE = 1.2000 ' / IN.	CHECKED - JMH	REVISED -							CONTRACT NO. 60N01		
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 8 OF 40 SHEETS	STA. TO STA.		ILLINOIS FED. AID PROJECT			

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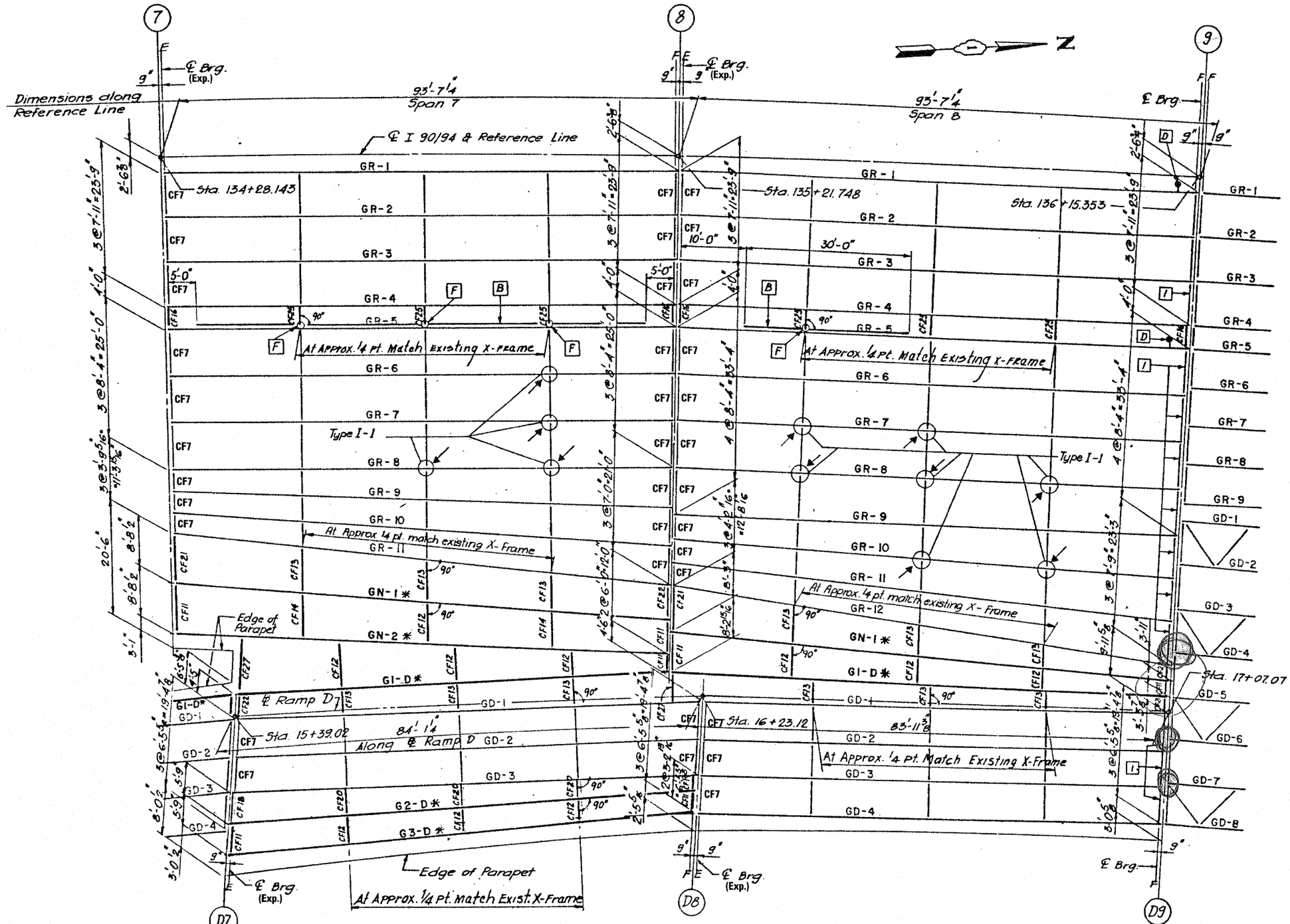

PLAN – SPANS 7 & 8 (N.B.)
SPANS D7 & D8 (N.B.)

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN SPANS 7, 8, D7 & D8 – LOCATION 1
STRUCTURE NO. 016-1113

SCALE: NTS | SHEET NO. 9 OF 40 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	15
		CONTRACT NO. 60N01		
	ILLINOIS	FED. AID PROJECT		

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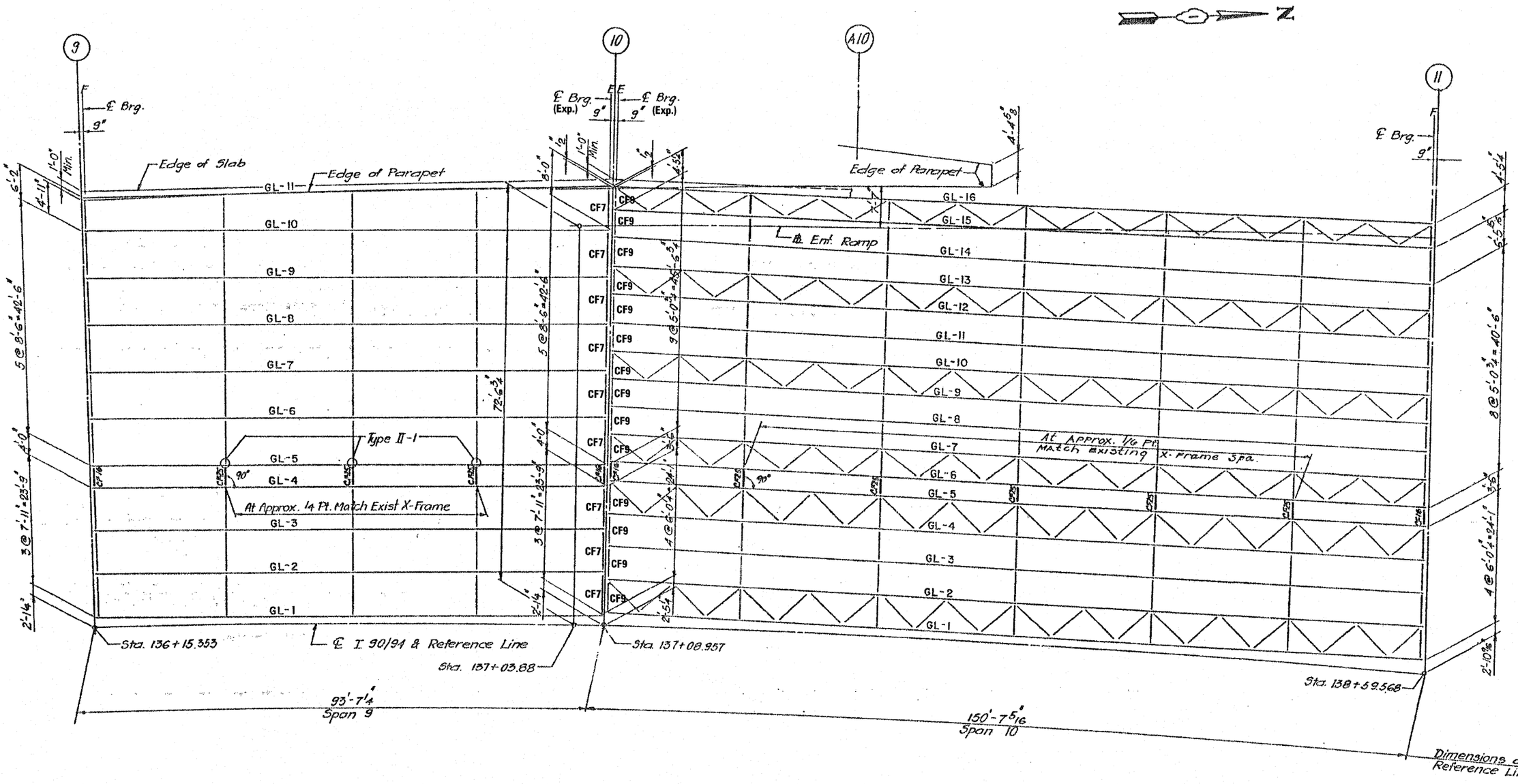
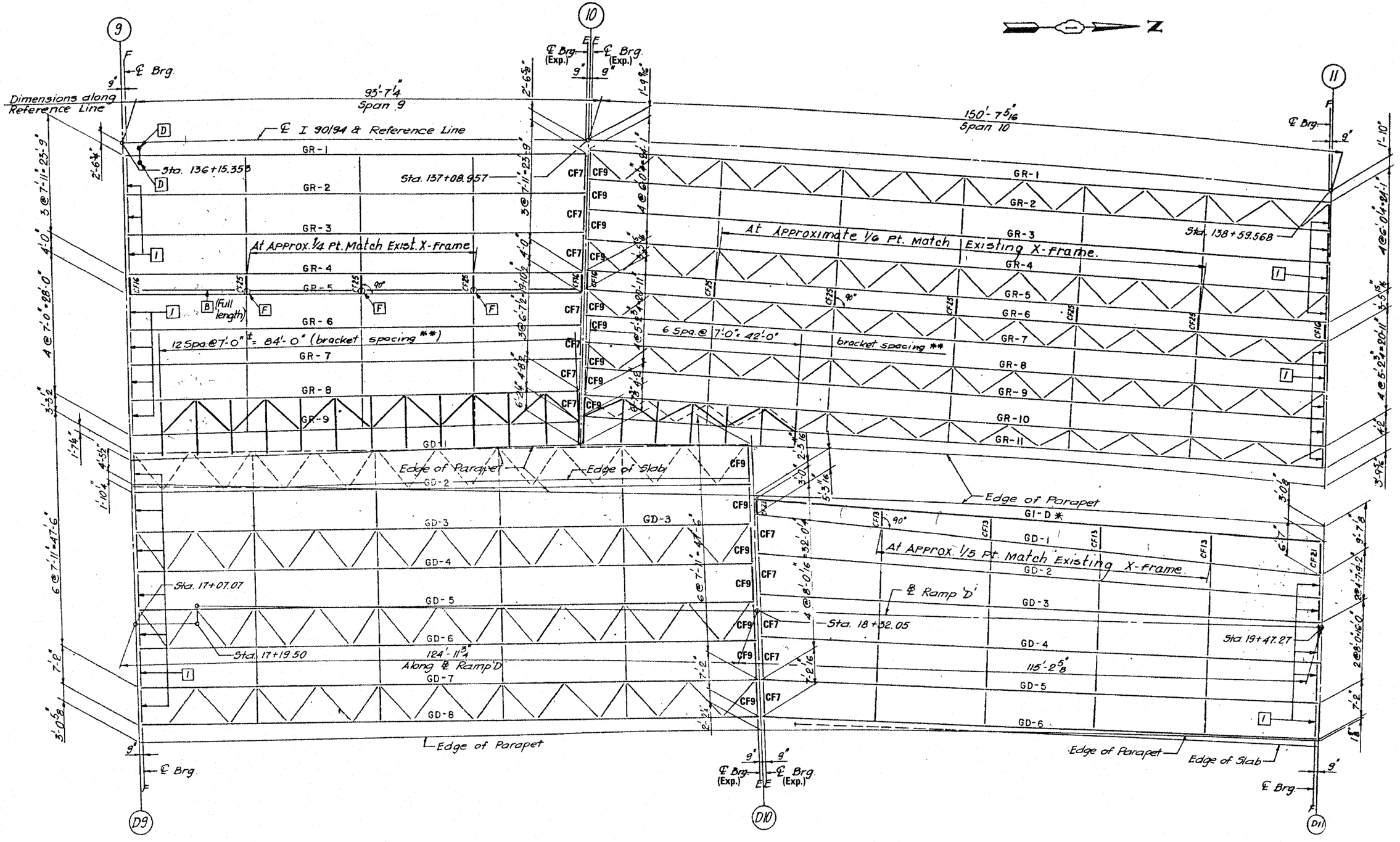


PLAN - SPANS 9 & 10 (S.B.)

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN SPANS 9 & 10 – LOCATION 1 STRUCTURE NO. 016-1113
		DRAWN - AMR	REVISED -		
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -		SCALE: NTS | SHEET NO. 10 OF 40 SHEETS | STA. | TO STA.
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	16
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

@FILEL@



PLAN — SPANS 9 & 10 (N.B.)
SPANS D9 & D10 (N.B.)

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

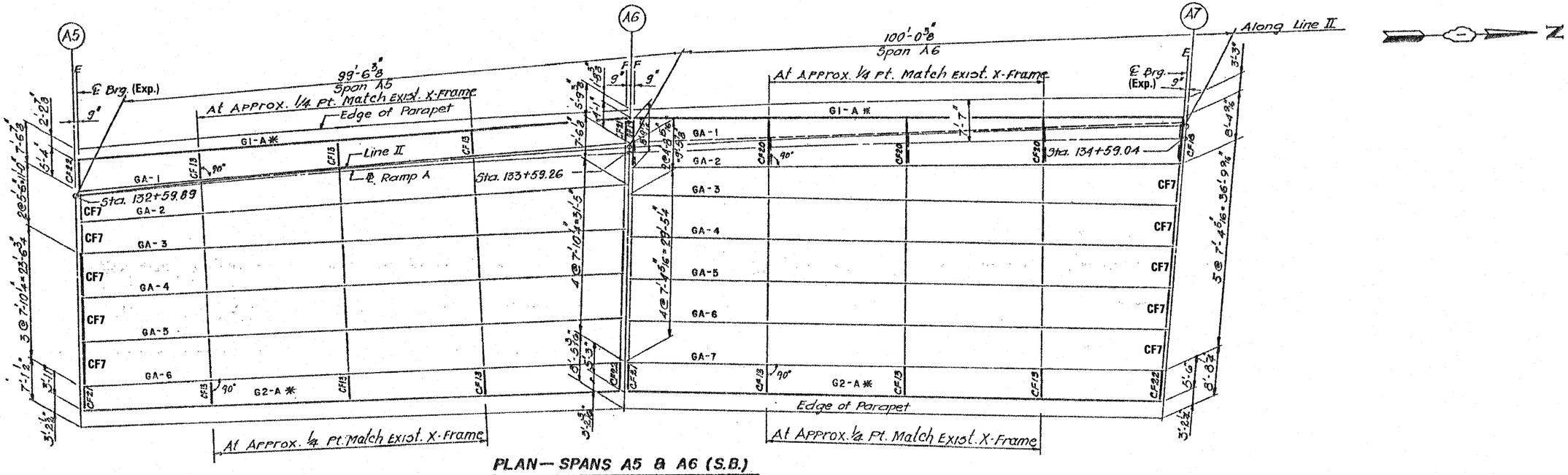
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

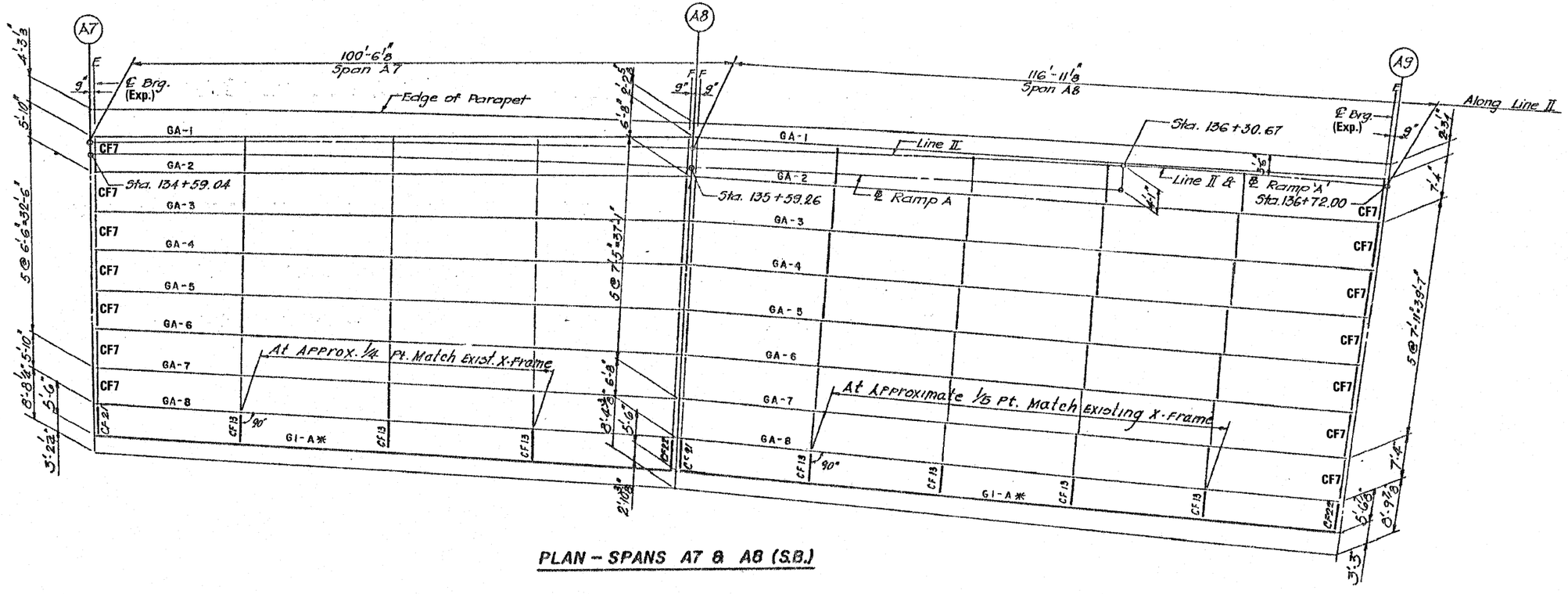
FRAMING PLAN SPANS 9, 10, D9 & D10 – LOCATION 1
STRUCTURE NO. 016-1113

SCALE: NTS | SHEET NO. 11 OF 40 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	17
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

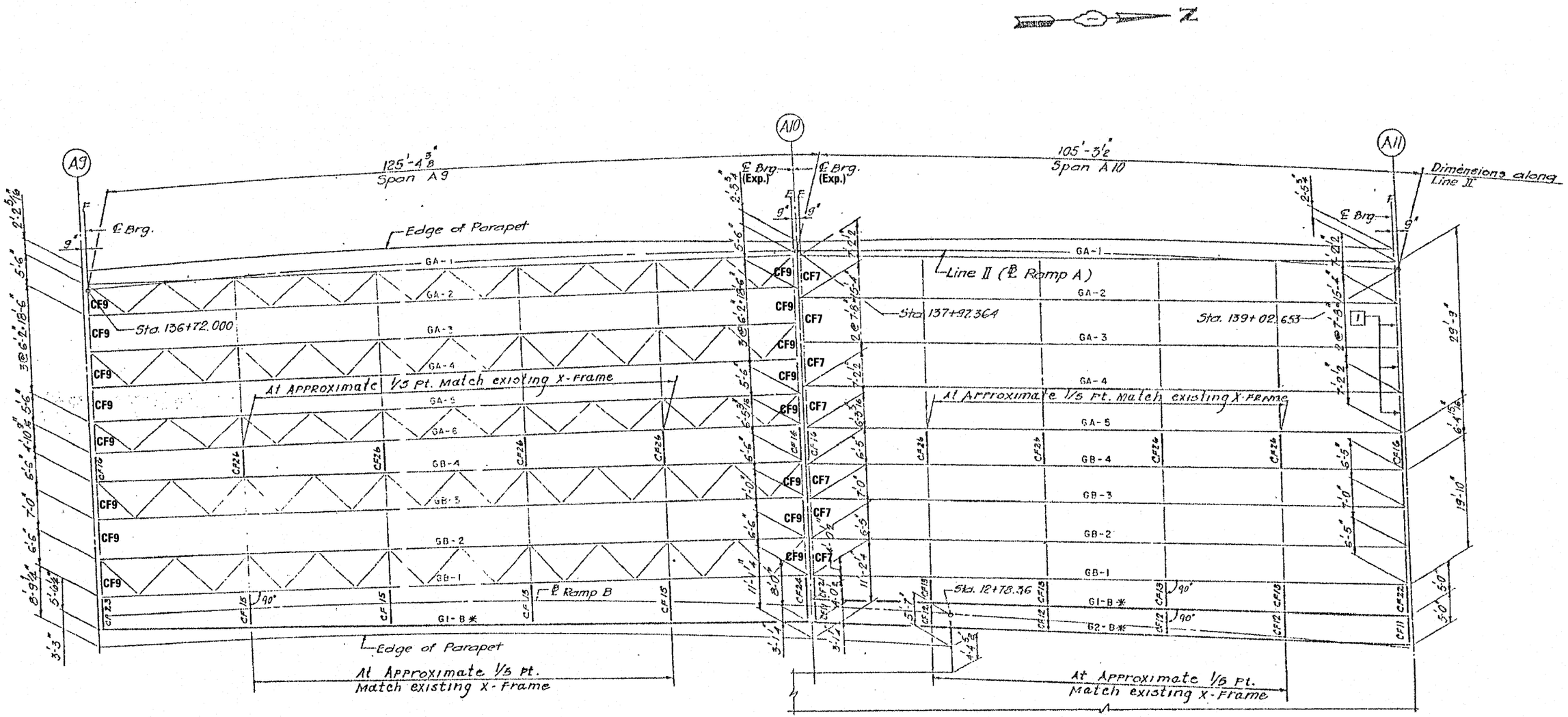
$FILE$





FILE NAME =	USER NAME = rgoll	DESIGNED - AMR	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**FRAMING PLAN SPANS A7 & A8 – LOCATION 1** **STRUCTURE NO. 016–1113**
		DRAWN - AMR	REVISED -		
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -		SCALE: NTS | SHEET NO. 12 OF 40 SHEETS | STA. | TO STA.
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	18
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			



PLAN -- SPANS A9 & A10 (S.B.)

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN SPANS A9 & A10 – LOCATION 1 STRUCTURE NO. 016-1113			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160	19
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -							CONTRACT NO. 60N01		
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 13 OF 40 SHEETS	STA. TO STA.		ILLINOIS	FED. AID PROJECT		

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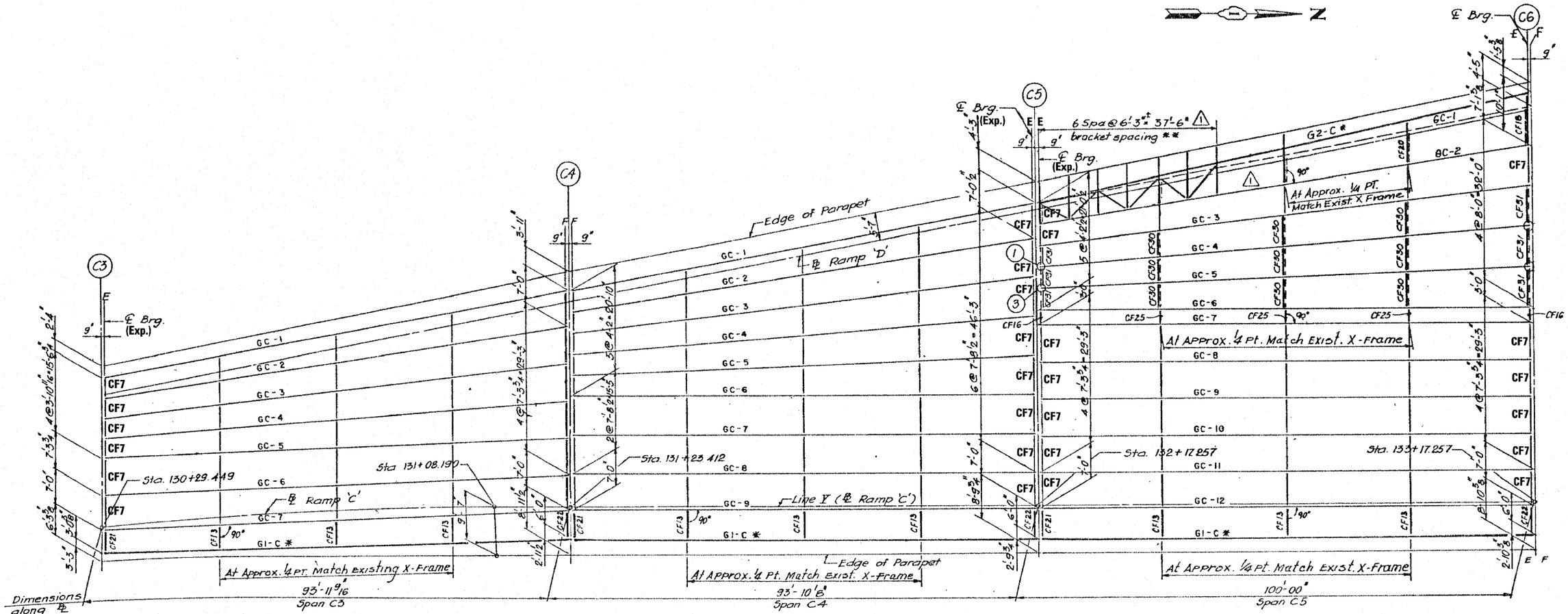
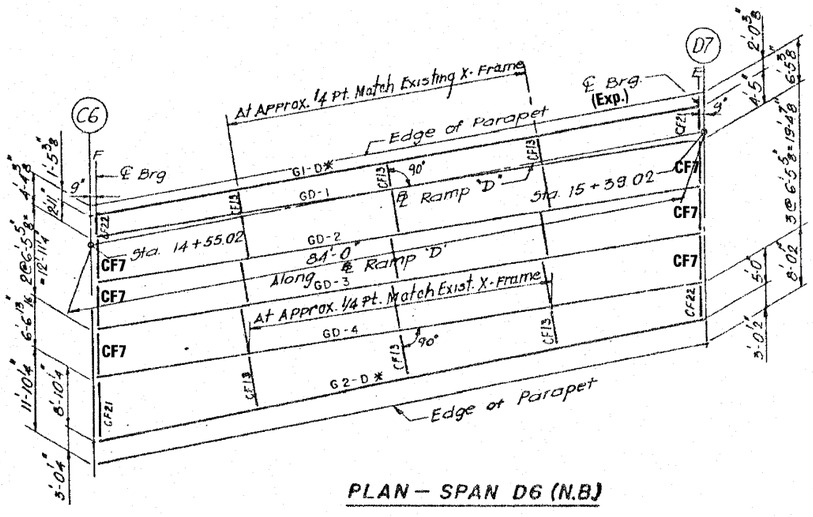


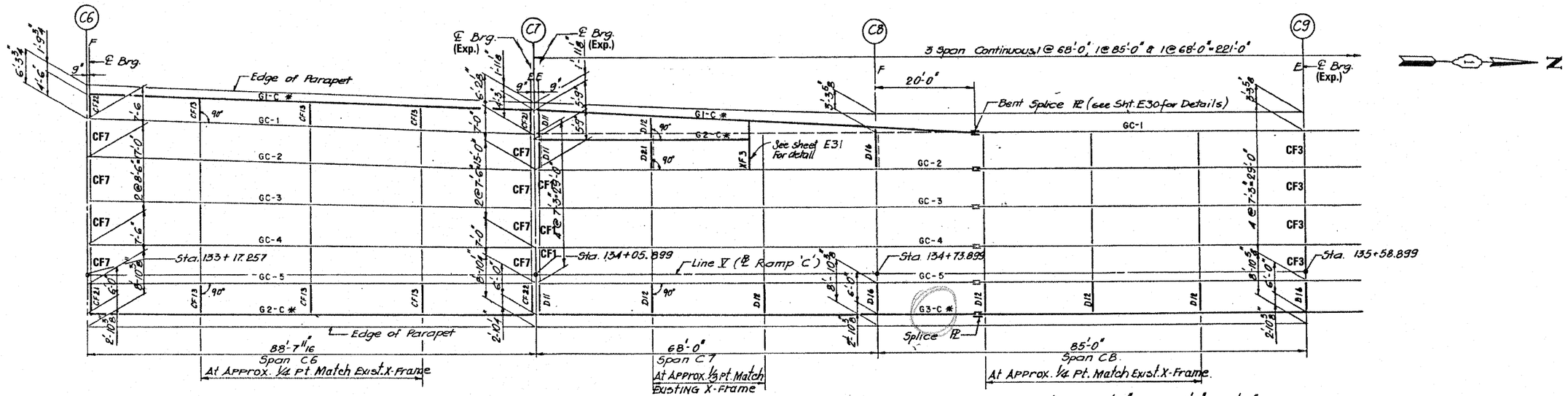
PLAN – SPANS C3 – C5 (N.B)

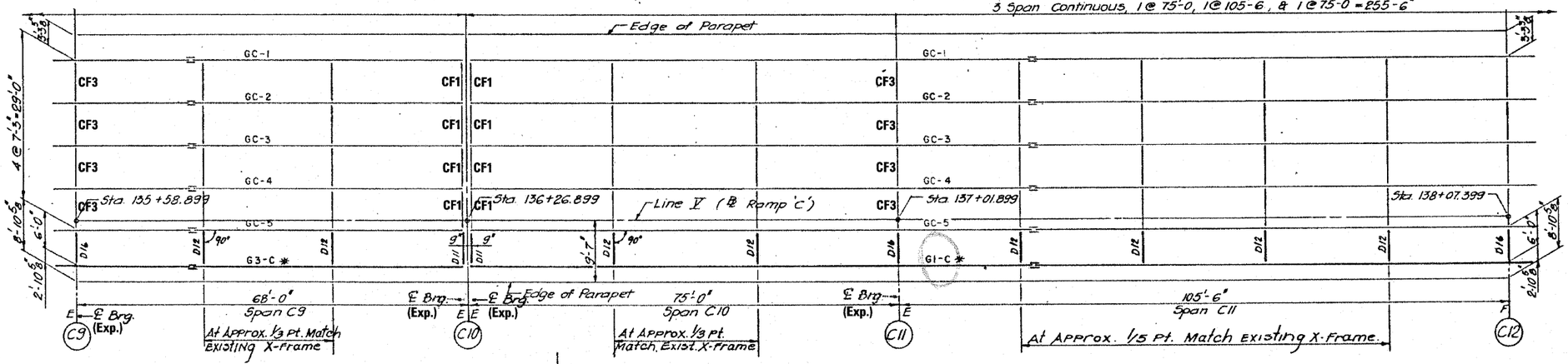


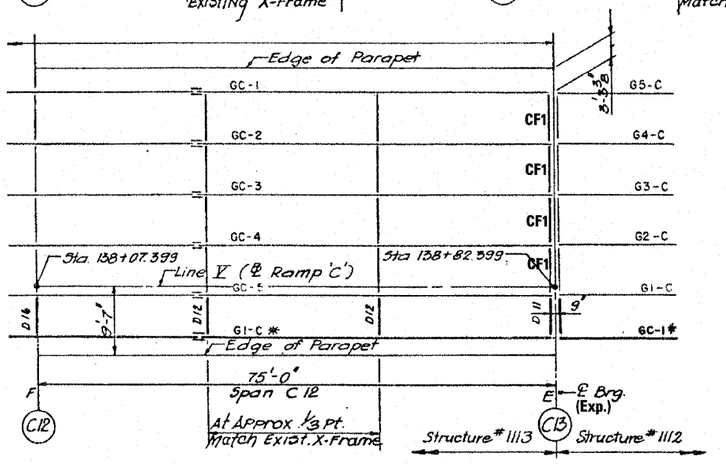
PLAN – SPAN D6 (N.B)

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN SPANS C3 TO C5 & D6 – LOCATION 1 STRUCTURE NO. 016–1113			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160	20
	PLOT SCALE = 1.2000 ' / IN.	CHECKED - JMH	REVISED -							CONTRACT NO. 60N01		
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 14 OF 40 SHEETS	STA. TO STA.			ILLINOIS FED. AID PROJECT		

STFILES







PLAN — SPANS C6 – C12 (N.B)

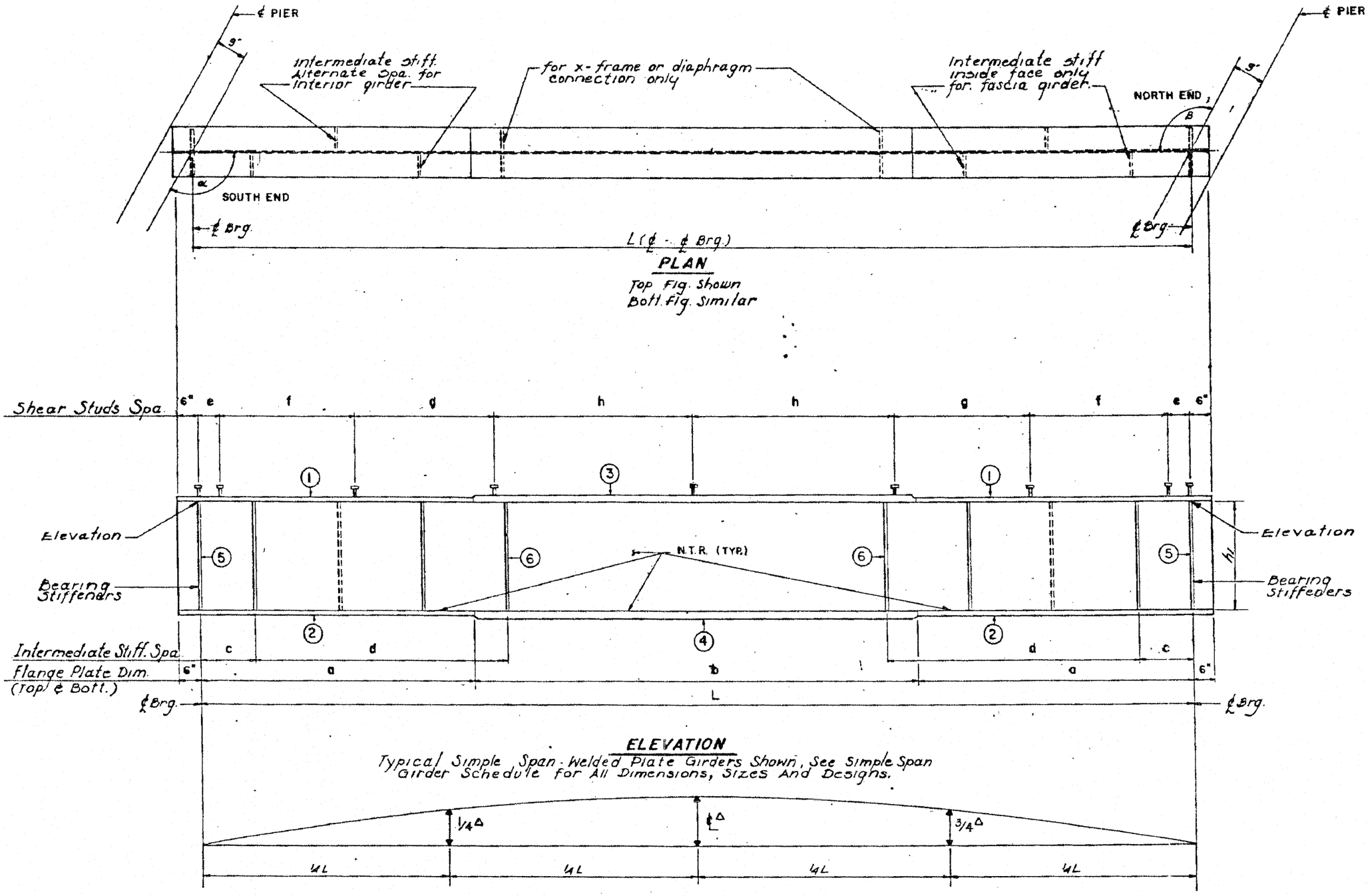
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN SPANS C6 TO C12 – LOCATION 1
STRUCTURE NO. 016–1113

SCALE: NTS | SHEET NO. 15 OF 40 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	21
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			



FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER PLAN & ELEVATION – LOCATION 1
STRUCTURE NO. 016-1113

SCALE: NTS | SHEET NO. 16 OF 40 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	22
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

SPAN	GIRDER	L (d to ℄) BEARING	SOUTH END TOP OF WEB ELEV.	SOUTH END ANGLE α	NORTH END TOP OF WEB ELEV.	NORTH END ANGLE β	WEB h_1	WEB t	FLANGE PLATES ①	②	③	④	a	b	BEARING STIFFENER ⑤	c	INTERMEDIATE STIFFENERS d	⑥	SHEAR STUD SPACINGS e	f	g	h	D.L. CAMBER ⅄℄	¼⅄
A1	G1-A	70'-3 3/8"	69.68	106°-26'-36"	68.26	92°-03'-09"	60"	7/16"	14"x 3/4"	14"x1"	14"x 3/4"	14"x1"	—	70'-3 3/8"	6 1/2"x 5/8"	2'-6"	3@5'	5"x 5/16"	11 1/16"	—	10@14"	18@15"	2 1/8"	1 9/16"
A2	G1-A	96'-11 3/8"	68.22	92°-19'-01"	65.67	95°-00'-16"	60"	7/16"	14"x 3/4"	18"x 3/4"	14"x1 1/4"	18"x1"	19'-6"	57'-11 3/8"	6 1/2"x 5/8"	2'-6"	3@5'	5"x 5/16"	10 3/8"	—	15@14"	19@19"	1 9/16"	1 1/16"
A3	G1-A	97'-2 1/2"	65.67	92°-56'-58"	63.28	95°-37'-49"	60"	7/16"	14"x 3/4"	18"x 3/4"	14"x1 1/4"	18"x1"	19'-6"	55'-2 1/2"	6 1/2"x 5/8"	2'-6"	3@5'	5"x 5/16"	12 1/4"	—	15@14"	19@19"	1 1/2"	1 1/16"
A4	G1-A	97'-10"	63.25	93°-31'-41"	61.03	96°-13'-44"	60"	7/16"	14"x 1/4"	16"x 3/4"	14"x1 1/8"	16"x1"	25'-0"	47'-10"	5"x 1/2"	2'-6"	2@5'	5"x 5/16"	—	5@19	12@21"	10@24"	1 3/8"	1"
A4	G2-A	95'-7 7/16"	62.19	91°-36'-57"	59.41	94°-21'-00"	60"	7/16"	14"x 1/4"	16"x 3/4"	14"x1 1/8"	16"x1"	25'-0"	45'-7 7/16"	5"x 1/2"	2'-6"	2@5'	5"x 5/16"	7 3/4"	5@19"	11@21"	10@24"	3/4"	9/16"
A5	G1-A	98'-1 7/16"	61.03	93°-39'-56"	58.86	96°-27'-05"	60"	7/16"	14"x 1/4"	16"x 3/4"	14"x1 1/8"	16"x1"	25'-0"	48'-1 7/16"	5"x 1/2"	2'-6"	2@5'	5"x 5/16"	5 3/4"	7@19"	10@21"	10@24"	1 1/8"	13/16"
A5	G2-A	95'-7 7/16"	59.37	91°-08'-24"	57.02	93°-55'-35"	60"	7/16"	14"x 3/4"	16"x 3/4"	14"x1 1/8"	16"x1"	25'-0"	45'-7 7/16"	5"x 1/2"	2'-6"	2@5'	5"x 5/16"	7 1/2"	5@19"	11@21"	10@24"	1 5/16"	15/16"
A6	G1-A	98'-5 1/8"	58.87	92°-45'-58"	56.58	95°-26'-31"	60"	7/16"	14"x 3/4"	16"x 7/8"	14"x1 1/8"	16"x1"	19'-6"	59'-5 1/8"	6 1/2"x 5/8"	2'-6"	6@5'± ①	5"x 5/16"	12 9/16"	—	17@13"	21@11"	1 1/2"	1 1/16"
A6	G2-A	95'-11 3/4"	56.98	91°-26'-15"	54.43	94°-06'-48"	60"	1/2"	14"x 3/4"	16"x 3/4"	14"x1 1/8"	16"x1"	25'-0"	45'-11 3/4"	5"x 1/2"	2'-6"	2@5'	5"x 5/16"	9 7/8"	5@19"	11@21"	10@24"	1 7/16"	1"
A7	G1-A	96'-3 7/16"	54.14	91°-25'-40"	51.25	93°-54'-45"	60"	1/2"	14"x 3/4"	16"x 3/4"	14"x1 1/8"	16"x1"	19'-0"	58'-3 7/16"	5"x 1/2"	2'-6"	2@5'	5"x 5/16"	11 3/4"	5@19"	11@21"	10@24"	1 7/16"	1"
A8	G1-A	110'-11 5/8"	51.20	90°-43'-22"	48.25	96°-54'-45"	60"	1/2"	14"x 3/4"	14"x 7/8"	14"x 2 1/4"	14"x 2 1/4"	22'-0"	66'-11 5/8"	6 1/2"x 5/8"	2'-6"	2@5'	5"x 5/16"	15 13/16"	4@20	6@23	13@24"	1 13/16"	15/16"
A9	G1-B	123'-10"	48.24	84°-26'-18"	45.36	89°-41'-13"	72"	1/2"	16"x 3/8"	16"x 3/8"	16"x1 1/8"	16"x1 1/8"	25'-0"	73'-10"	7 1/2"x 3/4"	3'-0"	6@5'± ①	5"x 5/16"	17"	7@18	8@21"	18@24"	2"	1 7/16"
A10	G1-B	105'-10 1/16"	45.59	85°-31'-36"	43.19	85°-23'-05"	60"	7/16"	14"x 3/4"	16"x 3/4"	14"x1 1/8"	16"x1"	25'-0"	53'-10 1/16"	5"x 1/2"	2'-6"	2@5'	5"x 5/16"	19"	7@19"	11@21"	10@24"	1 1/2"	1 1/16"
A10	G2-B	103'-11 5/8"	45.35	84°-57'-47"	42.89	84°-49'-13"	60"	7/16"	14"x 3/4"	16"x 3/4"	14"x1 1/8"	16"x1"	25'-0"	53'-11 5/8"	5"x 1/2"	2'-6"	2@5'	5"x 5/16"	19 9/16"	7@19"	11@21"	10@24"	1 5/8"	1 1/8"
5	GS-1	95'-5 1/8"	59.96	91°-29'-07"	57.43	94°-01'-13"	60"	7/16"	12"x 3/4"	14"x 3/4"	12"x1 1/4"	14"x1 1/4"	25'-0	45'-5 1/8"	5 1/2"x 1/2"	2'-6"	2@5'	5"x 5/16"	12 5/8"	7@16"	12@19"	11@20"	1"	3/4"
5	GS-2	95'-1"	59.76	90°-20'-53"	57.13	92°-59'-03"	60"	7/16"	12"x 3/4"	14"x 3/4"	12"x1 1/4"	14"x1 1/4"	25'-0	45'-1"	5 1/2"x 1/2"	2'-6"	2@5'	5"x 5/16"	10 1/2"	7@16"	12@19"	11@20"	1 1/2"	1"
6	GS-1	95'-7 7/16"	57.39	90°-38'-59"	54.60	93°-23'-02"	60"	7/16"	14"x 3/4"	14"x 3/4"	14"x1 1/2"	14"x1 1/2"	18'-0"	57'-7 7/16"	6 1/2"x 5/8"	2'-6"	3@5'	5"x 5/16"	9 3/4"	8@14"	8@16"	18@18"	1 3/4"	1 5/8"
6	GS-2	95'-3 13/16"	57.16	89°-52'-35"	54.48	92°-36'-48"	60"	7/16"	14"x 3/4"	14"x 3/4"	14"x1 1/2"	14"x1 1/2"	19'-0"	57'-3 13/16"	6 1/2"x 5/8"	2'-6"	3@5'	5"x 5/16"	7 3/8"	8@14"	8@16"	18@18"	1 1/4"	1"
7	GS-1	95'-7 9/16"	54.76	90°-48'-01"	52.19	93°-19'-21"	60"	7/16"	14"x 3/4"	14"x 3/4"	14"x1 1/2"	14"x1 1/2"	19'-0"	57'-7 9/16"	6 1/2"x 5/8"	2'-6"	3@5'	5"x 5/16"	9 13/16"	8@14"	8@16"	18@18"	1"	5/8"

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
		DRAWN - AMR	REVISED -	
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -	

GIRDER SCHEDULE – LOCATION 1
STRUCTURE NO. 016–1113

SCALE: NTS | SHEET NO. 17 OF 40 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	23
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

$FILE$

SPAN	GIRDER	L (℄ to ℄) BEARING	SOUTH END ELEV.	SOUTH END ANGLE ∝	NORTH END ELEV.	NORTH END ANGLE β	WEB h,	WEB t	FLANGE PLATES ①	②	③	④	a	b	BEARING STIFFENER ⑤	c	INTERMEDIATE STIFFENERS d	⑥	SHEAR STUD SPACINGS e	f	g	h	D.L. CAMBER ¼△	△½	¾△	
1	GN-1	107'-10 5/8"	66.59	104°-31'-37"	63.53	90°-11'-03"	60"	7/16"	12"x 3/4"	14"x 3/4"	12"x 1 1/4"	14"x 1 1/4"	21'-6"	64'-10 5/8"	5 1/2"x 1"	2'-6"	2 @ 5'	5"x 5/16"	7 5/16"	12 @ 16"	12 @ 19"	11 @ 20"	2 3/8"	3 1/8"	2 3/16"	
1	GN-2	108'-11 1/8"	66.68	103°-26'-38"	63.27	89°-12'-03"	"	"	14"x 3/4"	18"x 3/4"	14"x 1 1/4"	18"x 1 1/2"	21'-6"	65'-11 1/8"	6 1/2"x 5/8"	"	3 @ 5'	"	17 9/16"	—	14 @ 18"	16 @ 24"	1 1/4"	2 9/16"	2 9/16"	
2	GN-1	89'-4 5/16"	63.22	85°-48'-35"	60.35	88°-34'-33"	"	"	12"x 3/4"	14"x 3/4"	12"x 1 1/4"	14"x 1 1/4"	17'-6"	54'-4 5/16"	5 1/2"x 1"	"	2 @ 5'	"	8 9/16"	—	6 @ 20"	17 @ 24"	1 1/8"	1 1/8"	3/4"	
3	GN-1	89'-3 3/4"	60.48	86°-55'-27"	57.61	89°-37'-51"	"	"	12"x 3/4"	14"x 3/4"	12"x 1 1/4"	14"x 1 1/4"	"	54'-3 3/4"	"	"	2 @ 5'	"	7 3/8"	5 @ 16"	12 @ 19"	11 @ 20"	5/8"	5/8"	1/2"	
3	GN-2	89'-2"	60.30	85°-17'-31"	57.32	87°-59'-41"	"	"	12"x 3/4"	14"x 3/4"	12"x 1 1/4"	14"x 1 1/4"	"	54'-2"	"	"	2 @ 5'	"	7"	5 @ 16"	12 @ 19"	11 @ 20"	11/16"	5/8"	9/16"	
4	GN-1	89'-2 1/2"	57.55	86°-43'-49"	54.60	89°-27'-32"	"	"	12"x 7/8"	14"x 7/8"	12"x 1 3/8"	14"x 1 3/8"	"	54'-2 1/2"	"	"	4 @ 5' ①	"	11 1/4"	—	12 @ 13"	23 @ 16"	13/16"	13/16"	5/8"	
4	GN-2	88'-11 1/4"	57.26	85°-21'-50"	54.38	88°-05'-35"	60"	7/16"	12"x 7/8"	14"x 7/8"	12"x 1 3/8"	14"x 1 3/8"	17'-6"	53'-11 1/4"	5 1/2"x 1/2"	2'-6"	4 @ 5' ①	5"x 5/16"	9 5/8"	—	12 @ 13"	22 @ 16"	5/16"	5/16"	1/4"	
5	GN-1	89'-1 13/16"	54.85	86°-05'-18"	52.17	88°-45'-42"	60"	7/16"	12"x 3/4"	14"x 3/4"	12"x 1 1/4"	14"x 1 1/4"	17'-6"	54'-11 13/16"	5 1/2"x 1"	2'-6"	2 @ 5'	5"x 5/16"	6 3/8"	5 @ 16"	12 @ 19"	11 @ 20"	13/16"	13/8"	13/16"	
5	GN-2	88'-10 3/16"	54.60	85°-48'-11"	51.90	88°-28'-35"	"	"	"	"	"	"	"	53'-10 3/16"	"	"	"	"	5 1/8"	5 @ 16"	12 @ 19"	"	13/16"	13/8"	7/8"	
5	GN-3	88'-7"	54.35	85°-32'-35"	51.69	88°-12'-57"	"	"	"	"	"	"	"	53'-7"	"	"	"	"	16 1/2"	3 @ 16"	13 @ 19"	"	5/8"	1 1/16"	3/4"	
6	GN-1	89'-1 11/16"	52.12	84°-47'-52"	49.35	87°-26'-24"	"	"	"	"	"	"	"	54'-1 11/16"	"	"	"	"	6 1/8"	5 @ 16"	12 @ 19"	"	1/2"	3/4"	1/2"	
6	GN-2	88'-9 13/16"	51.85	86°-09'-17"	49.10	87°-47'-49"	"	"	"	"	"	"	"	53'-9 13/16"	"	"	"	"	7 11/16"	6 @ 16"	11 @ 19"	"	9/16"	3/4"	9/16"	
6	GN-3	88'-6"	51.65	85°-30'-51"	49.00	88°-09'-23"	60"	7/16"	12"x 3/4"	14"x 3/4"	12"x 1 1/4"	14"x 1 1/4"	17'-6"	53'-6"	5 1/2"x 1"	2'-6"	2 @ 5'	5"x 5/16"	6"	6 @ 16"	11 @ 19"	11 @ 20"	5/8"	7/8"	11/16"	
7	GN-1	88'-8 3/16"	49.17	84°-14'-04"	46.12	86°-55'-57"	60"	7/16"	12"x 7/8"	14"x 7/8"	12"x 1 3/8"	14"x 1 3/8"	17'-6"	53'-8 3/16"	5 1/2"x 1"	2'-6"	4 @ 5' ①	5"x 5/16"	11/16"	—	13 @ 13"	22 @ 16"	1 1/4"	2 1/4"	2 3/8"	
7	GN-2	88'-2 1/16"	48.95	85°-56'-33"	45.93	88°-38'-26"	"	"	12"x 7/8"	14"x 7/8"	12"x 1 3/8"	14"x 1 3/8"	17'-6"	53'-2 1/16"	5 1/2"x 1/2"	2'-6"	4 @ 5' ①	5"x 5/16"	8"	—	13 @ 13"	22 @ 16"	1 1/4"	2 1/4"	2 3/8"	
8	GN-1	88'-2 1/4"	45.97	84°-38'-16"	42.62	87°-17'-37"	60"	7/16"	12"x 3/4"	14"x 3/4"	12"x 1 1/4"	14"x 1 1/4"	17'-6"	53'-2 1/4"	5 1/2"x 1/2"	2'-6"	2 @ 5'	5"x 5/16"	5 5/16"	6 @ 16"	12 @ 19"	10 @ 20"	1/2"	1/2"	5/16"	
C1	G1-C	88'-2"	65.33	106°-12'-45"	61.88	105°-33'-27"	60"	7/16"	12"x 3/4"	14"x 3/4"	12"x 1"	14"x 1 1/4"	17'-6"	53'-2"	5 1/2"x 1/2"	—	—	—	5"	—	1 @ 20"	21 @ 24"	0	0	0	
C2	G1-C	99'-3"	61.72	98°-22'-59"	58.27	98°-35'-12"	"	"	14"x 3/4"	18"x 3/4"	14"x 1 1/4"	18"x 1 3/8"	19'-6"	60'-3"	6 1/2"x 5/8"	—	—	—	19 1/2"	—	—	24 @ 24"	0	0	0	
C3	G1-C	92'-3 3/8"	58.31	90°-11'-29"	55.57	90°-15'-20"	"	"	12"x 3/4"	14"x 3/4"	12"x 1 1/4"	14"x 1 1/4"	19'-0"	54'-3 3/8"	5 1/2"x 1/2"	2'-6"	2 @ 5'	5"x 5/16"	9 7/8"	6 @ 16"	12 @ 19"	11 @ 20"	0	0	0	
C4	G1-C	92'-5 3/8"	55.53	89°-53'-45"	53.35	89°-53'-15"	"	"	12"x 3/4"	14"x 3/4"	12"x 1 1/4"	14"x 1 1/4"	19'-0"	54'-5 3/8"	5 1/2"x 1/2"	2'-6"	2 @ 5'	5"x 5/16"	10 3/8"	6 @ 16"	12 @ 19"	11 @ 20"	5/8"	15/16"	5/8"	
C5	G1-C	98'-5 1/16"	53.32	90°-00'-17"	51.10	89°-58'-46"	60"	7/16"	14"x 3/4"	16"x 3/4"	14"x 1 1/8"	16"x 1 1/4"	19'-6"	59'-5 1/16"	5 1/2"x 1/2"	2'-6"	2 @ 5'	5"x 5/16"	7 1/16"	7 @ 16"	11 @ 21"	10 @ 24"	15/16"	1 9/16"	1"	
C5	G2-C	100'-7 5/16"	54.69	101°-51'-45"	51.86	102°-01'-57"	60"	7/16"	14"x 3/4"	18"x 3/4"	14"x 1 1/4"	18"x 1 1/4"	20'-0"	60'-7 5/16"	6 1/2"x 5/8"	2'-6"	3 @ 5'	5"x 5/16"	9 11/16"	—	18 @ 14"	18 @ 19"	2 3/8"	3 1/4"	2 3/8"	
C6	G1-C	87'-2 5/8"	51.92	87°-52'-35"	49.90	87°-56'-55"	"	"	12"x 3/4"	14"x 3/4"	12"x 1"	14"x 1 1/4"	17'-6"	52'-2 5/8"	5 1/2"x 1/2"	—	—	—	19 5/16"	—	—	21 @ 24"	1 9/16"	1 7/16"	7/8"	
C6	G2-C	87'-1 7/16"	51.07	89°-56'-58"	49.11	90°-01'-21"	60"	7/16"	12"x 3/4"	14"x 3/4"	12"x 1 1/4"	14"x 1 1/4"	17'-6"	52'-1 7/16"	5 1/2"x 1/2"	2'-6"	2 @ 5'	5"x 5/16"	10 1/16"	4 @ 16"	12 @ 19"	11 @ 20"	5/8"	13/16"	3/4"	
C7	G2-C	45'-0 1/2"	49.75	89°-59'-49"	—	—	48"	7/16"	—	—	12"x 7/8"	12"x 7/8"	—	45'-0 1/2"	5 1/2"x 1/2"	—	—	—	For Details, see Sht. E31				0	1/4"	0	
D6	G1-D	82'-7 13/16"	51.85	99°-31'-54"	48.65	99°-17'-04"	60"	7/16"	12"x 3/4"	14"x 3/4"	12"x 1"	14"x 1 1/4"	16'-6"	49'-7 13/16"	5 1/2"x 1/2"	—	—	—	15 15/16"	—	—	20 @ 24"	11/16"	9/16"	1/4"	
D6	G2-D	83'-2 1/2"	51.19	101°-07'-40"	47.76	100°-52'-50"	"	"	"	"	12"x 1 1/4"	"	"	50'-2 1/2"	"	2'-6"	2 @ 5'	5"x 5/16"	6 1/4"	4 @ 16"	11 @ 19"	11 @ 20"	9/16"	11/16"	5/8"	
D7	G1-D	77'-3 3/8"	48.60	96°-03'-40"	45.85	92°-20'-05"	"	"	"	"	12"x 1"	"	"	44'-3 3/8"	"	—	—	—	7 9/16"	—	—	19 @ 24"	9/16"	13/16"	3/8"	
D7	G2-D	82'-9 5/16"	47.93	97°-11'-48"	44.90	97°-13'-04"	"	"	"	"	"	"	"	49'-9 5/16"	"	—	—	—	16 1/16"	—	—	20 @ 24"	1/16"	7/16"	3/16"	
D7	G3-D	83'-1 5/16"	47.71	98°-53'-12"	44.77	98°-54'-27"	"	"	"	"	"	"	"	50'-1 5/16"	"	—	—	—	18 1/16"	—	—	20 @ 24"	1/4"	1 5/8"	1 5/16"	
D8	G1-D	87'-8 5/8"	45.79	88°-09'-27"	42.52	90°-48'-48"	60"	7/16"	12"x 3/4"	14"x 3/4"	12"x 1"	14"x 1 1/4"	16'-6"	54'-8 5/8"	5 1/2"x 1/2"	—	—	—	22 5/16"	—	—	21 @ 24"	1/2"	9/16"	0	
D10	G1-D	114'-5 1/2"	38.36	86°-18'-12"	33.54	88°-22'-16"	54"	7/16"	16"x 3/4"	16"x 3/4"	16"x 2 1/4"	16"x 2 1/4"	23'-0"	68'-5 1/2"	7 1/2"x 3/4"	—	—	—	17 3/4"	6 @ 19"	7 @ 21"	17 @ 24"	1 15/16"	3 3/8"	2 1/4"	

FILE NAME =

USER NAME = rgoll

PLOT SCALE = 1.0000 ' / IN.

PLOT DATE = 3/28/2011

DESIGNED - AMR
DRAWN - AMR
CHECKED - JMH
DATE - MARCH, 2011

REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER SCHEDULE – LOCATION 1
STRUCTURE NO. 016-1113

SCALE: NTS | SHEET NO. 18 OF 40 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	24
		CONTRACT NO. 60N01		
		ILLINOIS	FED. AID PROJECT	

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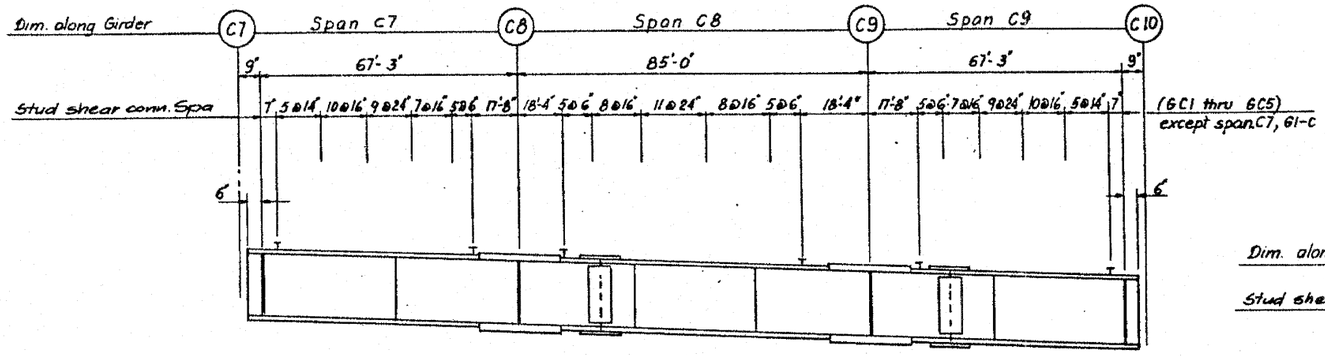
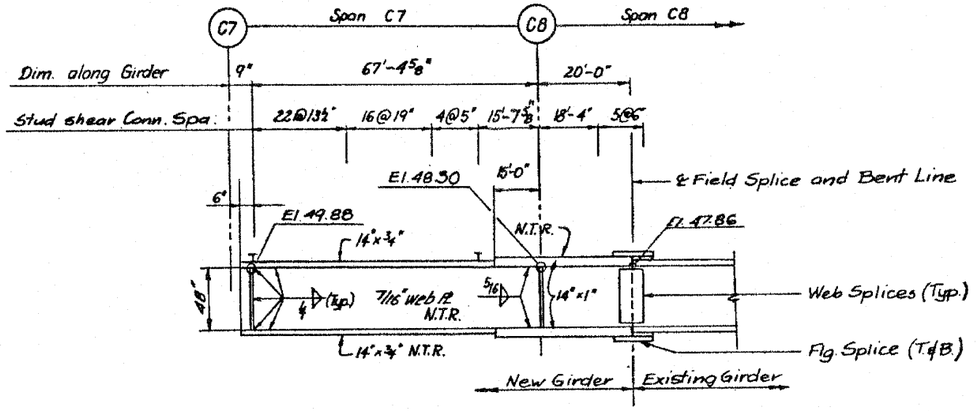
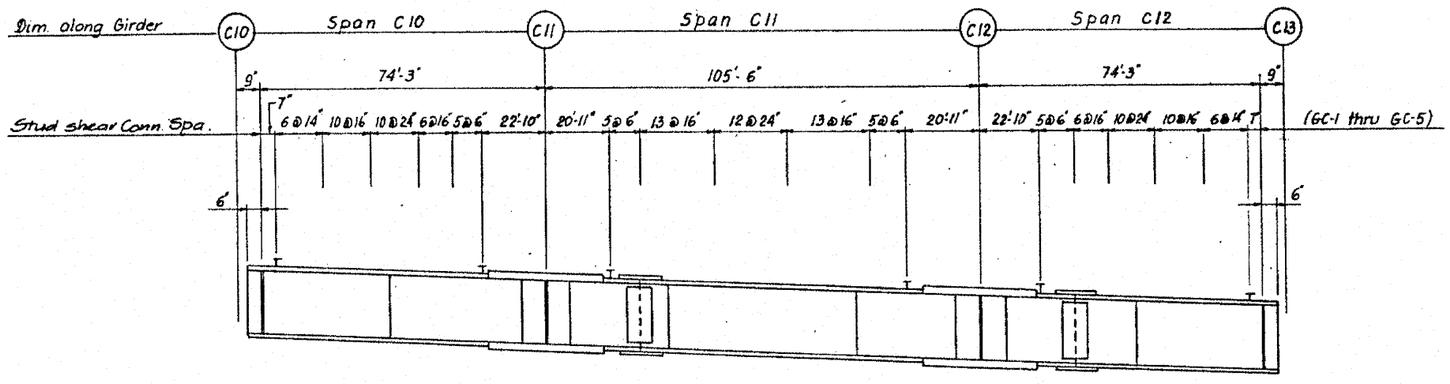


SPANS C7 THRU C9



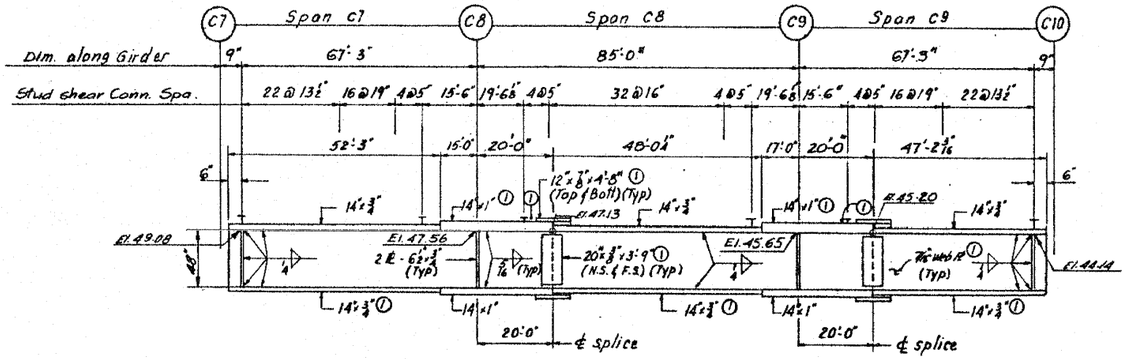
GIRDER G1-C ELEVATION



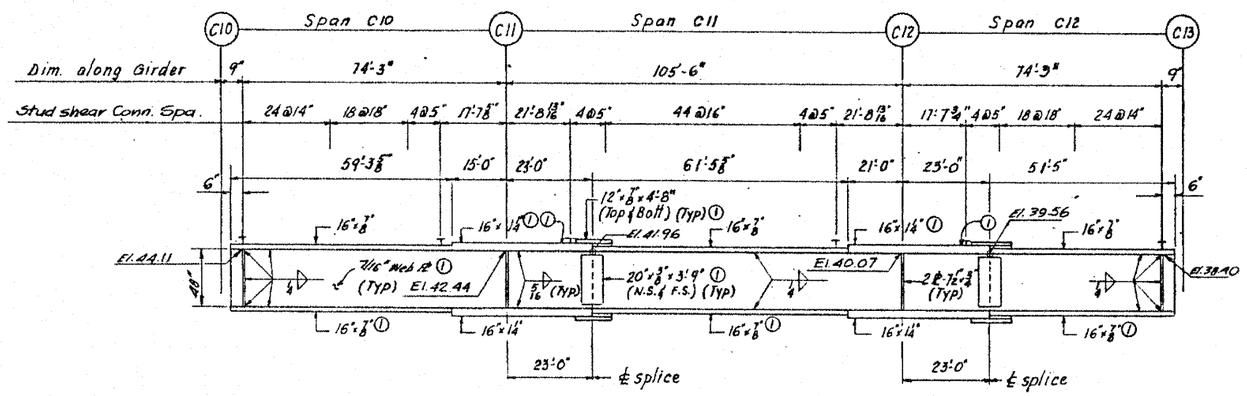
SPANS C10 THRU C12

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GIRDER ELEVATIONS – LOCATION 1 STRUCTURE NO. 016–1113			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160	25
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -							CONTRACT NO. 60N01		
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 19 OF 40 SHEETS	STA. TO STA.		ILLINOIS	FED. AID PROJECT		

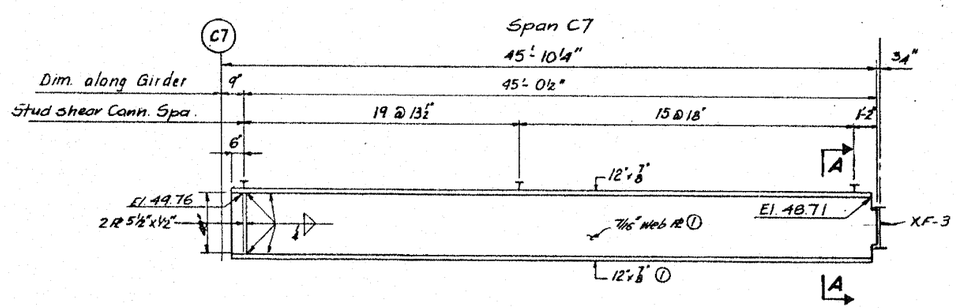
@FILEL@



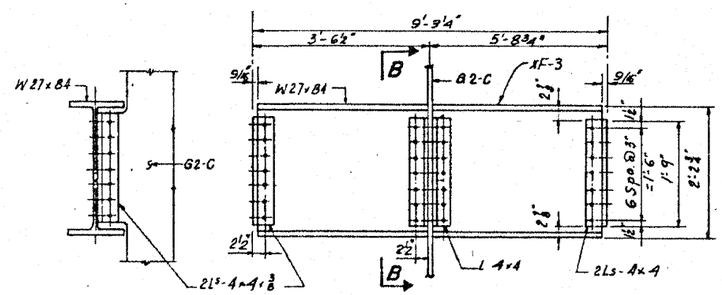
GIRDER G3-C ELEVATION



GIRDER G1-C ELEVATION



GIRDER G2-C ELEVATION



SECTION B-B

SECTION A-A

N.T.R.- denotes Notch Toughness requirements.

① - denotes N.T.R.

FILE NAME =	USER NAME = rgoll	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GIRDER ELEVATIONS – LOCATION 1 STRUCTURE NO. 016–1113	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -			94	2010-127-BP	COOK	160	26
	PLOT SCALE = 1.2000 ' / IN.	CHECKED - JMH	REVISED -					CONTRACT NO. 60N01		
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS | SHEET NO. 20 OF 40 SHEETS | STA. | TO STA.			ILLINOIS FED. AID PROJECT		

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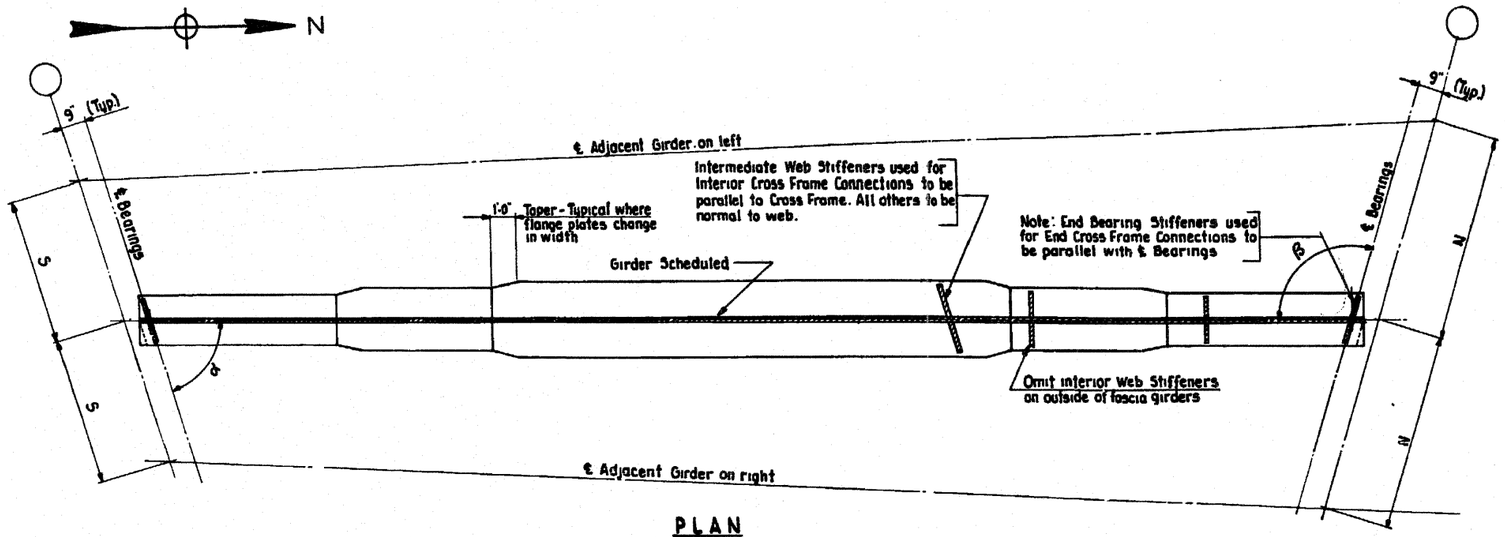
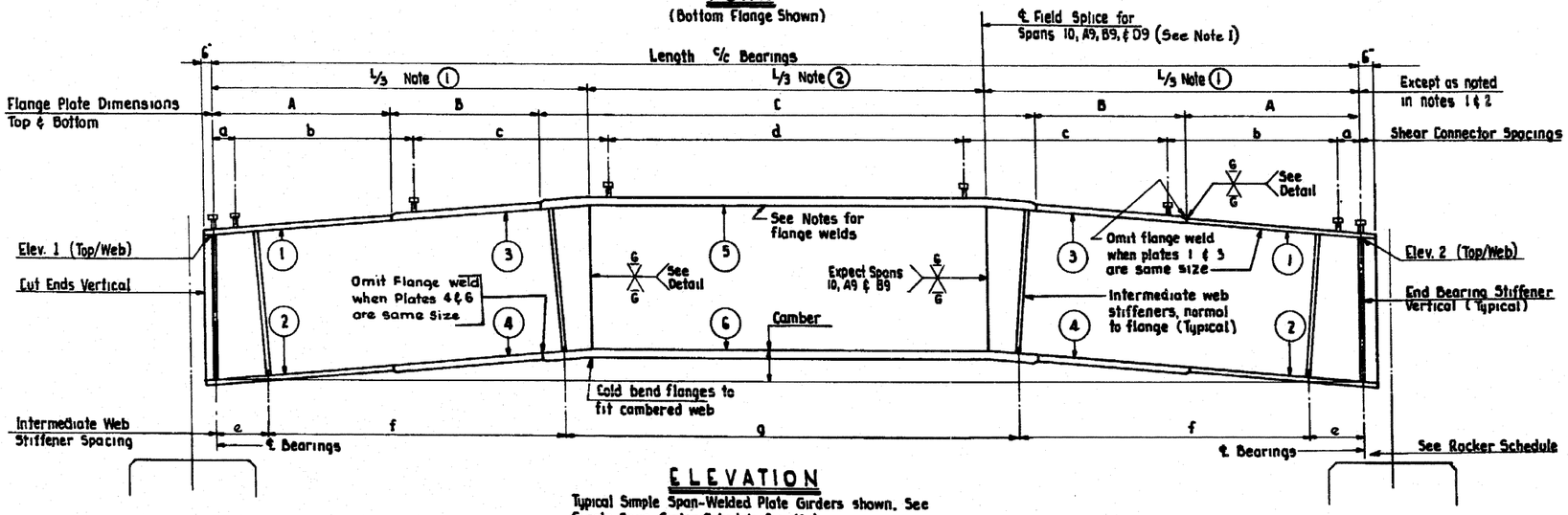
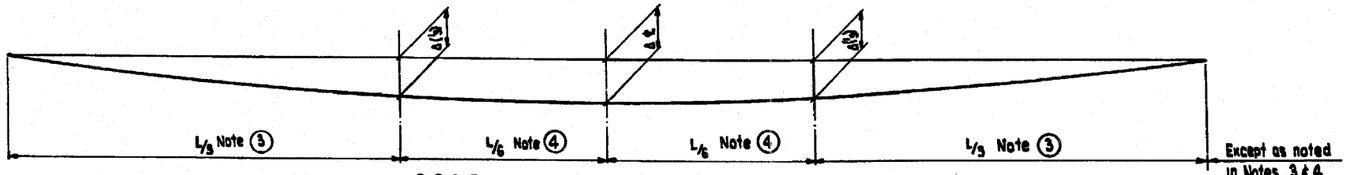


PLAN
(Bottom Flange Shown)



ELEVATION

Typical Simple Span-Welded Plate Girders shown. See Simple Span Girder Schedule for all dimensions, sizes and designs indicated here.



DEAD LOAD DEFLECTION

Dead Load Deflections given in feet include weight of concrete deck only.

Deflections shown in schedule not for use in field if Engineer is working from the theoretical grade adjusted for Dead Load Deflections.

Note: See Simple Span Girder Schedules for Dimensions & Sizes illustrated here.

In Spans 10, A9, B9 & D9 the following dimensions shall replace those shown at left.

Note 1 1/4
Note 2 1/2
Note 3 1/4
Note 4 1/8

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GIRDER PLAN & ELEVATION – LOCATION 1 STRUCTURE NO. 016-1113	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -			94	2010-127-BP	COOK	160	27
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -						CONTRACT NO. 60N01	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS SHEET NO. 21 OF 40 SHEETS STA. TO STA.			ILLINOIS	FED. AID PROJECT	

$FILEL$

SPAN	GIRDER	SOUTH END DATA S	SOUTH END DATA ELEVATION 1	SOUTH END DATA ANGLE δ	NORTH END DATA N	NORTH END DATA ELEVATION 2	NORTH END DATA ANGLE β	GIRDER DIMENSIONS LENGTH ℄ BRGS.	A	B	C	Δ (1/2) CONCRETE	Δ (℄) CONCRETE	WEB PLATE	FLANGE PLATES 1	2	3	4	5	6	CAMBER	SHEAR CONNECTOR SPACINGS a	b	c	d	INTERIOR WEB STIFFENER SPACINGS e	f	g	GIRDER
	GL-9		69.36	106°-59'-29"		67.86	92°-24'-17"	99'-2 1/2"	23'-0"	-	24'-2 1/2"	.058'	.057'	60"x3/8"	16"x3/4"	16"x3/4"	-	-	16"x3/4"	16"x3/4"	2 3/8"	6 1/4"	-	11@17"	24@24"	2'-01/4"	4@52"	8@60"	GL-9
	GL-8	6'-7 5/8"	69.14	106-35-22	6'-11 1/4"	67.67	92-10-10	81-10 1/8	12-3	3'-7"	98-2 1/8	.057	.056	"	"	"	16"x3/4"	16"x3/4"	"	18x7/8	"	1-4 1/16	-	"	"	3-7-1/16	"	"	GL-8
	GL-7	"	68.95	106-12-11	"	67.36	91-48-59	83-5 3/8	"	"	96-8 3/4	"	"	"	"	"	"	"	"	"	"	2 7/8	-	12@17	"	1-10 7/8	"	9@60	GL-7
	GL-6	6-7 5/8	68.75	105-48-53	6-11 1/4	67.07	91-26-41	85-1 3/8	"	"	96-5 3/8	"	"	"	"	"	"	"	"	"	"	1-6 11/16	-	"	"	2-8 11/16	"	"	GL-6
	GL-5	6-3 5/16	68.55	105-29-26	4-0	66.78	91-03-12	86-9 1/8	12-9	9-7	98-1 1/8	.053	.051	"	14x3/4	14x3/4	14x3/4	16x3/4	14x3/4	18x1	2 1/2	9 9/16	10@16"	9@21	20@24	2-10 9/16	9@52	11@60	GL-5
	GL-4	6-2 9/16	68.49	105-23-09	7-11	66.61	91-07-56	87-8 15/16	10-7	7-8	51-1 15/16	.059	.058	"	14x3/4	14x3/4	14x3/4	18x1	14x3/4	18x1 1/8	"	8-8	10@14	9@18	18@24	1-11	6@48	7@60	GL-4
	GL-3	"	68.21	"	"	66.26	"	89-10 1/2	10-2	8-4	52-10 1/2	.061	.060	"	"	"	"	18x1 1/8	"	18x1 3/8	2 7/8	8 1/4	9@15	8@18	21@24	2-5 1/4	5@48	8@60	GL-3
	GL-2		67.97	"	7-11	65.93	"	91-11	"	"	54-11	"	"	"	"	"	"	"	"	"	"	8 1/2	"	"	22@24	3-5 1/2	"	"	GL-2
1	GL-1	6-2 9/16	67.75	"	3-8	65.62	"	93-11 9/16	10-8	5-4	55-3 9/16	.112	.129	"	14x3/4	14x3/4	14x3/4	16x7/8	14x3/4	18x1	3 1/4	11 13/16	-	-	46@24	1-11 3/4	-	10@60	GL-1
	GR-1	3-8 11/16	67.78	105-33-08	3-4	65.62	91-07-56	95-2 1/16	13-6	5-7	57-6 1/16	.113	.130	"	"	"	"	"	"	"	"	7	-	-	47@24	1-10	3@53	13@60	GR-1
	GR-2	6-2 9/16	67.52	105-33-09	7-11	65.27	91-07-57	97-2 5/8	9-10	9-7	58-6 5/8	.081	.105	"	"	"	"	18x1 1/4	14x7/8	18x1 1/2"	3	10 5/16	9@14	9@19	23@24	2-7 5/16	6@47	9@60	GR-2
	GR-3	"	67.28	"	"	64.91	"	99-3 3/16	9-0	8-9	61-9 3/16	.085	.109	"	"	"	"	"	14x1	"	3 1/8	7 5/8	"	9@15	25@24	1-1 5/8	"	10@60	GR-3
	GR-4	6-2 9/16	67.06	105-33-09	7-11	64.62	91-07-57	101-3 3/8	11-2	9-8	60-11 3/4	.092	.106	"	"	"	"	18x1 1/8	14x3/4	18x1 3/8	"	10 7/8	9@16	8@21	28@24	2-3 7/8	5@50	11@60	GR-4
	GR-5	6-11 15/16	66.93	105-35-13	4-0	64.38	91-10-01	102-9 3/8	8-0	11-6	63-5 3/8	.081	.093	"	"	"	14x7/8	18x1 1/2	14x1 1/8	18x1 3/8	2 7/8	8 3/16	9@12	10@15	19@24	3-8 3/16	8@55	7@60	GR-5
	GR-6	6-11 1/2	66.66	105-39-27	6-6	63.99	91-16-15	104-7 1/8	7-6	12-4	64-11 1/8	.088	.100	"	"	"	14x1	18x1 5/8	14x1 3/8	18x1 7/8	3	9 9/16	10@13	11@16	25@24	2-11 9/16	8@49	9@60	GR-6
	GR-7	6-11 1/2	66.44	105-43-31	6-6	63.62	91-16-19	106-9 15/16	7-8	12-7	66-3 15/16	.093	.105	"	"	"	14x1 1/8	"	"	"	3 1/8	9	9@13	12@17	27@24	1-7	"	9@60	GR-7
	GR-8	6-3 1/8	66.19	105-42-03	6-0	63.26	91-16-51	108-10 5/8	"	"	68-4 5/8	.141	.160	"	"	"	14x1 3/8	"	18x1 5/8	"	3 3/8	8 5/16	9@13	"	"	2-7 5/16	"	"	GR-8
	GL-9		67.82	91-02-46		65.26	93-43-46	96-11 3/4	11-0	7-9	57-5 3/4	.134	.156	60x3/8	14x3/4	14x3/4	14x1	18x1	14x1 1/4	18x1 1/8	3 1/2	7 7/8	9@18	2@20	30@24	1-11 7/8	3@52	13@60	GL-9
	GL-8	5-6 1/2	67.64	88-51-24	7-6 5/8	64.96	92-22-24	96-7 3/8	12-6	5-5	58-9 3/8	.078	.091	"	"	"	14x3/4	18x7/8	14x3/4	18x1 1/8	2 7/8	5 11/16	9@18	2@20	30@24	2-3 11/16	3@50	13@60	GL-8
	GL-7	5-6 1/2	67.39	88-39-30	8-4	64.63	91-33-30	94-3 7/16	8-6	9-3	58-9 7/16	.083	.095	"	"	"	"	18x1 1/8	14x7/8	18x1 1/2	"	1-0 3/4	11@13	10@17	20@24	2-0 3/4	7@43	8@60	GL-7
	GL-6	8-4	67.04	"	8-4	64.28	"	93-10 3/4	8-6	9-3	58-4 3/4	"	"	"	"	"	"	18x1 1/8	14x7/8	18x1 1/2	"	1-1 3/8	10@14	10@17	20@24	2-5 3/8	7@42	8@60	GL-6
	GL-5	8-4	66.70	"	4-0	63.94	"	93-6 1/16	11-5	8-0	58-8 1/16	.068	.078	"	"	"	"	18x1	14x3/4	18x1 1/8	2 5/8	5 1/16	9@16	5@20	28@24	2-9 1/16	9@42	12@60	GL-5
	GL-4	4-0	66.52	"	7-11	63.78	"	93-3 13-16	9-8	8-6	57-11 13/16	.076	.085	"	"	"	"	18x1 1/8	"	18x1 3/8	2 3/4	8 7/8	11@13	12@17	17@24	2-1 7/8	6@46	9@60	GL-4
	GL-3	7-11	66.20	"	"	63.98	"	92-11 3/8	10-0	8-4	56-3 3/8	.081	.093	"	"	"	"	"	"	"	2 7/8	1-2 11/16	9@15	8@18	22@24	3-11 11/16	5@48	"	GL-3
	GL-2	"	65.85	"	"	63.12	"	92-6 15/16	10-0	8-4	55-10 15/16	"	"	"	"	"	"	18x1 1/8	"	18x1 3/8	"	1-0 1/2	9@15	8@18	22@24	3-9 1/2	5@48	9@60	GL-2
2	GL-1	7-11	65.55	"	3-4	62.82	"	92-2 7/16	14-0	5-4	53-6 7/16	.112	.129	"	"	"	"	18x7/8	"	18x1	3 1/4	1-1 1/4	-	-	45@24	2-1 1/4	2@58	11@60	GL-1
	GR-1	7-11	65.55	"	3-4	62.82	"	91-11 13/16	13-10	3-6	57-3 13/16	.100	.115	"	"	"	"	18x3/4	"	18x1	3	11 7/8	-	-	45@24	2-6 7/8	3@54	12@60	GR-1
	GR-2	7-11	65.21	"	7-11	62.48	"	91-7 3/8	10-8	8-4	54-11 3/8	.081	.093	"	"	"	"	18x1 1/8	"	18x1 3/8	2 7/8	6 11/16	9@15	8@18	22@24	3-3 11/16	5@48	9@60	GR-2
	GR-3	"	64.89	"	"	62.13	"	91-2 15/16	10-8	8-4	54-6 15/16	"	"	"	"	"	"	18x1 1/8	"	18x1 3/8	2 7/8	4 1/2	9@15	8@18	22@24	3-1 1/2	5@48	9@60	GR-3
	GR-4	7-11	64.56	"	7-11	61.80	"	90-10 1/2	12-5	5-7	54-10 1/2	.061	.070	"	"	"	"	18x7/8	"	18x1	2 1/2	1-0 1/4	10@17	9@21	25@24	3-5 1/4	3@48	12@60	GR-4
	GR-5	4-0	64.38	"	8-6	61.63	"	90-8 1/4	9-8	9-0	54-8 1/4	.071	.082	"	"	"	"	18x1 1/4	"	18x1 3/8	2 3/4	4 1/8	11@12	15@16	19@24	1-7 1/8	7@45	7@60	GR-5
	GR-6	8-6	64.02	"	8-6	61.29	"	90-3 1/2	9-0	8-8	56-3 1/2	.075	.086	"	"	"	"	18x1 1/8	"	"	"	9 3/8	10@13	12@16 1/2	17@24	1-11 3/8	8@46	5@60	GR-6
	GR-7	8-6	63.66	"	8-0	60.93	"	89-10 11/16	9-10	7-0	55-2 11/16	.073	.084	"	"	"	"	"	"	"	"	5 3/8	"	11@16	19@24	3-5 3/8	6@46	7@60	GR-7
	GR-8		63.33	88-39-30		60.57	91-20-30	89-6 3/16	9-10	7-0	55-10 3/16	.109	.125	60x3/8	14x3/4	14x3/4	14x3/4	18x1 1/8	14x3/4	18x1 3/8	3 1/8	3 1/8	10@13	11@15	19@24	3-3 1/8	6@48	7@60	GR-8
	GL-10	3-10 5/8	65.23	90-25-27	5-4 1/2	62.59	93-06-27	95-1 7/8	11-0	7-9	57-7 7/8	.134	.156	60x3/8	14x3/4	14x3/4	14x1	18x1	14x1 1/4	18x1 1/8	3 1/2	1-6 15/16	-	-	46@24	2-0 15/16	3@52	13@60	GL-10
	GL-9	3-10 5/8	65.11	89-22-36	5-4 1/2	62.41	92-13-36	94-10 13/16	10-0	-	56-10 13/16	.089	.079	"	"	"	-	-	14x3/4	18x3/4	2 3/4	1-5 3/8	-	-	"	2-5 3/8	-	18@60	GL- 9
	GL-8	8-4	64.95	88-39-30	8-4	62.19	91-20-30	94-8 1/8	12-6	5-5	58-10 1/8	.079	.081	"	"	"	14x3/4	18x7/8	14x3/4	18x1 1/8	2 7/8	6 1/16	9@18	2@20	30@24	2-4 1/16	3@50	13@60	GL- 8
	GL-7	"	64.59	"	"	61.83	"	94-3 7/16																					GL- 7
	GL-6	8-4	64.24	"	8-4	61.98	"	93-10 3/4																					GL- 6
	GL-5	4-0	63.90	"	4-0	61.14	"	93-6 1/16																					GL- 5
	GL-4	7-11	63.73	"	7-11	60.97	"	93-3 13/16																					GL- 4
	GL-3	"	63.40	"	"	60.64	"	92-11 3/8																					GL- 3
	GL-2	7-11	63.06	"	7-11	60.30	"	92-6 15/16																					GL- 2
3	GL-1	2-4	62.76	"	2-4	60.00	"	92-2 7/16																					GL- 1
	GR-1	2-4	62.76	88-39-30	2-4	60.00	91-20-30	91-11 13/16																					GR- 1

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	**STATE OF ILLINOIS**
		DRAWN - AMR	REVISED -	**DEPARTMENT OF TRANSPORTATION**
	PLOT SCALE = 1.2000 ' / IN.	CHECKED - JMH	REVISED -	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -	

GIRDER SCHEDULE – LOCATION 1
STRUCTURE NO. 016–1113

SCALE: NTS | SHEET NO. 22 OF 40 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	28
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

SFILE1.8

SPAN	GIRDER	SOUTH END DATA S	ELEVATION 1		ANGLE Δ	NORTH END DATA N	ELEVATION 2		ANGLE β	GIRDER DIMENSIONS LENGTH ℄ BRGS.	A	B	C	Δ (℄s) CONCRETE	Δ (℄) CONCRETE	WEB PLATE	FLANGE PLATES 1	2	3	4	5	6	CAMBER	SHEAR CONNECTOR SPACINGS a	b	c	d	INTERIOR WEB STIFFENER SPACINGS e	f	g	GIRDER
	GL-1	2'-9" 2'-9"	62.76			2'-9" 2'-9"	60.00									60"x2⅜"														
3	GR-1	7'-11"	62.76		88°-39'-30"	7'-11"	60.00		91°-20'-30"	91'-11 13/16"																				GR-1
	GR-2		62.92		"		59.66		"	91-7 3/8																				GR-2
	GR-3	7-11	62.09		"	7-11	59.33		"	91-2 15/16																				GR-3
	GR-4	7-11	61.77		"	7-11	58.96		"	90-10 1/2																				GR-4
	GR-5	4-0	61.59		"	4-0	58.63		"	90-8 1/4																				GR-5
	GR-6	8-6	61.23		"	8-6	58.47		"	90-3 1/2																				GR-6
	GR-7	8-6	60.87		"	8-6	58.11		"	89-10 11/16																				GR-7
	GR-8	8-0	60.53		"	8-0	57.77		"	89-6 3/16																				GR-8
	GL-10	5-1 1/2	62.51		90-57-49	7-0 7/8	59.93		93-38-99	95-3 7/8	9'-0"	9'-0"	59'-3 7/8"	.127'	.147'	60"x2⅜"	14"x3/4"	16"x3/4"	16"x1 1/8"	18"x1 1/8"	14"x1 3/8"	18"x1 1/2"	3 3/8	0'-9 15/16	9@19"	9@18"	24@28"	2'-7 15/16	6@45"	9@60"	GL-10
	GL-9	5-1 1/2	62.34		89-48-54	7-0 7/8	59.67		92-29-54	94-11 3/4	9-6	8-6	58-11 3/4	.096	.096	"	"	"	"	18x3/4	18x1 1/8	14x7/8	18x1 3/8	2 7/8	0-7 7/8	8@19	9@18	24@28	2-5 7/8	"	"	GL-9
	GL-8	8-4	62.19		88-39-30	8-4	59.37		91-20-30	94-8 1/16	8-8	9-4	58-8 1/16	.087	.100	"	"	"	"	"	18x1 1/4	"	18x1 1/2	3	1-1	9@13	14@15	19@24	1-1	7@45	9@60	GL-8
	GL-7	8-4	61.76		"	8-4	59.02		"	93-3 7/16																				GL-7
	GL-6	8-4	61.43		"	8-4	58.67		"	93-10 3/4																				GL-6
	GL-5	4-0	61.09		"	4-0	58.23		"	93-6 1/16																				GL-5
	GL-4	7-11	60.92		"	7-11	58.16		"	93-3 13/16																				GL-4
	GL-3	7-11	60.59		"	7-11	57.83		"	92-11 3/8																				GL-3
	GL-2	7-11	60.26		"	7-11	57.50		"	92-6 15-16																				GL-2
4	GL-1	2-6 2-6	59.95		"	2-6 2-6	57.19		"	92-2 7/16																				GL-1
	GR-1	7-11	59.95		"	7-11	56.85		"	91-11 13/16																				GR-1
	GR-2	7-11	59.61		"	7-11	56.52		"	91-7 3/8																				GR-2
	GR-3	7-11	59.28		"	7-11	56.19		"	91-2 15/16																				GR-3
	GR-4	4-0	58.95		"	4-0	56.02		"	90-10 1/2																				GR-4
	GR-5	8-6	58.78		"	8-11 1/4				90-8 1/4																				GR-5
	GR-6	8-6	58.43		88-28-07	8-11 1/4	55.64		91-08-07	90-3 3/8	9-0	8-0	56-3 3/8	.075	.086	60x3/8	14x3/4	14x3/4	14x3/4	18x1 1/8	14x3/4	18x1 3/8	2 3/4	0-9 11/16	10@13	12@16 1/2	17@24	1-11 11/16	8@45	5@60	GR-6
	GR-7	8-0	58.08		88-06-35	8-0	54.27		90-47-35	90-10 1/2	9-10	7-0	56-2 1/2	.073	.086	"	"	"	"	"	"	"	2 3/4	0-5 1/4	"	11@16	19@24	3-5 1/4	6@60	7@60	GR-7
	GR-8		57.73		88-06-27		54.91		90-47-27	90-6	11-3	5-7	55-10	.109	.125	"	"	"	"	"	"	"	3 1/8	0-3	"	"	"	3-3	"	"	GR-8
	GL-9	7-0 7/8	59.62		89-30-15	8-6	56.92		92-11-19	95-0 5/8	9-6	8-6	59-0 5/8	.084	.096	"	"	"	"	14x3/4	18x1 1/8	14x7/8	18x1 3/8	2 7/8	0-8 5/16	"	"	"	2-6 5/16	"	"	GL-9
	GL-8	7-0 7/8	59.32		88-39-30	8-4	56.56		91-20-30	94-8 1/8	8-8	9-4	58-8 1/8	.087	.100	"	"	"	"	"	18x1 1/4	"	18x1 1/2	3	1-1 1/16	9@13	14@15	19@24	1-1 1/16	7@45	9@60	GL-8
	GL-7	8-4	58.97		"	8-4	56.21		"	93-3 7/16																				GL-7
	GL-6	8-4	58.62		"	8-4	55.86		"	93-10 3/4																				GL-6
	GL-5	4-0	58.28		"	8-4	55.52		"	93-6 1/16																				GL-5
	GL-4	7-11	58.11		"	4-0	55.35		"	93-3 13/16																				GL-4
	GL-3	7-11	57.78		"	7-11	55.02		"	92-11 3/8																				GL-3
	GL-2	7-11	57.45		"	7-11	54.69		"	92-6 15/16																				GL-2
5	GL-1	2-6 2-6	57.15		"	7-11	54.39		"	92-2 7/16																				GL-1
	GR-1	7-11	56.80		"	2-6 2-6	54.04		"	91-11 13/16																				GR-1
	GR-2	7-11	56.47		"	7-11	53.71		"	91-7 3/8																				GR-2
	GR-3	7-11	56.14		"	7-11	53.38		"	91-2 15/16																				GR-3
	GR-4	4-0	55.97		"	4-0	53.21		"	90-10 1/2																				GR-4
	GR-5	8-4	55.62		"	8-4	52.84		"	90-8 1/4																				GR-5
	GR-6	8-4	55.27		"	8-4	52.51		"	90-3 9/16	9-0	8-0	56-3 9/16	.075	.086	60x3/8	14x3/4	14x3/4	14x3/4	18x1 1/8	14x3/4	18x1 3/8	2 3/4	0-9 3/4	10@13	12@16 1/2	17@24	1-11 3/4	8@45	5@60	GR-6
	GR-7	8-4	54.97		87-28-48	6-5 3/4	52.25		90-09-48	89-10 7/8	9-10	7-2	55-10 7/8	.073	.086	"	"	"	"	"	"	"	2 3/4	0-5 7/16	"	11@16	19@24	3-5 7/16	6@60	7@60	GR-7
	GR-8	4-7 1/4	54.87		88-17-47	6-5 3/4	51.96		88-58-47	89-6	15-10	-	58-0	.080	.089	"	"	"	"	-	-	"	10x7/8	2 1/2	1-1	-	9@21	23@24	3-4	3@58	11@60	GR-8
	GR-9	4-7 1/4								89-5 9/16	11-3	5-7	55-9 9/16	.109	.125	"	"	"	14x3/4	18x7/8	14x7/8	18x1 1/8	3 1/8	0-11 3/4	-	"	"	3-8 3/4	4@51	10@60	GR-9

FILE NAME =	USER NAME = rgoll	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GIRDER SCHEDULE – LOCATION 1 STRUCTURE NO. 016-1113	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -			94	2010-127-BP	COOK	160	29
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -						CONTRACT NO. 60N01	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS SHEET NO. 23 OF 40 SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		

$FILE$

SPAN	GIRDER	SOUTH END DATA S	SOUTH END DATA ELEVATION 1	SOUTH END DATA ANGLE δ	NORTH END DATA N	NORTH END DATA ELEVATION 2	NORTH END DATA ANGLE β	GIRDER DIMENSIONS LENGTH ℄ BRGS.	A	B	C	Δ(1/3) CONCRETE	Δ(℄) CONCRETE	WEB PLATE	FLANGE PLATES 1	2	3	4	5	6	CAMBER	SHEAR CONNECTOR SPACINGS a	b	c	d	INTERIOR WEB STIFFENER SPACINGS e	f	g	GIRDER
	GL-8	5-8	56.51	88-39-30	6-6	53.75	91-20-30	94-8 1/8	8-8	9-4	58-8 1/8	.087	.100	"	"	"	"	18x1 1/8	"	18x1 1/2	"	1-1 1/16	9@13	14@15	19@24	1-1 1/16	7@45	8@60	GL-8
	GL-7	8-4	56.16	"	8-4	53.40	"	94-3 7/16																					GL-7
	GL-6	8-4	55.81	"	8-4	53.05	"	93-10 3/4																					GL-6
	GL-5	8-4	55.47	"	8-4	52.71	"	93-6 1/16																					GL-5
	GL-4	4-0	55.30	"	4-0	52.54	"	93-3 13/16																					GL-4
	GL-3	7-11	54.97	"	7-11	52.21	"	92-11 3/8																					GL-3
	GL-2	7-11	54.64	"	7-11	51.88	"	92-6 15/16																					GL-2
	GL-1	7-11	54.34	"	7-11	51.58	"	92-2 7/16																					GL-1
6	GR-1	3-4 2-4	54.34	"	3-4 2-4	51.58	"	91-11 13/16																					GR-1
	GR-2	7-11	54.01	"	7-11	51.22	"	91-7 3/8																					GR-2
	GR-3	7-11	53.66	"	7-11	50.90	"	91-2 15/16																					GR-3
	GR-4	7-11	53.32	"	7-11	50.57	"	90-10 1/2																					GR-4
	GR-5	4-0	53.16	"	4-0	50.90	"	90-8 1/4																					GR-5
	GR-6	8-4	52.81	"	8-4	50.05	"	90-3 9/16																					GR-6
	GR-7	8-4	52.46	"	8-4	49.70	"	89-10 7/8	9-10	7-2	55-10	.073	.084	60x3/8	14x3/4	14x3/4	14x3/4	18x1 1/8	14x3/4	18x1 3/8	2 3/4	0-5 7/16	10@13	11@15	19@24	2-5 7/16	6@48	7@60	GR-7
	GR-8	4-3 13/16	52.28	87-16-15	6-6 5/16	49.43	89-57-15	89-8 1/8	10-10	-	58-0 1/8	.060	.069	"	"	"	"	-	-	18x7/8	2 1/2	1-1 1/16	-	9@21	20@24	3-4 1/16	3@56	11@60	GR-8
	GR-9	4-3 13/16	52.10	85-52-39	6-6 5/16	49.16	88-33-39	89-6 1/16	"	-	57-10 1/16	"	"	"	"	"	"	-	-	"	2 1/2	1-0	-	"	"	3-3	"	"	GR-9
	GR-10	4-3 13/16	51.91	84-28-46	6-6 5/16	48.88	87-09-46	89-4 9/16	11-1	5-7	55-8 9/16	.103	.125	"	"	"	14x3/4	18x7/8	14x7/8	18x1 1/8	3 1/8	0-11 1/4	-	"	"	3-2 1/4	"	"	GR-10
	GL-10	5-7	54.30	89-23-51	6-10	51.57	92-09-51	95-6 3/8	9-6	10-6	55-4 3/8	.085	.098	"	"	"	"	14x3/4	18x1 1/4	14x7/8	"	2 7/8	0-10 13/16	"	"	"	2-8 3/16	"	"	GL-10
	GL-9	5-7	54.05	88-39-30	8-4	51.29	91-20-30	95-0 13/16	"	8-6	59-0 13/16	.086	.096	"	"	"	"	18x1 1/8	"	"	2 7/8	0-8 3/8	"	"	"	2-6 3/8	"	"	GL-9
	GL-8	8-4	53.70	"	8-4	50.94	"	94-8 1/8																					GL-8
	GL-7	8-4	53.35	"	8-4	50.59	"	94-3 7/16																					GL-7
	GL-6	8-4	53.00	"	8-4	50.24	"	93-10 3/4																					GL-6
	GL-5	8-4	52.66	"	8-4	49.90	"	93-6 1/16																					GL-5
	GL-4	4-0	52.50	"	4-0	49.74	"	93-3 13/16																					GL-4
	GL-3	7-11	52.16	"	7-11	49.40	"	92-11 3-8																					GL-3
	GL-2	7-11	51.83	"	7-11	49.07	"	92-6 15/16																					GL-2
	GL-1	7-11	51.53	"	7-11	48.77	"	92-2 7/16																					GL-1
7	GR-1	2-4 2-4	51.53	"	2-4 2-4	48.77	"	91-11 13/16																					GR-1
	GR-2	7-11	51.19	"	7-11	48.43	"	91-7 3/8																					GR-2
	GR-3	7-11	50.87	"	7-11	48.08	"	91-2 15/16																					GR-3
	GR-4	7-11	50.52	"	7-11	47.76	"	90-10 1/2																					GR-4
	GR-5	4-0	50.35	"	4-0	47.59	"	90-8 1/4																					GR-5
	GR-6	8-4	50.00	"	8-4	47.24	"	90-3 9/16																					GR-6
	GR-7	8-4	49.65	"	8-4	46.89	"	89-10 7/8																					GR-7
	GR-8	8-4	49.32	"	8-4	46.53	"	89-6 3/16	9-10	7-2	55-6 3/16	.073	.084	60x3/8	14x3/4	14x3/4	14x3/4	18x1 1/8	14x3/4	18x1 3/8	2 3/4	0-6 1/8	11@13	10@15	19@24	3-3 1/8	6@48	7@60	GR-8
	GR-9	3-9 5/16	49.14	86-37-28	7-0	46.26	89-18-28	89-3 7/8	15-10	-	57-7 7/8	.060	.069	"	"	"	"	-	-	18x7/8	2 1/2	0-10 15/16	-	9@21	28@24	3-1 15/16	3@56	11@60	GR-9
	GR-10	3-9 5/16	48.99	84-35-05	7-0	45.96	87-16-05	89-2 7/8	"	-	57-6 7/8	"	"	"	"	"	"	-	-	"	2 1/2	0-10 7/16	-	"	"	3-1 7/16	"	"	GR-10
	GR-11	3-9 5/16	48.83	82-32-27	7-0	45.65	85-13-37	89-3 3/16	11-3	5-7	55-7 3/16	.109	.125	"	"	"	14x3/4	18x7/8	14x7/8	18x1 1/8	3 1/8	0-10 5/8	-	"	"	3-1 5/8	"	"	GR-11

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GIRDER SCHEDULE – LOCATION 1 STRUCTURE NO. 016-1113
		DRAWN - AMR	REVISED -		
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -		SCALE: NTS SHEET NO. 24 OF 40 SHEETS STA. TO STA.
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	30
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

$FILE$

SPAN	GIRDER	SOUTH END DATA S	SOUTH END DATA ELEVATION 1	SOUTH END DATA ANGLE α	NORTH END DATA N	NORTH END DATA ELEVATION 2	NORTH END DATA ANGLE β	GIRDER DIMENSIONS LENGTH c/c BRGS.	A	B	C	Δ (⅓) CONCRETE	Δ (℄) CONCRETE	WEB PLATE	FLANGE PLATES 1	2	3	4	5	6	CAMBER	SHEAR CONNECTOR SPACINGS a	b	c	d	INTERIOR WEB STIFFENER SPACINGS e	f	g	GIRDER
	GL-11	5'-4"	51.79	89°-32'-31"	6'-10"	49.09	92°-13'-31"	95'-9"	9'-0"	9'-0"	59'-9"	.131'	150	60"x3/8"	14"x3/4"	14"x3/4"	14"x1 1/8"	18"x1 1/8"	18"x1 3/8"	3 1/2"	1'-0 1/2"	8@18"	9@18"	24@24"	2'-10 1/2"	6@15"	9@60"	GL-11
	GL-10	8-4	51.61	88-39-30	8-4	48.82	91-20-30	95-5 1/2	9-6	10-6	55-5 1/2	.085	.098	"	"	"	14x3/4	18x1 1/4	14x7/8	"	2 7/8	0-10 3/4	"	"	"	2-8 3/4	"	"	GL-10
	GL-9	8-4	51.26	"	8-4	48.47	"	95-0 13/16	8-8	9-4	59-0 13/16	.087	.100	"	"	"	"	"	"	3	1-0 3/8	10@12	14@15	18@24	1-3 3/8	7@45	8@60	GL-9
	GL-8	8-4	50.91	"	8-4	48.12	"	94-8 1/8											14x1 1/2									GL-8
	GL-7	8-4	50.56	"	8-4	47.77	"	94-3 7/16																				GL-7
	GL-6	8-4	50.21	"	8-4	47.42	"	93-10 3/4																				GL-6
	GL-5	4-0	49.87	"	4-0	47.08	"	93'-6 9/16																				GL-5
	GL-4	7-11	49.69	"	7-11	46.93	"	93-3 13/16																				GL-4
	GL-3	7-11	49.37	"	7-11	46.58	"	92-11 3/8																				GL-3
	GL-2	7-11	49.02	"	7-11	46.26	"	92-6 15/16																				GL-2
	GL-1	7-11	48.72	"	7-11	45.96	"	92-2 7/16																				GL-1
8	GR-1	3-9 2-4	48.72	"	3-9 2-4	45.96	"	91-11 12/16																				GR-1
	GR-2	7-11	48.38	"	7-11	45.62	"	91-7 3/8																				GR-2
	GR-3	7-11	48.05	"	7-11	45.29	"	91-2 15/16																				GR-3
	GR-4	7-11	47.71	"	7-11	44.95	"	90-10 1/2																				GR-4
	GR-5	4-0	47.55	"	4-0	44.79	"	90-8 1/4																				GR-5
	GR-6	8-4	47.20	"	8-4	44.45	"	90-3 9/16																				GR-6
	GR-7	8-4	46.85	"	8-4	44.09	"	89-10 7/8																				GR-7
	GR-8	8-4	46.50	"	8-4	43.74	"	89-6 3/16																				GR-8
	GR-9	8-4	46.15	"	8-4	43.39	"	89-1 1/2	9-10	7-2	55-1 1/2	.073	.084	60x3/8	14x3/4	14x3/4	14x3/4	18x1 1/8	14x3/4	18x1 3/8	2 3/4	0-6 3/4	10@14	10@16	18@24	3-0 3/4	6@48	7@60	GR-9
	GR-10	4-2 11/16	45.97	86-25-26	7-9	43.06	89-06-26	88-10 15/16	10-8	3-10	51-8 15/16	.061	.070	"	"	"	"	18x3/4	"	18x7/8	2 1/2	0-7 1/2	-	10@13	28@24	3-5 1/2	3@54	11@60	GR-10
	GR-11	4-2 11/16	45.78	84-10-57	7-9	42.75	86-51-57	88-10 1/16	"	"	51-8 1/16	"	"	"	"	"	"	"	"	"	"	0-7	-	"	"	3-5	"	"	GR-11
	GR-12	4-2 11/16	45.61	81-56-27	7-9	42.40	84-37-27	88-10 3/4	11-3	5-7	55-2 3/4	.088	.125	"	"	"	"	16x7/8	14x7/8	18x1 1/8	3 1/8	0-7 3/8	-	"	"	3-5 3/8	"	"	GR-12
	GL-11	6-2	49.06	89-44-14	8-0	45.36	92-25-14	95-10 1/8	9-0	9-0	59-10 1/8	.131	.150	60x3/8	14x3/4	14x3/4	14x1 1/8	18x1 1/8	14x1 1/4	18x1 3/8	3 1/2	1-1 1/16	8@14	9@18	24@24	2-11 1/16	6@45	9@60	GL-11
	GL-10	8-6	48.82	88-39-30	8-6	45.06	91-20-30	95-5 15/16	9-6	10-6	55-5 15/16	.085	.098	"	"	"	14x3/4	18x1 1/4	14x7/8	"	2 7/8	0-11	"	"	"	2-9	"	"	GL-10
	GL-9	8-6	48.48	"	8-6	45.69	"	95-1 1/8	8-8	9-4	59-1 1/8	.087	.100	"	"	"	"	"	"	18x1 1/2	3	0-7 9/16	10@12 1/2	14@15	19@24	1-3 9/16	7@45	8@60	GL-9
	GL-8	8-6	48.11	"	8-6	45.35	"	94-8 3/8	"	"	58-8 3/8	"	"	"	"	"	"	"	"	"	"	0-10 3/16	10@12	"	"	1-1 3/16	"	"	GL-8
	GL-7	8-6	47.75	"	8-6	44.99	"	94-3 5/8	"	"	58-3 5/8	"	"	"	"	"	"	"	"	"	"	0-7 13/16	"	"	"	1-5 13/16	7@44	"	GL-7
	GL-6	8-6	47.41	"	8-6	44.62	"	93-10 13/16	"	"	57-10 13/16	"	"	"	"	"	"	"	"	"	"	0-5 3/8	"	"	"	1-3 3/8	"	"	GL-6
	GL-5	4-0	47.05	"	4-0	44.29	"	93-6 1/16																				GL-5
	GL-4	7-11	46.88	"	7-11	44.12	"	93-3 13/16																				GL-4
	GL-3	7-11	46.55	"	7-11	43.79	"	92-11 3/8																				GL-3
	GL-2	7-11	46.23	"	7-11	43.46	"	92-6 15/16																				GL-2
	GL-1	7-11	45.91	"	7-11	43.15	"	92-2 7/16																				GL-1
9	GR-1	3-9 2-4	45.91	88-39-31	3-9 2-4	43.15	91-20-31	91-11 13/16																				GR-1
	GR-2	7-11	45.57	"	7-11	42.81	"	91-7 3/8																				GR-2
	GR-3	7-11	45.24	"	7-11	42.48	"	91-2 15/16																				GR-3
	GR-4	7-11	44.91	"	7-11	42.15	"	90-10 1/2																				GR-4
	GR-5	4-0	44.74	"	4-0	41.98	"	90-8 1/4																				GR-5
	GR-6	7-0	44.45	88-53-32	6-7 1/2	41.69	91-34-32	90-4 7/16	9-0	8-0	56-4 7/16	.075	.086	60x3/8	14x3/4	14x3/4	14x3/4	18x1 1/8	14x3/4	18x1 3/8	2 3/4	0-10 1/4	10@13	12@16 1/2	17@24	2-0 1/4	8@46	5@80	GR-6
	GR-7	7-0	44.15	89-07-40	6-7 1/2	41.92	91-48-40	90-0 5/8	"	"	56-0 5/8	"	"	"	"	"	"	"	"	"	"	0-5 5/16	"	"	"	1-10 5/16	"	"	GR-7
	GR-8	7-0	43.85	89-21-53	4-8 1/2	41.15	92-02-53	89-5 13/16	"	"	55-5 13/16	"	"	"	"	"	"	"	"	"	"	0-4 3/8	"	"	"	1-8 3/8	"	"	GR-8
	GR-9	7-0	43.56	90-48-33		40.95	93-29-33	89-6 3/16	10-2	8-5	50-4 3/16	.093	.107	"	"	"	"	18x3/4	"	18x7/8	3	0-9 1/8	-	-	44@24	3-7 1/8	4@56	9@60	GR-9

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GIRDER SCHEDULE – LOCATION 1 STRUCTURE NO. 016–1113
		DRAWN - AMR	REVISED -		
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -		SCALE: NTS | SHEET NO. 25 OF 40 SHEETS | STA. | TO STA.
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	31
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

$FILE1$

SPAN	GIRDER	SOUTH END DATA S	SOUTH END DATA ELEVATION 1	SOUTH END DATA ANGLE δ	NORTH END DATA N	NORTH END DATA ELEVATION 2	NORTH END DATA ANGLE β	GIRDER DIMENSIONS LENGTH ℄ BRGS.	A	B	C	Δ (1) CONCRETE	Δ (2) CONCRETE	WEB PLATE	FLANGE PLATES 1	2	3	4	5	6	CAMBER	SHEAR CONNECTOR SPACINGS a	b	c	d	INTERIOR WEB STIFFENER SPACINGS e	f	g	GIRDER
	GL-16		46.26	88°-25'-00"		41.67	88°-25'-00"	169'-0 5/16"	8'-11"	19'-10"	91'-6 5/16"	.203'	.233'	72"x7/16"	16x1"	16x1"	24x1 3/8"	26x1 3/8"	24x2"	26"x2 1/8"	4 7/8	0'-6 1/8"	-	-	74@24"	3'-10 1/8"	8@52"	12@72"	GL-16
	GL-15	9'-5 1/8"	46.22	"	9'-5 1/8"	41.56	"	"	18-0	19-10	91-4 9/16	.199	.171	"	16x3/4	16x3/4	16x1 1/8	20x1 3/8	16x1 3/8	20x1 5/8	4 3/4	"	-	-	"	2-6 1/8	3@60	19@72	GL-15
	GL-14	5-0 3/4	45.95	87-52-29	6-5 15/16	41.26	87-52-23	169-8 7/8	13-0	17-3	98-6 7/8	.198	.270	"	"	"	16x1 1/4	20x1 1/2	16x1 1/2	20x1 3/4	"	1-1 7/16	-	7@23"	60@24	5-2 7/16	4@84	18@72	GL-14
	GL-13	5-0 3/4	45.70	"	5-0 3/4	41.06	"	"	14-0	14-10	91-4 7/8	.149	.171	"	"	"	16x1 1/8	20x1 3/8	16x1 3/8	20x1 5/8	"	0-6 7/16	-	-	74@24	2-6 7/16	3@80	19@72	GL-13
	GL-12	5-0 3/4	45.48	"	5-0 3/4	40.64	"	"																					GL-12
	GL-11	5-0 3/4	45.26	"	5-0 3/4	40.62	"	"																					GL-11
	GL-10	5-0 3/4	45.06	"	5-0 3/4	40.39	"	"																					GL-10
	GL-9	5-0 3/4	44.84	"	5-0 3/4	40.17	"	"																					GL-9
	GL-8	5-0 3/4	44.63	"	5-0 3/4	39.95	"	"																					GL-8
	GL-7	5-0 3/4	44.42	"	5-0 3/4	39.71	"	"																					GL-7
	GL-6	3-6	44.22	"	3-6	39.50	"	"	15-0	13-9	91-6 7/8	.137	.157	"	"	"	"	16x1	20x1 1/4	16x1 1/4	20x1 1/2	4 3/8	0-6 7/16	-	-	74@24	2-6 7/16	3@60	19@72	GL-6
	GL-5	6-0 1/4	44.01	"	6-0 1/4	39.29	"	"	9-11	18-10	91-6 7/8	.140	.161	"	"	"	16x1 1/2	20x1 7/8	16x1 7/8	20x2 1/4	4 5/8	0-10 7/8	-	8@16	63@24	4-0 7/16	6@57	14@72	GL-5
	GL-4	6-0 1/4	43.79	"	6-0 1/4	39.04	"	"	12-0	16-8	91-6 7/8	.149	.172	"	"	"	16x1 1/4	20x1 5/8	16x1 5/8	20x1 7/8	"	1-3 7/16	-	7@21	61@24	5-0 7/16	3@62	18@72	GL-4
	GL-3	6-0 1/4	43.53	"	6-0 1/4	38.78	"	"																					GL-3
	GL-2	6-0 1/4	43.27	"	6-0 1/4	38.50	"	"																					GL-2
10	GL-1	6-0 1/4	43.02	"	6-0 1/4	38.26	"	"	11-3	17-6	91-6 7/8	.197	.226	"	"	"	"	16x1 1/2	20x1 1/2	16x1 7/8	"	5	0-6 7/16	-	-	74@24	5-0 7/16	3@62	18@72	GL-1
	GR-1	6-0 1/4	43.02	87-50-21	6-0 1/4	38.26	87-50-21	"	11-0	17-8	91-8 7/8	.187	.214	"	"	"	"	20x1 5/8	"	"	4 7/8	"	-	-	"	3-2 7/16	4@61	17@72	GR-1
	GR-2	6-0 1/4	42.78	"	6-0 1/4	37.99	"	"	12-0	16-8	91-8 7/8	.149	.172	"	"	"	16x1 1/4	"	16x1 5/8	"	4 5/8	1-3 7/16	-	7@21	61@24	5-0 7/16	3@62	18@72	GR-2
	GR-3	6-0 1/4	42.53	"	6-0 1/4	37.73	"	"																					GR-3
	GR-4	6-0 1/4	42.28	"	6-0 1/4	37.47	"	"																					GR-4
	GR-5	3-5 15/16	42.07	"	3-5 15/16	37.23	"	"	15-2	13-9	91-2 7/8	.146	.168	"	"	"	"	16x1	20x1 1/4	16x1 1/4	20x1 1/2	4 7/8	0-6 7/16	-	-	74@24	1-8 7/16	3@63	22@72	GR-5
	GR-6	5-2 3/4	41.86	"	5-2 3/4	37.02	"	"	9-11	18-10	91-6 7/8	.136	.156	"	"	"	16x1 1/2	20x1 7/8	16x1 7/8	20x2 1/4	4 5/8	0-10 7/16	-	8@16	63@24	4-0 7/16	6@57	14@72	GR-6
	GR-7	5-2 3/4	41.67	"	5-2 3/4	36.80	"	"	13-11	16-10	"	.149	.171	"	"	"	16x1 1/8	20x1 3/8	16x1 1/2	20x1 5/8	4 3/4	"	-	9@23	71@24	4-0 7/16	2@63	28@72	GR-7
	GR-8	5-2 3/4	41.45	"	5-2 3/4	36.58	"	"																					GR-8
	GR-9	5-2 3/4	41.21	"	5-2 3/4	36.35	"	"																					GR-9
	GR-10	5-2 3/4	41.00	"	5-2 3/4	36.12	"	"																					GR-10
	GR-11	4-2	40.83	"	4-2	35.95	"	"	12-4	16-5	91-6 7/8	.210	.261	"	16x1	16x1	24x1 3/8	26x1 3/8	24x1 5/8	26x1 5/8	5 1/8	"	-	"	71@24	2-9 7/16	5@57	16@72	GR-11

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GIRDER SCHEDULE – LOCATION 1 STRUCTURE NO. 016–1113
		DRAWN - AMR	REVISED -		
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -		SCALE: NTS SHEET NO. 26 OF 40 SHEETS STA. TO STA.
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	32
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

$FILE$

RAMP A

SPAN	GIRDER	SOUTH END DATA S	SOUTH END DATA ELEVATION 1	SOUTH END DATA ANGLE δ	NORTH END DATA N	NORTH END DATA ELEVATION 2	NORTH END DATA ANGLE β	GIRDER DIMENSIONS LENGTH C/C BRGS.	A	B	C	Δ (℄) CONCRETE	Δ (℄) CONCRETE	WEB PLATE	FLANGE PLATES 1	2	3	4	5	6	CAMBER	SHEAR CONNECTOR SPACINGS a	b	c	d	INTERIOR WEB STIFFENER SPACINGS e	f	g	GIRDER
A-1	GA-1	6'-11 1/8"	69.47	106°-36'-42"	6'-6 1/16"	68.00	92°-11'-30"	72'-6"	15'-5"	-	41'-8"	.059"	.068"	60"x3/8"	16"x3/4"	16"x3/4"	-	-	16"x3/4"	18"x3/4"	2 2/8"	1'-5"	12@16"	-	19@26"	2'-8"	3@24"	8@60"	GA-1
	GA-2	"	69.43	106-42-57	"	67.96	92-17-45	76-2 13/16	"	-	43'-6 13/16	.061	.087	"	"	"	"	-	"	"	2 1/8	1-1 7/16	"	-	20@26	3-7 7/16	"	"	GA-2
	GA-3	"	69.38	106-48-55	"	67.91	92-23-53	75-11 9/16	"	-	45-1 9/16	"	"	"	"	"	"	-	"	"	"	0-11 13/16	"	-	21@26	1-11 13/16	4@58	"	GA-3
	GA-4	6-11 1/8	69.35	106-54-37	6-6 1/16	67.85	92-29-25	77-8 3/8	"	-	46-10 3/8	"	"	"	"	"	"	-	"	"	"	1-3 3/16	11@17	-	22@26	2-10 3/16	"	"	GA-4
	GA-5	3-1 3/4	69.31	107-00-06	3-0 3/16	67.81	92-34-52	79-5 1/8	22-9	-	33-11 1/8	.068	.066	"	"	"	"	-	"	"	2 1/4	0-8 9/16	12@17	-	"	2-8 9/16	4@61	"	GA-5
	GL-9																												
A-2	GA-1		67.82	92-43-43		65.30	95-25-53	96-6 7/8	9-4	18-1	57-8 7/8	.114	.130	60x3/8	16x3/4	16x3/4	16x1 1/8	18x1 1/4	16x1 3/8	18x1 1/2	3 1/4	1-3 7/16	9@16	4@21	28@26	3-8 7/16	5@47	10@60	GA-1
	GA-2	5-8 7/8	67.83	92-08-36	6-8 1/8	65.25	94-48-38	96-2 9/16	11-6	6-8	59-10 9/16	.083	.096	"	"	"	16x3/4	18x1	16x3/4	18x1 1/4	2 7/8	1-1 5/16	"	"	"	3-1 5/16	5@48	10@60	GA-2
	GA-3	6-9 1/8	67.78	92-09-19	"	65.19	94-50-19	95-10 13/16	"	"	59-6 13/16	"	"	"	"	"	"	"	"	"	"	0-11 7/16	"	"	"	2-11 7/16	"	"	GA-3
	GA-4	6-9 1/8	67.73	92-10-00	"	65.03	94-51-00	95-7	"	"	58-3	"	"	"	"	"	"	"	"	"	"	0-8 1/2	"	"	"	2-8 1/2	"	"	GA-4
	GA-5	6-9 1/8	67.65	92-10-51	6-9 1/8	64.89	94-51-41	95-3 3/16	11-0	7-2	58-11 3/16	.126	.145	"	"	"	"	14x7/8	"	16x1 1/8	"	2 3/8	0-7 1/8	"	"	"	2-7 1/8	"	"	GA-5
	GL-8	3-0 1/8			6-11 9/16																								
A-3	GA-1		65.28	93-54-56		62.80	96-35-56	97-1 1/4	9-6	10-1	58-3 1/4	.114	.130	60x3/8	16x3/4	16x3/4	16x1 1/8	18x1 1/4	16x1 3/8	18x1 1/2	3 1/4	0-8 5/8	11@16	9@18	23@26	3-11 5/8	5@47	10@60	GA-1
	GA-2	7-6	65.15	93-56-06	7-6	62.63	96-37-06	96-9 1/16	9-9	9-5	58-5 1/16	.087	.100	"	"	"	"	14x3/4	"	14x7/8	"	3	1-0 9/16	10@13	9@18	"	3-9 9/16	"	"	GA-2
	GA-3	7-10	65.02	93-57-15	7-10	62.51	96-38-15	96-9 11/16	"	"	58-0 11/16	"	"	"	"	"	"	"	"	"	"	1-2 3/8	9@14	9@18	"	3-7 3/8	"	"	GA-3
	GA-4	7-10	64.90	93-58-26	7-10	62.39	96-39-26	96-0 5/16	"	"	57-8 5/16	"	"	"	"	"	"	"	"	"	"	1-0 3/16	"	"	"	3-5 3/16	"	"	GA-4
	GA-5	5-10 1/2	64.81	93-59-37	6-0 3/8	61.99	96-40-37	95-5 5/8	11-0	7-2	58-1 5/8	.126	.145	"	"	"	"	14x7/8	18x1	14x1 1/8	18x1 1/4	3 3/8	0-8 13/16	"	"	"	3-1 13/16	"	"	GA-5
	GL-10	3-11 3/16																											
A-4	GA-1		62.75	94-05-04		60.56	96-46-04	97-6 13/16	9-6	10-1	58-8 13/16	.114	.130	60x3/8	16x3/4	16x3/4	16x1 1/8	18x1 1/4	16x1 3/8	18x1 1/2	3 1/4	0-9 7/16	10@15	6@21	25@26	2-9 7/16	5@47	9@60	GA-1
	GA-2	5-1 9/16	62.67	93-06-12	6-10 15/16	60.39	95-45-12	97-1 5/8	10-11	9-9	55-9 5/8	.092	.106	"	"	"	16x3/4	18x1 1/8	16x3/4	18x1 1/4	3 1/8	0-6 13/16	10@15	6@21	25@26	1-10 13/16	4@50	12@60	GA-2
	GA-3	5-1 9/16	62.59	93-02-50	"	60.07	94-43-50	96-8 13/16	10-7	9-7	56-4 13/16	.086	.099	"	"	"	"	"	"	"	3	0-10 9/16	"	6@18	26@26	2-11 3/8	5@48	10@60	GA-3
	GA-4	6-10 7/8	62.35	93-03-19	"	59.80	94-44-19	96-4 15/16	"	"	56-0 15/16	"	"	"	"	"	"	"	"	"	"	0-8 1/2	"	"	"	2-8 1/2	"	"	GA-4
	GA-5	6-10 7/8	62.14	93-03-48	"	59.56	94-44-48	96-1 1/16	"	"	55-9 1/16	"	"	"	"	"	"	"	"	"	"	0-5 1/2	"	"	"	2-7 1/2	"	"	GA-5
	GA-6	6-10 7/8	61.93	93-04-18	6-10 15/16	59.26	94-45-18	95-9 9/16	"	7-7	55-5 3/16	.126	.145	"	"	"	"	14x7/8	"	16x1 1/8	"	3 3/8	0-2 5/8	10@16	"	"	2-5 5/8	"	"	GA-6
	GL-10	6-6 5/8																											
A-5	GA-1		60.56	94-16-18		58.80	96-57-18	98-0 5/8	9-6	10-3	58-6 5/8	.117	.134	60x3/8	16x3/4	16x3/4	16x1 1/8	18x1 1/4	16x1 3/8	18x1 1/2	3 1/4	0-8 5/16	10@16	12@21	14@24	3-0 5/16	4@48	12@60	GA-1
	GA-2	5-6	60.36	93-07-56	7-6 1/8	58.23	95-48-55	97-6 7/8	10-11	9-9	56-2 7/8	.092	.106	"	"	"	16x3/4	18x1 1/8	16x3/4	18x1 1/4	3 1/8	0-8 7/16	10@15	6@21	25@24	2-11 7/16	5@50	10@60	GA-2
	GA-3	5-6	60.11	91-46-58	7-10 1/4	57.89	94-27-58	97-1 5/16	9-10	9-6	60-5 5/16	.088	.101	"	"	"	"	18x1 1/4	16x7/8	18x1 1/2	3	0-10 11/16	9@14	10@17	23@24	3-0 11/16	6@46	9@60	GA-3
	GA-4	7-10 1/4	59.79	91-47-40	"	57.54	94-28-40	96-8 7/8	"	9-7	59-10 7/8	"	"	"	"	"	"	"	"	"	"	0-8 7/16	"	"	"	2-8 7/16	"	"	GA-4
	GA-5	7-10 1/4	59.46	91-48-23	"	57.21	94-29-23	96-4 1/2	"	9-6	59-8 1/2	"	"	"	"	"	"	"	"	"	"	0-6 1/4	"	"	"	2-8 1/4	"	"	GA-5
	GA-6	7-10 1/4	59.12	91-49-05	7-10 1/4	56.84	94-30-05	96-0 1/16	"	9-4	59-3 1/16	.126	.145	"	"	"	"	14x7/8	"	16x1 1/8	"	3 3/8	0-7 1/16	10@14	9@17	"	2-6 1/16	"	"	GA-6
A-6																													
	GA-2	4-8 15/16	58.32	93-01-11	7-4 5/16	56.16	95-42-11	98-0 9/16	10-11	9-9	58-8 9/16	.092	.106	"	"	"	"	14x3/4	18x1 1/8	14x3/4	18x1 1/4	3 1/8	1-0 1/4	10@15	6@21	25@24	3-2 1/4	5@50	10@60	GA-2
	GA-3	4-8 15/16	58.12	91-31-31	"	55.86	94-12-31	97-7 1/4	"	"	56-3 1/4	"	"	"	"	"	"	"	"	"	"	0-9 5/8	"	"	"	2-11 5/8	"	"	GA-3
	GA-4	7-4 5/16	57.78	91-32-07	"	55.53	94-13-07	97-3 1/8	9-9	8-8	60-7 1/8	.086	.099	"	"	"	"	"	"	16x7/8	18x1 3/8	3	0-8 9/16	9@15	8@19	24@24	3-7 9/16	5@48	10@60	GA-4
	GA-5	"	57.47	91-32-43	"	55.22	94-13-43	96-11	"	"	60-3	"	"	"	"	"	"	"	"	"	"	0-6 1/2	"	"	"	3-5 1/2	"	"	GA-5
	GA-6	7-4 5/16	57.17	91-33-20	7-4 5/16	54.89	94-14-20	96-6 13/16	"	"	59-10 13/16	"	"	"	"	"	"	"	"	"	"	1-1 7/16	9@14	"	"	3-3 7/16	"	"	GA-6
	GA-7		56.82	91-33-56		54.56	94-14-56	96-2 11/16	"	8-6	59-10 11/16	.126	.145	"	"	"	"	14x7/8	"	16x1 1/8	18x1 3/8	3 3/8	0-11 3/8	9@14	"	"	3-1 3/8	"	"	GA-7
A-7	GA-1		58.39	96-16-00		56.35	97-29-00	99-1 1/4	9-6	10-3	58-7 1/4	.117	.134	60x3/8	16x3/4	16x3/4	16x1 1/8	18x1 1/4	16x1 3/8	18x1 1/2	3 1/4	1-2 5/8	10@16	12@21	14@24	3-6 5/8	4@48	12@60	GA-1
	GA-2	5-10	58.19	96-26-40	6-8	56.00	97-01-00	98-9 3/4	10-11	9-9	57-5 3/4	.092	.106	"	"	"	16x3/4	18x1 1/8	16x3/4	18x1 1/4	3 1/8	1-9 3/8	10@15	6@21	25@24	3-6 3/8	5@50	10@60	GA-2
	GA-3	6-6	57.89	93-50-22	7-5	53.58	96-31-22	98-3 13/16	10-10	8-9	59-1 13/16	.092	.106	"	"	"	"	"	"	18x1 3/8	"	0-8	10@16	5@29	27@26	3-8 7/8	5@49	10@60	GA-3
	GA-4	"	57.62	93-13-50	"	53.13	96-00-50	97-11	"	"	58-9	"	"	"	"	"	"	"	"	"	"	1-1 1/2	10@15	"	"	3-6 1/2	"	"	GA-4
	GA-5	"	57.32	92-99-02	"	52.71	95-30-02	97-6 1/4	"	"	58-4 1/8	"	"	"	"	"	"	"	"	"	"	0-11 1/8	"	"	"	3-4 1/8	"	"	GA-5
	GA-6	6-6	57.09	92-18-00	7-5	52.28	94-59-00	97-1 5/8	"	"	57-11 5/8	"	"	"	"	"	"	"	"	"	"	0-9 13/16	"	"	"	3-1 13/16	"	"	GA-6
	GA-7	5-10	56.76	91-46-46	6-8	51.85	96-27-46	96-9 1/16	"	"	57-7 1/16	"	"	"	"	"	"	"	"	"	"	0-6 1/2	"	"	"	2-11 1/2	"	"	GA-7
	GA-8		56.47	91-18-05		51.46	93-59-05	96-5 1/16	"	7-4	60-1 1/16	.126	.145	"	"	"	"	14x7/8	"	16x1 1/8	"	3 3/8	0-9 9/16	11@15	4@20	"	3-2 1/2	5@48	"	GA-8

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GIRDER SCHEDULE – LOCATION 1 STRUCTURE NO. 016-1113	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -			94	2010-127-BP	COOK	160	33
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -							CONTRACT NO. 60N01
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS SHEET NO. 27 OF 40 SHEETS STA. TO STA.			ILLINOIS	FED. AID PROJECT	

$FILEL$

RAMPS A & B

SPAN	GIRDER	SOUTH END DATA S	SOUTH END DATA ELEVATION 1	SOUTH END DATA ANGLE δ	NORTH END DATA N	NORTH END DATA ELEVATION 2	NORTH END DATA ANGLE β	GIRDER DIMENSIONS LENGTH ℄ BRGS.	A	B	C	Δ (1) CONCRETE	Δ (2) CONCRETE	WEB PLATE	FLANGE PLATES 1	2	3	4	5	6	CAMBER	SHEAR CONNECTOR SPACINGS a	b	c	d	INTERIOR WEB STIFFENER SPACINGS e	f	g	GIRDER
A-8	GA-1	6'-8"	54.23	92°-33'-09"	7'-4"	51.65	86°-46'-59"	115'-5 7/8"	6'-2"	15'-11"	71'-3 7/8"	.161'	.165'	60"x 5/8"	14"x3/8"	16"x3/4"	16x1 7/8"	18"x1 7/8"	16"x2 1/4	18x2 1/4	0"	1'-1 15/16	9@16"	9@19"	33@24"	21-11 15/16	9@83	9@60"	GA-1
	GA-2	7-5	53.86	92-14-43	7-11	51.43	86-28-37	114-11 1/8	7-6	15-6	68-11 1/16	.112	.129	"	"	"	16x1 1/4	18x1 3/8	16x1 1/2	18x2	3 1/2	0-10 9/16	8@16	9@19	33@24	2-8 9/16	"	"	GA-2
	GA-3	7-5	53.40	92-01-12	7-11	50.91	86-15-07	114-3 13/16	"	"	68-3 13/16	"	"	"	"	"	"	"	"	"	"	0-6 15/16	"	"	"	2-9 15/16	"	"	GA-3
	GA-4	7-5	52.92	91-47-33	7-11	50.40	86-01-28	113-8 5/8	"	"	67-8 5/8	"	"	"	"	"	"	"	"	"	"	0-10 5/16	9@19	"	33@24	2-1 5/16	"	"	GA-4
	GA-5	7-5	52.45	91-38-45	7-11	49.90	85-47-40	113-1 1/2	"	"	67-1 1/2	"	"	"	"	"	"	"	"	"	"	0-6 3/4	"	"	"	1-9 3/4	"	"	GA-5
	GA-6	7-5	51.97	91-19-49	7-11	49.39	85-33-46	112-6 5/16	"	"	66-6 5/16	"	"	"	"	"	"	"	"	"	"	0-9 5/16	8@19	"	"	2-3 3/16	9@82	"	GA-6
	GA-7	7-5	51.50	91-05-46	7-11	48.88	85-19-39	111-11 3/16	"	"	65-11 3/16	"	"	"	"	"	"	"	"	"	"	1-0 5/8	8@19	"	"	2-8 5/8	9@81	"	GA-7
	GA-8	6-8	51.08	90-46-22	7-4	48.41	85-03-16	111-6 9/16	"	13-7	65-10 9/16	.156	.179	"	"	"	"	"	"	"	"	0-9 5/16	"	"	"	2-5 5/16	"	"	GA-8
A-9	GA-1	5-6	51.89	91-20-35	5-6	49.02	91-20-35	123-10	10-5	13-4	76-4	.153	.177	72x7/16	16x3/4	16x3/4	16x1 1/2	20x1 1/2	16x1 3/4	20x1 7/8	3 7/8	1-2	9@21	-	48@24	2-7	5@56	12@72	GA-1
	GA-2	6-2	51.62	"	6-2	48.74	"	"	10-11	10-1	73-10	.109	.125	"	16x3/4	16x3/4	16x3/4	20x1 1/8	16x7/8	20x1 1/4	3 5/8	"	"	-	"	2-5	3@66	14@72	GA-2
	GA-3	6-2	51.20	"	6-2	48.32	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GA-3
	GA-4	6-2	50.62	"	6-2	47.90	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GA-4
	GA-5	6-2	50.43	"	5-6	47.46	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GA-5
	GA-6	5-8	50.04	91-20-35	5-5 9/16	47.09	91-20-35	123-10	13-9	10-0	76-4	.153	.177	"	"	"	16x1	20x1 1/4	16x1 1/4	20x1 1/2	3 7/8	1-4	11@17	-	"	4-2	3@83	"	GA-6
B-9	GB-4	6-10 9/16	49.67	90-38-01	6-6	46.61	90-38-01	123-9 11/16	9-11	13-10	76-3 11/16	.153	.177	"	"	"	16x1 1/2	20x1 1-2	16x1 3/4	20x1 7/8	"	1-3 7/8	"	-	"	2-6 7/8	5@56	12@72	GB-4
	GB-3	6-6	49.26	"	7-0	46.28	"	"	13-9	10-0	76-3 11/16	.107	.126	"	"	"	16x3/4	20x1 1/4	16x1	20x1 1/2	3 1/2	0-10 7/8	10@18	-	48@24	1-1 7/8	3@63	14@72	GB-3
	GB-2	6-6	48.90	"	6-5	45.75	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3 1/2	"	"	-	"	"	"	"	GB-2
	GB-1	6-6	48.46	90-38-01	6-5	45.31	90-38-01	123-9 11/16	"	"	"	.152	.175	"	"	"	16x1	"	16x1 1/4	"	3 7/8	"	"	-	"	"	"	"	GB-1
A-10	GA-1	7-2 1/2	48.26	86-01-29	7-2 1/2	47.10	86-01-29	103-9	8-0	11-9	64-3	.127	.146	60x3/8	14x3/4	16x3/4	14x1 3/8	18x1 1/2	14x1 5/8	16x1 3/4	3 1/2	0-6 1/2	9@ 13	11@17	28@24	3-1 1/2	7@45	9@60	GA-1
	GA-2	7-8	48.88	"	7-8	46.64	"	"	"	8-0	11-9	64-3	.066	.098	"	14x3/4	16x3/4	14x7/8	18x1 1/2	14x1 1/8	18x1 3/4	3	0-6 1/2	9@13	11@17	28@24	3-1 1/2	7@45	9@60	GA-2
	GA-3	7-8	48.39	"	7-8	46.11	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GA-3
	GA-4	7-8	47.80	"	7-8	45.61	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GA-4
	GA-5	7-2 1/2	47.31	86-01-29	7-2 1/2	45.09	86-01-29	103-9	8-0	11-9	64-3	.127	.145	"	"	"	14x1 1/8	"	14x1 3/8	"	3 1/2	"	"	"	"	"	"	"	GA-5
B-10	GB-4	6-3 3/16	46.73	85-56-35	6-4 15/16	44.26	85-56-35	103-9 3/16	"	"	64-3 3/16	.127	.144	"	"	"	14x1 3/8	"	14x1 5/8	"	3 1/2	0-6 5/8	"	"	"	3-1 5/8	"	"	GB-4
	GB-3	6-5	46.39	"	6-5	43.90	"	"	"	"	"	.096	.098	"	"	"	14x7/8	"	14x1 1/8	"	3	"	"	"	"	"	"	"	GB-3
	GB-2	7-0	45.93	"	7-0	43.53	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	3	"	"	"	"	"	"	"	GB-2
	GB-1	6-5	45.56	85-56-35	6-5	43.16	85-56-35	103-9 3/16	8-0	11-9	64-3 3/16	.129	.147	"	"	"	14x1	"	14x1 1/8	"	3 1/2	"	"	"	"	"	"	"	GB-1

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GIRDER SCHEDULE – LOCATION 1 STRUCTURE NO. 016-1113
		DRAWN - AMR	REVISED -		
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -		SCALE: NTS | SHEET NO. 28 OF 40 SHEETS | STA. | TO STA.
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	34
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

$FILE$

RAMP C

SPAN	GIRDER	SOUTH END DATA S	ELEVATION 1	ANGLE δ	NORTH END DATA N	ELEVATION 2	ANGLE β	GIRDER DIMENSIONS LENGTH C/C BRGS.	A	B	C	Δ (1/3) CONCRETE	Δ (℄) CONCRETE
C-1	8R-8 GC-1	3'-7 7/16"	66.77	98°-54'-18"		63.44	104°-24'-18"	90'-8 5/16"	8'-6"	8'-7"	58'-6 15/16"	.115	.133
	GC-2	6'-3"	66.49	98-58-51	6'-3"	63.13	104-28-50	90-1 1/4	10-11	7-9	52-9 1/4	.067	.077
	GC-3	7-3 1/2	66.13	98-04-13	7-3 1/2	62.71	104-34-13	89-5	"	"	52-1	"	"
	GC-4	7-3 1/2	65.76	99-09-41	7-3 1/2	62.28	104-39-41	88-8 13/16	"	"	51-4 13/16	"	"
	GC-5	6-3	65.46	99-14-25	6-3	61.89	104-44-25	88-1 3/4	"	6-7	53-1 3/4	.106	.122
C-2	GC-1		63.43	100-25-57		59.60	100-25-57	99-7 7/8	9'-3	9-7	61-11 7/8	.118	.134
	GC-2	4-5 1/2	63.19	98.52-13	7-3	59.35	98-52-14	99-2 3/8	9-3	9-7	61-6 3/8	.090	.104
	GC-3	7-8 1/4	62.70	"	7-8 1/4	59.01	"	"	"	"	"	"	"
	GC-4	7-8 1/4	62.23	"	7-8 1/4	58.63	"	"	"	"	"	"	"
	GC-5	7-3	61.72	98-52-13	7-3	58.27	98-52-14	99-2 3/8	"	"	"	.118	.134
C-3	GC-1		59.71	100-10-09		56.86	100-10-09	93-9 7/8	10-9	7-0	58-3 7/8	.124	.142
	GC-2	3-10 11/16	59.55	98-19-12	7-0	56.67	98-19-12	93-3 15/16	13-8	6-8	52-7 15/16	.071	.081
	GC-3	"	59.34	96-15-53	7-3 3/4	56.48	96-15-53	92-10 13/16	"	"	52-2 13/16	"	"
	GC-4	"	59.16	94-11-35	"	56.22	94-11-35	92-7 1/8	"	"	51-11 1/8	"	"
	GC-5	3-10 11/16	58.95	92-06-38	"	56.01	92-06-38	92-4 15/16	"	"	51-8 15/16	"	"
	GC-6	7-3 3/4	58.63		7-3 3/4	55.78	"	"	10-1	8-3	55-8 15/16	.077	.089
	GC-7	7-0	58.26	92-06-38	7-0	55.56	92-06-38	92-4 15/16	10-1	7-8	56-10 15/16	.124	.142
C-4	GC-1		56.54	100-09-58		54.44	100-09-58	93-9 13/16	10-9	7-0	58-3 13/16	.124	.142
	GC-2	4-2	56.47	98-27-24	7-0 1/2	54.34	98-27-24	93-4 5/16	13-8	6-8	52-8 5/16	.071	.081
	GC-3	"	56.36	96-19-50	7-8 1/2	54.20	96-19-50	92-10 15/16	"	"	52-2 15/16	"	"
	GC-4	"	56.27	94-11-12	"	54.05	94-11-12	92-7 1/8	"	"	51-11 1/8	"	"
	GC-5	"	56.18	92-01-52	"	53.90	92-01-52	92-4 13/16	"	"	51-8 13/16	"	"
	GC-6	4-2	56.07	89-52-11	"	53.76	89-52-11	92-4 1/8	10-1	8-3	55-8 1/8	.077	.089
	GC-7	7-8 1/2	55.90	"	"	53.62	"	"	"	"	"	"	"
	GC-8	7-8 1/2	55.74	"	7-8 1/2	53.46	"	"	"	"	"	"	"
	GC-9	7-0	55.55	89-52-11	7-0	53.30	89-52-11	92-4 1/8	"	7-4	57-6 1/8	.118	.136
C-5	GC-1		54.70	100-14-40		51.90	100-14-40	100-1 1/8	8-10	10-1	62-3 1/8	.113	.129
	GC-2	4-2 1/2	54.64	98-37-27	7-1 3/8	51.70	98-37-27	99-7 1/2	10-0	8-11	61-9 1/2	.083	.095
	GC-3	"	54.57	96-29-22	8-0	51.50	96-29-22	98-1 5/8	"	"	61-3 5/8	"	"
	GC-4	"	54.50	94-20-12	"	51.47	94-20-12	98-9 1/8	"	"	60-11 3/8	"	"
	GC-5	"	54.43	92-10-17	"	51.53	92-10-17	98-6 7/8	"	"	60-8 7/8	"	"
	GC-6	4-2 1/2	54.26	90-00-00	8-0	51.65	90-00-00	98-6	27-6	-	43-6	.089	.103
	GC-7	3-0	54.16	"	3-0	51.70	"	"	"	-	"	"	"
	GC-8	7-3 3/4	53.92	"	7-3 3/4	51.70	"	"	9-0	9-8	61-2	.090	.103
	GC-9	"	53.77	"	"	51.55	"	"	"	"	"	"	"
	GC-10	"	53.63	"	"	51.41	"	"	"	"	"	"	"
	GC-11	7-3 3/4	53.48	"	7-3 3/4	51.26	"	"	"	"	"	"	"
	GC-12	7-0	53.30	90-00-00	7-0	51.08	90-00-00	98-6	"	"	"	.114	.130
C-6	GC-1		51.73	88-03-42		49.69	88-03-42	87-2 5/16	10-5	6-0	54-4 5/16	.104	.116
	GC-2	7-6	51.59	88-23-04	7-0	49.58	88-23-04	87-2 1/8	"	"	54-4 1/8	.065	.074
	GC-3	8-6	51.43	89-01-50	7-6	49.44	89-01-50	87-1 7/8	"	"	54-3 7/8	"	"
	GC-4	8-6	51.24	89-40-37	7-6	49.29	89-40-37	87-1 3/4	"	"	54-3 3/4	"	"
	GC-5	7-6	51.09	90-00-00	7-0	49.11	90-00-00	87-1 11/16	"	"	54-3 11/16	.101	.116

SPAN	GIRDER	WEB PLATE	FLANGE PLATES 1	2	3	4	5	6	CAMBER	SHEAR CONNECTOR SPACINGS a	b	c	d	INTERIOR WEB STIFFENER SPACINGS e	f	g	GIRDER
C-1	GC-1	60"x3/8"	14"x3/4"	14"x3/4"	14"x1"	18"x1 1/4"	14"x1 1/4"	18"x1 3/8"	3 1/8"	1'-2 3/16"	10@14"	6@18"	23@24"	2'-4 1/8"	6@46"	8@60"	GC-1
	GC-2	"	14x3/4	14x3/4	14x3/4	18x1	14x3/4	18x1 1/8	2 5/8	0-10 5/8	10@14	6@18	23@24	3-4 5/8	4@50	10@60	GC-2
	GC-3	"	"	"	"	"	"	"	"	0-8 1/2	10@15	"	22@24	3-8 1/2	"	"	GC-3
	GC-4	"	"	"	"	"	"	"	"	1-2 7/16	10@14	"	"	2-8 7/16	"	"	GC-4
	GC-5	"	"	"	"	"	14x7/8	"	3 1/8	0-10 7/8	"	"	"	2-4 7/8	"	"	GC-5
C-2	GC-1	60x3/8	14x3/4	14x3/4	14x1 1/8	18x1 3/8	14x1 3/8	18x1 5/8	3 3/8	0-4 15/16	10@13	11@17	23@24	2-3 15/16	8@45	7@60	GC-1
	GC-2	"	"	"	14x3/4	"	14x1	"	3	1-0 3/16	10@12	"	"	2-1 3/16	"	"	GC-2
	GC-3	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GC-3
	GC-4	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GC-4
	GC-5	"	"	"	14x1 1/8	"	14x1 3/8	"	3 3/8	"	"	"	"	"	"	"	GC-5
C-3	GC-1	60x3/8	14x3/4	14x3/4	14x7/8	18x1	14x1 1/8	18x1 1/4	3 3/8	0-10 15/16	10@18	-	31@24	2-2 15/16	4@44	12@60	GC-1
	GC-2	"	"	"	14x3/4	18x7/8	14x3/4	18x1	2 3/4	0-8	"	-	"	3-5	3@53	"	GC-2
	GC-3	"	"	"	"	"	"	"	"	1-2 7/16	9@19	-	"	3-2 7/16	"	"	GC-3
	GC-4	"	"	"	"	"	"	"	"	1-0 9/16	"	-	"	3-0 9/16	"	"	GC-4
	GC-5	"	"	"	"	"	"	"	"	0-11 7/16	"	-	"	2-11 7/16	"	"	GC-5
	GC-6	"	"	"	"	18x1 1/8	"	18x1 3/8	"	1-0 7/16	10@14	7@18	23@24	3-8 7/16	5@48	9@60	GC-6
	GC-7	"	"	"	14x7/8	"	14x1 1/8	"	3 3/8	"	"	"	"	"	"	"	GC-7
C-4	GC-1	60x3/8	14x3/4	14x3/4	14x7/8	18x1	14x1 1/8	18x1 1/4	3 3/8	0-10 15/16	10@18	-	31@24	2-2 15/16	4@44	12@60	GC-1
	GC-2	"	"	"	14x8-4	18x7/8	14x3/4	18x1	2 3/4	0-8 3/16	"	-	"	3-5 3/16	3@53	"	GC-2
	GC-3	"	"	"	"	"	"	"	"	1-2 1/2	9@19	-	"	3-2 1/2	"	"	GC-3
	GC-4	"	"	"	"	"	"	"	"	1-0 9/16	"	-	"	3-0 9/16	"	"	GC-4
	GC-5	"	"	"	"	"	"	"	"	0-11 7/16	"	-	"	2-11 7/16	"	"	GC-5
	GC-6	"	"	"	"	18x1 1/8	"	18x1 3/8	"	1-0 1/16	10@14	7@18	23@24	3-8 1/16	5@48	9@60	GC-6
	GC-7	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GC-7
	GC-8	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GC-8
	GC-9	"	"	"	14x7/8	"	14x1 1/8	"	3 1/4	"	"	"	"	"	"	"	GC-9
C-5	GC-1	60x3/8	14x3/4	14x3/4	14x1 1/4	18x1 3/8	14x1 1/2	18x1 5/8	3 1/4	0-10 9/16	10@14	6@19	28@24	3-4 9/16	5@46	11@60	GC-1
	GC-2	"	"	"	14x3/4	18x1 1/8	14x7/8	18x1 3/8	3	1-0 3/4	9@15	"	"	3-1 3/4	"	"	GC-2
	GC-3	"	"	"	"	"	"	"	"	0-9 13/16	"	"	"	2-10 13/16	"	"	GC-3
	GC-4	"	"	"	"	"	"	"	"	0-7 11/16	"	"	"	2-8 11/16	"	"	GC-4
	GC-5	"	"	"	"	"	"	"	"	0-6 7/16	"	"	"	2-7 7/16	"	"	GC-5
	GC-6	"	"	"	-	-	14x3/4	18x3/4	3 1/8	1-9	-	-	48@24	1-9	-	19@60	GC-6
	GC-7	"	"	"	-	-	"	"	"	"	-	-	"	"	-	"	GC-7
	GC-8	"	"	"	14x3/4	18x1 1/4	14x7/8	18x1 1/2	"	0-6	9@14	9@19	24@24	2-5	7@46	8@60	GC-8
	GC-9	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GC-9
	GC-10	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GC-10
	GC-11	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GC-11
	GC-12	"	"	"	14x1 1/8	"	14x1 3/8	"	3 1/4	"	"	"	"	"	"	"	GC-12
C-6	GC-1	60x3/8	14x3/4	14x3/4	14x3/4	18x1	14x1	18x1 1/4	3	0-6 1/8	11@13	10@17	17@24	2-7 1/8	6@47	7@60	GC-1
	GC-2	"	"	"	"	"	14x3/4	"	2 5/8	0-6 1/16	"	"	"	2-7 1/16	"	"	GC-2
	GC-3	"	"	"	"	"	"	"	"	0-5 15/16	"	"	"	2-6 15/16	"	"	GC-3
	GC-4	"	"	"	"	"	"	"	"	0-5 7/8	"	"	"	2-6 7/8	"	"	GC-4
	GC-5	"	"	"	"	"	14x1	"	3	"	"	"	"	2-6 13/16	"	"	GC-5

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER SCHEDULE – LOCATION 1
STRUCTURE NO. 016–1113

SCALE: NTS | SHEET NO. 29 OF 40 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	35

CONTRACT NO. 60N01

ILLINOIS FED. AID PROJECT

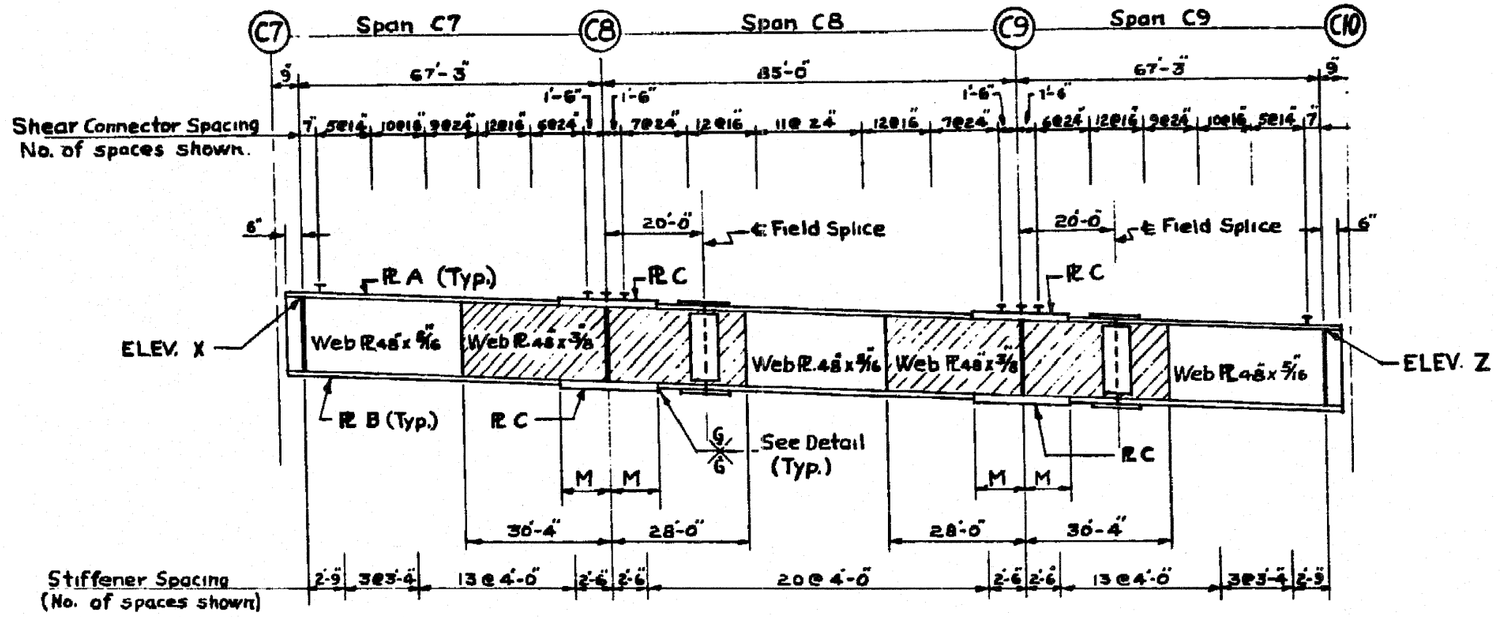
$FILEL$

RAMP D

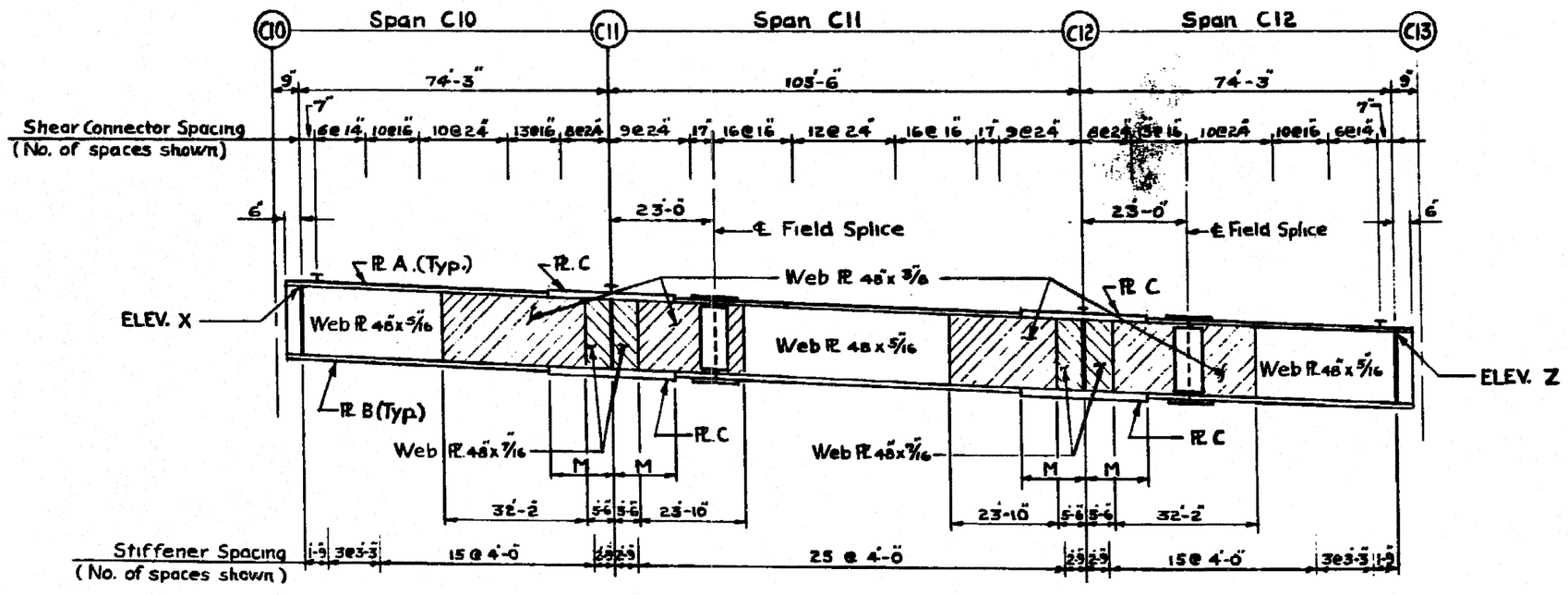
SPAN	GIRDER	SOUTH END DATA S	SOUTH END DATA ELEVATION 1	SOUTH END DATA ANGLE δ	NORTH END DATA N	NORTH END DATA ELEVATION 2	NORTH END DATA ANGLE β	GIRDER DIMENSIONS LENGTH c/c BRGS.	A	B	C	Δ (½) CONCRETE	Δ (℄) CONCRETE	WEB PLATE	FLANGE PLATES 1	2	3	4	5	6	CAMBER	SHEAR CONNECTOR SPACINGS a	b	c	d	INTERIOR WEB STIFFENER SPACINGS e	f	g	GIRDER
D-6	GD-1	6'-5 5/8"	51.68	90°-22'-54"	6'-5 5/8"	48.62	90°-22'-54"	62'-5 5/8	11'-3"	5'-0"	49'-11 5/8"	.093'	.106'	60"x3/8"	14"x3/4"	14"x3/4"	14"x3/4"	18"x7/8"	14"x7/8"	18"x1"	2 7/8"	9-0 13/16"	10@14"	7@18"	18@26"	2-8 12/16	4@48	9@60	GD-1
	GD-2	6-5 5/8	51.51	"	6-5 5/8	48.36	"	"	"	5-10	49-3 5/8	.048	.055	"	"	"	"	"	14x3/4	"	2 3/8	"	"	"	"	"	"	"	GD-2
	GD-3	6-5 5/8	51.33	90-22-54	6-5 5/8	48.09	90-22-54	62-5 5/8	"	"	49-3 5/8	"	"	"	"	"	"	"	14x7/8	"	2 7/8	"	"	"	"	"	"	"	GD-3
	GD-4	6-6 13/16	51.13	90-26-54	6-5 5/8	47.89	90-26-54	62-5 13/16	11-3	5-0	49-11 13/16	.093	.106	"	"	"	"	"	14x7/8	"	2 7/8	9-0 15/16	"	"	"	2-8 15/16	"	"	GD-4
D-7	GD-1	6-5 5/8	48.55	90-40-52	6-5 5/8	45.49	90-40-52	62-5 13/16	11-3	5-0	49-11 13/16	.093	.106	60x3/8	14x3/4	14x3/4	14x3/4	18x7/8	14x7/8	18x1	2 7/8	9-0 15/16	10@14	7@18	18@26	2-8 15/16	4@48	9@60	GD-1
	GD-2	6-5 5/8	48.33	"	6-5 5/8	45.26	"	"	"	5-10	49-3 13/16	.046	.055	"	"	"	"	"	14x3/4	"	2 3/8	"	"	"	"	"	"	"	GD-2
	GD-3	6-5 5/8	48.09	"	6-5 5/8	45.00	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GD-3
D-8	GD-1	6-5 5/8	48.48	92-55-29	6-5 5/8	42.37	91-47-17	62-5 11/16	11-3	5-0	49-11 11/16	.093	.106	60x3/8	14x3/4	14x3/4	14x3/4	18x7/8	14x7/8	18x1	2 7/8	1-0 7/8	10@14	7@18	18@26	2-8 7/8	4@48	9@60	GD-1
	GD-2	"	48.20	92-55-16	"	42.11	91-47-04	62-7 1/8	"	5-10	49-5 1/4	.048	.055	"	"	"	"	"	14x3/4	"	2 3/8	1-1 5/8	"	"	"	2-9 5/8	"	"	GD-2
	GD-3	6-5 5/8	47.94	92-55-03	6-5 5/8	41.85	91-46-51	62-8 3/4	"	"	49-5 3/4	"	"	"	"	"	"	"	"	"	"	0-11 3/8	11@13	"	"	2-10 3/8	"	"	GD-3
	GD-4		47.67	92-54-50		41.58	91-46-38	62-10 5/16	11-3	5-0	50-4 5/16	.093	.106	"	"	"	"	"	14x7/8	"	2 7/8	1-0 3/16	"	"	"	2-11 3/16	"	"	GD-4
D-9	GD-1	7-11	43.38	88-37-14	7-11	38.06	88-37-14	123-6 11/16	9-2	15-8	73-8 11/16	.092	.106	72x7/16	16x3/4	16x3/4	16x1 1/4	20x1 3/4	16x1 5/8	20x2	3 1/2	0-11 3/8	10@13	10@18	35@24	2-7 3/8	7@50	10@72	GD-1
	GD-2	"	42.96	"	"	38.37	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GD-2
	GD-3	"	42.75	"	"	37.80	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GD-3
	GD-4	"	42.65	"	"	37.66	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GD-4
	GD-5	"	42.29	"	"	37.49	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GD-5
	GD-6	7-11	42.12	"	7-11	37.31	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GD-6
	GD-7	7-2	41.85	"	7-2	37.17	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	"	GD-7
	GD-8		41.56	88-37-14		37.08	88-37-14	123-6 11/16	9-2	15-6	76-2 11/16	.135	.155	"	"	"	"	"	"	"	3 7/8	"	"	"	"	"	"	"	GD-8
D-10	GD-1	8-0 1/16	38.14	86-29-18	7-7	32.78	86-37-30	116-8 11/16	5-10	15-10	71-2 11/16	.168	.193	54x3/8	16x3/4	16x3/4	16x1 7/8	20x1 7/8	16x2 1/4	20x2 1/4	4 1/2	0-11 5/16	8@11	15@16	29@24	2-7 3/8	11@48	8@56	GD-1
	GD-2	"	37.96	86-10-12	7-7	32.73	88-18-24	116-1 5/16	6-10	14-10	70-9 5/16	.113	.130	"	"	"	"	18x1 3/8	20x1 7/8	16x1 3/4	20x2 1/8	3 7/8	"	"	"	"	"	"	"	GD-2
	GD-3	"	37.82	87-51-48	8-0	32.63	90-00-00	113-9 1/8	"	"	70-5 1/8	"	"	"	"	"	"	"	"	"	"	"	1-0 9/16	7@12	15@17	"	2-2 9/16	"	"	GD-3
	GD-4	8-0 1/16	37.65	87-51-48	8-0	32.46	"	113-5 9/16	"	"	70-1 9/16	"	"	"	"	"	"	"	"	"	"	"	1-0 13/16	8@12	15@16	"	2-0 13/16	"	"	GD-4
	GD-5	7-2 1/16	37.47	87-51-48	7-2	32.31	"	113-2	"	"	69-10	"	"	"	"	"	"	"	"	"	"	"	0-11	"	"	"	1-11	"	"	GD-5
	GD-6		37.30	87-51-48		32.14	90-00-00	112-10 13/16	6-9	14-9	69-10 13/16	.165	.191	"	"	"	"	16x1 5/8	"	16x2	20x2 1/8	5 3/8	0-9 7/16	"	"	"	1-9 7/16	"	"	GD-6

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GIRDER SCHEDULE – LOCATION 1 STRUCTURE NO. 016–1113	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -			94	2010-127-BP	COOK	160	36
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -					CONTRACT NO. 60N01		
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS SHEET NO. 30 OF 40 SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		

FILEL



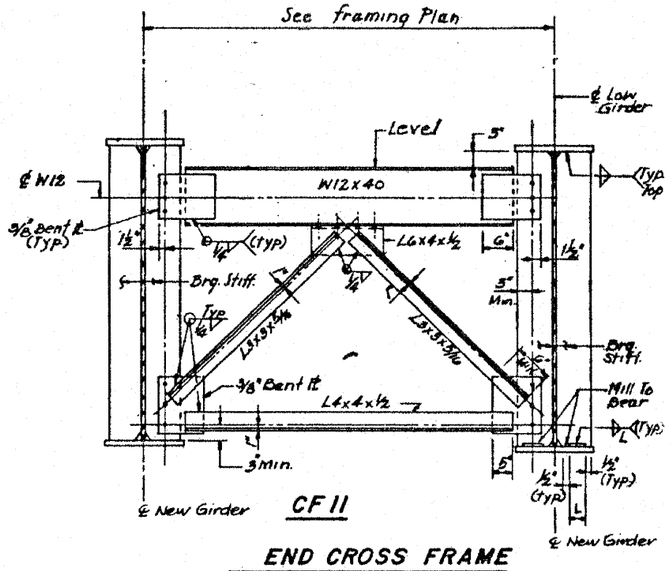
SPANS C7 THRU C9



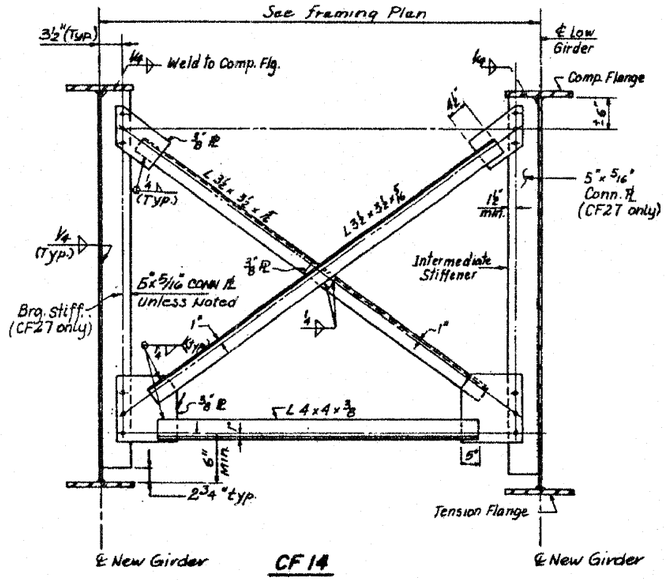
SPANS C10 THRU C12

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GIRDER ELEVATIONS – LOCATION 1 STRUCTURE NO. 016–1113			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160	37
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -							CONTRACT NO. 60N01		
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 31 OF 40 SHEETS	STA. TO STA.			ILLINOIS FED. AID PROJECT		

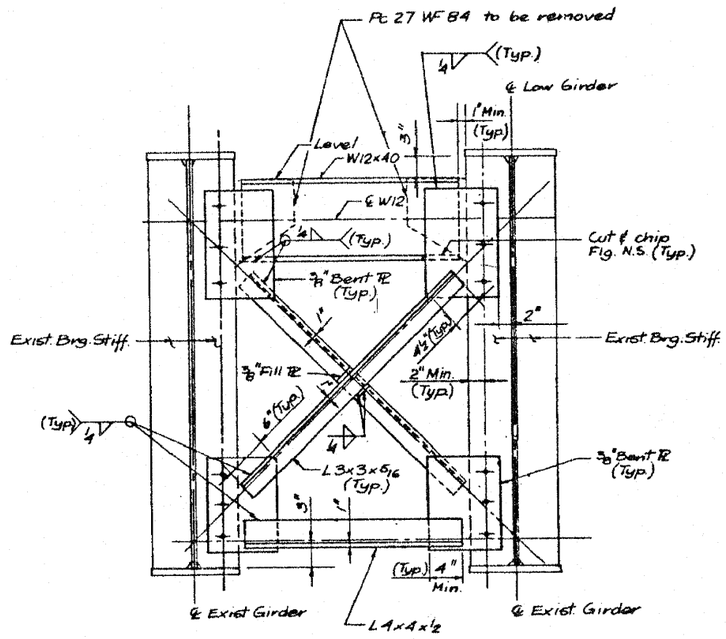
$FILE$



END CROSS FRAME
(60" Web Girder)
Looking toward ℄ Pier

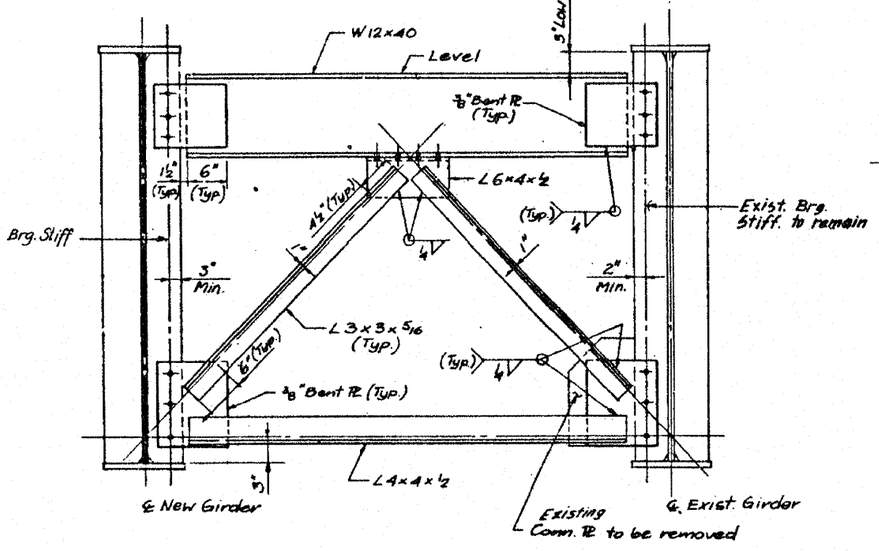


INTERIOR CROSS FRAME
(60" Web Girder)



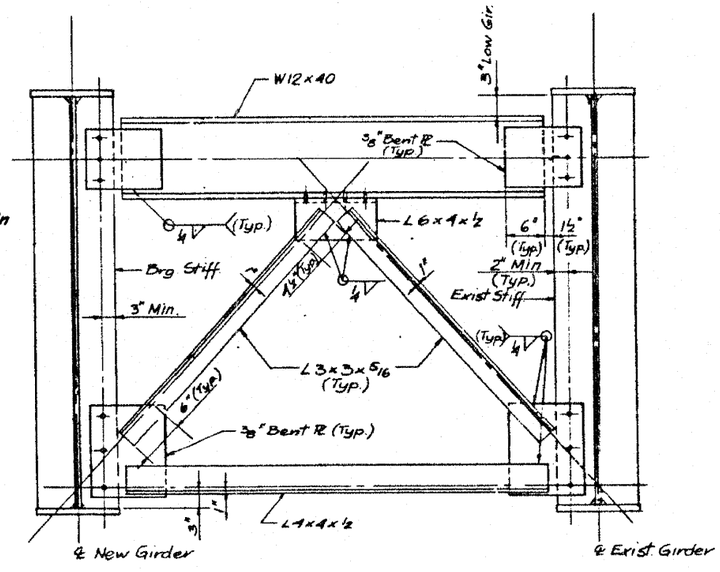
CF 16

END CROSS FRAME
LOOKING TOWARD ℄ PIER



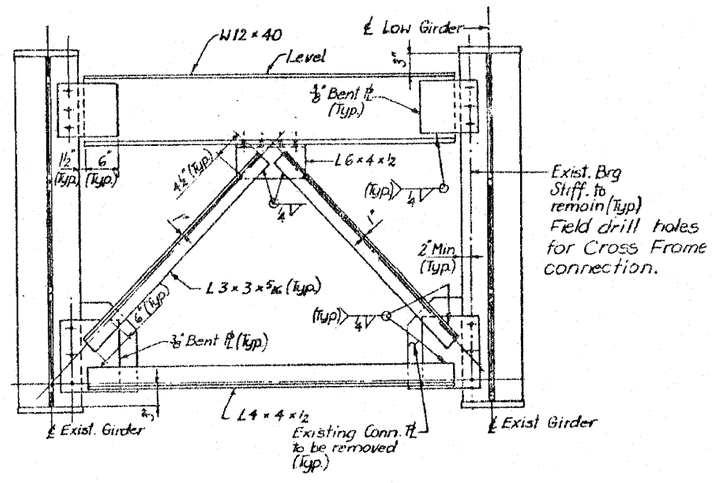
CF 18
CF 19

END CROSS FRAME
LOOKING TOWARD ℄ PIER



CF23 & CF 21
CF24 & CF 22 (OPP. HAND)

END CROSS FRAME
LOOKING TOWARD ℄ PIER



CF 31

END CROSS FRAME

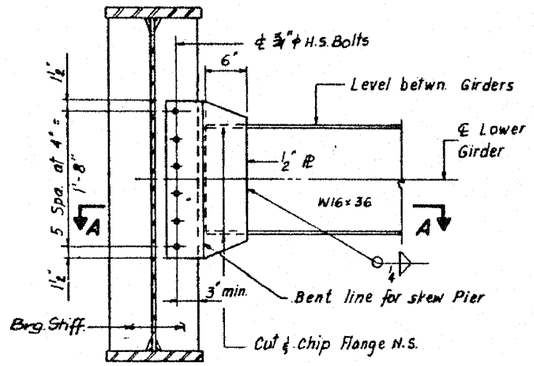
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS FRAME DETAILS – LOCATION 1
STRUCTURE NO. 016–1113

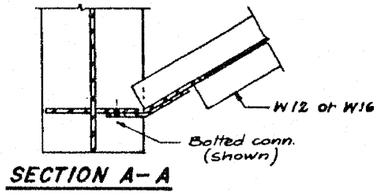
SCALE: NTS | SHEET NO. 32 OF 40 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	38
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

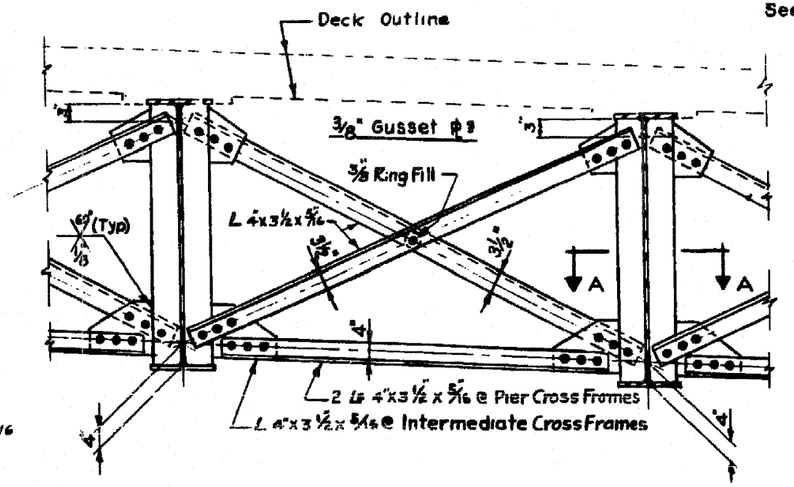


D16 (Exist. Stiff. to New Stiff.)

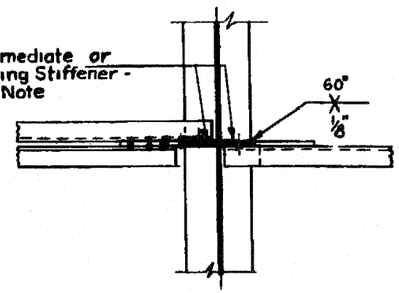
INTERIOR DIAPHRAGM AT PIER
(48" Web Girder)



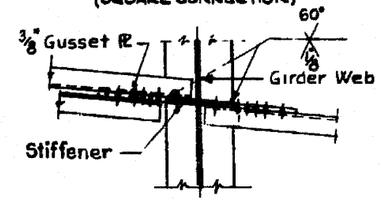
SECTION A-A



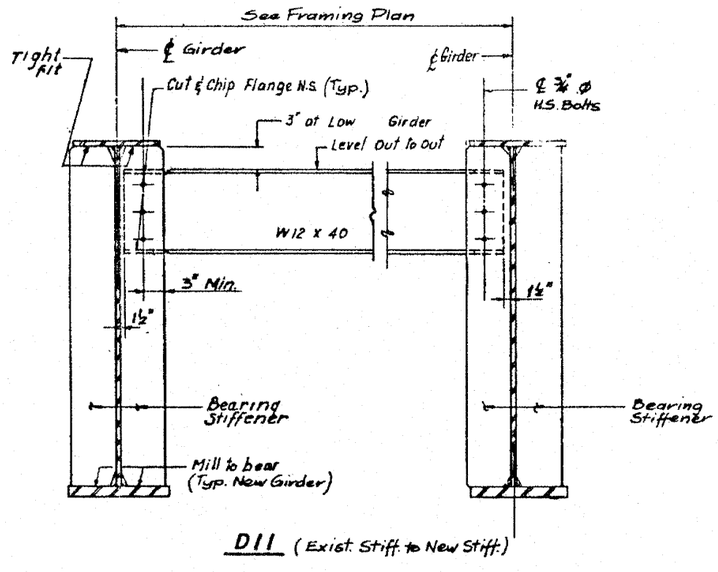
PIER CROSS FRAME CF-3
(SQUARE OR SLIGHTLY SKEWED CONNECTIONS-48 WEB GIRDERS)



SECTION A-A
(SQUARE CONNECTION)

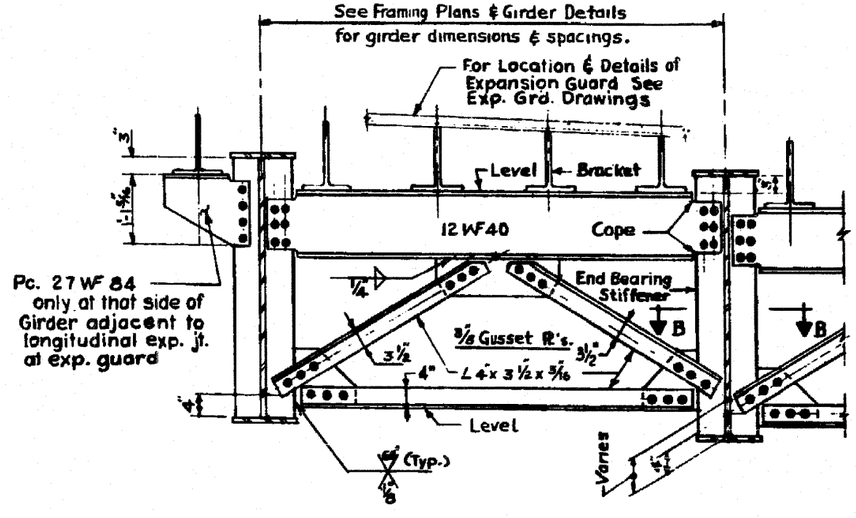


SECTION A-A
SLIGHTLY SKEWED CONNECTION

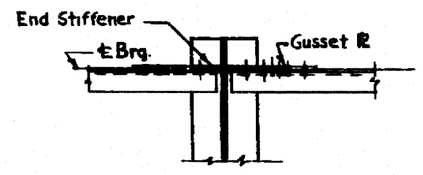


D11 (Exist. Stiff. to New Stiff.)

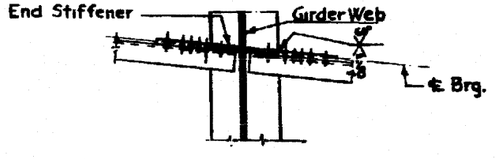
END DIAPHRAGM
(48" Web Girder)



END CROSS FRAME CF-1
(SQUARE OR SLIGHTLY SKEWED CONNECTIONS-48"WEB GIRDERS)



SECTION B-B
(SQUARE CONNECTION)



SECTION B-B
(SLIGHTLY SKEWED CONNECTION)

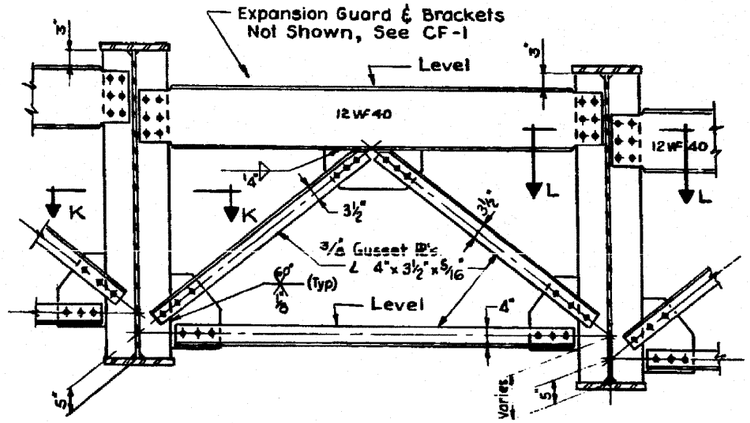
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

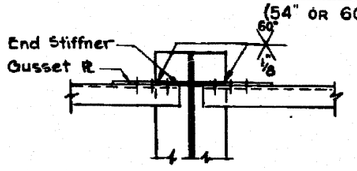
DIAPHRAGM & CROSS FRAME DETAILS – LOCATION 1
STRUCTURE NO. 016-1113

SCALE: NTS | SHEET NO. 33 OF 40 SHEETS | STA. | TO STA.

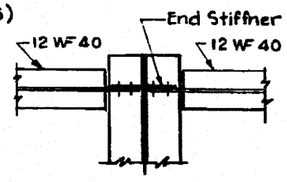
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	39
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			



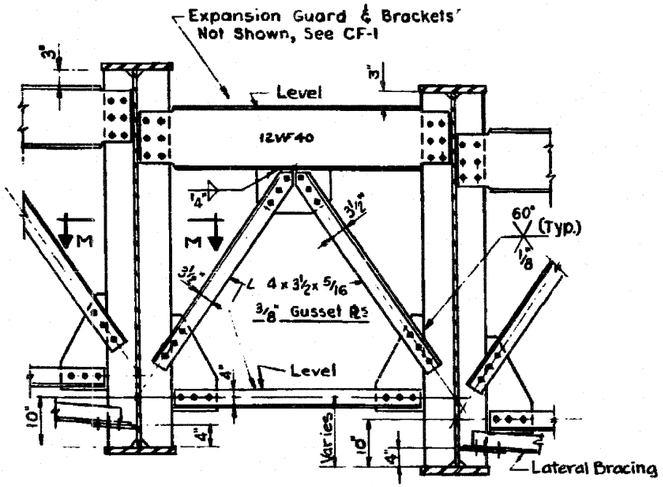
CROSS FRAME CF-7
(54" OR 60" WEB GIRDERS)



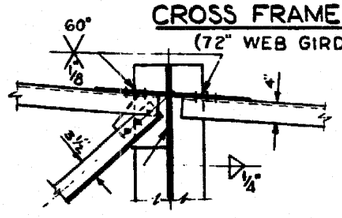
SECTION K-K



SECTION L-L

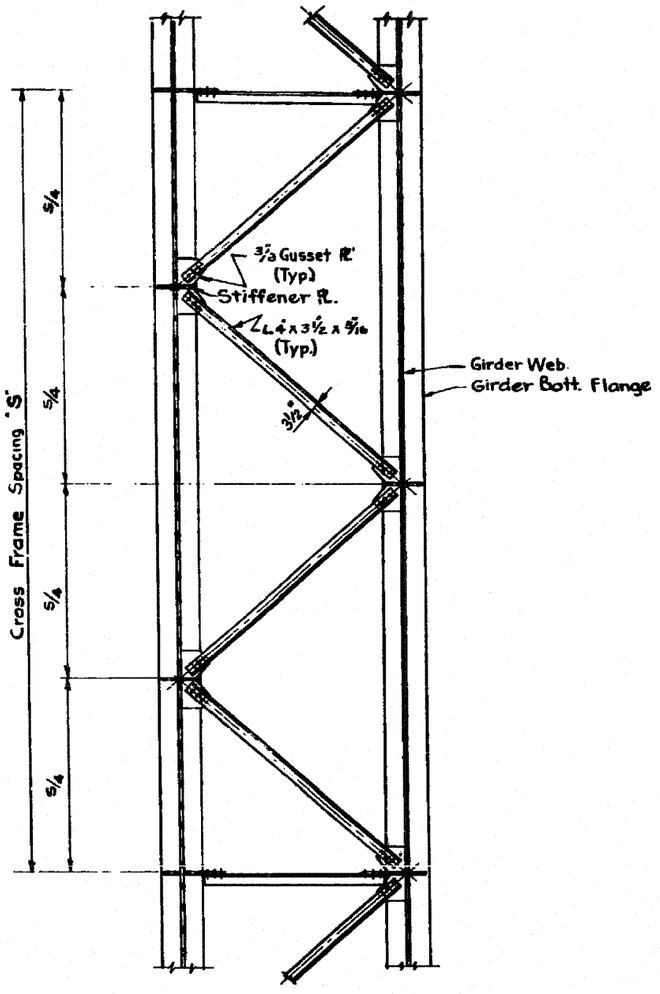


CROSS FRAME CF-9
(72" WEB GIRDERS)



SECTION M-M

END CROSS FRAMES
SQUARE OR SLIGHTLY SKEWED CONNECTIONS

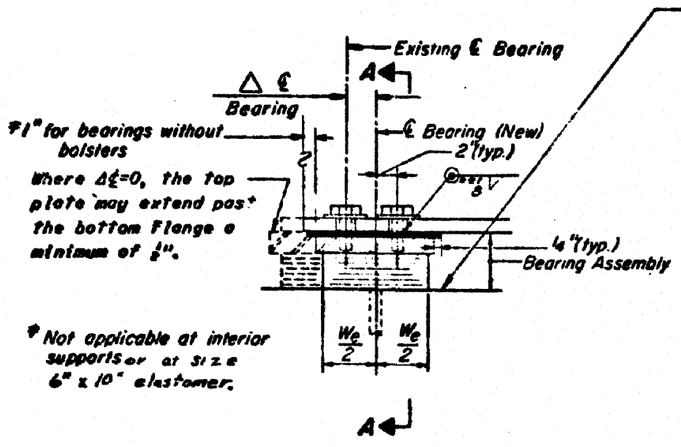


LATERAL BRACING PLAN
(SPANS 10 & A9)

Note: For general layout of lateral bracing, see Framing Plans

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS FRAME & LATERAL BRACING DETAILS – LOCATION 1 STRUCTURE NO. 016-1113			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160 / 40
	PLOT SCALE = 1.2000 ' / IN.	CHECKED - JMH	REVISED -								CONTRACT NO. 60N01
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 34 OF 40 SHEETS	STA. TO STA.			ILLINOIS	FED. AID PROJECT

$FILE$



Elastomer sits on a concrete capbeam except when bolster is required as scheduled on this sheet and steel capbeams as scheduled on sheet 16.

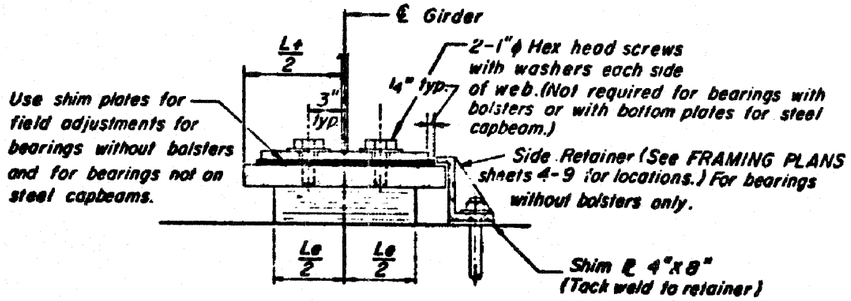


TABLE OF DIMENSIONS AND THICKNESSES
TYPE I - BEARINGS WITH BOLSTERS

Section	Pier	Girder	Bottom Plates W_b	L_b	B_w	B_L	Shim Plate Thickness	Anchor Bolt Diameter
	A1(N)	C2-C4, A1-A5	11"	20"	0"	8½"	•	1¼"
		L5-L9						
		L4	11"	20"	0"	8½"	•	1¼"
		L2, L3, C1, C5	12"	22"	0"	8½"	•	1¼"
105		L1, R1	11"	20"	0"	8½"	•	1¼"
		R2-R4	12"	22"	0"	8½"	•	1¼"
		R5-R7	12"	22"	0"	8½"	•	1¼"
		R8	13"	24"	0"	8½"	•	1¼"

TABLE OF DIMENSIONS - TYPE I
ELASTOMERIC EXPANSION BEARINGS

W_e	L_e	Series	T_p	N_p	T_s	N_s	T_e
6"	10"	a	3/8"	3	14 ga.	2	1 1/8"
6"	10"	b	3/8"	5	14 ga.	4	1 7/8"
6"	10"	c	3/8"	6	14 ga.	5	2 1/4"
7"	12"	a	3/8"	3	3/32"	2	1 5/16"
7"	12"	b	3/8"	4	3/32"	3	1 11/16"
7"	12"	c	3/8"	5	3/32"	4	2 1/4"
9"	12"	a	3/8"	5	3/32"	4	2 1/4"
9"	12"	b	3/8"	7	3/32"	6	3 3/16"
9"	12"	c	3/8"	8	3/32"	7	3 11/16"
10"	14"	a	7/16"	5	1/8"	4	2 11/16"
10"	14"	b	7/16"	6	1/8"	5	3 1/4"
10"	14"	c	7/16"	7	1/8"	6	3 13/16"
10"	14"	d	7/16"	8	1/8"	7	4 3/8"
11"	16"	a	1/2"	4	1/8"	3	2 5/8"
11"	16"	b	1/2"	5	1/8"	4	3"
11"	16"	c	1/2"	6	1/8"	5	3 5/8"
11"	16"	d	1/2"	7	1/8"	6	4 1/4"
12"	18"	a	9/16"	3	3/16"	2	2 1/16"
12"	18"	b	9/16"	4	3/16"	3	2 13/16"
12"	18"	c	9/16"	5	3/16"	4	3 9/16"
12"	18"	d	9/16"	6	3/16"	5	4 3/8"
12"	18"	e	9/16"	7	3/16"	6	5 1/16"
14"	20"	a	5/8"	7	3/16"	6	5 1/2"
15"	22"	a	11/16"	6	3/16"	5	5 1/16"
16"	24"	a	3/4"	6	3/16"	5	5 7/16"

Tp denotes thickness of each elastomeric layer
Np denotes number of elastomeric layers
Ts denotes thickness of each steel plate
Ns denotes number of steel plates

TYPICAL SECTION

** = ½" when screws are not used.

SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.

BEARING ASSEMBLY

END VIEW

Side Retainer hole ¼" larger in diameter than bolt.

PLAN VIEW

SIDE RETAINER

SECTION	LOCATION	GIRDER	W_e	L_e	SERIES	TOP PLATE T_1	W_1	L_1	SLOPE	NO. REQ'D.	△ ℄ BEARING
105		A1	10"	14"	a	1 3/8"	14"	18"	2.2%	1	0"
		A2-A5	10"	14"	a	1 3/8"	14"	18"	1.3%	4	0
		L1, R1	10"	14"	b	1 3/8"	14½"	18"	2.3%	2	0"
		R2-R4	11"	16"	c	1 3/8"	14½"	20"	2.4%	3	0"
		R5-R7	11"	16"	c	1 11/16"	14½"	20"	2.5%	3	0"
	Pier A1 (N)	R8	12"	18"	c	1 11/16"	14½"	22"	2.7%	1	0"
		L2, L3	11"	16"	b	1 3/8"	14½"	20"	2.2%	2	0
		L4 - L8	10"	14"	a	1 3/8"	14½"	18"	2.3%	5	0"
		L9	10"	14"	a	1 3/8"	14½"	18"	1.7%	1	0"
		C1	11"	16"	b	1 3/4"	14½"	20"	3.7%	1	0"
		C2 -C4	10"	14"	a	1 11/16"	14½"	18"	3.8%	3	0"
105		C5	11"	16"	b	1 3/4"	14½"	20"	4.0%	1	0"

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPE I ELASTOMERIC EXPANSION BEARING DETAILS – LOCATION 1 STRUCTURE NO. 016-1113
		DRAWN - AMR	REVISED -		
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -		SCALE: NTS | SHEET NO. 35 OF 40 SHEETS | STA. | TO STA.
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	41
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

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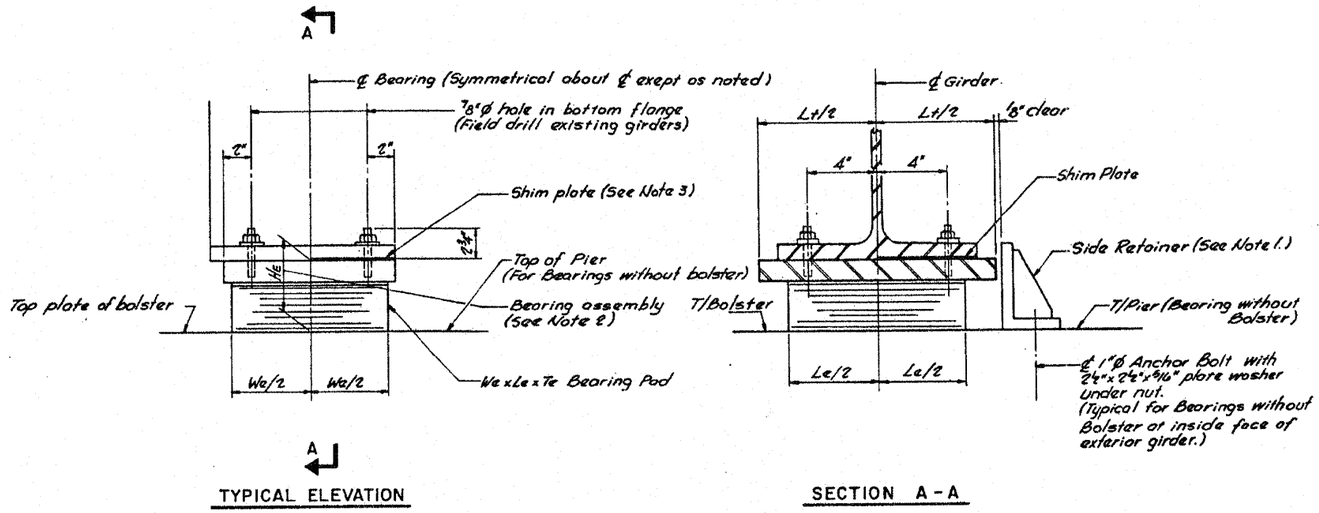
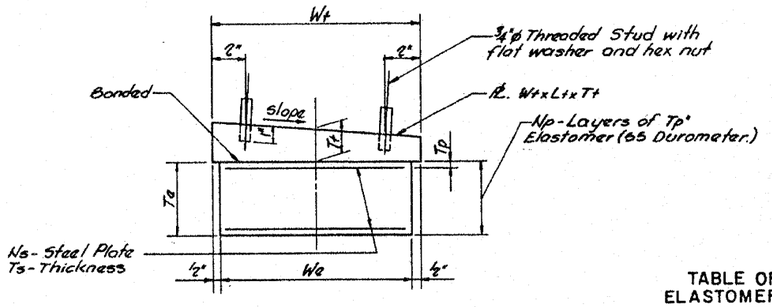


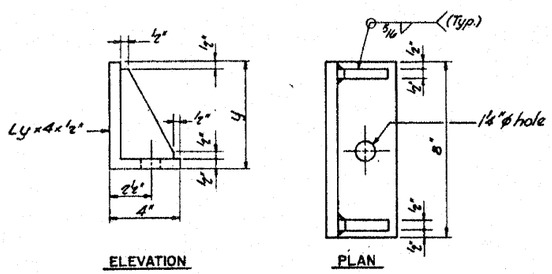
TYPICAL ELEVATION

SECTION A-A

TYPE I ELASTOMERIC EXPANSION BEARING



BEARING ASSEMBLY



ELEVATION

PLAN

SIDE RETAINER DETAILS

TABLE OF DIMENSIONS - TYPE I ELASTOMERIC EXPANSION BEARINGS

We	Le	Series	Tp	Np	Ts	Ns	Te
9	12	a	5/8	5	3/32	4	2 1/4
9	12	b	3/8	7	3/32	6	3 3/16
10	14	a	7/16	5	1/8	4	2 11/16
10	14	b	7/16	6	1/8	5	3/4
10	14	c	7/16	7	1/8	6	3 13/16
10	14	d	7/16	8	1/8	7	4 7/8
11	16	c	1/2	6	1/8	5	3 5/8
11	16	d	1/2	7	1/8	6	4 1/4

Tp-denotes thickness of each elastomeric layer.
Np-denotes number of elastomeric layers.
Ts-denotes thickness of each steel plate.
Ns-denotes number of steel plates.

TYPE I ELASTOMERIC EXPANSION BEARING SCHEDULE

STRUCTURE NO.	PIER LOCATION	GIRDER NO.	We	Le	SERIES	TOP PLATE T1	TOP PLATE W1	TOP PLATE L1	TOP PLATE SLOPE %	Y	He	NO. REQ'D.	REMARKS
016-1113	1(N)	GN-1, GN-2, G1-C	9	12	b	1 1/2	10	14	2.6	(*)	(*)	3	N, B
	3(S)	GR-1 → GR8	10	14	b	2	11	16	3.1	6	5 1/4	8	R, E (GR-1)
		GN-1	10	14	b	2	11	16	3.1	6	5 1/4	1	N, E
	3(N)	GR-1 → GR8	10	14	b	2	11	16	2.6	6	5 1/4	8	R, E (GR-1)
		GN-1, GN-2	10	14	b	2	11	16	2.6	6	5 1/4	2	N, E (GN-2)
	5(S)	GR-1 → GR-8	10	14	b	2	11	16	3.1	(*)	(*)	8	R, B
		GN-1, GN-2	10	14	b	2	11	16	3.1	(*)	(*)	2	N, B
	5(N)	GR-1 → GR9	10	14	b	2	11	16	2.6	(*)	(*)	9	R, B
		GN-1, GN-2, GN-3	10	14	b	2	11	16	2.6	(*)	(*)	3	N, B
	7(S)	GR-1 → GR-10	10	14	b	2	11	16	3.6	6	5 1/4	10	R, E (GR-1)
		GN-1, GN-2, GN-3	10	14	b	2	11	16	3.6	6	5 1/4	3	N, E (GN-3)
	7(N)	GR-1 → GR-11	10	14	b	2	11	16	2.6	6	5 1/4	11	R, E (GR-1)
		GN-1, GN-2	10	14	b	2	11	16	2.6	6	5 1/4	2	N, E (GN-2)
	8(N)	GR-1 → GR-12	10	14	b	2	11	16	2.6	(*)	(*)	12	R, B
		GN-1, G1-D	10	14	b	2	11	16	2.6	(*)	(*)	2	N, B
	10(S)	GR-1 → GR-9	10	14	b	2	11	16	3.6	(*)	(*)	9	R, B
016-1113	C3(S)	GC-1 → GC-5	10	14	d	2 1/4	11	16	4.2	7	6 5/8	5	R, E (GC-1)
		GC-1	10	14	d	2 1/4	11	16	4.2	7	6 5/8	1	N, B (G1-C)
	C7(S)	GC-1, GC-5	10	14	a	2	11	16	1.6	5	4 11/16	5	R
		G1-C → G2-C	10	14	a	2	11	16	1.6	5	4 11/16	2	N, E
	C7(N)	GC-2 → GC-5	9	12	a	2 1/4	10	14	2.1	5	4 1/2	4	R
		G1-C, G2-C, G3-C	9	12	a	2 1/4	10	14	2.1	5	4 1/2	3	N, E (G1-C, G3-C)
	C9	GC-1 → GC-5	10	14	a	2	11	16	2.1	(*)	(*)	5	R, B
		G3-C	10	14	a	2	11	16	2.1	(*)	(*)	1	N, B
	C11	G1-C	10	14	c	2	11	16	2.1	(*)	(*)	1	N, B
	C13(S)	GC-1 → GC-5	9	12	a	2	10	14	2.1	5	4 1/4	5	R, E (GC-1)
		G1-C	9	12	a	2	10	14	2.1	5	4 1/4	1	N, E (G1-C)
	D7(S)	GD-1 → GD-4	9	12	b	2	10	14	4.2	(*)	(*)	4	R, B
		G1-D, G2-D	9	12	b	2	10	14	4.2	(*)	(*)	2	N, B
	D7(N)	GD1 → GD-3	9	12	b	2	10	14	3.1	(*)	(*)	3	R, B
		GD1, G2-D, G3-D	9	12	b	2	10	14	3.1	(*)	(*)	3	N, B
	D8(N)	GD-1 → GD-4	9	12	b	2	10	14	3.1	(*)	(*)	4	R, B
	D10(S)	GD-1 → GD-8	11	16	d	2 1/2	12	18	4.2	(*)	(*)	8	R, B
	D10(N)	GD1 → GD-6	11	16	c	2 1/2	12	18	4.2	(*)	(*)	6	R, B
		G1-D	11	16	c	2 1/2	12	18	4.2	(*)	(*)	1	N, B

Notes:

1. Side Retainer Details for Bearings without Bolster are shown on this sheet. For Bearings requiring a Bolstar, see Bolster Details for Side Retainer details.
2. Height of Bearing Assembly, He, includes Top Plate and Elastomeric Pad and does not include Shim Plate.
3. See Shim Thickness Schedule for required shims.

Remarks: B - Bolster required, See Bolster Details and schedule.
E - Exterior girder, Side Retainer required at inside face of exterior girder
N - New bearing for roadway widening.
R - Replacement bearing for existing girders
(*) - See Bolster schedule for y and He dimensions. Sheet BRG 21

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPE I ELASTOMERIC EXPANSION BEARING DETAILS - LOCATION 1
STRUCTURE NO. 016-1113

SCALE: NTS | SHEET NO. 36 OF 40 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	42
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

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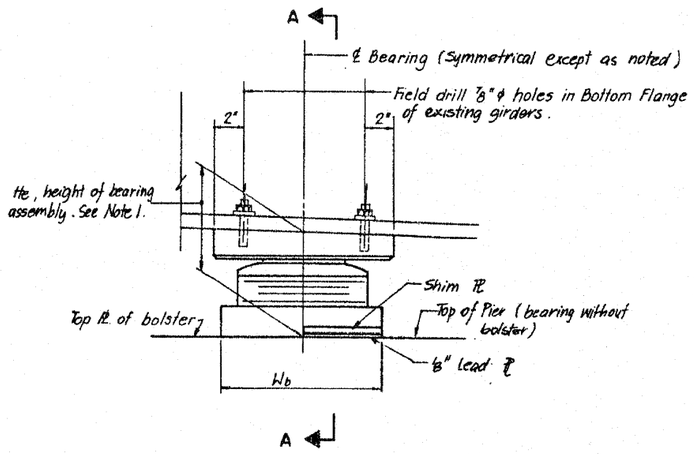
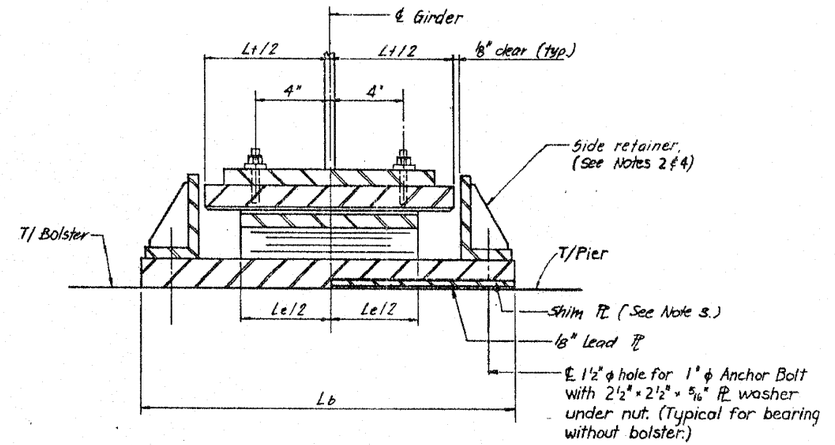


TYPICAL ELEVATION

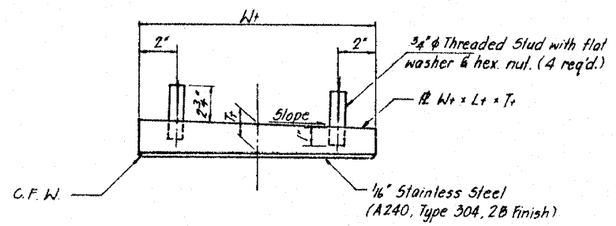


SECTION A-A

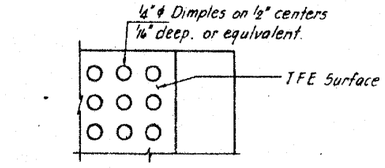
W_e	L_e	SERIES	T_p	N_p	T_s	N_s	T_e
9	12	b	5/8	7	3/32	6	4 1/16
10	14	a	7/16	5	1/8	4	3 3/16
11	16	a	1/2	4	1/8	3	3/4

T_p - denotes thickness of each elastomeric layer
N_p - denotes number of elastomeric layers
T_s - denotes thickness of each steel plate
N_s - denotes number of steel plates

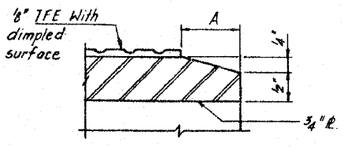
TYPE II TFE ELASTOMERIC EXPANSION BEARING



TOP BEARING ASSEMBLY



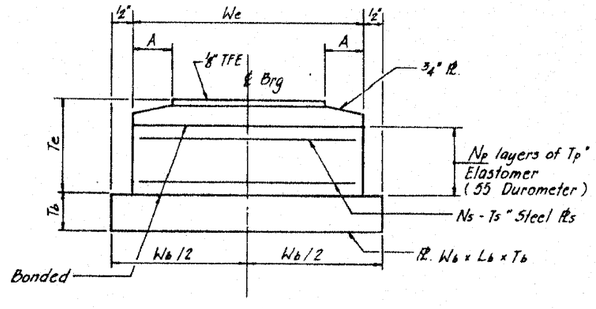
PLAN-TFE SURFACE



SECTION THRU TFE

Note: The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surface

Bonding of 1/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



BOTTOM BEARING ASSEMBLY

W_e	6"	7"	9"	10"	11"	12"
A	1"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"

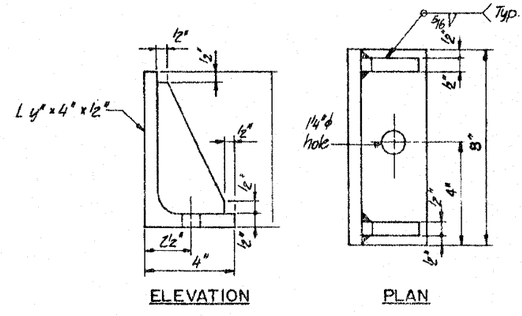
TYPE II ELASTOMERIC BEARING SCHEDULE

STRUCTURE NO.	PIER LOCATION	GIRDER NO.	W_e	L_e	SERIES	TOP PLATE T_t	TOP PLATE W_t	TOP PLATE L_t	TOP PLATE SLOPE %	BOTTOM PLATE T_b	BOTTOM PLATE W_b	BOTTOM PLATE L_b	y	H_E	NO. REQ'D	REMARKS
016-1113	10(N)	GR-1 → GR-11	11	16	a	2 1/2	12	18	2.6	1	12	26 1/2	⊛	⊛	11	R, B
	C3(N)	GC1 → GC7	11	16	a	1 7/8	11 3/4	18	2.6	1 1/8	12	26 1/2	6	6 7/16	7	R
		G1-C	11	16	a	1 7/8	11 3/4	18	2.6	1 1/8	12	26 1/2	6	6 7/16	1	N
	C6(S)	GC-2 → GC-12	10	14	a	2 1/2	11	16	2.6	1 1/2	11	24 1/2	7	7 3/4	11	R
		G1-C, G2-C	10	14	a	2 1/2	11	16	2.6	1 1/2	11	24 1/2	7	7 3/4	11	N
	C10(S)	G3-C	9	12	b	2	10	14	2.1	1	10	22 1/2	⊛	⊛	1	N, B
	C10(N)	G1-C	9	12	b	2	10 1/4	14	2.1	1	10	22 1/2	⊛	⊛	1	N, B

Remarks: B - Bolster required. See Bolster Schedule and Details.
R - Replacement bearings for existing girders.
N - New bearings for Roadway Widening
⊛ - See Bolster Schedule for y and H_E dimensions.

ALL MATERIALS SHOWN ON THIS SHEET ARE FURNISHED UNDER A SEPARATE SUPPLY CONTRACT (SECTION 1988-004 I), UNLESS NOTED OTHERWISE.

NOTES:
1. Height of bearing assembly, H_E, includes top plate, elastomeric assly, bottom plate, and 1/8" lead plate. H_E does not include shim plate.
2. Side retainer details for bearings located on top of pier are shown on this sheet. For bearings requiring a bolster, see bolster details for side retainer details.
3. See shim thickness schedule for required shims.
4. For Bearings without Bolster the Side Retainer shall be tack welded as shown after the girder and bearing assembly have been set into their final position.



ELEVATION PLAN

SIDE RETAINER DETAILS

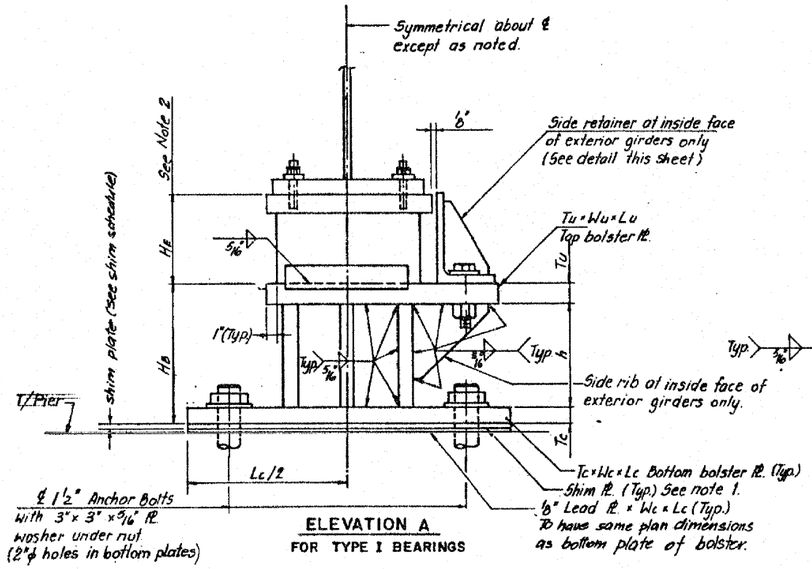
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

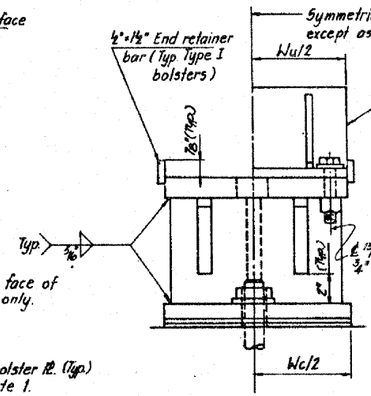
TYPE II ELASTOMERIC EXPANSION BEARING DETAILS – LOCATION 1
STRUCTURE NO. 016-1113

SCALE: NTS | SHEET NO. 37 OF 40 SHEETS | STA. | TO STA.

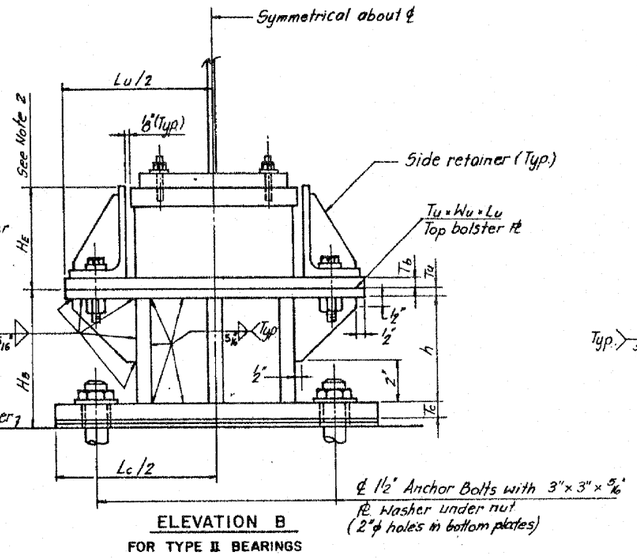
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	43
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			



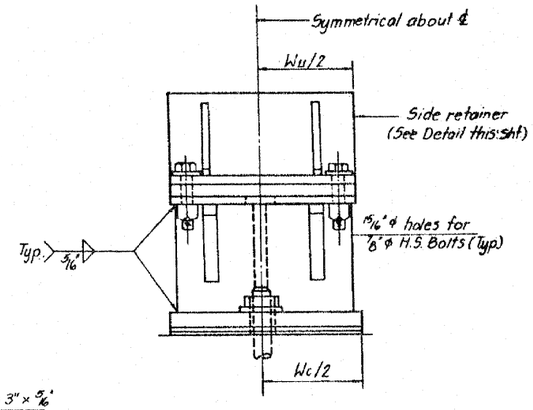
ELEVATION A
FOR TYPE I BEARINGS



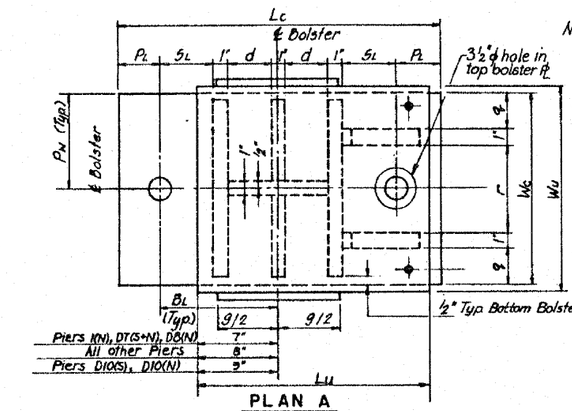
SIDE ELEVATION A



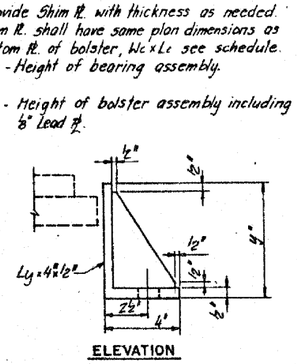
ELEVATION B
FOR TYPE II BEARINGS



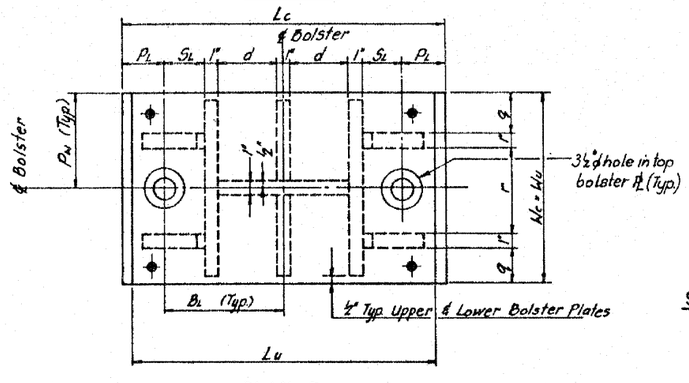
SIDE ELEVATION B



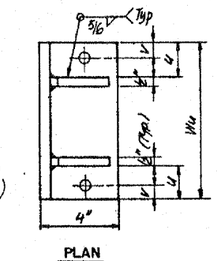
PLAN A



ELEVATION



PLAN B



PLAN

SIDE RETAINER

Notes:
1. Provide Shim Pl. with thickness as needed. Shim Pl. shall have same plan dimensions as bottom Pl. of bolster, Wc = Lc see schedule.
2. Hs - Height of bearing assembly.

Hb - Height of bolster assembly including 6" Lead Pl.

BOLSTER SCHEDULE FOR ELASTOMERIC BEARINGS

STRUCTURE NO.	PIER LOCATION	GIRDER NO.	NO. REQ'D	BRG. TYPE	PLAN & ELEV.	TOP BOLSTER Pl. Tu	TOP BOLSTER Pl. Wu	TOP BOLSTER Pl. Lu	BOTTOM BOLSTER Pl. Tc	BOTTOM BOLSTER Pl. Wc	BOTTOM BOLSTER Pl. Lc	ANCHOR BOLT Bw	ANCHOR BOLT BL	ANCHOR BOLT ϕ	d	g	PL	q	r	SL	u	v	y	h	HB	HE
016-1113	1(N)	GN-1	1	I	A	1	10½	14	1	10	22	0	8½	1½	4½	10	2½	—	—	2½	—	—	—	6 13/16	8 5/16	4 5/16
		GN-2, G1-C	2	I	A	1	10½	18½	1	10	22	0	8½	"	4½	10	"	—	—	"	2½	14	5	6 13/16	8 5/16	4 5/16
	5(S)	GR-1, GN-2	2	I	A	1	11½	20½	1	11	22	0	8½		4½	12		2½	4½		2½	14	6	6	8 5/8	5¼
		GR-2→GR-8, GN-1	8	I	A	1	11½	16	1	11	22	0	8½		4½	12		—	—		—	—	—	6	8 5/8	5¼
	5(N)	GR-1, GN-3	2	I	A	1	11½	20½	1	11	22	0	8½		4½	12		2½	4½		2½	14	6	6	8 5/8	5¼
		GR-2→GR9, GN1, GN2	10	I	A	1	11½	16	1	11	22	0	8½		4½	12		—	—		—	—	—	6	8 5/8	5¼
	8(N)	GR-1	1	I	A	1	11½	20½	1	11	22	0	8½		4½	12		2½	4½		2½	14	6	6⅛	8¼	5¼
		GR-2→GR12, GN-1, G1-D	13	I	A	1	11½	16	1	11	22	0	8½		4½	12		—	—		—	—	—	6⅛	8¼	5¼
	10(S)	GR-1, GR-9	2	I	A	1	11½	20½	1	11	22	0	8½		4½	12		2½	4½		2½	14	6	6	8 5/8	5¼
		GR-2→GR8	7	I	A	1	11½	16	1	11	22	0	8½		4½	12		—	—		—	—	—	6	8 5/8	5¼
	10(N)	GR-1→GR-11	11	II	B	1	12	26½	1	12	24	0	9½		5½	14		—	—		3	1½	6	8 11/16	10 15/16	6 15/16
	C9	GC-1, G3-C	2	I	A	1¼	11½	20½	1	11	22	0	8½		4½	12		—	—		2½	14	5	10 15/16	13 5/16	4 1/16
		GC-2→GC-5	4	I	A	1½	11½	16	1	11	22	0	8½		4½	12		—	—		—	—	—	10 15/16	13 5/16	4 1/16
	C10(S)	G3-C	1	II	B	1	10	22½	1	10	22	0	8½		4½	10		—	—		3	1½	7	4⅝	6¼	7⅛
	C10(N)	G1-C	1	II	B	1	10	22½	1	10	22	0	8½		4½	10		—	—		3	1½	7	4⅝	6¼	7⅛
	C11	G1-C	1	I	A	1½	11¾	16	1	11	22	0	8½		4½	12		—	—		—	—	—	9 11/16	12 5/16	5 13/16
	D7(S)	GD-1→GD-4	4	I	A	1	10½	14	1	10	22	0	8½		4½	10		—	—		—	—	—	6 3/16	8 5/16	5 5/16
		G1-D, G2-D	2	I	A	1	10½	18½	1	10	22	0	8½		4½	10		2½	3½		2½	14	6	6 3/16	8 5/16	5 5/16
	D7(N)	GD-1→GD-3, G2-D	4	I	A	1	10½	14	1	10	22	0	8½		4½	10		—	—		—	—	—	6 3/16	8 5/16	5 5/16
		G1-D, G3-D	2	I	A	1	10½	18½	1	10	22	0	8½		4½	10		2½	3½		2½	14	6	6 3/16	8 5/16	5 5/16
	D8(N)	GD-1→GD-3	3	I	A	1	10½	14	1	10	22	0	8½		4½	10		—	—		—	—	—	6 3/16	8 5/16	5 5/16
		GD-4	1	I	A	1	10½	18½	1	10	22	0	8½		4½	10		2½	3½		2½	14	6	6 3/16	8 5/16	5 5/16
	D10(S)	GD-8	1	I	A	1½	12¾	22½	1	12	24	0	9½		5½	14		—	—		2½	14	7	8½	11⅛	6¾
		GD-2→GD-7	6	I	A	1½	12¾	18	1	12	24	0	9½		5½	14		—	—		—	—	—	8½	11⅛	6¾
	D10(N)	GD-1→GD-5	5	I	A	1½	12¾	16	1	12	24	0	9½	↓	5½	14	↓	—	—	↓	—	—	—	9	11 5/8	6⅞
		GD-6, G1-D	2	I	A	1½	12¾	22½	1	12	24	0	9½	½	5½	14	2½	—	—	2½	2½	14	7	9	11 5/8	6⅞

SECTION	PIER	GIRDER	NO. REQ'D	BEARING TYPE	PLAN VIEW END	PLAN VIEW SIDE	BOTTOM BOLSTER PLATE Tc	BOTTOM BOLSTER PLATE Wc	BOTTOM BOLSTER PLATE Lc	d	g	PL	PW	q	r	SL	u	v	y	h
105	A1 (N)	A1-A5, L4-L9, C2-C4	14	I	B	H	1"	11"	21"	4½"	11"	2"	5½"	2½"	4"	2½"	2"	5½"	1"	6¾"
		L2, L3, C1, C5	4	I	B	H	1"	12"	22"	4½"	13"	2½"	6"	2½"	5"	2½"	2"	6½"	1⅜"	6½"
		L1, R1	2	I	B	H	1"	11"	21"	4½"	11"	2"	5½"	2½"	4"	2½"	2"	5½"	1⅜"	5⅝"
		R2-R7	6	I	B	H	1"	12"	22"	4½"	13"	2½"	6"	2½"	5"	2½"	2"	6½"	1⅝"	5⅝"
		R8	1	I	B	H	1"	13"	24"	4½"	15"	3½"	6½"	2½"	6"	2½"	2"	7½"	1½"	5½"
	C10 (S)	C1-C5	5	II	A	H	1"	10"	19"	7"	9"	2"	5"	2½"	3"	3"	2"	4½"	1⅝"	5½"
	C10 (N)	C1-C5	5	II	B	H	1"	10"	21"	4½"	9"	2"	5"	2½"	3"	2½"	2"	4½"	1⅝"	5⅜"

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

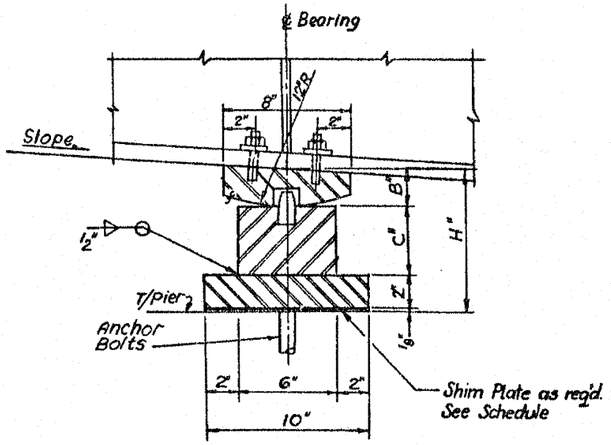
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOLSTER DETAILS – LOCATION 1
STRUCTURE NO. 016-1113

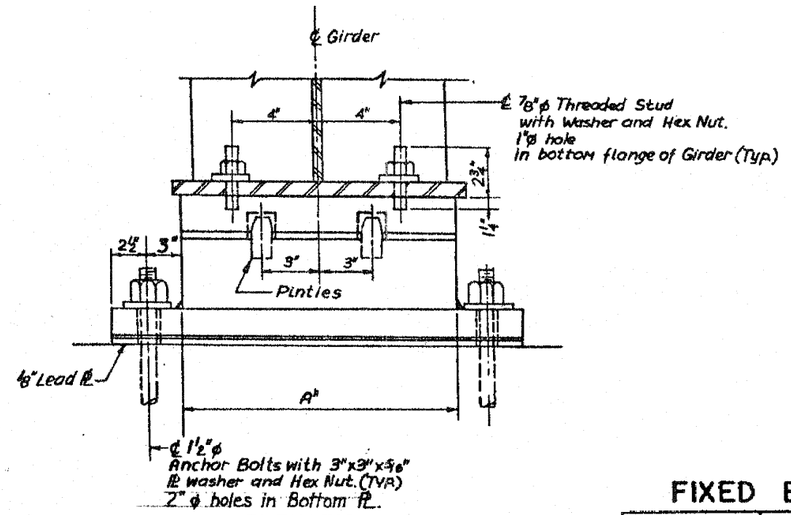
SCALE: NTS | SHEET NO. 38 OF 40 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	44
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

SFILELS



SECTION

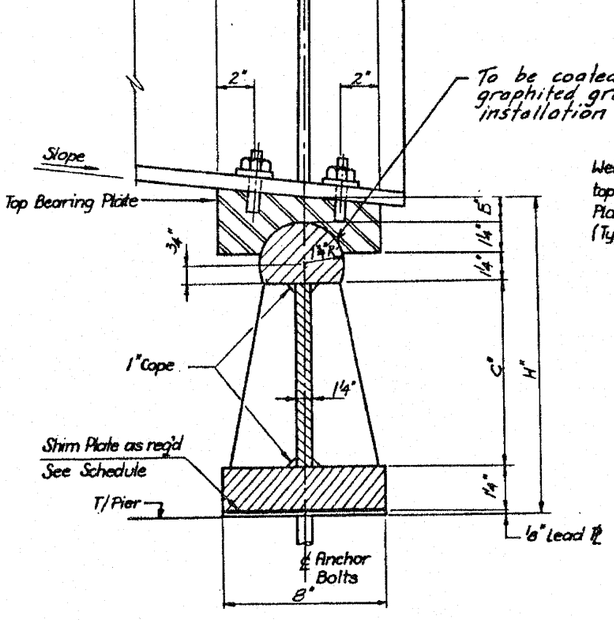


ELEVATION

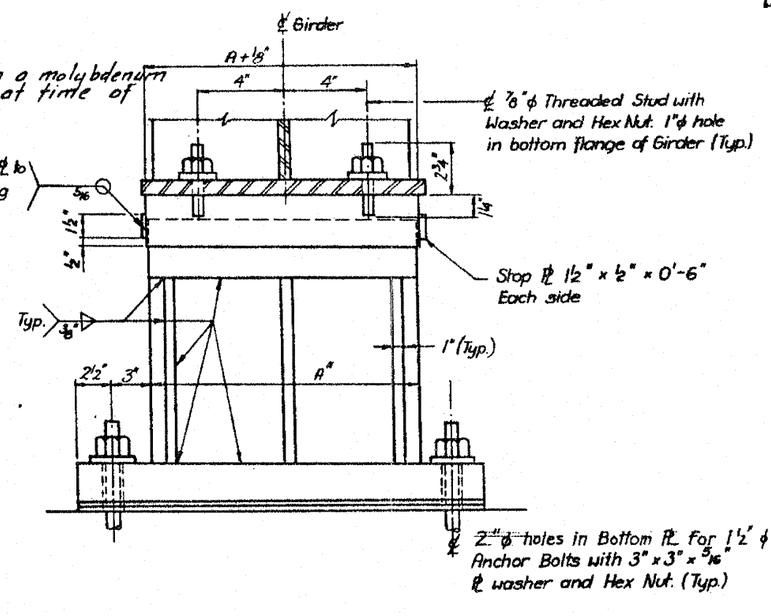
TYPE F3 FIXED ROCKER

FIXED BEARING SCHEDULE

STRUCTURE NO.	PIER LOCATION	GIRDER NO.	BEARING TYP.	NO. REQ'D	A"	B"	C"	H"	SLOPE %
016-1113	B(S)	G1-1, G1-2 G1-D	F4	3	13	2 1/8	7 3/4	13 3/4	4.2
	C6(N)	G1-D, G2-D G1-C, G2-C	F3	4	13	2 1/4	3 1/2	7 7/8	2.1
	D8(S)	G1-1 thru G1-3	F4	5	13	2 1/8	7 1/2	13 1/2	4.2
		G2-D, G3-D	F4	2	13	2 1/8	7 1/2	13 1/2	4.2



SECTION



ELEVATION

TYPE F4 FIXED ROCKER

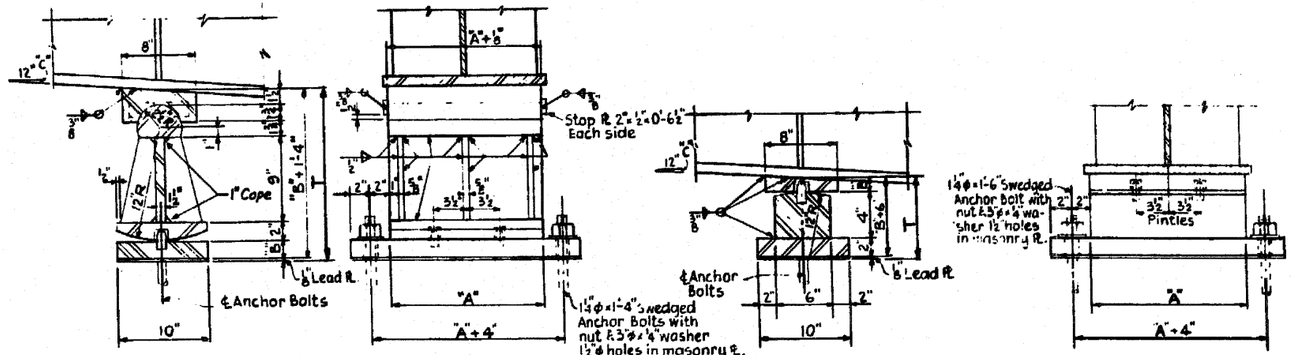
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPE F3 & F4 FIXED BEARING DETAILS – LOCATION 1
STRUCTURE NO. 016-1113

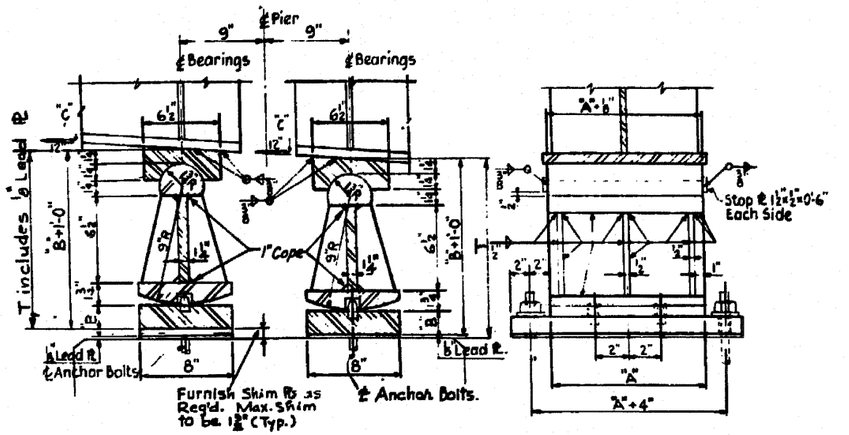
SCALE: NTS | SHEET NO. 39 OF 40 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	45
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			



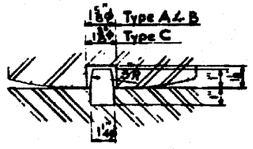
TYPE "A" EXPANSION ROCKER.

TYPE "C" FIXED ROCKER.



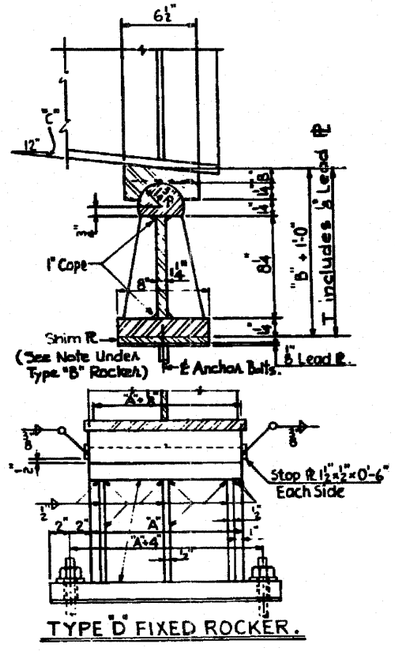
TYPE "B" EXPANSION ROCKER.

DETAIL TYPE "A" ROCKER. DET. TYPE "B" ROCKER



PINTLE DETAIL.

ROCKER DETAILS.
3"=1'-0".



TYPE "D" FIXED ROCKER.

ROCKER SCHEDULE.

SPAN	GIRDER	SOUTH END ROCKER TYPE	SOUTH END DIMENSIONS "A"	"B"	"C"	T	NORTH END ROCKER TYPE	NORTH END DIMENSIONS "A"	"B"	"C"	T
1	GL-1,5,6,7,8, & GR-1	B	13	1½	5/16	1-1⅜					
	GL-2 to GL4	B	"	1⅜	"	1-1½					
	GR-2 to GR4	B	"	"	¼	"					
	GR-5 to GR-8	B	"	1½	5/16	1-1⅝					
2	GL-1					0-7⅝	B	13	1¼	5/16	1-1⅜
	GL-2 to GL-9					0-7⅜	"	"	1⅜	"	1-1½
3	GL-1	B	"	1¼	"	1-1⅜					
	GL-2 to 10	"	"	1⅜	"	1-1½					
4	GL-1						B	"	1¼	"	1-1⅜
	GL-2 to 10						"	"	1⅜	"	1-1½
5	GL-1	B	"	1¼	"	1-1⅜					
	GL-2 to 10	"	"	1⅜	"	1-1½					
6	GL-1						B	"	1¼	7/16	1-1⅜
	GL-2 to 11						"	"	1⅜	"	1-1½
7	GL-1	B	"	1¼	"	1-1⅜	D	"	1⅜	"	1-1½
	GL-2 to 11	"	"	1⅜	"	1-1½	"	"	1⅜	GR11 1½	1-1¾
8	GL-1	"	"	1¼	"	1-1⅜					
	GL-2 to 11	"	"	1⅜	"	1-1½					
9	GL-1						B	"	1¼	⅜	1-1⅜
	GL-2 to 11						"	"	1½	"	1-1⅝
10	GL-1 to 4	A	15	1⅝	"	1-5¾					
		"	"	"	"	"					
	GL-6 to 15	"	"	1½	"	1-5⅝					
	GL-5	"	"	1¾	"	1-5⅞					
	GL-16	"	"	1⅞	"	1-6					
A5	GA-1 to GA-6	B	13	1⅜	¼	1-1½					
A6	GA-1 to GA-7						B	13	1⅜	5/16	1-1½
A7	GA-1 to GA-8	B	"	1½	"	1-1½					
A8	GA-1 to GA-7						B	"	1½	⅜	1-1⅝
	GA-8						B	"	1⅜	7/16	1-1½
A9	GA-1	C	.5	1⅞	3/16	0-8	A	15	1⅝	5/16	1-5¾
	GA-2 to GA-6	C	"	1⅝	¼	0-7¾	"	"	1½	⅜	1-5⅝
A10	GA-1 to GA-5	A	13	1⅝	3/16	1-5¾					
C4	GC-1, 6, 7, 8 & 9						B	13	1⅜"	3/16"	1'-1½"
	GC-2 to GC-5						"	"	1¼"	"	1'-1⅜"
C5	GC-1, GC-8 to 12	B	13	1½"	¼	1'-1⅝"					
	GC-2 to GC-7	"	"	1⅜"	"	1'-1½"					
C6	GC2 to GC-4	C	"	1¾"	"	0'-7⅞"	B	"	1⅜"	"	1'-1½"
C-9	GC-1, GC-5	A	"	2"	"	1'-6⅜"					
	GC-2 to GC-4	A	"	1⅞"	"	1'-6"					
C10	GC-1 to GC-5	B	13"	1¼"	¼	1-1⅜"					
			¢ Pier								
C-11	GC-1, GC-5	A	17"	2⅛"	¼"	1'-6¼"					
	GC-2 to GC-4	"	"	2"	"	1'-6⅛"					
D-6	GD-1 to GD-4	C	13"	1⅜"	⅜"	0'-7⅝"					
D-7	GD-1 to GD-4						B	13"	1⅜"	½"	1'-1½"

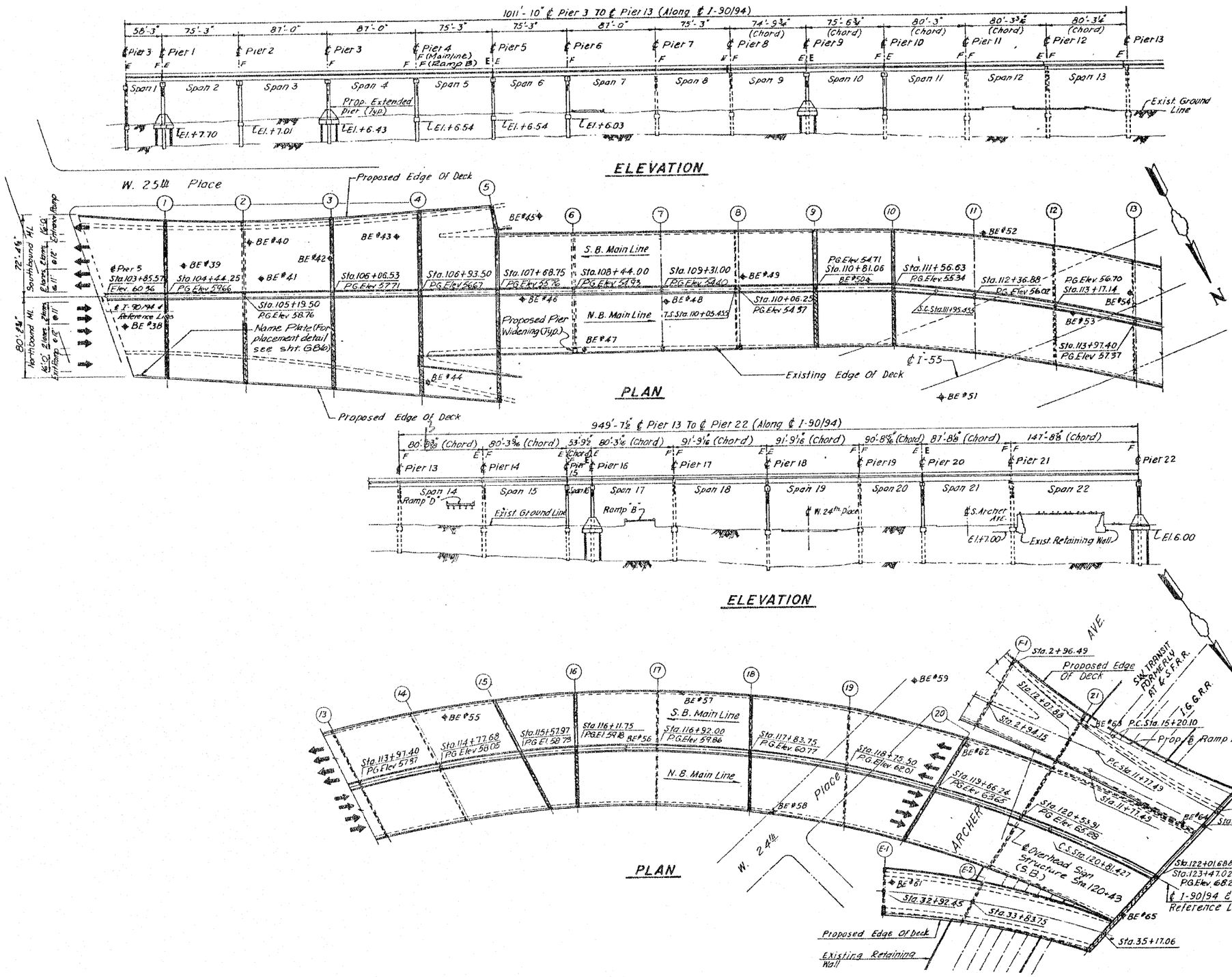
FILE NAME =	USER NAME = rgoll	DESIGNED - AMR	REVISED -	
		DRAWN - AMR	REVISED -	
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPE A, B, C & D ROCKER DETAILS – LOCATION 1
STRUCTURE NO. 016-1113

SCALE: NTS | SHEET NO. 40 OF 40 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	46
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			



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		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160	47
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -							CONTRACT NO. 60N01		
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 1 OF 37 SHEETS	STA. TO STA.			ILLINOIS	FED. AID PROJECT	

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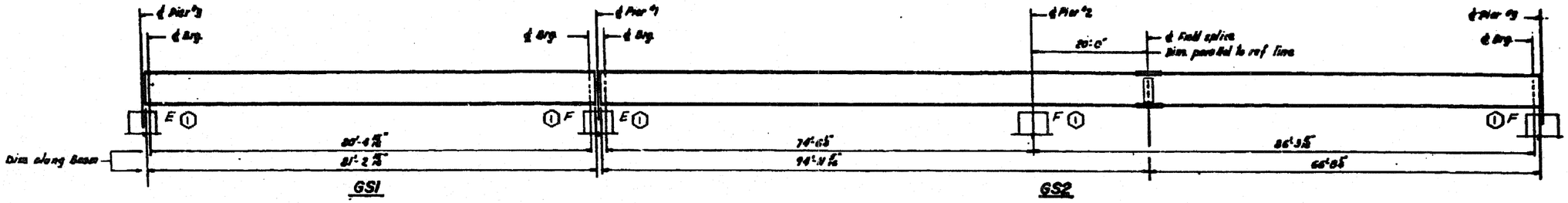
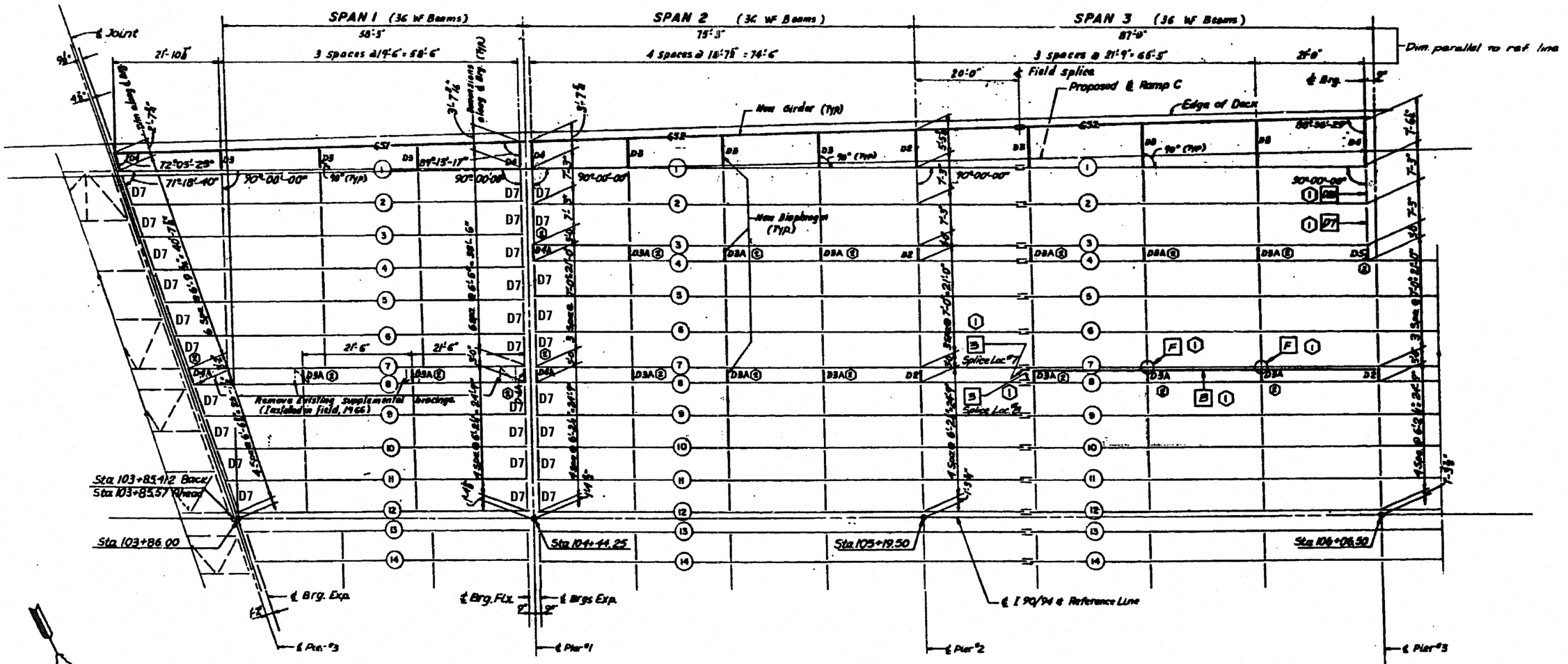


GIRDER ELEVATION



FRAMING PLAN
SPANS 1, 2 & 3 (S.B.)

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN SPANS 1 TO 3 – LOCATION 2
STRUCTURE NO. 016–1115

SCALE: NTS | SHEET NO. 2 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	48
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

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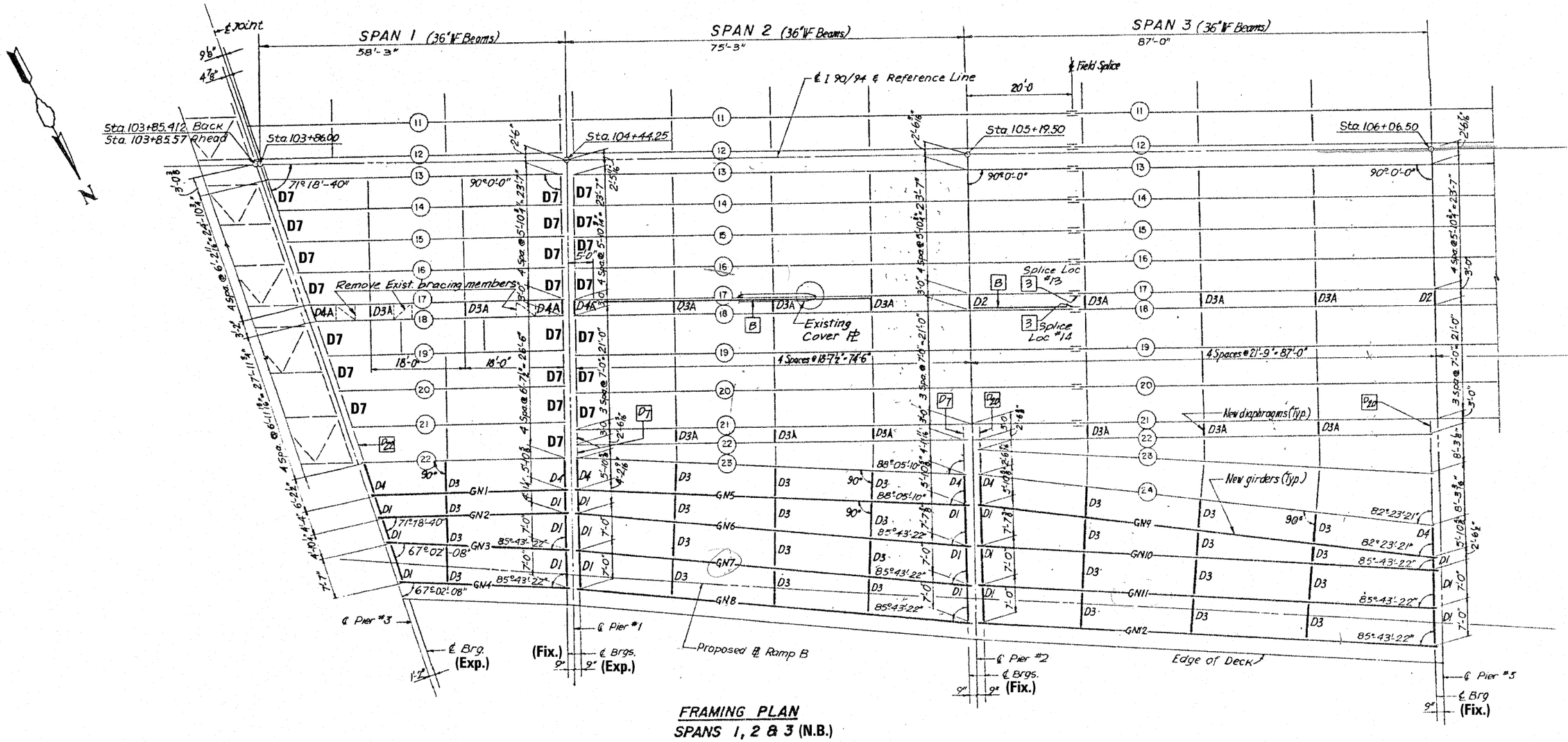

FRAMING PLAN
SPANS 1, 2 & 3 (N.B.)

FILE NAME =	USER NAME = rgoll	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN SPANS 1 TO 3 – LOCATION 2 STRUCTURE NO. 016–1115			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160	49
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -								CONTRACT NO. 60N01	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 3 OF 37 SHEETS	STA. TO STA.			ILLINOIS	FED. AID PROJECT	

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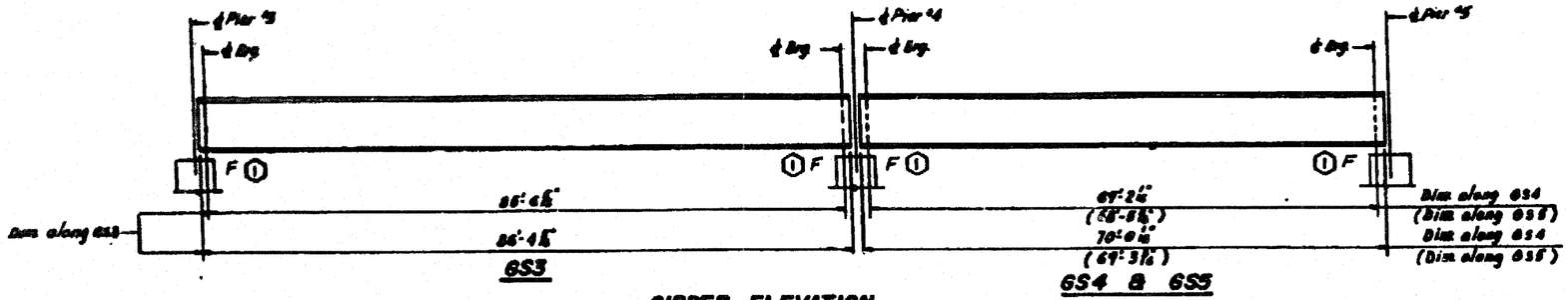
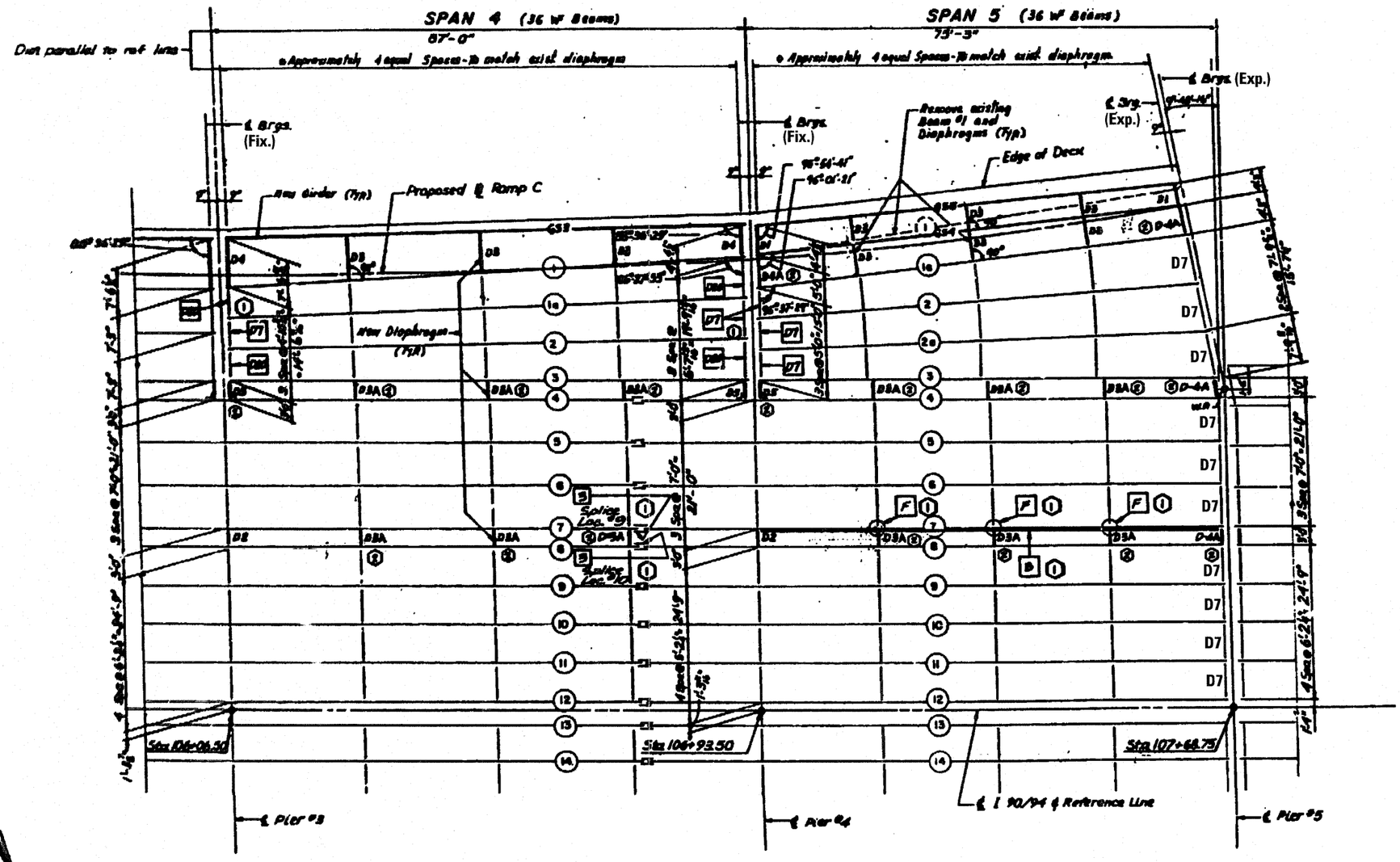


GIRDER ELEVATION



FRAMING PLAN
SPANS 4 & 5 (S.B.)

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN SPANS 4 & 5 – LOCATION 2 STRUCTURE NO. 016–1115
		DRAWN - AMR	REVISED -		
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -		SCALE: NTS | SHEET NO. 4 OF 37 SHEETS | STA. | TO STA.
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	50
		CONTRACT NO. 60N01		
		ILLINOIS FED. AID PROJECT		

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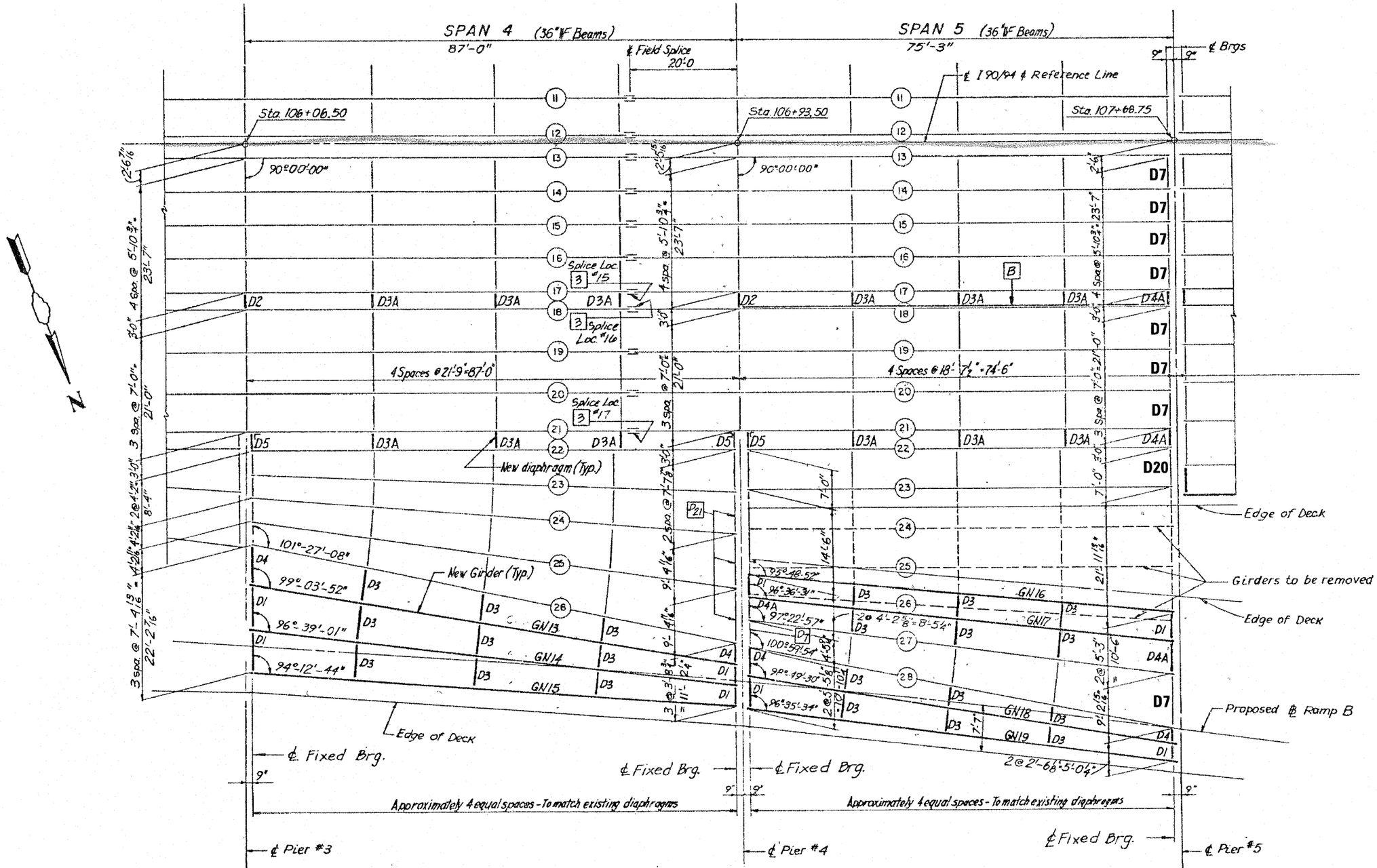


FRAMING PLAN
SPANS 4 & 5 (N.B.)

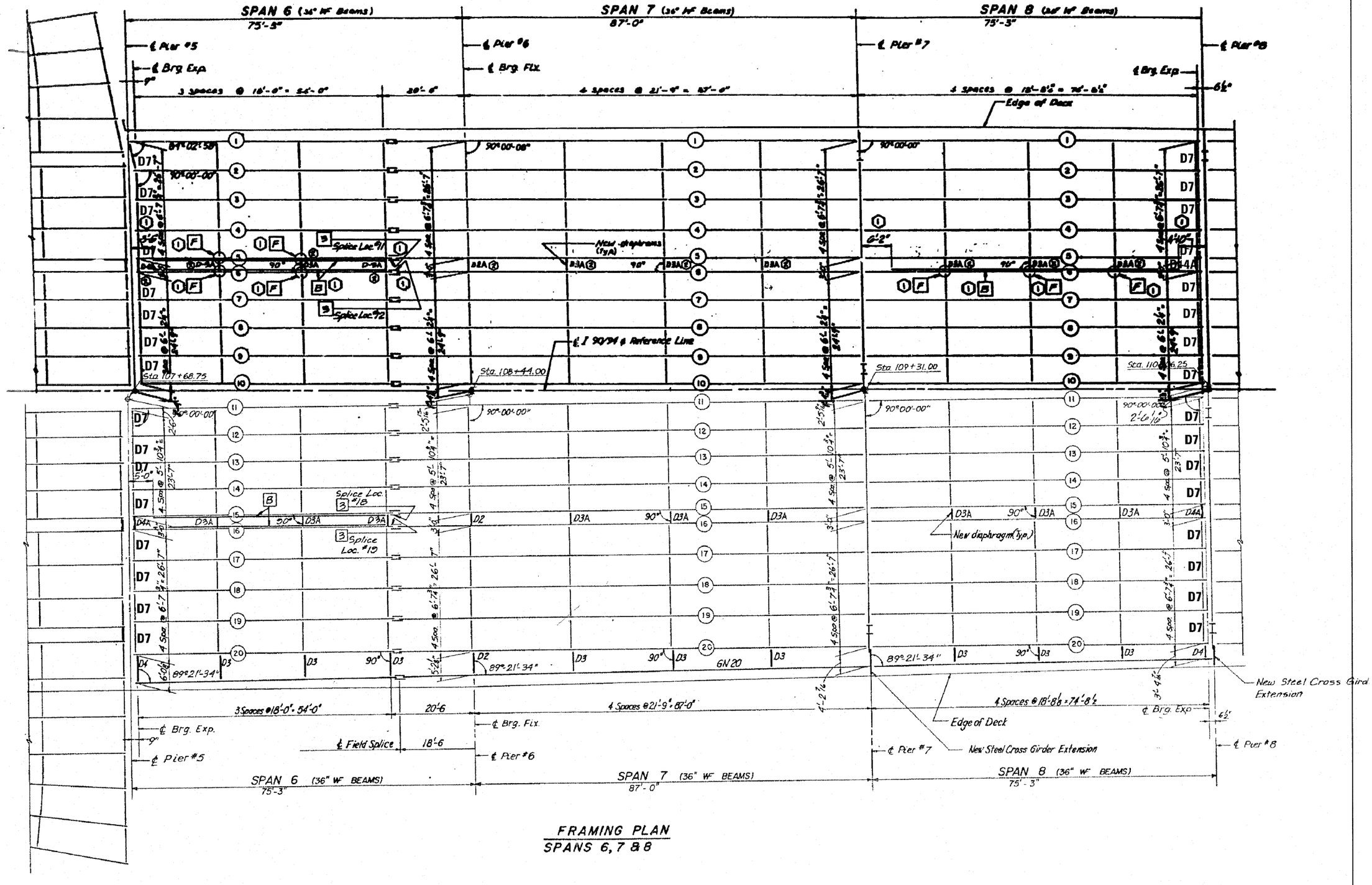
FILE NAME =	USER NAME = rgoll	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN SPANS 4 & 5 – LOCATION 2
STRUCTURE NO. 016–1115

SCALE: NTS | SHEET NO. 5 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	51
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			



FRAMING PLAN
SPANS 6, 7 & 8

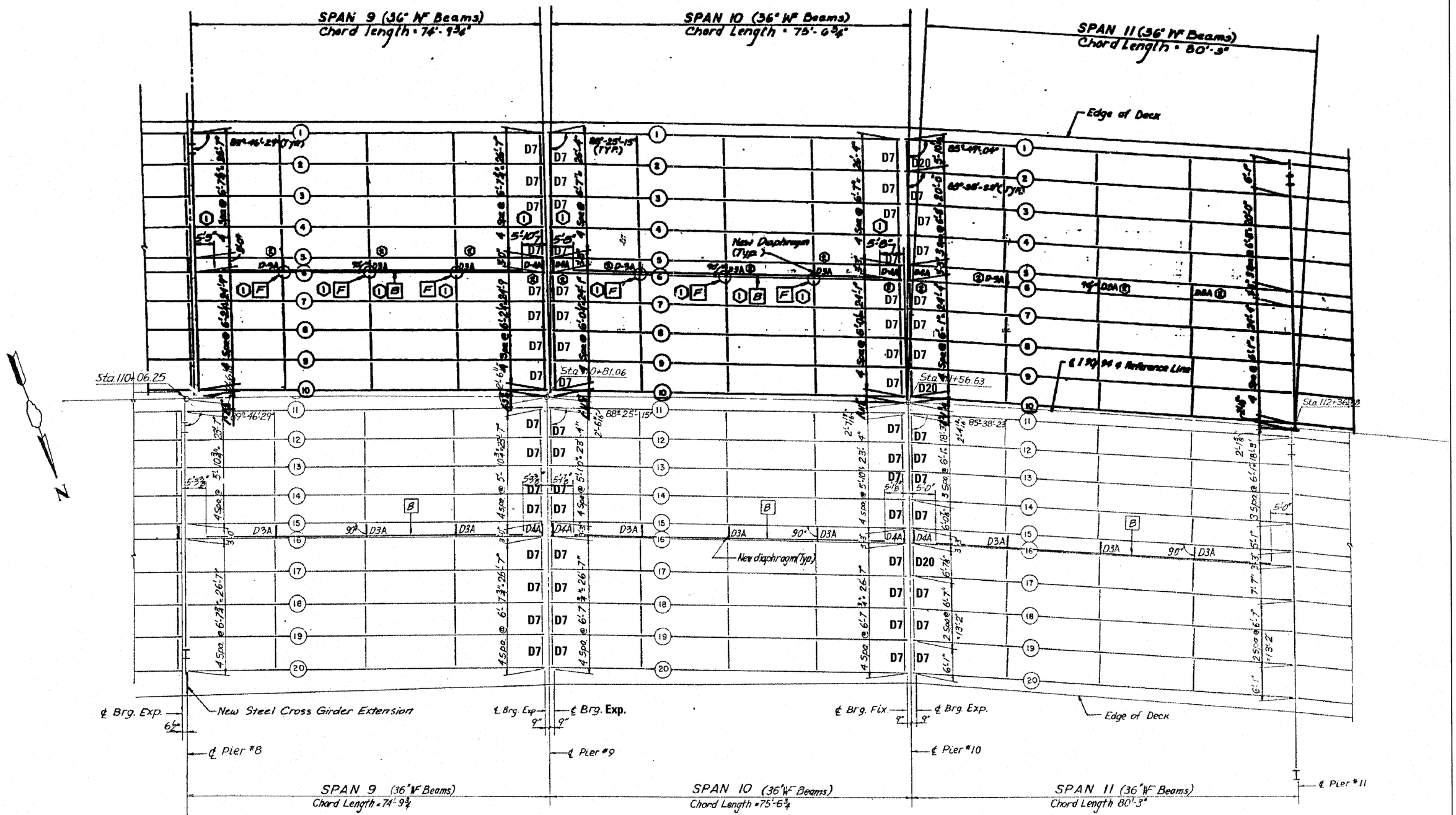
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN SPANS 6 TO 8 – LOCATION 2
STRUCTURE NO. 016-1115

SCALE: NTS | SHEET NO. 6 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	52
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			



FRAMING PLAN
SPANS 9, 10 & 11

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN SPANS 9 TO 11 – LOCATION 2
STRUCTURE NO. 016-1115

SCALE: NTS | SHEET NO. 7 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	53
		CONTRACT NO. 60N01		
		ILLINOIS FED. AID PROJECT		

SPAN 12 (36" Nº Beams)
Chord Length = 80'-3 3/16"

SPAN 13 (36" Nº Beams)
Chord Length = 80'-3 1/4"

SPAN 14 (36" Nº Beams)
Chord length = 80'-3 5/8"

Edge of Deck

New Diaphragm (Typ.)

Sta 112+36.88

℄ I 90/94 & Reference Line

N

℄ Brg Exp

℄ Pier #11

℄ Pier #12

℄ Pier #13

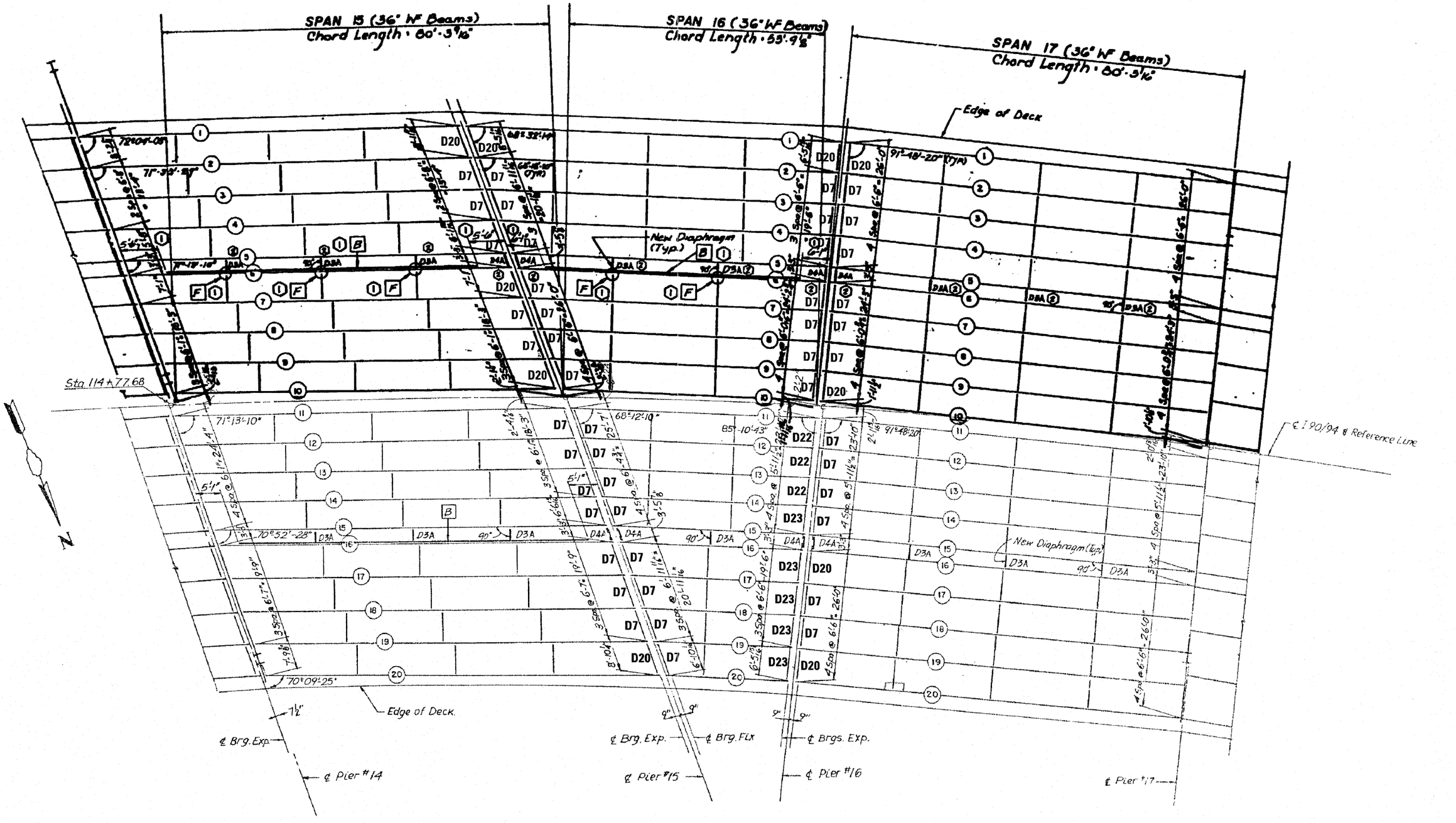
℄ Pier #14

Edge of Deck

FRAMING PLAN
SPANS 12, 13 & 14

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN SPANS 12 TO 14 – LOCATION 2 STRUCTURE NO. 016-1115
		DRAWN - AMR	REVISED -		
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -		SCALE: NTS / SHEET NO. 8 OF 37 SHEETS / STA. / TO STA.
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	54
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			



FRAMING PLAN
SPANS 15, 16 & 17

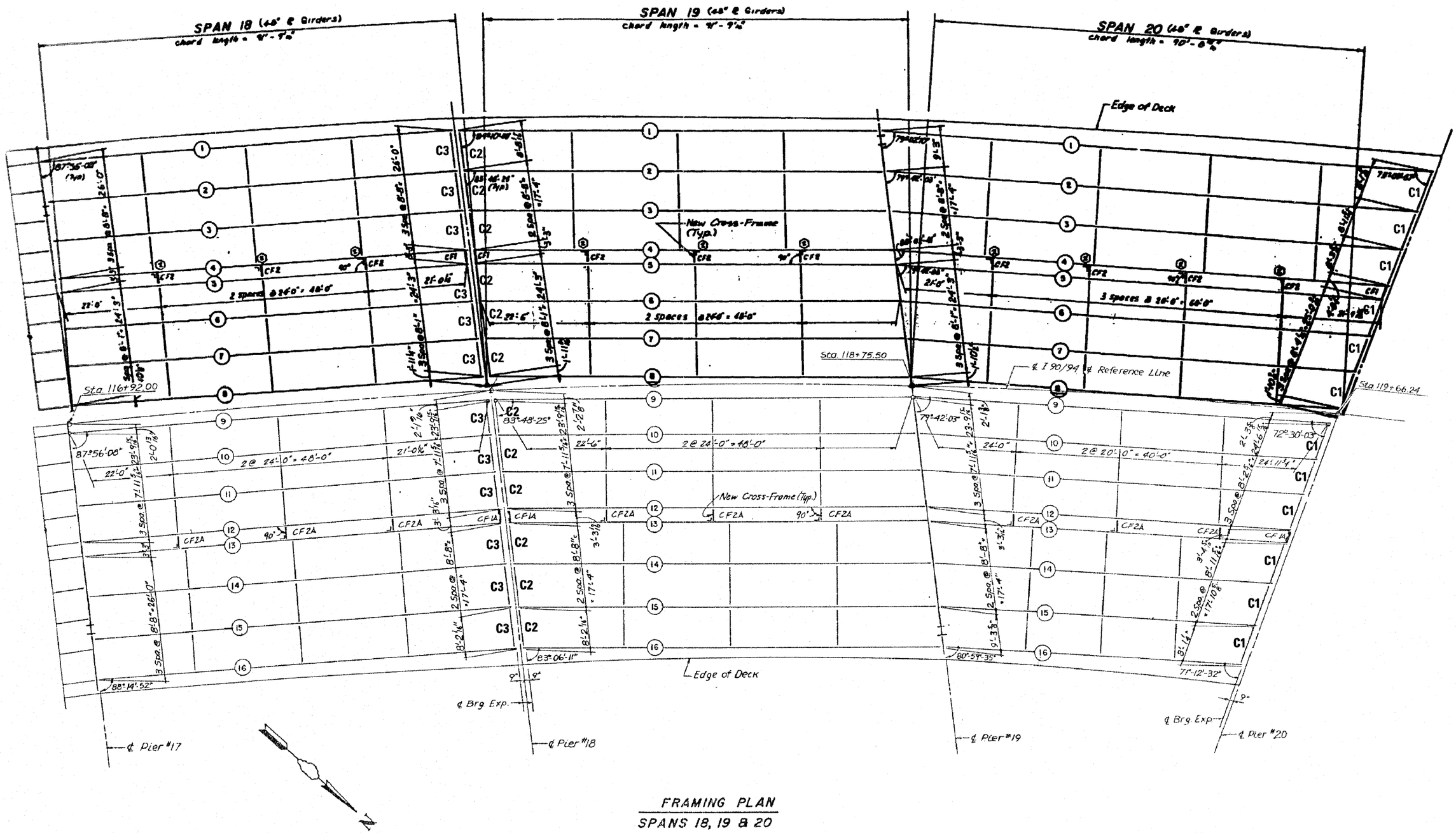
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN SPANS 15 TO 17 – LOCATION 2
STRUCTURE NO. 016-1115

SCALE: NTS | SHEET NO. 9 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	55
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			



FRAMING PLAN
SPANS 18, 19 & 20

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.2000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

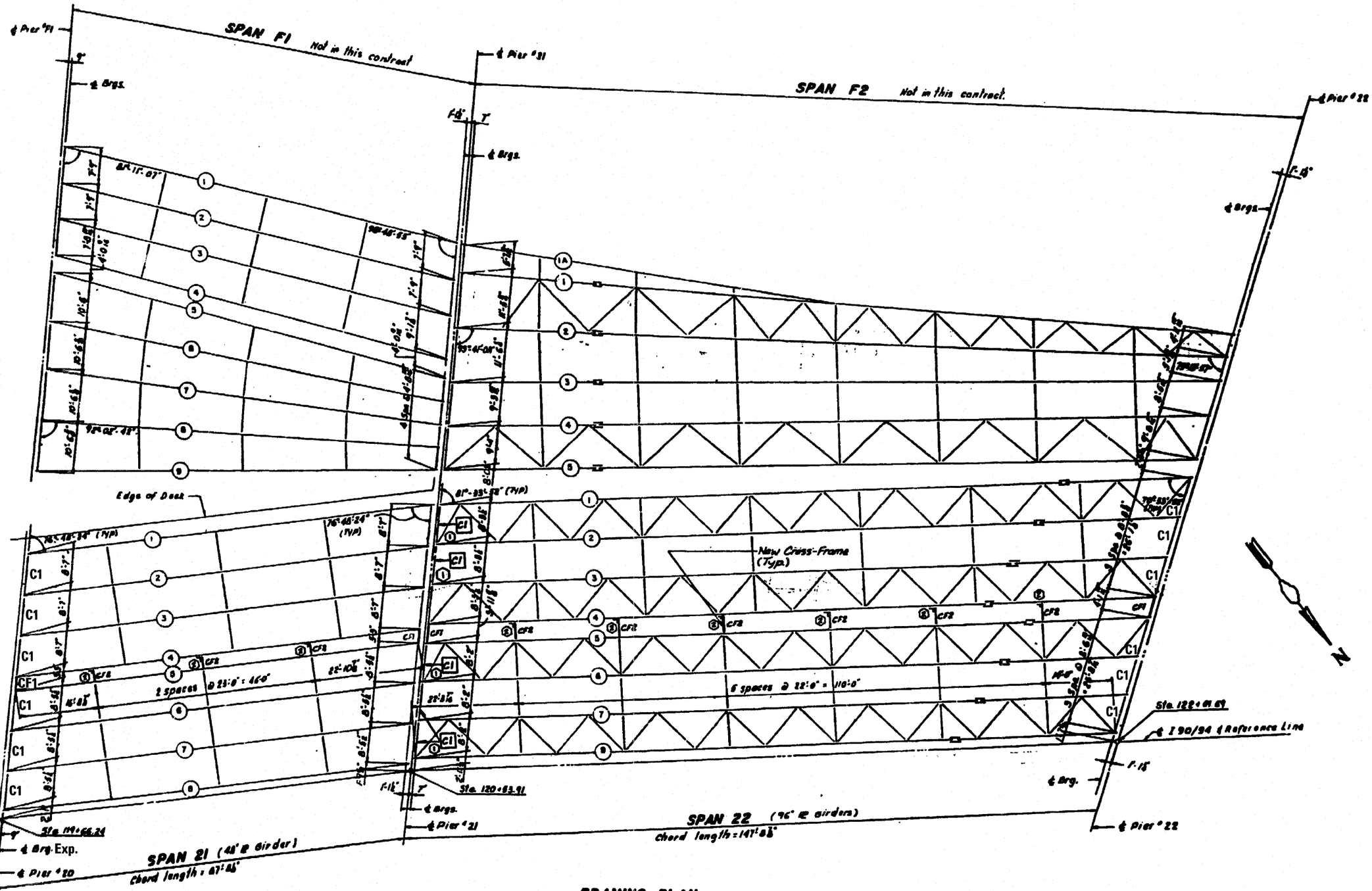
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN SPANS 18 TO 20 – LOCATION 2
STRUCTURE NO. 016-1115

SCALE: NTS | SHEET NO. 10 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	56
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

*FILE/8



FRAMING PLAN
SPANS 21, 22, F1 & F2 (S.B)

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN SPANS 21 & 22 – LOCATION 2 STRUCTURE NO. 016–1115	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -			94	2010-127-BP	COOK	160	57
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -						CONTRACT NO. 60N01	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS / SHEET NO. 11 OF 37 SHEETS / STA. / TO STA.		ILLINOIS FED. AID PROJECT			

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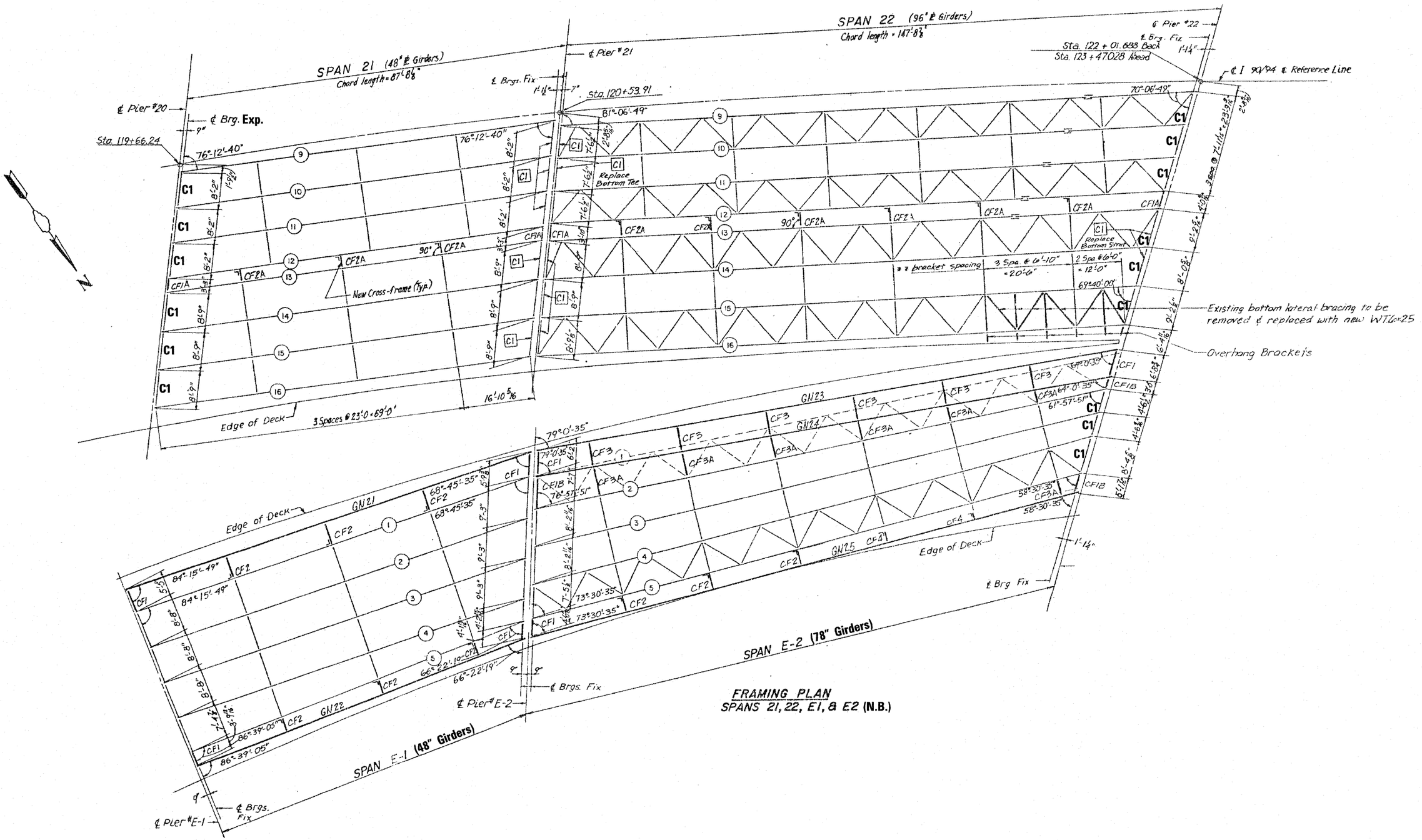


FRAMING PLAN
SPANS 21, 22, E1, & E2 (N.B.)

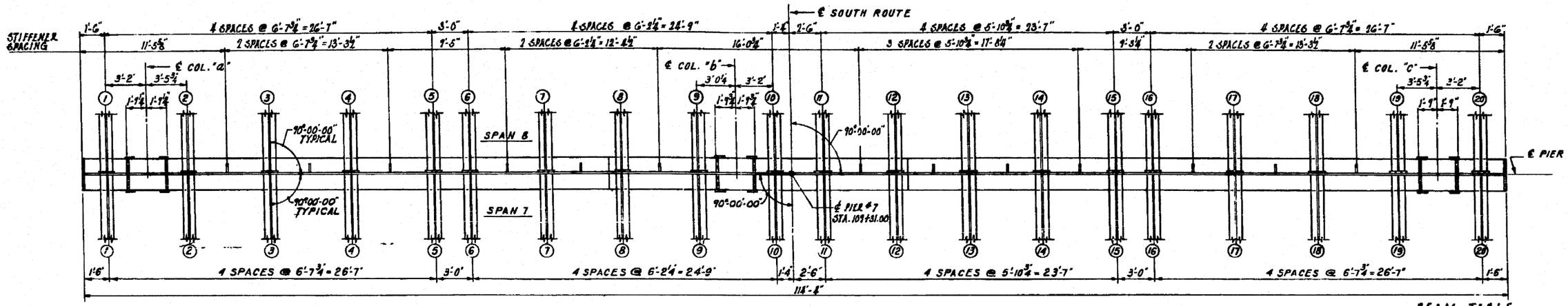
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN SPANS 21, 22, E1 & E2 – LOCATION 2
STRUCTURE NO. 016–1115

SCALE: NTS | SHEET NO. 12 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	58
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

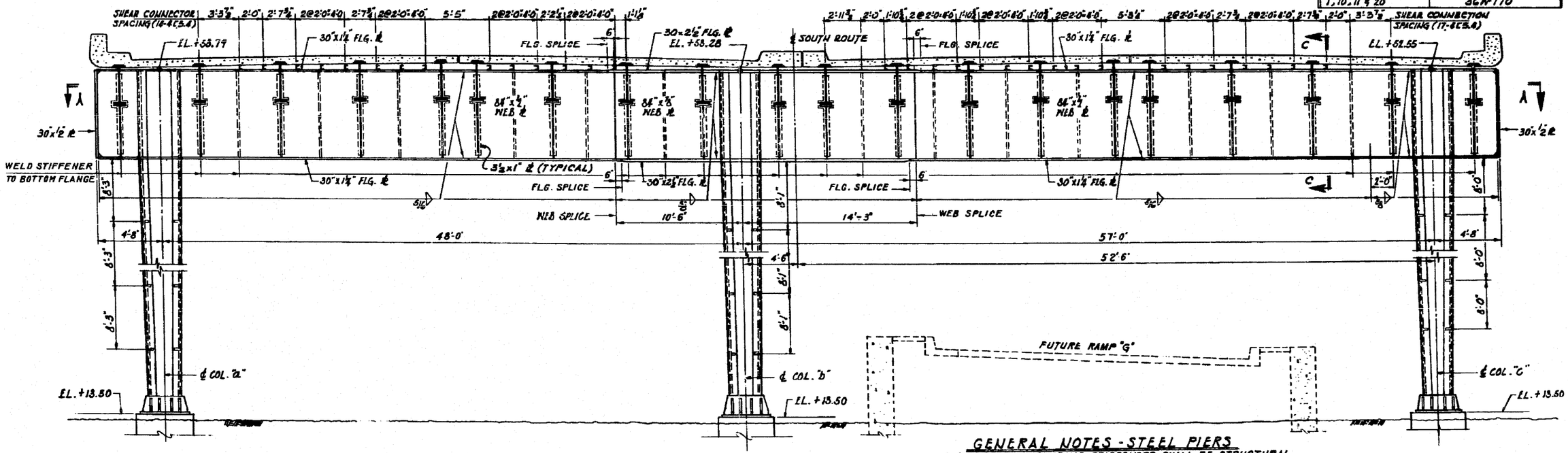


SECTION A-A

SCALE 1/4"-1'-0"

BEAM TABLE

SPANS #7 & #8 (FIXED)	
BEAM NO.	SIZE
2 THRU 9, 12 THRU 19	36WF150
1, 10, 11 & 20	36WF170



ELEVATION
PIER 7

GENERAL NOTES - STEEL PIERS

1. ALL STEEL, INCLUDING STIFFENERS, SHALL BE STRUCTURAL CARBON STEEL A.S.T.M. -A-378 UNLESS OTHERWISE NOTED.
2. ALL STEEL MARKED A441 SHALL BE LOW ALLOY STEEL A.S.T.M.- A-441.

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

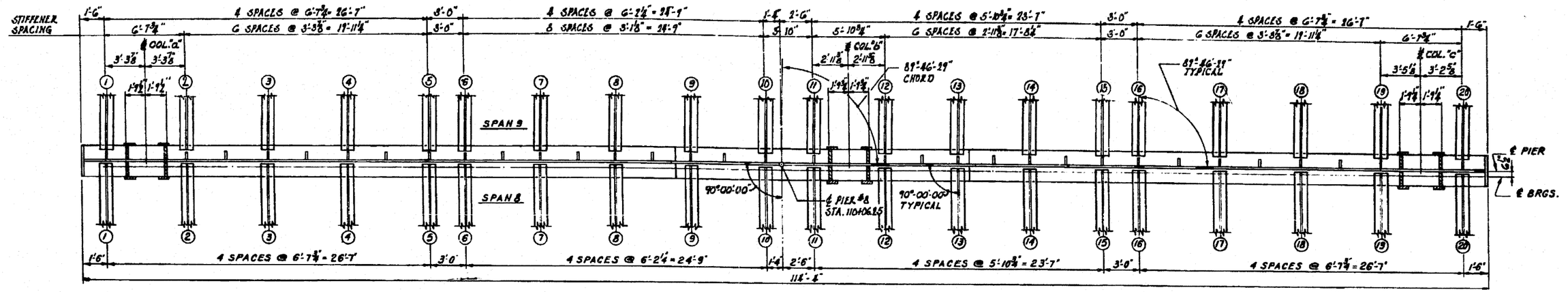
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 7 – LOCATION 2
STRUCTURE NO. 016-1115

SCALE: NTS | SHEET NO. 13 OF 37 SHEETS | STA. | TO STA.

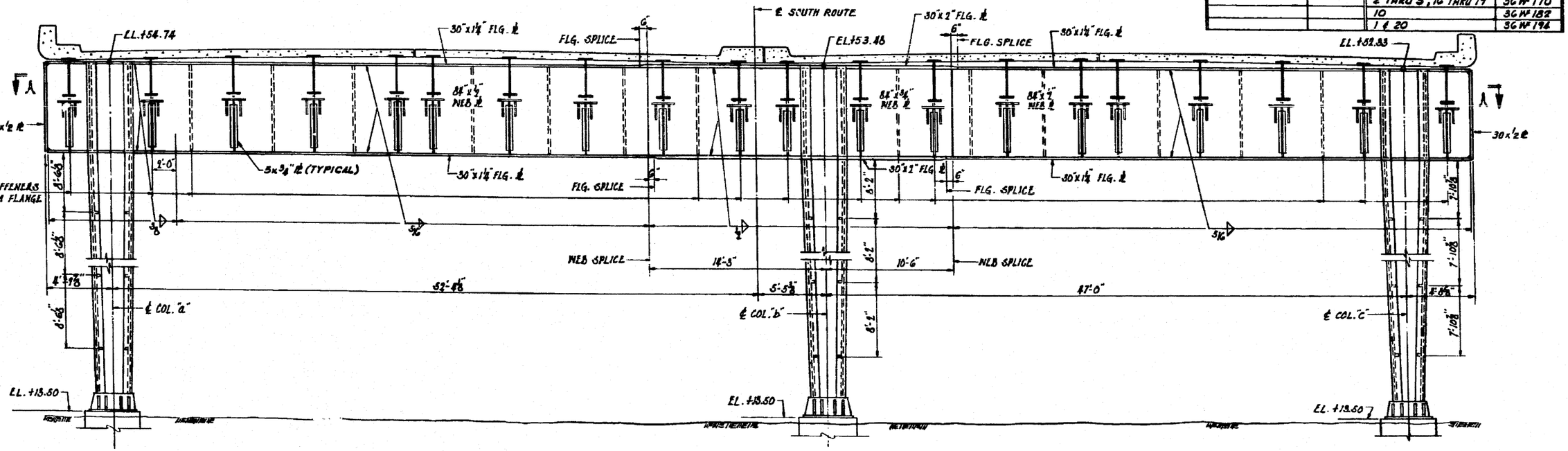
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	59
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

$FILEL8



SECTION A-A

SCALE 1/4"-1'-0"



ELEVATION

PIER 8

BEAM TABLE

SPAN #8 (EXP.)		SPAN #9 (FIXED)	
BEAM Nº	SIZE	BEAM Nº	SIZE
2 THRU 9, 12 THRU 19	36 WF 150	7 THRU 9, 11 THRU 14	36 WF 150
1, 10, 11 ℄ 20	36 WF 170	6 ℄ 15	36 WF 160
		2 THRU 5, 16 THRU 19	36 WF 170
		10	36 WF 182
		1 ℄ 20	36 WF 194

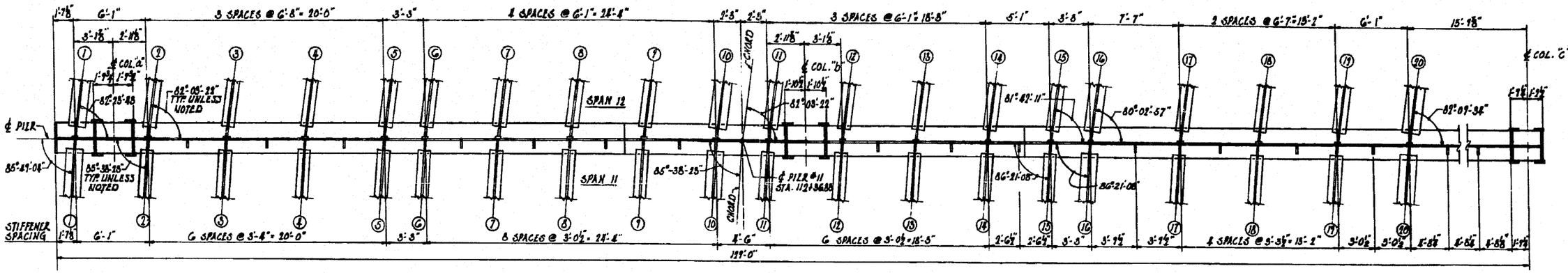
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 8 – LOCATION 2
STRUCTURE NO. 016-1115

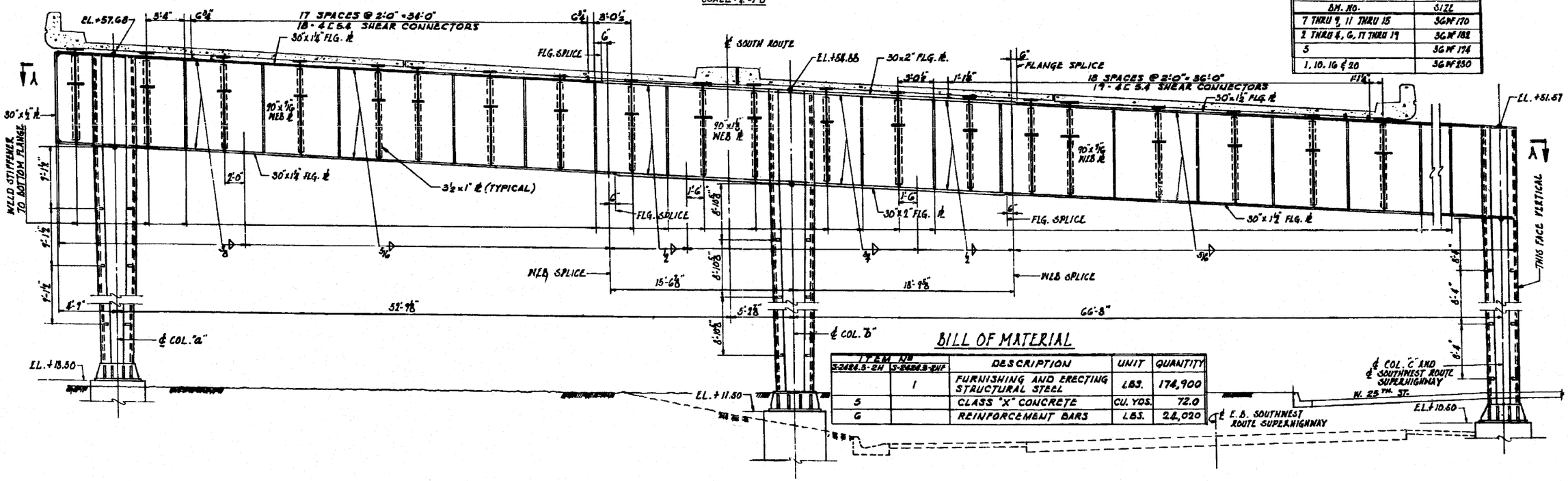
SCALE: NTS | SHEET NO. 14 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	60
		CONTRACT NO. 60N01		
	ILLINOIS	FED. AID PROJECT		



SECTION A-A

SCALE: ¼"=1'-0"



BEAM TABLE

SPAN 11 (FIXED) AND SPAN 12 (FIXED)	
BM. NO.	SIZE
7 THRU 9, 11 THRU 15	36WF170
2 THRU 4, 6, 17 THRU 19	36WF182
5	36WF174
1, 10, 16 & 20	36WF230

BILL OF MATERIAL

ITEM NO. S-2484.5-2H	ITEM NO. S-8484.5-BHF	DESCRIPTION	UNIT	QUANTITY
	1	FURNISHING AND ERECTING STRUCTURAL STEEL	LBS.	174,900
5		CLASS "X" CONCRETE	CU. YDS.	72.0
6		REINFORCEMENT BARS	LBS.	24,020

ELEVATION

PIER 11

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	
		DRAWN - AMR	REVISED -	
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -	

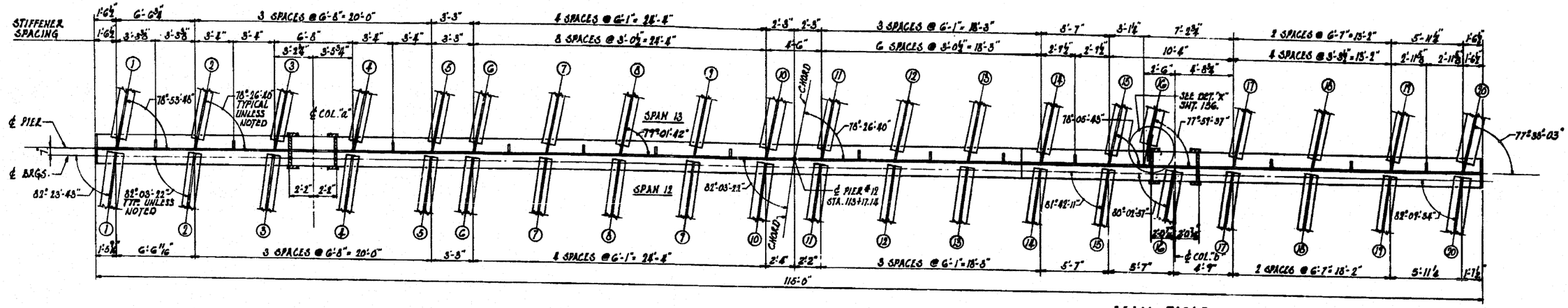
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 11 – LOCATION 2
STRUCTURE NO. 016-1115

SCALE: NTS | SHEET NO. 15 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	61
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

$FILE1$

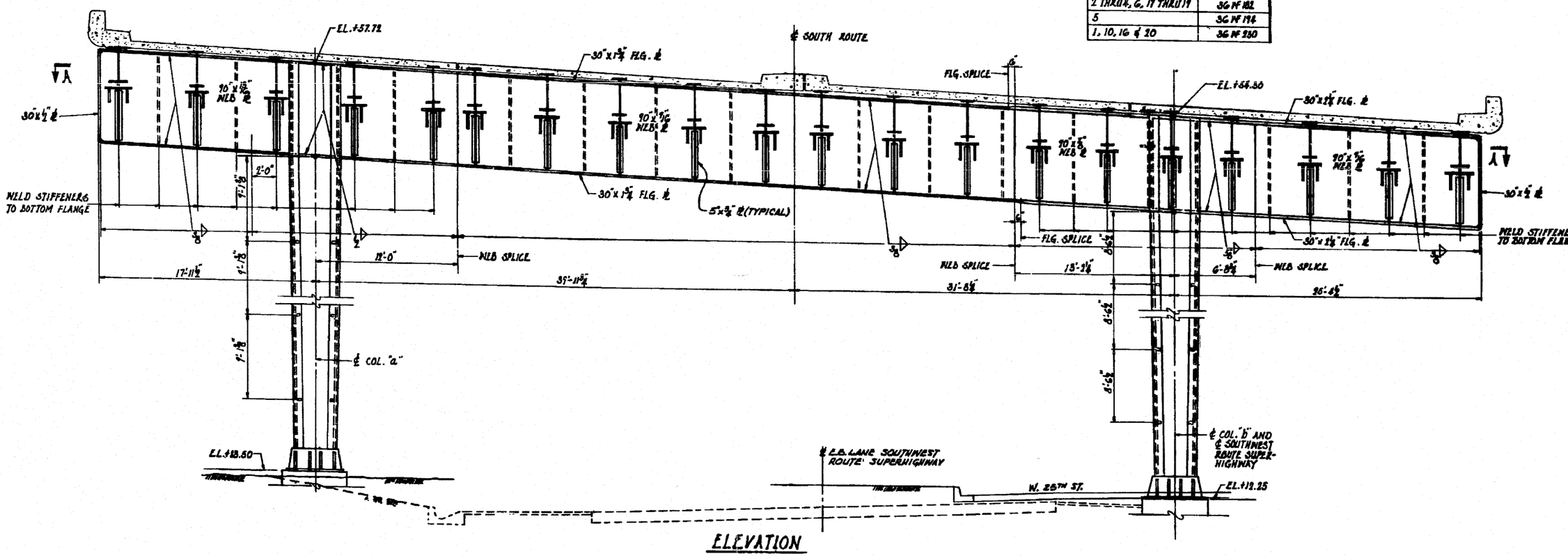


SECTION A-A

SCALE : ¼" = 1'-0"

BEAM TABLE

SPAN 12 (EXP.) AND SPAN 13 (FIXED)	
BM. NO.	SIZE
7 THRU 9, 11 THRU 15	36 WF 170
2 THRU 4, 6, 17 THRU 19	36 WF 182
5	36 WF 194
1, 10, 16 & 20	36 WF 280

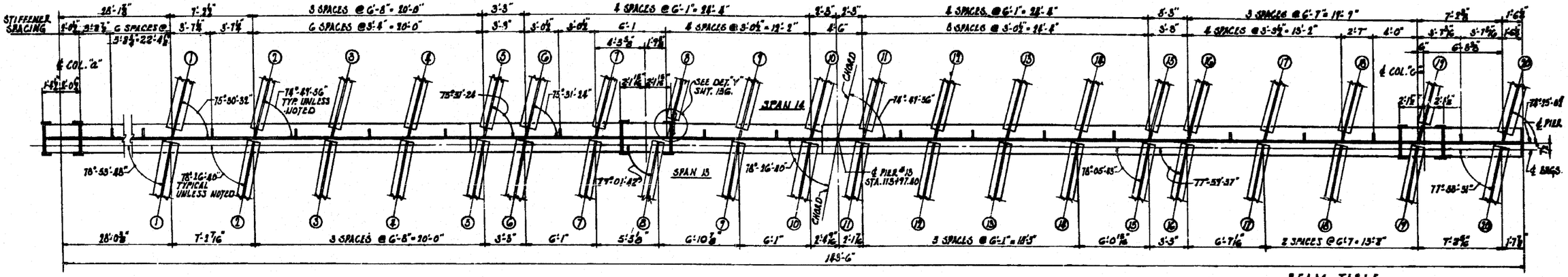


ELEVATION
PIER 12

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PIER 12 – LOCATION 2 STRUCTURE NO. 016-1115		
		DRAWN - AMR	REVISED -				
	PLOT SCALE = 1.2000 ' / IN.	CHECKED - JMH	REVISED -		SCALE: NTS	SHEET NO. 16 OF 37 SHEETS	STA. TO STA.
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -				

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	62
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

$FILE$

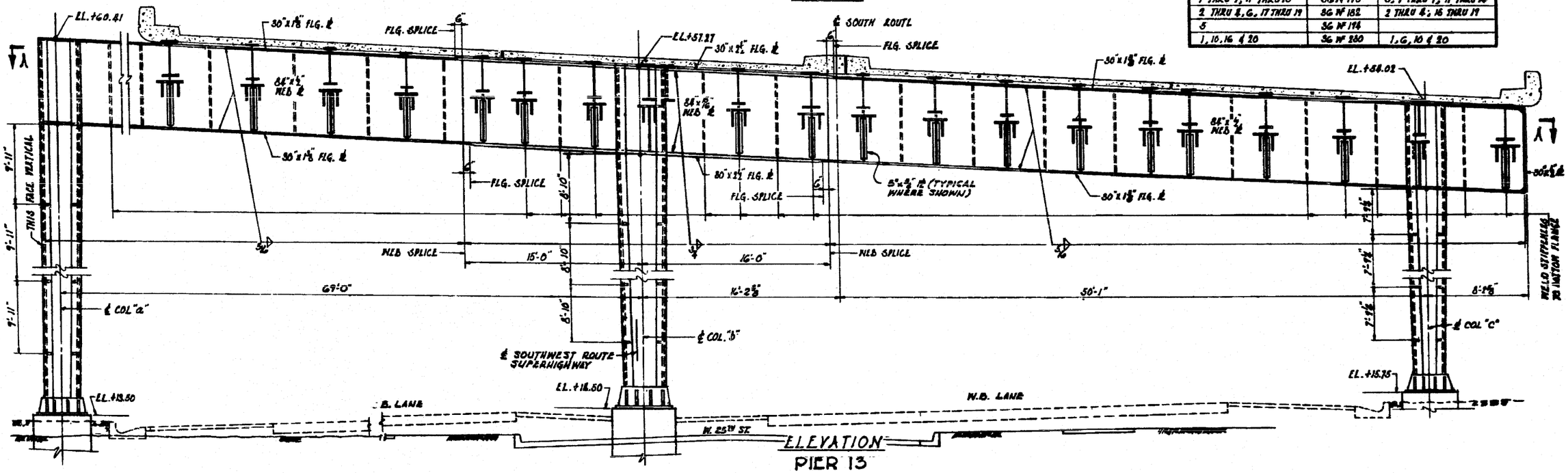


BEAM TABLE

SPAN 13 (EXP.)		SPAN 14 (FIXED)
BM. NO.	SIZE	BM. NO.
7 THRU 9, 11 THRU 15	36 WF 170	5, 7 THRU 9, 11 THRU 14
2 THRU 4, 6, 17 THRU 19	36 WF 182	2 THRU 4; 16 THRU 19
5	36 WF 194	
1, 10, 16 & 20	36 WF 280	1, 6, 10 & 20

SECTION A-A

SCALE: ½" = 1'-0"



ELEVATION
PIER 13

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

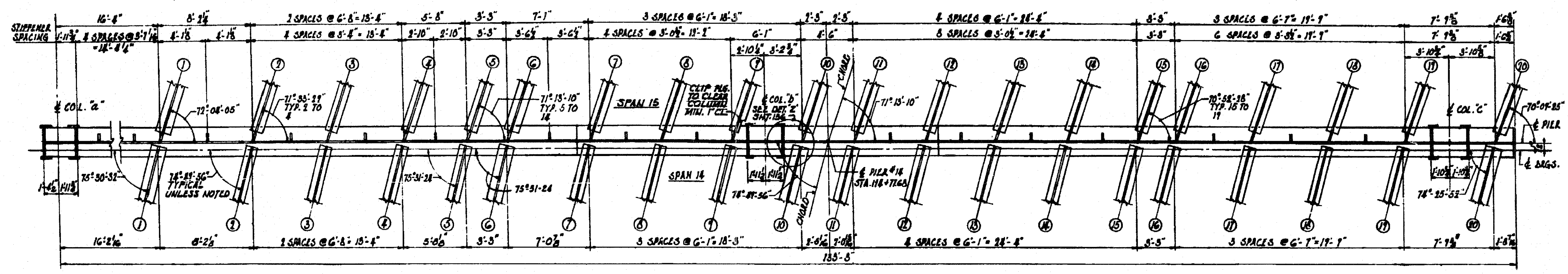
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 13 – LOCATION 2
STRUCTURE NO. 016–1115

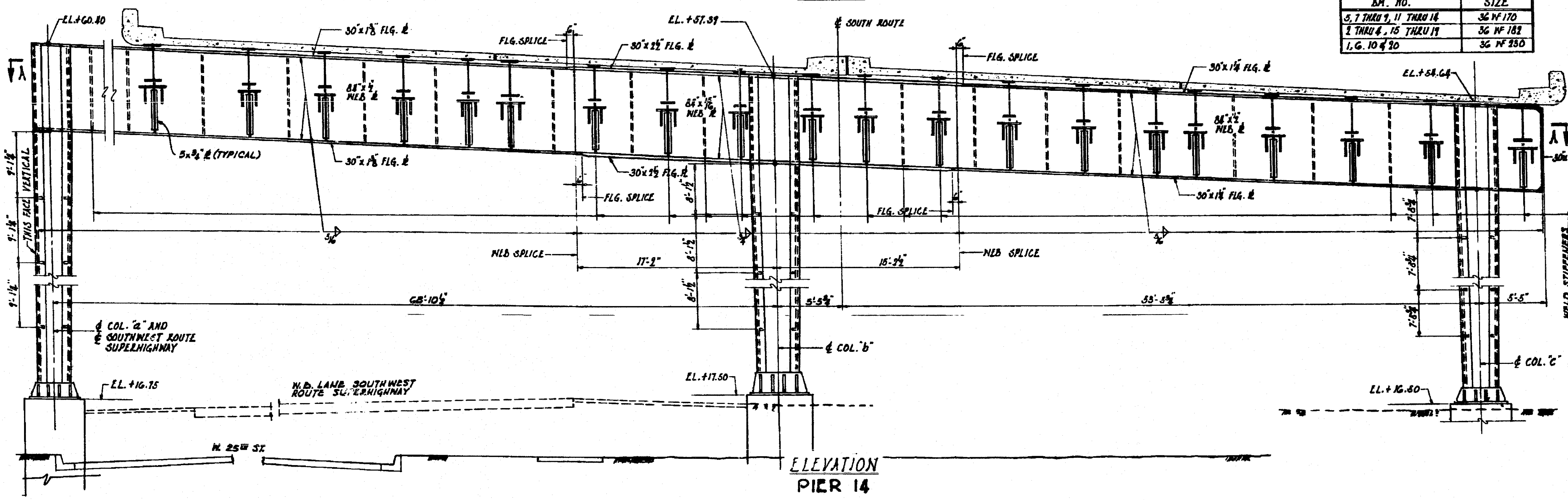
SCALE: NTS | SHEET NO. 17 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	63
		CONTRACT NO. 60N01		
	ILLINOIS	FED. AID PROJECT		

@FILEL@



SECTION A-A
SCALE: ¼" = 1'-0"



ELEVATION
PIER 14

BEAM TABLE

SPAN 14 (EXP.) AND SPAN 15 (FIXED)	
BM. NO.	SIZE
5, 7 THRU 9, 11 THRU 14	36 WF 170
2 THRU 4, 15 THRU 19	36 WF 182
1, 6, 10 & 20	36 WF 230

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 14 – LOCATION 2
STRUCTURE NO. 016–1115

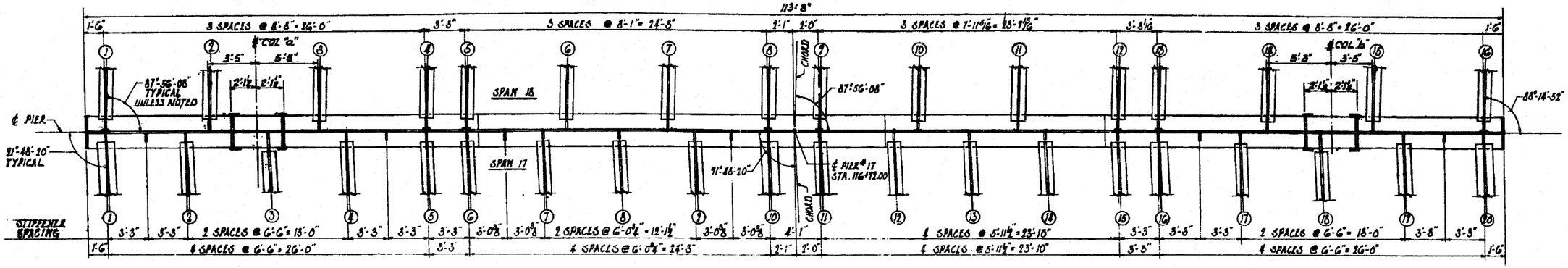
SCALE: NTS | SHEET NO. 18 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	64

CONTRACT NO. 60N01

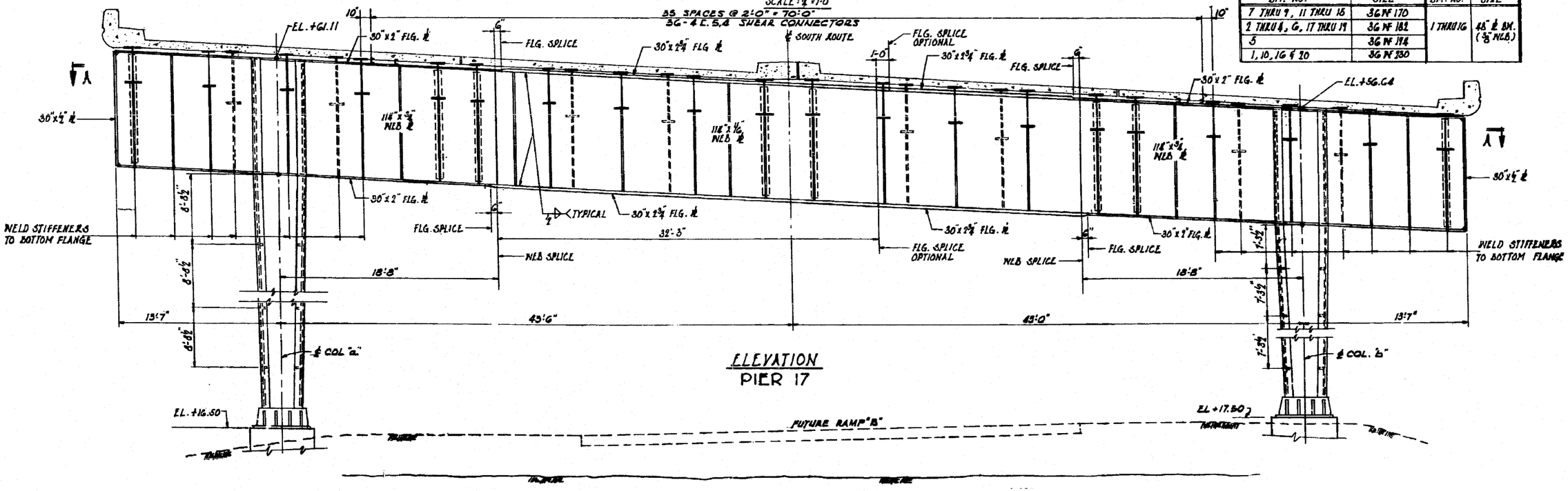
ILLINOIS | FED. AID PROJECT

$FILE$



SECTION A-A

SCALE: 1/4"=1'-0"



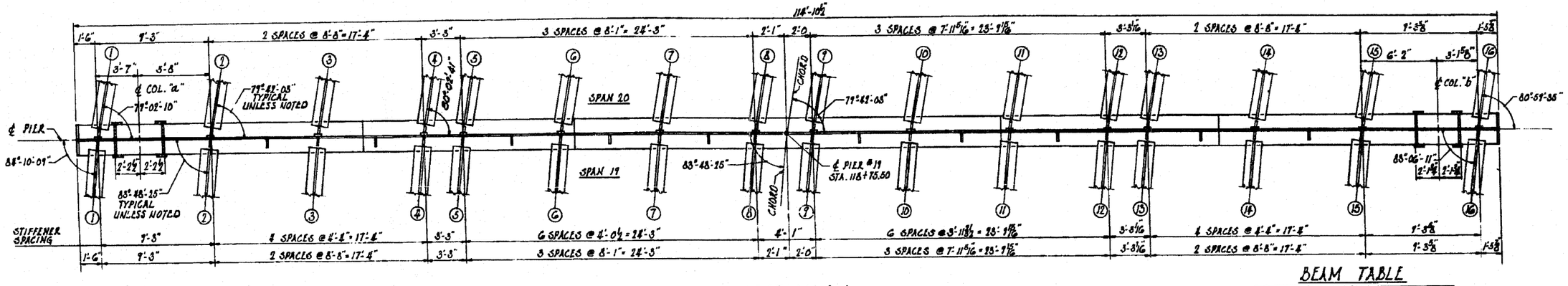
ELEVATION
PIER 17

BEAM TABLE

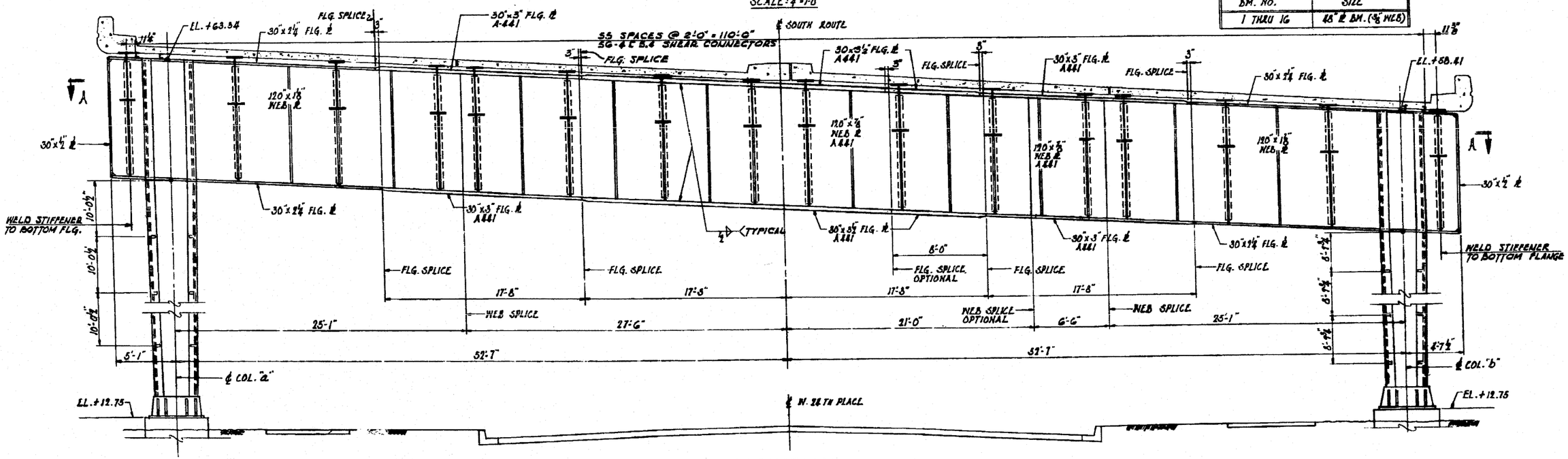
SPAN 17 (FIXED)		SPAN 18 (FIXED)	
BM. NO.	SIZE	BM. NO.	SIZE
7 THRU 9, 11 THRU 15	36 WF 170		
2 THRU 4, 6, 17 THRU 19	36 WF 182	1 THRU 16	45° ℄ BM. (½ WEB)
5	36 WF 194		
1, 10, 16 & 20	36 WF 230		

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PIER 17 – LOCATION 2 STRUCTURE NO. 016-1115		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -				94	2010-127-BP	COOK	160	65
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -						CONTRACT NO. 60N01		
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 19 OF 37 SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		

SFILE1.8



SECTION A-A
SCALE: ¼"=1'-0"



ELEVATION
PIER 19

BEAM TABLE

SPAN 19 (FIXED) AND SPAN 20 (FIXED)	
BM. NO.	SIZE
1 THRU 16	48" ℄ BM. (⅝" WEB)

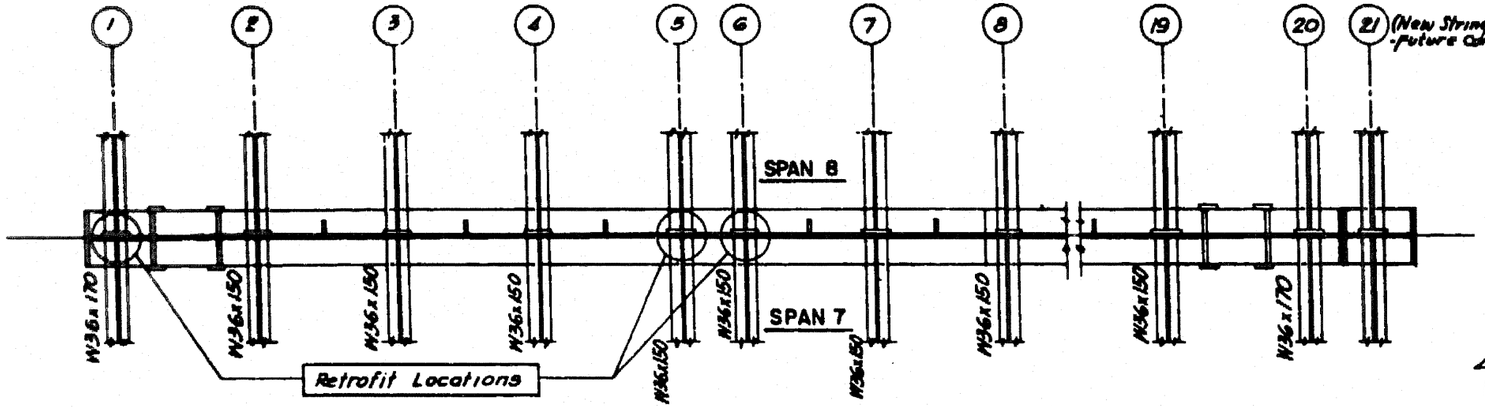
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

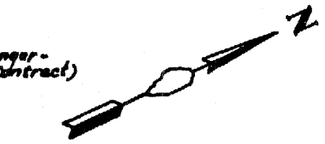
PIER 19 – LOCATION 2
STRUCTURE NO. 016-1115

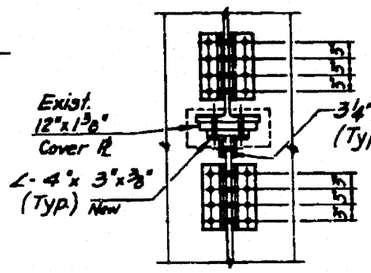
SCALE: NTS | SHEET NO. 20 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	66
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

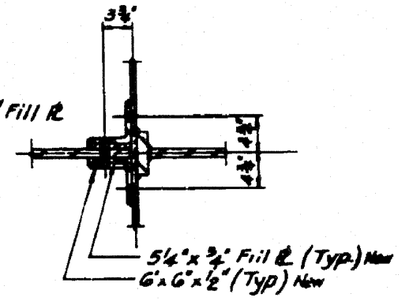


PLAN OF PIER 7

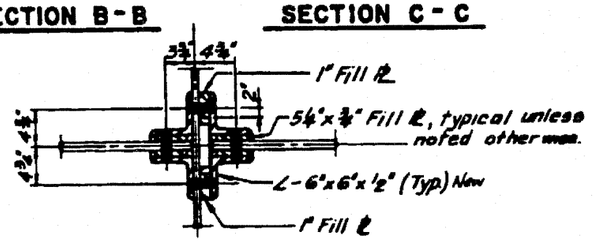




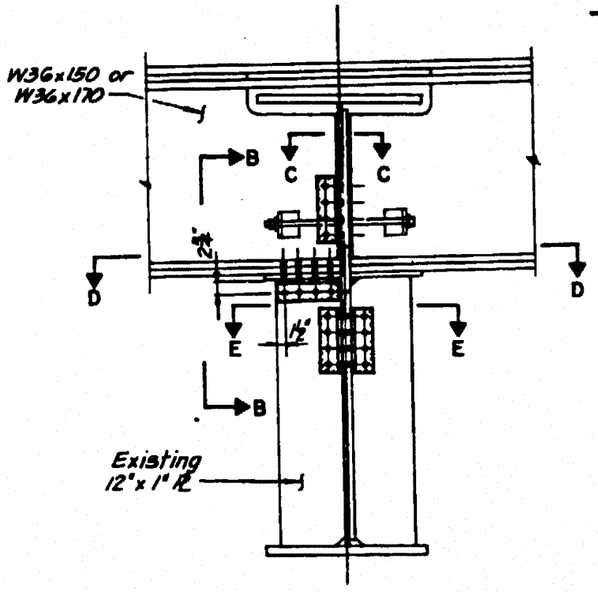
SECTION B-B



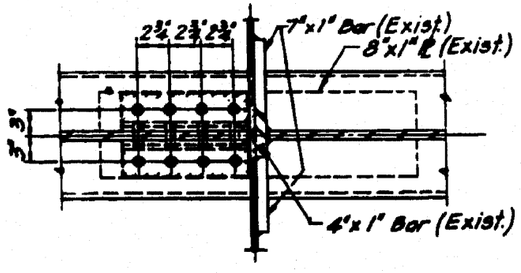
SECTION C-C



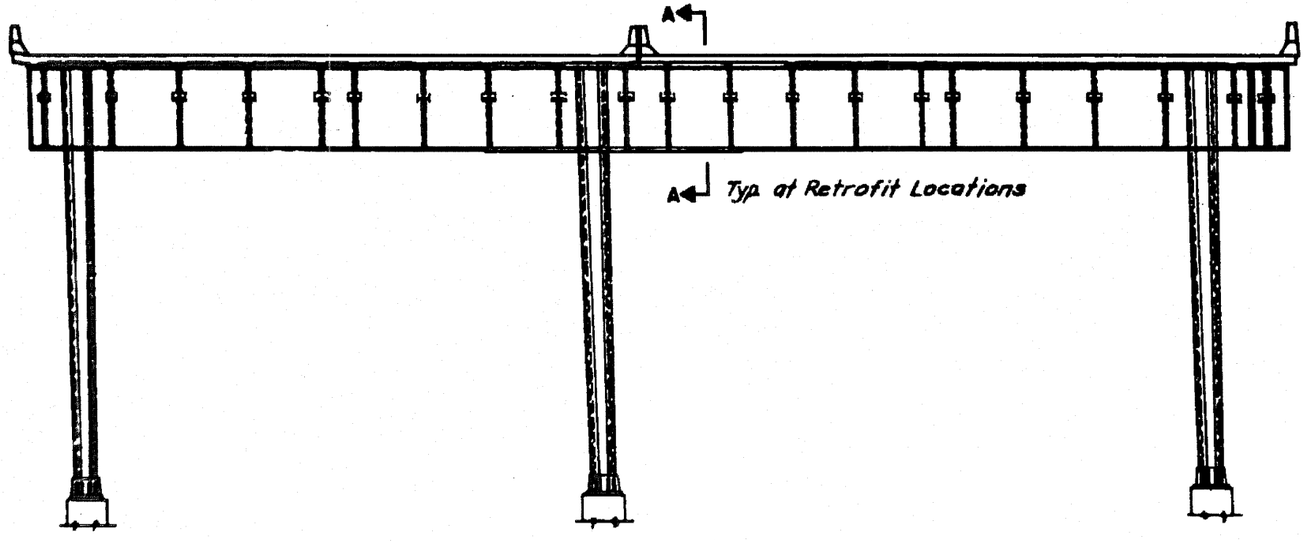
SECTION E-E



SECTION A-A



SECTION D-D



ELEVATION

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

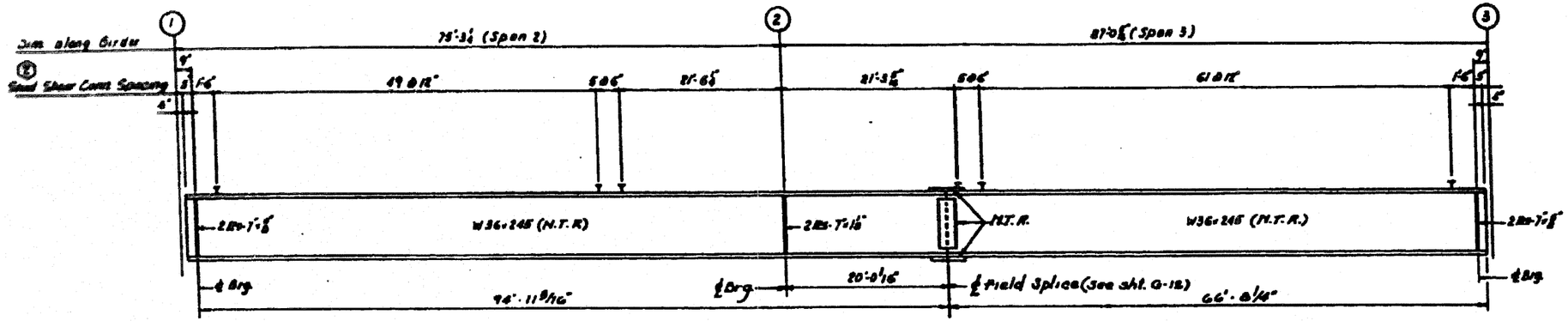
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 7 RETROFIT – LOCATION 2
STRUCTURE NO. 016-1115

SCALE: NTS | SHEET NO. 21 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	67
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

@FILE%@



GIRDER GS-2 -SPAN 2 & 3

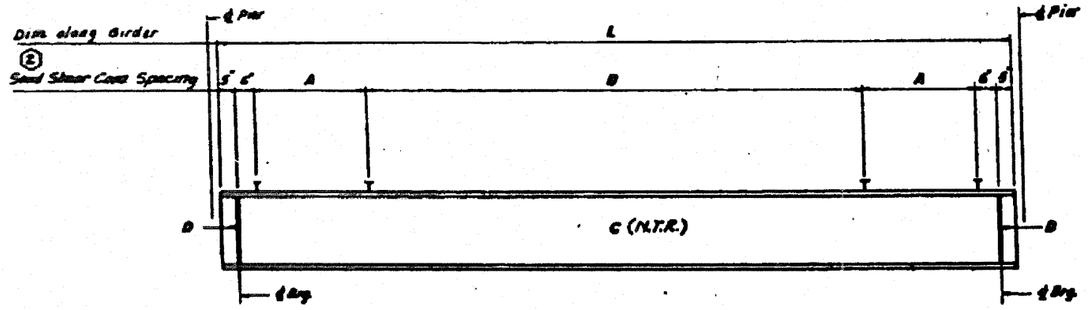
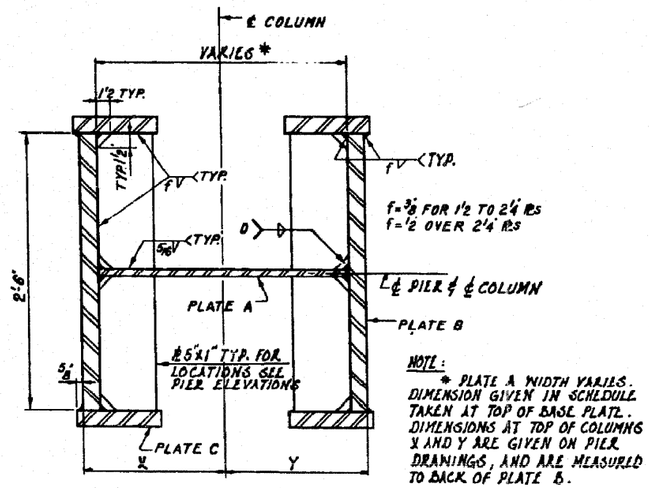


TABLE STUD SHEAR CONN. SPACING

SPAN	GIRDER	L	C	D	A	B
1	GS-1	81'-2 15/16"	W36x210	2 Rs - 5'-1"	12 @ 16"	60 @ 12"
4	GS-3	86'-4½"	W36x280	2 Rs - 7'-5"	11 @ 16"	67 @ 12"
5	GS-4	78'-0 15/16"	W36x210	2 Rs - 6'-1"	12 @ 16"	49 @ 12"
5	GS-5	69'-8"	W36x210	2 Rs - 6'-1"	12 @ 16"	46 @ 12"

GIRDER GS-1, GS-3, GS-4 & GS-5 - SPAN 1, 4 & 5



NOTE:
* PLATE A WIDTH VARIES. DIMENSION GIVEN IN SCHEDULE TAKEN AT TOP OF BASE PLATE. DIMENSIONS AT TOP OF COLUMNS X AND Y ARE GIVEN ON PIER DRAWINGS, AND ARE MEASURED TO BACK OF PLATE B.

COLUMN SECTION
NO SCALE

COLUMN SCHEDULE

PIER	MEMBER OR DIMENSIONS	COLUMN a		COLUMN b		COLUMN c	
		DIMENSION	MATERIAL	DIMENSION	MATERIAL	DIMENSION	MATERIAL
7	PLATE A	27"x 7/8"		27"x 1"		27"x 7/8"	
	PLATE B	30"x 1"		30"x 1 1/4"		30"x 1"	
	PLATE C	9"x 1 3/4"		9"x 2"		9"x 1 3/4"	
	WELD D	5/16"		3/8"		5/16"	
8	PLATE A	27"x 7/8"		27"x 1"		27"x 7/8"	
	PLATE B	30"x 1 1/4"		30"x 1 5/8"		30"x 1 1/4"	
	PLATE C	9"x 1 3/4"		9"x 2 1/4"		9"x 1 3/4"	
	WELD D	5/16"		3/8"		5/16"	
11	PLATE A	27"x 7/8"		27"x 1"		27"x 7/8"	
	PLATE B	30"x 1"		30"x 1 1/4"		30"x 1"	
	PLATE C	9"x 1 3/4"		9"x 2"		9"x 1 3/4"	
	WELD D	5/16"		3/8"		5/16"	
12	PLATE A	33"x 1"		33"x 1"			
	PLATE B	30"x 2 1/4"	A441	30"x 2 1/4"	A441	—	—
	PLATE C	9"x 2 3/4"	A441	9"x 2 3/4"	A441		
	WELD D	3/8"		3/8"			
13	PLATE A	30"x 1"		33"x 1"		30"x 1"	
	PLATE B	30"x 1 3/4"		30"x 2 1/4"	A441	30"x 1 3/4"	
	PLATE C	9"x 2"		9"x 2 3/4"	A441	9"x 2"	
	WELD D	3/8"		3/8"		3/8"	
14	PLATE A	30"x 1"		33"x 1"		30"x 1"	
	PLATE B	30"x 1 3/4"		30"x 2 1/4"	A441	30"x 1 3/4"	
	PLATE C	9"x 2"		9"x 2 3/4"	A441	9"x 2"	
	WELD D	3/8"		3/8"		3/8"	
17	PLATE A	33"x 7/8"		33"x 7/8"			
	PLATE B	30"x 2"		30"x 2"		—	—
	PLATE C	9"x 2 3/4"		9"x 2 3/4"			
	WELD D	3/8"		3/8"			
19	PLATE A	33"x 7/8"		33"x 7/8"			
	PLATE B	30"x 2"		30"x 2"		—	—
	PLATE C	9"x 2 3/4"		9"x 2 3/4"			
	WELD D	3/8"		3/8"			

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER ELEVATIONS & COLUMN DETAILS – LOCATION 2
STRUCTURE NO. 016-1115

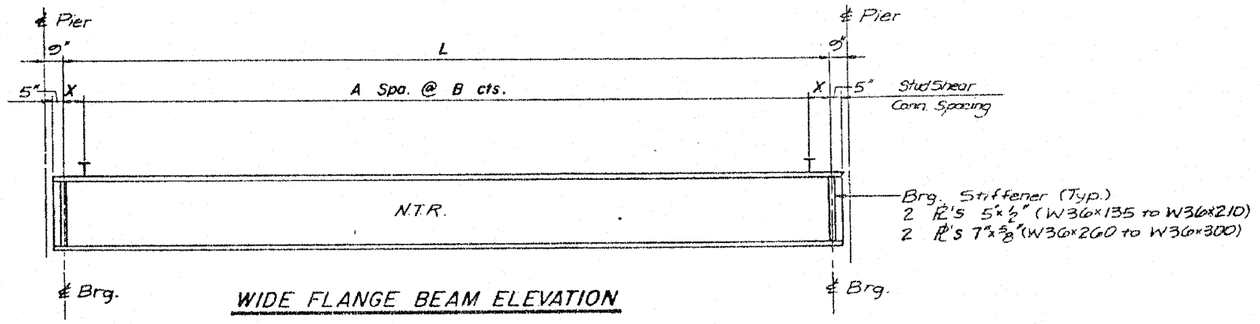
SCALE: NTS | SHEET NO. 22 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	68
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

WIDE FLANGE BEAMS GN-1 TO GN-19

SPAN	BEAM	BEAM SIZE	L (℄ BRG. TO ℄ BRG)	TOP OF BEAM ELEV. AT ℄ BEARINGS				STUDS PER ROW	STUD SHEAR CONNECTORS SPACING				
				PIER NO.	ELEV.	PIER NO.	ELEV.		A	B	C	D	X
1	GN-1	W36x135	36'-5 1/4"	3*	59.196	1	58.765	4	36	12"			6"
1	GN-2	W36x135	35'-0 3/8"	3*	59.117	1	58.643	4	34	12"			6"
1	GN-3	W36x135	33'-9"	3*	58.965	1	58.517	4	33	12"			6"
1	GN-4	W36x135	31'-4 1/4"	3*	58.809	1	58.392	4	31	12"			6"
2	GN-5	W36x260	73'-9 1/2"	1	58.766	2	57.814	4	73	12"			6"
2	GN-6	W36x260	73'-11 3/4"	1	58.664	2	57.659	4	73	12"			6"
2	GN-7	W36x260	73'-11 3/4"	1	58.518	2	57.512	4	73	12"			6"
2	GN-8	W36x260	73'-11 3/4"	1	58.371	2	57.366	4	73	12"			6"
3	GN-9	W36x300	86'-3 3/8"	2	57.791	3	56.532	4	86	12"			6"
3	GN-10	W36x300	85'-8 13/16"	2	57.637	3	56.483	4	85	12"			6"
3	GN-11	W36x300	85'-8 13/16"	2	57.491	3	56.337	4	85	12"			6"
3	GN-12	W36x300	85'-8 13/16"	2	57.345	3	56.190	4	85	12"			6"
4	GN-13	W36x280	86'-7"	3	56.479	4	55.174	4	74	14"			6"
4	GN-14	W36x280	86'-0 15/16"	3	56.324	4	55.097	4	73	14"			6"
4	GN-15	W36x280	85'-8 13/16"	3	56.170	4	55.019	4	73	14"			6"
5	GN-16	W36x210	74'-1 15/16"	4	55.504	5	54.465	4	63	14"			6"
5	GN-17	W36x210	74'-2 5/16"	4	55.412	5	54.345	4	63	14"			6"
5	GN-18	W36x210	74'-9 15/16"	4	55.105	5	53.969	4	64	14"			6"
5	GN-19	W36x210	74'-2 7/8"	4	54.985	5	53.922	4	63	14"			6"

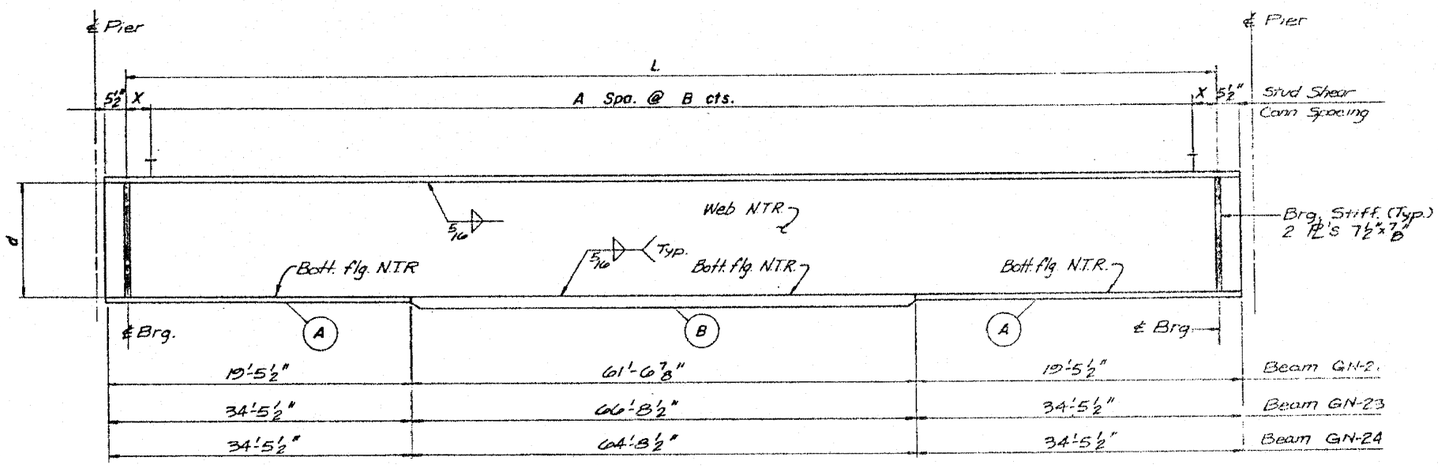
* Structure No. 016-1116



WIDE FLANGE BEAM ELEVATION

WELDED PLATE BEAMS, GN-21, 22, 23, 24 & 25

SPAN	BEAM	L (℄ BRG. TO ℄ BRG)	d	t	TOP FLG.	BOTTOM FLANGE		TOP OF WEB ELEV. ℄ BRG.				STUDS PER ROW	STUD SHEAR CONNECTORS SPACING				
						A	B	PIER NO.	ELEV.	PIER NO.	ELEV.		A	B	C	D	X
E-1	GN-21	99'-6 7/8"	48	7/16	7/8 x 16	7/8 x 16	1 1/4 x 16	E-1	54.963	E-2	60.018	4	66	18"			6"
E-1	GN-22	80'-2 4"	48	7/16	7/8 x 16	7/8 x 16	7/8 x 16	E-1	52.780	E-2	57.204	4	53	18"			6"
E-2	GN-23	134'-8 5/8"	78	1/2	7/8 x 16	7/8 x 16	1 3/4 x 16	E-2	60.192	22	65.240	4	67	24"			6"
E-2	GN-24	132'-11 4"	78	1/2	7/8 x 16	7/8 x 16	1 3/4 x 16	E-2	59.697	22	64.832	4	66	24"			6"
E-2	GN-25	129'-2 5/16"	78	9/16	7/8 x 16	7/8 x 16	7/8 x 16	E-2	57.267	22	63.263	4	64	24"			6"



WELDED PLATE BEAM ELEVATION

FILE NAME =	USER NAME = rgell	DESIGNED - AMR	REVISED -	
		DRAWN - AMR	REVISED -	
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER ELEVATIONS & SCHEDULES – LOCATION 2
STRUCTURE NO. 016-1115

SCALE: NTS | SHEET NO. 23 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	69
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

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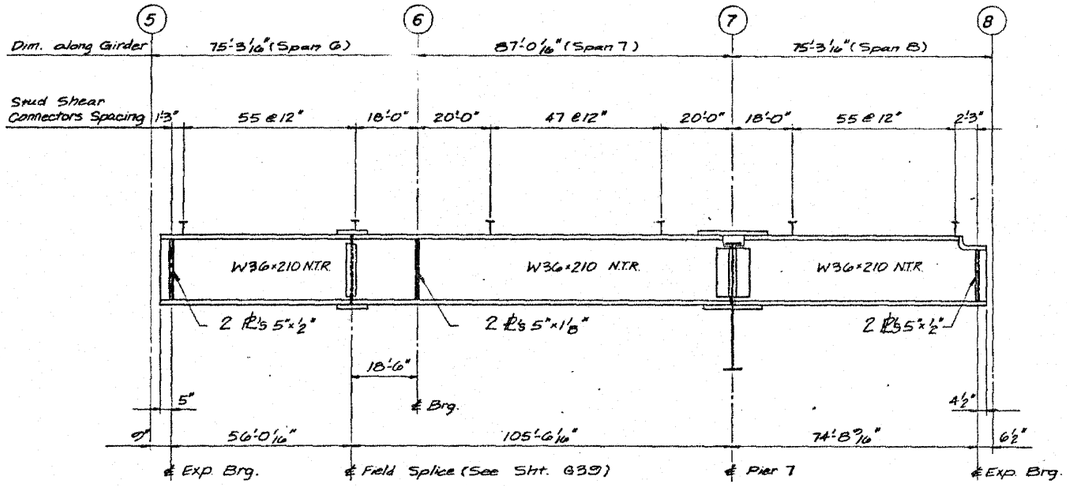
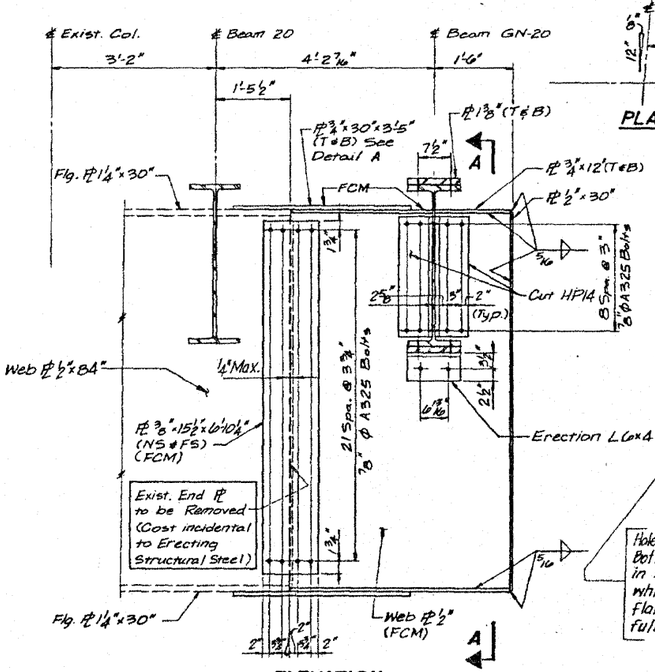
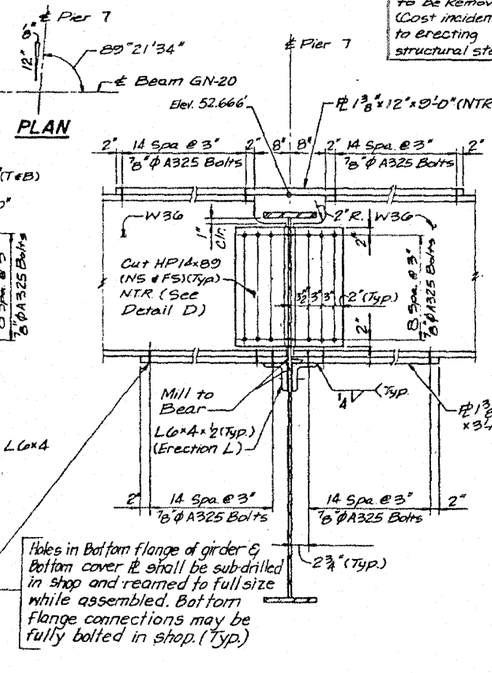


GIRDER GN-20 ELEVATION - SPANS 6 TO 8



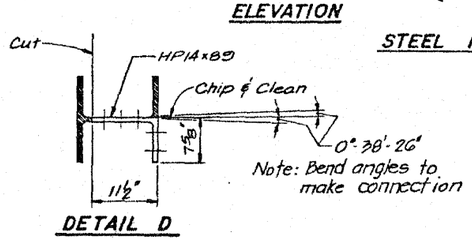
ELEVATION



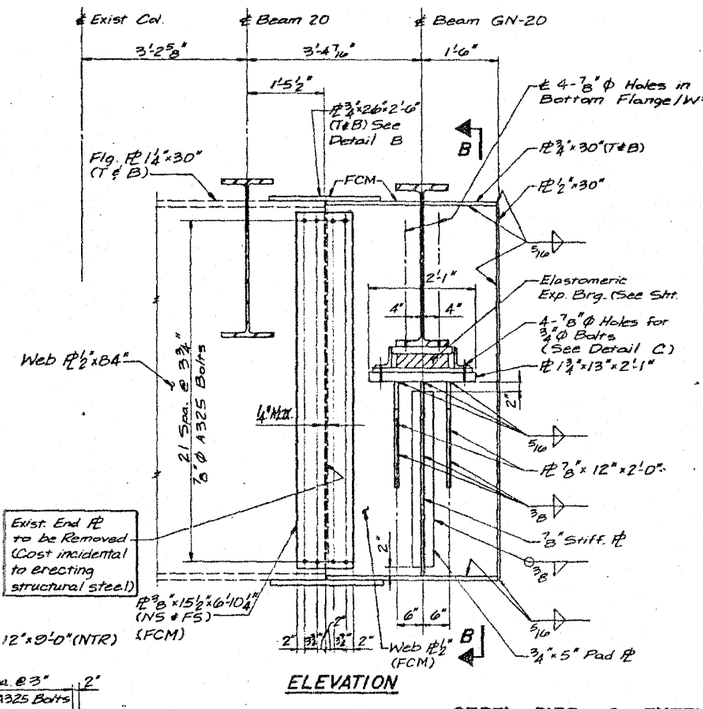
PLAN

SECTION A-A

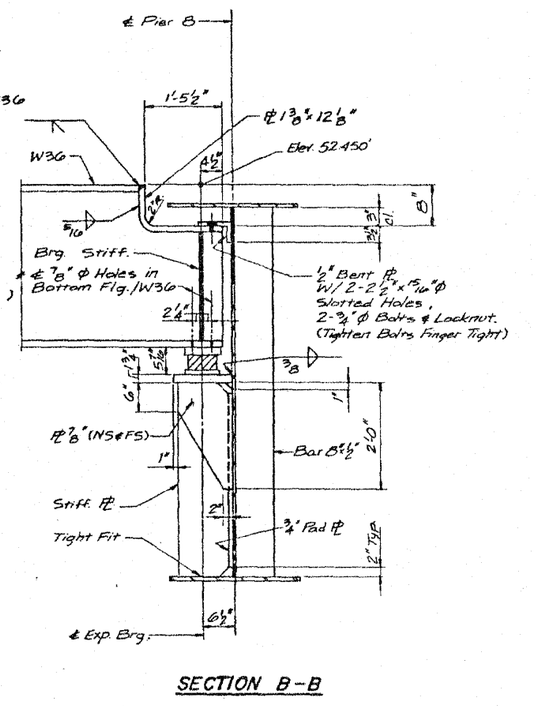
STEEL PIER - 7 EXTENSION DETAIL



DETAIL D

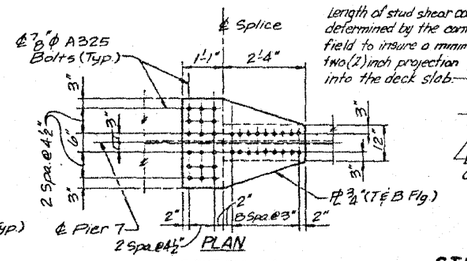


ELEVATION



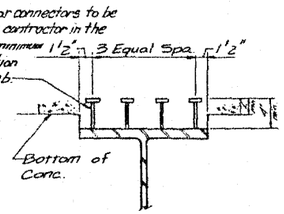
SECTION B-B

STEEL PIER - 8 EXTENSION DETAIL

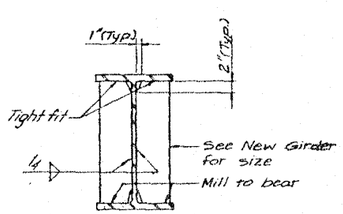


DETAIL A

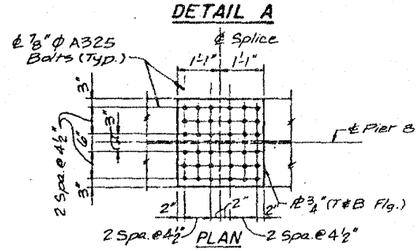
Length of stud shear connectors to be determined by the contractor in the field to insure a minimum 1'-2" two (2) inch projection into the deck slab.



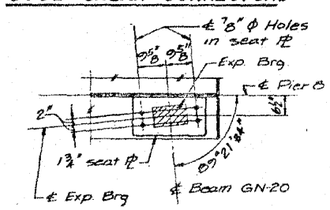
TYPICAL DETAIL OF STUD SHEAR CONNECTORS



BEARING STIFFENER DETAIL



DETAIL B



DETAIL C

Note:

1. Stud shear connector locations at flange splice plates to be adjusted by installer to miss splice bolts.
2. N.T.R. - Notch Toughness Requirement
3. All dimensions are along girder in horizontal plane.
4. Steel plates designated F.C.M. indicates Fracture Critical Material. Material & Fabrication shall conform to AASHTO Bridge Specification for Fracture Critical Members.

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GIRDER ELEVATIONS & STEEL PIER DETAILS - LOCATION 2 STRUCTURE NO. 016-1115			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160	70
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -								CONTRACT NO. 60N01	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 24 OF 37 SHEETS	STA. TO STA.			ILLINOIS	FED. AID PROJECT	

WF BEAM SCHEDULE

SPAN	BEAM NO.	LENGTH L	BEAM SIZE	BOTTOM COVER PLATE	SHEAR CONN. SPACING** A	B
	1	79'-6 1/2"	36WF230	15"x 7/8"x46'-3"	6	9@10-11@12-5@15-9@18
	2	77'-4 5/8"	36WF170	11"x 1 1/16"x 49'-9"	6	11@10-9@12-8@15-6@18
	3	73'-2 5/8"	36WF170	11"x 1"x45'-0"	6	19@10-7@15-3@18-3@24
	4	73'-0 5/8"	36WF150	11"x 15/16"x 48'-6"	6	16@9-12@12-6@18-1@24
	5	70'-10 5/8"	36WF150	11"x 1"x45'-9"	6	18@10-6@15-5@18-2@24
	6	68'-8 1/8"	36WF150	11"x 7/8"x41'-9"	6	19@10-4@15-4@18-3@24
	7	66'-6 1/8"	36WF135	10"x 7/8"x43'-3"	6	17@9-9@12-4@18-2@24
	8	65'-6 1/8"	36WF135	10"x 7/8"x42'-3"	6	17@9-10@12-3@18-2@24
	9	63'-5 5/8"	36WF135	11"x 7/8"x36'-3"	6	8@10-11@12-7@18-1@24
	10	61'-4"	36WF135	10"x 7/8"x32'-9"	6	20@10-6@15-2@18-1@24
	11	59'-2 5/8"	33WF118	10"x 3/4"x37'-9"	6	7@9-7@10-11@12-4@18
	12	57'-1 3/8"	30WF116	9 1/2"x 1"x 37'-6"	6	18@18-4@12-4@15-4@18
	13	55'-10 1/8"	30WF99	9 1/2"x 3/4"x38'-0"	6	15@18-7@12-4@15-3@18
	14	53'-10 1/8"	30WF99	9 1/2"x 3/4"x36'-6"	6	19@6-5@10-8@12-3@15
	15	51'-10 1/8"	30WF99	9 1/2"x 5/8"x33'-3"	6	16@8-7@12-3@15-2@18
	16	49'-10 1/2"	30WF99	9 1/2"x 1/2"x30'-3"	6	16@8-6@12-3@15-2@18
	17	47'-10 5/8"	27WF84	9"x 1/2"x34'-3"	6	15@6-9@8-6@10-4@12
	18	46'-10 7/8"	27WF84	9"x 1/2"x34'-3"	6	14@6-9@8-6@10-4@12
	19	44'-11 7/8"	27WF84	9"x 1/2"x31'-9"	6	15@6-8@8-6@10-3@12
	20	43'-4 1/2"	27WF84	9"x 5/16"x27'-9"	6	20@5-9@8-4@10-2@12
	21	41'-11 7/8"	27WF84	9"x 3/8"x24'-3"	6	21@5-7@8-4@10-2@12
	22	37'-10 1/2"	36WF135	—	6	6@12-4@15-9@18-1@24
2	1 THRU 21	SEE NEXT SHEET				
	22	73'-9"	36WF150	11"x 1"x47'-3"	6	10@10-8@12-6@18-5@24
	23	73'-9 5/8"	36WF194	11"x 5/8"x35'-6"	6	1@16-17@24-
3	1 THRU 21	SEE NEXT SHEET				
	22	85'-6"	36WF230	15"x 7/8"x49'-3"	1	7@15-10@18-9@24-
	23	85'-11 5/16"	36WF230	15"x 7/8"x47'-6"	1	7@15-10@18-9@24
	24	86'-3 1/8"	36WF260	15"x 7/8"x46'-3"	1	8@21-14@24
4	1	85'-7 7/8"	36WF260	15"x 1 1/4"x51'-0"	1	7@16-10@18-9@24
	1a	85'-6 3/8"	36WF194	11"x 1 1/2"x54'-6"	1	11@10-12@12-7@18-5@24
	2	85'-6 7/8"	36WF194	11"x 1 1/2"x54'-6"	1	11@10-12@12-7@18-5@24
	3	85'-6"	36WF230	15"x 7/8"x46'-0"	1	5@15-9@18-11@24
	4 THRU 21	SEE NEXT SHEET				
	22	85'-6"	36WF230	15"x 7/8"x44'-0"	1	5@15-9@18-11@24
	23	85'-6 3/8"	36WF230	15"x 1"x53'-3"	1	6@14-9@16-5@21-7@24
	24	85'-9 7/16"	36WF230	15"x 1"x53'-3"	1	6@14-9@16-5@21-7@24
	25	86'-4 5/8"	36WF230	15"x 1"x53'-3"	1	6@14-9@16-5@21-7@24
	26	87'-2 7/8"	36WF280	15"x 1 1/4"x50'-3"	1	12@15-3@18-4@21-8@24
5	1a	64'-11 7/8"	36WF150	11"x 1 1/4"x46'-9"	6	18@9-9@12-6@18-1@24
	2	71'-0 3/16"	36WF150	11"x 1 1/4"x46'-9"	6	18@9-9@12-5@18-2@24
	2a	72'-2 1/16"	36WF170	11"x 1 1/2"x49'-3"	6	17@10-6@15-6@18-2@24
	3	73'-5 3/16"	36WF170	11"x 1"x47'-3"	6	18@10-3@15-7@18-3@24
	4 THRU 21	SEE NEXT SHEET				
	22	73'-9"	36WF170	11"x 7/8"x43'-0"	6	10@10-10@12-6@18-4@24
	23	73'-9"	36WF260	15"x 7/8"x41'-6"	6	10@15-6@18-7@22
	27	74'-4 3/8"	36WF170	11"x 1 1/8"x47'-6"	6	19@9-7@12-7@18-2@24
	28	75'-1 7/16"	36WF194	11"x 1 1/2"x48'-3"	6	14@10-11@12-5@18-3@24
9 & 10	1 & 20	74'-0 3/8"	36WF194	11"x 1 1/2"x46'-0"	9*	11@9-8@12-12@15-2@24
	2705, 1670179	74'-0 3/8"	36WF170	11"x 1 1/2"x47'-6"	9*	15@9-10@12-8@18-1@24
	6, 15	74'-0 3/8"	36WF160	11"x 1"x46'-0"	9*	11@9-12@12-6@18-3@24
	7, 8, 9	74'-0 3/8"	36WF150	11"x 1"x47'-6"	9*	11@9-13@12-4@18-4@24
	10	74'-0 3/8"	36WF182	11"x 1 1/8"x46'-0"	9*	5@9-14@12-9@18-2@24
	11	74'-0 3/8"	36WF150	11"x 1"x46'-0"	9*	15@9-6@15-7@18-3@24
	12, 13, 14	74'-0 3/8"	36WF150	11"x 7/8"x46'-0"	9*	11@9-13@12-4@18-4@24
11	1 & 20	SEE TABLE THIS SHEET	36WF230	15"x 7/8"x49'-3"	6*	6@12-7@15-10@18-4@24
12	2, 3, 4, 17, 18, 19		36WF182	11"x 1 1/8"x52'-6"	6*	19@9-11@12-7@18-1@24
13	5		36WF194	11"x 1 1/2"x51'-0"	6*	11@9-8@10-13@12-6@18
17	6		36WF182	11"x 1"x46'-0"	6*	12@10-10@12-7@15-6@18
	7, 8, 9, 12, 13, 14		36WF170	11"x 1 1/8"x49'-3"	6*	11@9-12@12-9@18-2@24
	10		36WF230	15"x 7/8"x41'-3"	6*	9@15-7@18-8@24-
	11		36WF170	11"x 1"x44'-6"	6*	12@12-7@15-10@18-4@24
	15		36WF170	11"x 1"x49'-3"	6*	13@12-5@15-7@18-4@24
	16		36WF230	15"x 1"x48'-3"	6*	12@12-7@15-6@18-4@24
14 & 15	1 & 20		36WF230	15"x 1 1/16"x51'-6"	6*	9@12-7@15-8@18-4@24
	2, 3, 4, 17, 18, 19		36WF182	11"x 1 1/4"x50'-9"	6*	11@9-12@12-9@18-2@24
	5		36WF170	11"x 1"x47'-6"	6*	10@12-7@15-10@18-2@24
	6		36WF230	15"x 7/8"x44'-6"	6*	8@12-9@15-7@18-4@24
	7, 8, 9, 12, 13, 14		36WF170	11"x 1 1/16"x49'-3"	6*	11@9-12@12-9@18-2@24
	10		36WF230	15"x 7/8"x41'-3"	6*	9@15-7@18-8@24
	11		36WF170	11"x 1"x44'-6"	6*	12@12-7@15-6@18-4@24
	15		36WF182	11"x 1 1/16"x51'-0"	6*	9@10-10@12-9@15-6@18
	16		36WF182	11"x 1 1/16"x54'-0"	6*	16@10-7@12-8@15-5@18

* DIMENSION "A" 1'-9" AT FIXED STEEL PIER CONNECTION.
2'-3" AT EXPANSION STEEL PIER CONNECTION.

WF BEAM SCHEDULE

SPAN	BEAM NO.	LENGTH L	BEAM SIZE	BOTTOM COVER PLATE	SHEAR CONN. SPACING** A	B
16	1	78'-10 1/2"	36WF230	15"x 1"x49'-9"	6	8@10-13@12-9@15-4@21
	2	75'-11 5/8"	36WF170	11"x 1 1/16"x48'-9"	6	16@9-9@12-10@15-2@18
	3	72'-9 5/8"	36WF160	11"x 1 1/8"x47'-9"	6	14@9-6@12-10@15-4@18
	4	69'-8"	36WF150	11"x 1"x45'-0"	6	14@9-7@12-3@15-8@18
	5	66'-6 1/8"	36WF135	11"x 1"x45'-9"	6	13@9-10@12-6@15-3@18
	6	64'-11 7/8"	36WF135	11"x 7/8"x36'-9"	6	6@10-12@12-4@15-6@18
	7	62'-0 7/8"	33WF118	10"x 7/8"x40'-3"	6	12@9-6@12-8@15-3@18
	8	59'-11 3/8"	33WF118	10"x 7/8"x36'-3"	6	12@9-6@12-8@15-2@18
	9	56'-2 5/16"	33WF118	10"x 1/2"x31'-0"	6	8@8-10@10-7@12-4@18
	10	53'-3 1/4"	33WF118	10"x 5/16"x31'-9"	6	6@10-9@12-3@15-5@18
	11	51'-3 3/16"	27WF84	9"x 3/8"x34'-9"	6	14@8-6@10-6@12-3@15
	12	48'-11 1/16"	27WF84	9"x 3/8"x34'-3"	6	16@6-8@9-5@12-3@15
	13	45'-6 1/16"	27WF84	9"x 5/16"x30'-6"	6	16@6-9@9-4@12-2@15
	14	42'-7 1/16"	24WF76	8"x 3/4"x30'-3"	6	20@5-8@8-5@10-2@12
	15	39'-9 3/16"	24WF76	8"x 5/16"x27'-0"	6	18@4-10@6-6@8-4@10
	16	38'-2 5/16"	24WF76	8"x 5/16"x26'-9"	6	20@4-13@6-3@8-3@10
	17	35'-0 1/16"	24WF68	8"x 7/16"x23'-6"	6	11@4-10@6-8@8-2@12
	18	31'-11 5/16"	24WF68	8"x 3/8"x17'-3"	6	9@4-11@6-6@8-2@12
	19	28'-9 3/16"	24WF68	—	6	12@4-8@6-4@9-2@12
	20	25'-9 1/16"	36WF135	—	6	2@12-2@15-2@18-2@24

SPAN LENGTH "L"

BEAM NO.	LENGTH L SPAN 11	SPAN 12	SPAN 13	SPAN 14	SPAN 15	SPAN 17
1	79'-5 3/4"	79'-7 3/8"	79'-6 1/16"	79'-7 15/16"	79'-7 1/16"	79'-6 1/16"
2	79'-6"	79'-8 1/8"	79'-7 5/8"	79'-7 5/8"	79'-4 3/16"	79'-6 1/16"
3	79'-6"	79'-8 1/8"	79'-7 5/8"	79'-7 5/8"	79'-4 3/16"	79'-6 1/16"
4	79'-6"	79'-8 1/8"	79'-7 5/8"	79'-7 5/8"	79'-4 3/16"	79'-6 1/16"
5	79'-6"	79'-8 1/8"	79'-7 5/8"	79'-4 9/16"	79'-6 1/16"	79'-6 1/16"
6	79'-6"	79'-8 1/8"	79'-7 5/8"	79'-4 9/16"	79'-6 1/16"	79'-6 1/16"
7	79'-6"	79'-8 1/8"	79'-7 5/8"	79'-7 5/8"	79'-6 1/16"	79'-6 1/16"
8	79'-6"	79'-8 1/8"	79'-7 5/8"	79'-7 5/8"	79'-6 1/16"	79'-6 1/16"
9	79'-6"	79'-8 1/8"	79'-7 5/8"	79'-7 5/8"	79'-6 1/16"	79'-6 1/16"
10	79'-6"	79'-8 1/8"	79'-7 5/8"	79'-7 5/8"	79'-6 1/16"	79'-6 1/16"
11	79'-6"	79'-8 1/8"	79'-7 5/8"	79'-7 5/8"	79'-6 1/16"	79'-6 1/16"
12	79'-6"	79'-8 1/8"	79'-7 5/8"	79'-7 5/8"	79'-6 1/16"	79'-6 1/16"
13	79'-6"	79'-8 1/8"	79'-7 5/8"	79'-7 5/8"	79'-6 1/16"	79'-6 1/16"
14	79'-6"	79'-8 1/8"	79'-7 5/8"	79'-7 5/8"	79'-6 1/16"	79'-6 1/16"
15	79'-5 7/8"	79'-8 1/16"	79'-8 13/16"	79'-7 5/8"	79'-8"	79'-6 1/16"
16	79'-5 7/8"	80'-1 3/8"	79'-9 7/16"	79'-7 5/8"	79'-8"	79'-6 1/16"
17	79'-6"	79'-8 1/8"	79'-7 5/8"	79'-7 5/8"	79'-8"	79'-6 1/16"
18	79'-6"	79'-8 1/8"	79'-7 5/8"	79'-7 5/8"	79'-8"	79'-6 1/16"
19	79'-6"	79'-8 1/8"	79'-7 5/8"	79'-7 5/8"	79'-8"	79'-6 1/16"
20	79'-6"	79'-7 7/8"	79'-10 3/4"	79'-9 1/16"	80'-0 7/16"	79'-6 1/16"

WELDED PLATE BEAM SCHEDULE

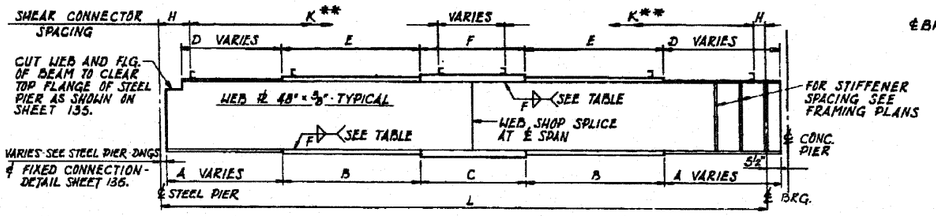
SPAN	BEAM	L	d	t	BOTTOM FLANGE PLATES A	B OR B, B1	C	TOP FLANGE PLATES D	E OR E, E1	F	SHEAR CONNECTOR SPACING H	K**
22	2	155'-4 1/2"	96"	7/16	16x1 5/8	16x 2 1/4x38'-0"	16 x 2 1/4 x 37'-0	16x 3/8	16 x 1 1/2 x 36'-0	16 x 1 3/4 x 40'-0	6	12@15-9@18-24@24
	3	153'-8 1/16"	96"	7/16	16x1 5/8	16x 2 1/4x38'-0"	16 x 2 1/4 x 37'-0	16x 3/8	16 x 1 1/2 x 36'-0	16 x 1 3/4 x 40'-0	6	14@15-8@18-23@24
	4	152'-0 7/8"	96"	7/16	16x 5/8	16x2 x 31'-0"	16 x 2 1/4 x 47'-0	16x 3/8	16 x 1 1/8 x 25'-0	16 x 1 3/8 x 41'-0	6	13@15-11@18-21@24-
	5	151-2 7/16	96"	7/16	16x1	16x 1 1/2 x 28'-0"	16 x 1 3/8 x 54'-0	16x 3/8	——	16 x 1 x 57'-0	6	3@15-11@18-27@24-
	6	149'-7 5/8"	96"	7/16	16x1	16x 1 3/8 x 33'-0	16 x 2 1/4 x 41'-0	16x 3/8	——	16 x 1 1/4 x 76'-0	6	10@15-10@18-23@24-
	7	147'-11 1/2"	96"	7/16	16x1	16x1 3/8 x 33'-0	16 x 2 1/4 x 41'-0	16x 3/8	——	16 x 1 1/4 x 76'-0	6	11@15-10@18-22@24-
22	8	146'-3 1/16"	96"	7/16	16x1	16x1 3/8 x 30'-0	16 x 2 1/4 x 46'-0	16x 3/8	16 x 1 1/8 x 24'-0	16 x 1 3/8 x 46'-0	6	4@15-10@18-26@24-
	9	145'-3 1/16"	96"	7/16	16x1	16x 1 3/8 x 29'-0	16 x 1 3/8 x 49'-0	16x 3/8	——	16 x 1 3/8 x 66'-0	6	13@18-26@24
	10	144'-1 3/16"	96"	7/16	16x1	16x 1 3/8 x 29'-0	16 x 1 3/8 x 46'-0	16x 3/8	——	16 x 1 x 46'-0	6	10@15-13@18-25@24
	11	142'-6 7/16"	96"	7/16	16x1	16x 1 1/2 x 29'-0	16 x 1 3/8 x 46'-0	16x 3/8	——	16 x 1 x 46'-0	6	2@15-13@18-24@24
	12	141'-0 7/16"	96"	7/16	16x 3/8	16x1 1/8 x 28'-0"	16 x 1 3/8 x 44'-0	——	——	16 x 3/4	6	10@15-11@18-20@24
	13	140'-3 1/16"	96"	7/16	16x 3/8	16x1 1/2 x 25'-6"	16 x 1 3/8 x 44'-0	16x 3/8	——	16 x 3/4 x 40'-0	6	10@15-10@18-19@24
	14	138'-5 7/16"	96"	7/16	16x 3/8	16x1 1/2 x 20'-0	16 x 2 x 54'-0	16x 3/8	——	16 x 1 1/4 x 58'-0	6	15@12-10@18-19@24
	15	137'-1 1/8"	96"	7/16	16x 3/8	16x1 1/2 x 20'-0	16 x 2 x 54'-0	16x 3/8	——	16 x 1 1/4 x 58'-0	6	14@12-10@18-19@24
	16	135'-3 3/16"	96"	7/16	16x1	16x1 3/8 x 25'-0	16 x 2 1/4 x 43'-0	16x 3/8	——	16 x 1 1/8 x 63'-6	6	13@15-8@18-19@24

WELDED PLATE BEAM SCHEDULE

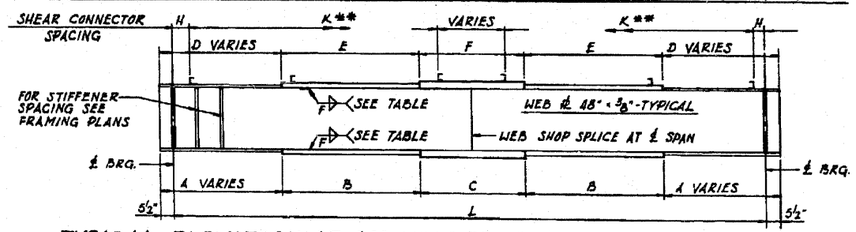
SPAN	BEAM	L	d	t	BOTTOM FLANGE PLATES A	B OR B, B1	C	TOP FLANGE PLATES D	E OR E, E1	F	SHEAR CONNECTOR SPACING H	K**
18	1	91'-0 1/16"	48"	3/8"	16x 1/2	16x 2 1/2 x 21'-0	16 x 2 1/2 x 20'-6	16x 1	——	16 x 1 1/2 x 52'-0	9*	13@9-19@12-6@18-3@24
	2, 3, 14, 15	91'-0 1/16"	48"	3/8"	16x 1/2	16x 2 1/2 x 14'-0	16 x 2 1/4 x 31'-0	16x 3/4	——	16 x 1 1/2 x 55'-0	9*	21@9-15@12-6@18-2@24
	4	91'-0 1/16"	48"	3/8"	16x 1	——	16 x 1 3/8 x 58'-6	16x 3/4	——	16 x 3/8 x 20'-6	9*	13@9-15@12-6@18-5@24
	5	91'-0 1/16"	48"	3/8"	16x 1	16x 1 3/8 x 14'-0	16 x 1 3/8 x 34'-0	16x 3/4	——	16 x 3/8 x 26'-0	9*	13@9-19@12-6@18-3@24
	6, 7, 10, 11	91'-0 1/16"	48"	3/8"	16x 1	——	16 x 1 3/8 x 63'-0	16x 3/4	——	16 x 1 3/8 x 63'-6	9*	13@9-17@12-6@18-4@24
	8	91'-0 1/16"	48"	3/8"	16x 1 1/4	16x 2 x 21'-0	16 x 2 1/4 x 21'-0	16x 3/4	——	16 x 1 3/8 x 49'-6	9*	18@9-21@12-8@18-5@24
	9	91'-0 1/16"	48"	3/8"	16x 1	16x 1 3/8 x 15'-0	16 x 1 3/8 x 33'-0	16x 3/4	——	16 x 1 x 33'-6	9*	9@9-13@12-8@18-6@24
	12	91'-0 1/16"	48"	3/8"	16x 1	——	16 x 1 3/8 x 57'-0	——	——	16 x 3/8	9*	13@9-12@12-8@18-5@24
	13	91'-0 1/16"	48"	3/8"	16x 1	16x 1 3/8 x 14'-0	16 x 2 x 35'-0	16x 3/4	——	16 x 1 x 33'-6	9*	19@9-13@12-11@18-3@24
	16	91'-1 1/2"	48"	3/8"	16x 1	16x 2 1/2 x 19'-6	16 x 2 1/2 x 24'-0	16x 1	——	16 x 1 1/2 x 45'-0	9*	13@9-19@12-6@18-3@24
20	1	117'-0"	48"	3/8	16x1 3/8	16x3 1/2 x 17'-6	18x 4 x 56'-0	16x1 3/8	18x 2 3/4 x 25'-6	18 x 3 x 31'-0	9*	13@10-13@12-10@18-9@24
	2	112'-10 3/16"	48	3/8	16x1 1/2	18x 2 1/2 x 23'-0	18 x 3 x 23'-0	16x1	18x 1 1/2 x 15'-0	18 x 1 3/4 x 43'-0	9*	17@9-19@12-6@18-7@24
	3	102'-7 1/2"	48	3/8	16x1 3/8	18x 2 3/4 x 25'-0	18x 2 3/4 x 30'-0	16x1 1/8	——	18 x 1 3/8 x 61'-0	9*	18@9-15@12-8@18-6@24
	4	102'-7 1/2"	48	3/8	16x1 3/8	18x 1 3/8 x 14'-0	18 x 2 x 38'-0	16x 3/4	——	18 x 1 1/8 x 61'-0	9*	14@10-11@12-8@18-8@24
	5	102'-9 3/16"	48	3/8	16x1 1/2	16x 2 1/2 x 27'-0	16 x 2 x 27'-0	16x 3/4	——	16 x 1 1/4 x 53'-6	9*	13@9-17@12-9@18-4@24
	6	98'-10 7/16"	48	3/8	16x1 1/2	16x 2 x 14'-0	16 x 2 x 32'-0	16x 3/4	——	16 x 1 1/8 x 53'-6	9*	14@10-15@12-6@18-6@24
	7	96'-11 3/8"	48	3/8	16x1 1/2	16x 2 x 14'-0	16 x 2 1/2 x 21'-0	16x 3/4	——	16 x 1 1/8 x 46'-0	9*	13@10-15@12-8@18-4@24
	8	96'-11 7/16"	48	3/8	16x1 1/2	——	16 x 2 x 50'-6	16x 3/4	——	16 x 1 1/8 x 43'-0	9*	1@9-21@12-8@18-5@24
	9	88'-11 5/8"	48	3/8	16x1	——	16 x 1 1/2 x 57'-6	16x 3/4	——	16 x 7/8 x 27'-0	9*	7@10-14@12-10@18-4@24
	10	85'-1 3/16"	48	3/8	16x1	——	16 x 1 5/8 x 52'-0	——	——	16 x 3/4	9*	13@10-15@12-6@18-3@24
	11	81'-2 7/16"	48	3/8	16x1 1/2	——	16 x 1 1/2 x 53'-0	——	——	16 x 3/4	9*	12@10-16@12-6@18-2@24
	12	77'-3 5/16"	48	3/8	16x1	——	16 x 1 3/8 x 46'-0	——	——	16 x 3/4	9*	9@10-15@12-7@18-2@24
	13	75'-8 3/16"	48	3/8	16x1 1/2	——	16 x 2 x 47'-0	——	——	16 x 3/4	9*	19@8-16@12 —— 5@18
	14	71'-6"	48	3/8	16x1 1/2	——	16 x 1 3/8 x 40'-0	——	——	16 x 3/4	9*	14@9-14@12-5@18-1@24
	15	67'-3 5/8"	48	3/8	16x1 1/2	——	16 x 1 3/8 x 32'-0	——	——	16 x 3/4	9*	14@9-14@12-5@18- ——
	16	63'-2 5/8"	48	3/8	16x1 1/2	——	16 x 1 3/8 x 31'-6	——	——	16 x 3/4	9*	6@10-12@12-6@18-2@24
21	1	85'-7 3/8"	48	3/8	16x1 1/2	16x 2 1/2 x 14'-0	16 x 2 1/2 x 27'-0	16x 3/4	——	16x 1 3/8 x 56'-0	6	10@10-13@12-8@18-4@24
	2, 3	85'-7 3/8"	48	3/8	16x1 1/2	——	16 x 2 x 51'-0	16x 3/4	——	16x 1 x 33'-0	6	17@9-14@12-7@18-2@24
	4	85'-7 3/8"	48	3/8	16x1	——	16 x 1 3/8 x 53'-0	——	——	16 x 3/4	6	11@9-18@12-6@18-3@24
	5	85'-7 3/8"	48	3/8	16x1	——	16 x 1 1/2 x 50'-0	——	——	16 x 3/4	6	10@10-18@12-6@18-3@24
	6, 7	85'-7 3/8"	48	3/8	16x1	——	16 x 1 3/8 x 60'-0	16x 3/4	——	16 x 3/8 x 26'-0	6	11@9-18@12-6@18-3@24
	8	85'-7 3/8"	48	3/8	16x1	——	16 x 1 3/8 x 57'-0	16x 3/4	——	16 x 1 x 45'-0	6	10@10-13@12-8@18-4@24
	9	85'-10 5/8"	48	3/8	16x1	——	16 x 1 3/8 x 54'-0	——	——	16 x 3/4	6	10@10-13@12-8@18-4@24
	10, 11	85'-10 5/8"	48	3/8	16x1	——	16 x 1 5/8 x 57'-0	16x 3/4	——	16 x 3/4 x 19'-0	6	10@10-18@12-6@18-3@24
	12	85'-10 5/8"	48	3/8	16x1	——	16 x 1 1/2 x 50'-0	——	——	16 x 3/4	6	12@10-13@12-7@18-3@24
	13	85'-10 5/8"	48	3/8	16x1	——	16 x 1 5/8 x 54'-0	——	——	16 x 3/4	6	12@9-18@12-7@18-2@24
	14, 15	85'-10 5/8"	48	3/8	16x1	——	16 x 2 x 53'-0	16x 3/4	——	16 x 1 x 36'-6	6	18@8-15@12-7@18-2@24
	16	85'-10 5/8"	48	3/8	16x1	16x 2 x 14'-0	16 x 2 1/2 x 31'-0	16x 3/4	——	16 x 1 1/8 x 54'-0	6	9@10-17@12-6@18-4@24
22	1	157'-1"	96"	9/16	16x1 1/4	16x 2 x 16'-0 16x 3 x 25'-0	16 x 2 1/2 x 27'-6	16x1	16 x 2 x 35'-0	16 x 2 1/2 x 45'-0	6	12@15-9@18-24@24
E1	1	96'-11 1/4"	48	3/8	16x1 1/2	16x 2 3/4 x 22'-0	16 x 3 x 24'-6	16x1	16x 1 3/4 x 15'-0	16 x 1 3/4 x 32'-0	6	12@10-17@12-8@18-4@24
	2	92'-8 5/8"	48	3/8	16x1 1/2	16x 2 x 14'-0	16 x 2 1/2 x 36'-0	16x 1 3/8	——	16 x 1 1/4 x 50'-6	6	20@8-15@12-7@18-3@24
	3	88'-6"	48	3/8	16x1 1/2	16x 1 3/8 x 15'-0	16 x 2 1/2 x 30'-0	16x 1 3/8	——	16 x 1 1/8 x 42'-0	6	20@8-15@12-7@18-2@24
	4	84'-3 3/8"	48	3/8	16x1	——	16 x 1 1/2 x 53'-0	——	——	16 x 3/4	6	13@8-15@12-6@18-4@24
	5	82'-0 1/2"	48	3/8	16x1	——	16 x 1 1/2 x 54'-0	16x 3/8	——	16 x 1 x 34'-0	6	1@9-18@12-6@18-7@24
E2	1	135'-6	78	1/2	16x1 1/2	16x 2 1/2 x 17'-6 16x 3 x 21'-0	16 x 4 x 18'-0	16x1	16 x 2 x 21'-0 16x 2 1/2 x 14'-0	16 x 3 x 36'-0	6	12@15-9@18-19@24
	2	133'-1 1/8"	78	1/2	16x1	16x 1 3/8 x 25'-0	16 x 3 1/2 x 41'-0	16x 3/4	——	16 x 1 1/4 x 74'-6	6	1@9-13@12-9@18-19@24
	3	132'-11 7/8"	78	1/2	16x1	16x 1 3/8 x 22'-0	16x 1 3/8 x 42'-0	16x 3/4	——	16 x 1 1/4 x 57'-0	6	11@15-9@18-19-24
	4	132'-10 7/8"	78	1/2	16x1	16x 1 3/8 x 25'-0	16 x 2 1/4 x 36'-0	16x 1/4	——	16 x 1 1/2 x 57'-0	6	1@9-13@12-9@18-19@24
	***5	130'-6 3/8"	78	1/2	SEE SCHEMATIC PLAN SHT. 136		22 x 4 x 26'-0"	SEE SCHEMATIC PLAN SHT. 136		22 x 3 x 26'-0"	6	6@15-7@18-23@24
	5A	22'-0 1/16"	78	1/2	—		12 x 1 3/8	—	——	12 x 7/8	6	4@12-4@15-8@18-

FILE NAME =	USER NAME = rgoll	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GIRDER SCHEDULES – LOCATION 2 STRUCTURE NO. 016–1115
		DRAWN - AMR	REVISED -		
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -		SCALE: NTS | SHEET NO. 25 OF 37 SHEETS | STA. | TO STA.
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		

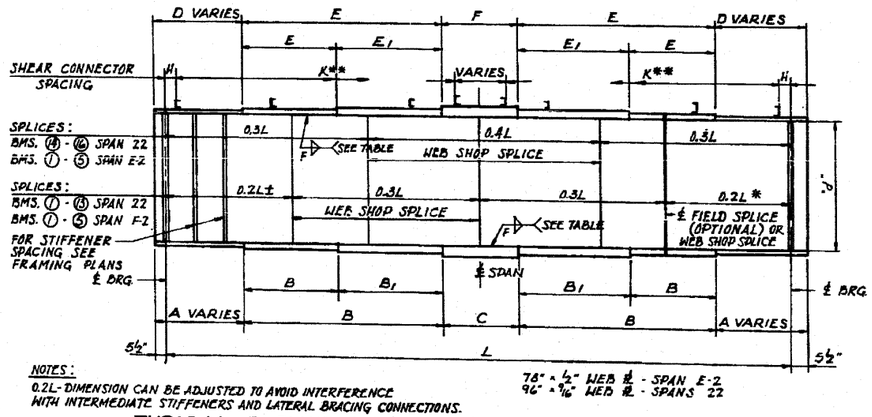
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	71
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			



TYPICAL ELEVATION OF 48" WELDED PLATE BEAMS - SPANS 18, 19, 20



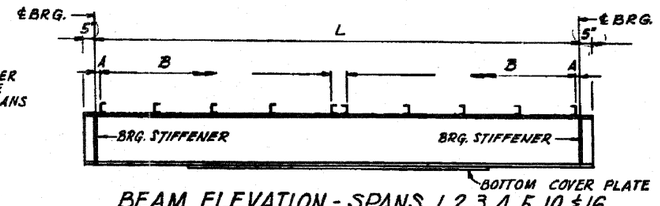
TYPICAL ELEVATION OF 48" WELDED PLATE BEAMS - SPANS 21, E-1



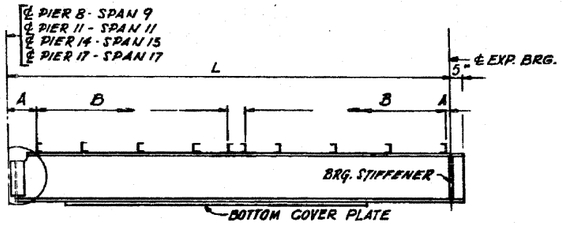
NOTES:
0.2L - DIMENSION CAN BE ADJUSTED TO AVOID INTERFERENCE WITH INTERMEDIATE STIFFENERS AND LATERAL BRACING CONNECTIONS.

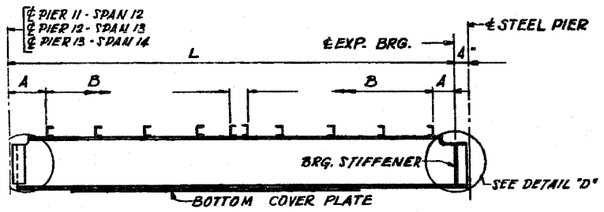
78" = ½" WEB ℄ - SPAN E-2
96" = 9/16" WEB ℄ - SPANS 22

TYPICAL ELEVATION OF 78" & 96" WELDED PLATE BEAMS

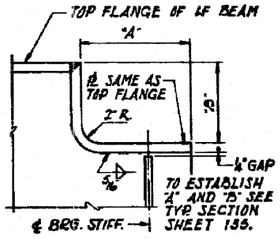


BEAM ELEVATION - SPANS 1, 2, 3, 4, 5, 10 & 16





BEAM ELEVATION - SPANS 12, 13 & 14



DETAIL "D"

TABLE FOR 2 SPAN CONTINUOUS BEAM

WF BEAM AND COVER PLATES					SHEAR CONNECTOR SPACING "F" *	SHEAR CONNECTOR SPACING "G" *
BEAM NO.	BM. SIZE	C	D	E		
1	36WF230	15"x 1 5/8" x 21'-0"	14"x 2" x 25'-0"	22'-6"	21@1'-0"-12@1'-6"	26@1'-0"-13@1'-6"
2 AND 3	36WF194	11"x 1 3/8" x 21'-0"	10"x 1½" x 25'-0"	22'-6"	23@1'-0"-5@2'-0"	24@1'-0"-7@2'-0"

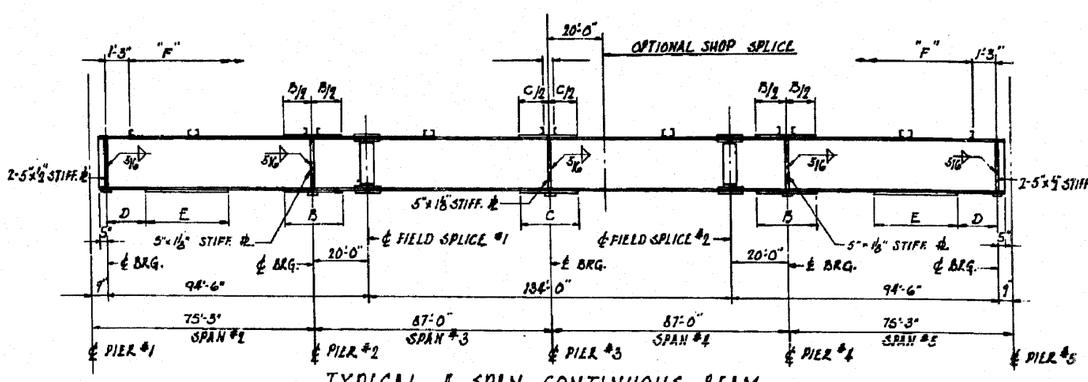
TABLE FOR 3 SPAN CONTINUOUS BEAM

WF BEAM AND COVER PLATES								SHEAR CONNECTOR SPACING "K" *
BEAM NO.	BM. SIZE	B	C	D	E	F	G	
2 TO 9, 12 TO 19	36WF150	10"x ½" x 26'-0"	18'-3"	11"x 1 1/8" - 28'-0"	11"x 1 1/8" x 12'-0"	12"x 1 1/8" x 25'-8"	5"x 1 3/8" x 9'-6"	21@1'-0"*-12@1'-6"-23@1'-0" 5@2'-0"-1@2'-6"
1, 10, 11, AND 20	36WF170	10"x 5/8" x 33'-0"	15'-6"	11"x 1¼"-23'-0"	11"x 1¼" x 14'-0"	12"x 1 3/8" x 29'-6"	5"x 1½" x 10'-0"	34@1'-0"-5@1'-6"

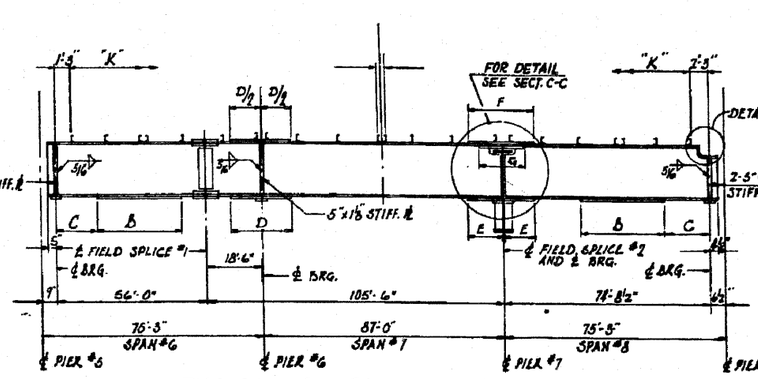
* 20 @ 1'-8" - SPAN 8

TABLE FOR 4 SPAN CONTINUOUS BEAM

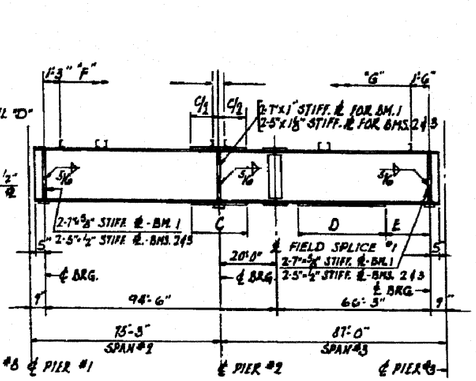
WF BEAM AND COVER PLATES						SHEAR CONNECTOR SPACING "F" *
BEAM NO.	BM. SIZE	B	C	D	E	
4 TO 11, 14 TO 21	36WF150	11"x 1 1/8" x 21'-0"	11"x 1" - 20'-0"	18'-3"	10"x ½" - 25'-0"	21@1'-0"-12@1'-6"-23@1'-0"-5@2'-0"
12 AND 13	36WF170	11"x 1½" x 21'-0"	11"x 1" - 20'-0"	13'-6"	10"x 5/8" - 32'-0"	1@2'-6"-34@1'-0"-11@1'-6"-32@1'-0"



TYPICAL 4 SPAN CONTINUOUS BEAM
BMS. ④ THRU ㉑



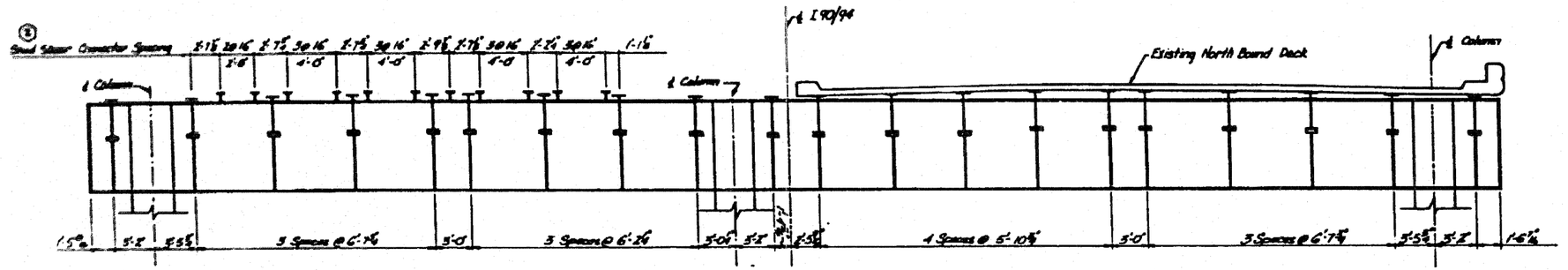
TYPICAL 3 SPAN CONTINUOUS BEAM
BMS. ① THRU ⑳



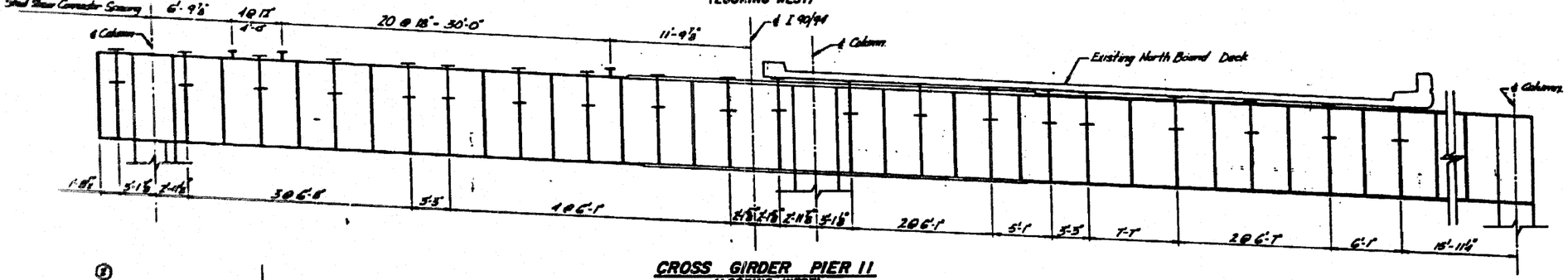
TYPICAL 2 SPAN CONTINUOUS BEAM
BMS. ① THRU ⑤

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GIRDER ELEVATIONS – LOCATION 2 STRUCTURE NO. 016-1115			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160	72
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -							CONTRACT NO. 60N01		
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 26 OF 37 SHEETS	STA. TO STA.			ILLINOIS	FED. AID PROJECT	

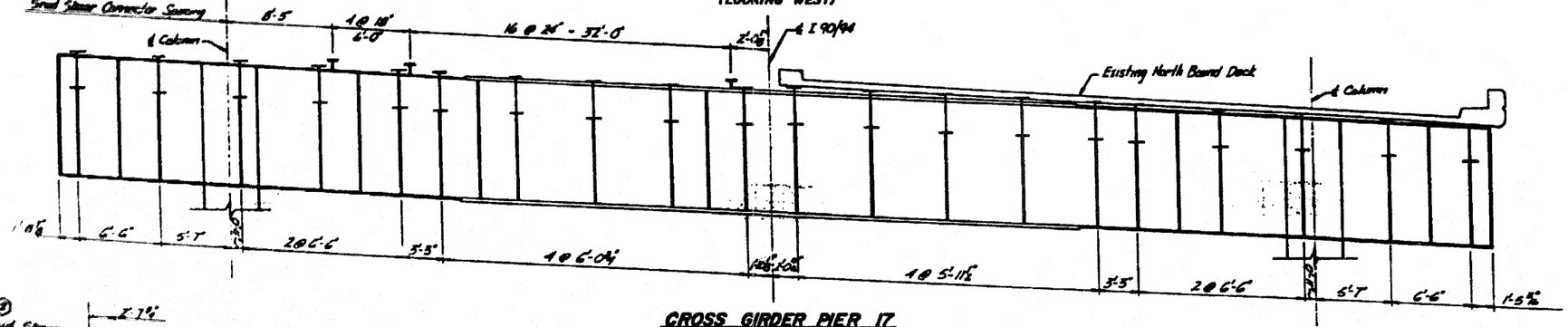
$FILE$



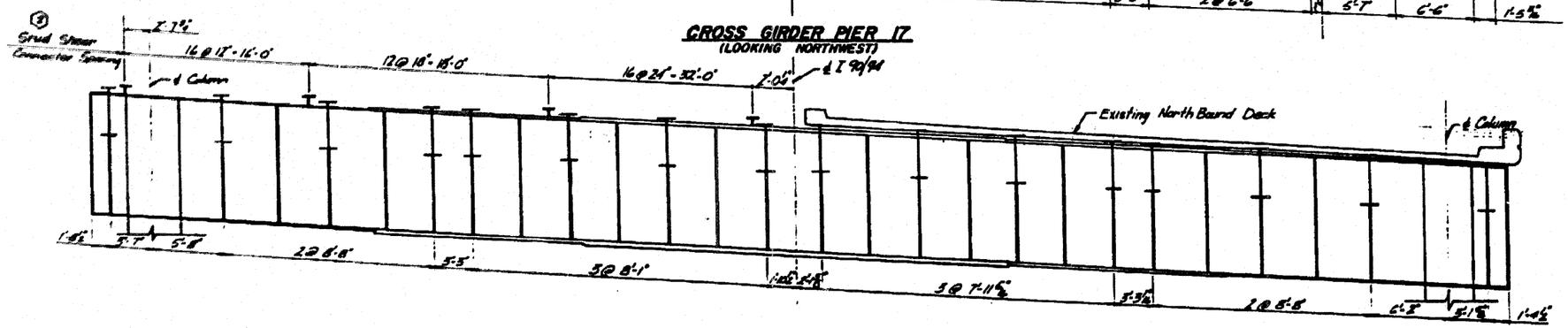
CROSS GIRDER PIER 7
(LOOKING WEST)



CROSS GIRDER PIER 11
(LOOKING WEST)



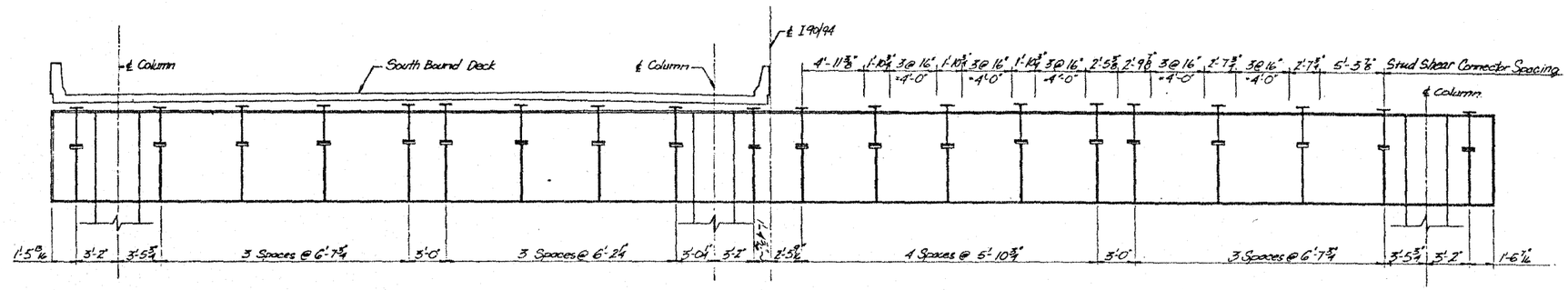
CROSS GIRDER PIER 17
(LOOKING NORTHWEST)



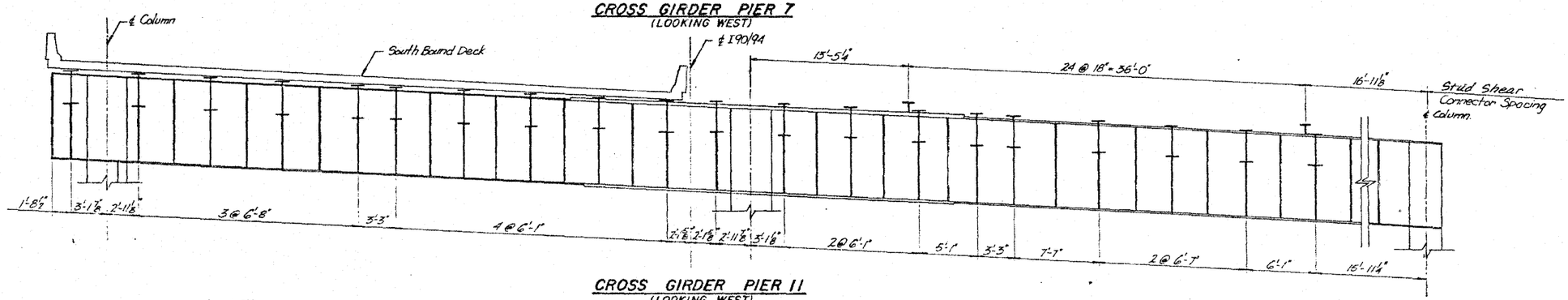
CROSS GIRDER PIER 19
(LOOKING NORTHWEST)

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STEEL PIER GIRDER ELEVATIONS – LOCATION 2 STRUCTURE NO. 016–1115		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - AMR	REVISED -				94	2010-127-BP	COOK	160 / 73
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -							CONTRACT NO. 60N01
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 27 OF 37 SHEETS STA. TO STA.			ILLINOIS	FED. AID PROJECT

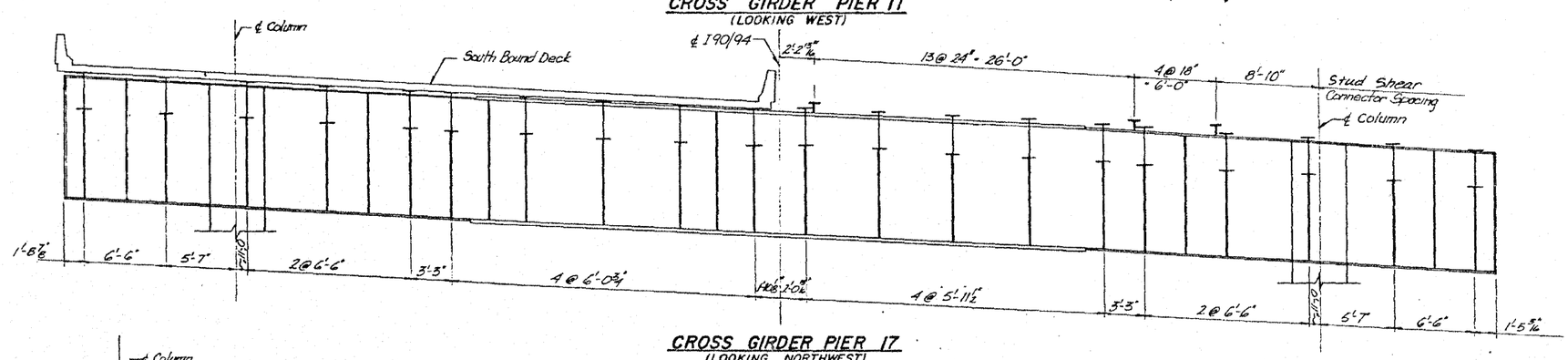
#FILEL#



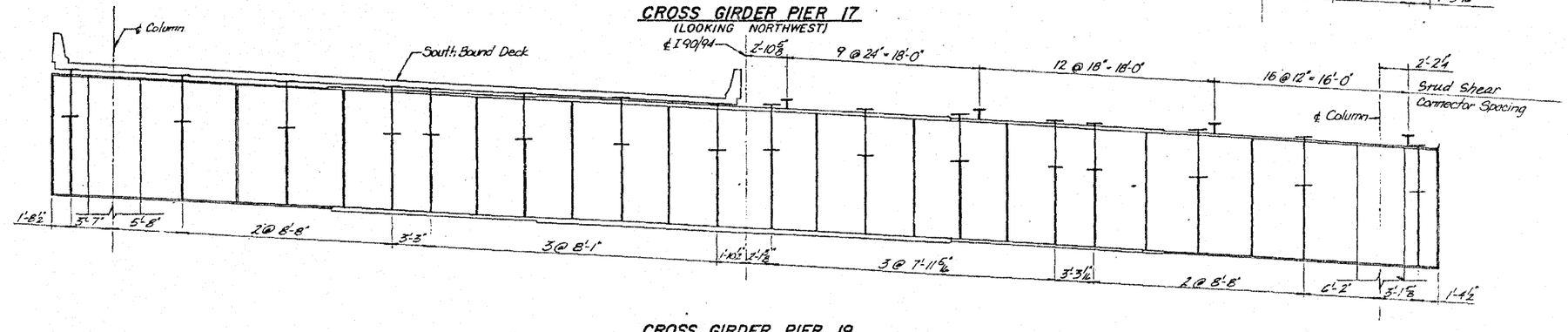
CROSS GIRDER PIER 7
(LOOKING WEST)



CROSS GIRDER PIER 11
(LOOKING WEST)



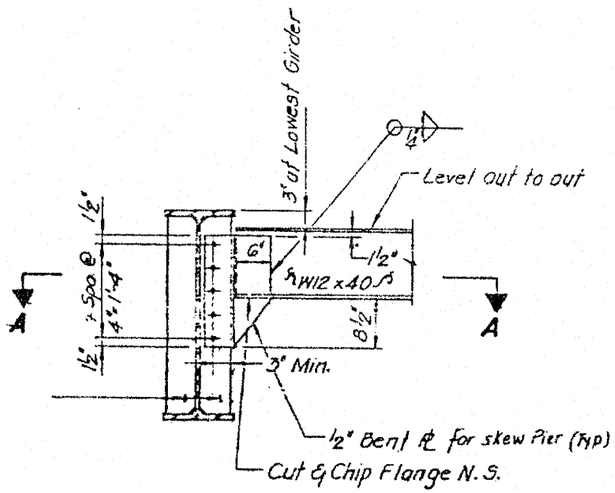
CROSS GIRDER PIER 17
(LOOKING NORTHWEST)



CROSS GIRDER PIER 19
(LOOKING NORTHWEST)

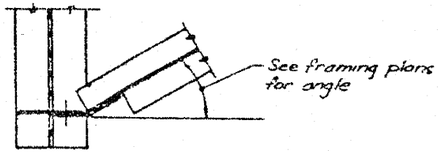
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**STEEL PIER GIRDER ELEVATIONS – LOCATION 2 STRUCTURE NO. 016–1115**	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -			94	2010-127-BP	COOK	160	74
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -						CONTRACT NO. 60N01	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS / SHEET NO. 28 OF 37 SHEETS / STA. / TO STA.			ILLINOIS	FED. AID PROJECT	

$FILE$

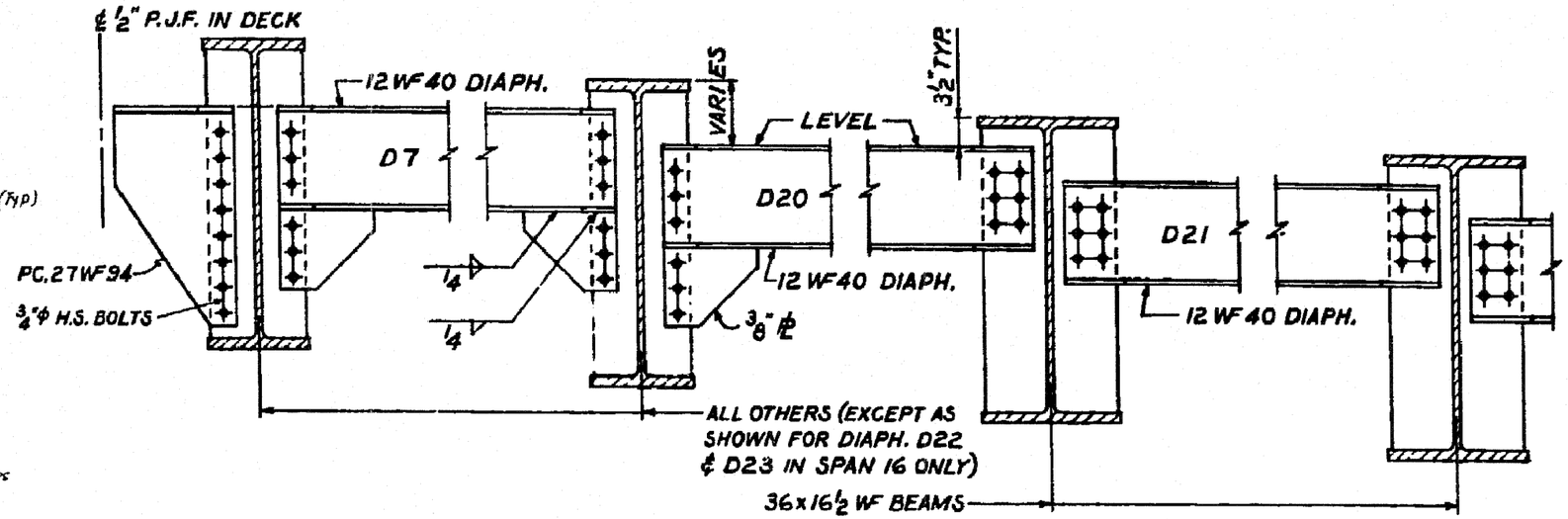


D-1

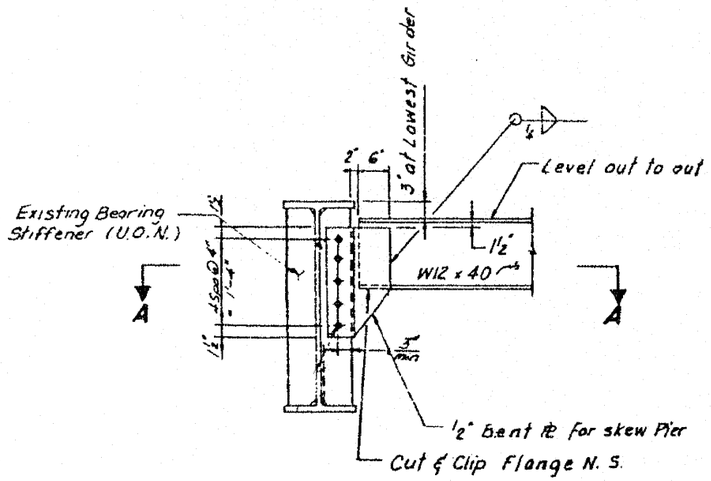
END DIAPHRAGM



SECTION A - A

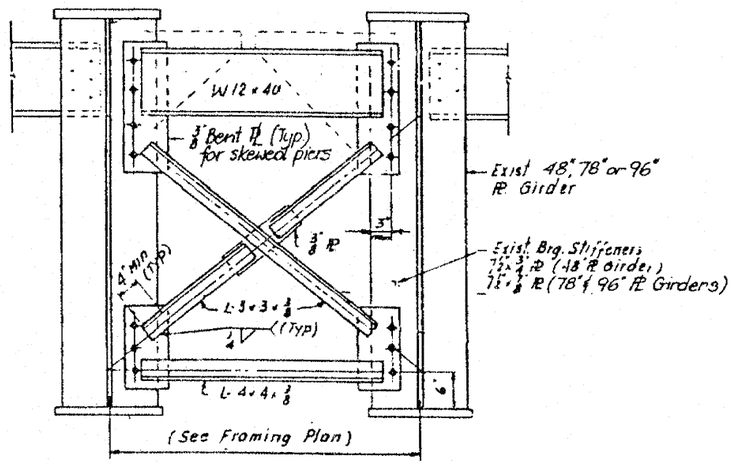


ELEVATION OF END DIAPHRAGMS D7, D20



D-4 & D-4A

END DIAPHRAGM



CF-1, CF-1A & CF-1B

TYPICAL END CROSS FRAME

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

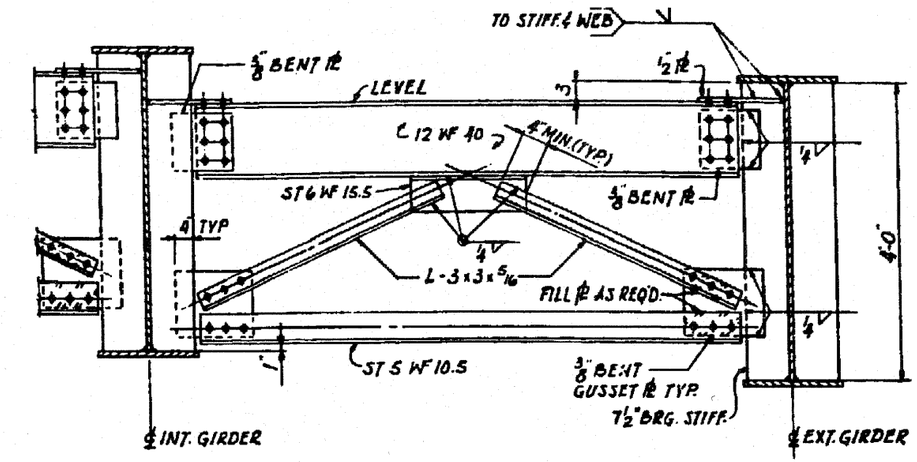
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM & CROSS FRAME DETAILS – LOCATION 2
STRUCTURE NO. 016-1115

SCALE: NTS | SHEET NO. 29 OF 37 SHEETS | STA. | TO STA.

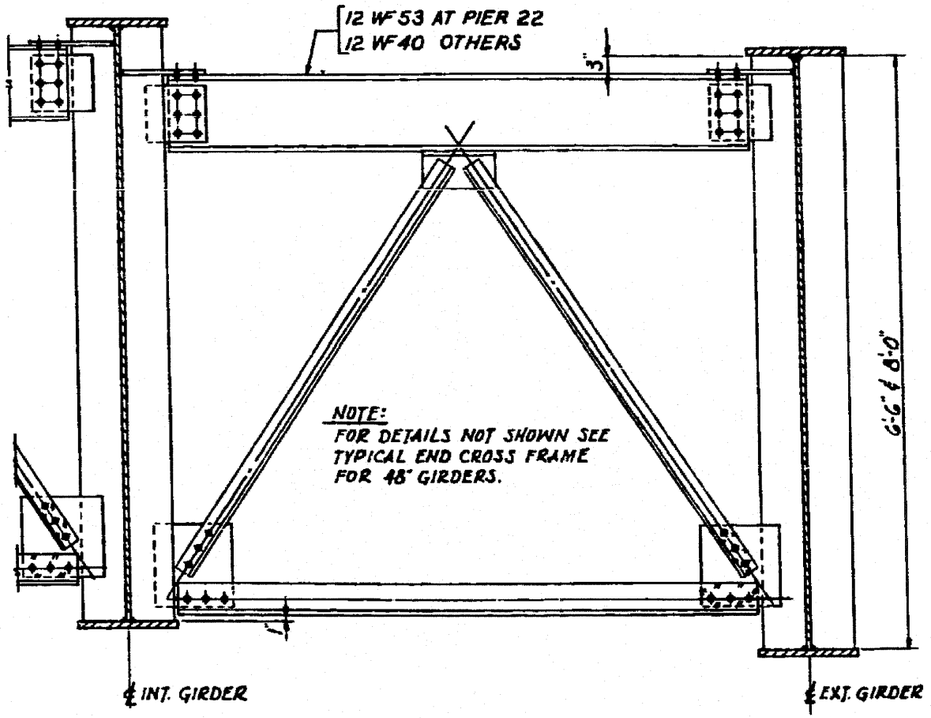
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	75
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

@FILEL@



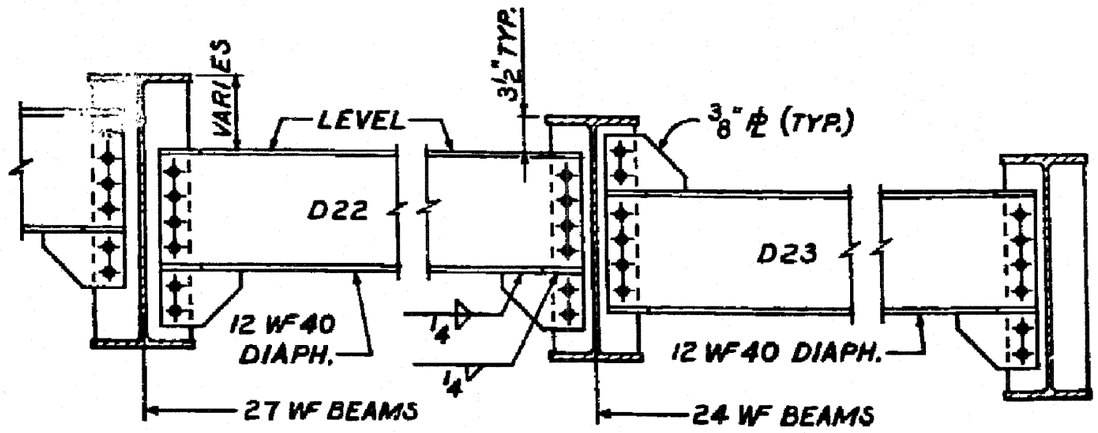
TYPICAL END CROSS FRAME FOR 48" GIRDERS

ELEV. FOR C1 SHOWN – ELEV. FOR C2 & C3 SIMILAR



TYPICAL END CROSS FRAME FOR 78" & 96" GIRDERS

ELEV. FOR C1 SHOWN – ELEV. FOR C2 & C3 SIMILAR



ELEVATION OF END DIAPHRAGMS D22 & D23 (SPAN 16 ONLY)

FILE NAME =	USER NAME = rgoll	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

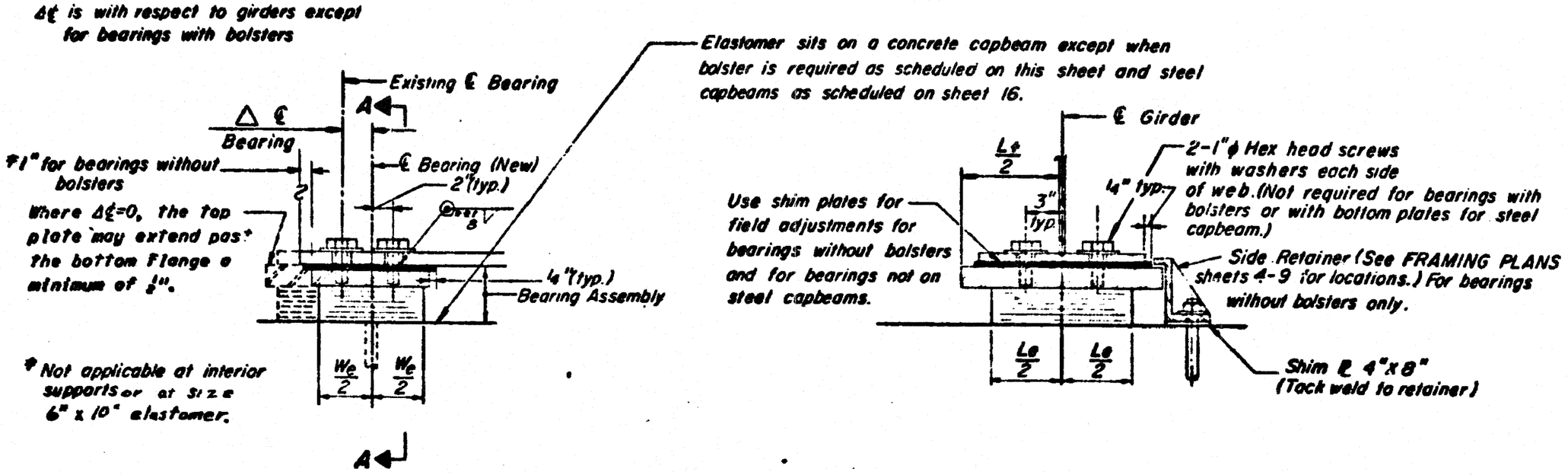
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM & CROSS FRAME DETAILS – LOCATION 2
STRUCTURE NO. 016-1115

SCALE: NTS | SHEET NO. 30 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	76
		CONTRACT NO. 60N01		
	ILLINOIS	FED. AID PROJECT		

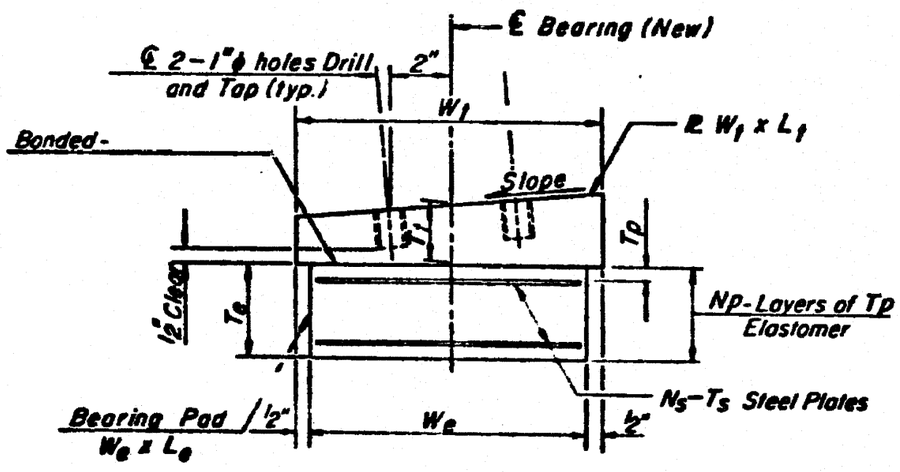
@FILE@



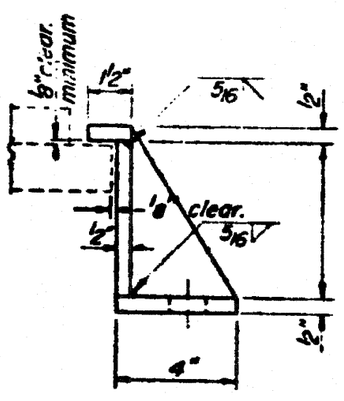
TYPICAL SECTION

SECTION A-A

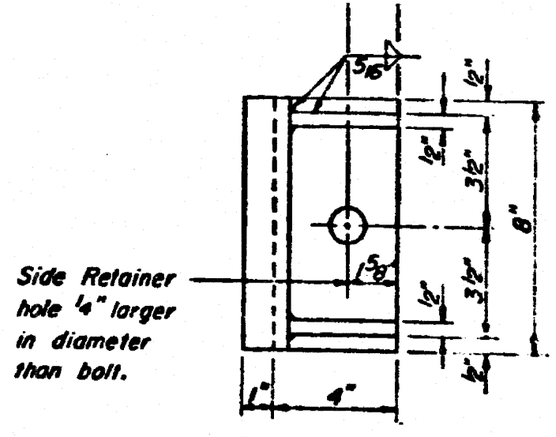
TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY



END VIEW



PLAN VIEW

SIDE RETAINER

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPE I ELASTOMERIC EXPANSION BEARING DETAILS – LOCATION 2 STRUCTURE NO. 016-1115	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -			94	2010-127-BP	COOK	160	77
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -						CONTRACT NO. 60N01	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS / SHEET NO. 31 OF 37 SHEETS / STA. / TO STA.		ILLINOIS	FED. AID PROJECT		

&FILE1&

LOCATION	GIRDER	W_e	L_e	SERIES	TOP PLATE T_1	TOP PLATE W_1	TOP PLATE L_1	TOP PLATE SLOPE	NO. REQ'D	Δ ℄ BEARING
Pier 3 (N) (from section 102)	1	10"	14"	a	$1\frac{7}{8}$"	11"	$19\frac{1}{2}$"	2.1%	1	$1\frac{3}{8}$"
	2,3,4	10"	14"	a	$1\frac{5}{8}$"	11"	16"	2.0%	3	$1\frac{1}{8}$"
	5,6,9,10,11	9"	12"	a	$2\frac{1}{8}$"	10"	15"	2.0%	5	1"
	7,8	7"	12"	c	$2\frac{1}{8}$"	8"	15"	1.8%	2	0"
	12,14-18	7"	12"	b	$2\frac{5}{16}$"	8"	14"	1.9%	6	0"
	13	7"	12"	b	$2\frac{3}{8}$"	8"	14"	2.0%	1	0"
	19	7"	12"	a	$2\frac{13}{16}$"	8"	14"	1.8%	1	0"
	20,21	7"	12"	a	$2\frac{13}{16}$"	8"	14"	1.8%	2	0"
	22	7"	12"	a	$3\frac{1}{16}$"	8"	15"	1.6%	1	0"
Pier 9 (S)	1,20	10"	14"	a	$1\frac{11}{16}$"	11"	16"	0.0%	2	$1\frac{1}{2}$"
	2,3,4	10"	14"	a	$1\frac{5}{8}$"	11"	16"	1.9%	3	$1\frac{1}{2}$"
	5	9"	12"	a	$2\frac{1}{8}$"	10"	$15\frac{1}{2}$"	1.7%	1	1"
	6-9	9"	12"	a	$2\frac{1}{8}$"	10"	15"	1.5%	4	1"
	10-15	9"	12"	a	$2\frac{1}{8}$"	10"	15"	1.2%	6	1"
	16	9"	12"	a	$2\frac{1}{8}$"	10"	15"	0.0%	1	1"
	17-19	10"	14"	a	$1\frac{3}{4}$"	11"	16"	0.0%	3	$1\frac{1}{2}$"
Pier 10 (N)	1	10"	14"	a	$1\frac{11}{16}$"	11"	$19\frac{1}{2}$"	1.6%	1	$1\frac{1}{2}$"
	2	10"	14"	a	$1\frac{11}{16}$"	11"	16"	1.6%	1	$1\frac{1}{2}$"
	3,4	10"	14"	a	$1\frac{11}{16}$"	11"	15"	1.4%	2	$1\frac{1}{2}$"
	5	10"	14"	a	$1\frac{11}{16}$"	11"	16"	1.3%	1	$1\frac{1}{2}$"
	6-9,11-15	10"	14"	a	$1\frac{11}{16}$"	11"	15"	0.0%	12	$1\frac{1}{8}$"
	17-19									
	10,16,20	10"	14"	a	$1\frac{11}{16}$"	11"	$19\frac{1}{2}$"	0.0%	3	$1\frac{1}{2}$"
Pier 12 (S)	1,20	10"	14"	c	$1\frac{3}{8}$"	11"	$19\frac{1}{2}$"	0.0%	2	$2\frac{1}{2}$"
	2-9	10"	14"	a	$1\frac{5}{8}$"	11"	16"	1.7%	8	$2\frac{1}{2}$"
	11-15,	10"	14"	a	$1\frac{3}{8}$"	11"	16"	1.8%	8	$2\frac{1}{2}$"
	17-19									
	20	10"	14"	a	$1\frac{5}{8}$"	11"	$19\frac{1}{2}$"	1.8%	1	$2\frac{1}{2}$"
	16	10"	14"	a	$1\frac{9}{16}$"	11"	$19\frac{1}{2}$"	1.6%	1	$2\frac{1}{2}$"

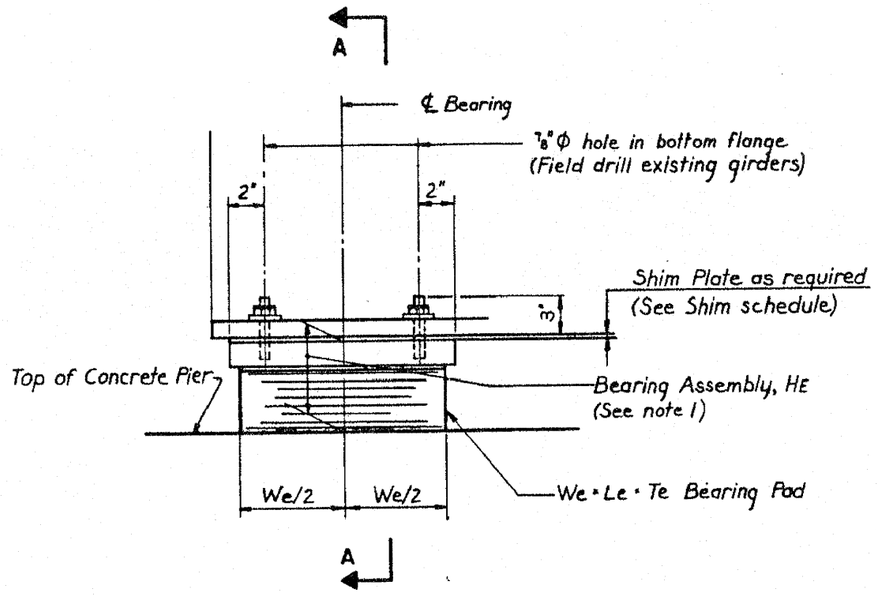
LOCATION	GIRDER	W_e	L_e	SERIES	TOP PLATE T_1	TOP PLATE W_1	TOP PLATE L_1	TOP PLATE SLOPE	NO. REQ'D	Δ ℄ BEARING
Pier 13 (S)	1,20	10"	14"	a	$1\frac{9}{16}$"	11"	$19\frac{1}{2}$"	0.0%	2	$2\frac{1}{2}$"
	2-4,11,17-19	10"	14"	a	$1\frac{9}{16}$"	11"	16"	1.7%	7	$2\frac{1}{2}$"
	10	10"	14"	a	$1\frac{9}{16}$"	11"	$19\frac{1}{2}$"	1.7%	1	$2\frac{1}{2}$"
	5,6	9"	12"	b	$1\frac{9}{16}$"	10"	$15\frac{1}{2}$"	1.7%	2	2"
	7-9, 12-15	9"	12"	b	$1\frac{9}{16}$"	10"	15"	1.7%	7	2"
	16	9"	12"	b	$1\frac{9}{16}$"	10"	$19\frac{1}{2}$"	1.7%	1	2"
Pier 14 (S)	1,20	10"	14"	a	$1\frac{9}{16}$"	11"	$19\frac{1}{2}$"	0.0%	2	$2\frac{1}{2}$"
	2-4,7-9, 17-19	10"	14"	a	$1\frac{5}{8}$"	11"	16"	1.8%	9	$2\frac{1}{2}$"
	15,16	9"	12"	b	$1\frac{3}{8}$"	10"	$15\frac{1}{2}$"	1.8%	2	2"
	10	10"	14"	a	$1\frac{5}{8}$"	11"	$19\frac{1}{2}$"	1.8%	1	$2\frac{1}{2}$"
	5,11,12-14	9"	12"	b	$1\frac{5}{8}$"	10"	15"	1.8%	5	2"
	6	9"	12"	b	$1\frac{5}{8}$"	10"	$19\frac{1}{2}$"	1.8%	1	2"
Pier 15 (S)	1,20	10"	14"	a	$1\frac{11}{16}$"	11"	$19\frac{1}{2}$"	0.0%	2	$1\frac{7}{8}$"
	2-5,7-9, 11-19	10"	14"	a	$1\frac{11}{16}$"	11"	15"	1.7%	15	$1\frac{1}{8}$"
	6,10	10"	14"	a	$1\frac{11}{16}$"	11"	$19\frac{1}{2}$"	1.7%	2	$1\frac{1}{2}$"
Pier 16 (N)	1,20	10"	14"	a	$1\frac{11}{16}$"	11"	$19\frac{1}{2}$"	0.0%	2	$1\frac{1}{2}$"
	2-9, 11-15, 17-19	10"	14"	a	$1\frac{11}{16}$"	11"	16"	1.8%	15	$2\frac{1}{2}$"
Pier 16 (N)	10,16	10"	14"	a	$1\frac{1}{2}$"	11"	$19\frac{1}{2}$"	1.8%	2	$1\frac{1}{2}$"
Pier 18 (S)	1,16	11"	16"	b	$1\frac{7}{8}$"	12"	19"	0.0%	2	$1\frac{1}{2}$"
	2 - 15	11"	16"	b	$1\frac{3}{8}$"	12"	19"	2.1%	14	$1\frac{1}{2}$"
Pier 18 (N)	1,16	11"	16"	b	$1\frac{11}{16}$"	12"	19"	0.0%	2	$1\frac{1}{2}$"
	2, 3,6-11, 14,15	11"	16"	b	$1\frac{1}{2}$"	12"	19"	0.0%	10	$1\frac{1}{2}$"
	4,5,12,13	10"	14"	b	$1\frac{1}{2}$"	11"	19"	0.0%	4	1"
Pier 20 (S)	1	12"	18"	d	$1\frac{5}{8}$"	13"	20"	1.9%	1	2"
	4,5	12"	18"	d	$1\frac{3}{8}$"	13"	20"	1.8%	2	1"
	6-11	12"	18"	c	$1\frac{3}{8}$"	13"	20"	1.8%	6	$1\frac{1}{2}$"
	12,13	9"	12"	b	$1\frac{7}{8}$"	10"	19"	1.8%	2	$1\frac{1}{2}$"
	14-16	10"	14"	a	$1\frac{9}{16}$"	11"	19"	1.9%	3	1"
Pier 22 (S)	1	14"	20"	a	$1\frac{11}{16}$"	$18\frac{1}{2}$"	24"	1.5%	1	$2\frac{1}{4}$"
	2-4, 6-8	14"	20"	a	$1\frac{11}{16}$"	$18\frac{1}{2}$"	24"	1.5%	6	$2\frac{1}{4}$"
	5	12"	18"	a	$1\frac{1}{2}$"	$18\frac{1}{2}$"	22"	0.0%	1	$2\frac{1}{4}$"

FILE NAME = | USER NAME = rgall | DESIGNED - AMR | REVISED -
| | DRAWN - AMR | REVISED -
PLOT SCALE = 1.0000 ' / IN. | CHECKED - JMH | REVISED -
PLOT DATE = 3/28/2011 | DATE - MARCH, 2011 | REVISED -

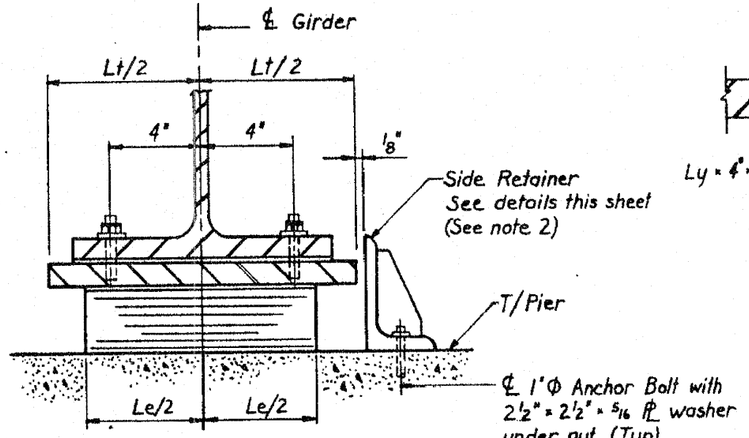
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPE I ELASTOMERIC EXPANSION BEARING SCHEDULE – LOCATION 2
STRUCTURE NO. 016-1115
SCALE: NTS | SHEET NO. 32 OF 37 SHEETS | STA. | TO STA.

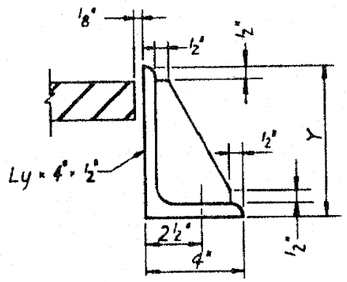
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	78
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			



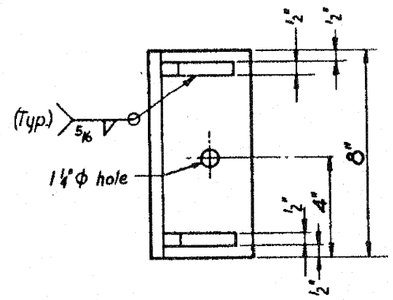
TYPICAL ELEVATION



SECTION A-A



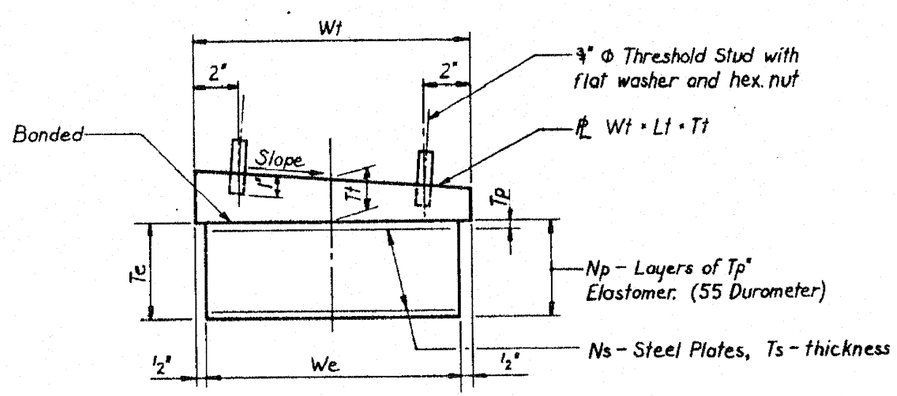
ELEVATION



PLAN

SIDE RETAINER

TYPE I ELASTOMERIC EXPANSION BEARING



BEARING ASSEMBLY

TABLE OF DIMENSIONS - TYPE I ELASTOMERIC EXPANSION BEARINGS

We	Le	Series	Tp	Np	Ts	Ns	Te
7	12	a	3/8	3	3/32	2	1 5/16
9	12	c	3/8	8	3/32	7	3 5/8

Tp - denotes thickness of each elastomeric layer
Np - denotes number of elastomeric layers
Ts - denotes thickness of each steel plate
Ns - denotes number of steel plates

Notes:

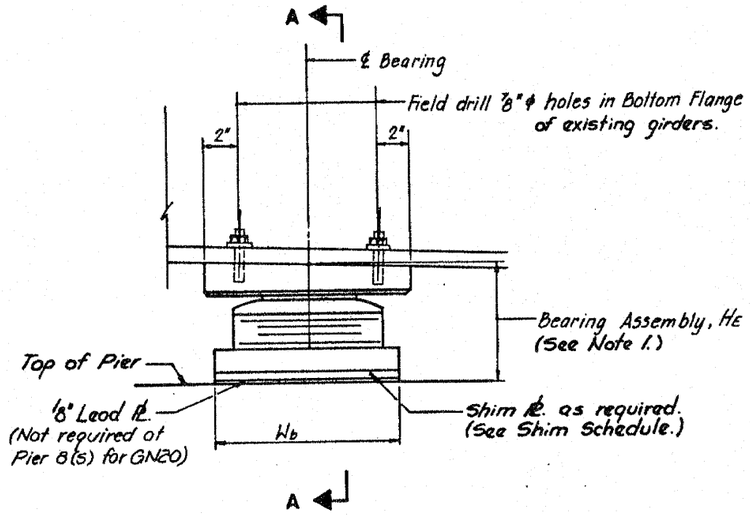
1. *Height of bearing assembly, HE, includes top plate and elastomeric pad and does not include shim plate.*
2. *Provide side retainer at inside face of exterior girder.*

TYPE I ELASTOMERIC EXPANSION BEARING SCHEDULE

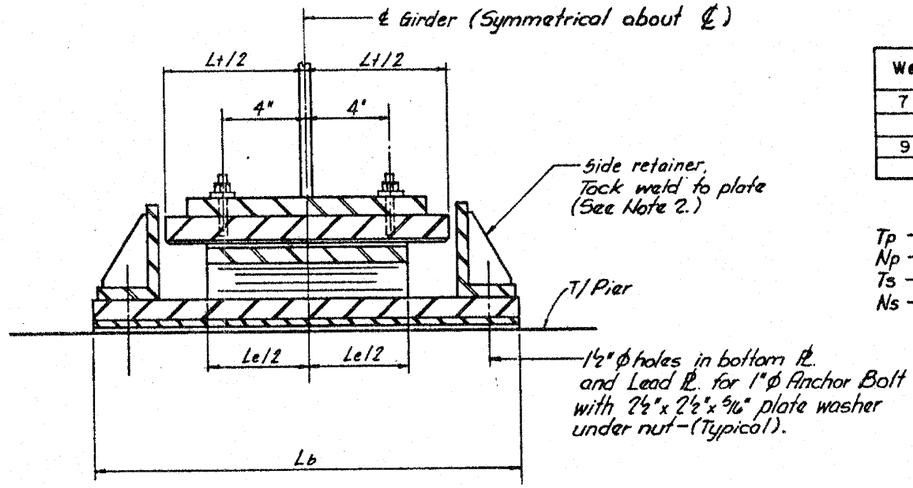
STRUCTURE NO.	PIER LOCATION	GIRDER NO.	We	Le	SERIES	TOP PLATE Tt	TOP PLATE Wt	TOP PLATE Lt	TOP PLATE SLOPE %	Y	He	NO. REQD
016-1115	3(N)	GN1—GN3	7	12	a	1 3/4	8	14	1.6	4	3 1/16	3
		GN4	7	12	a	1 3/4	8	14	1.6	4	3 1/16	1
	5(N)	16—20	9	12	c	2	10	14	1.0	6	5 5/8	5
		GN20	9	12	c	2	10	14	1.0	6	5 5/8	1

FILE NAME =	USER NAME = rgoll	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPE I ELASTOMERIC EXPANSION BEARING DETAILS – LOCATION 2 STRUCTURE NO. 016-1115			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160 / 79
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -								CONTRACT NO. 60N01
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 33 OF 37 SHEETS	STA. TO STA.		ILLINOIS FED. AID PROJECT		

©FILE1.8



TYPICAL ELEVATION



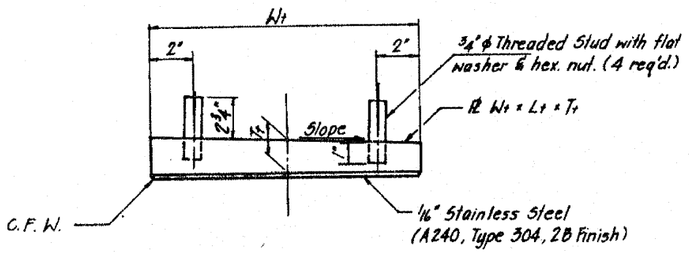
SECTION A-A

TABLE OF DIMENSIONS—TYPE II
ELASTOMERIC EXPANSION BEARINGS

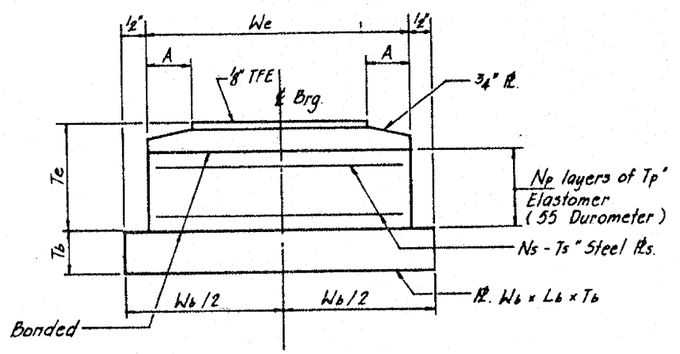
We	Le	Series	Tp	Np	Ts	Ns	Te
7	12	b	3/8	4	3/32	3	2 5/8
9	12	b	3/8	7	3/32	6	4 1/16

Tp - denotes thickness of each elastomeric layer.
Np - denotes number of elastomeric layers.
Ts - denotes thickness of each steel plate.
Ns - denotes number of steel plates.

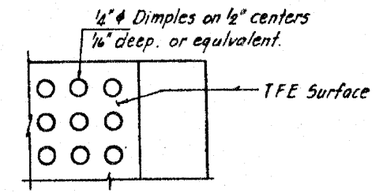
TYPE II TFE ELASTOMERIC EXPANSION BEARING



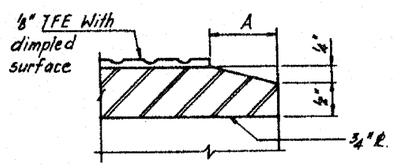
TOP BEARING ASSEMBLY



BOTTOM BEARING ASSEMBLY



PLAN-TFE SURFACE

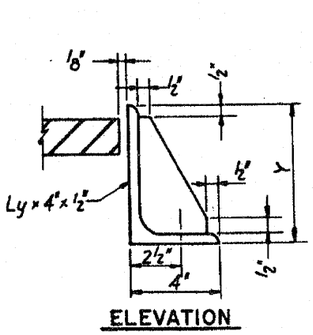


SECTION THRU TFE

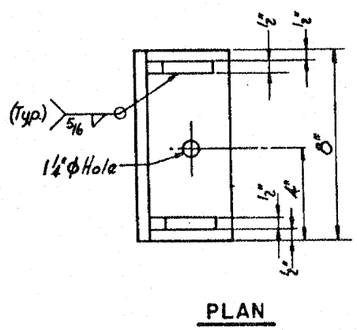
We	6"	7"	9"	10"	11"	12"
A	1"	1"	1½"	1½"	1½"	1½"

TYPE II ELASTOMERIC EXPANSION BEARING SCHEDULE

STRUCTURE NO.	PIER LOCATION	GIRDER NO.	We	Le	SERIES	TOP PLATE				BOTTOM PLATE			Y	He	NO. REQ'D.
						Tt	Wt	Lt	SLOPE %	Tb	Wb	Lb			
016-1115	1(N)	17—23	9	12	b	1⅝	11	14	1.6	1¼	10	22½	6	7⅛	7
		GN5-GN8	9	12	b	1⅝	11	14	1.6	1¼	10	22½	6	7⅛	4
	8(S)	GN 20	7	12	b	1¾	8½	14	0.0	1	8	22½	5	5 7/16	1



ELEVATION



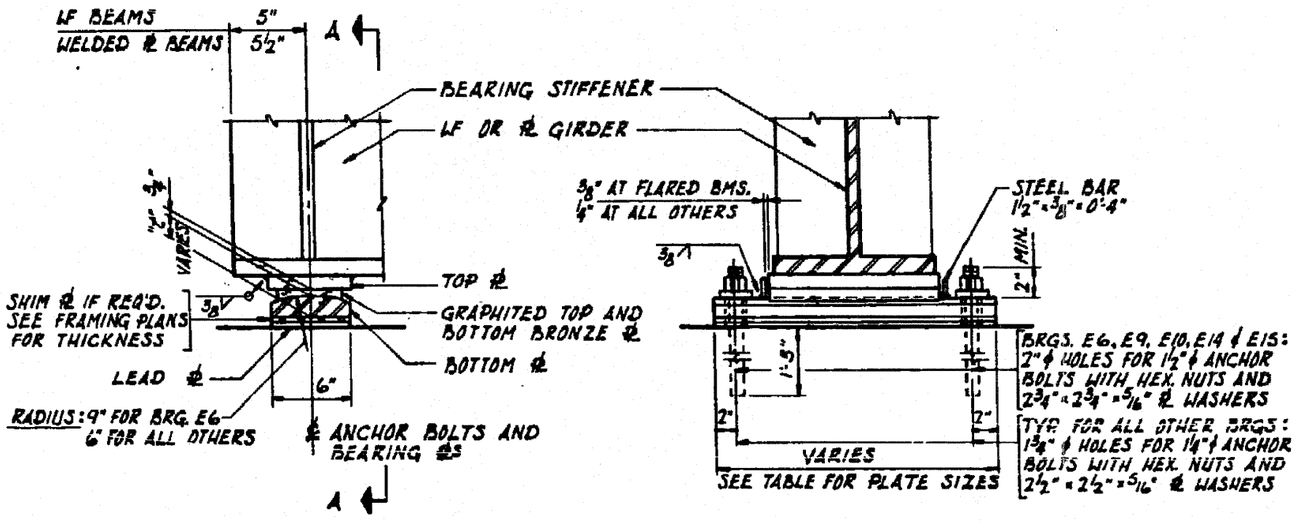
PLAN

SIDE RETAINER

FILE NAME =	USER NAME = rgoll	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPE II ELASTOMERIC EXPANSION BEARING DETAILS – LOCATION 2 STRUCTURE NO. 016-1115
		DRAWN - AMR	REVISED -		
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -		SCALE: NTS SHEET NO. 34 OF 37 SHEETS STA. TO STA.
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	80
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

@FILE1@



ELEVATION

SECTION A-A

TYP. EXPANSION BEARINGS FOR CONCRETE PIERS

SLIDING EXPANSION BEARING TABLE

MARK	TOTAL	TOP ℄	BRONZE ℄	BOTTOM ℄	LEAD ℄	CUT TYPE
E1	80	7"x1"x1'-5½"	5"x1'-5½"	6"x2½"x2'-3"	6"x⅛"x2'-3"	
E2	119	7"x1"x1'-1"	5"x1'-1"	6"x2½"x1'-10"	6"x⅛"x1'-10"	
E3	13	6½"x1"x1'-0"	4½"x1'-0"	6"x2¼"x1'-9"	6"x⅛"x1'-9"	
E4	6	6½"x1"x0'-10"	4½"x0'-10"	6"x2"x1'-7"	6"x⅛"x1'-7"	
E5	9	7½"x1"x1'-5½"	5"x1'-5½"	6"x2¾"x2'-3"	6"x⅛"x2'-3"	
E11	60	8"x1"x1'-1"	5"x1'-1"	6"x2½"x1'-10"	6"x⅛"x1'-10"	
E12	1	8"x1"x1'-5½"	5"x1'-5½"	6"x2½"x2'-3"	6"x⅛"x2'-3"	
E13	20	8"x1"x1'-2"	5"x1'-2"	6"x2½"x1'-2"	——	
E15	2	7"x1"x1'-5½"	5"x1'-5½"	6"x2¾"x2'-3½"	6"x⅛"x2'-3½"	

BEARINGS AT PIER #1

SPAN 2	
BEAM	TYPE
1	E12
2–16	E11

BEARINGS AT PIER #5

SPAN 5	
BEAM	TYPE
1,11,2,20,3	E2
4–17	E11

BEARINGS AT PIER #5

SPAN 6	
BEAM	TYPE
1–15	E11

BEARINGS AT PIER #9

SPAN 10	
BEAM	TYPE
1-20	E2

BEARINGS AT PIER #8

SPAN 8	
BEAM	TYPE
1-20	E13

BEARINGS AT PIER #20

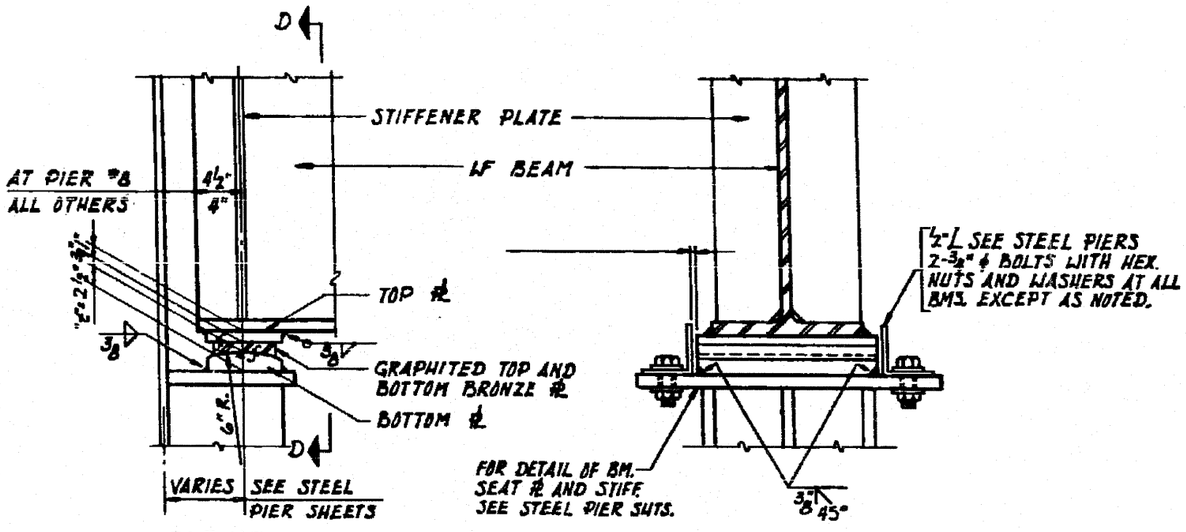
SPAN 20	
BEAM	TYPE
2&3	E15

BEARINGS AT PIER 20

SPAN 21	
BEAM	TYPE
1 & 16	E5
2-15	E1

BEARINGS AT PIER #16

SPAN 16	
BEAM	TYPE
1	E1
2-10, 20	E2
11-15	E3
18-19	E4



ELEVATION

SECTION D-D

EXPANSION BEARING ON STEEL PIERS

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	
		DRAWN - AMR	REVISED -	
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -	

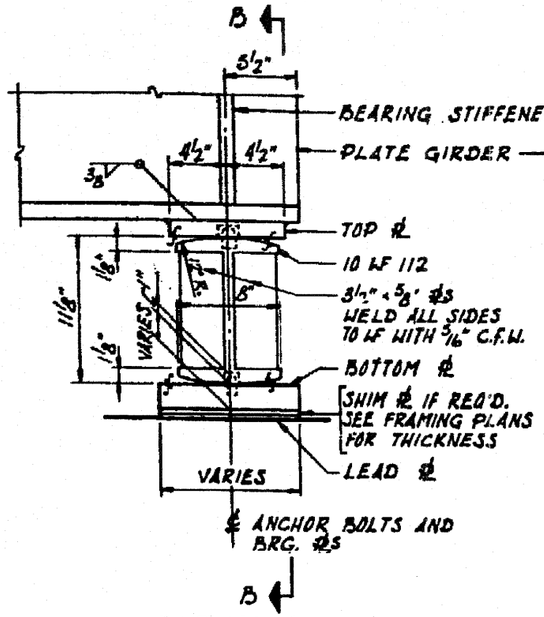
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION BEARING DETAILS – LOCATION 2
STRUCTURE NO. 016–1115

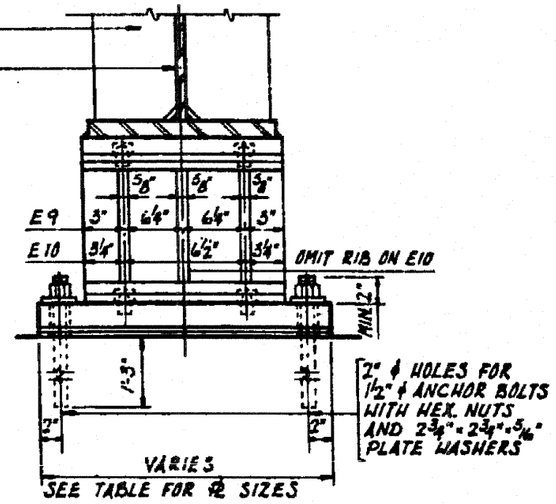
SCALE: NTS | SHEET NO. 35 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	81
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

&FILE&



ELEVATION



SECTION B-B

TYP. EXPANSION ROCKER BEARING AT PIER 22

BEARINGS AT PIER 22	
SPAN 22	
BEAM	TYPE
1-8	E9

ROCKER EXPANSION BEARING TABLE

MARK		TOP ℄.	BRONZE ℄.	BOTTOM ℄.	LEAD ℄.	CUT TYPE
E9		9"x2¼"x1'-6½"	ROCKER	10"x2⅜"x2'-2½"	10"x⅛"x2'-2½"	

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION ROCKER BEARING DETAILS – LOCATION 2
STRUCTURE NO. 016-1115

SCALE: NTS | SHEET NO. 36 OF 37 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	82
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

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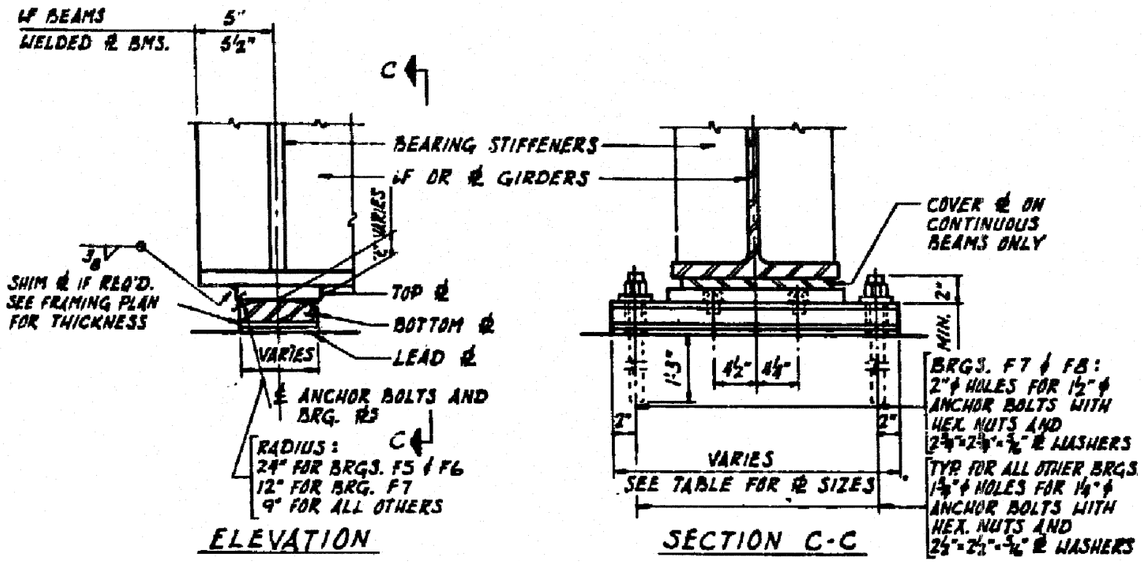


TYP. FIXED BEARINGS FOR CONCRETE PIERS

FIXED BEARING TABLE

MARK	TOTAL	TOP ℄	BOTTOM ℄	LEAD ℄	CUT TYPE
F1	53	6"x1"x1'-5½"	6"x2½"x2'-2"	6"x⅜"x2'-2"	
F2	60	6"x1"x1'-1"	6"x2¼"x1'-9"	6"x⅜"x1'-9"	
F3	13	6"x1"x1'-0"	6"x2"x1'-8"	6"x⅜"x1'-8"	
F4	6	6"x1"x0'-10"	6"x2"x1'-6"	6"x⅜"x1'-6"	

BEARINGS AT PIER #1

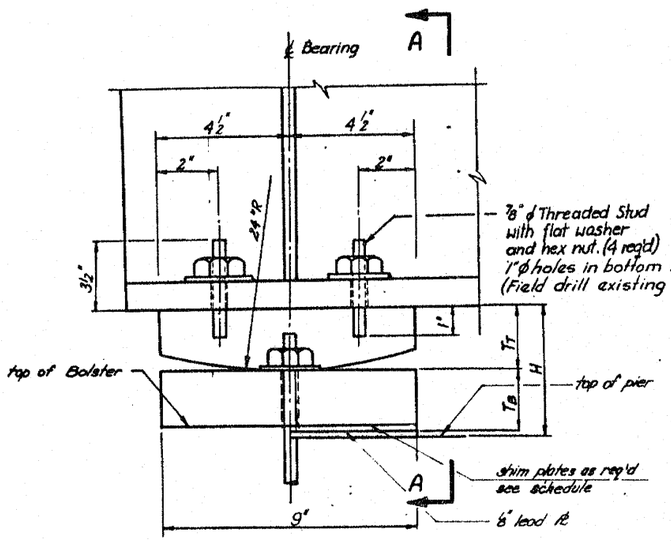
SPAN 1	
BEAM	TYPE
1	F1
2-11, 22	F2
12-21	F3

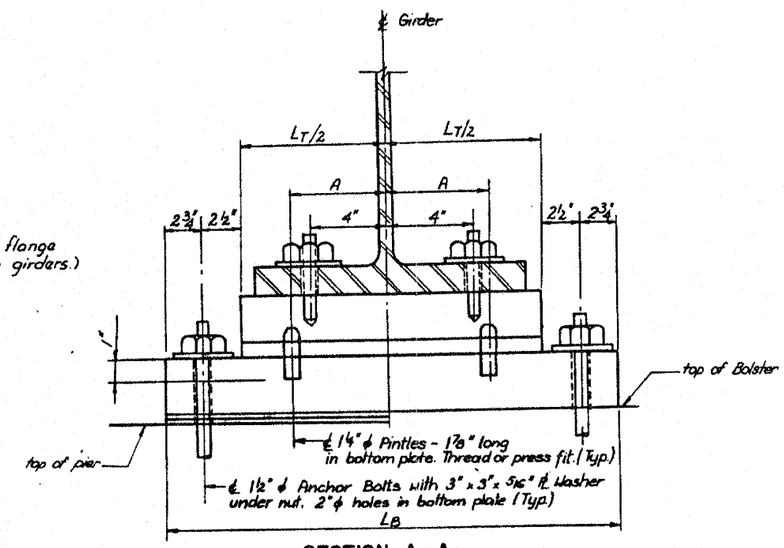
BEARINGS AT PIER #10

SPAN 10	
BEAM	TYPE
1-20	F2

BEARINGS AT PIER #15

SPAN 16	
BEAM	TYPE
1	F1
2-10, 20	F2
11-13	F3
14-19	F4





FIXED BEARING SCHEDULE FOR ROADWAY WIDENING

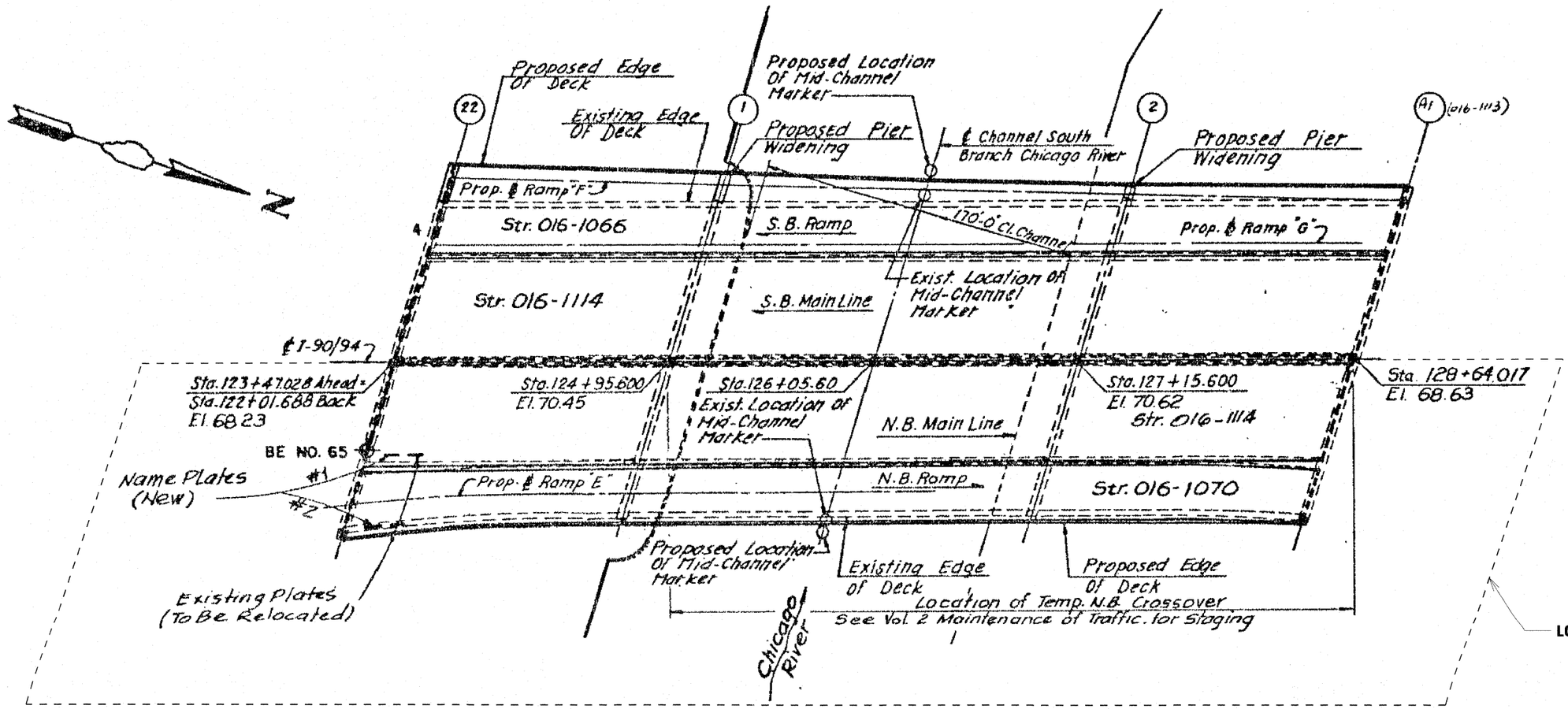
STRUCTURE NO.	PIER LOCATION	GIRDER NO.	BRG. TYPE	NO. REQ'D.	T_T"	L_T"	T_B"	L_B"	A"	H"
016-1115	1(S)	GN1-GN4	F	4	2"	12½	1½	23	3	3⅝
	5(S)	18-22, 27, 28	F	7	2½	12½	2½	23	3	5⅛
		23	F	1	2½	17	2½	27½	5	5⅛
		GN 16-GN 19	F	4	2½	12½	2½	23	3	5⅛
	22(S)	9-16	F	8	2½	17	1½	27½	5	4⅛
		2-5	F	4	2½	17	1½	27½	5	4⅛
		GN23-GN25	F	3	2⅞	17	1½	27½	5	4½

FIXED BEARING - TYPE F

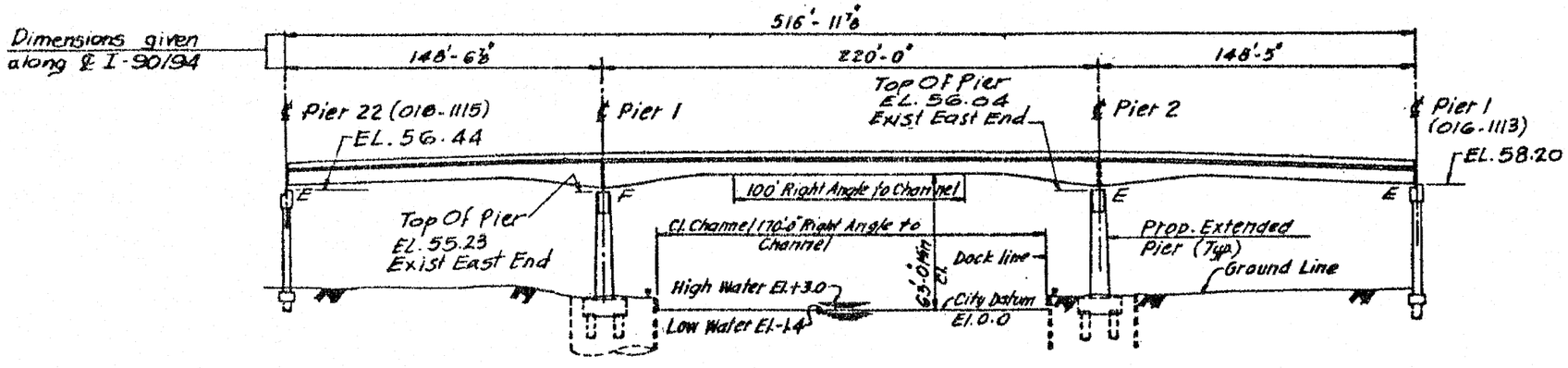
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FIXED BEARING DETAILS – LOCATION 2 STRUCTURE NO. 016-1115			
		DRAWN - AMR	REVISED -					
	PLOT SCALE = 1.0000 '/ IN.	CHECKED - JMH	REVISED -					
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 37 OF 37 SHEETS	STA.	TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	83
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

#FILE1$



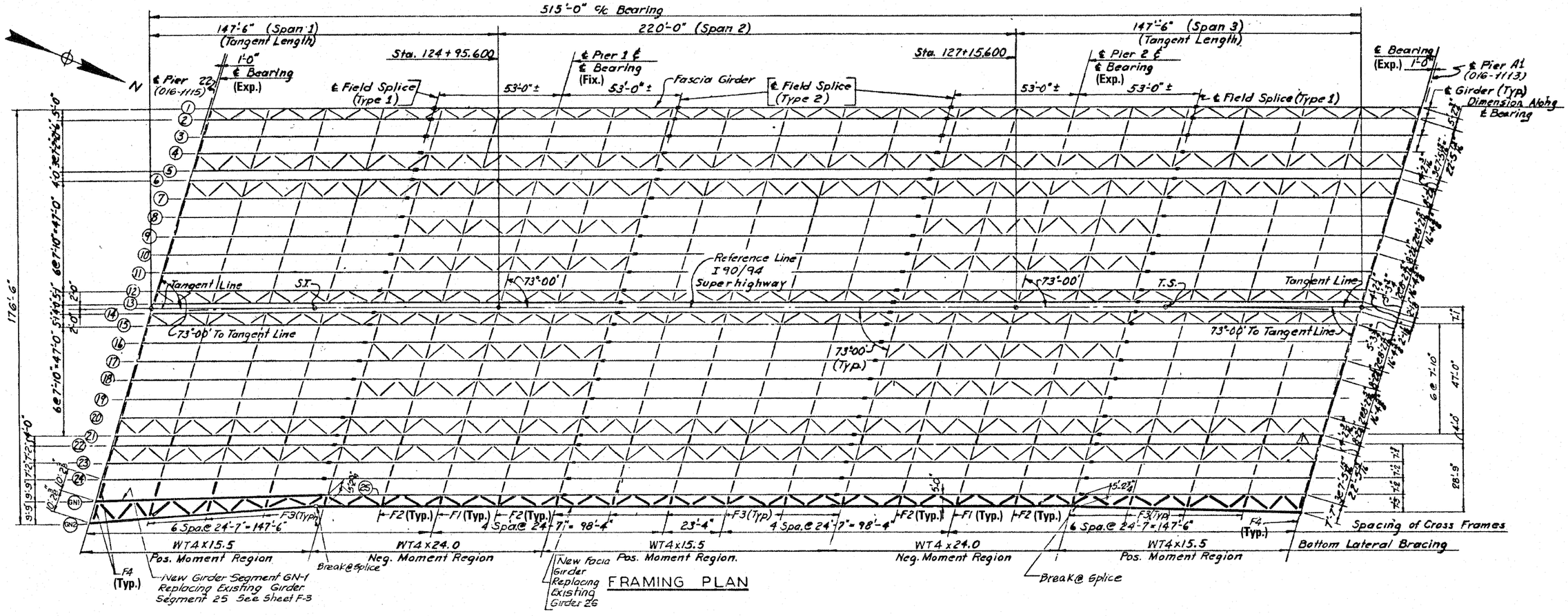
PLAN



ELEVATION

FILE NAME =	USER NAME = rgoll	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN & ELEVATION – LOCATION 3 STRUCTURE NO. 016–1070			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160 / 84
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -								CONTRACT NO. 60N01
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 1 OF 6 SHEETS	STA. TO STA.		ILLINOIS	FED. AID PROJECT	

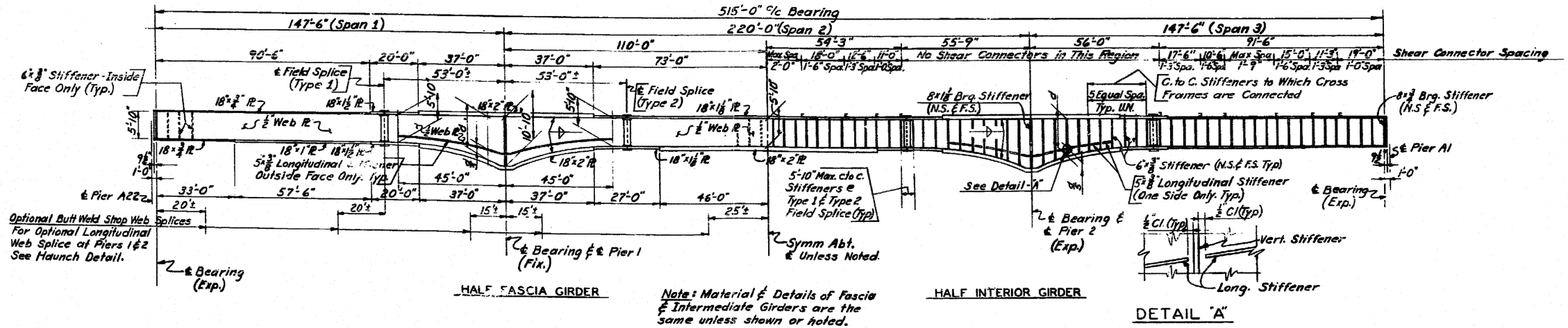
$FILE$



FRAMING PLAN

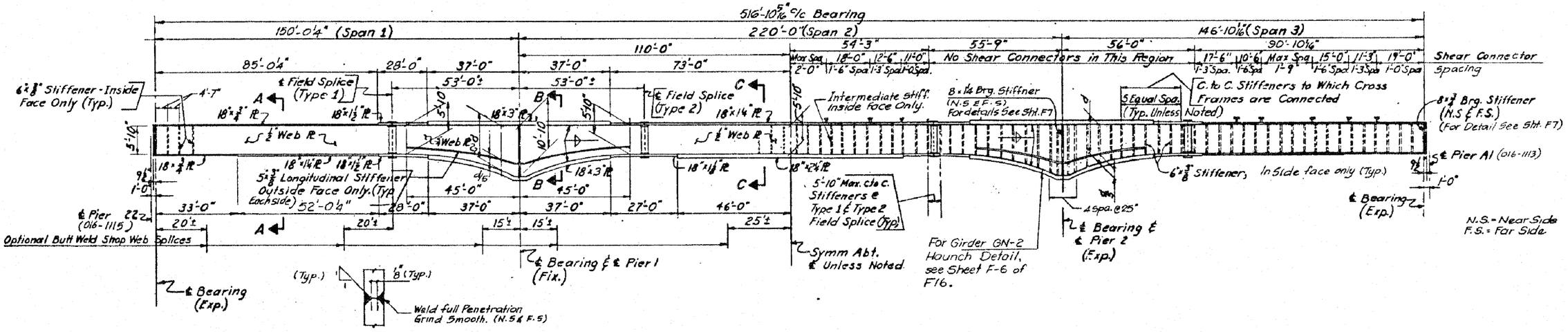
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN – LOCATION 3 STRUCTURE NO. 016–1070			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160	85
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -								CONTRACT NO. 60N01	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 2 OF 6 SHEETS	STA. TO STA.			ILLINOIS	FED. AID PROJECT	

$FILE$



Note: Material & Details of Fascia & Intermediate Girders are the same unless shown or noted.

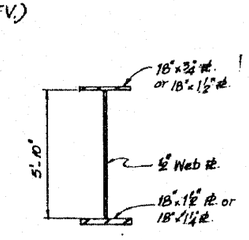
GIRDER ELEVATION



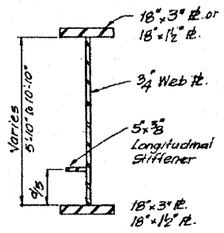
WELD SPLICE DETAIL IN WEB

(FOR LOCATION SEE ELEV.)

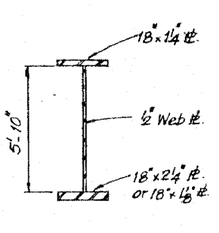
GIRDER ELEVATION - GN-2 (NEW)



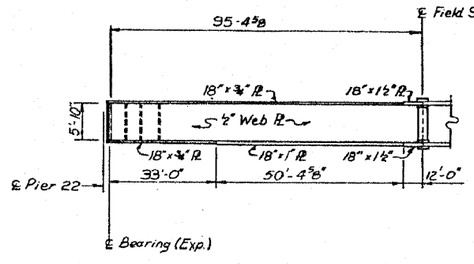
SECTION A-A



SECTION B-B



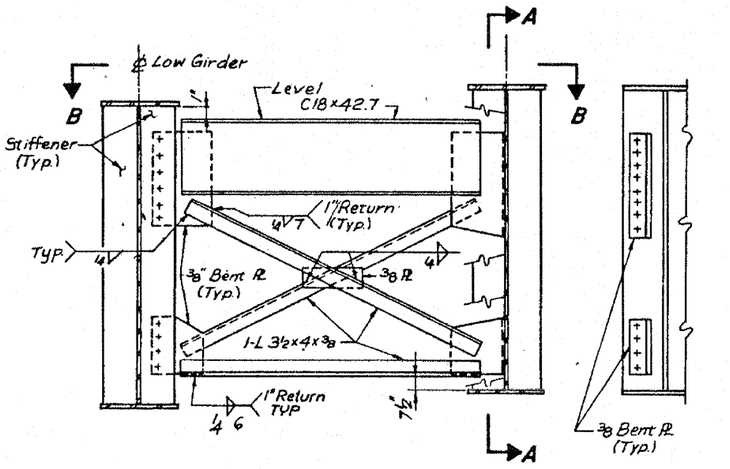
SECTION C-C



GIRDER ELEVATION - GN1

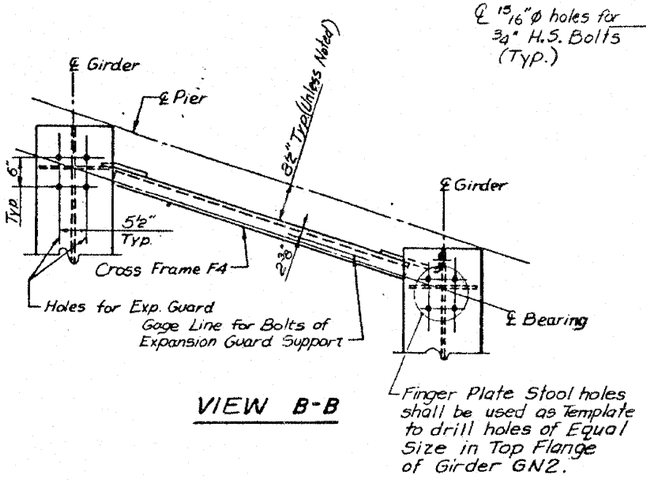
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GIRDER ELEVATIONS – LOCATION 3 STRUCTURE NO. 016-1070			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160	86
	PLOT SCALE = 1.2000 ' / IN.	CHECKED - JMH	REVISED -							CONTRACT NO. 60N01		
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 3 OF 6 SHEETS	STA. TO STA.		ILLINOIS FED. AID PROJECT			

&FILE1&

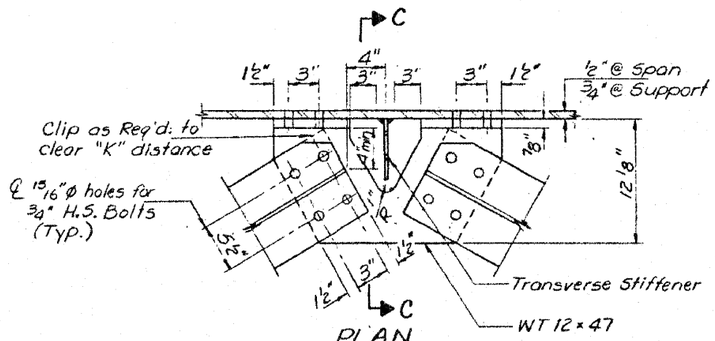


CROSS FRAME - F4

SECTION A-A

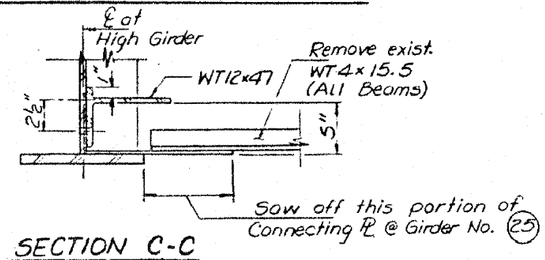


VIEW B-B

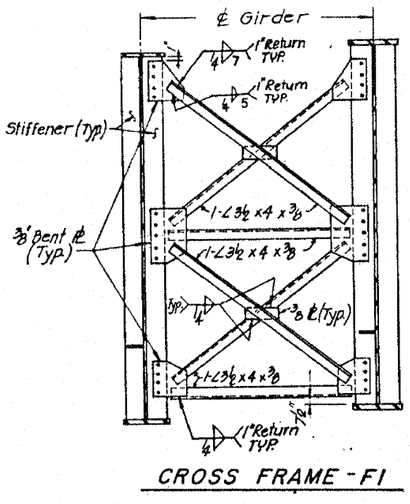


PLAN

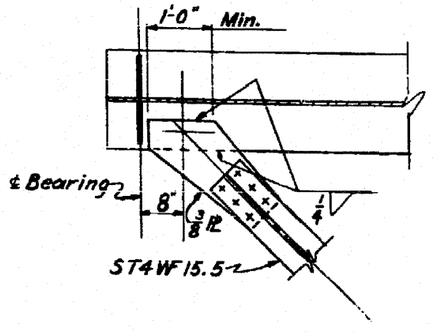
LATERAL BRACING CONNECTION



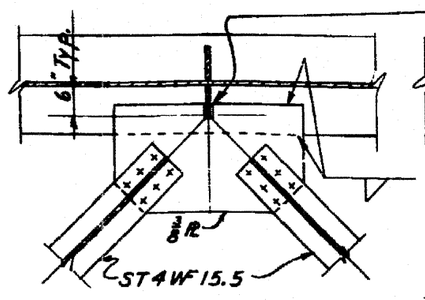
SECTION C-C



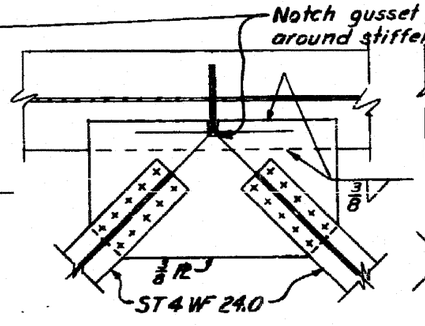
CROSS FRAME - F1



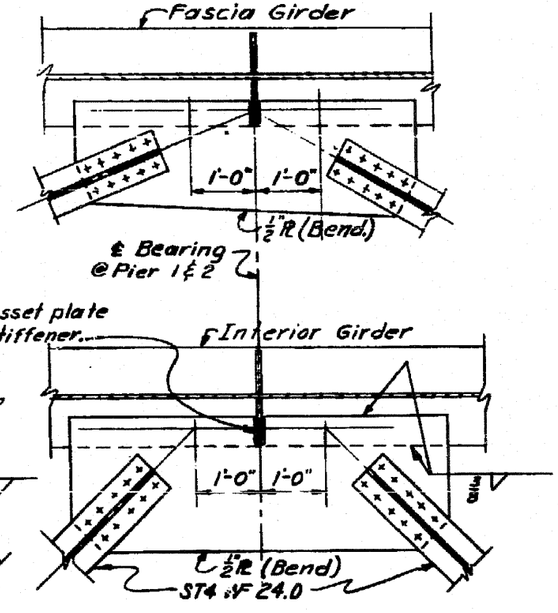
℄ BEARING AT PIERS A22 & A1



POS. MOMENT REGION



NEG. MOMENT REGION

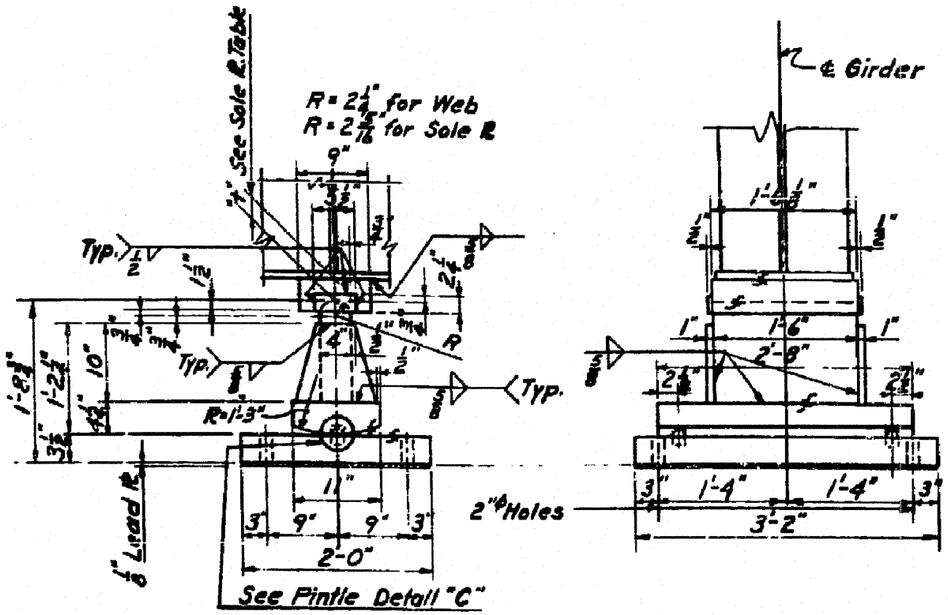


℄ BEARING AT PIERS 1 & 2

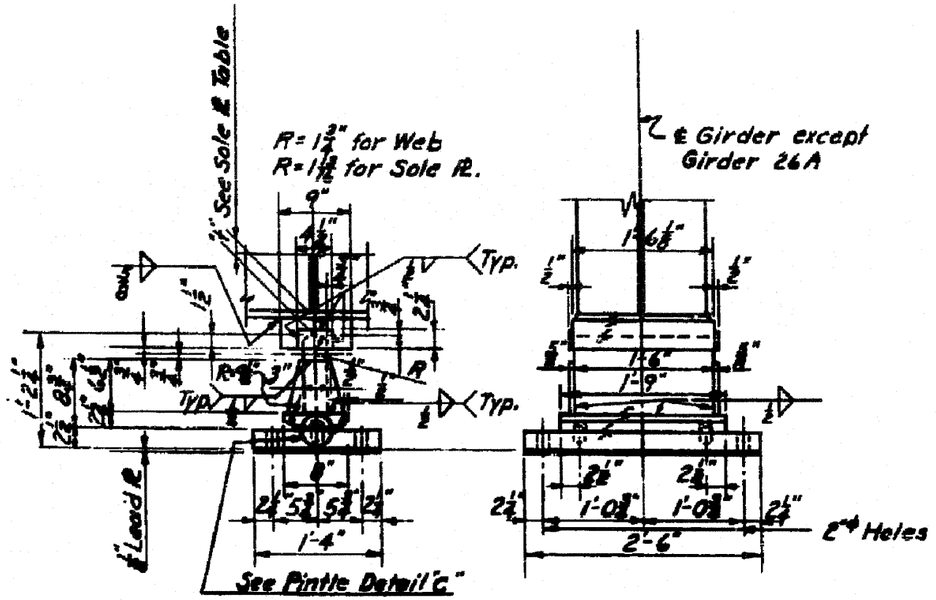
LATERAL BRACING DETAILS

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS FRAME & LATERAL BRACING DETAILS – LOCATION 3 STRUCTURE NO. 016-1070			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160	87
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -							CONTRACT NO. 60N01		
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 4 OF 6 SHEETS	STA. TO STA.		ILLINOIS	FED. AID PROJECT		

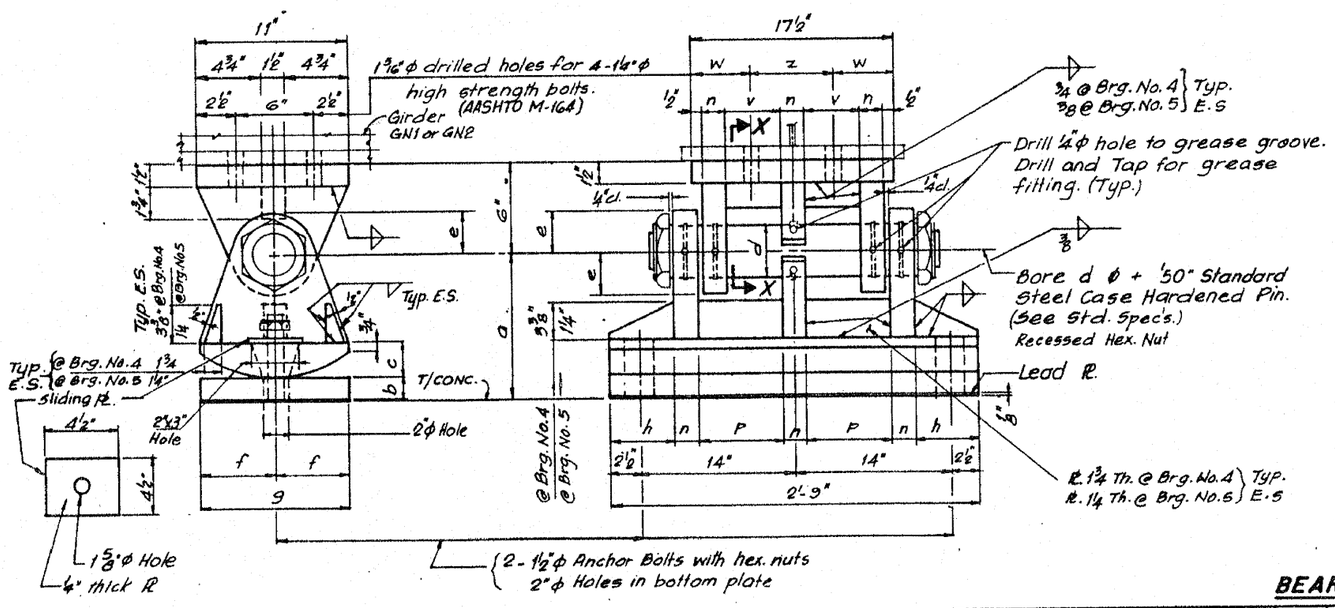
$FILE.$



EXPANSION BEARING AT PIER 2



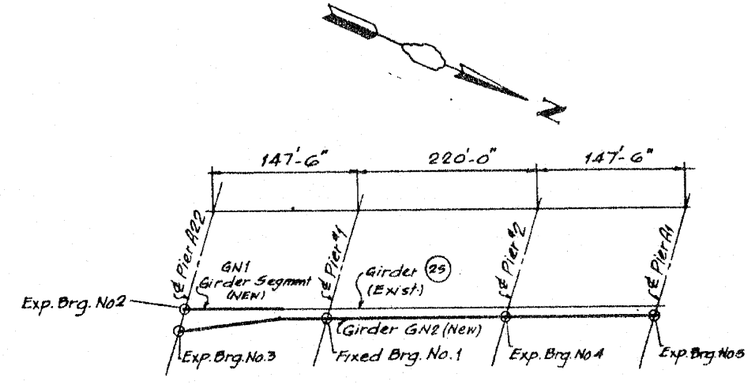
EXPANSION BEARING AT PIER A22 & A1



END VIEW

ELEVATION
TYPE E1

EXPANSION BEARING



BEARING LOCATION PLAN

BEARING DIMENSION TABLE

BEARING Nos	a	b	c	e	f	g	h	n	p	v	w	z	ANCH BOLT K	ANCH BOLT M	PIN & PIN NUT T	PIN & PIN NUT ℓ	PIN & PIN NUT d	PIN & PIN NUT t
Brg. No.2(Exp.)	See Type II Elastomeric Bearing Schedule												—	—	—	—	—	—
Brg. No.3(Exp.)	See Type II Elastomeric Bearing Schedule												—	—	—	—	—	—
BRG. No.4 (Exp.)	12¼"	2¼"	2¾"	3¼"	6"	12"	6¼"	1¾"	7⅝"	5⅝"	5 1/16"	7⅜"	8"	5⅞"	1⅜"	1'-8½"	5"	1½"
BRG. No.5 (Exp.)	8 3/16"	1¼"	2 7/16"	2⅞"	4½"	9"	6¾"	1¼"	7⅜"	6⅝"	4 15/16"	7⅝"	6"	3¾"	1½"	1'-7⅛"	4¼"	1⅜"

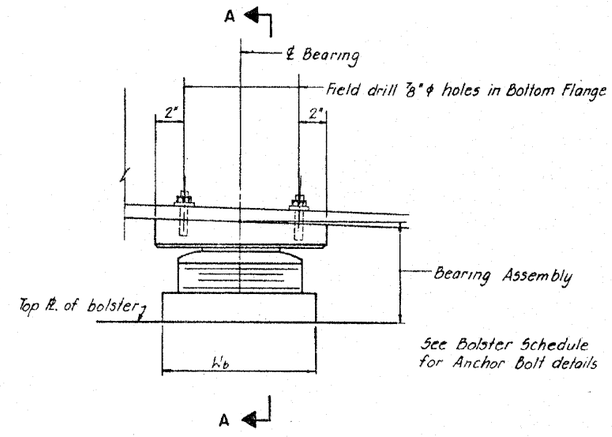
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.2000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

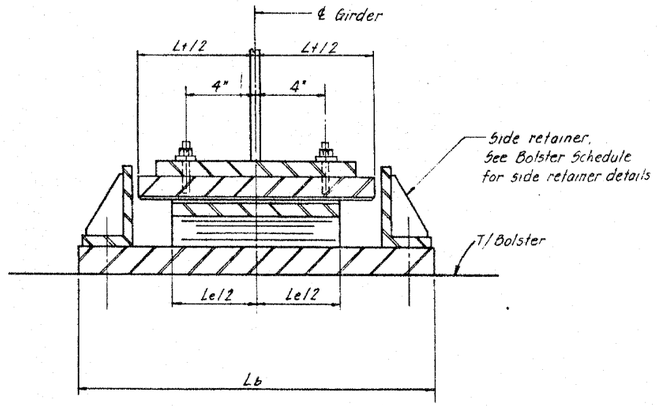
EXPANSION BEARING DETAILS – LOCATION 3
STRUCTURE NO. 016-1070

SCALE: NTS | SHEET NO. 5 OF 6 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	88
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			



TYPICAL ELEVATION



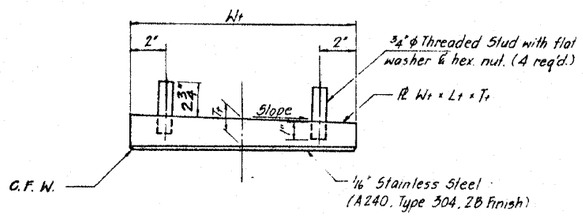
SECTION A-A

TABLE OF DIMENSIONS - TYPE II
ELASTOMERIC EXPANSION BEARINGS

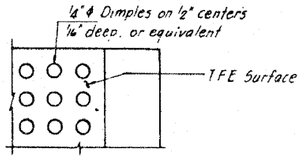
We	Le	Series	Tp	Np	Ts	Ns	Te
11	16	a	1/2	4	1/8	3	3 1/4

Tp - denotes thickness of elastomeric layer.
Np - denotes number of elastomeric layers.
Ts - denotes thickness of steel plate.
Ns - denotes number of steel plates.

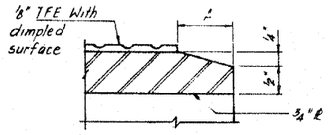
TYPE II TFE ELASTOMERIC EXPANSION BEARING



TOP BEARING ASSEMBLY



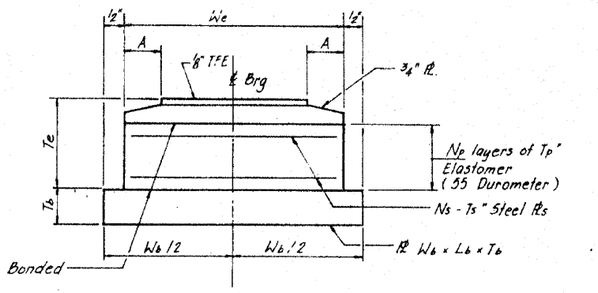
PLAN-TFE SURFACE



SECTION THRU TFE

Note: The ⅛" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification M.M.M-A-134, Type I. The bond agent shall be applied on the full area of the contact surface.

Bonding of ⅛" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



BOTTOM BEARING ASSEMBLY

We	6"	7"	9"	10"	11"	12"
A	1"	1"	1½"	1½"	1½"	1½"

TYPE II ELASTOMERIC EXPANSION BEARING SCHEDULE

STRUCTURE NO.	PIER LOCATION	GIRDER	We	Le	SERIES	TOP PLATE				BOTTOM PLATE			NO. REQ'D	REMARKS
						Tt	Wt	Lt	SLOPE %	Tb	Wb	Lb		
016-1070														
	22 (N)	GN1, GN2	11	16	a	2¼	12	18	3.0	1	12	26½	2	N, B, ④

Remarks: N - New bearing for roadway widening.
B - Bolster required; see Bolster Details.
④ - Pier 22 is from STRUCTURE No. 016-1116.

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

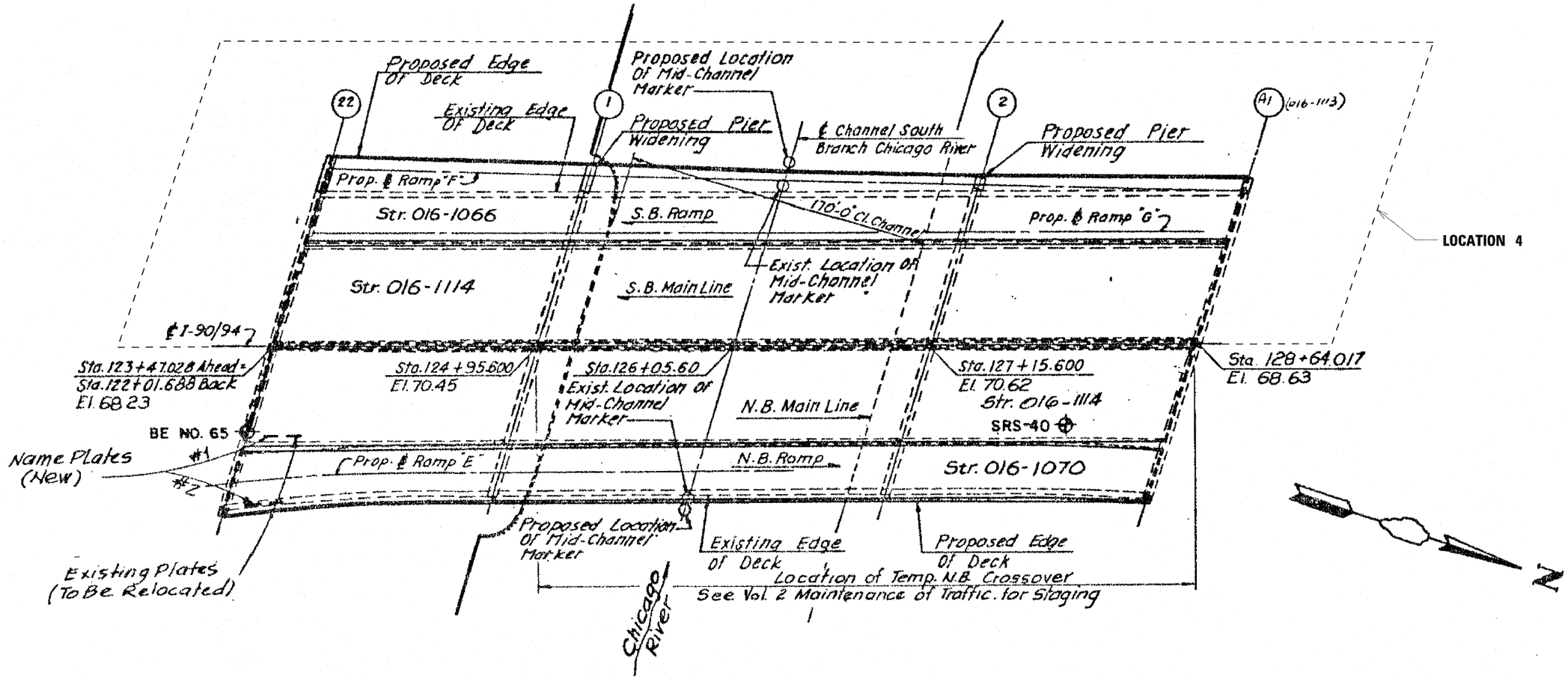
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPE II ELASTOMERIC EXPANSION BEARING DETAILS – LOCATION 3
STRUCTURE NO. 016-1070

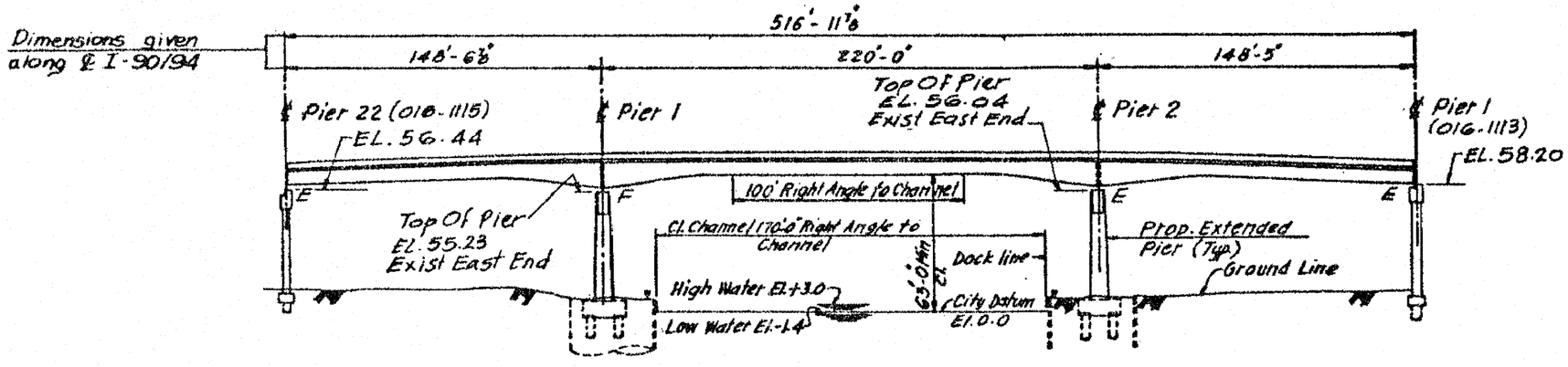
SCALE: NTS | SHEET NO. 6 OF 6 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	89
		CONTRACT NO. 60N01		
	ILLINOIS	FED. AID PROJECT		

SFILES



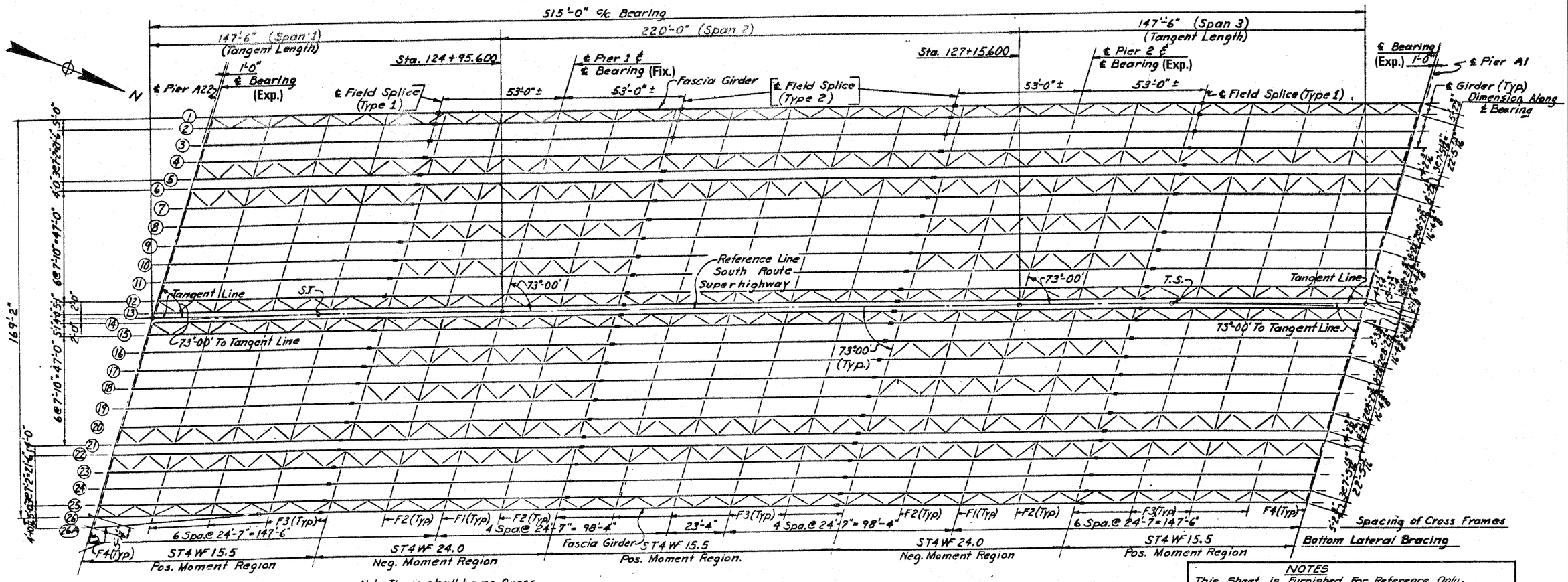
PLAN



ELEVATION

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN & ELEVATION – LOCATION 4 STRUCTURE NO. 016–1114			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160	90
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -							CONTRACT NO. 60N01		
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 1 OF 4 SHEETS	STA. TO STA.			ILLINOIS	FED. AID PROJECT	

@FILE@

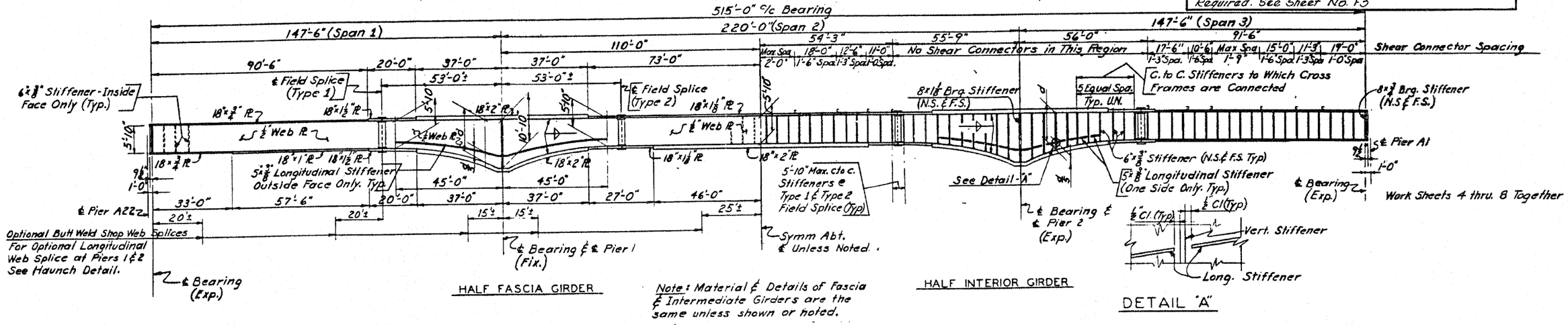


Note: There shall be no Cross Frames between Girders 5 ℄ 6, 13 ℄ 14, 21 ℄ 22.

EXISTING FRAMING PLAN

NOTES

This Sheet is Furnished For Reference Only.
No New Steel Plate Girders or Crossframes are Req'd.
New Studs to be Added And Replaced as Required. See Sheet No. F3

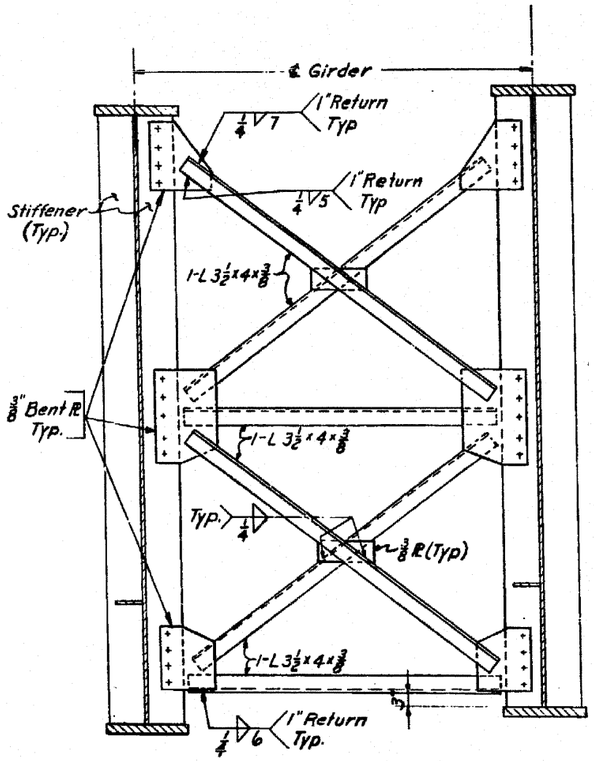


Note: Material ℄ Details of Fascia ℄ Intermediate Girders are the same unless shown or noted.

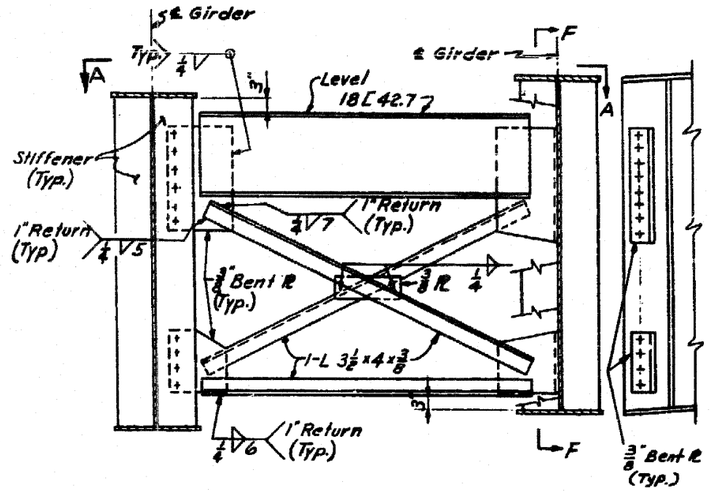
EXISTING GIRDER ELEVATION

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN – LOCATION 4 STRUCTURE NO. 016–1114			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -					94	2010-127-BP	COOK	160	91
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -									CONTRACT NO. 60N01
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 2 OF 4 SHEETS	STA. TO STA.			ILLINOIS	FED. AID PROJECT	

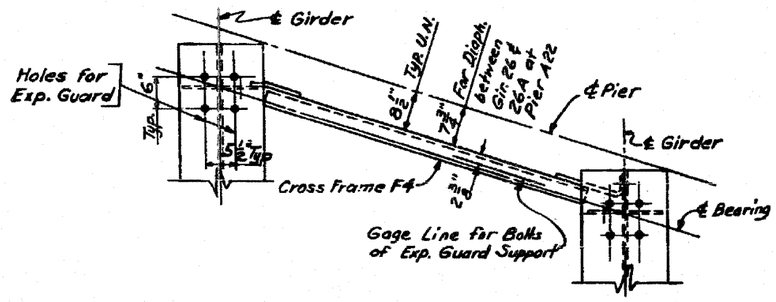
$FILE$



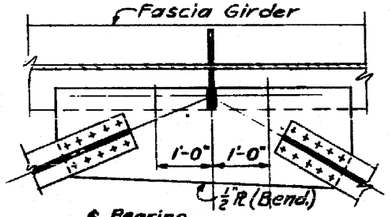
CROSS FRAME - F1

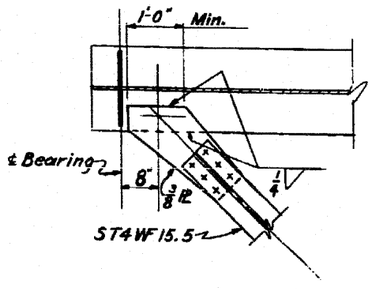


CROSS FRAME - F4 SECTION F-F

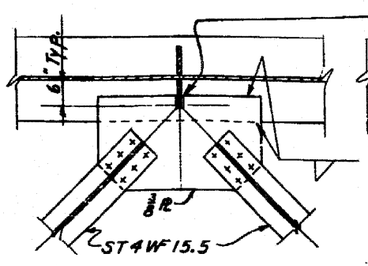


VIEW A-A

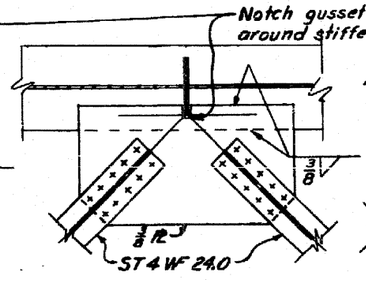




℄ BEARING AT PIERS A22 & A1



POS. MOMENT REGION



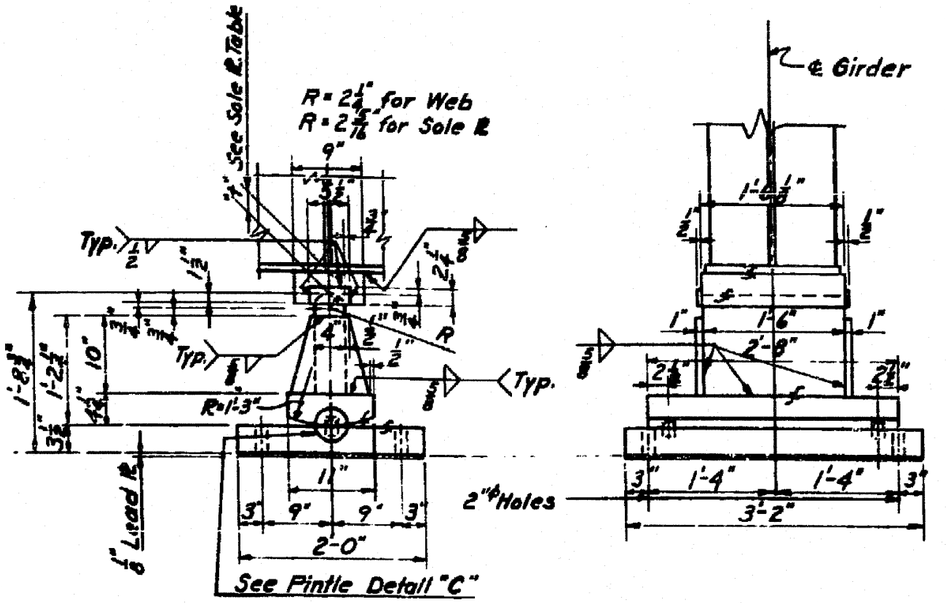
NEG. MOMENT REGION

℄ BEARING AT PIERS 1 & 2

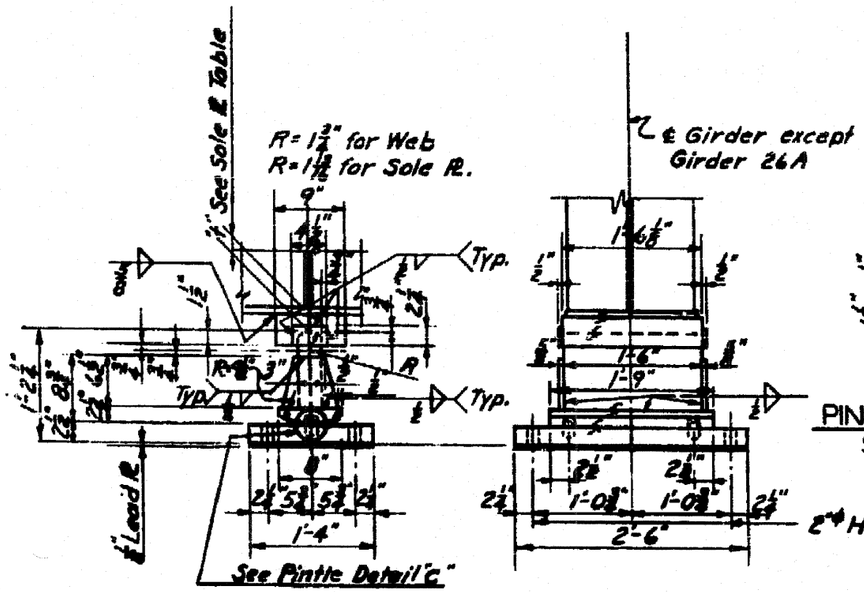
LATERAL BRACING DETAILS

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS FRAME & LATERAL BRACING DETAILS – LOCATION 4 STRUCTURE NO. 016-1114				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - AMR	REVISED -						94	2010-127-BP	COOK	160	92
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -									CONTRACT NO. 60N01	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 3 OF 4 SHEETS	STA.	TO STA.			ILLINOIS	FED. AID PROJECT	

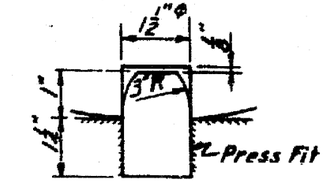
@FILEL@



EXPANSION BEARING AT PIER 2



EXPANSION BEARING AT PIER A22 & A1



PINTLE DETAIL - "C"
SCALE - NONE

BEARING DETAILS

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BEARING DETAILS – LOCATION 4 STRUCTURE NO. 016–1114
		DRAWN - AMR	REVISED -		
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -		SCALE: NTS / SHEET NO. 4 OF 4 SHEETS / STA. / TO STA.
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	93
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

$FILE$

Station Equation:
P.T. Sta. 8+87.26 AHD.
= P.T. Sta. 22+20.76 BK.

Sta. 22+20.353 El. = 32.295
Bk of Abut Sta. 22+21.728 El. = 82.246
SW 1:5
Sta 21+87.520 El. = 33.547
Sta 21+54.689 El. = 34.987
34:2" o to o
Sta 20+89.136 El. = 38.420
Curve F-3
Sta 20+23.461 El. = 42.350
Sta 19+57.909 El. = 46.284
Sta 18+92.247 El. = 50.224
Sta 18+58.39 Prop. ℄ Ramp "F"
P.C.C.
Sta 17+61.135 El. = 58.057
Curve F-2
Sta 16+95.845 El. = 61.332
P.C. Sta. 15+14.03
Name Plate for Placement Detail see Sht 82
Sta 16+33.947 El. = 63.681
Sta 15+48.384 El. = 65.736
Ref. Pt. No. 9
Curve F-1
Sta. 10+00 Ramp "G" = Mt. Sta. 124+16.764
P.C. Sta. 15+15.26
LOCATION 5
Sta 13+81.816 El. = 69.412
Sta 12+34.699 El. = 72.01
Proposed ℄ Ramp "F"
Sta 10+17.028 El. = 71.956
Sta 127+59.54 ℄ F-90/94 = 10+00.00 ℄ Ramp "A"
Name Plate for Placement Detail see Sht 82
Sta 128+90.91 El. = 70.53
℄ Ramp "A"
Install exist. Name ℄ (Cost incidental, see special provisions)
Sta 128+64.017
S.C. Sta 129+60.119
Sta 28+68.48 (℄ Ramp "G"

S. LOWE AVE.
S. WALLACE ST.
Ref. Pt. No. 8
℄ N.E.B. Roadway
℄ I-55
℄ S.W.B. Roadway
S.C. Sta. 14+84.051
T.S. Sta. 13+14.051
S.C. Sta. 14+77.368
T.S. Sta. 13+07.368
S.C. Sta. 14+70.686
T.S. Sta. 13+00.686
P.C.C. Sta. 7+22.03 AHD = F-90/94 ℄ Ramp "G" = Sta 17+22.03 BK = Prop ℄ Ramp "G"
R.O.W.
W. 24th PLACE
Sta 10+08.560 El. = 29.820
Sta 9+52.202 El. = 28.490
Ramp "G"
Sta 8+95.844 El. = 27.160
Sta 8+39.516 El. = 26.870
Sta 7+73.188 El. = 61.120
Sta 17+09.123 El. = 62.091
Sta 16+36.115 El. = 62.980
Sta 15+46.134 El. = 63.964
Sta 14+56.139 El. = 64.992
Sta 13+83.143 El. = 65.837
Curve G-1
Varies See Deck Plans
BE 59.8
BE 60
BE 64
Sta. 11+71.445
Sta. 122+01.688 Back
Sta. 123+47.088 Ahead
S. 24°-24'-00" E. Proposed ℄ Ramp "G"
E. 22°-29'-27" E.
Sta. 120+53.910
C.S. Sta. 120+81.427
S.T. Sta. 124+16.764
Sta. 124+95.600
Sta. 127+15.600
Sta 126+05.600 (℄ Channel)
Varies See Deck Plans
Chicago River
℄ I-90/94 ℄ Ref. Line
Name Plate for Placement Detail see Sht 82
Ramp "C"
Ramp "D"
Ramp "B"
Ramp "E"
Sta 11+48.969 El. = 43.540
Sta 12+18.203 El. = 41.330
Ref. Pt. No. 7
PT Sta 12+89.417 El. = 37.110
Sta 13+66.709 El. = 32.480
Sta 14+62.709 El. = 26.720
Sta 15+40.009 El. = 22.080
Sta 11+78.775 El. = 47.690
Sta 113+71.384 ℄ I-90/94 = Sta 20+72.787 ℄ I-55
S.C. Sta. 111+95.455
T.S. Sta. 110+05.455
S.T. Sta 22+98.788 Ahead
S.T. Sta 22+64.077 Back
C.S. Sta 21+14.077
C.S. Sta 21+07.395
S.T. Sta 22+77.395
S.T. Sta 22+70.712
C.S. Sta 21+00.712
Ref. Pt. No. 31
S. ARCHER AVE.
S.W. TRANSIT (FORMERLY A.T. & S.F.R.R.)
I.C.R.R.
R.O.W.
W. 24th PLACE
N

PLAN

℄ Pier 1A (016-1113)
℄ Pier 2
℄ Pier 1
℄ Pier 22 (016-1115)
147'-6⅝"
217'-10½"
146'-11"
℄ Brg.
E
F
100' Rt. ℄ to Channel
Clr. Channel 170'-0" Right Angle to Channel
High Water El. +3.07
Min. Clr. 83'-0"
Dock Line
Low Water El. -1.4
City Datum El. 0.0
Prop. Extended Pier (Typ.)
Existing Pier (Typ.)

ELEVATION - WEST RAMP

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

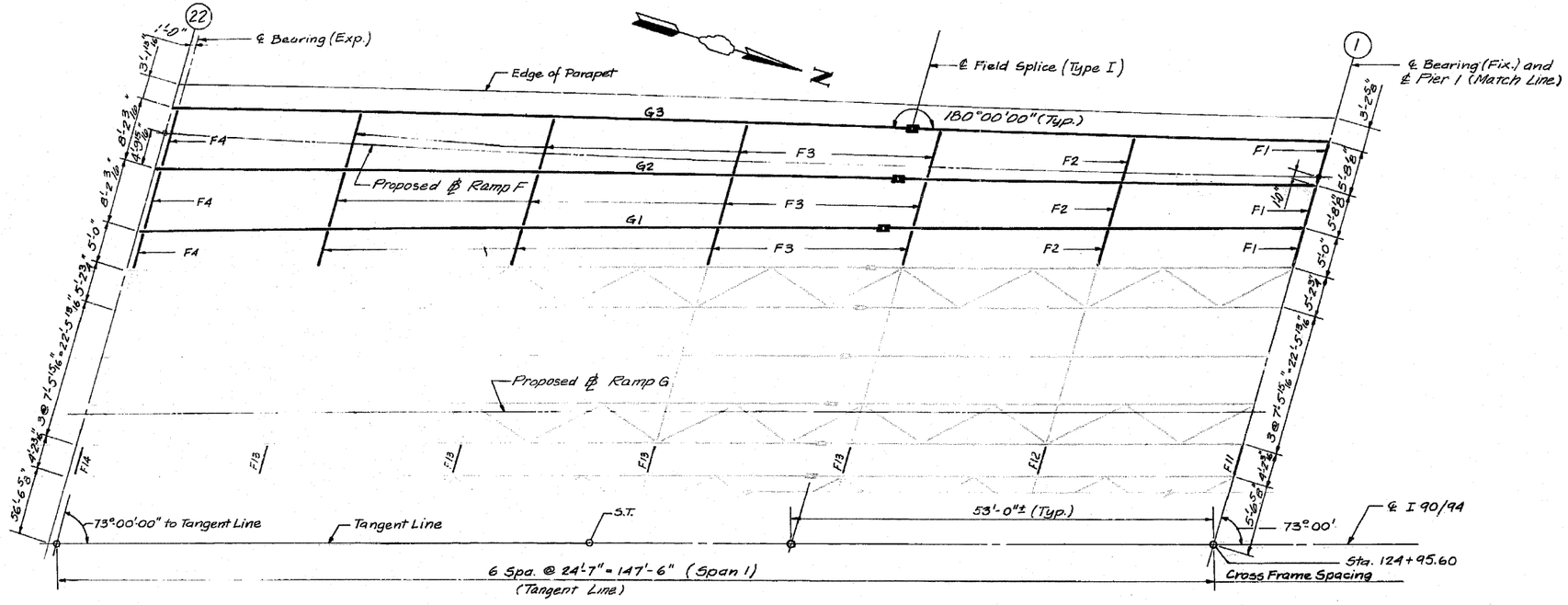
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION – LOCATION 5
STRUCTURE NO. 016-1066

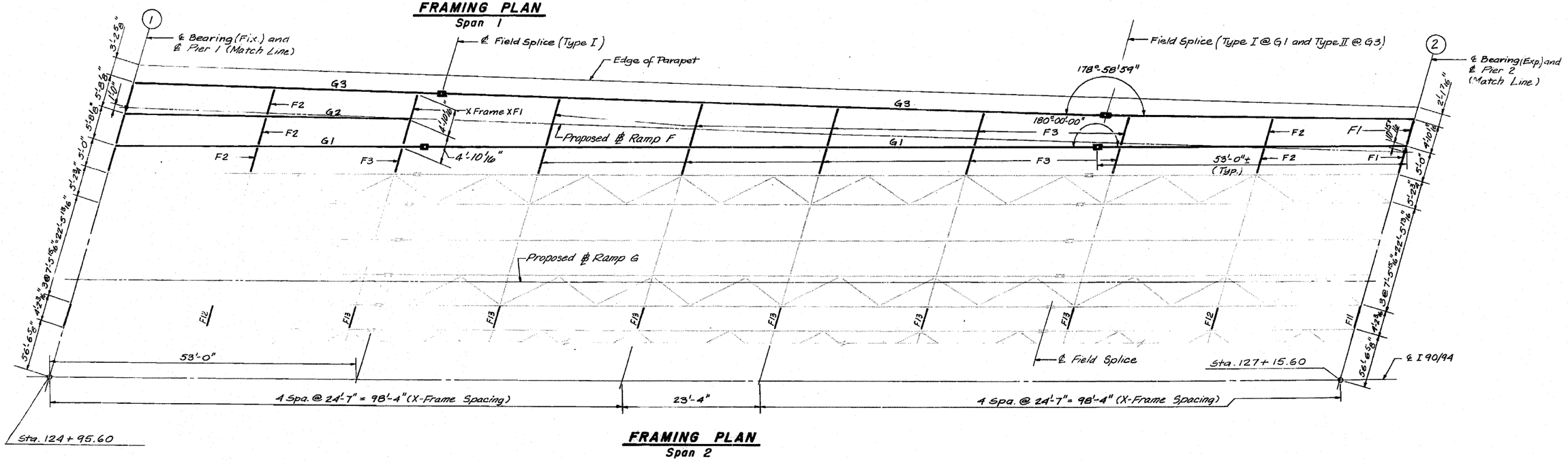
SCALE: NTS | SHEET NO. 1 OF 7 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	94
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

@FILE1$



FRAMING PLAN
Span 1



FRAMING PLAN
Span 2

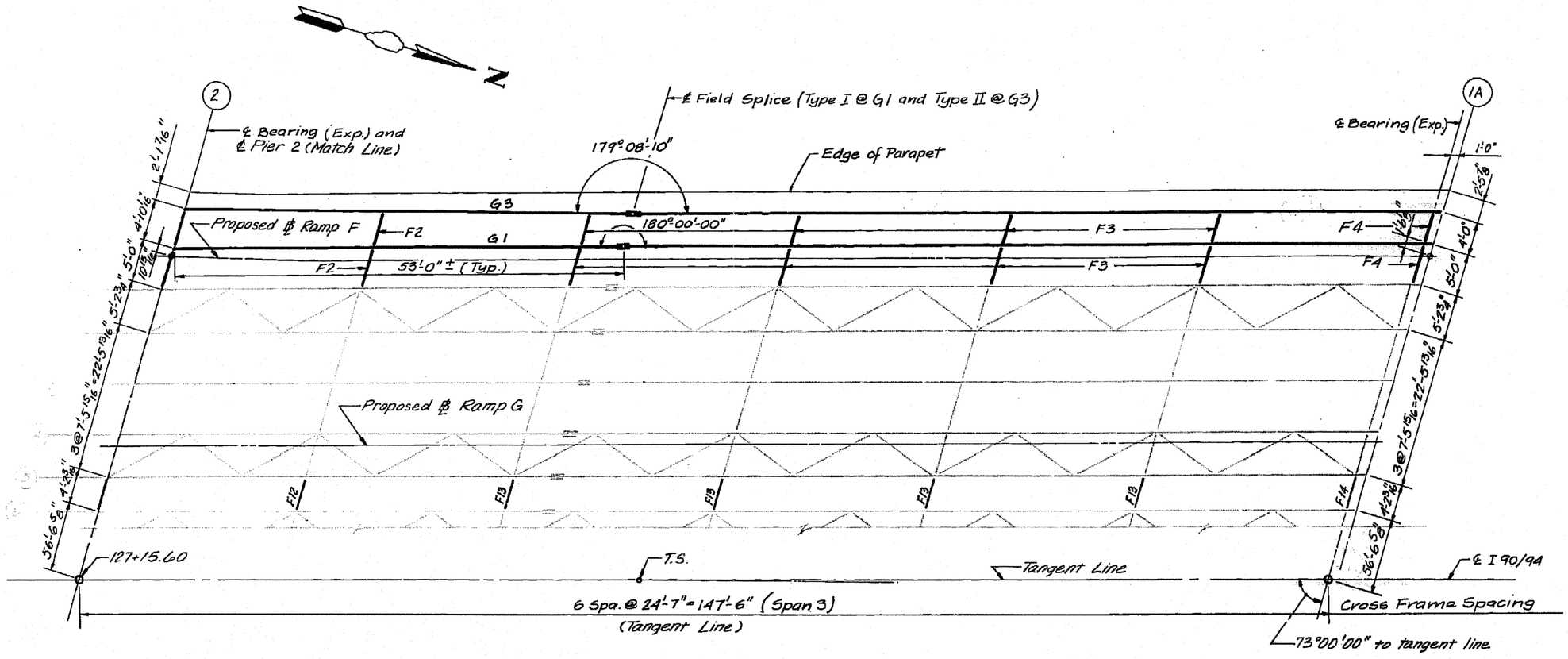
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -
		DRAWN - AMR	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN SPANS 1 & 2 – LOCATION 5
STRUCTURE NO. 016-1066

SCALE: NTS | SHEET NO. 2 OF 7 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	95
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

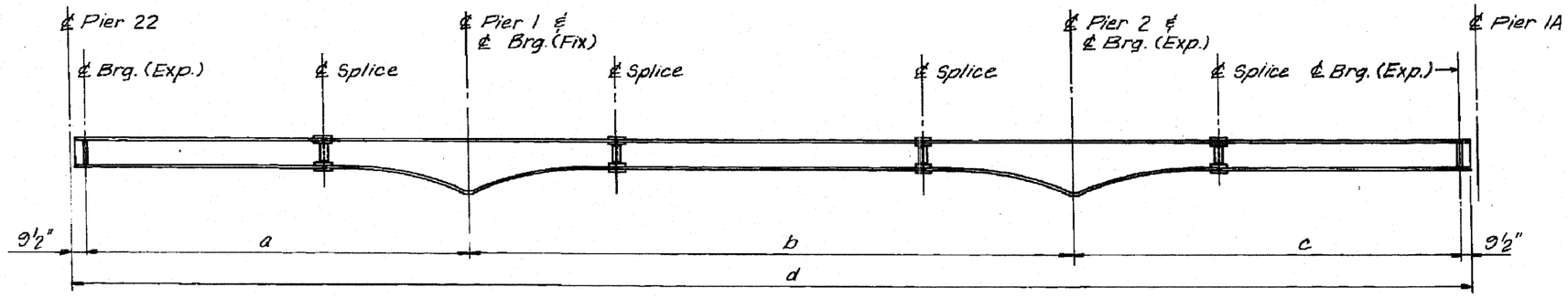


FRAMING PLAN
Span 3

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN SPAN 3 – LOCATION 5 STRUCTURE NO. 016–1066
		DRAWN - AMR	REVISED -		
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -		SCALE: NTS | SHEET NO. 3 OF 7 SHEETS | STA. | TO STA.
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		

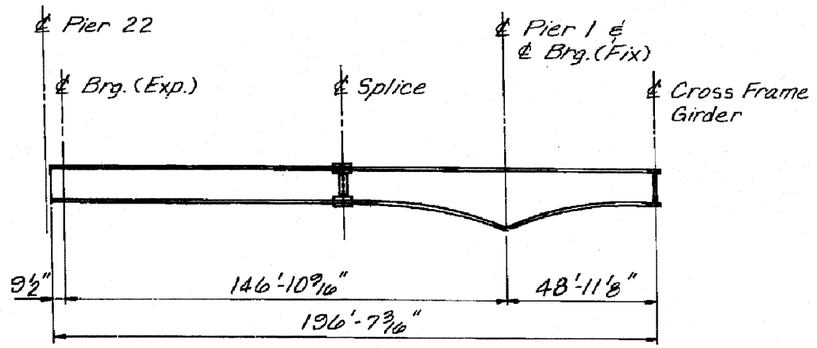
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	96
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

$FILE$



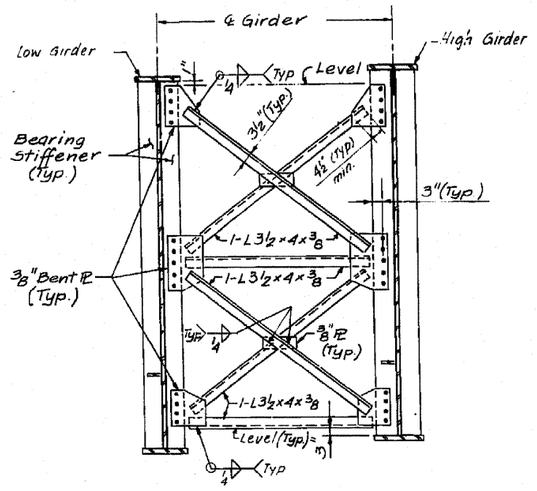
GIRDER ELEVATION
Girders G1 & G3

Note:
See Structure No. 016–1070 & 016–1114 for Remaining Girder Dimensions and Details.

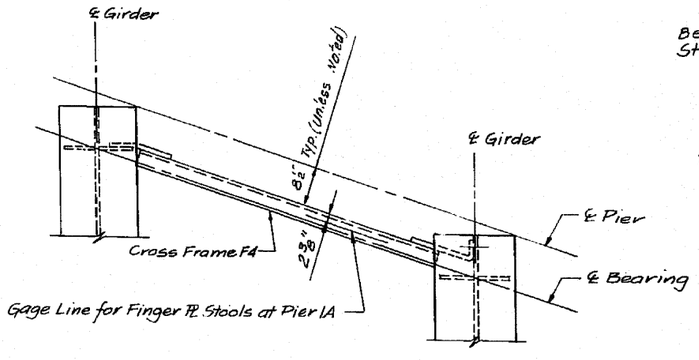


GIRDER ELEVATION
Girder G2
(Looking West)

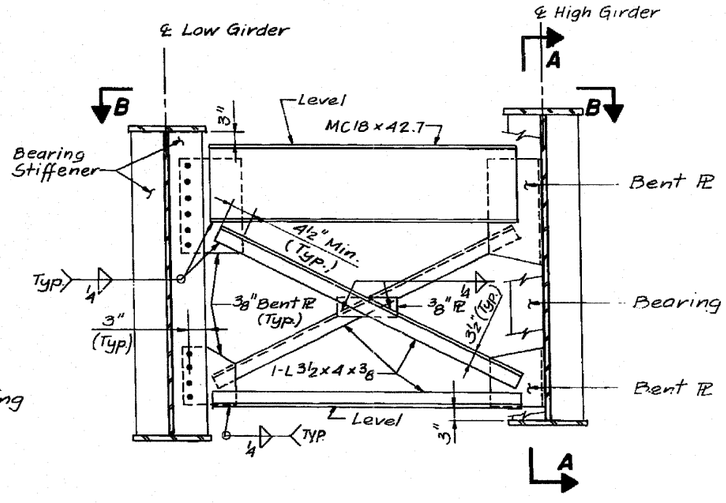
Dimension Table					
Location	Girder	a	b	c	d
Spans 1-3	G1	147'-6 7/8"	220'-0"	147'-6"	516'-7 7/8"
Spans 1-3	G3	146'-2 5/8"	218'-2"	147'-3"	513'-2 5/8"



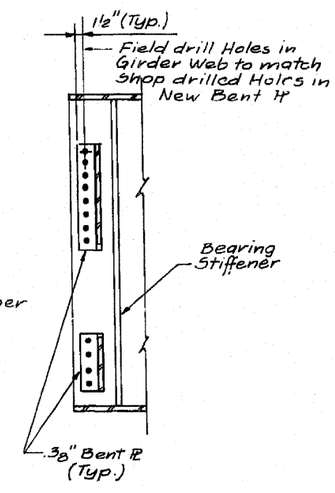
CROSS FRAME-F1 AND F11



VIEW B-B



CROSS FRAME-F4 AND F14

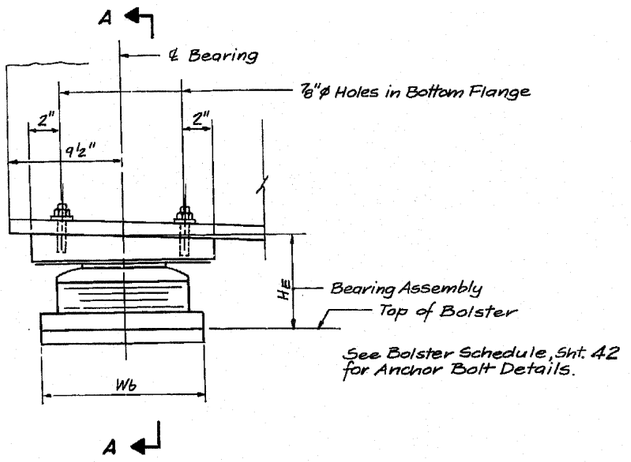


SECTION A-A

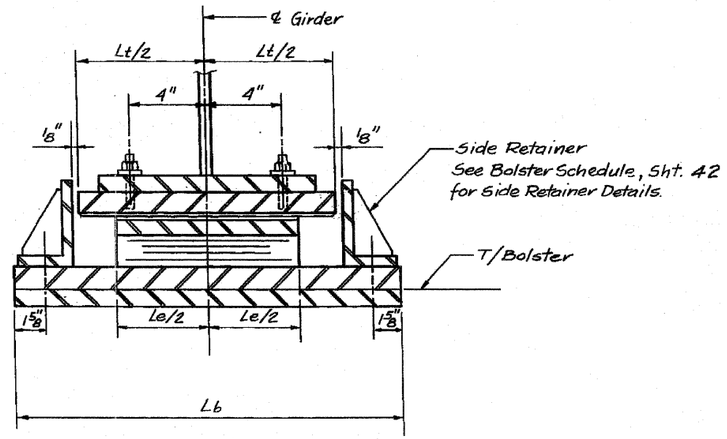
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - AMR	REVISED -	
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -	
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -	

GIRDER ELEVATIONS & CROSS FRAME DETAILS – LOCATION 5
STRUCTURE NO. 016–1066
SCALE: NTS | SHEET NO. 4 OF 7 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	97
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

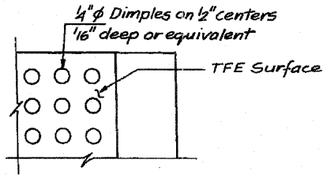


TYPICAL ELEVATION

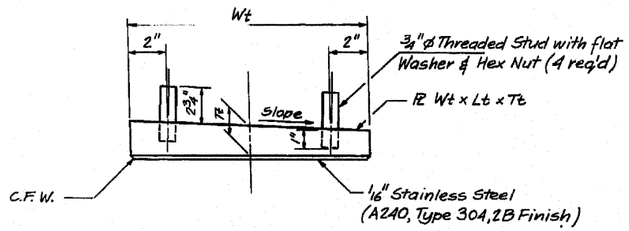


SECTION A-A

TYPE II TFE ELASTOMERIC EXPANSION BEARING

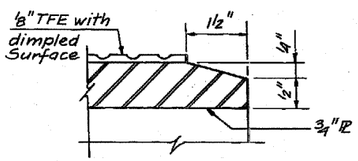


PLAN-TFE SURFACE

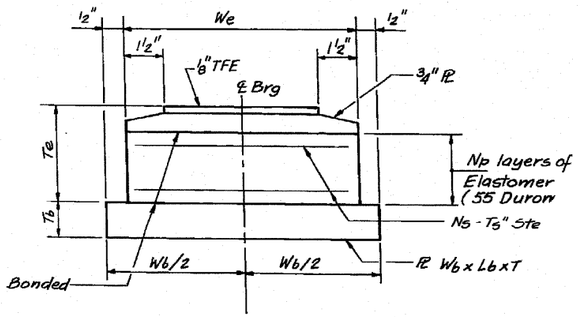


TOP BEARING ASSEMBLY

C.F.W. denotes continuous fillet weld.



SECTION THRU TFE



BOTTOM BEARING ASSEMBLY

TABLE OF DIMENSIONS - TYPE II ELASTOMERIC EXPANSION BEARINGS

We	Le	Series	Tp	Np	Ts	Ns	Te
11	16	d	½	7	⅛	6	5⅛

Tp - denotes thickness of elastomeric layer.
Np - denotes number of elastomeric layers.
Ts - denotes thickness of steel plate.
Ns - denotes number of steel plates.

TYPE II ELASTOMERIC EXPANSION BEARING SCHEDULE

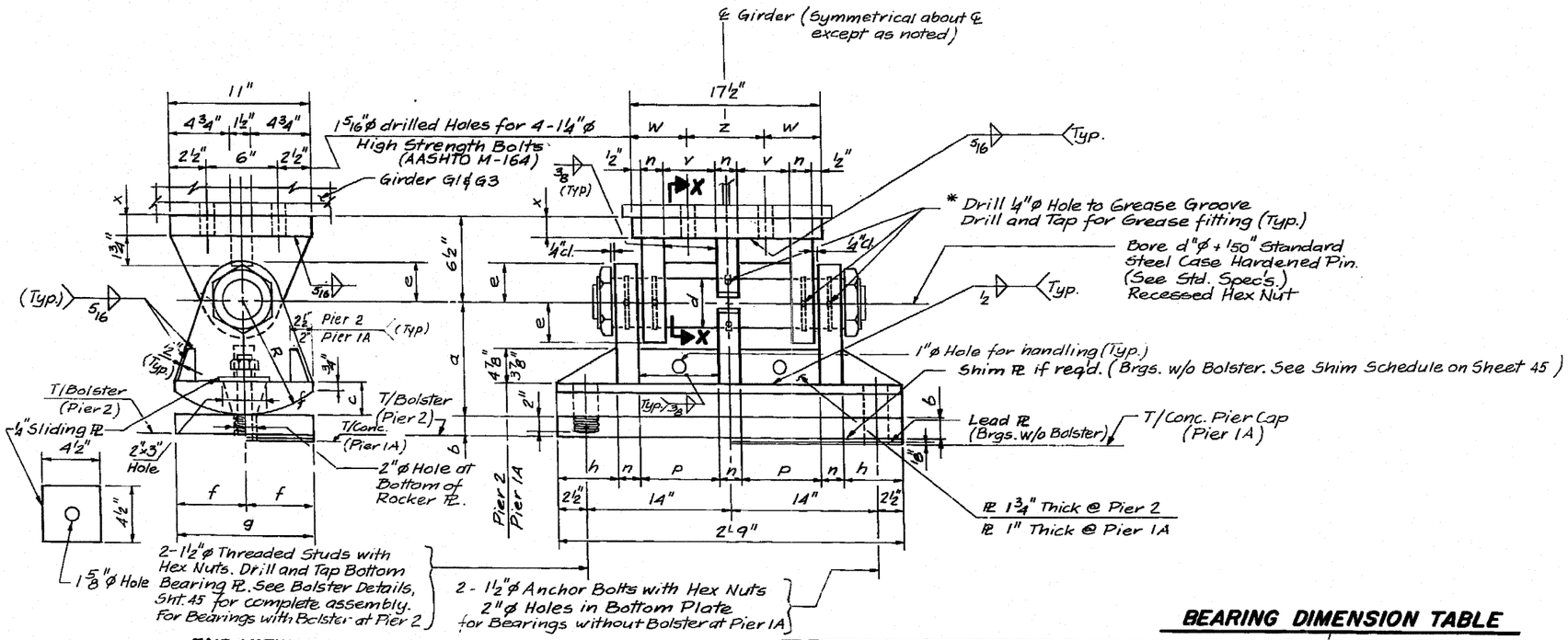
STRUCTURE NO	PIER LOCATION	GIRDER	We	Le	SERIES	TOP PLATE Tt	TOP PLATE Wt	TOP PLATE Lt	TOP PLATE SLOPE %	BOTTOM PLATE Tb	BOTTOM PLATE Wb	BOTTOM PLATE Lb	NO. REQ'D	HE	REMARKS
016-1066	22 (N)	G1,G2,G3	11	16	d	1⅞	12	18	—	1½	12	26½	3	8½	N, ⊛

Remarks: N - New bearing for roadway widening.
⊛ - Bolster req'd.

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPE II ELASTOMERIC EXPANSION BEARING DETAILS – LOCATION 5 STRUCTURE NO. 016-1066			
		DRAWN - AMR	REVISED -					
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -					
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 5 OF 7 SHEETS	STA.	TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	98
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

$FILELS



EXPANSION BEARING - E1

(PIER 2 & 1A)

f - surface finish shall have ANSI surface roughness value not exceeding 250.

Bearings at Pier No. 2 require a Bolster
Bearings at Pier No. 1A rest on Concrete Pier Cap.

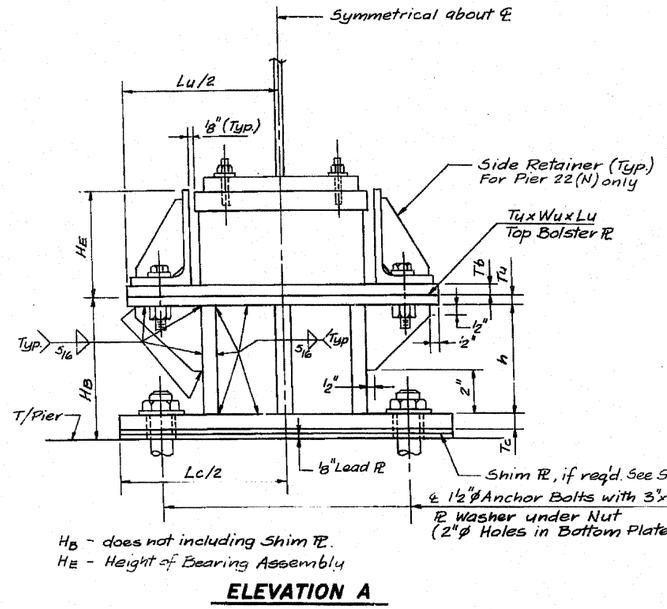
BEARING DIMENSION TABLE

PIER NO.	GIRDER	a	b	c	e	f	g	h	n	p	v	w	z	X	R
2 ⊛	G1 & G3	12"	2½"	3"	3¾"	7"	14"	5¾"	2¼"	7⅜"	4⅞"	5 3/16"	7⅛"	1½"	12"
1A(S)	G1 & G3	11¾"	1½"	1⅝"	3¼"	4½"	9"	7"	1"	8"	6¾"	4⅞"	7¾"	1½"	11¾"

⊛ - Bolster required.

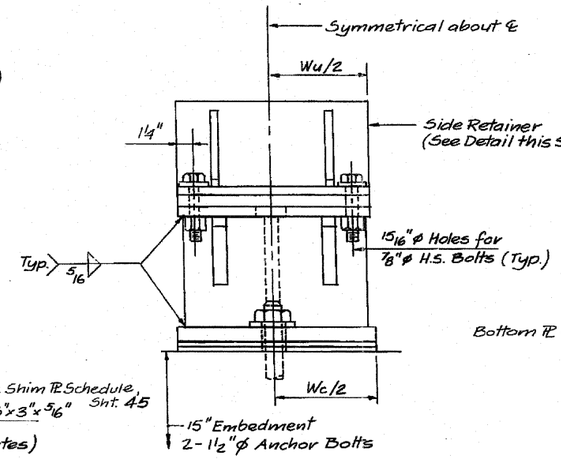
FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	E1 EXPANSION BEARING DETAILS – LOCATION 5 STRUCTURE NO. 016-1066				
		DRAWN - AMR	REVISED -						
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -						
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		SCALE: NTS	SHEET NO. 6 OF 7 SHEETS	STA.	TO STA.	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	99
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

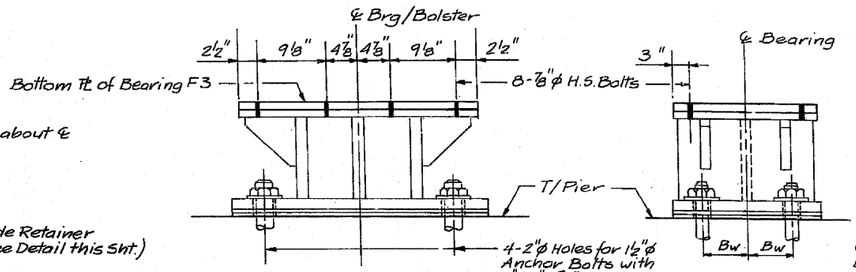


H_B - does not including Shim PL.
H_E - Height of Bearing Assembly

ELEVATION A

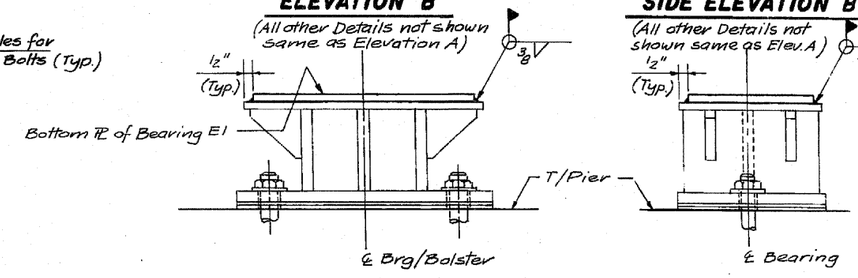


SIDE ELEVATION A



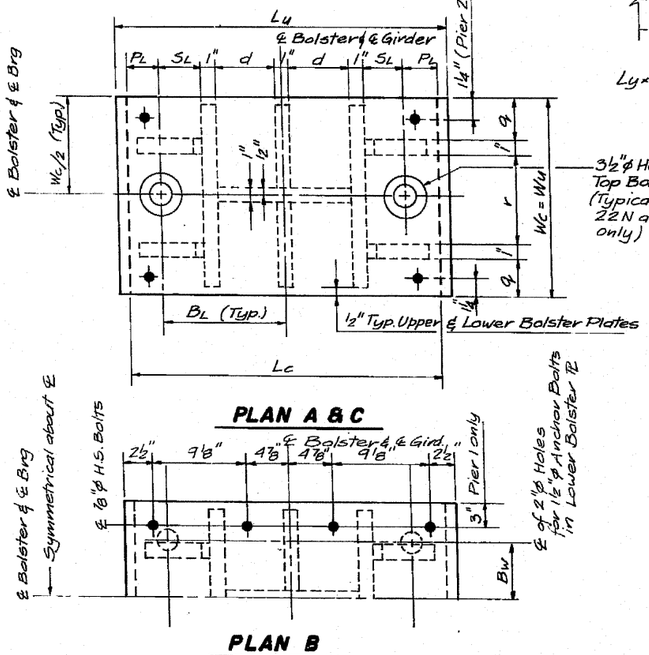
ELEVATION B
(All other Details not shown same as Elevation A)

SIDE ELEVATION B
(All other Details not shown same as Elev. A)



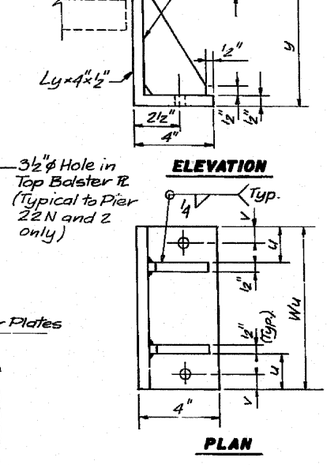
ELEVATION C
(All other Details not shown same as Elevation A)

SIDE ELEVATION C
(All other Details not shown same as Elevation A)



PLAN A & C

PLAN B
(All other Details not shown same as Plan A and C)



SIDE RETAINER
(For Pier No. 22(N) only)

BOLSTER SCHEDULE FOR BEARINGS

STRUCTURE NO.	PIER LOCATION	GIRDER NO.	NO. REQ'D	BRG. TYPE	PLAN & ELEV.	TOP BOLSTER PL Tu	Wu	Lu	BOTT. BOLSTER PL Tc	Wc	Lc	ANCHOR BOLT Bw	BL	Ø	d	g	PL	q	r	SL	u	v	y	h	HB	HE
016-1066	22(N)	G1,G2,G3	3	II	A	1½	12	26½	1½	12	24	–	9½	1½	5½	–	2½	2½	5	2½	3	1¼	8	5¼	8⅜	8½
	1	G1	1	F3	B	2	14	33	2½	14	32	4½	13½	1½	9¼	–	2½	4¼	3½	2¾	–	–	–	7	11⅝	15½
		G2,G3	2	F3	B	2	14	33	2½	14	32	4½	13½	1½	9¼	–	2½	4¼	3½	2¾	–	–	–	8½	13⅛	15½
	2	G1,G3	2	E1	C	2	15	34	2½	15	32	–	13½	1½	9¼	–	2½	4	5	2¾	–	–	–	5	9⅝	21

FILE NAME =	USER NAME = rgall	DESIGNED - AMR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BOLSTER DETAILS – LOCATION 5 STRUCTURE NO. 016-1066
		DRAWN - AMR	REVISED -		
	PLOT SCALE = 1.0000 ' / IN.	CHECKED - JMH	REVISED -		SCALE: NTS SHEET NO. 7 OF 7 SHEETS STA. TO STA.
	PLOT DATE = 3/28/2011	DATE - MARCH, 2011	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	2010-127-BP	COOK	160	100
		CONTRACT NO. 60N01		
	ILLINOIS FED. AID PROJECT			

$FILE%