

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

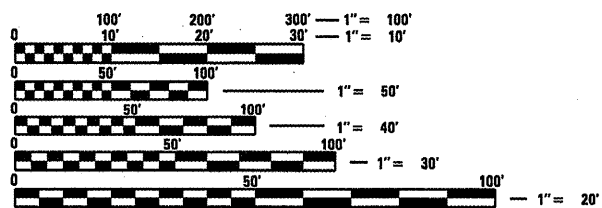
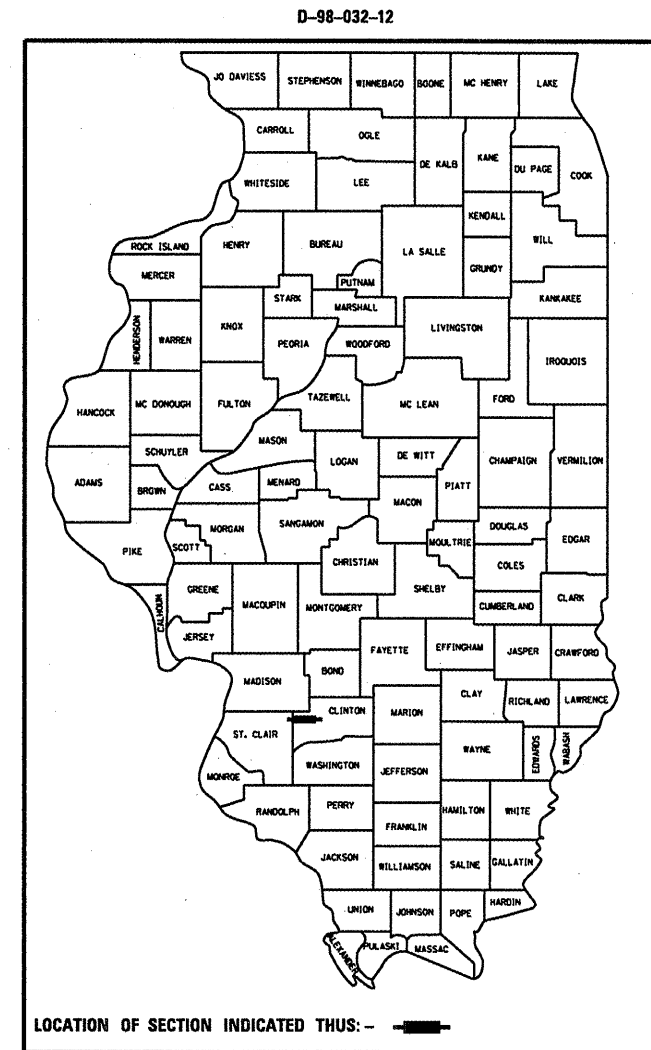
FAP ROUTE 327/FAP 690 (ST. ROSE ROAD/IL 160)
SECTION 14-14HB-P, 14-12BR-P

BRIDGE PAINTING
CLINTON COUNTY

C-98-036-12

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327/690	14-14HB-P, 14-12BR-P	CLINTON	12	1
		ILLINOIS	CONTRACT NO. 76F43	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

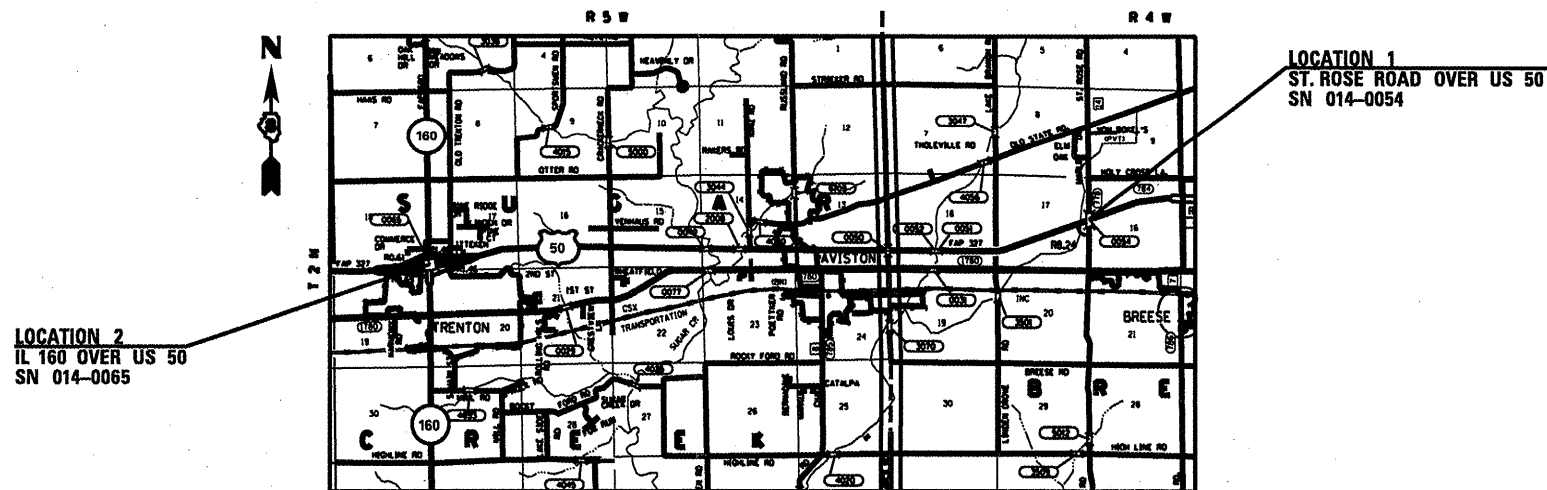


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

PROJECT ENGINEER: PATTI LeBEAU (618) 346-3179
PROJECT MANAGER: REBECCA THARP (618) 346-3323

CONTRACT NO. 76F43



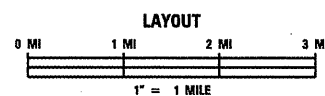
LOCATION 2
IL 160 OVER US 50
SN 014-0065

LOCATION 1
ST. ROSE ROAD OVER US 50
SN 014-0054

TRAFFIC DATA

LOCATION 1
2010 ADT = 3700 (ACTUAL)
2032 ADT = 4600 (ESTIMATED)

LOCATION 2
2011 ADT = 5350 (ACTUAL)
2032 ADT = 5600 (ESTIMATED)
SU = 2.8%
MU = 2.4%



LOCATION 1:
LATITUDE: 38.6197
LONGITUDE: -89.5538

LOCATION 2:
LATITUDE: 38.6128
LONGITUDE: -89.6871

DESIGN DESIGNATION:
N/A

LOCATION 1
GROSS LENGTH = 0.041 MILE
NET LENGTH = 0.041 MILE

LOCATION 2
GROSS LENGTH = 0.035 MILE
NET LENGTH = 0.035 MILE

TOTAL
GROSS LENGTH = 0.076 MILE
NET LENGTH = 0.076 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED December 21 20 11
Jan M. Thomas
ACTING DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER

Feb 3 20 12
John D. Baranzelli P.E. Jr
ACTING ENGINEER OF DESIGN AND ENVIRONMENT

Feb 3 20 12
William R. Fley Jr
ACTING DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

INDEX OF SHEETS

- 1 COVER SHEET
- 2 GENERAL NOTES, STANDARDS, INDEX OF SHEETS, COMMITMENTS
- 3 SUMMARY OF QUANTITIES
- 4 LOCATION MAP
- 5-8 EXISTING STRUCTURE PLANS - LOCATION 1 - SN 014-0054
- 9-12 EXISTING STRUCTURE PLANS - LOCATION 2 - SN 014-0065

COMMITMENTS

NONE

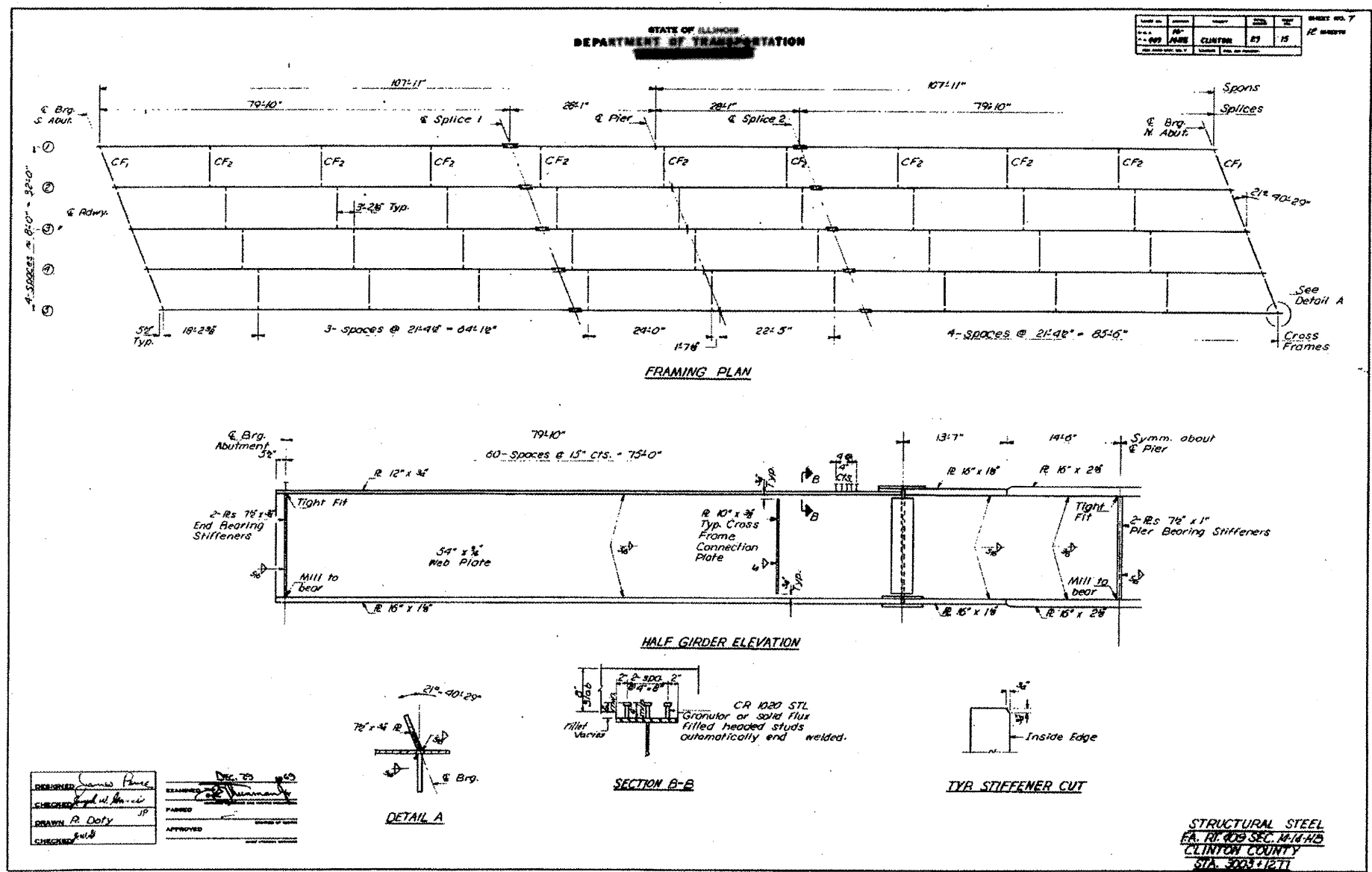
GENERAL NOTES

- 1 LOCATION 1: SN 014-0054, LOCATED AT ST. ROSE ROAD OVER U.S. ROUTE 50, NEAR BREESE
 - 2 LOCATION 2: SN 014-0065, LOCATED AT IL ROUTE 160 OVER U.S. ROUTE 50, IN TRENTON
 - 3 AT LOCATIONS 1 & 2: CLEANING AND PAINTING OF THE EXISTING STRUCTURAL STEEL AND BEARINGS SHALL BE AS SPECIFIED IN THE SPECIAL PROVISION FOR "CLEANING AND PAINTING EXISTING STEEL STRUCTURES." ALL EXISTING STEEL AND BEARINGS SHALL BE CLEANED PER "NEAR WHITE BLAST CLEANING -SSPC-SP10." ALL EXISTING STEEL AND BEARINGS SHALL BE PAINTED ACCORDING TO THE REQUIREMENTS OF "PAINT SYSTEM 1-OZ/E/U." THE COLOR OF THE FINAL FINISH COAT FOR ALL STRUCTURAL STEEL SURFACES AND BEARINGS SHALL BE GREY MUNSELL NO. 5B 7/1.
 - 4 A MINIMUM OF TWO AIR MONITORS WILL BE REQUIRED AT LOCATION 1, AND A MINIMUM OF ONE AIR MONITOR WILL BE REQUIRED AT LOCATION 2 TO MONITOR ABRASIVE BLASTING OPERATION AT EACH BRIDGE. SEE SPECIAL PROVISIONS FOR "CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES."
 - 5 THE SSPC-QP1 AND SSPC-QP2 CERTIFICATIONS WILL BE REQUIRED FOR ALL BRIDGES.
 - 6 ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES WITHIN THE PROJECT AREA BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:
 - AT&T ILLINOIS
 - CHARTER COMMUNICATIONS, INC
 - CLINTON COUNTY ELECTRIC COOPERATIVE, INC.
 - ST. ROSE PUBLIC WATER DISTRICT
 - CITY OF TRENTON
 - TRI-TOWNSHIP WATER DISTRICT
- MEMBERS OF J.U.L.I.E. CALL TOLL FREE (800) 892-0123 OR 811 AND ARE INDICATED BY *.
NON- J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.
- 7 ONE (1) ADDITIONAL "ROAD CONSTRUCTION AHEAD" (WITH ARROW) SIGN SHALL BE REQUIRED FOR THE ENTRANCE/EXIT RAMP FROM ST. ROSE ROAD. THE COST SHALL BE INCLUDED IN THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION, STANDARD 701201."
 - 8 ALL TURF AREAS DISTURBED BY THE CONTRACTOR SHALL BE SEEDED WITH THE APPROPRIATE EROSION CONTROL AS DIRECTED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
 - 9 ANY ADDITIONAL FLAGGER NEEDED FOR THE ENTRANCE/EXIT RAMP FROM ST. ROSE ROAD SHALL BE PAID FOR ACCORDING TO ARTICLE 109.04.

STANDARDS

- 000001-06
- 701001-02
- 701006-03
- 701101-02
- 701106-02
- 701201-04
- 701422-04
- 701901-02

FILE NAME =	USER NAME = challandeske	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES, STANDARDS, INDEX OF SHEETS, COMMITMENTS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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	PLOT SCALE = 100.0000' / 1" =	CHECKED -	REVISED -			CONTRACT NO. 76F43					
	PLOT DATE = 12/23/2011	DATE -	REVISED -			SCALE: NONE	SHEET NO. OF SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	



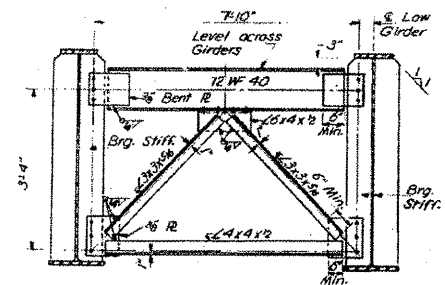
DESIGNED	James P. Hume	DATE	12/28/2011
CHECKED	R. Doty	BY	JP
DRAWN	R. Doty	APPROVED	
CHECKED	R. Doty		

LOCATION 1
SN 014-0054
NO SCALE

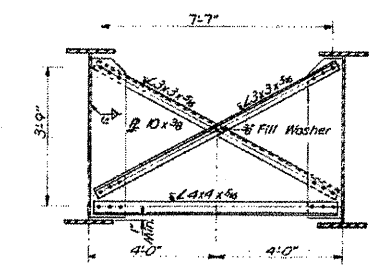
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ca:\pwr\work\psd\dot\challandeska\08287912	challandeska	DRAWN	REVISED			327/690	14-14HB-P, 14-12BR-P	CLINTON	12	6
		CHECKED	REVISED			SCALE: NONE	SHEET NO. OF SHEETS	STA.	TO STA.	CONTRACT NO. T6F43
		DATE	REVISED			FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	CLINTON	29	45
SHEET NO.	12 SHEETS		



CROSS FRAME I
6 REQUIRED

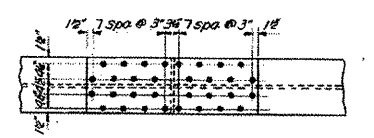
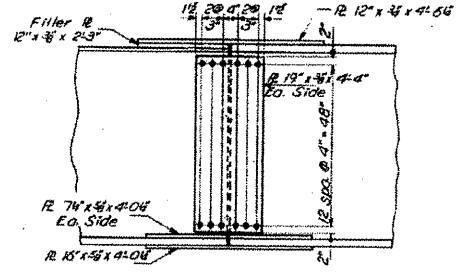
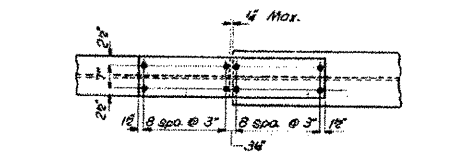


CROSS FRAME 2
36 REQUIRED

*TOP OF WEB ELEVATIONS

Location	Girder	1	2	3	4	5
6 Brg. S. Abut.		489.029	489.192	489.329	489.216	489.029
6 Splice 1		489.139	489.291	489.410	489.291	489.139
6 Pier		489.139	489.291	489.410	489.291	489.139
6 Splice 2		489.139	489.291	489.410	489.291	489.139
6 Brg. N. Abut.		489.076	489.216	489.329	489.192	489.029

* For Fabrication only.



FIELD SPLICE

DESIGNED: *[Signature]*
CHECKED: *[Signature]*
DRAWN: *[Signature]*
DATE: Dec 23, 1990

STRUCTURAL STEEL
F.A. RT. 409 SEC. 14-11-112
CLINTON COUNTY
STA. 3003+12.11

LOCATION 1
SN 014-0054
NO SCALE

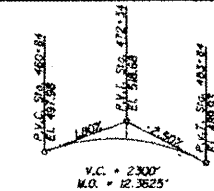
FILE NAME: <i>challengeska\08287812</i>	USER NAME: <i>challengeska</i>	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS - SN 014-0054	F.A.P. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:	
		DRAWN: -	REVISED: -			327/690	14-14B-P, 14-12BR-P	CLINTON	12	7	
		CHECKED: -	REVISED: -			SCALE: NONE	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 76F43		
		DRAWN: <i>R. Doty</i>	REVISED: -			FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT					

PROPOSED IMPROVEMENTS

1. Replace expansion joints of the abutments.
2. Hydroscarify deck 1/2" and install 2 1/2" microsilica overlay.
3. Perform full depth deck patching.
4. Replace deteriorated diaphragms of abutments.
5. Replace steel tracter bearings of abutments with elastomeric.
6. Patch/extend existing floor drains.
7. Repair abutments.
8. Substructure repairs.

INDEX OF SHEETS

1. General Plan & Elevation
2. Slope Construction Details
3. Repair Details
4. Deck Slab Repair
5. Superstructure Concrete Removal
6. Superstructure Details
7. Superstructure Details
8. Prefabricated Joint Strip Seal
9. Floor Drain Details
10. Structural Steel Details
11. Bearing Details
12. Abutment Concrete Repair Details
13. Pier Concrete Repair Details
14. Bar Splice Details



EXISTING PROFILE GRADE

(Along F.A.P. 690 P.G.)
(From Existing Plans)

DESIGN STRESSES

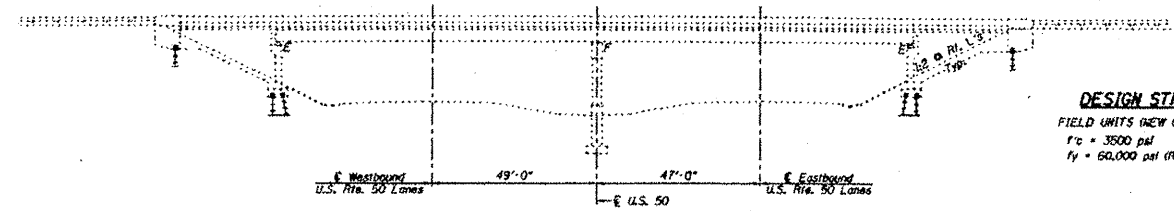
FIELD UNITS (NEW CONSTRUCTION)
F_c = 3000 psi
F_y = 60,000 psi (Reinforcement)

TOTAL BILL OF MATERIAL

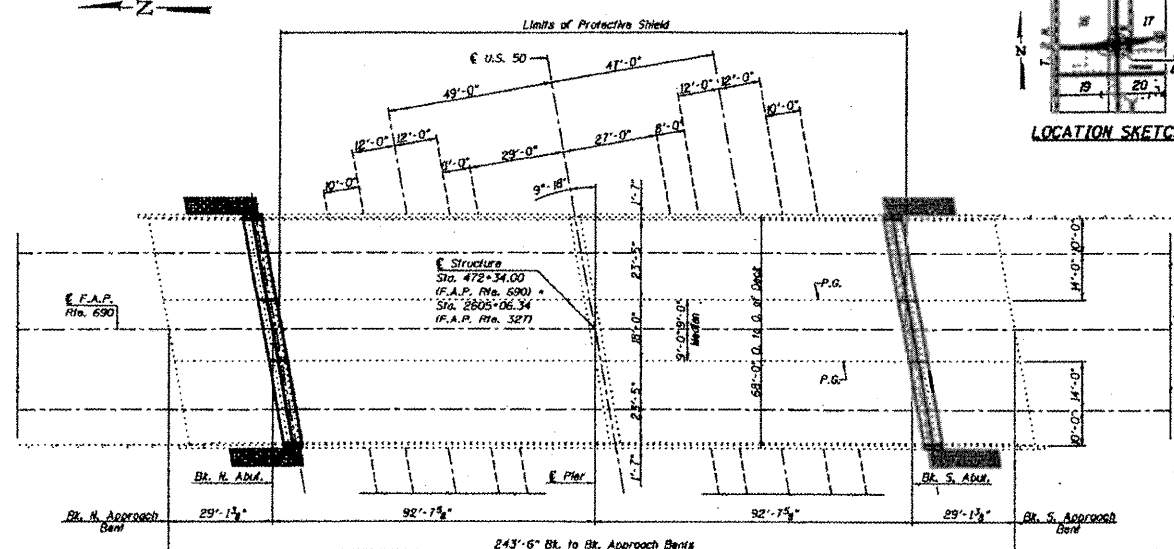
ITEM	UNIT	SUPER	SUB	TOTAL
Shore Riprap, Class A3	Sq. Yd.		50	50
Filter Fabric	Sq. Yd.		50	50
Hot Mix Asphalt Surface Removal, 1 1/2"	Sq. Yd.	1136		1136
Concrete Removal	Cu. Yd.	27.9		27.9
Protective Slab	Sq. Yd.	1374		1374
Concrete Superstructure	Cu. Yd.	27.5		27.5
Bridge Deck Grooving	Sq. Yd.	900		900
Floor Drain Extension	Each	4		4
Reinforcement Bars, Epoxy Coated	Pounds	3655		3655
Bar Splice	Each	40		40
Prefabricated Joint Strip Seal	Feet	158		158
Elastomeric Bearing Assembly, Type I	Each	18		18
Anchor Bolts, 1"	Each	36		36
Protective Coat	Sq. Yd.	1877		1877
Polymer Concrete	Cu. Ft.	4.0		4.0
Furnishing and Erecting Structural Steel	Pounds	8340		8340
Structural Repair of Concrete (Lengths Equal to or Less than 5')	Sq. Ft.		721	721
Bridge Deck Microsilica Concrete Overlay, 2 1/2"	Sq. Yd.	1096		1096
Pre-Existing Deck Drains	Each	4		4
Jack and Remove Existing Bearings	Each	18		18
Bridge Deck Hydro-scarification, 1/2"	Sq. Yd.	1096		1096
Cleaning Bridge Seals	Sq. Ft.		236	236
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	49.3		49.3
Structural Steel Removal	Pounds	4700		4700

GENERAL NOTES

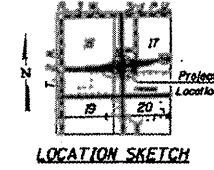
Fasteners shall be AASHTO M54 Type I, mechanically galvanized bolts. Bolts 1/2", holes 5/8", unless otherwise noted.
 All structural steel shall be AASHTO M57 Grade 50.
 Reinforcement bars shall conform to the requirements of ASTM A706, Grade 60.
 Reinforcement bars designated (E) shall be epoxy coated.
 The layout of the riprap may be varied to suit ground conditions in the field as determined by the Engineer.
 Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.
 Plan dimensions and details relative to existing plans are subject to normal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
 Cleaning and field painting of structural steel shall be done under a separate painting contract.
 The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
 The existing abutment seats shall be cleaned according to the special provision for "Cleaning Bridge Seats".
 All structural steel shall be shop primed with the Inorganic zinc rich primer per AASHTO M300, Type I. Cost included with Furnishing and Erecting Structural Steel.
 Existing structural steel that will be in contact with new structural steel shall be cleaned and primed prior to erection as required by the Special Provision "Cleaning and Priming Contact Surface Areas of Existing Steel Structures".
 Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.
 Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50°F.
 Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splice or anchorage system. Cost included with Concrete Removal.



ELEVATION



PLAN



LOCATION SKETCH



**GENERAL PLAN & ELEVATION
 ILL. ROUTE 140 OVER U.S. ROUTE 50
 S.N. 014-0065**

Allen Henderson & Associates, Inc. Civil and Structural Engineers Springfield, IL 82708 Phone: (317)644-8088 IL Design Firm No. 194-01897	SHEET NO. 1 14 SHEETS	F.A.P. RTE. 690	SECTION 14-12BR-1	COUNTY CLINTON	TOTAL SHEETS 72	SHEET NO. 21
	CONTRACT NO. 76B27 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

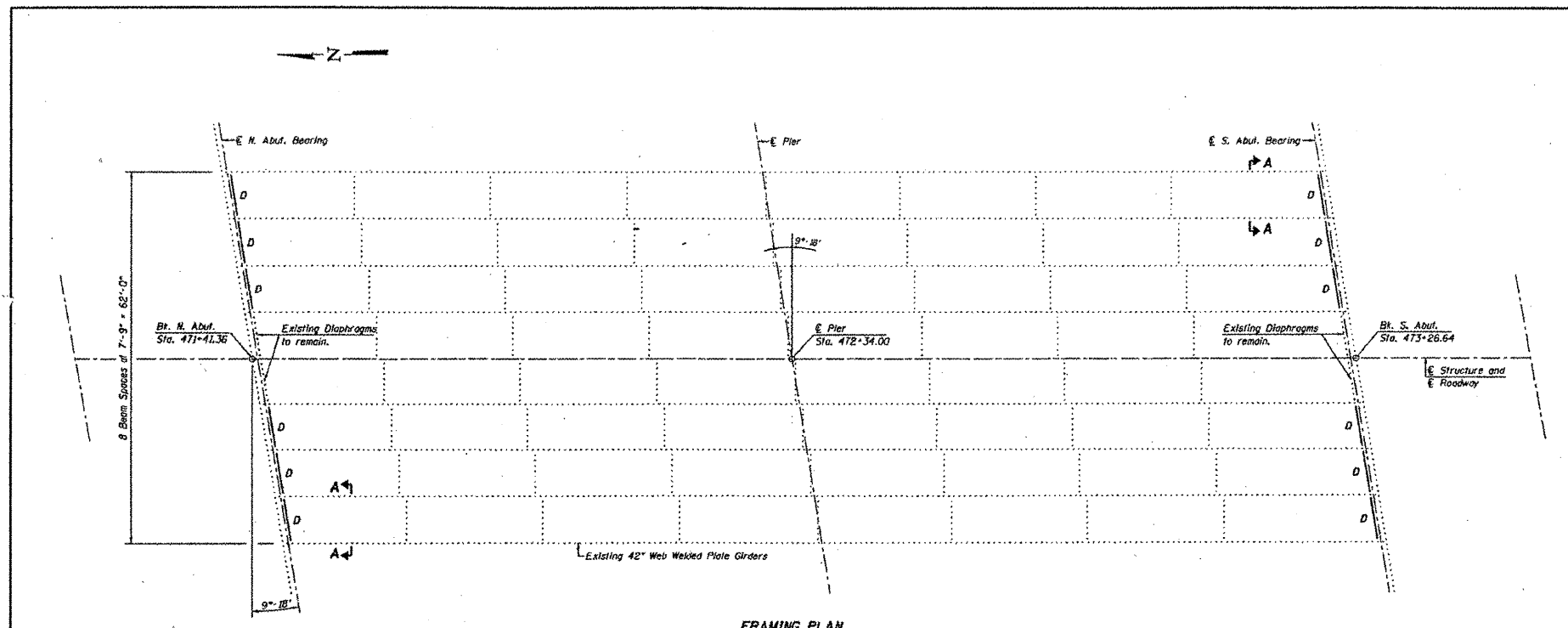
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		DRAWN	REVISED
		CHECKED	REVISED
		DATE	REVISED

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS - SN 014-0065
 SCALE: NONE
 SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327/690	14-14NB-P, 14-12BR-P	CLINTON	12	9
CONTRACT NO. 76F43				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

LOCATION 2
 SN 014-0065
 NO SCALE

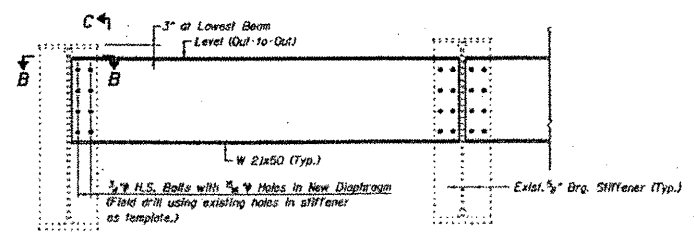


FRAMING PLAN

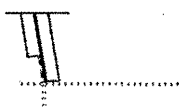
Diaphragm connection holes shall be $\frac{5}{8}$ " for $\frac{3}{4}$ " bolts. Two hardened washers shall be required at each diaphragm connection.

BILL OF MATERIAL

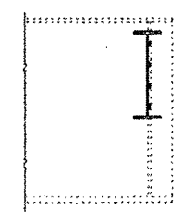
Item	Unit	Total
Furnishing and Erecting Structural Steel	Found	4770
Structural Steel Removal	Found	4770



SECTION A-A
(Diaphragm "D" - 12 Required)



SECTION B-B



SECTION C-C

STRUCTURAL STEEL DETAILS
IL. ROUTE 160 OVER U.S. ROUTE 90
SN. 014-0065

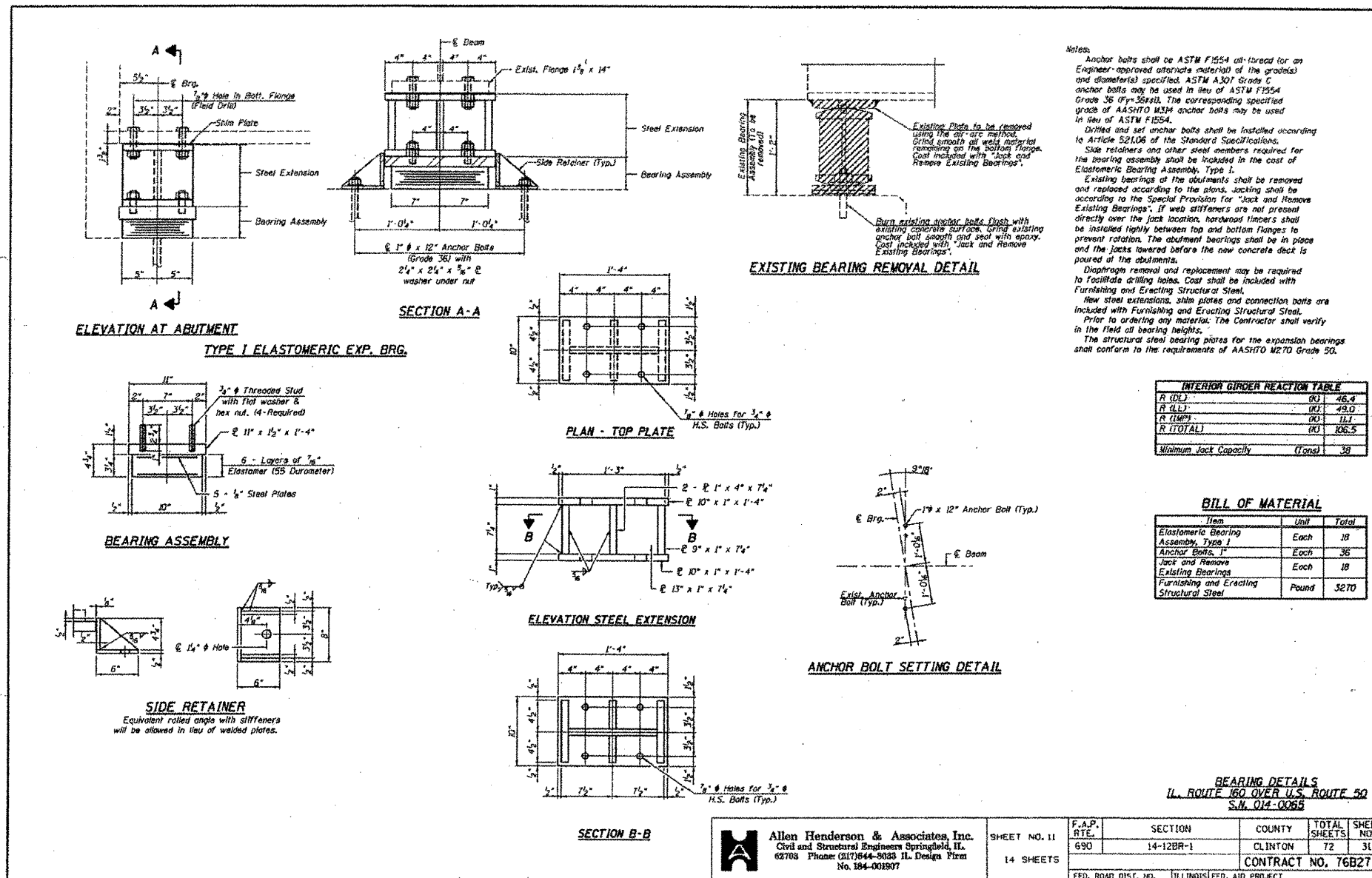
Allen Henderson & Associates, Inc.
Civil and Structural Engineers Springfield, IL.
62703 Phone: (217) 944-8033 IL Design Firm
No. 184-001907

SHEET NO. 10
14 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
690	14-12BR-1	CLINTON	72	30
CONTRACT NO. 76B27				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

LOCATION 2
SN 014-0065
NO SCALE

FILE NAME	USER NAME	DESIGNED	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS - SN 014-0065	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
at\pwwork\pwwork\challengedsk\08287812	challengedsk	-	-			327/690	14-14HB-P, 14-12BR-P	CLINTON	12	10
	0876F43-shr-east-2.dgn	DRAWN	REVISED							
	PLOT SCALE = 1/8" = 1'-0"	CHECKED	REVISED							
	PLOT DATE = 12/28/2011	DATE	REVISED							
						SCALE: NONE	SHEET NO. OF SHEETS	STA.	TO STA.	
						CONTRACT NO. 76F43				
						FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



Allen Henderson & Associates, Inc.
Civil and Structural Engineers Springfield, IL.
62703 Phone: (317)844-8033 IL. Design Firm
No. 184-001907

SHEET NO. 11
14 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
690	14-12BR-1	CLINTON	72	31
CONTRACT NO. 76B27				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

FILE NAME	USER NAME	DESIGNED	REVISED
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PLOT SCALE	DRAWN	REVISOR	REVISION
1/8" = 1'-0"	-	-	-
PLOT DATE	CHECKED	DATE	DATE
12/28/2011	-	-	-

DESIGNED	REVISOR
DRAWN	REVISION
CHECKED	DATE
DATE	DATE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

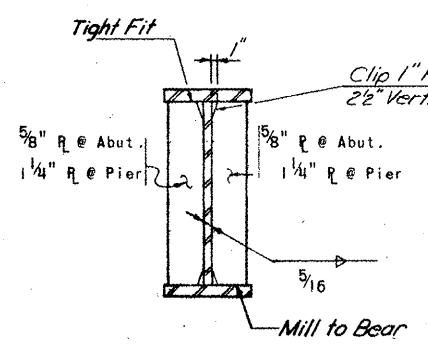
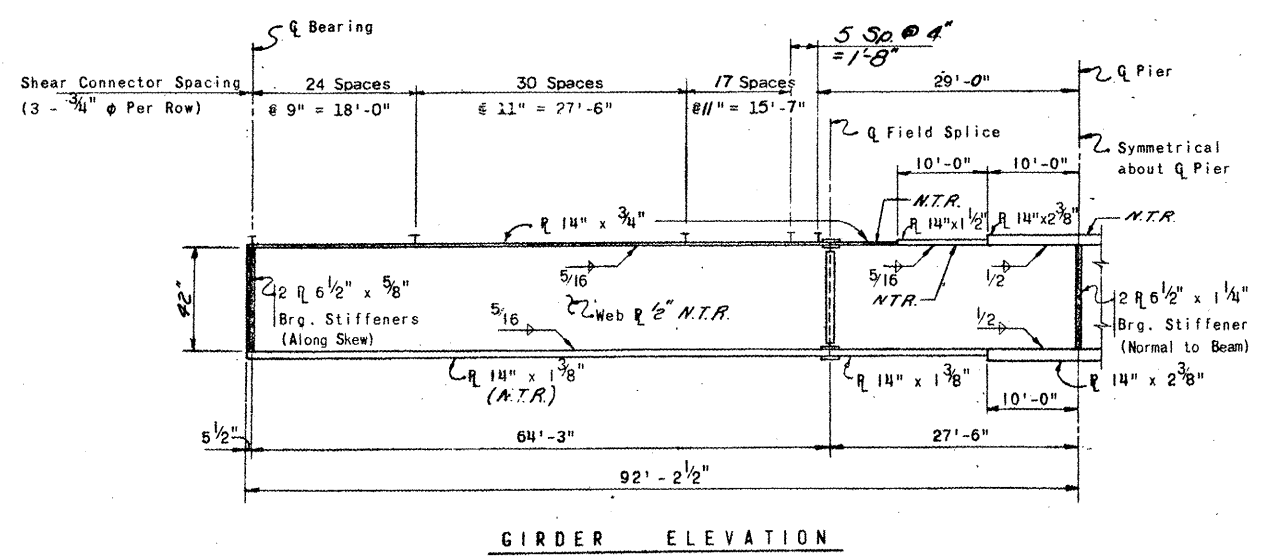
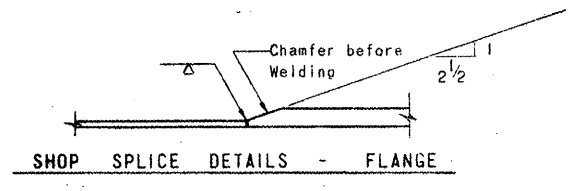
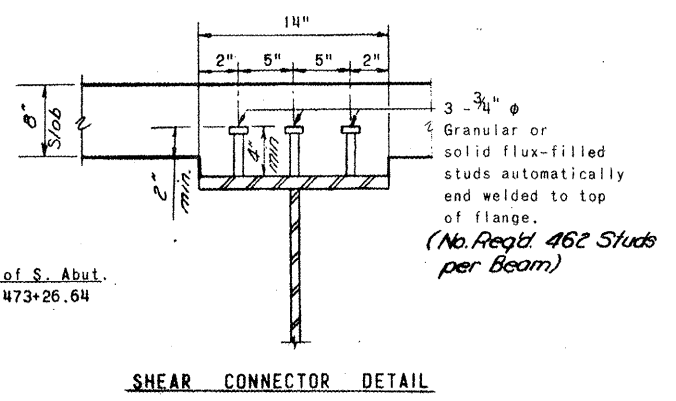
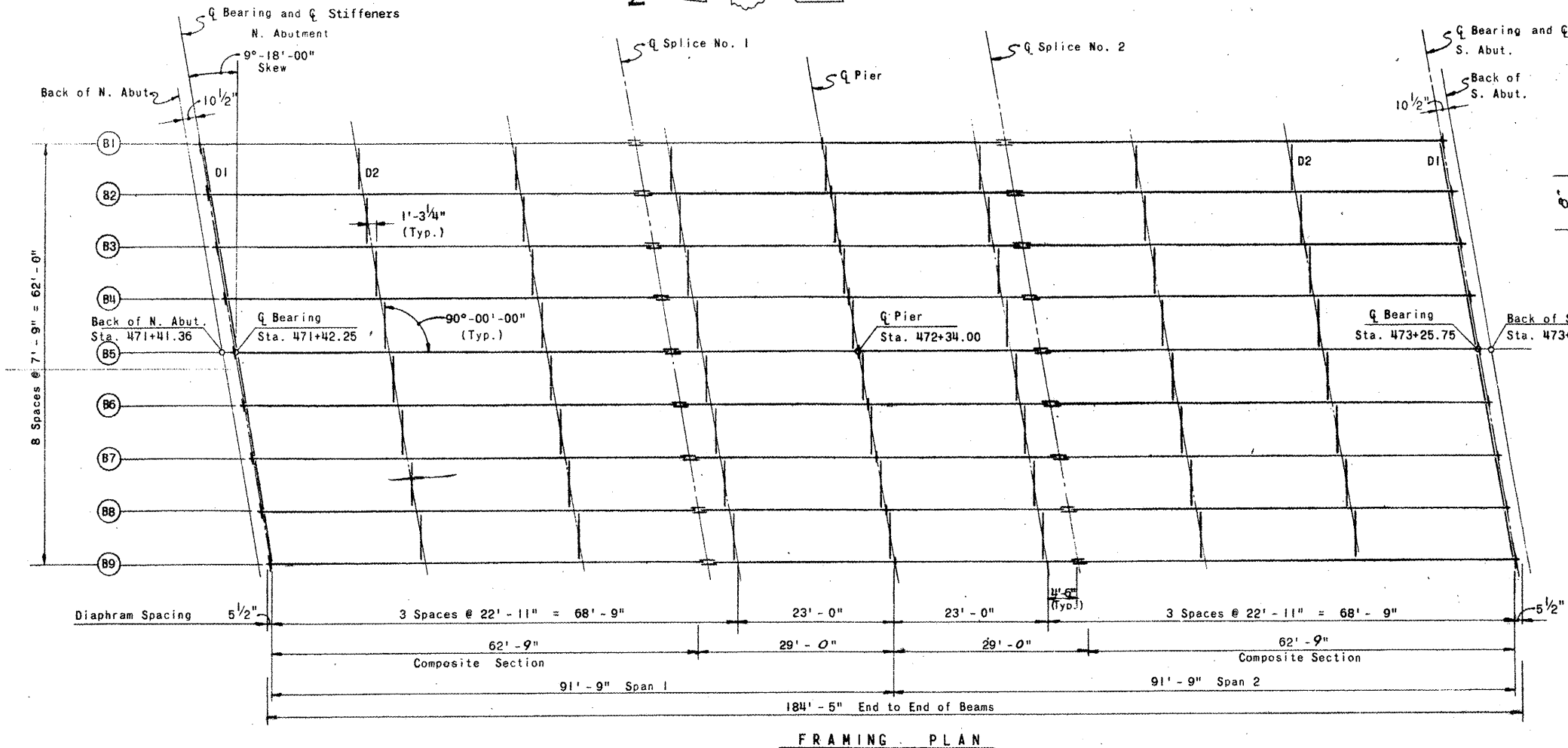
EXISTING STRUCTURE PLANS - SN 014-0065
SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327/690	14-14MB-P, 14-12BR-P	CLINTON	12	11
CONTRACT NO. 76F43				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

LOCATION 2
SN 014-0065
NO SCALE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION
FA409	14-12HB
FNWA	REG. NO. 41



EXISTING INTERIOR DIAPHRAGMS ARE W16x36
EXISTING END DIAPHRAGMS ARE W21x50

LOCATION 2
SN 014-0065
NO SCALE

FILE NAME c:\p\work\p\dot\challenged\02287812	USER NAME challenged	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STRUCTURE PLANS - SN 014-0065	F.A.P. RTE. 327/690	SECTION 14-14HB-P, 14-12BR-P	COUNTY CLINTON	TOTAL SHEETS 12	SHEET NO. 12	
						SCALE: NONE	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 76F43		
						FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					