#72702 #62 09-21-01 F.A.RTE. 55(I-55) Montgomery County Sect.(68-5HB-1)BR I & R Copy #62

95%
5-18-2002

62

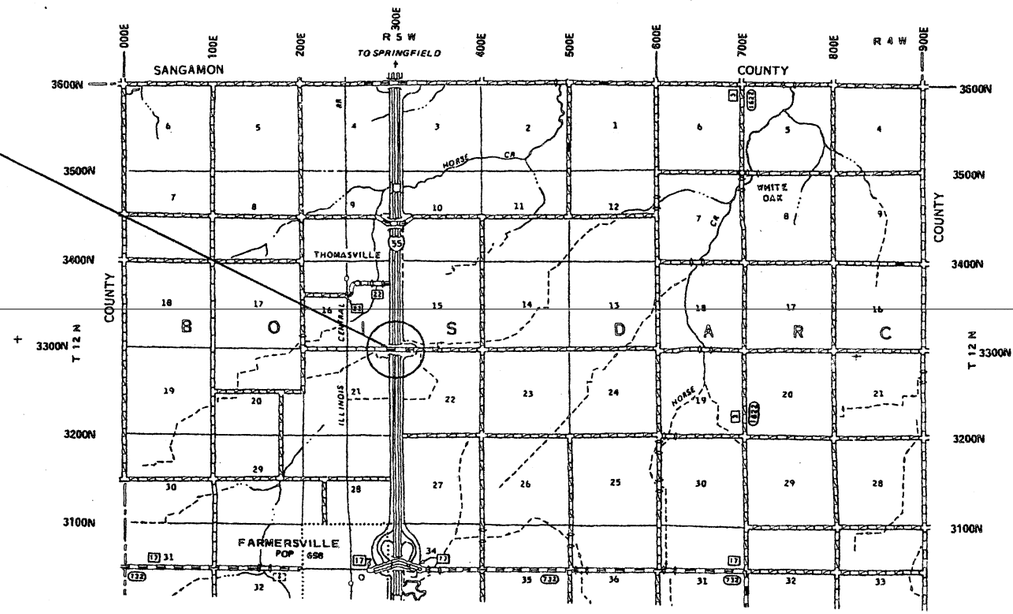
FOR INDEX OF SHEETS AND HIGHWAY STANDARDS, SEE SHEET 2.

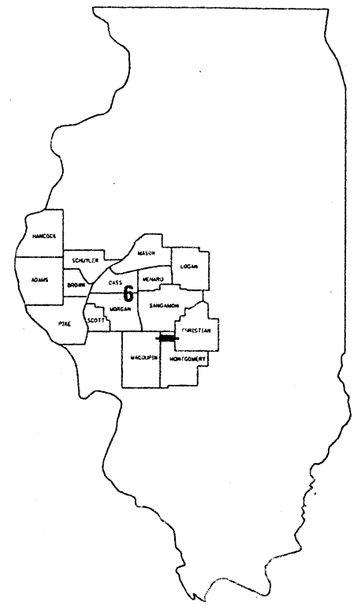
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED MOTORIST CAUSED HIGHWAY DAMAGE CLAIM NO. 657756

FAI ROUTE 55 (I-55)
SECTION (68–5HB–1)BR
MONTGOMERY COUNTY
C96–020–02/ D96–038–01

SN 068-0036





LOCATION OF SECTION INDICATED THUS: —

NET LENGTH OF SECTION = 339.00 FEET = 0.640 MILE

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

BRIDGE ENGINEER – TIM SOUTHER
BRIDGE INSPECTION ENGINEER – DAVE COPENBARGER
PHONE: (217) 785–5303

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED July 12 2001
Victor A. Modeer
DISTRICT ENGINEER

August 17, 2001
Michael Kim
ENGINEER OF DESIGN AND ENVIRONMENT

August 17, 2001
James C. Sylvia
DIRECTOR, DIVISION OF HIGHWAYS

VICTOR ALBERT MODEER
062-043112
REGISTERED PROFESSIONAL ENGINEER
OF
ILLINOIS

SEAL

CONTRACT NO. 72702

068-0036

PRINTED BY AUTHORITY OF THE STATE OF ILLINOIS

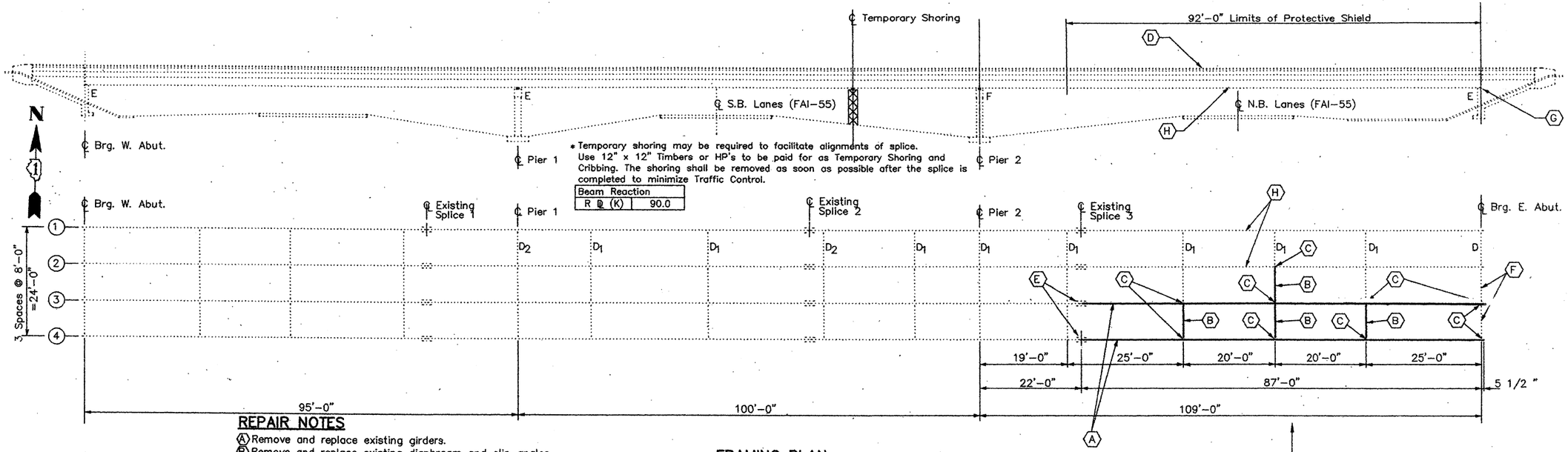
6-262

s:\bridgeplans_cad\72702 - sn 0680 Jun. 22, 2001 10:04:44

9300-0036

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-55(68-5HB-1)BR		MONTGOMERY	12	7
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT:		

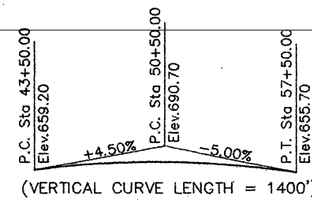
SHEET NO. 1 OF 6



REPAIR NOTES

(A) Remove and replace existing girders.
(B) Remove and replace existing diaphragm and clip angles.
(C) Remove and replace existing H.S. Bolts.(See Note (E) also).
(D) Existing railing to be removed at rail splice near pier 2 and at east abutment as required to clear construction. Provide new rail post anchors in new parapet and re-erect existing railing and posts.
(E) Remove and replace existing web and bottom flange splice plates. Re-use existing top flange splice plates. Remove and replace all H.S. bolts at splices.
(F) Remove and re-use existing end diaphragms, bearing assemblies and bearing extensions. Provide new H.S. bolts at bottom flange of girder at bearing.
(G) Remove and replace anchor bolts and retainer angles at E. Abut.for all four girders.
(H) Grind smooth all knicks and gouges in the bottom flange of beams 1 and 2. Cost included with Furnishing and Erecting Structural Steel.

FRAMING PLAN



(VERTICAL CURVE LENGTH = 1400')

PROFILE GRADE T.R.17

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36 unless otherwise noted.

Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.

Prior to pouring the new concrete for the deck, all loose rust, loose mill scale and other loose potentially detrimental foreign material shall be removed from the surfaces of the girders in contact with concrete. The cost of this work will be included in the pay item Concrete Removal.

All heavy rust and other tightly adhered potentially detrimental foreign matter shall also be removed from the surfaces of the existing steel which is re-used and in contact with concrete. Tightly adhered paint may remain unless otherwise noted. This removal shall be accomplished by methods that will not damage the steel. The cost of this work will be paid for according to Article 109.04 of the Standard Specifications.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work. However, the contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Grind existing nicks, gouges and shallow cracks in the damaged beams as detailed. Ground surfaces shall be inspected for cracks using magnetic particle testing. Cost included with Furnishing and Erecting Structural Steel. Any cracks that cannot be removed by grinding approximately $\frac{1}{4}$" deep shall be identified and reported to the Bureau of Bridges and Structures for futher disposition.

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 plates and attached bars shall be shop painted with the inorganic zinc rich primer. No field paint required.

The inorganic zinc rich primer/acrylic/acrylic paint system shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the acrylic finish coat shall be interstate green, Munsell No.7.5G 4/8. See Special Provisions "Cleaning and Painting New Metal Structures".

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

Existing structural steel shall only be cleaned and painted as required by the Special Provision "Cleaning and Painting Adjacent Areas of Existing Steel Structures".

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the web and bottom flange section and splice plate material for girders 3 and 4 only.

Field welding of construction accessories will not be permitted to the bottom flange of beams or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in others areas will be permitted only when approved by the Engineer.

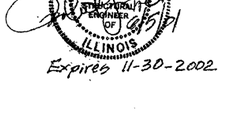
Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

Existing reinforcement extending into the removed 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 splicer or anchorage system. Cost included with Concrete Removal.

Fasteners shall be high strength bolts.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	41.3
Concrete Superstructure	Cu. Yd.	41.3
Furnishing and Erecting Structural Steel	Pound	44,250
Structural Steel Removal	Pound	43,795
Stud Shear Connectors	Each	288
Reinforcement Bars Epoxy Coated	Pound	10,500
Temporary Shoring and Cribbing	L.S.	1
Waterproofing Membrane System	Sq. Yd	144
Bit. SC Super (C) N50	Tons	14
Protective Shield	Sq. Yd	194
Removing and Re-Erecting Existing Railing	Ft.	107
Floor Drains	Each.	7
Protective Coat	Sq. Yd.	33
Mechanical Splice	Each	197



Expires 11-30-2002

REVISIONS	
NAME	DATE

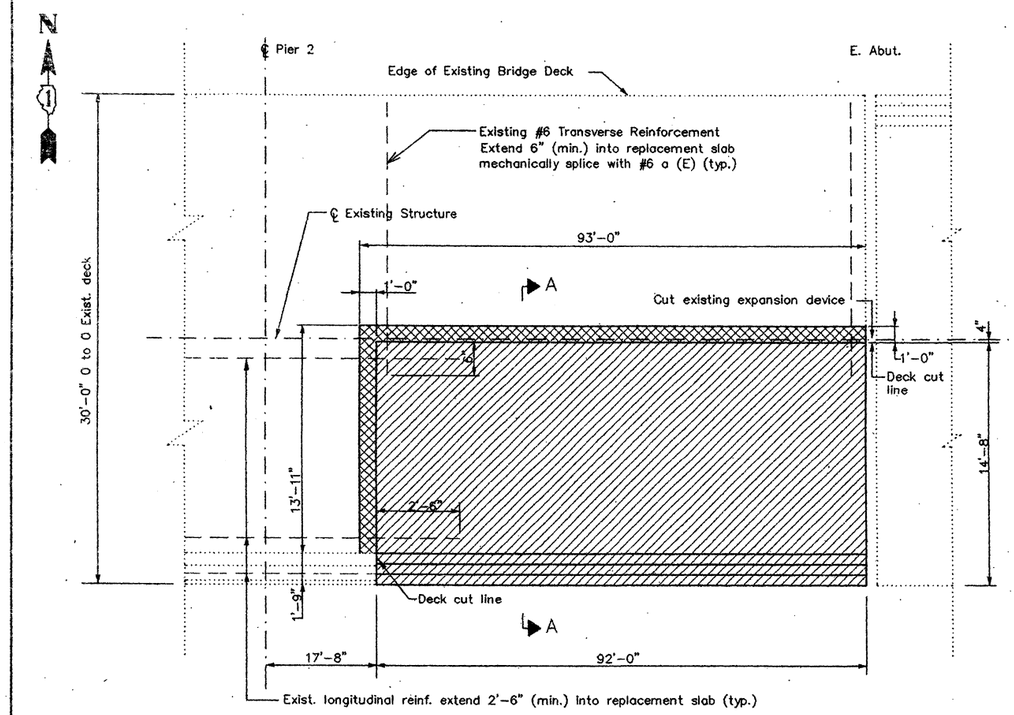
STV Incorporated
Engineers/Architects/Planners/Construction Managers
200 W. Monroe St. Chicago, IL 60606-5015

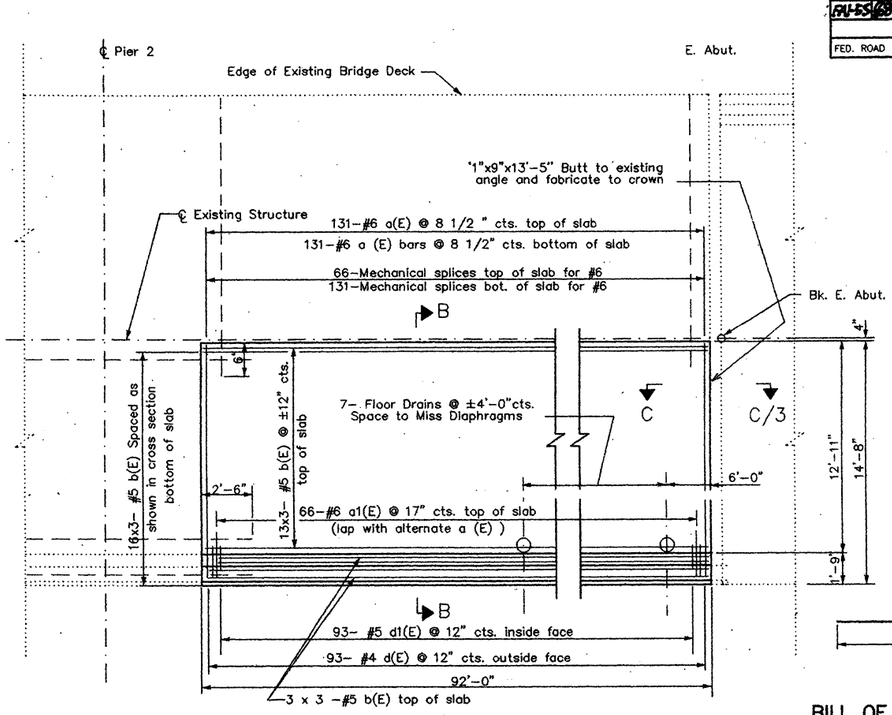
ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION
T.R. 17 OVER F.A.I. RT.55
MONTGOMERY COUNTY
S.N. 068-0036

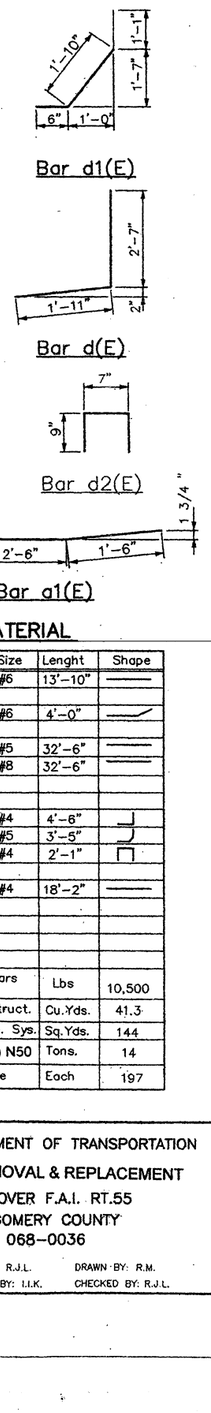
DESIGNED: R.J.L. DRAWN BY: R.M.
DATE: 06/01/01 CHECKED BY: I.I.K. CHECKED BY: R.J.L.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 68	(68-5HB-1) BR	MONTGOMERY	12	8
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT:	

SHEET NO. 2 OF 6







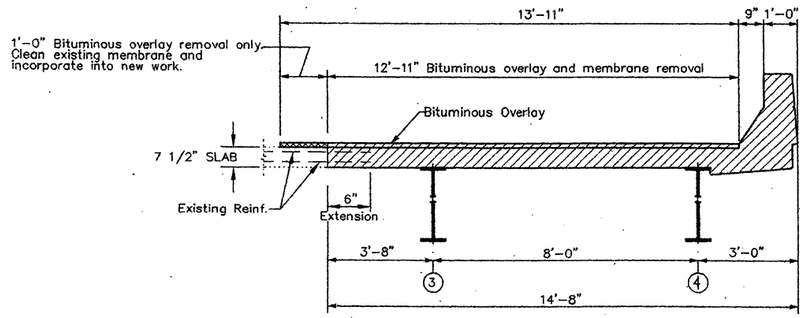
BILL OF MATERIAL

Bar	No.	Size	Lenght	Shape
a(E)	262	#6	13'-10"	
a1(E)	66	#6	4'-0"	
b(E)	96	#5	32'-6"	
b1(E)	6	#8	32'-6"	
d(E)	93	#4	4'-6"	
d1(E)	93	#5	3'-5"	
d2(E)	20	#4	2'-1"	
e(E)	20	#4	18'-2"	
Reinforcement Bars Epoxy Coated		Lbs	10,500	
Concrete Superstruct.		Cu.Yds.	41.3	
Waterproof Memb. Sys.		Sq.Yds.	144	
Bit. SC Super (C) N50		Tons.	14	
Mechanical Splice		Each	197	

ASPHALT AND CONCRETE REMOVAL

CONCRETE REMOVAL (INCLUDES BITUM. OVERLAY & MEMBRANE AND END DAM AT ABUTMENT)

BITUMINOUS OVERLAY REMOVAL ONLY-PRESERVE MEMBRANE.

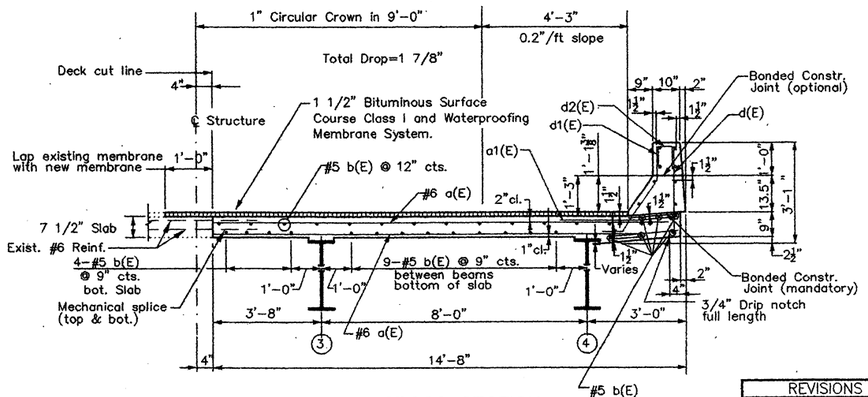


CONCRETE REMOVAL
(Looking East)
SECTION A-A

Note:
See General Notes Sheet 1 for existing reinforcement.

Min. Lap	
#4	2'-0"
#5	2'-5"
#6	2'-7"
#8	2'-9"

CONCRETE REPLACEMENT PLAN



CROSS SECTION
SECTION B-B

REVISIONS	
NAME	DATE

STV Incorporated
Engineers/Architects/Planners/Construction Managers
200 W. Monroe St. Chicago, IL 60606-5015

ILLINOIS DEPARTMENT OF TRANSPORTATION

DECK REMOVAL & REPLACEMENT

T.R. 17 OVER F.A.I. RT.55

MONTGOMERY COUNTY

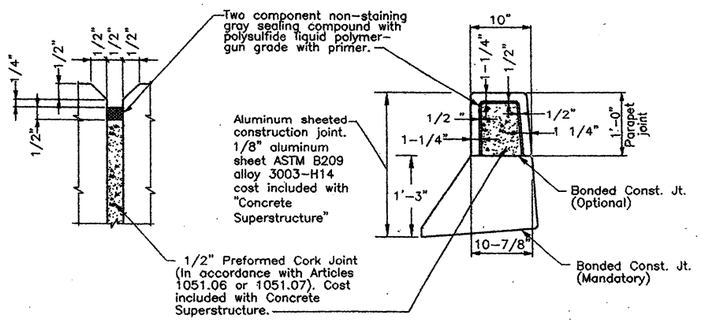
S.N. 068-0036

DESIGNED: R.J.L. DRAWN BY: R.M.

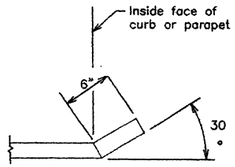
DATE: 06/01/01 CHECKED BY: I.I.K. CHECKED BY: R.J.L.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-55 (I-55 STR-1) BR		MONTGOMERY	12	9
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT:	

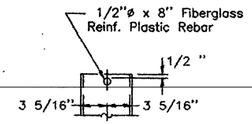
SHEET NO. 3 OF 6



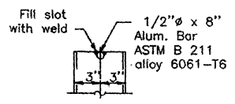
PARAPET JOINT DETAIL



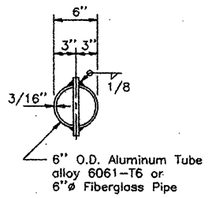
END OF PLATE



FIBERGLASS PIPE

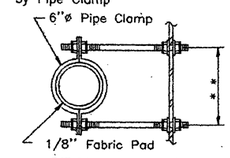


ALUMINUM TUBE

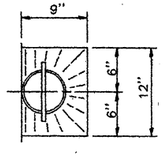


TOP PLAN
(Showing Aluminum Tube)

* * Dimension as required by Pipe Clamp



SECTION C-C

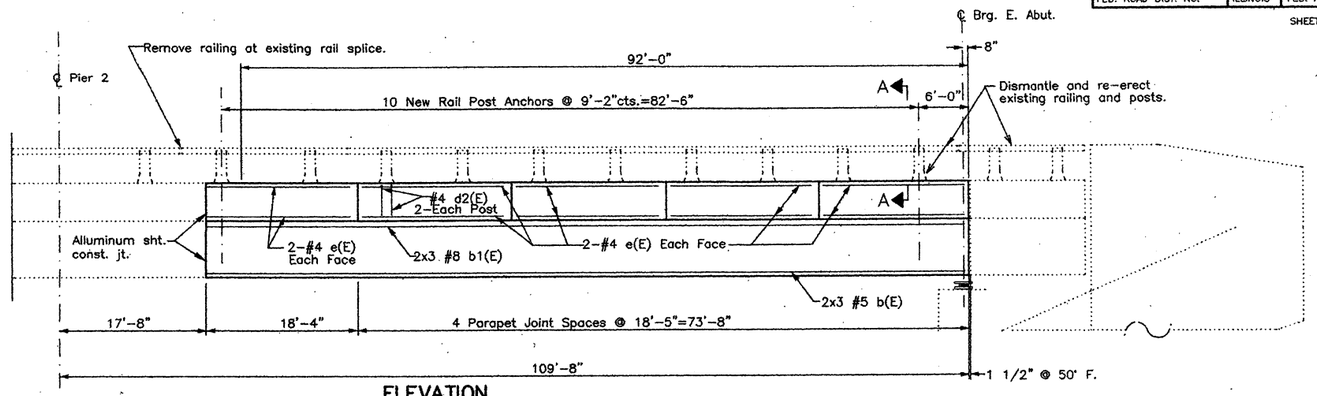


TOP PLAN

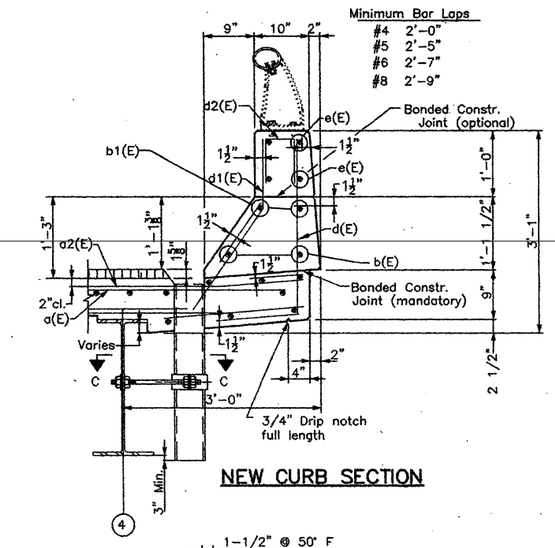
Notes:

The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to Steel Structures Painting Council's Spec. SSPC-SP-1 prior to painting.

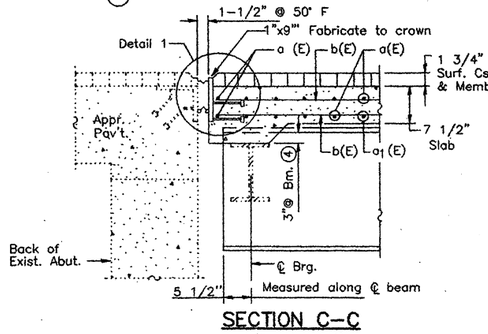
Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.



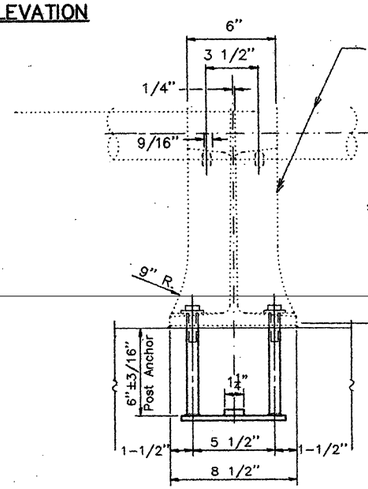
ELEVATION



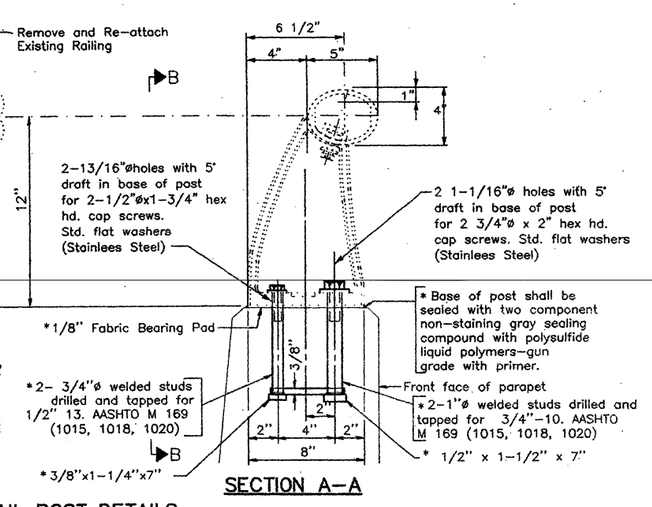
NEW CURB SECTION



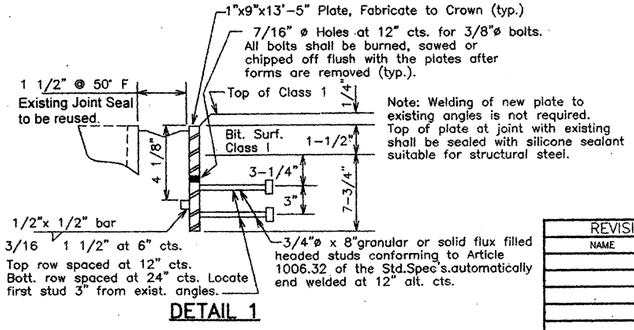
SECTION C-C
(See Sheet 2)



VIEW B-B



RAIL POST DETAILS



Note: Welding of new plate to existing angles is not required. Top of plate at joint with existing shall be sealed with silicone sealant suitable for structural steel.

DETAIL 1

NOTES:

* New Rail Post anchorage device will be required at each location where posts are connected to new construction. Cost to be included with Removing and Re-erecting Existing Railing.

All Posts shall be normal to parapet. Provide 1-1/8 " and 2-1/16 "aluminum Shims. Rail elements shall be parallel to Grade-high spots will be ground and low spots shimmed. Horizontal rail element and rail posts shown are for information only.

REVISIONS	
NAME	DATE

STV Incorporated
Engineers/Architects/Planners/Construction Managers
200 W. Monroe St. Chicago, IL 60606-5015

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

T.R. 17 OVER F.A.I. RT.55

MONTGOMERY COUNTY

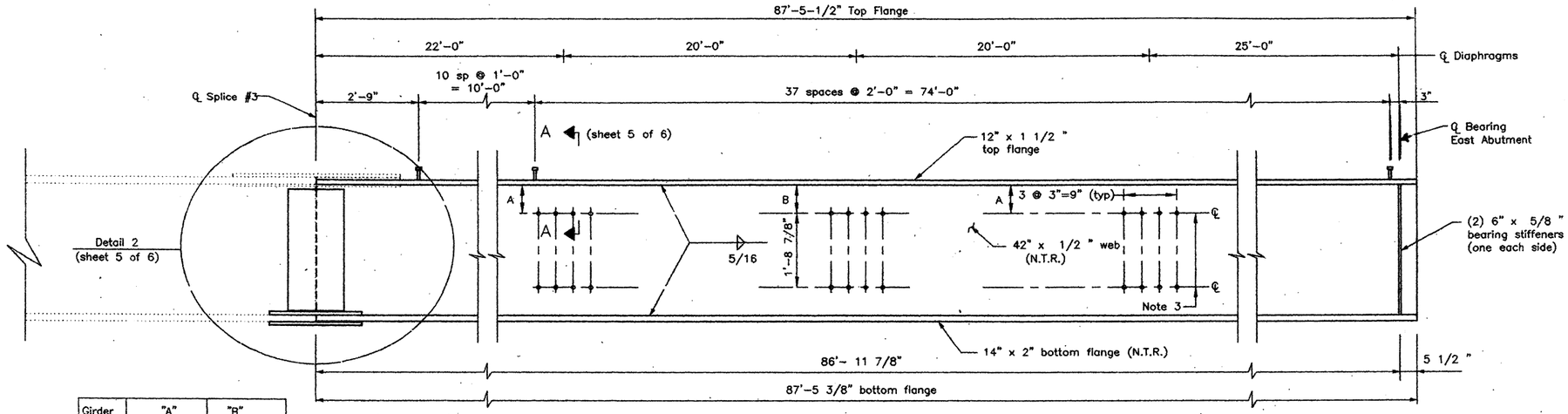
S.N. 068-0036

DESIGNED: R.J.L. DRAWN BY: R.M.

DATE: 06/01/01 CHECKED BY: I.I.K. CHECKED BY: R.J.L.

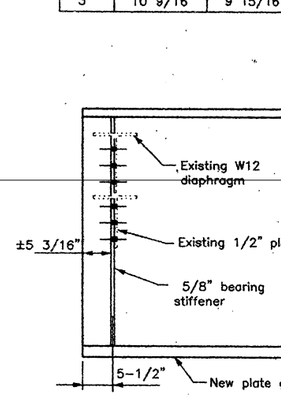
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-55(68-5)BR-1)		MONTGOMERY	12	10
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT:		

SHEET NO. 4 OF 6

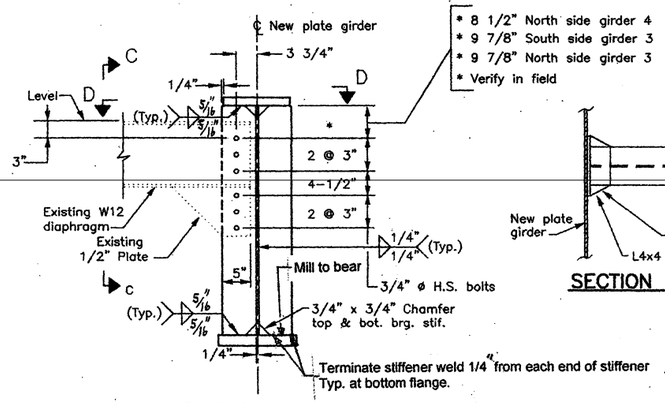


Girder	"A"	"B"
4	10 9/16"	10 9/16"
3	10 9/16"	9 15/16"

SPAN 3 ELEVATION – GIRDERS 3 and 4



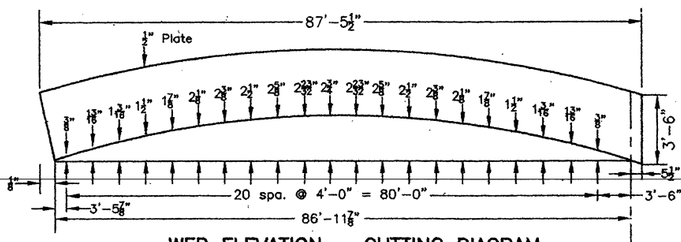
SECTION C–C



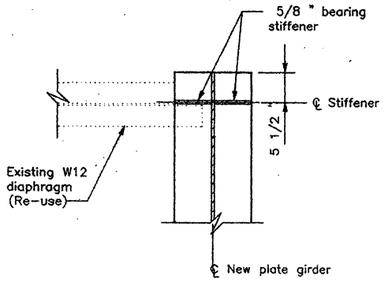
DIAPHRAGM D

(Existing)

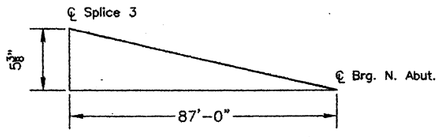
SECTION F–F



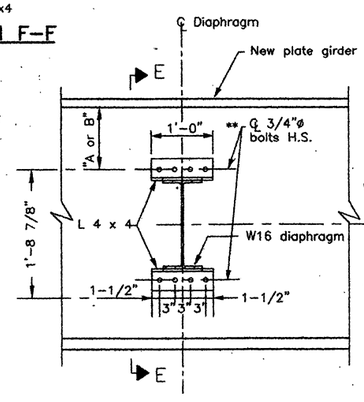
WEB ELEVATION – CUTTING DIAGRAM



SECTION D–D

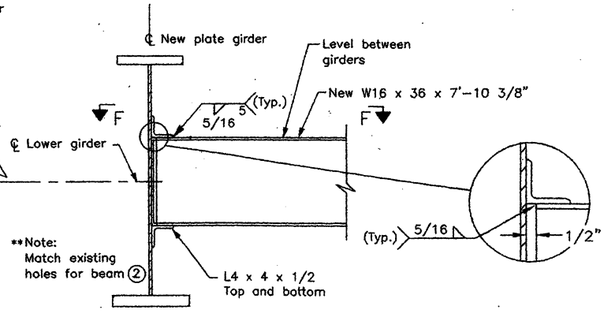


BLOCKING DIAGRAM



INTERIOR DIAPHRAGM D1

(4 required)



SECTION E–E

Notes:

1. (N.T.R.) denotes Notch Toughness Requirements.
2. New holes for 7/8"ø bolts shall be 15/16"ø
3. Holes for steel W diaphragms in girder web shall be 15/16"ø for girder 4 and 15/16" x 2-3/4" vertical slotted holes for girder 3. Holes in diaphragm angles shall be 13/16"ø Provide two hardened washers at all diaphragm connections.
4. Exist. anchor bolts shall be cut off flush with exist. concrete and ground smooth and epoxy sealed.
5. Cost of field drilling included with Furnishing and Erecting Structural Steel.

REVISIONS	
NAME	DATE

STV Incorporated
Engineers/Architects/Planners/Construction Managers
200 W. Monroe St. Chicago, IL 60606-5015

ILLINOIS DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL

T.R. 17 OVER F.A.I. RT.55

MONTGOMERY COUNTY

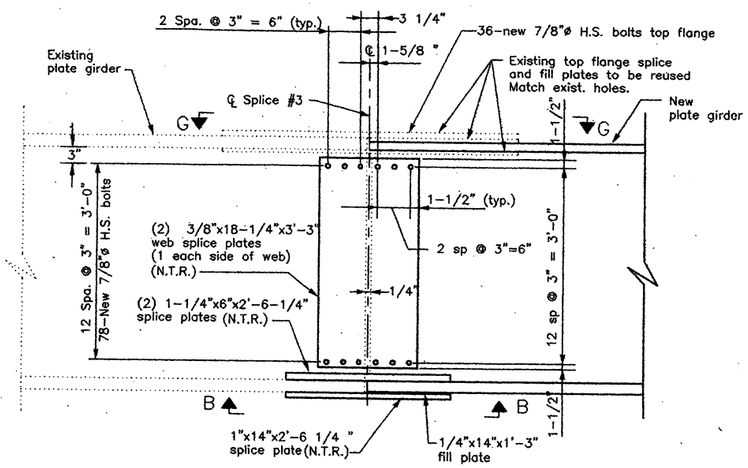
S.N. 068-0036

DESIGNED: R.J.L. DRAWN BY: R.M.

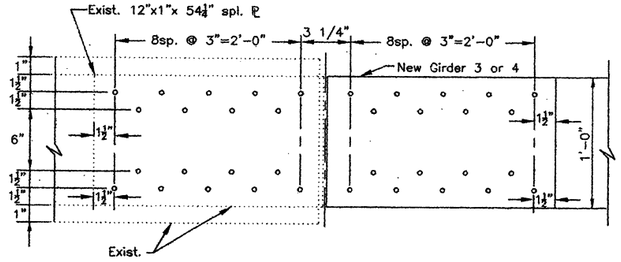
DATE: 06/01/01 CHECKED BY: I.I.K. CHECKED BY: R.J.L.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-55 (68-5HB-1)BR		MONTGOMERY	12	11
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT:		

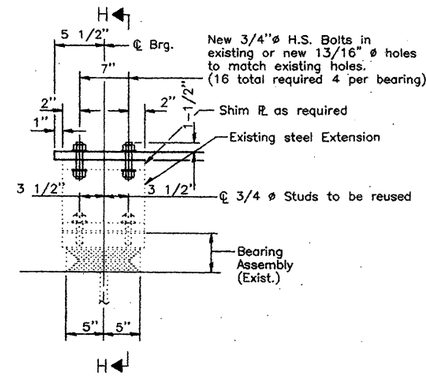
SHEET NO. 5 OF 6



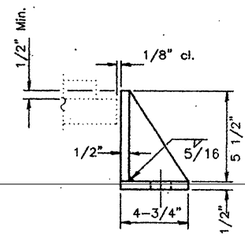
DETAIL 2
(See sheet 4)



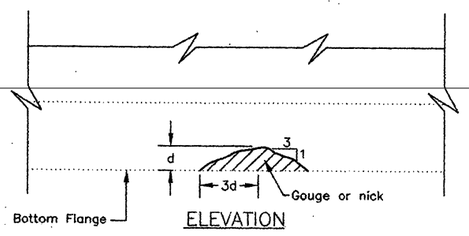
SECTION G–G
(@ Top Flange)



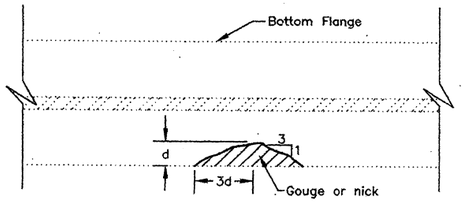
ELEVATION AT E. ABUT.
(Girders 1,2,3 & 4)



SIDE RETAINER
(8 Req'd.)
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plate.

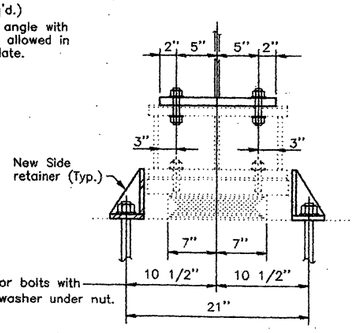


ELEVATION

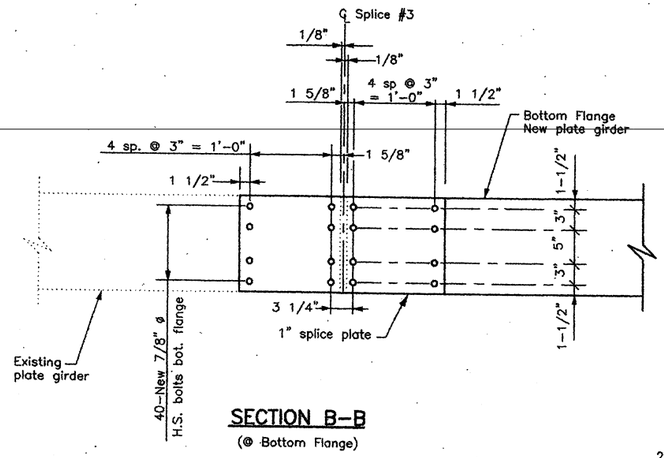


PLAN

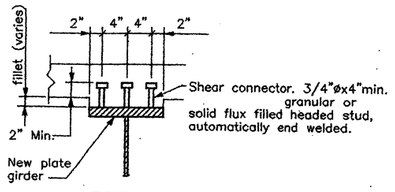
GRINDING DETAIL
(For Beams 1 & 2)



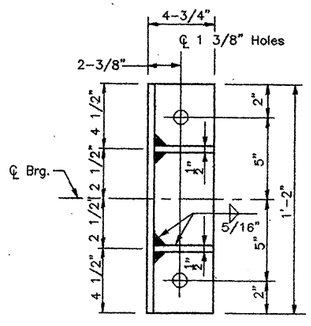
SECTION H–H



SECTION B–B
(@ Bottom Flange)



SECTION A–A



PLAN

REVISIONS NAME	DATE

STV Incorporated
Engineers/Architects/Planners/Construction Managers
200 W. Monroe St. Chicago, IL 60606-5015

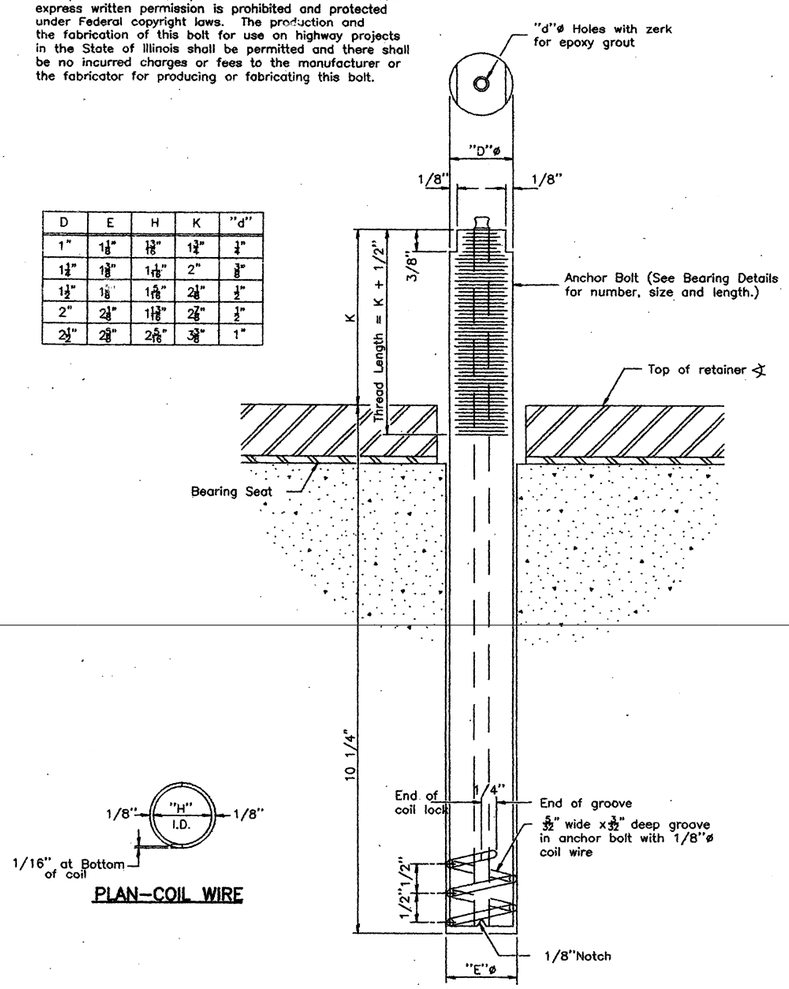
ILLINOIS DEPARTMENT OF TRANSPORTATION
STRUCTURAL STEEL
T.R. 17 OVER F.A.I. RT.55
MONTGOMERY COUNTY
S.N. 068-0036

DESIGNED: R.J.L. DRAWN BY: R.M.
DATE: 06/01/01 CHECKED BY: I.I.K. CHECKED BY: R.J.L.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 55 (68-3UB-1) BR		MONTGOMERY	12	12
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT:		

SHEET NO. 6 OF 6

D	E	H	K	"d"
1"	$1\frac{1}{8}$"	$\frac{13}{16}$"	$1\frac{3}{4}$"	$\frac{1}{4}$"
$1\frac{1}{4}$"	$1\frac{3}{8}$"	$1\frac{1}{16}$"	2"	$\frac{3}{8}$"
$1\frac{1}{2}$"	$1\frac{5}{8}$"	$1\frac{5}{16}$"	$2\frac{1}{8}$"	$\frac{1}{2}$"
2"	$2\frac{1}{8}$"	$1\frac{13}{16}$"	$2\frac{3}{4}$"	$\frac{1}{2}$"
$2\frac{1}{2}$"	$2\frac{5}{8}$"	$2\frac{5}{16}$"	$3\frac{3}{8}$"	1"



PLAN–COIL WIRE

ILLINOIS COIL–LOCK ANCHOR BOLT

MATERIALS FOR ILLINOIS COIL–LOCK ANCHOR BOLT

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

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

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

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

INSTALLATION PROCEDURE for the ILLINOIS COIL–LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

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

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

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

Location	Type
E. Abut.	A307

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

GENERAL NOTES

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

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

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

REVISIONS NAME	DATE

STV Incorporated
Engineers/Architects/Planners/Construction Managers
200 W. Monroe St. Chicago, IL 60606–5015

ILLINOIS DEPARTMENT OF TRANSPORTATION
ANCHOR BOLTS
T.R. 17 OVER F.A.I. RT.55
MONTGOMERY COUNTY
S.N. 068–0036

DESIGNED: R.J.L. DRAWN BY: R.M.
DATE: 06/01/01 CHECKED BY: I.I.K. CHECKED BY: R.J.L.

#35 #92688 2-28-97 FAI 55 Montgomery Co. Sec. 68-5RS I&R Copy #35

35

95.0%
9-13-97

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	68-5RS	MONTGOMERY	71	1
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT*	

*STPI-55-2(112)71

D-96-572-92

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

SCALES { PLAN = 1:500 / PROFILE HORIZ. / PROFILE VERT. / CROSS SECTIONS }

F.A.I. ROUTE 55
SECTION 68-5RS
PROJECT STPI-55-2(112)71
MONTGOMERY COUNTY

C-96-532-95

INDEX OF SHEETS

STANDARDS

BLR-21-4	442101	606301	701006	701326
BLR-23	482006	609001	701011	701401
000001	482101	609006	701101	701406
280001	542201	630001	701106	701411
420001	601001	631031	701201	702001
420601	601101	667101	701301	780001
420701	606001	701001	701311	781001
442001				

METRIC RATIOS

1 in 0 2 in — 1 : 50

0 5 cm 10 in — 1 : 100

10 in 0 20 in — 1 : 250

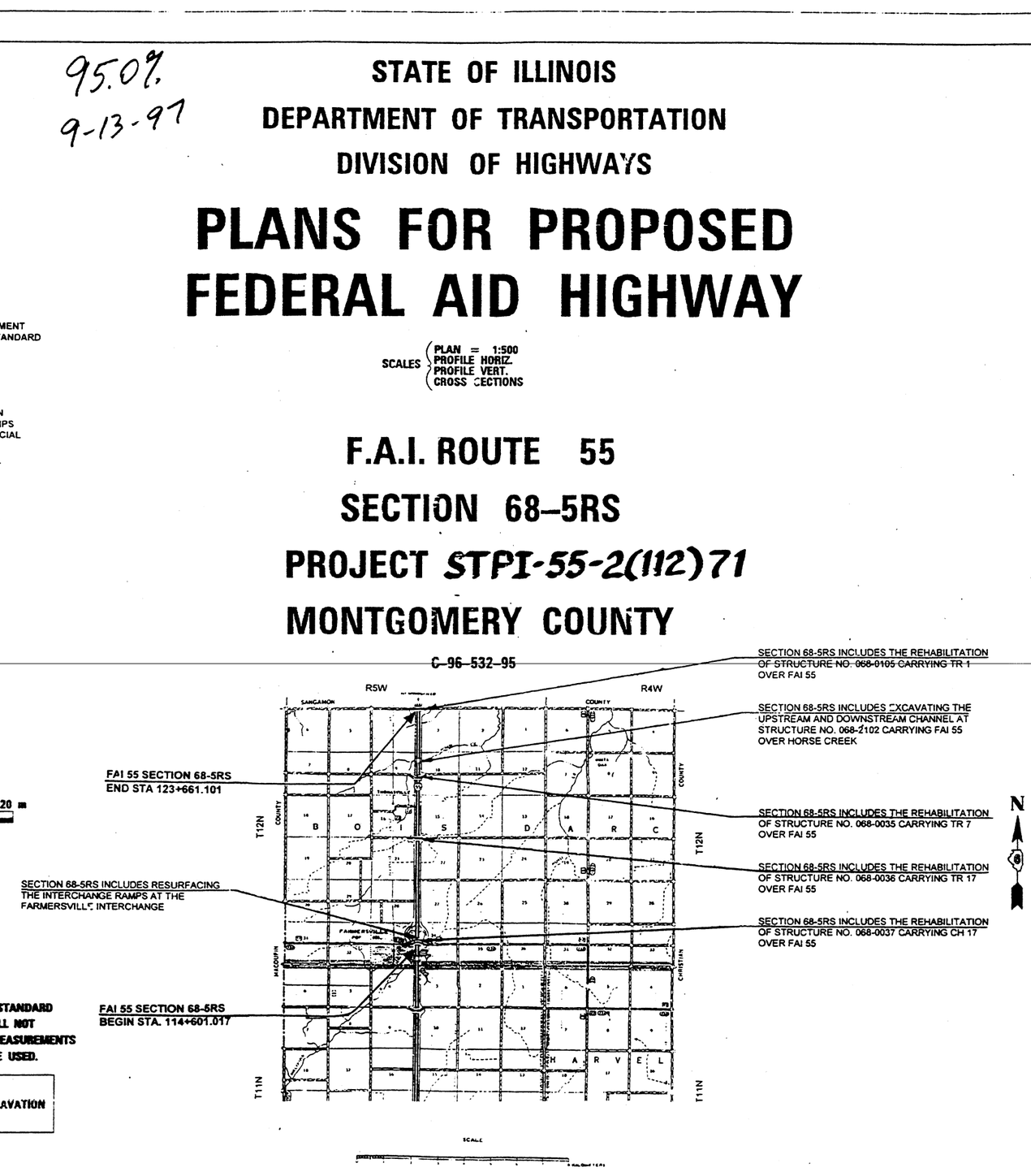
5 in 0 20 in — 1 : 500

0 50 in 100 in — 1 : 1000

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

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

CONTRACT NO. 92688
068-0036



FAI 55 SECTION 68-5RS
END STA 123+661.101

SECTION 68-5RS INCLUDES RESURFACING THE INTERCHANGE RAMPS AT THE FARMERSVILLE INTERCHANGE

FAI 55 SECTION 68-5RS
BEGIN STA. 114+601.017

SECTION 68-5RS INCLUDES THE REHABILITATION OF STRUCTURE NO. 068-0105 CARRYING TR 1 OVER FAI 55

SECTION 68-5RS INCLUDES EXCAVATING THE UPSTREAM AND DOWNSTREAM CHANNEL AT STRUCTURE NO. 068-2102 CARRYING FAI 55 OVER HORSE CREEK

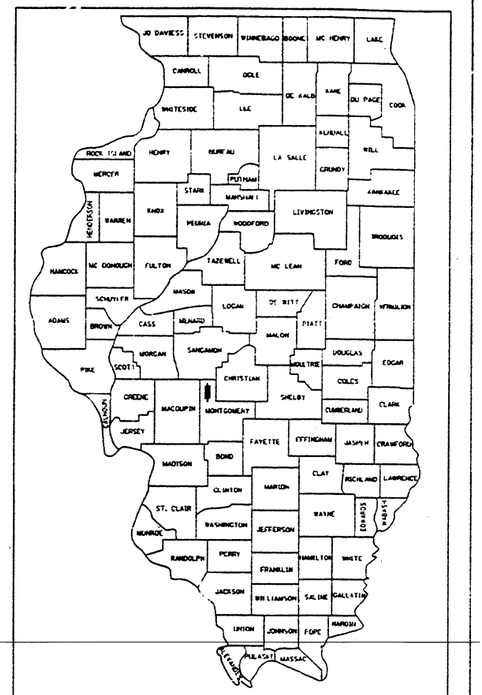
SECTION 68-5RS INCLUDES THE REHABILITATION OF STRUCTURE NO. 068-0035 CARRYING TR 7 OVER FAI 55

SECTION 68-5RS INCLUDES THE REHABILITATION OF STRUCTURE NO. 068-0036 CARRYING TR 17 OVER FAI 55

SECTION 68-5RS INCLUDES THE REHABILITATION OF STRUCTURE NO. 068-0037 CARRYING CH 17 OVER FAI 55

N

NET LENGTH OF PROJECT 9060.084 meters = 9.060 km



LOCATION OF SECTION INDICATED THUS:- ▬▬

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Dec. 6, 19 96
James V. Easton
DISTRICT ENGINEER
_____ 19 _____

ENGINEER OF PROJECT DEVELOPMENT AND IMPLEMENTATION
January 31, 19 97
ENGINEER OF DESIGN AND ENVIRONMENT
January 31, 19 97
James P. Sheehan
DIRECTOR, DIVISION OF HIGHWAYS

/usr/project/md51292/md51292pp.dgn Lvl-63
Wed Aug 21 15:16:36 1996

PROJECT ENGINEER: ROGER L. DRISKELL (217) 782-4761
SQUAD LEADER: NICK KETCHUM (217) 524-7940

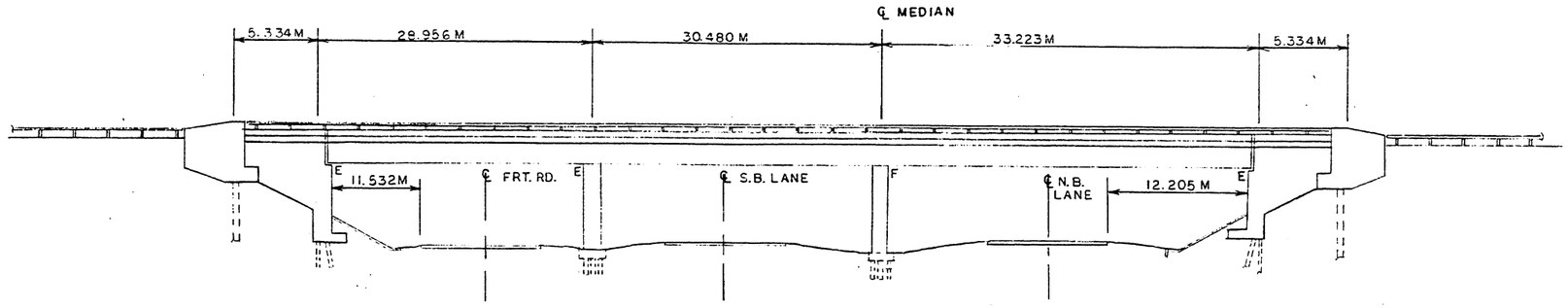
PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

6-224

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 56	68-5RS	MONTGOMERY	71	59
STA.		TO STA.		
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT		

Sheet 1 of 4

SN 068-0036, BUILT IN 1970 AS FAI 55 SECTION 68-5HB-1, CONSISTS OF 3 SPAN CONTINUOUS STEEL WELDED STEEL PLATE BEAMS GIRDERS ON VAULTED ABUTMENTS AND TWO 2-COLUMN PIERS. TOTAL LENGTH 103.327m BK. TO BK. OF APPROACH BENTS.
WIDTH 8.534m FACE TO FACE OF RAIL.



GENERAL NOTES

PLAN DIMENSIONS AND DETAILS OF THE EXISTING STRUCTURE ARE TAKEN FROM THE EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD PRIOR TO ORDERING MATERIALS.

SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK. HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

ALL NEW STRUCTURAL STEEL SHALL CONFORM TO AASHTO CLASSIFICATION M270 GR. 36.

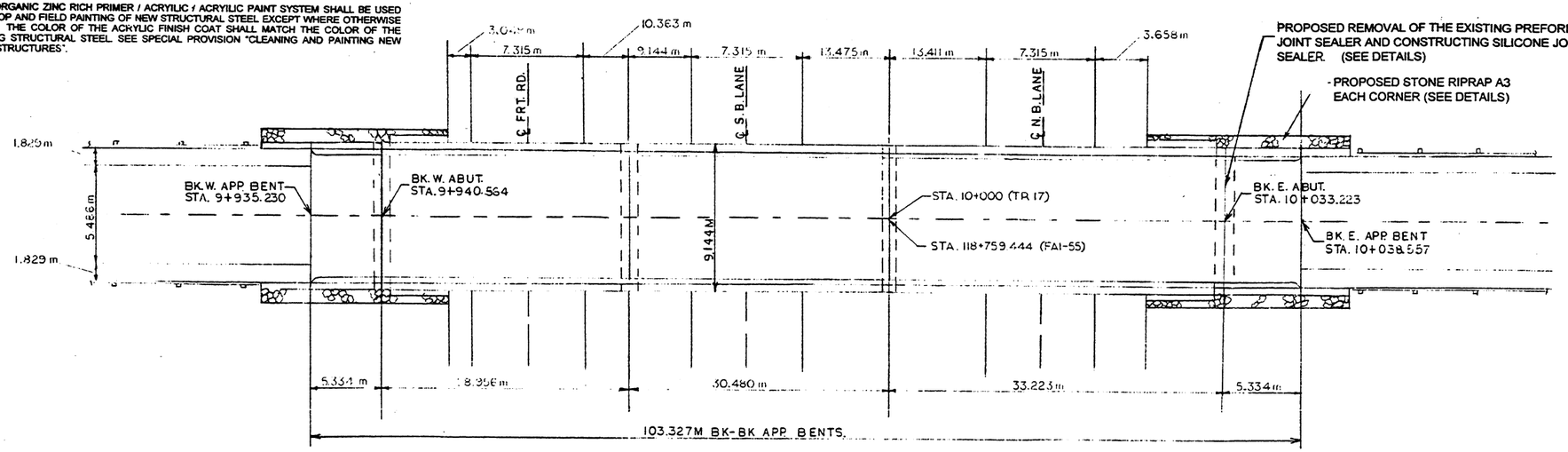
ALL NEW FASTENERS SHALL BE HIGH STRENGTH BOLTS. HOLES SHALL BE SUBPUNCHED OR SUBDRILLED 11/16" DIAMETER AND REAMED IN THE FIELD TO 13/16" DIAMETER FOR 3/4" DIAMETER HIGH STRENGTH BOLTS (EXCEPT AS NOTED ON THE PLANS) AFTER NEW STRUCTURAL STEEL SECTIONS ARE PROPERLY FITTED INTO POSITION.

EXISTING STRUCTURAL STEEL SHALL ONLY BE CLEANED AND PAINTED AS REQUIRED BY THE SPECIAL PROVISION "CLEANING AND PAINTING ADJACENT AREAS OF EXISTING STEEL STRUCTURES".

THE INORGANIC ZINC RICH PRIMER / ACRYILIC / ACRYILIC PAINT SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF NEW STRUCTURAL STEEL EXCEPT WHERE OTHERWISE NOTED. THE COLOR OF THE ACRYLIC FINISH COAT SHALL MATCH THE COLOR OF THE EXISTING STRUCTURAL STEEL. SEE SPECIAL PROVISION "CLEANING AND PAINTING NEW METAL STRUCTURES".

TOTAL BILL OF MATERIAL

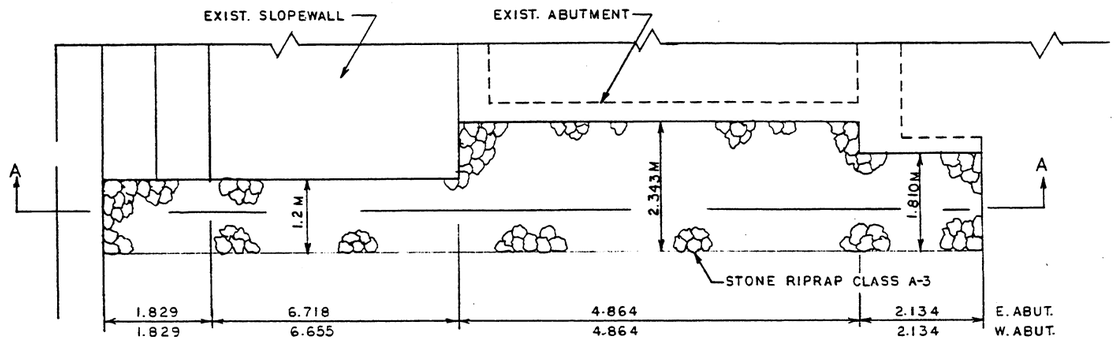
PAY ITEM	UNITS	QUANTITY
SILICONE JOINT SEALER	METER	9.1
STONE RIPRAP A-3	SQ.M.	113
FILTER FABRIC FOR USE WITH RIPRAP	SQ.M.	113
ELASTOMERIC BEARING ASSEMBLY TYPE I	EACH	4
ELASTOMERIC BEARING ASSEMBLY TYPE II	EACH	4
JACK AND REMOVE EXISTING BEARINGS	EACH	8
FURNISHING AND ERECTING STRUCTURAL STEEL	KG	750



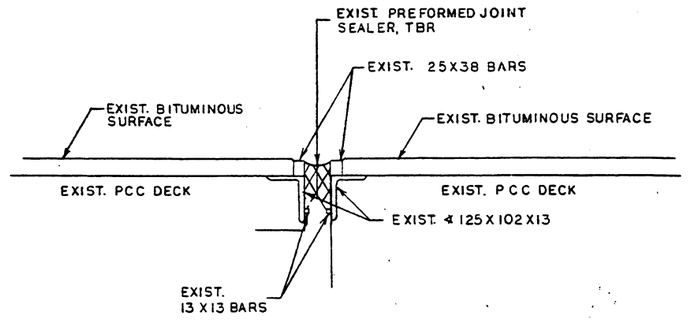
BRIDGE REHABILITATION
DETAILS
FAI-55
SECTION 68-5RS
MONTGOMERY COUNTY
SN 068-0036

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 55	68-5RS	MONTGOMERY	7	60
STA.		TO STA.		
FED. ROAD DIST. NO. 5	ILLINOIS	FED. AID PROJECT -		

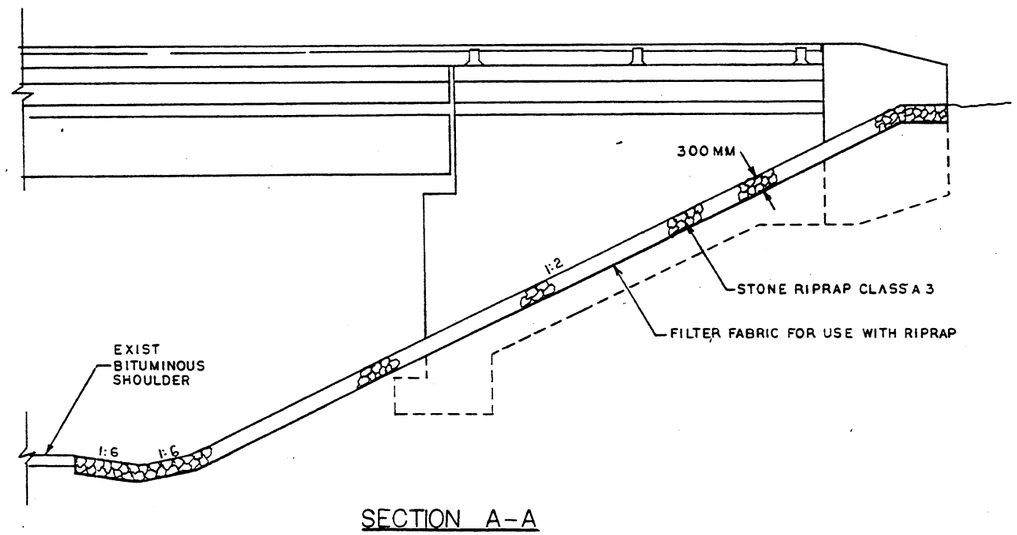
Sheet 2 of 4



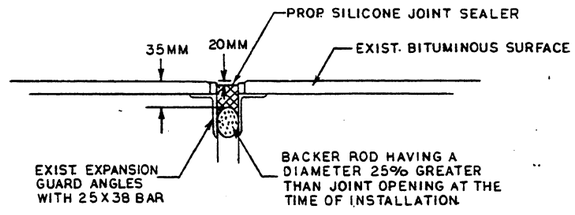
PLAN VIEW



DETAIL OF EXISTING EXPANSION JOINT



SECTION A-A



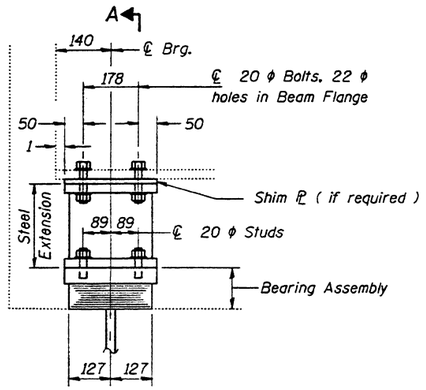
PROPOSED SILICONE JOINT SEAL

1 SILICONE JOINT SEAL SHALL BE INSTALLED FROM OUTSIDE OF DECK TO OUTSIDE OF DECK.
2 REMOVAL AND SATISFACTORY DISPOSAL OF THE EXISTING PREFORMED JOINT SEALER WILL NOT PAID FOE SEPARATELY BUT SHALL BE INCLUDED IN THE COST FOR SILICONE JOINT SEALER.
3 ALL WORK SHALL BE DONE WITH THE ROAD OPEN TO TRAFFIC. TRAFFIC CONTROL AND PROTECTION FOR OPERATIONS REQUIRING A LANE CLOSURE SHALL BE AS SHOWN ON STANDARD 701201

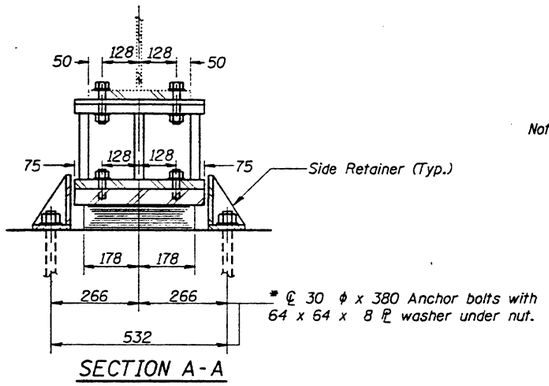
BRIDGE REHABILITATION DETAILS
FAI 55
SECTION 68-5RS
MONTGOMERY COUNTY
SN 068-0036

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	68-5RS	MONT.	71	61
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET 3 OF 4



ELEVATION AT E. ABUTMENT



SECTION A-A

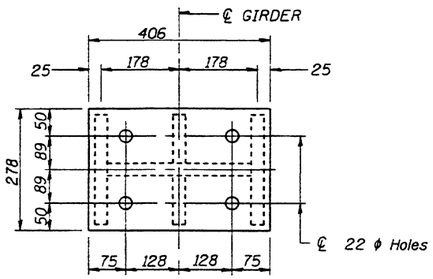
GIRDER REACTIONS

R℄	(KN)	277.57
R℄	(KN)	157.47
Imp.	(KN)	33.36
R (Total)	(KN)	468.40

Notes: Diaphragm removal and replacement may be required to facilitate drilling holes. Cost is incidental to "Furnishing and Erecting Structural Steel".

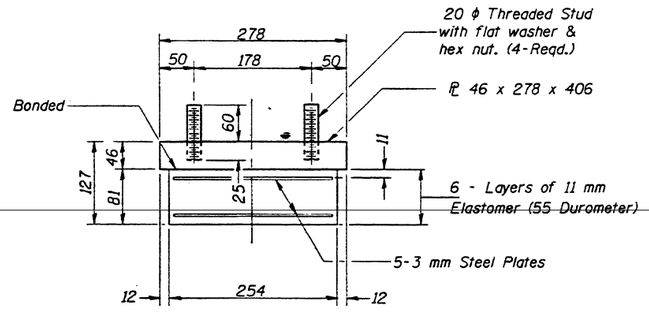
New steel extensions, side retainers, connection bolts, and anchor bolts are included in "Furnishing and Erecting Structural Steel". See sheet 8 OF 8 for structure no.068-0037 for Anchor Bolt installation.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.



PLAN TOP AND BOTTOM PLATE

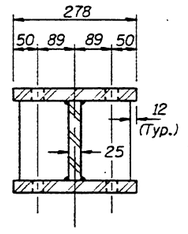
TYPE I ELASTOMERIC EXP. BRG.



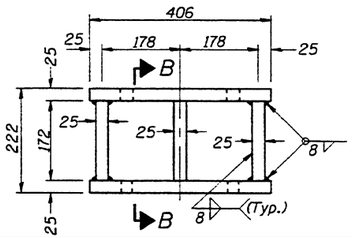
BEARING ASSEMBLY

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

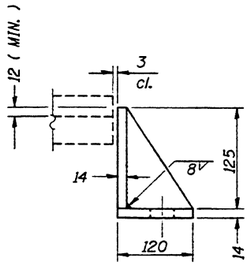
This sheet for bearing replacement at east abutment.

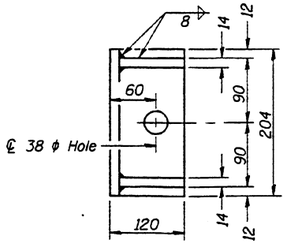


SECTION B-B



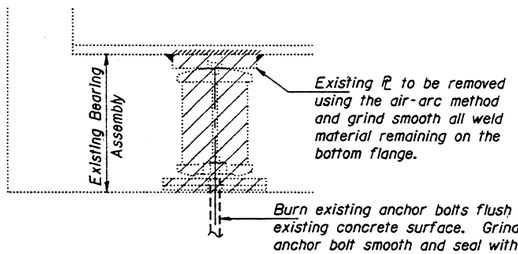
STEEL EXTENSION DETAIL





SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



EXISTING BEARING REMOVAL DETAIL

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	4

NOTE:
UNLESS OTHERWISE SHOWN ALL DIMENSIONS ARE IN MILLIMETERS.

REVISIONS	
NAME	DATE
CMS	11-21

ILLINOIS DEPARTMENT OF TRANSPORTATION

BEARING REPLACEMENT DETAILS

S.N. 068-0036

SECTION 68-5RS

T.R. 17 OVER F.A.I.-55

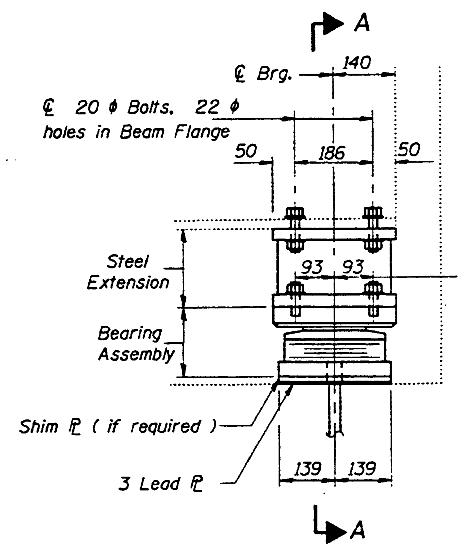
MONTGOMERY COUNTY

DRAWN BY

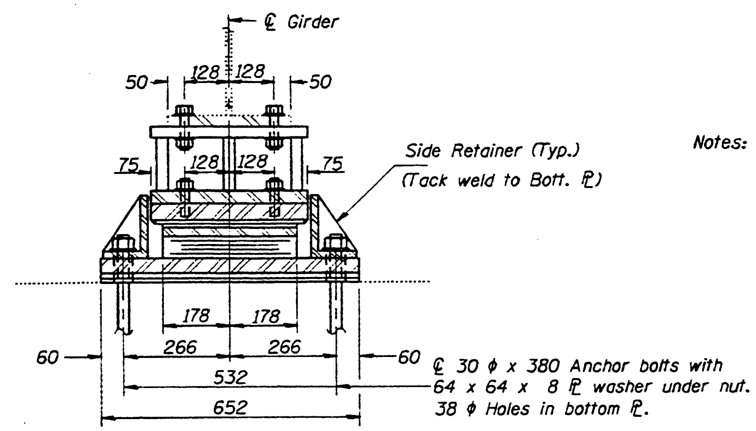
DATE CHECKED BY

/usr/project/ms01292/ms01292s02.dgn LV11-63
Thu Nov 21 11:51:28 1996

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION AT w. ABUTMENT



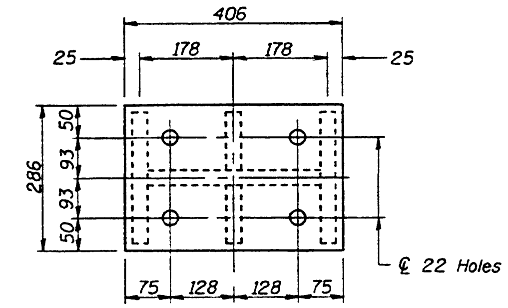
SECTION A-A

TYPE II TFE ELASTOMERIC EXP. BRG.

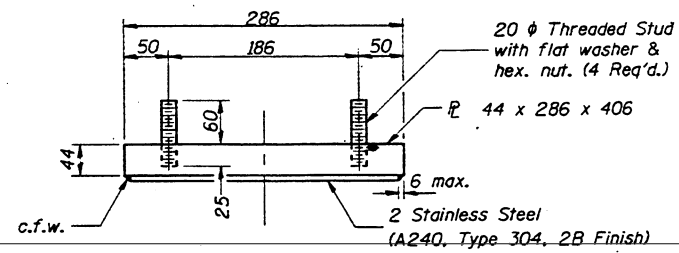
GIRDER REACTIONS

Rℓ	(KN)	230.42
Rℓ	(KN)	154.80
Imp.	(KN)	35.14
R (Total)	(KN)	420.36

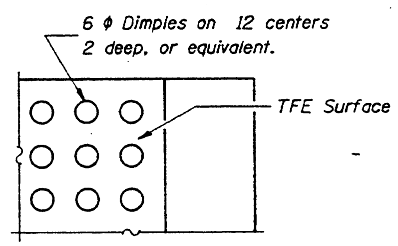
Notes: Diaphragm removal and replacement may be required to facilitate drilling holes. Cost is incidental to "Furnishing and Erecting Structural Steel".
New steel extensions, side retainers, connection bolts, and anchor bolts are included in "Furnishing and Erecting Structural Steel". See sheet 8 OF 8 for structure no.068-0037 for Anchor Bolt installation.
Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions.



PLAN TOP AND BOTTOM PLATE

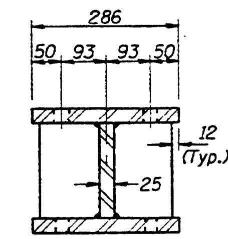


TOP BEARING ASSEMBLY

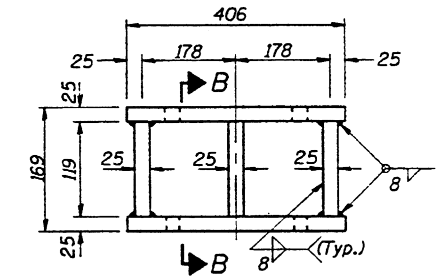


PLAN-TFE SURFACE

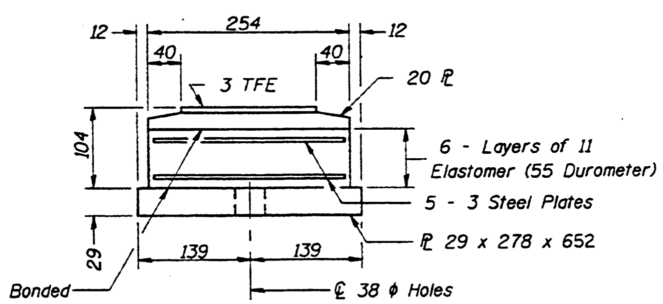
This sheet for bearing replacement at west abutment.



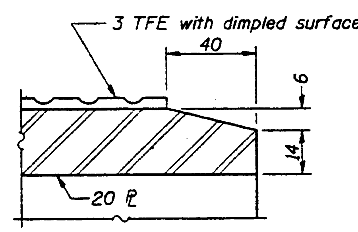
SECTION B-B



STEEL EXTENSION DETAIL



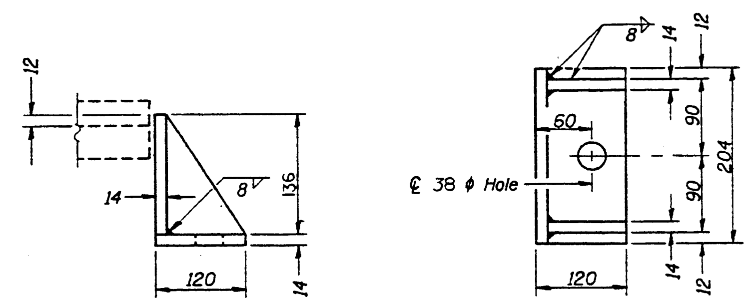
BOTTOM BEARING ASSEMBLY



SECTION THRU TFE

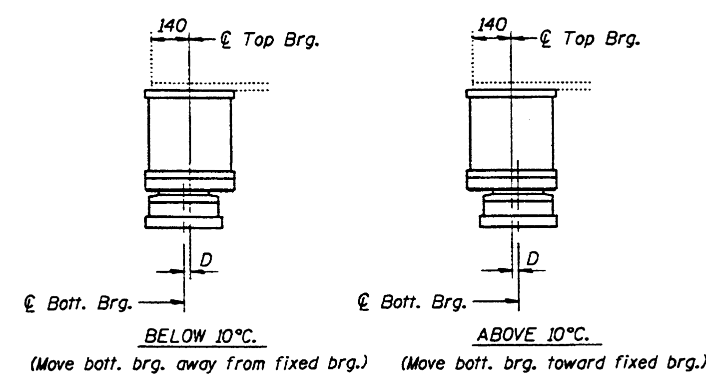
Note: The 3 TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 3 TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



SETTING ANCHOR BOLTS AT EXP. BRG.

D= 3 mm per each 30.5 m of expansion for every 8°C temp. change from the normal temp. of 10°C.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	4

NOTE:
UNLESS OTHERWISE SHOWN ALL DIMENSIONS ARE IN MILLIMETERS.

DESIGNED	
CHECKED	
DRAWN	
CHECKED	

19

EXAMINED
ENGINEER OF STRUCTURAL SERVICES
PASSED
ENGINEER OF BRIDGES AND STRUCTURES

REVISIONS	
NAME	DATE
CMS	11-21

ILLINOIS DEPARTMENT OF TRANSPORTATION
BEARING REPLACEMENT DETAILS
S.N. 068-0036
T.R. 17 OVER F.A.I.-55
SECTION 68-5RS
MONTGOMERY COUNTY
DRAWN BY CAD
DATE: OCTOBER 1, 1996
CHECKED BY

MONTGOMERY CO. SEC. 1985-1 DECK REPAIR I-R 4-18-86

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID INTERSTATE HIGHWAY

P96-004-85

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-55	*	MONT.	11	1

* DISTRICT 6 BRIDGE DECK WATERPROOFING 1985-1

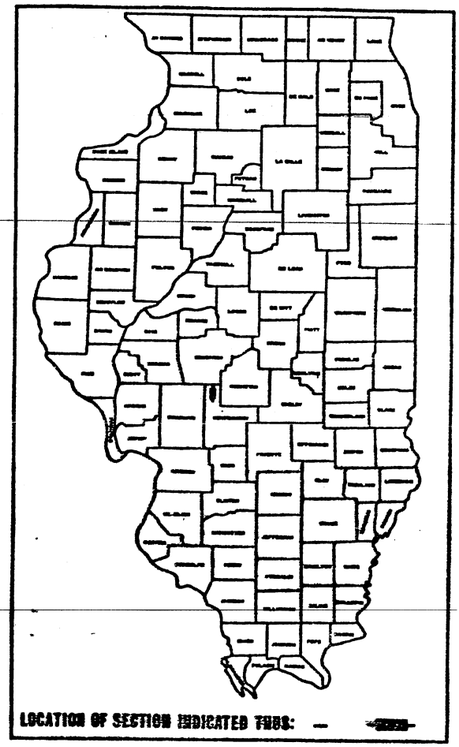
INDEX OF SHEETS

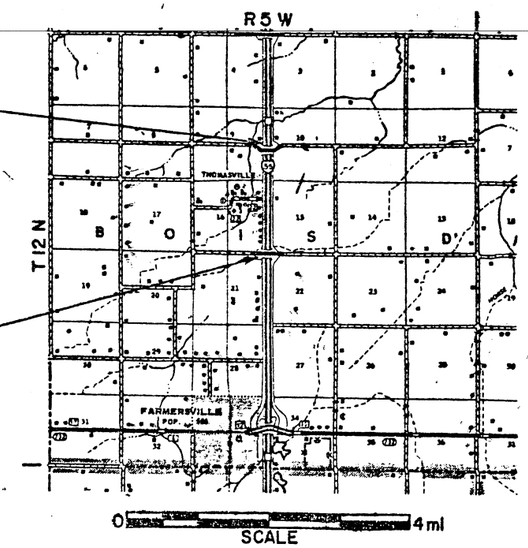
SHEET NO.	DESCRIPTION
1	COVERSHEET
2	TYPICAL SECTIONS
3	SUMMARY OF QUANTITIES
4	BRIDGE ELEVATIONS
5-6	BRIDGE CONDITION DETAILS
7	DELAMINATION SCHEDULE
8	DETAILS
9-10	EXPANSION JOINT DETAILS
11	TRAFFIC CONTROL & PROTECTION PLAN

STANDARDS
2298-7
2299-10
2300-3
2344-1
BLR 21-1

SCALES
PLAN 0'
PROFILE HORIZ. 0'
PROFILE VERT. 0'
CROSS SECTIONS HORIZ. 0'
CROSS SECTIONS VERT. 0'

FAI ROUTE 55
SECTION DISTRICT 6 BRIDGE DECK
WATERPROOFING 1985-1
PROJECT ACIR-55-2(104)73
MONTGOMERY COUNTY
C96-111-85





SN-068-0035 (TR-7)
SECTION 68-5HB-2
STA. 839+39.00 (FAI-55)

SN-068-0036 (TR-17)
SECTION 68-5HB-1
STA. 916+44.59 (FAI-55)

SECTION DISTRICT 6 BRIDGE DECK WATERPROOFING 1985-1 CONSISTS OF DECK REPAIR, APPLICATION OF A WATERPROOFING MEMBRANE SYSTEM, BITUMINOUS CONCRETE RESURFACING, EXPANSION JOINT INSTALLATION AND GUARDRAIL MODIFICATION ON TWO STRUCTURES (068-0035 & 068-0036) IN MONTGOMERY COUNTY.

SN-068-0035 SECTION 68-5HB-2 NET LENGTH = 420.33' = .080mi
SN-068-0036 SECTION 68-5HB-1 NET LENGTH = 422.00' = .080mi

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED January 16, 19 86
DISTRICT ENGINEER
EXAMINED 2/13, 19 86
BUREAU OF BLDGS. AND CONTRACTS
PASSED 2/13, 19 86
ENGINEER OF BRIDGES
APPROVED 2/13, 19 86
DIRECTOR, DIVISION OF HIGHWAYS

JOINT UTILITY LOCATING INFORMATION FOR EXCAVATIONS PHONE: 800-892-0123

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
DIVISION ADMINISTRATOR DATE

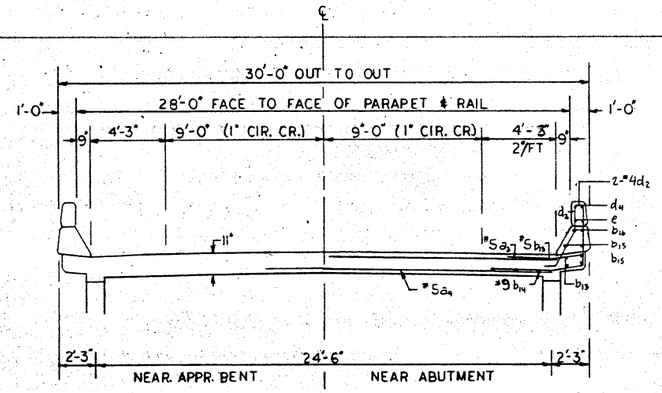
068-0036
CONTRACT NO. 40637

6-148

MONTGOMERY COUNTY SECTION DISTRICT 6 ROUTE FAI-55

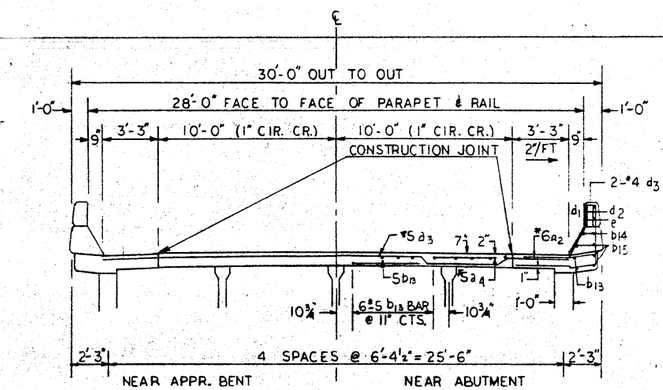
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-55	*	MONT.	11	2
STA. -		TO STA.		
F.H.W.A. REG. NO. 5	ILLINOIS	FED. AID PROJECT NO.		

*DISTRICT 6 BRIDGE DECK WATERPROOFING 1985-1



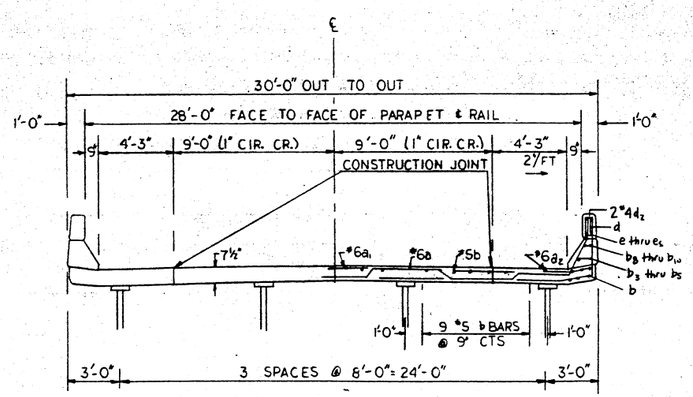
EAST & WEST APPROACH CROSS SECTION

SN: 068-0036 AS BUILT SECTION: 68-SHB-1



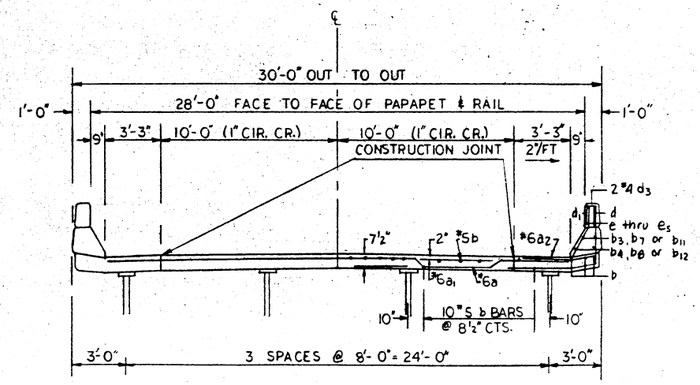
EAST & WEST APPROACH CROSS SECTION

SN: 068-0035 AS BUILT SECTION: 68-SHB-2



MAIN SPAN CROSS SECTION

SN: 068-0036 AS BUILT SECTION: 68-SHB-1



MAIN SPAN CROSS SECTION

SN: 068-0035 AS BUILT SECTION: 68-SHB-2

SCALE

VERT 0 3 6

HORZ 0 4 8

EXAMINED	November 15 1985
DISTRICT TRAFFIC ENGINEER	
EXAMINED	December 23 1985
DISTRICT MAINTENANCE ENGINEER	
EXAMINED	December 23 1985
DISTRICT CONSTRUCTION ENGINEER	
EXAMINED	November 20 1985
DISTRICT MATERIALS ENGINEER	
EXAMINED	January 16 1986
DISTRICT DESIGN ENGINEER	

TYPICAL SECTIONS F.A.I.-55 SECTION: DIST. 6 BRIDGE DECK WATERPROOFING 1985-1 MONT. CO.

SUMMARY OF QUANTITIES

*DISTRICT 6 BRIDGE DECK WATERPROOFING 1985-1

FED. ROAD DIST. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-55	*	MONTGOMERY	11	3
ILLINOIS	FED. AID PROJECT=			

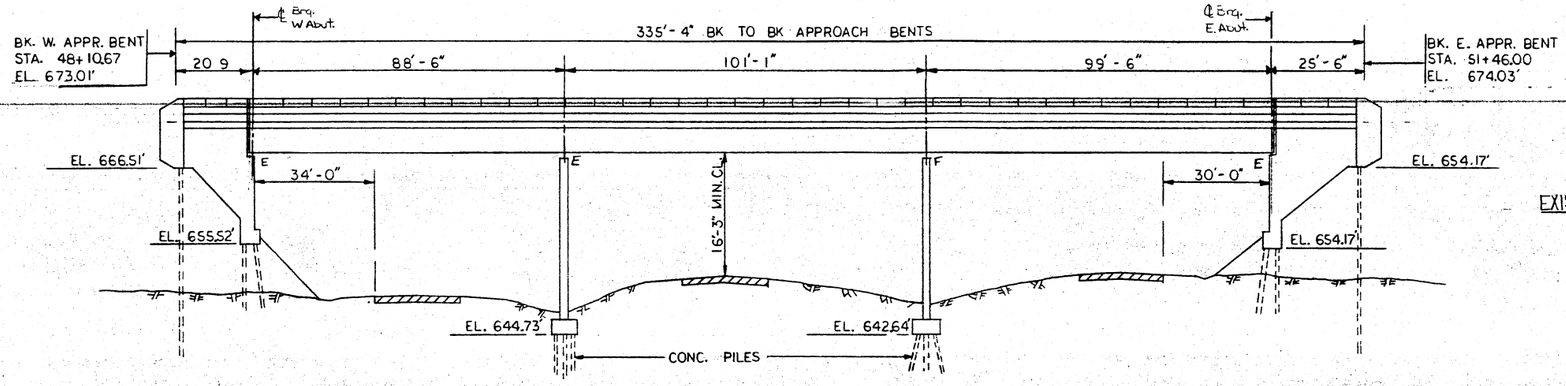
CODE NO.	ITEM	UNIT	TOTAL	CONSTRUCTION SAFETY CODE 2D SN:068-0035	SN:068-0036
202001	EARTH EXCAVATION	CU. YD.	18	9	9
215012	AGGREGATE SHOULDERS, TYPE B	TON	20	10	10
406002	BITUMINOUS MATERIALS (PRIME COAT)	TON	0.2	0.1	0.1
406003	AGGREGATE (PRIME COAT)	TON	1.0	0.5	0.5
406012	BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE C, CLASS I	TON	198	99	99
501024	CONCRETE REMOVAL	CU. YD.	10.4	5.2	5.2
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
504003	CLASS X CONCRETE	CU. YD.	10.4	5.2	5.2
507004	FURNISHING & ERECTING STRUCTUAL STEEL	POUND	4866	2433	2433
512001	REINFORCEMENT BARS	POUND	556	278	278
617010	BITUMINOUS CONCRETE SURFACE REMOVAL	SQ. YD.	378	189	189
633003	STEEL PLATE BEAM GUARD RAIL REMOVAL	LIN. FT.	200	100	100
648018	TRAFFIC CONTROL & PROTECTION (SPECIAL)	LUMP SUM	1	0.5	0.5
X50319	PREFORMED JOINT SEAL 3½"	LIN.FT.	64	32	32
X50323	PREFORMED JOINT SEAL 5"	LIN.FT.	64	32	32
X62845	TRAFFIC BARRIER TERMINAL, TYPE 7	EACH	8	4	4
Z10181	DECK SLAB REPAIR (PARTIAL)	SQ. YD.	166.9	118.7	48.2
Z10340	PRESSURE GROUTING ANGLES	LIN.FT.	80	40	40
Z10630	WATERPROOFING MEMBRANE SYSTEM	SQ.YD	1982	987	995
650001	MOBILIZATION	L. SUM	1	0.5	0.5
X50320	FLOOR DRAIN EXTENSIONS	EACH	24	8	16

* NON-PARTICIPATING.

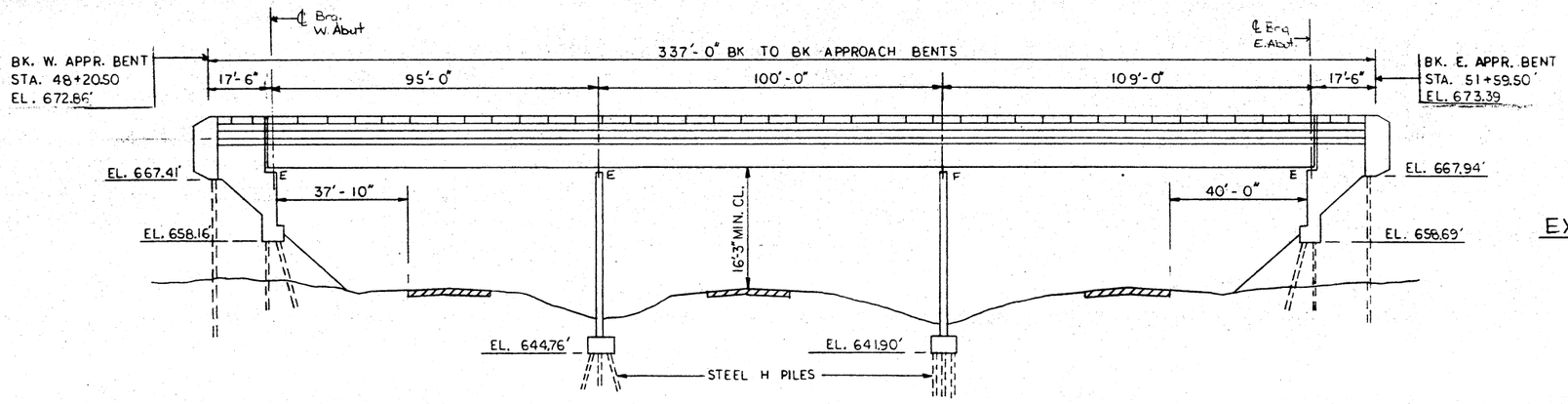
REVISED

ROUTE	SECTION	COUNTY	TOTAL SHTS	SHEET
FAI-55	*	MONT.	11	-4
STA.		TO STA.		
F.H.W.A. REG. NO. 5 | ILLINOIS | FED. AID PROJ. Y —				

*DISTRICT 6 BRIDGE DECK WATERPROOFING 1985-1



EXISTING ELEVATION
SN: 068-0035
AS BUILT SECTION: 68-5HB-2



EXISTING ELEVATION
SN: 068-0036
AS BUILT SECTION: 68-5HB-1

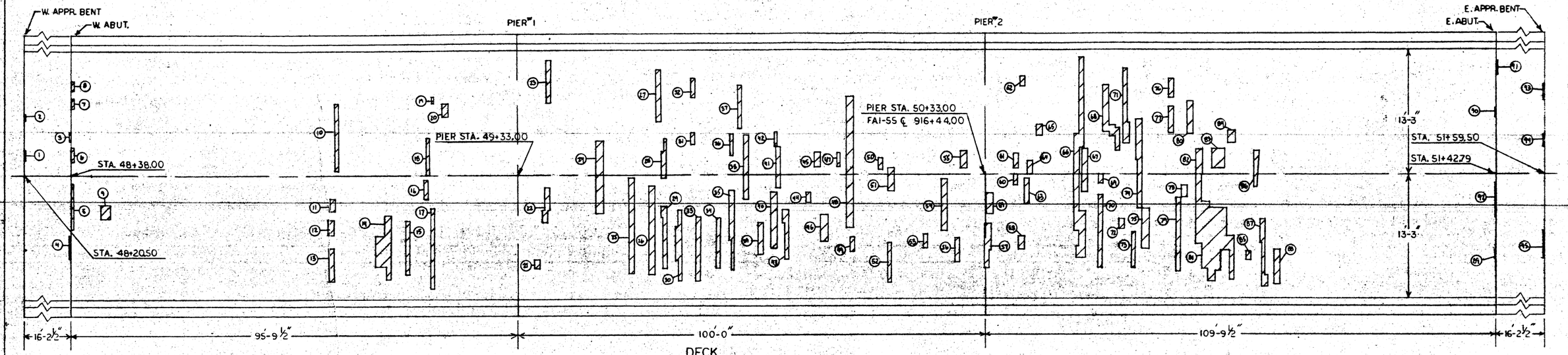
SCALE
20
0 40'
HORZ.
10
0 20'
VERT.

BRIDGE ELEVATIONS
F.A.I.-55
SECTION: DIST. 6 BRIDGE DECK WATERPROOFING
1985-1 MONT. CO.

REVISED

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 55	*	MONTGOMERY	11	6
STA.		TO STA.		
F.A.I.M.A. REG. NO. 5	ILLINOIS	FED. AID PROJECT -		

* DIST. 6 BRIDGE DECK WATERPROOFING 1985 - 1



DECK

NOTES

1. THE DECK HAS 48.2 SQ. YDS/4.8% OF DELAMINATION
2. THE DECK HAS SEVERAL SCATTERED VERY SMALL SPALLS.
3. NO PREDOMINATE CRACKS WERE FOUND IN THE DECK.

LEGEND

DELAMINATION - ▨

FOR DELAMINATION SCHEDULE SEE SHEET NO. 7

SCALE

HORIZ. 0 — 20'

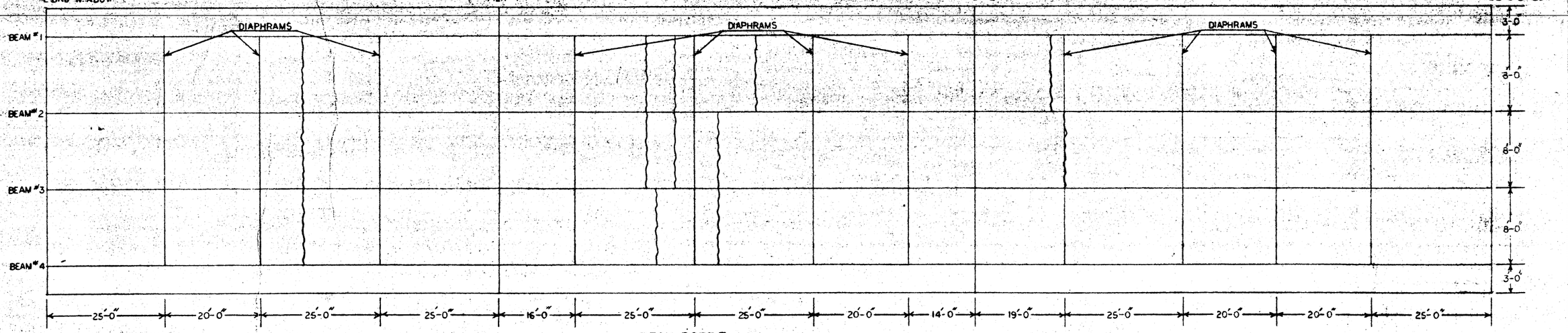
VERT. 0 — 10'

EXPANSION JOINT SCHEDULE

EAST ABUT. CASE II A & IV

WEST ABUT. CASE III A & IV

SEE SHEET NO. 9 & 10



DECK SOFFIT

NOTES:

1. ALL CRACKS SHOWN IN THE DECK SOFFIT ARE HAIRLINE CRACKS WITH LEACHING.
2. NO SPALLS OR DELAMINATIONS WERE FOUND IN THE DECK SOFFIT.

SPBGR REMOVAL

STA. 47+95.50 TO STA. 48+20.50	RT. & LT.	50 LF
STA. 51+69.50 TO STA. 51+84.50	RT. & LT.	50 LF
	TOTAL	100 LF

TRAFFIC BARRIER TERMINAL, TYPE 1

STA. 47+95.50 TO STA. 48+35.31 RT. & LT. 2 EA.
STA. 51+44.69 TO STA. 51+84.50 RT. & LT. 2 EA.

BRIDGE DECK CONDITION DETAIL

F.A.I. ROUTE 55 SEC. 68-5HB-1

MONTGOMERY COUNTY

STA. 916+44.59 (068-0036)

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 55	*	MONT.	11	7
STA.		TO STA.		
F.H.W.A. REG. NO. 5	ILLINOIS	FED. AID PROJECT –		

*DISTRICT 6 BRIDGE DECK WATERPROOFING 1985-1

DELAMINATION SCHEDULE SN 068-0035

NO.	SIZE	S.F.	NO.	SIZE	S.F.	NO.	SIZE	S.F.
1	1.2x0.4	.48	52	2.1x4.9	7.21	103	3.0x1.6	4.80
2	1.4x0.4	.56	53	1.5x1.4	2.10	104	1.0x1.0	1.00
3	1.4x0.4	.56	54	1.0x1.0	1.00	105	3.3x1.4	4.62
4	1.4x0.5	.70	55	1.3x7.3	7.29	106	2.0x2.6	5.20
5	1.5x0.5	.75	56	24.0x15.0	162.54	107	2.7x1.6	3.72
6	1.6x0.5	.80	57	2.4x1.2	2.88	108	3.7x2.0	4.98
7	0.4x0.7	.28	58	1.0x1.4	1.40	109	1.2x1.4	1.68
8	0.4x2.1	.84	59	1.1x1.2	1.32	110	1.3x1.7	2.21
9	0.6x1.3	.78	60	1.1x1.1	1.21	111	8.1x3.3	20.05
10	1.3x1.3	1.69	61	2.6x1.5	3.90	112	7.2x2.2	13.14
11	1.1x1.1	1.21	62	6.8x1.0	6.80	113	4.2x1.4	5.88
12	1.4x1.2	1.68	63	1.1x1.2	1.32	114	1.6x3.4	5.44
13	1.5x1.0	1.50	64	0.9x7.0	6.30	115	2.6x3.0	4.94
14	1.4x0.5	.70	65	16.5x2.1	23.17	116	1.9x1.3	2.47
15	6.0x1.7	10.20	66	1.5x2.3	3.45	117	1.7x1.3	2.21
16	4.8x1.6	6.43	67	3.1x1.1	3.41	118	3.9x1.8	5.50
17	1.4x5.1	7.14	68	1.0x3.0	3.00	119	1.5x1.6	2.40
18	1.3x1.2	1.56	69	1.2x3.2	3.84	120	2.0x7.5	11.55
19	1.6x4.2	6.72	70	1.2x7.0	8.40	121	2.0x14.5	29.00
20	7.8x1.3	10.14	71	9.3x2.3	15.48	122	9.1x1.6	14.56
21	1.3x1.0	1.30	72	6.5x1.3	7.01	123	6.8x1.3	8.84
22	1.4x1.6	2.24	73	2.4x1.4	3.36	124	1.5x3.1	4.65
23	1.8x10.5	18.90	74	7.1x0.9	6.39	125	3.1x1.5	4.65
24	0.9x2.9	2.61	75	2.4x14.3	18.50	126	1.0x1.0	1.00
25	3.7x1.5	5.55	76	1.4x2.0	2.80	127	1.5x1.0	1.50
26	1.9x1.2	2.28	77	1.4x10.7	11.08	128	2.0x6.0	9.53
27	1.6x1.2	1.92	78	9.8x3.0	16.08	129	2.7x4.1	11.07
28	6.3x1.3	6.57	79	1.0x3.0	3.00	130	4.7x1.5	7.05
29	1.3x0.9	1.17	80	5.0x1.7	6.90	131	6.5x3.2	9.36
30	7.1x1.6	11.36	81	6.0x3.3	11.28	132	0.9x1.0	.90
31	10.7x1.7	14.25	82	5.3x3.2	7.97	133	1.0x0.9	.90
32	11.1x11.5	70.76	83	4.8x1.3	6.24	134	6.6x1.4	8.24
33	4.2x2.3	6.96	84	6.4x6.0	23.70	135	1.6x4.8	7.68
34	4.4x0.8	3.52	85	1.4x1.2	1.68	136	5.3x2.6	8.26
35	1.9x1.6	3.04	86	1.4x1.7	2.38	137	1.4x1.6	2.24
36	3.1x2.3	7.13	87	1.5x2.0	3.00	138	1.2x1.6	1.92
37	6.7x6.4	17.41	88	1.9x1.3	2.47	139	1.5x1.2	1.80
38	2.5x1.5	3.75	89	2.0x1.1	2.20	140	3.0x1.8	5.40
39	0.8x0.5	.40	90	1.5x1.5	2.25	141	1.7x1.5	2.55
40	5.1x6.3	15.04	91	1.0x1.2	1.20	142	1.2x1.8	2.16
41	1.2x2.9	3.48	92	3.2x7.6	15.20	143	1.1x1.2	1.32
42	0.7x1.1	.77	93	1.1x0.9	.99	144	0.5x1.5	.75
43	2.0x1.5	3.00	94	3.0x2.6	6.37	145	0.5x2.2	1.10
44	1.4x2.5	3.50	95	2.0x1.6	3.20	146	0.5x1.6	.80
45	1.5x1.1	1.65	96	2.5x1.3	3.25	147	0.5x1.2	.60
46	2.4x1.2	2.88	97	1.5x1.3	1.95	148	8.7x0.5	4.35
47	1.0x1.3	1.30	98	0.8x0.8	.64	149	0.4x1.7	.68
48	3.2x1.1	3.52	99	2.2x8.1	10.91	150	0.4x1.6	.64
49	1.0x1.0	1.00	100	1.4x3.5	4.90	151	0.4x0.8	.32
50	2.1x1.7	3.57	101	2.9x7.0	13.52		TOTAL	1041.18s.F.
51	2.0x9.9	13.57	102	2.4x1.4	3.36		PAY AREA	115.5 S.Y.

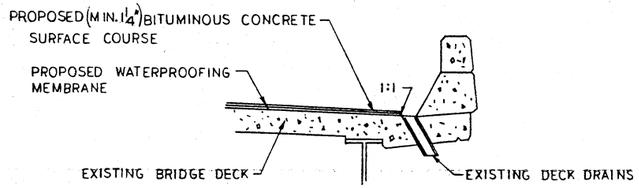
DELAMINATION SCHEDULE SN 068-0036

NO.	SIZE	S.F.	NO.	SIZE	S.F.	NO.	SIZE	S.F.
1	0.5x1.0	.50	33	6.9x1.0	6.90	65	1.2x1.3	1.56
2	0.4x0.7	.28	34	0.9x5.4	4.86	66	1.9x18.4	32.29
3	0.5x1.0	.50	35	8.5x1.1	8.07	67	1.1x4.6	5.06
4	0.4x2.4	.96	36	2.0x0.8	1.60	68	3.5x6.9	11.13
5	0.4x5.9	2.36	37	4.6x0.8	3.68	69	1.0x1.0	1.00
6	1.6x0.5	.30	38	6.8x1.1	7.48	70	7.8x0.9	7.02
7	1.2x0.5	.60	39	1.2x3.4	4.08	71	1.6x8.0	10.48
8	1.1x0.5	.55	40	1.3x5.9	7.67	72	1.0x1.0	1.00
9	2.0x1.5	3.00	41	1.0x4.3	4.30	73	0.8x3.8	3.04
10	7.1x0.7	4.97	42	1.5x0.6	.90	74	9.4x1.3	10.69
11	1.1x1.3	1.43	43	5.2x1.3	5.20	75	1.5x4.3	6.45
12	1.3x1.6	2.08	44	1.1x1.1	1.21	76	2.0x1.3	2.60
13	1.0x3.5	3.50	45	1.5x1.4	2.10	77	1.1x2.8	3.08
14	3.0x6.7	13.93	46	1.5x2.9	4.35	78	1.1x1.2	1.32
15	5.7x0.9	5.13	47	1.5x0.8	1.20	79	1.0x8.9	8.90
16	0.9x2.0	1.80	48	13.9x1.5	20.85	80	3.3x1.4	4.62
17	8.7x0.8	6.96	49	0.9x1.4	1.26	81	10.7x8.5	56.07
18	4.0x0.7	2.80	50	1.3x0.9	1.17	82	3.2x1.5	4.80
19	0.7x0.6	.42	51	2.4x1.4	3.36	83	2.1x2.7	5.67
20	1.4x1.3	1.82	52	4.2x0.8	3.36	84	1.4x1.8	2.52
21	1.2x0.9	1.08	53	0.8x1.5	1.20	85	1.1x1.0	1.10
22	1.6x3.7	4.09	54	1.3x5.5	7.15	86	3.9x1.0	3.90
23	4.5x1.0	4.50	55	1.9x1.4	2.66	87	7.2x1.5	6.65
24	1.5x7.7	11.55	56	1.1x2.5	2.75	88	1.3x3.7	4.81
25	1.1x10.2	11.22	57	4.7x1.5	6.29	89	0.5x0.8	.40
26	1.2x9.5	11.40	58	1.4x1.4	1.96	90	0.5x1.0	.50
27	5.6x1.1	6.16	59	2.2x1.7	3.74	91	0.5x1.5	.75
28	4.1x0.9	3.17	60	1.0x1.1	1.10	92	0.5x3.7	1.85
29	6.7x1.3	7.12	61	1.6x1.1	1.76	93	0.4x1.8	.72
30	7.5x1.3	7.97	62	1.0x0.9	.90	94	0.4x1.2	.48
31	1.3x0.8	1.04	63	1.3x2.7	3.51	95	0.5x3.0	1.50
32	2.0x0.9	1.80	64	1.5x1.1	1.65		TOTAL	433.34s.F.
							PAY AREA	48.2 S.Y.

DELAMINATION SCHEDULE
FAI-55
SECTION: DIST. 6 BRIDGE DECK WATERPROOFING
1985-1 MONT. CO.

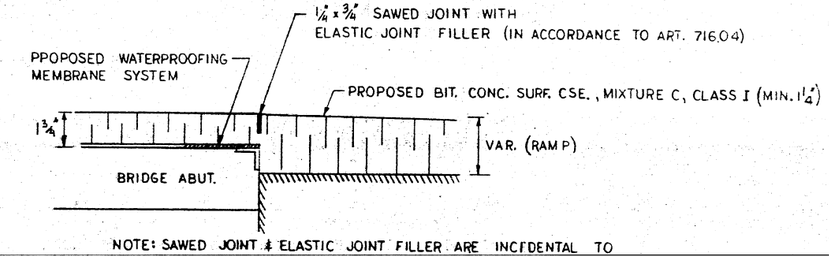
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 55	*	MONT.	11	8
STA.		TO STA.		
F.H.W.A. REG. NO. 5	ILLINOIS	FED. AID PROJECT -		

*DISTRICT 6 BRIDGE DECK WATERPROOFING 1985-1



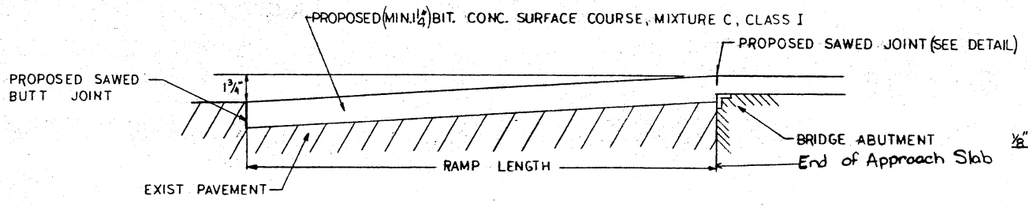
DRAIN DETAIL
NO SCALE

PAINT NOTE: The exterior surfaces of the aluminum drains shall be cleaned and given a washcoat pretreatment in accordance with the Steel Painting Council's Spec. SSPC-SP1 and SSPC-Paint 27 prior to painting. The basic lead silico chromate paint system shall be used for the shop and field painting of the deck drains and bracket assemblies. All costs associated with painting shall be incedential to the cost of "FLOOR DRAIN EXTENSIONS."



NOTE: SAWED JOINT & ELASTIC JOINT FILLER ARE INCIDENTAL TO BITUMINOUS CONCRETE SURFACE COURSE, MIXTURE C, CLASS I

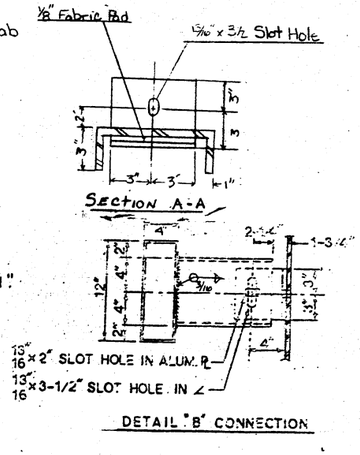
SAWED JOINT DETAIL
NO SCALE



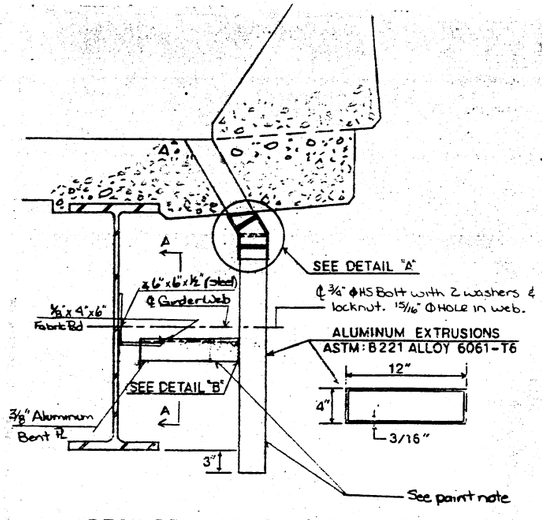
BRIDGE NO.	SECTION	RAMP LENGTH
068-0035	68-SHB-2	35' EAST ABUT. 50' WEST ABUT.
068-0036	68-SHB-1	50 EAST ABUT. 35 WEST ABUT.

RAMP LENGTH
NO SCALE

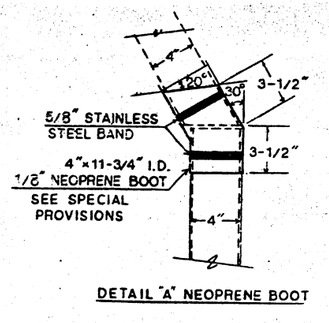
NOTE: DECK drain extensions shall be paid for at the contract unit price for "FLOOR DRAIN EXTENSIONS, EACH."



DETAIL "B" CONNECTION



DECK DRAIN EXTENSION DETAIL
NO SCALE
(SN 068-0035, 8 Req'd
SN 068-0036, 16 Req'd)



DETAIL "A" NEOPRENE BOOT

DETAIL SHEET
FAI-55
SECTION: DIST. 6 BRIDGE DECK WATERPROOFING
1985-1 MONT. CO.

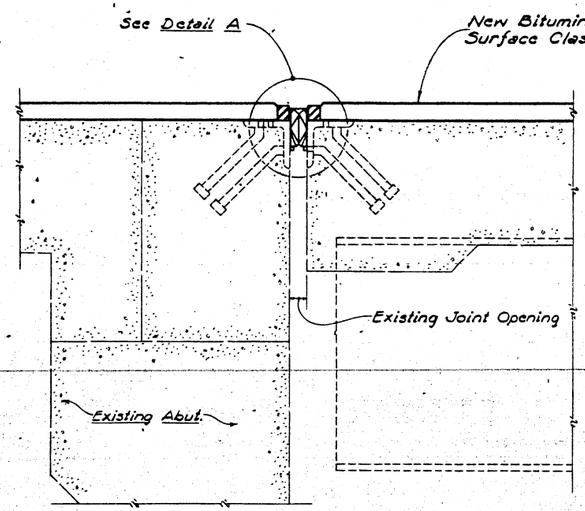
REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

*DISTRICT 6 BRIDGE DECK WATERPROOFING 1985-1

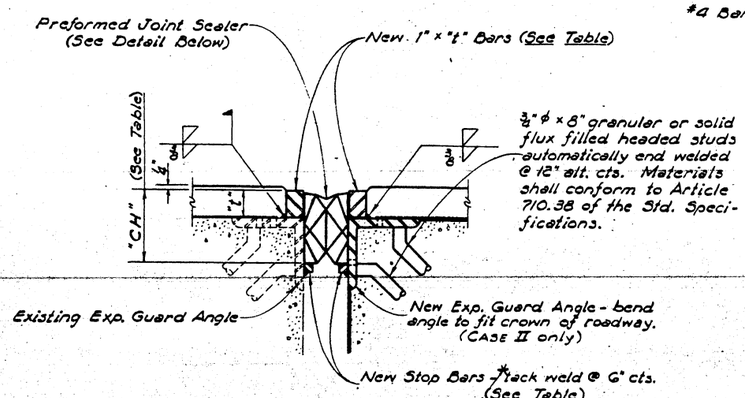
ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. 55	*	MONT	11	9
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO.
SHEETS

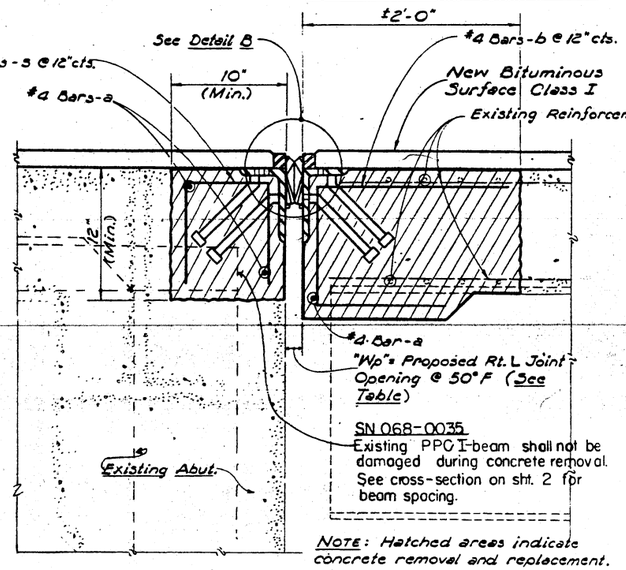


SEC. AT JOINT (CASE Ia)

Where the existing opening and L's are adequate for the specified P.J.S.



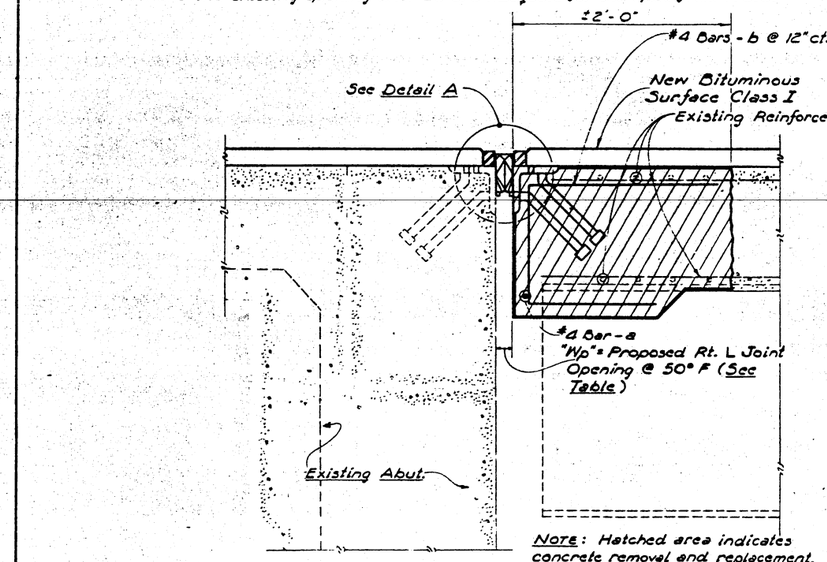
DETAIL A



NOTE: Hatched areas indicate concrete removal and replacement.

SEC. AT JOINT (CASE IIIa)

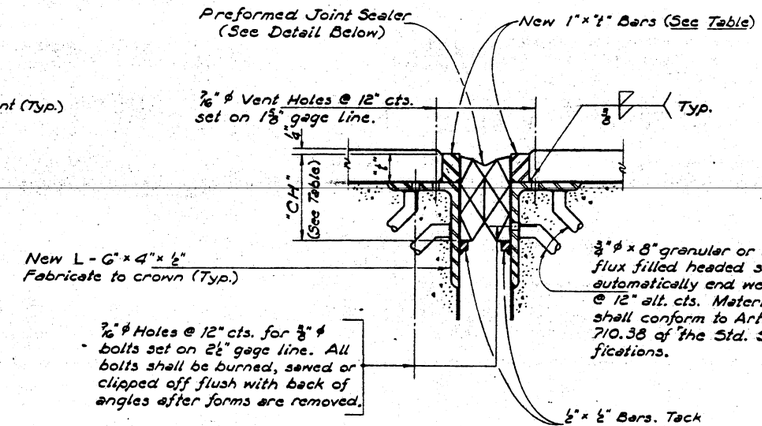
Where new 6"x 4" Expansion Guard L's are required for the specified P.J.S.



NOTE: Hatched area indicates concrete removal and replacement.

SEC. AT JOINT (CASE IIa)

Where a wider opening must be constructed for the required P.J.S.

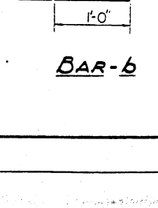


DETAIL B

PROPOSED JOINT SEAL DIMENSIONS

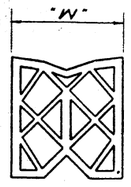
Structure Number	Location	Size of P.J.S. "W"	Plan Detail (Case)	Compr. Height "CH"	1" Bar Height "t"	Stop Bar Size	Prop. Open. "Wp"
068-0035	EAST ABUT.	3½"	II & IV	4⅛"	1½"	½"x½"	2¼"
068-0035	WEST ABUT.	5"	III & IV	6⅛"	1½"	½"x½"	3¼"
068-0036	EAST ABUT.	3½"	II & IV	4⅛"	1½"	½"x½"	2¼"
068-0036	WEST ABUT.	5"	III & IV	6⅛"	1½"	½"x½"	3¼"

New expansion joint angles and attached bars shall be shop painted with one coat of dull orange primer in accordance with Article 712.28 of the Standard Specifications.

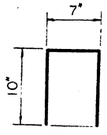


BAR-b

"W" = Nominal size of P.J.S.



PREFORMED JOINT SEALER



BAR-s

JOINT SEALING AT ABUTMENTS FOR EXISTING BRIDGE DECKS
(With Bituminous Wearing Surface)

DESIGNED	
CHECKED	
DRAWN r. b. carbonell	
CHECKED	

19
EXAMINED
ENGINEER OF STRUCTURAL SERVICES
PASSED
ENGINEER OF BRIDGES AND STRUCTURES
APPROVED
DIRECTOR OF HIGHWAYS

55-10-1A& 2-24-84

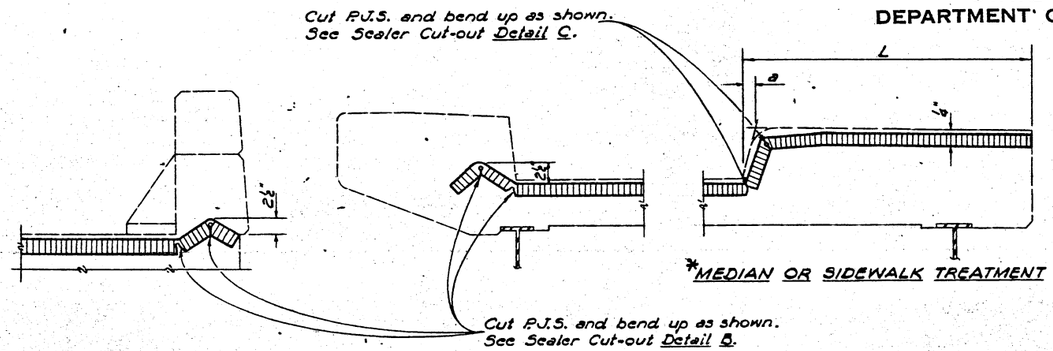
REVIS-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 55	*	MONT.	11	10
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:		

SHEET NO.
SHEETS

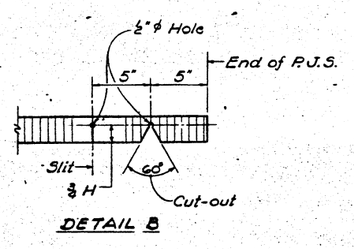
*DISTRICT 6 BRIDGE DECK WATERPROOFING
1985-1



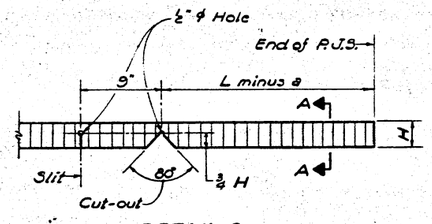
*MEDIAN OR SIDEWALK TREATMENT

*CURB SEALER TREATMENTS

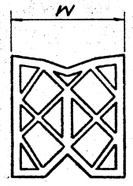
*Use when the skew angle is ≤ 15°



DETAIL B



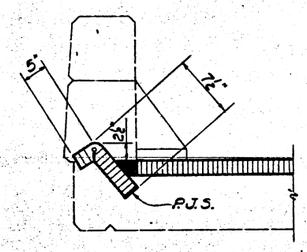
DETAIL C

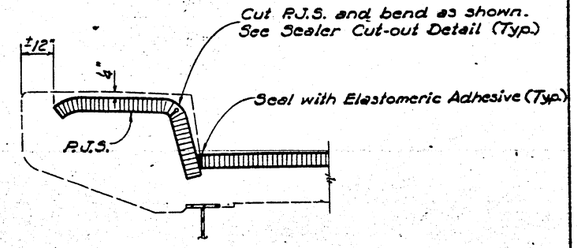


PREFORMED JOINT SEALER
(SECTION A-A)

P.J.S. CUT-OUT DETAILS

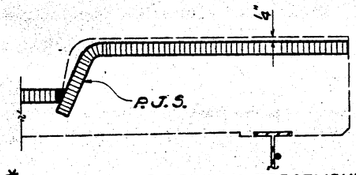
(CASE IV)



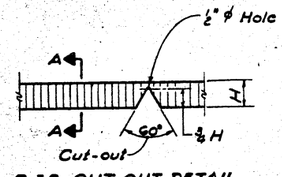


*CURB SEALER TREATMENTS

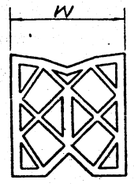
*Use when the skew angle is > 15°



*MEDIAN OR SIDEWALK TREATMENT



P.J.S. CUT-OUT DETAIL



PREFORMED JOINT SEALER
(SECTION A-A)

(CASE V)

NOTE:
Remove concrete in curb as necessary to provide opening for P.J.S. as directed by the Engineer.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	8	#4	26.5	——
b	108	#4	3.5'	⊏
s	108	#4	2.25'	⊓

Concrete Removal	Cu. Yds.	10.4
Class X Concrete	Cu. Yds.	10.4
Reinforcement Bars	Lbs.	556
Structural Steel	Lbs.	4866
Preformed Joint Seal (3¼)	Lin. Ft.	64
Preformed Joint Seal (5")	Lin. Ft.	64

JOINT SEALING
FOR EXISTING BRIDGE DECKS
(Median, Curb and Sidewalk Details)

DESIGNED	
CHECKED	
DRAWN n.b. carbonell	
CHECKED	

19
EXAMINED
ENGINEER OF STRUCTURAL SERVICES
PASSED
ENGINEER OF BRIDGES AND STRUCTURES
APPROVED
DIRECTOR OF HIGHWAYS

33-10-2 2-24-84

FEDERAL-AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	
F.A.I.-55	68-5HB-1	MONT.	31	
S. P. R. REG. NO. 4	ILLINOIS	PROJECT	I-55-2(30)73	

INDEX OF SHEETS

CET SET
#113
9-4-70

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID INTERSTATE HIGHWAY
ROUTE 55

P-98-004-66

LOCATION OF SECTION INDICATED THUS:—

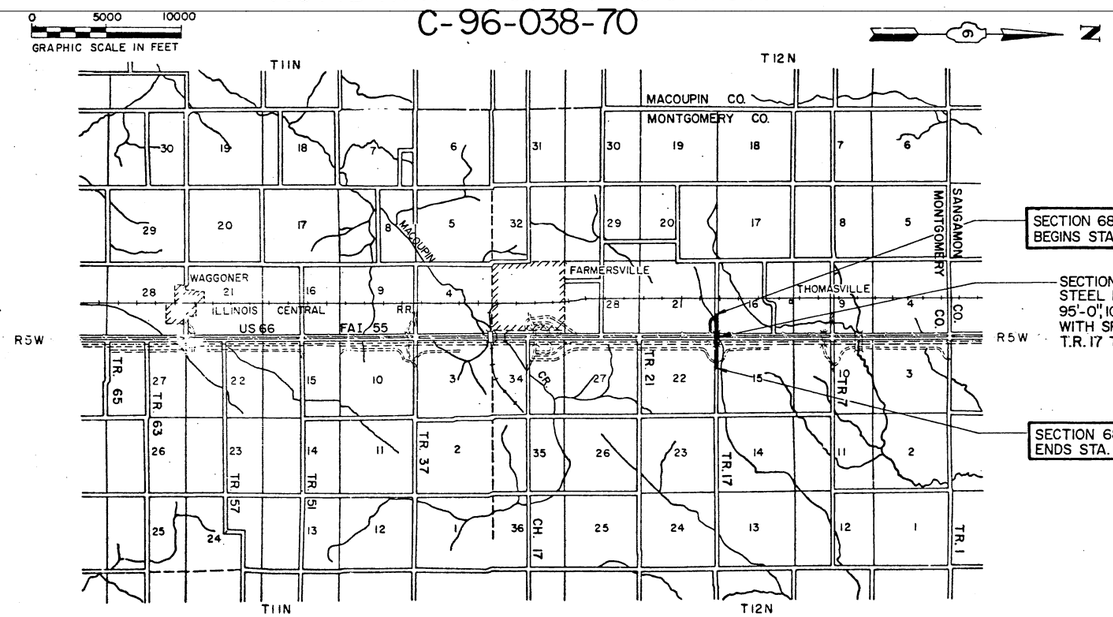
PROJECT I-55-2(30)73
SECTION 68-5HB-1

SCALES

PLAN		0	100
PROFILE	HORZ.	0	100
	VERT.	0	10
CROSS SECTIONS	HORZ.	0	10
	VERT.	0	5
OTHER	AS NOTED		

MONTGOMERY COUNTY

ROADWAY CONSTRUCTION
C-96-038-70



SECTION 68-5HB-1 BEGINS STA. 39+50

SECTION 68-5HB-1 INCLUDES THE CONSTRUCTION OF A STEEL PLATE GIRDER BRIDGE CONSISTING OF 3 SPANS @ 95'-0", 100'-0", 109'-0" WITH VAULTED APPROACH ABUTMENTS WITH SPANS OF 17'-6" AND LOCATED AT STA. 916+44.59 T.R. 17 TOTAL BRIDGE OMISSION IS 338 FT.

SECTION 68-5HB-1 ENDS STA. 62+50

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS

SUBMITTED _____ 19 70
DISTRICT ENGINEER
EXAMINED 6-25 19 70
ENGINEER OF ROAD PLANS AND CONSTRUCTION
PASSED 6-25 19 70
ENGINEER OF
APPROVED 6-25 19 70
CHIEF HIGHWAY ENGINEER
APPROVED 6-25 19 70
DIRECTOR

DESIGN DESIGNATION

T.R. 17

87(79)-G-0.00243 (B-15)
MAXIMUM GRADE = -5.00%
LENGTH OF MAXIMUM GRADE = 100 FT.
MINIMUM HORIZONTAL RADIUS = INFINITE LENGTH
MINIMUM STOPPING SIGHT DISTANCE = 455 FT.

F.A.I. 55

3361(90)-A-1 TRUNK-15.56 (C.R.C.-20)
MAXIMUM GRADE ADJACENT TO STRUCTURE = +0.422 %
LENGTH OF MAXIMUM GRADE = 830 FT.
MINIMUM HORIZONTAL RADIUS = INFINITE LENGTH
MINIMUM STOPPING SIGHT DISTANCE = 850 FT.

NET LENGTH OF SECTION 68-5HB-1	=	2300.00 FT. =	0.436 MILES
NET LENGTH OF PROJECT I-55-2(30)73	=	0 FT. =	0 MILES
NET LENGTH OF F.A.I. 55	=	0 FT. =	0 MILES

ROADWAY PLANS PREPARED BY
WESTENHOFF AND NOVICK, INC.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

SUBMITTED Howard S. Newman
ILLINOIS PE # 19417

DEPARTMENT OF TRANSPORTATION
BUREAU OF PUBLIC ROADS

APPROVED _____
DIVISION ENGINEER

DATE

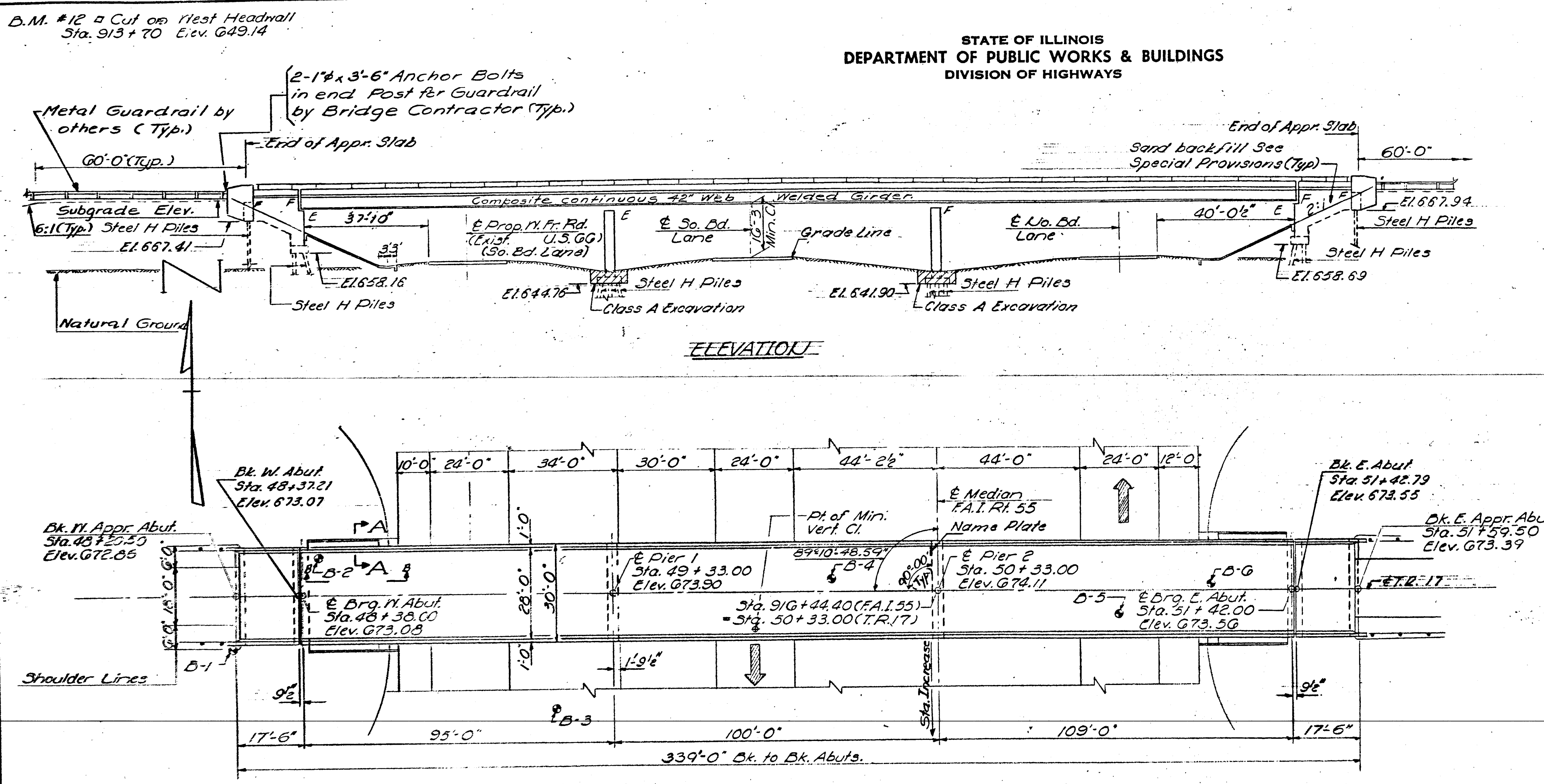
CONTRACT NO. 28091

REEL 6-67

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.I. 55	68-5HB-1	Montgomery	31	8
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1
13 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS



GENERAL NOTES

All reinforcement bars shall be lapped 24 diameters unless otherwise shown.

Fasteners shall be high strength bolts. Bolts ⅞" φ, open holes 15/16" φ, unless otherwise noted.

Calculated weight of Structural Steel = 290,600 Lbs.

The basic Lead Silico Chromate paint system shall be used for shop and field painting of structural steel.

Field welding of construction accessories will not be permitted to the bottom flange of bms or girders nor to the top flange for a distance equal to one-fourth the span length each way from the pier supports. Field welding in other areas will be permitted only when approved by the Engineer.

Anchor bolts shall be set before bolting diaphragms over supports.

Slope wall shall be reinforced with welded wire fabric 6"x6" mesh, weighing 58 Lb per 100 sq. ft.

The Contractor shall drive 2 steel (10BP42) test piles in permanent locations at Pier 1 & East Abutment as directed by the Engineer.

The concrete rail section above the mandatory const. joint at the top of the slab shall be constructed of Class X Concrete, except the aggregates shall conform to the requirements of Handrail Concrete.

Class A Excavation for structures include excavation for slope wall.

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

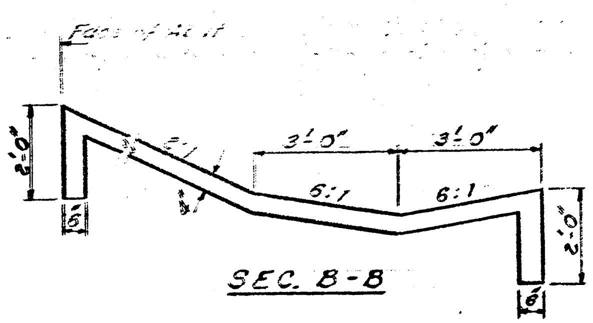
TOTAL BILL OF MATERIAL

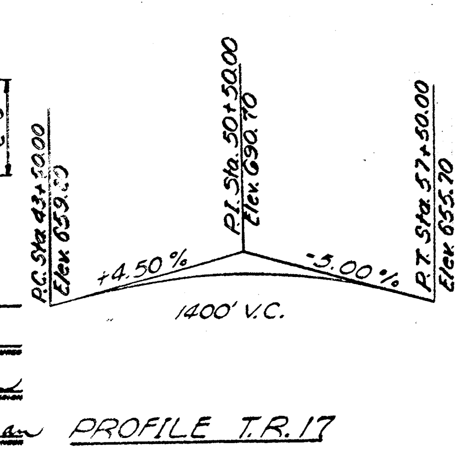
Item	Unit	Super	Sub	Total
Sand Backfill	Cu. Yd.		122	122
Class A Excavation for Structures	Cu. Yd.		120	120
Protective Coat	Sq. Yd.	1250		1250
Class X Concrete	Cu. Yd.	317.3	203.9	521.2
Structural Steel	L.S.	1		1
Stud Shear Connectors	Ea.	1164		1164
Aluminum Railing	Lin. Ft.			668
Reinforcement Bars	Lbs.	82950	28770	111720
Steel Piles (10BP42)	Lin. Ft.			1535
Test Piles Steel (10BP42)	Ea.			2
Name Plates	Ea.			1
Slope Wall (4")	Sq. Yd.			290
* Bridge Seat Sealant	L.S.			1

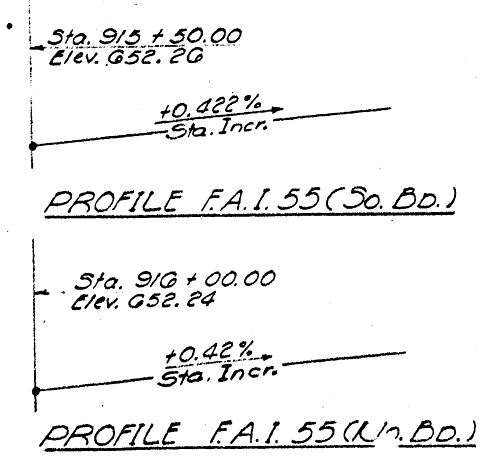
* At Abutments

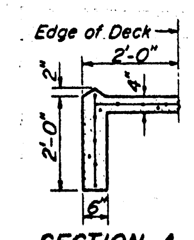
STATION 916 + 44.59
BUILT 19 BY
STATE OF ILLINOIS
F.A.I. RT. 55 SEC. 68-5HB-1
F.A. PROJ. I-55-2(30)
LOADING HS 15-44

NAME PLATE
(See Std. 2113-1)





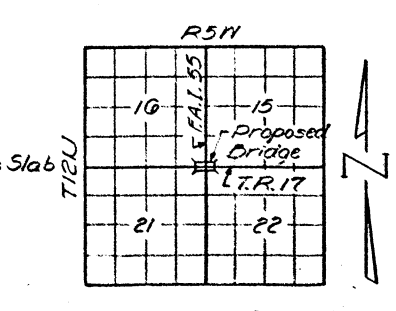




DESIGN STRESSES

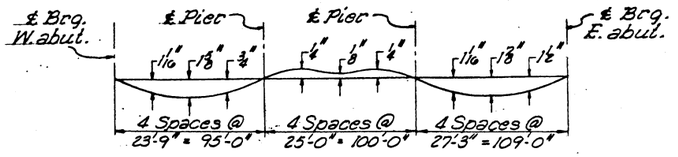
fc = 1200 p.s.i. (Deck Slab)
fc = 1400 p.s.i. (Sub, Par. & Curb) & Appr. Slab
fs = 20000 p.s.i. (Reinf.)
fs = 20000 p.s.i. (Struct.)
Vc = 75 p.s.i. (Ftgs.)
n = 10
Allow 25 #/□' for future W.S.
L Δ = L/1200 Composite

LOADING HS15-44



GENERAL PLAN & ELEVATION
PROJ. I-55-2(30) 73
T.R. 17 OVER F.A.I. RT. 55
F.A.I. RT. 55 SEC. 68-5HB-1
MONTGOMERY COUNTY
STA. 916 + 44.59 (F.A.I. 55)

DESIGNED	[signature]	EXAMINED	
CHECKED	SHEN, TZAIFA	PASSED	W.E. Baumann
DRAWN	J. Kessler	APPROVED	Richard H. Golterman
CHECKED	SHEN, TZAIFA		



DEAD LOAD DEFLECTION DIAGRAM

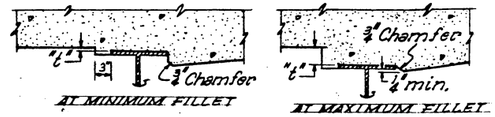
(Includes weight of concrete only)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.
Dead load of approach spans = 0.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I. R. A. I. 55	68-5HB-1	Montgomery	31	9
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

SHEET NO. 2
13 SHEETS



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

FILLET HEIGHTS

GIRDERS 1 & 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Brg. ℄ girder W. abut.	4838.000	12.000	672.947	672.947
B	4848.000	12.000	673.062	673.100
C	4858.000	12.000	673.171	673.247
D	4868.000	12.000	673.273	673.369
E	4878.000	12.000	673.368	673.473
F	4888.000	12.000	673.456	673.563
G	4898.000	12.000	673.538	673.624
H	4908.000	12.000	673.612	673.678
I	4918.000	12.000	673.680	673.720
J	4928.000	12.000	673.742	673.755
℄ Pier #1	4933.000	12.000	673.770	673.770
K	4943.000	12.000	673.821	673.813
L	4953.000	12.000	673.865	673.849
M	4963.000	12.000	673.902	673.884
N	4973.000	12.000	673.933	673.917
O	4983.000	12.000	673.957	673.944
P	4993.000	12.000	673.974	673.957
Q	5003.000	12.000	673.984	673.964
R	5013.000	12.000	673.988	673.970
S	5023.000	12.000	673.984	673.975
℄ Pier #2	5033.000	12.000	673.974	673.974
T	5043.000	12.000	673.957	673.990
U	5053.000	12.000	673.934	673.999
V	5063.000	12.000	673.903	674.000
W	5073.000	12.000	673.866	673.987
X	5083.000	12.000	673.822	673.968
Y	5093.000	12.000	673.771	673.922
Z	5103.000	12.000	673.714	673.852
a	5113.000	12.000	673.649	673.775
b	5123.000	12.000	673.578	673.665
c	5133.000	12.000	673.500	673.541
℄ Brg. ℄ girder E. abut.	5142.000	12.000	673.424	673.424

GIRDERS 2 & 3

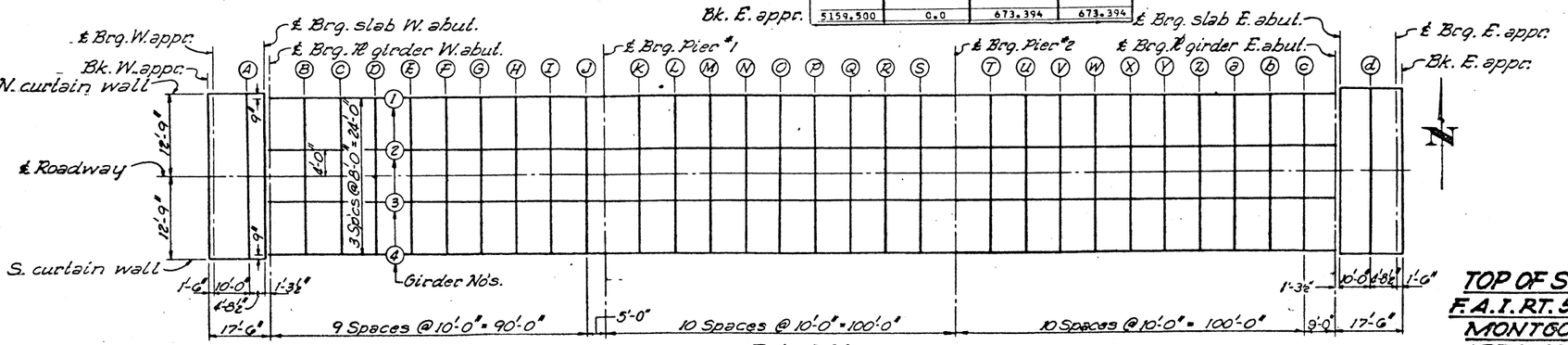
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
℄ Brg. ℄ girder W. abut.	4838.000	4.000	673.064	673.064
B	4848.000	4.000	673.179	673.217
C	4858.000	4.000	673.288	673.364
D	4868.000	4.000	673.390	673.486
E	4878.000	4.000	673.485	673.590
F	4888.000	4.000	673.573	673.680
G	4898.000	4.000	673.655	673.741
H	4908.000	4.000	673.729	673.795
I	4918.000	4.000	673.797	673.837
J	4928.000	4.000	673.859	673.872
℄ Pier #1	4933.000	4.000	673.887	673.887
K	4943.000	4.000	673.938	673.930
L	4953.000	4.000	673.982	673.966
M	4963.000	4.000	674.019	674.001
N	4973.000	4.000	674.050	674.034
O	4983.000	4.000	674.074	674.061
P	4993.000	4.000	674.091	674.074
Q	5003.000	4.000	674.101	674.081
R	5013.000	4.000	674.105	674.087
S	5023.000	4.000	674.101	674.092
℄ Pier #2	5033.000	4.000	674.091	674.091
T	5043.000	4.000	674.074	674.107
U	5053.000	4.000	674.051	674.116
V	5063.000	4.000	674.020	674.116
W	5073.000	4.000	673.983	674.104
X	5083.000	4.000	673.939	674.085
Y	5093.000	4.000	673.888	674.038
Z	5103.000	4.000	673.831	673.969
a	5113.000	4.000	673.766	673.892
b	5123.000	4.000	673.695	673.782
c	5133.000	4.000	673.617	673.658
℄ Brg. ℄ girder E. abut.	5142.000	4.000	673.541	673.541

℄ ROADWAY APPR. SPANS

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. appr.	4820.500	0.0	672.862	672.862
℄ Brg. W. appr.	4822.000	0.0	672.881	672.881
A	4832.000	0.0	673.008	673.008
℄ Brg. slab W. abut.	4836.708	0.0	673.065	673.065
℄ Brg. ℄ girder W. abut.	4838.000	0.0	673.080	673.080
B	4848.000	0.0	673.196	673.233
C	4858.000	0.0	673.304	673.380
D	4868.000	0.0	673.406	673.502
E	4878.000	0.0	673.501	673.607
F	4888.000	0.0	673.590	673.697
G	4898.000	0.0	673.671	673.758
H	4908.000	0.0	673.746	673.812
I	4918.000	0.0	673.814	673.856
J	4928.000	0.0	673.875	673.888
℄ Pier #1	4933.000	0.0	673.903	673.903
K	4943.000	0.0	673.954	673.946
L	4953.000	0.0	673.998	673.982
M	4963.000	0.0	674.036	674.017
N	4973.000	0.0	674.066	674.051
O	4983.000	0.0	674.090	674.078
P	4993.000	0.0	674.107	674.091
Q	5003.000	0.0	674.118	674.097
R	5013.000	0.0	674.121	674.103
S	5023.000	0.0	674.118	674.109
℄ Pier #2	5033.000	0.0	674.108	674.108
T	5043.000	0.0	674.091	674.124
U	5053.000	0.0	674.067	674.133
V	5063.000	0.0	674.037	674.133
W	5073.000	0.0	674.000	674.120
X	5083.000	0.0	673.956	674.101
Y	5093.000	0.0	673.905	674.055
Z	5103.000	0.0	673.847	673.995
a	5113.000	0.0	673.783	673.909
b	5123.000	0.0	673.712	673.798
c	5133.000	0.0	673.634	673.675
℄ Brg. ℄ girder E. abut.	5142.000	0.0	673.558	673.558
℄ Brg. slab E. abut.	5143.292	0.0	673.546	673.546
d	5153.292	0.0	673.455	673.455
℄ Brg. E. appr.	5158.000	0.0	673.409	673.409
Bk. E. appr.	5159.500	0.0	673.394	673.394

CURTAIN WALLS

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. appr.	4820.500	12.750	672.716	672.716
℄ Brg. W. appr.	4822.000	12.750	672.735	672.735
A	4832.000	12.750	672.862	672.862
℄ Brg. slab W. abut.	4836.708	12.750	672.919	672.919
℄ Brg. slab E. abut.	5143.292	12.750	673.401	673.401
d	5153.292	12.750	673.309	673.309
℄ Brg. E. appr.	5158.000	12.750	673.263	673.263
Bk. E. appr.	5159.500	12.750	673.249	673.249



PLAN

TOP OF SLAB ELEVATIONS

F.A.I. RT. 55 SEC. 68-5HB-1
MONTGOMERY COUNTY
STATION 916 + 44.59

DESIGNED	Charles P. Green
CHECKED	SHEN, TRAIFA
DRAWN	JM.
CHECKED	SHEN, TRAIFA

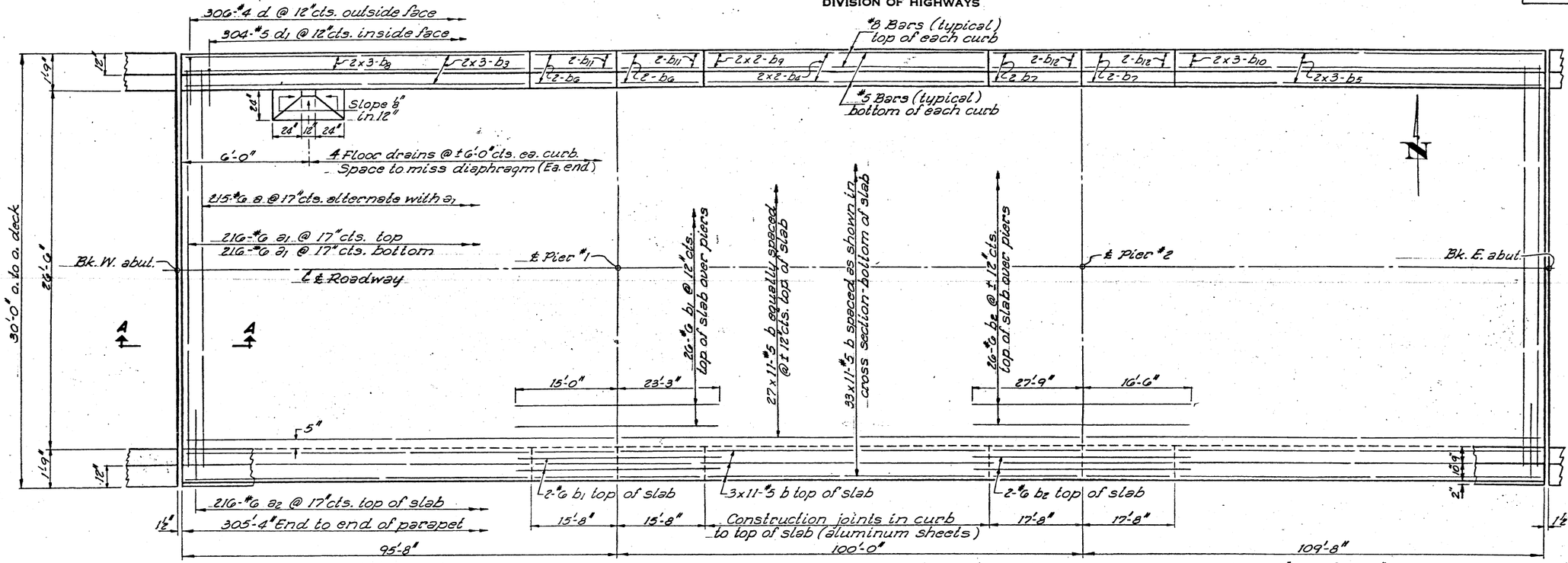
19
EXAMINED
ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED W. E. Bensmann
ENGINEER OF DESIGN
APPROVED Richard H. Rutemeyer
CHIEF HIGHWAY ENGINEER

Note: Bars designated thus 20 x 3 etc., indicates 20 lines of bars with 3 lengths per line. Min. bar laps = 24 dia.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 55	68-5HB-1	Montgomery	31	10
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 3
13 SHEETS



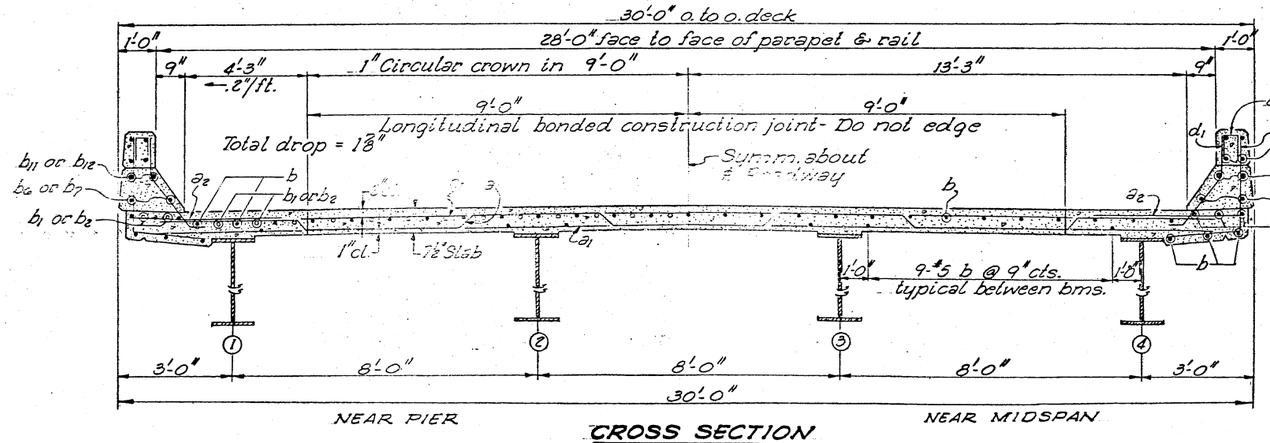
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	215	#6	29'-0"	
a1	432	#6	28'-0"	
a2	432	#6	4'-0"	
b	726	#5	29'-0"	
b1	30	#6	38'-3"	
b2	30	#6	44'-3"	
b3	12	#5	27'-6"	
b4	8	#5	34'-0"	
b5	12	#5	31'-5"	
b6	8	#5	15'-5"	
b7	8	#5	17'-5"	
b8	12	#8	28'-0"	
b9	8	#8	34'-6"	
b10	12	#8	32'-0"	
b11	8	#8	15'-5"	
b12	8	#8	17'-5"	
d	612	#4	4'-6"	
d1	608	#5	3'-5"	
d2	148	#4	2'-1"	
Reinforcement Bars		Lbs.	64670	
* Structural Steel		Lbs.	290600	
Class X Concrete		Cu.yds.	254.1	

*Weight of bearing assemblies with lead plates & anchor bolts are included as structural steel. Est. wt. = 6390#

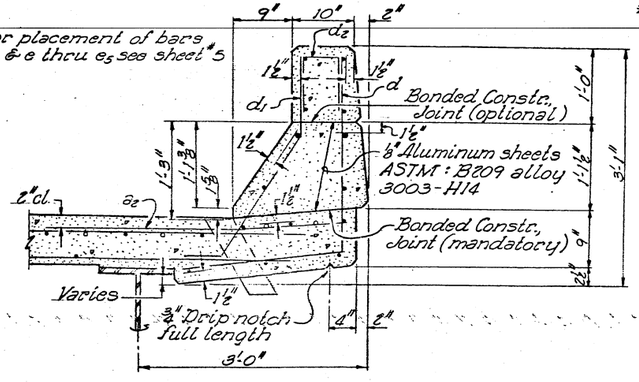
The lengths & quantities of longitudinal reinforcement & Class X Concrete in parapets are not included in the above quantities. See sheet #5

PLAN

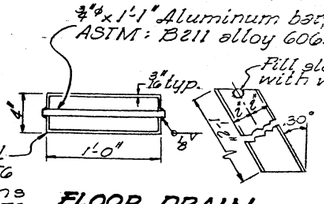


CROSS SECTION
(Looking East)

Note: For placement of bars d2 & e thru e5 see sheet #5



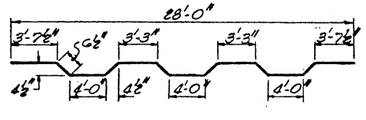
CURB SECTION
Cost of aluminum drains and sheets incidental to Class X Concrete



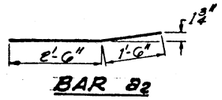
FLOOR DRAIN

DESIGNED	Charles P. Green
CHECKED	SHEN, TJ AIFA
DRAWN	J. Mullenix
CHECKED	SHEN, TJ AIFA

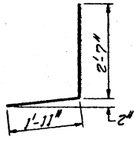
April 10 1970
EXAMINED Carl E. Rummann ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED W. E. Baumann ENGINEER OF DESIGN
APPROVED Richard H. Gotterman CHIEF HIGHWAY ENGINEER



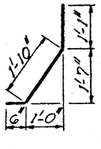
BAR a



BAR a2



BAR d



BAR d1

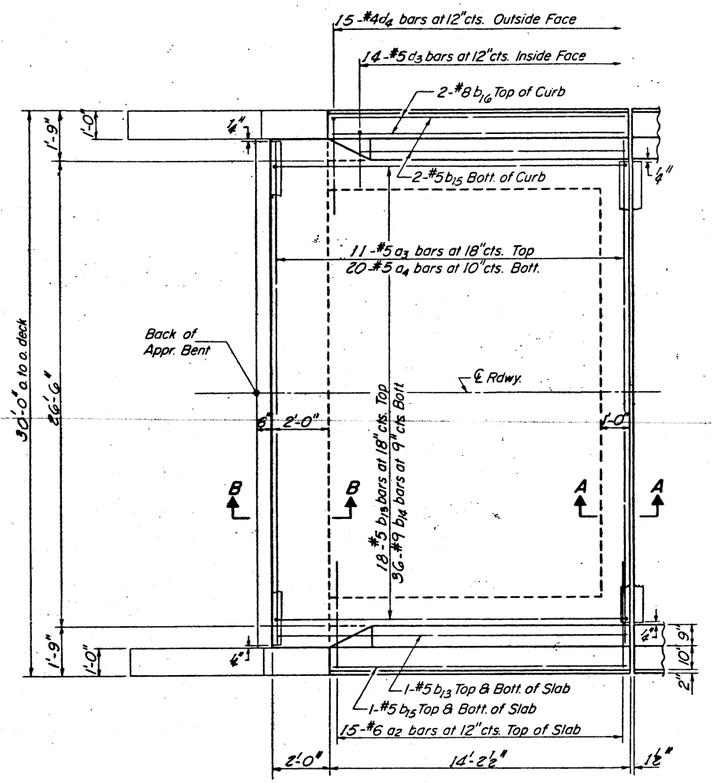
BAR d2

SUPERSTRUCTURE DETAILS
F.A.I. RT. 55 SEC. 68-5HB-1
MONTGOMERY COUNTY
STATION 916 + 44.59

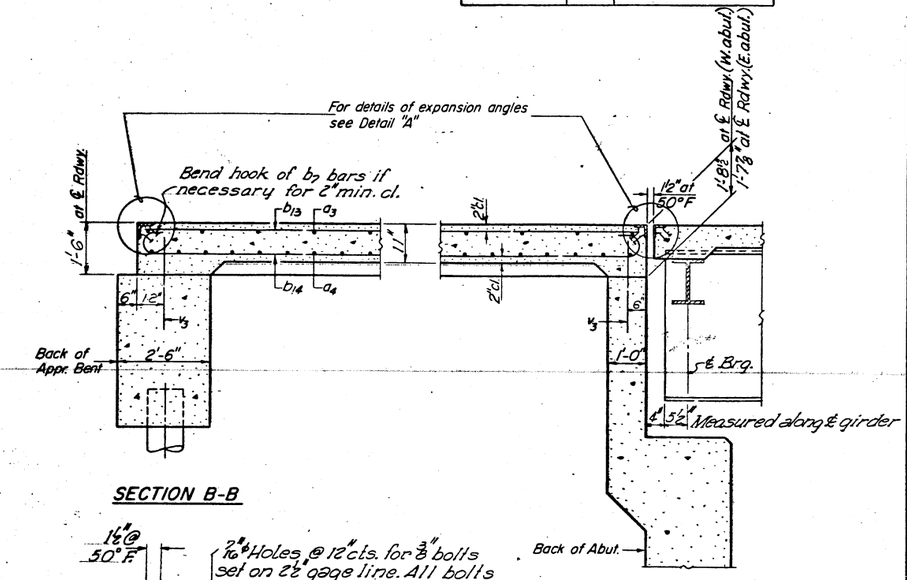
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 55	68-5H8-1	Montgomery	31	11
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:		

SHEET NO. 4
13 SHEETS

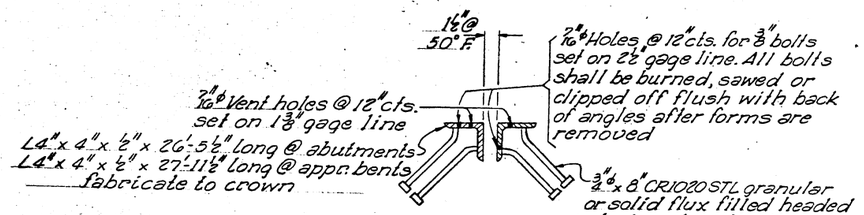


PLAN

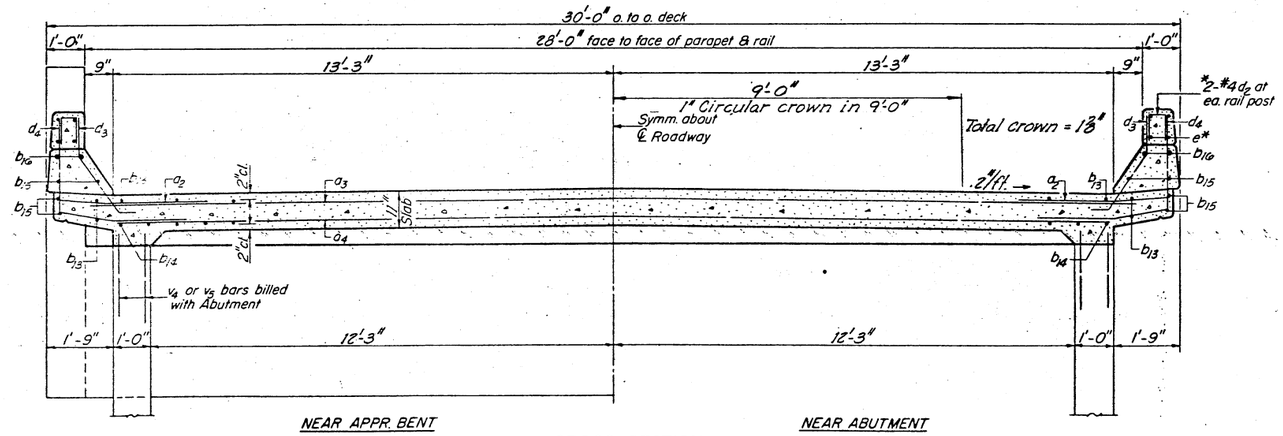


SECTION B-B

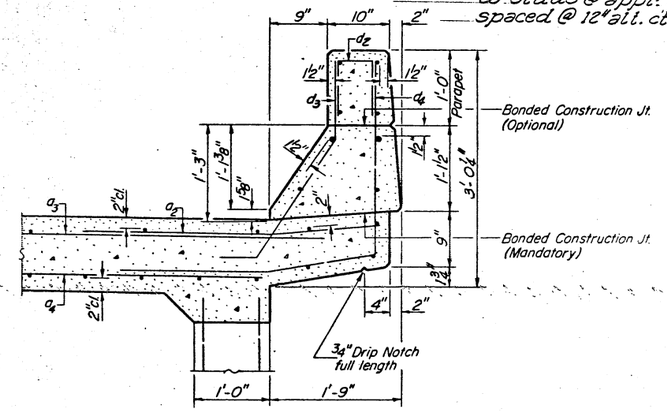
SECTION A-A



DETAIL A



CROSS SECTION



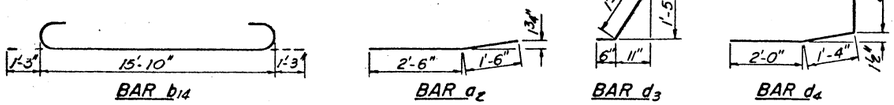
CURB SECTION

TWO APPR. SLABS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_2	60	#6	4'-0"	—
a_3	22	#5	27'-9"	—
a_4	40	#5	26'-3"	—
b_{13}	44	#5	15'-10"	—
b_{14}	72	#9	18'-4"	⊂
b_{15}	16	#5	13'-10"	—
b_{16}	8	#8	13'-10"	—
d_3	56	#5	3'-3"	y
d_4	60	#4	5'-11"	⌋
Reinforcement Bars			Lbs.	16,520
Class X Concrete			Cu. Yds.	41.6
			—	

*Longitudinal parapet reinforcement & class x concrete are billed on sh. #5 The length & quantity of d_2 bars in the approach span are included with those of the main spans sh. # 3

Note: See sheet #3 for detail of bar d_2



DESIGNED	Charles O'Shea
CHECKED	SHEN, TD AIFA
DRAWN	J. Mullenix
CHECKED	SHEN, TD AIFA

April 10 1970
EXAMINED Dale E. Bauman
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED W. E. Bauman
ENGINEER OF DESIGN
APPROVED Richard H. Gotterman
CHIEF HIGHWAY ENGINEER

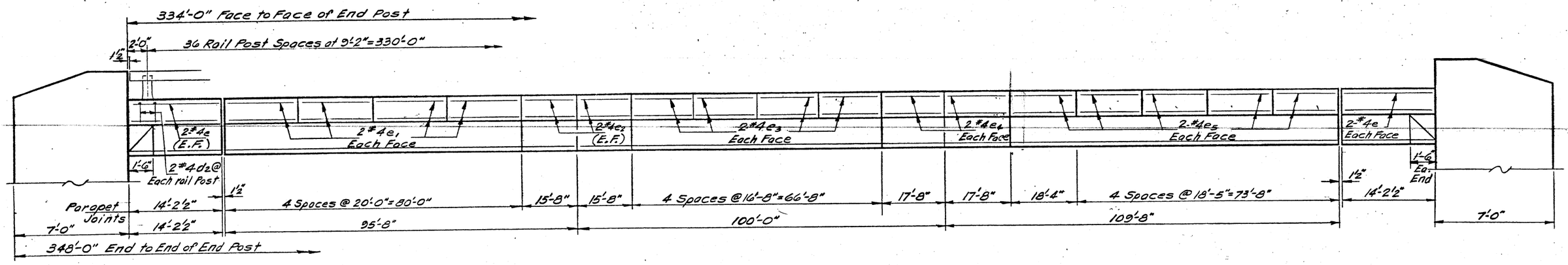
SAS-O 3-1-69

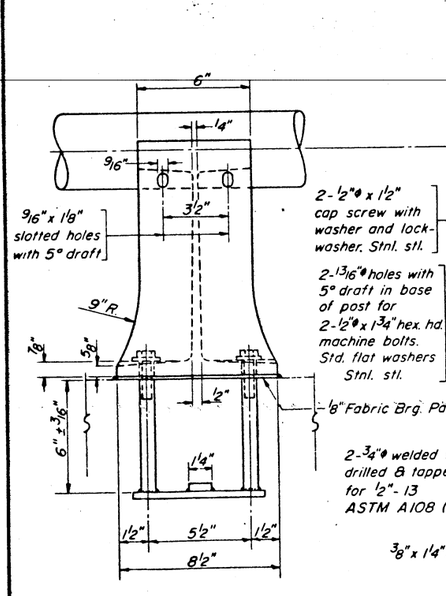
E. & W. APPR. SLABS
F.A.I. RT. 55 SEC. 68-5HB-1
MONTGOMERY COUNTY
STATION 916 + 44.59

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

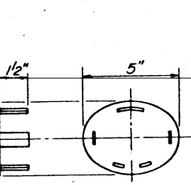
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 55	68-5HB-1	Montgomery	31	12
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:		

SHEET NO. 5
13 SHEETS

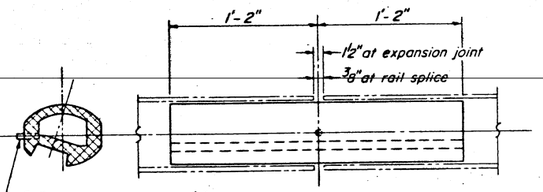




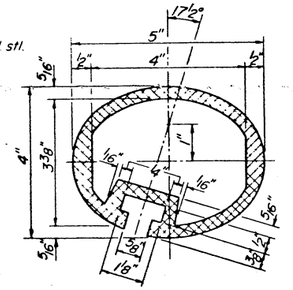
RAIL POST DETAILS



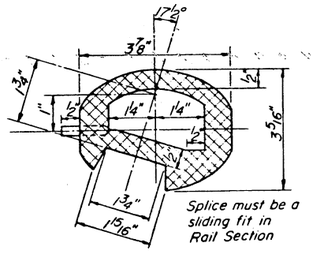
CAST END CAP
DRIVE FIT TYPE
4 Required



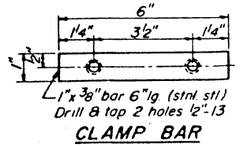
RAIL SPLICE



SEC. THRU ELLIPTICAL RAIL SECTION



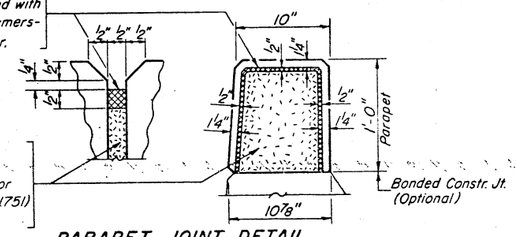
SEC. THRU SPLICE



CLAMP BAR

Two component non-staining gray sealing compound with polysulfide liquid polymers-gun grade with primer.

½" Preformed Cork Asphalt Joint Filler. (meets qualifications for ASTM: Designation D 1751) Cost incidental.



PARAPET JOINT DETAIL

PARAPETS & RAILS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
e	16	#4	13'-11"	
e1	32	#4	19'-9"	
e2	16	#4	15'-5"	
e3	32	#4	16'-5"	
e4	16	#4	17'-5"	
e5	40	#4	18'-2"	
Reinforcement Bars			Lbs.	1760
Class X Concrete			Cu. Yds.	21.6
Aluminum Railing			Lin. Ft.	668

NOTES:

All Aluminum Alloy Extruded Rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.

All joints in rail shall be spliced per detail.

Provide 1 - ⅛" and 2 - 1/16" Aluminum Shims for 25% of the Posts. Rail element shall be parallel to Grade - high spots shall be ground and low spots shimmed.

Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers, gun grade with primer. Fabric Bearing Pad shall have same dimensions as base of post.

Aluminum alloy rail shall conform to ASTM B221 alloy 6061-T6 or 6351-T5 with min. yield 35 ksi, min. tensile 38 ksi, and elongation of 10% in 2 inches.

DESIGNED	Charles O'Green	
CHECKED	SHEN, TUAIFA	
DRAWN	Leona Heeren	
CHECKED	SHEN, TUAIFA	

EXAMINED April 10 1970
Paul E. Tammen
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED W. E. Bauman
ENGINEER OF DESIGN
APPROVED Richard H. Volkerman
CHIEF HIGHWAY ENGINEER

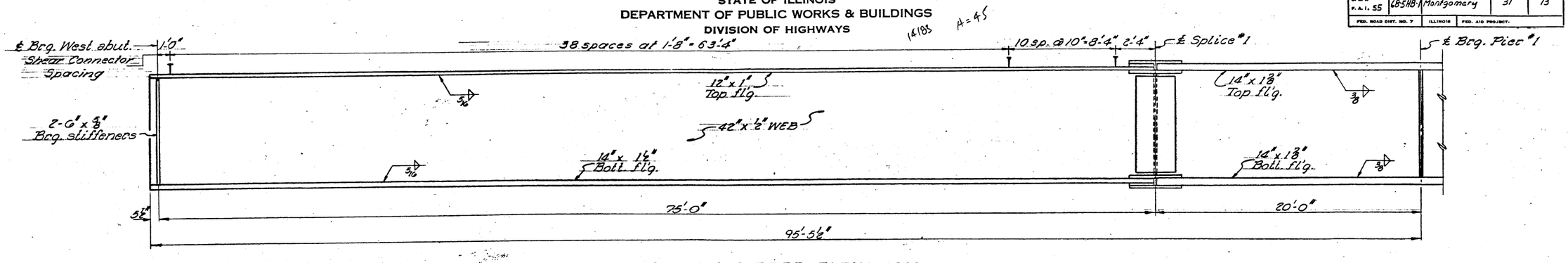
ALUMINUM RAILING
F.A.I. RT. 55 SEC. 68-5HB-1
MONTGOMERY COUNTY
STATION 916+44.59

R-17 4-22-68 9-18-69

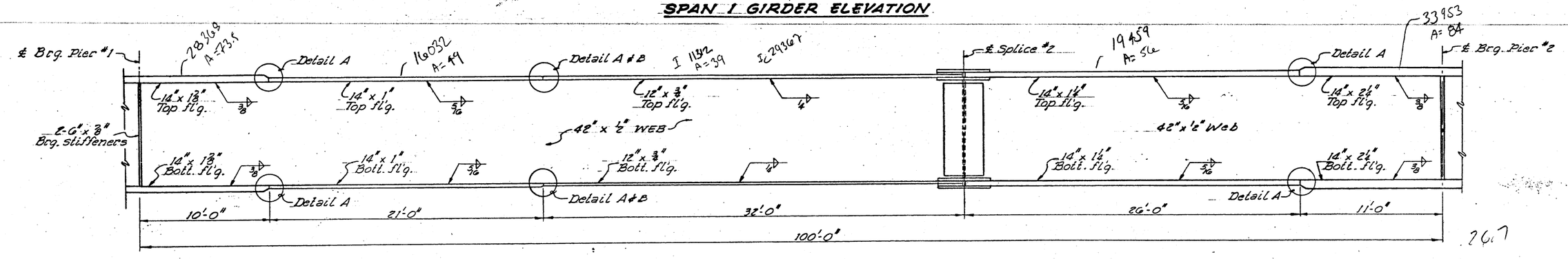
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
U. S. I. F. A. I. 55	68518-1	Montgomery	31	13
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 6
13 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS



SPAN 1 GIRDER ELEVATION



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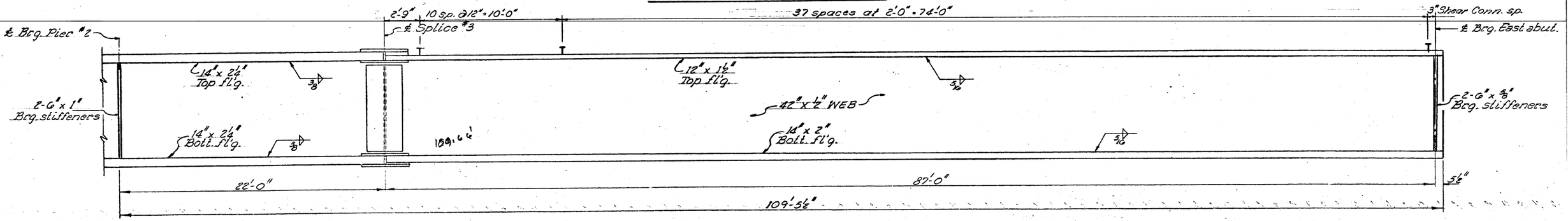

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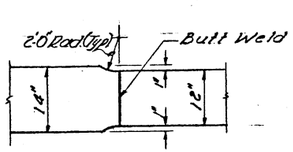
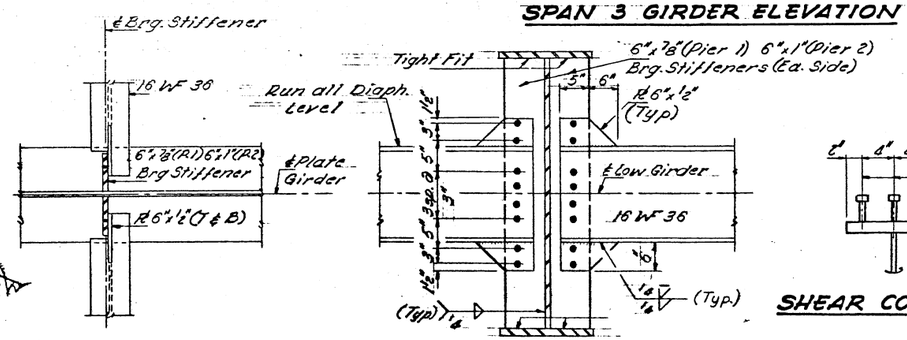
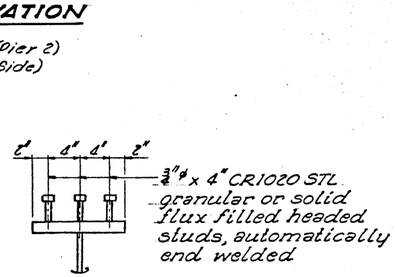


DETAIL B

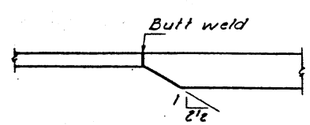


DIAPHRAGM D2

No. Req'd 6



SHEAR CONNECTORS



DETAIL A

DESIGNED	Charles R. Shen
CHECKED	SHEN, TZU-I FA
DRAWN	J. Mullenix
CHECKED	SHEN, TZU-I FA

Approved ID 1970

EXAMINED W. E. Bauman
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES

PASSED W. E. Bauman
ENGINEER OF DESIGN

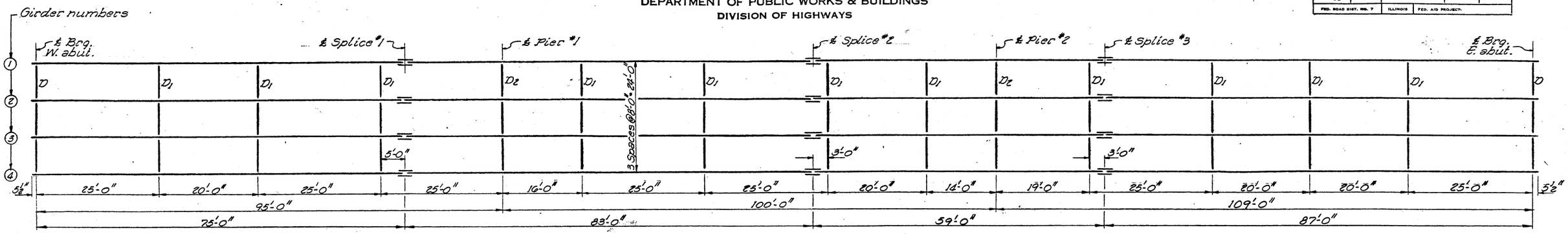
APPROVED Richard H. Gotterman
CHIEF HIGHWAY ENGINEER

GIRDER ELEVATIONS
F.A.I. RT. 55 SEC. 68-5HB-1
MONTGOMERY COUNTY
STATION 916 + 44.59

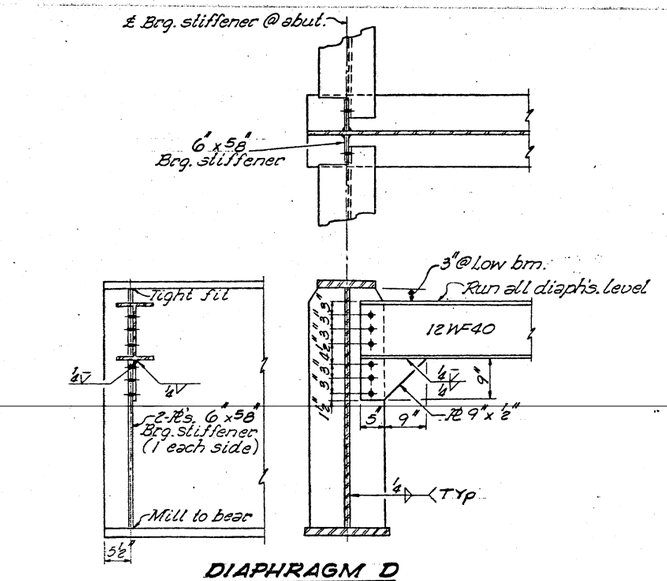
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.I. 55	68-5HB-1	Montgomery	31	14
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

SHEET NO. 7
13 SHEETS

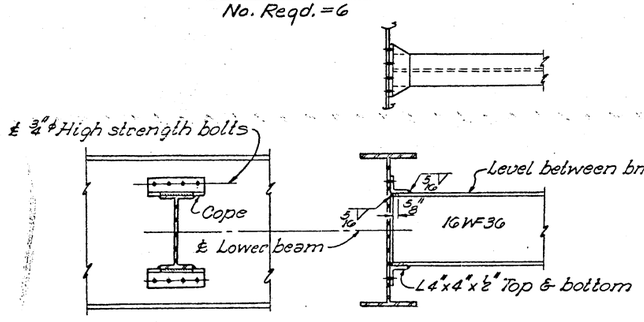
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS



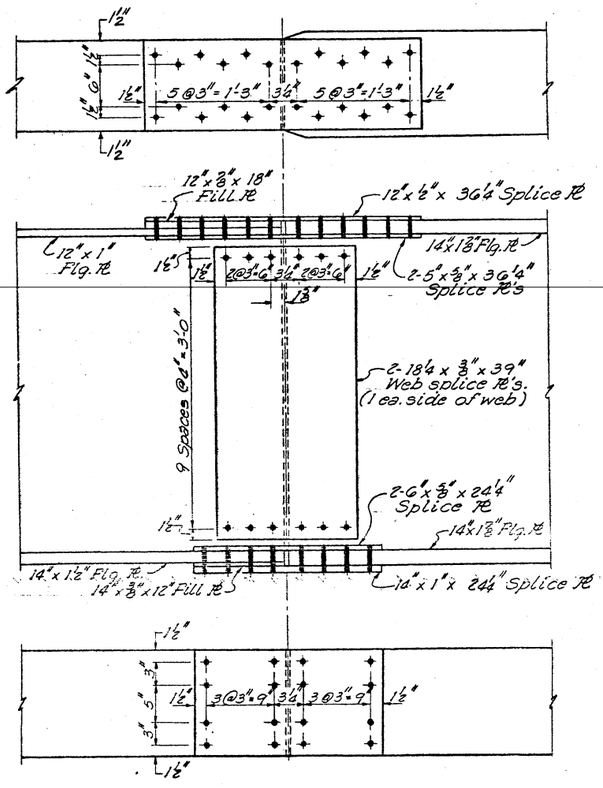
DIAPHRAGM LAYOUT



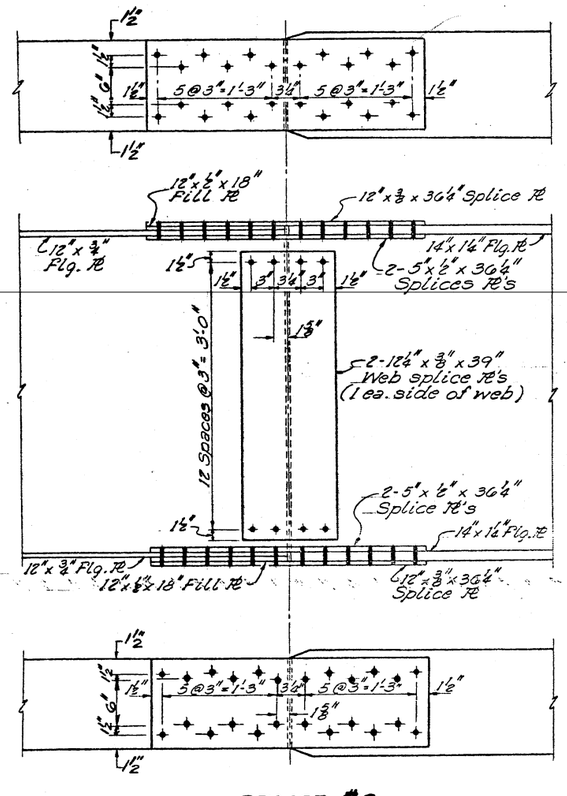
DIAPHRAGM D
No. Reqd. = 6



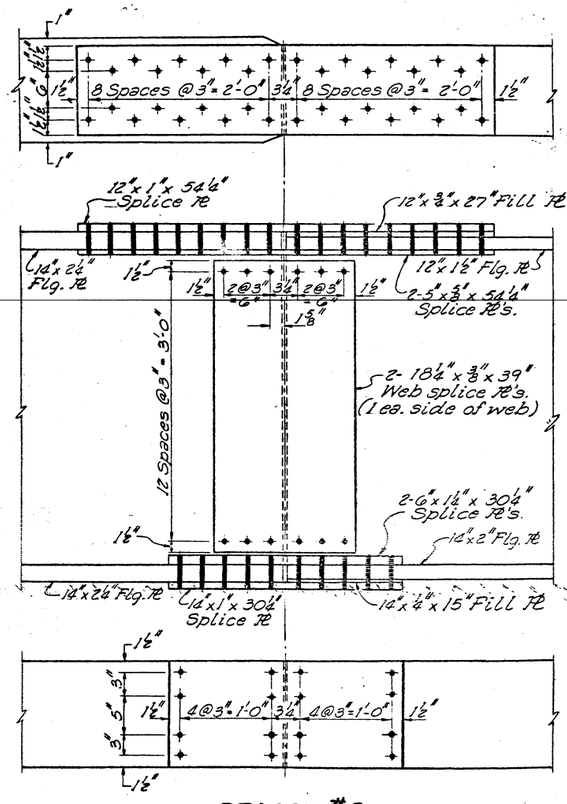
INTERIOR DIAPHRAGM D1
No. Reqd. = 33



SPLICE #1
⅞" ϕ H.S. Bolts



SPLICE #2
⅞" ϕ H.S. Bolts



SPLICE #3
⅞" ϕ H.S. Bolts

DESIGNED	Charles P. Green
CHECKED	SHEN, TOY & IFFA
DRAWN	J. Mullenix R.H.
CHECKED	SHEN, TOY & IFFA

April 10 1970
EXAMINED Paul E. Brunman
ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED W. E. Baumann
ENGINEER OF DESIGN
APPROVED Richard H. Wolterman
CHIEF HIGHWAY ENGINEER

Note: For diaphragm D2 detail, see sheet #6

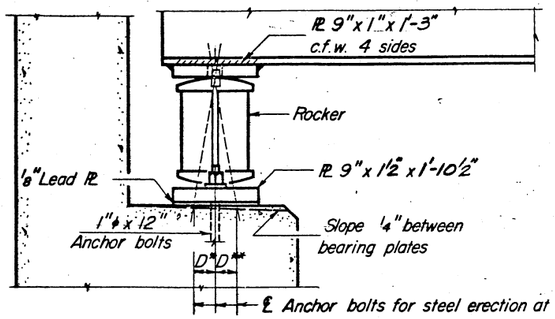
DIAPHRAGM LAYOUT & SPLICE DETAILS

F.A.I. RT. 55 SEC. 68-5HB-1
MONTGOMERY COUNTY
STATION 916 + 44.59

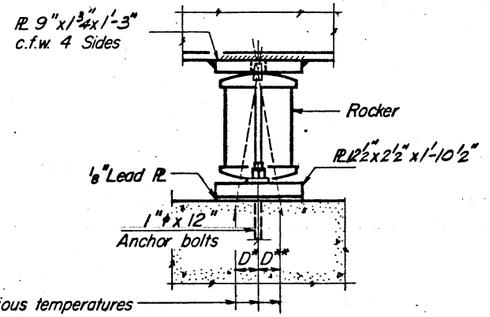
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. R. I. F. A.I. 55	68-5HB-1	Montgomery	31	15
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

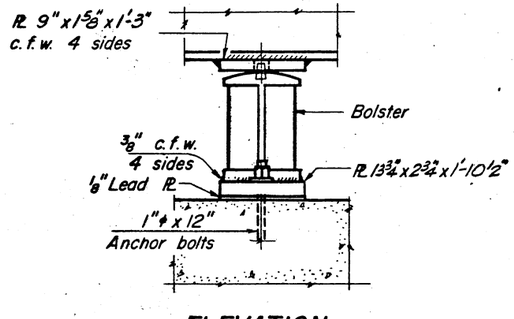
SHEET NO. 8
13 SHEETS



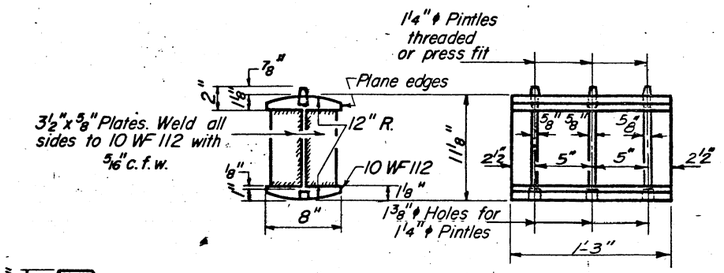
SECTION



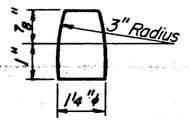
ELEVATION



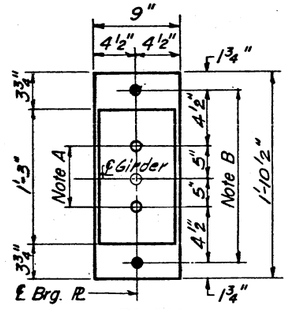
ELEVATION



ROCKER



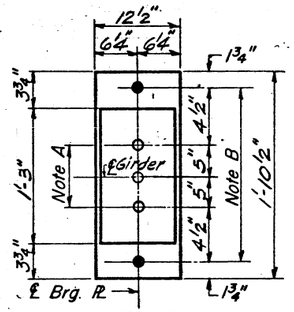
PINTLE



PLAN

AT ABUTMENTS

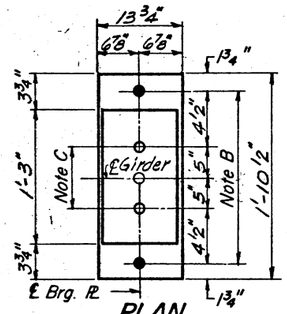
NOTE A
1⅜"ϕ Holes – 1" deep in top Rr. for pintles. Thread or press fit pintles into bottom Rr.



PLAN

AT PIER 1

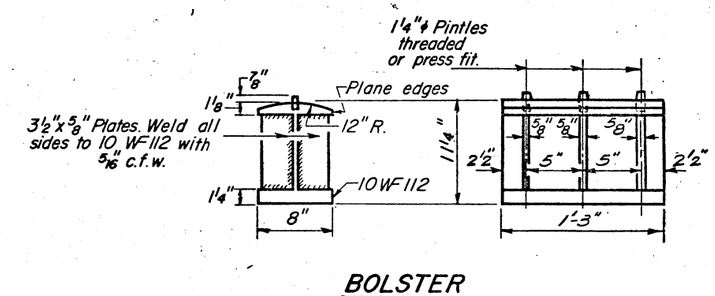
NOTE B
1½"ϕ Holes for 1"ϕ anchor bolts. 2½"x2½"x⅝16" Rr. Washers under nut.



PLAN

AT PIER 2

NOTE C
1⅜"ϕ Holes 1" deep in top Rr. only for 1¼"ϕ pintles.



BOLSTER

NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

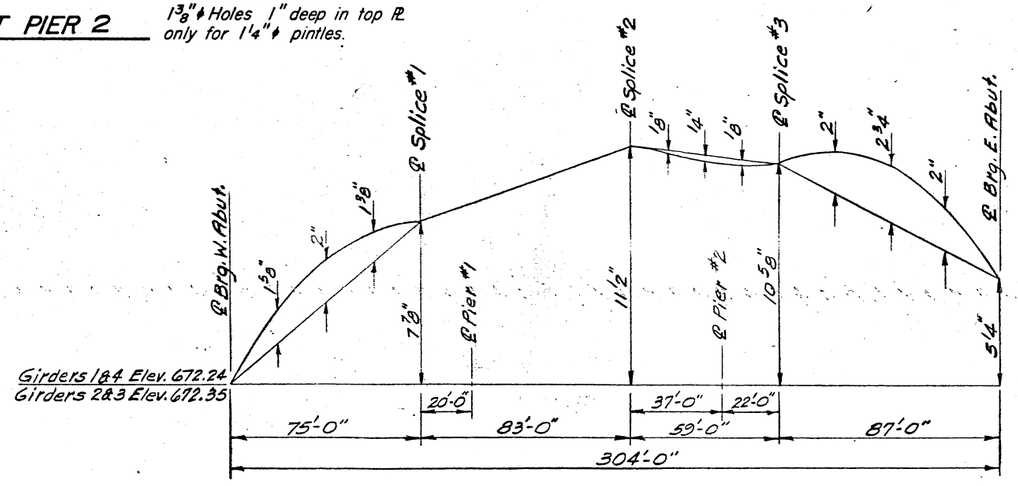
a) D* (Side of brg. away from fixed brg.)
D* = ⅛" per each 100' of expansion for every 15° fall below the normal temp. of 50°F.
D** (Side of brg. toward fixed brg.)
D** = ⅛" per each 100' of expansion for every 15° rise above the normal temp. of 50°F.

b) After beams have been erected and dimensions D* or D** determined, holes shall be drilled and anchor bolts shall be grouted in place. All fixed anchor bolts may be built into the masonry.

BEARING ASSEMBLY DETAILS

MOMENT TABLE

INTERIOR GIRDER MOMENT TABLE						
		0.4 Span 1	Pier 1	0.5 Span 2	Pier 2	0.6 Span 3
I_s	(in^4)	17842	28368	11312	33953	24415
I_c	(in^4)	42050				51631
S_s	(in^3)	948.0	1240.1	520.1	1460.4	1242.5
S_c	(in^3)	1235.7				1547.2
n		1.018		0.998		1.063
M℄	(1k)	712.0	976.3	127.5	1263.8	1010.0
f_s ℄	(Ksi)	9.01	9.45	2.94	10.38	9.76
S℄	(M_1)	0.36		0.36		0.36
$M_{S℄}$	(1k)	261.6	320.6	94.7	390.1	357.2
M℄	(1k)	678.2	556.2	416.6	621.0	792.3
Mimp.	(1K)	154.0	126.3	92.5	137.9	168.8
Total	(1k)	1093.8	1003.1	603.8	1149.0	1318.3
f_{su} ℄ s ℄	(ksi)	10.62	9.71	13.93	9.44	10.22
f_s Total	(ksi)	19.63	19.16	16.87	19.82	19.98
VR	(K)	39.4		38.9		40.4



CAMBER DIAGRAM

REACTION TABLE

INTERIOR GIRDER REACTION TABLE					
		W. Abut.	Pier 1	Pier 2	E. Abut.
R℄+S℄	(k)	51.8	143.4	164.2	62.4
R℄	(k)	34.8	54.0	57.2	35.4
Imp.	(k)	7.9	12.3	12.7	7.5
R_{TOTAL}	(k)	94.5	209.7	234.1	105.3

DESIGNED	Charles O. Green
CHECKED	SHEN, TZAI FA
DRAWN	P.G. Barnett R.H.
CHECKED	SHEN, TZAI FA

EXAMINED April 9 1970
Gale E. Peterman
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED W.E. Baumann
ENGINEER OF DESIGN
APPROVED Richard H. Gotterman
CHIEF HIGHWAY ENGINEER

I-2-B 9-1-65

BEARING DETAILS
F.A.I. RT. 55 SEC. 68-5HB-1
MONTGOMERY COUNTY
STA. 916+44.59

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I. F. A. I. 55	68-5HB-1	Montgomery	31	16
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:		

SHEET NO. 9
13 SHEETS

Welded wire fabric 6"x 6" mesh #4 wires - Wt. 58#/100 sq. ft. plus 4-#4 tie bars. The cost of Cl. X Conc. Encasement & Reinforcement is incidental to the cost of furnishing piles. Forms for encasement may be omitted when soil conditions will permit.

10BP42

SECTION G-G (Typical)

SIDE ELEVATION

PLAN

VIEW C-C

SECTION A-A

SECTION B-B

SECTION D-D

SECTION E-E

WING WALL REINFORCEMENT

1" ø ANCHOR BOLT (Cost Incidental to Bridge Structure)

VIEW F-F

FIELD CUTTING DIAGRAM

*Order h_3 & v_5 bars full length. Cut to fit as shown and use remainder of bars in other face.

BAR v_1

BARS v_2, v_7 & v_8

BAR h_2

BAR s

BAR n

Note: Interior of vault to be sand filled to bottom of slab.

ABUT. - PILE DATA
Type - Steel (10BP42)
Capacity - Drive to refusal
Est. Length 30'
No. Req'd. 12

APPR. BENT - PILE DATA
Type - Steel (10BP42)
Capacity - Drive to refusal
Est. Length 40'
No. Req'd. 5

BILL OF MATERIAL

Bar	No	Size	Length	Shape
h	18	#5	26'-3"	
h_1	8	#5	24'-3"	
h_2	68	#5	3'-3"	
h_3	10	#4	14'-8"	
h_4	20	#4	14'-0"	
h_5	4	#6	14'-6"	
h_6	36	#4	6'-9"	
n	62	#5	4'-7"	
p	10	#7	23'-8"	
s	26	#4	12'-5"	
t	27	#7	6'-3"	
v	54	#5	6'-9"	
v_1	25	#5	8'-0"	
v_2	25	#5	11'-9"	
v_3	53	#5	2'-6"	
v_4	8	#4	11'-3"	
v_5	22	#4	13'-6"	
v_6	32	#4	5'-3"	
v_7	10	#4	8'-9"	
v_8	6	#4	5'-9"	
v_9	4	#4	4'-3"	
w	4	#5	27'-3"	
Reinforcement Bars		Lbs.	4570	
Class X Concrete		Cu. Yds.	54.8	
Steel Piles (10BP42)		Lin. Ft.	560	

DESIGNED	Charles P. Green
CHECKED	JHEN, TJA, IFA
DRAWN	Leona Heeren
CHECKED	JHEN, TJA, IFA

EXAMINED April 10 1970
Carl E. Bauman
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED W. E. Bauman
ENGINEER OF DESIGN
APPROVED Richard H. Mostert
CHIEF HIGHWAY ENGINEER

VAF-O 3-1-69

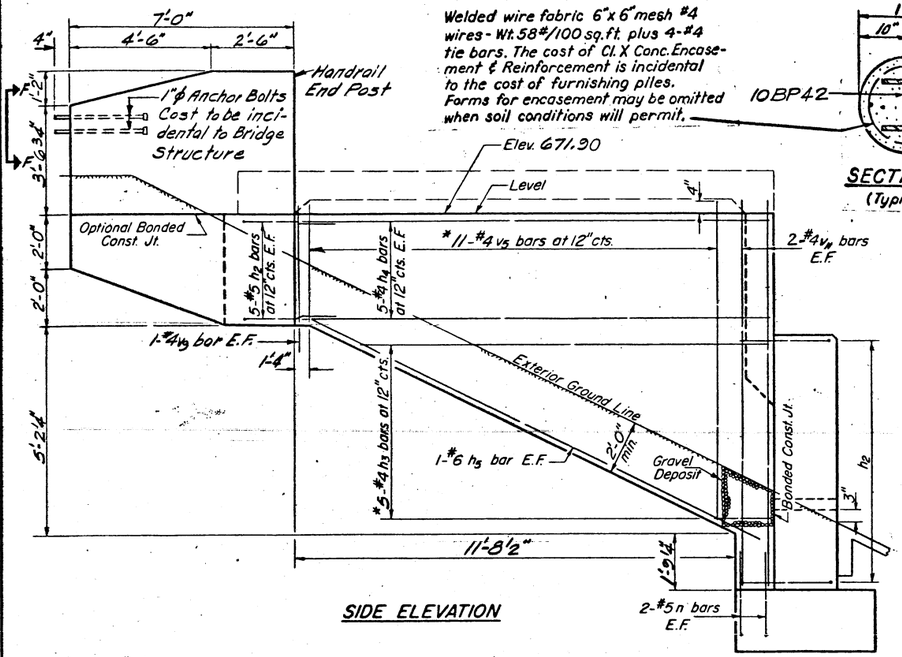
WEST ABUTMENT
F.A.I. RT. 55 SEC. 68-5HB-1
MONTGOMERY COUNTY
STATION 916+44.59

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

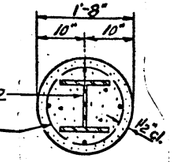
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 55	68-5HB-1	Montgomery	31	17
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 10
13 SHEETS

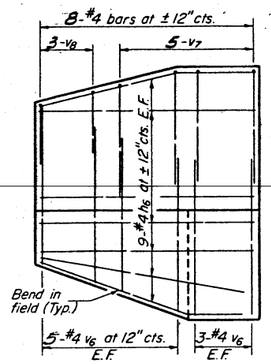
Welded wire fabric 6"x6" mesh #4 wires - Wt. 58#/100 sq. ft. plus 4-#4 tie bars. The cost of Cl. X Conc. Encasement & Reinforcement is incidental to the cost of furnishing piles. Forms for encasement may be omitted when soil conditions will permit.



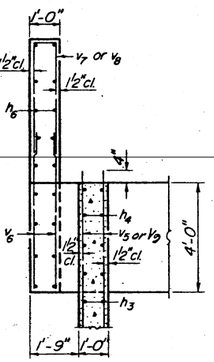
SIDE ELEVATION



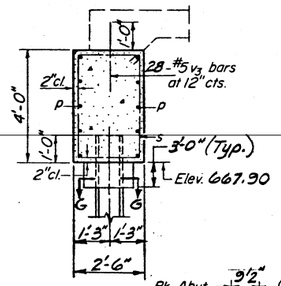
SECTION G-G
(Typical)



WING WALL REINFORCEMENT



SECTION D-D

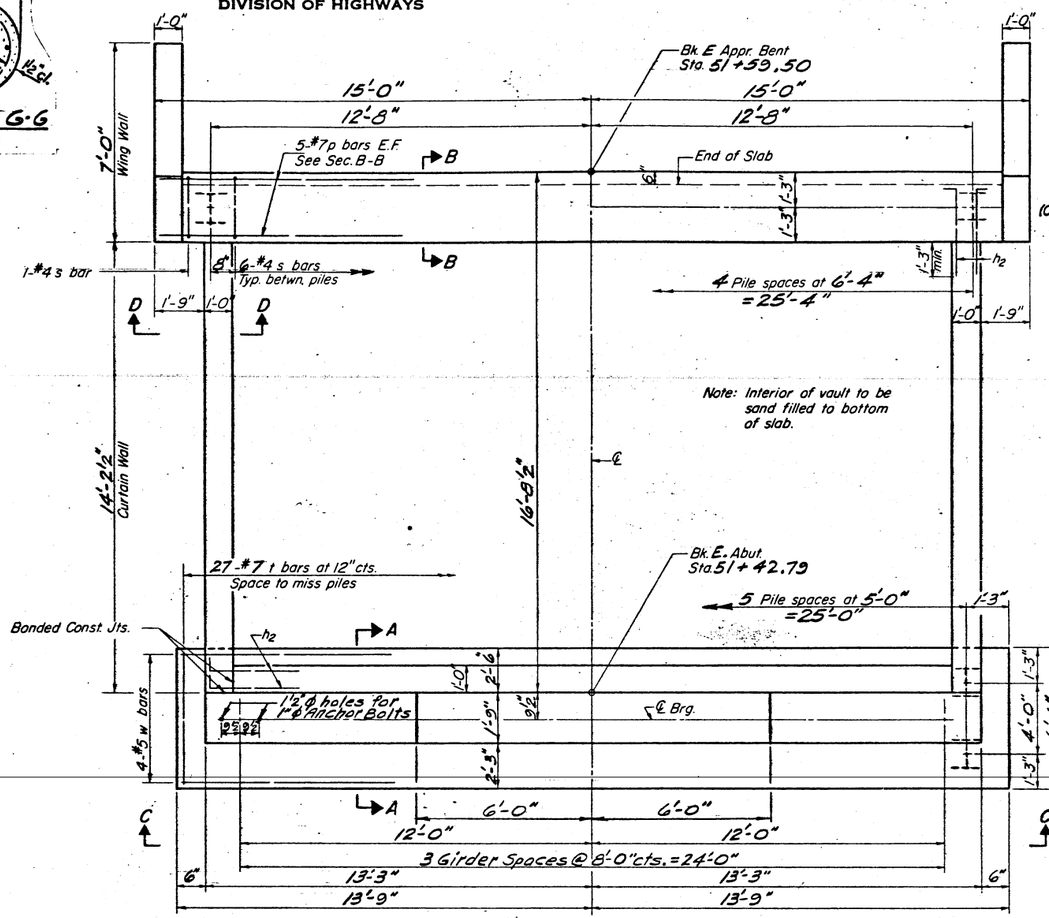


SECTION B-B

SECTION E-E

ABUT - PILE DATA
Type - Steel (10BP42)
Capacity - Drive to refusal
Est. Length 30'
No. Req'd. 11+1 test pile

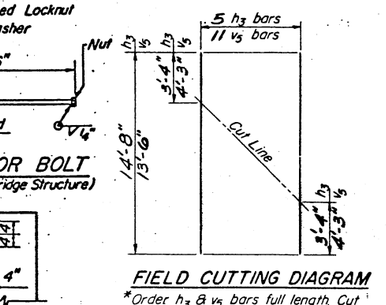
APPR. BENT - PILE DATA
Type - Steel (10BP42)
Capacity - Drive to refusal
Est. Length 40'
No. Req'd. 5

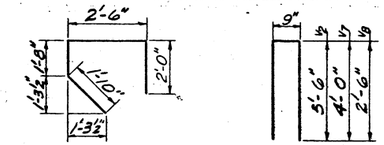


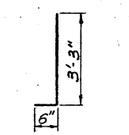
PLAN

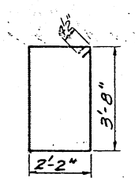
VIEW C-C

SECTION A-A









BILL OF MATERIAL

Bar	No	Size	Length	Shape
h	18	#5	26'-3"	
h1	8	#5	24'-3"	
h2	68	#5	3'-9"	
h3	10	#4	14'-8"	
h4	20	#4	14'-0"	
h5	4	#6	14'-6"	
h6	36	#4	6'-9"	
n	62	#5	4'-7"	
p	10	#7	29'-8"	
s	26	#4	12'-5"	
t	27	#7	6'-3"	
v	54	#5	6'-7"	
v1	25	#5	8'-0"	
v2	25	#5	11'-9"	
v3	53	#5	2'-6"	
v4	8	#4	11'-3"	
v5	22	#4	13'-6"	
v6	32	#4	5'-3"	
v7	10	#4	8'-9"	
v8	6	#4	5'-9"	
v9	4	#4	4'-3"	
w	4	#5	27'-3"	
Reinforcement Bars			Lbs.	4570
Class X Concrete			Cu. Yds.	54.5
Steel Piles (10BP42)			Lin. Ft.	530
Test Piles (10BP42)			Each	1

DESIGNED	Charles P. Green
CHECKED	SHEN, TSAI & FA
DRAWN	Leona Heeren
CHECKED	SHEN, TSAI & FA

EXAMINED April 19 1970
Albert Thuman
ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED W. E. Bamesmann
ENGINEER OF DESIGN
APPROVED Richard H. Holtermann
CHIEF HIGHWAY ENGINEER

VAF-0 3-1-69

EAST ABUTMENT
F.A.I. RT. 55 SEC. 68-5HB-1
MONTGOMERY COUNTY
STATION 916+44.59

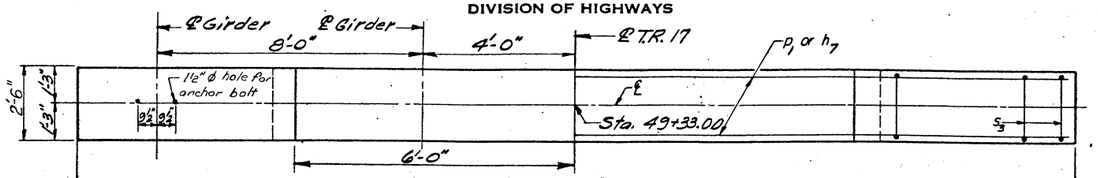
NOTES:

Space reinforcement in cap to miss anchor bolts.
All edges shall have standard ¾" chamfers except as noted.
Pour steps monolithically with cap.

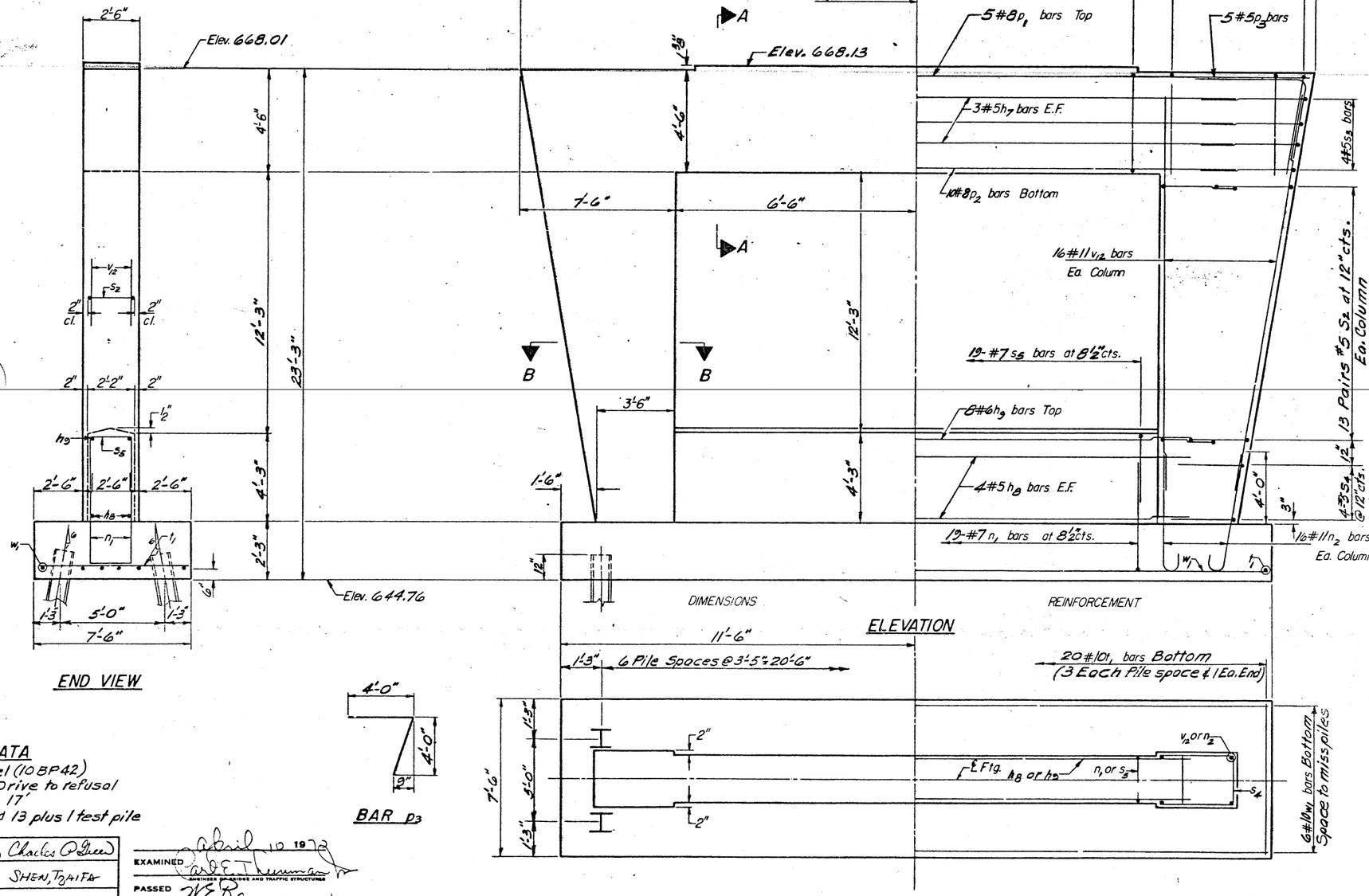
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.I. 55	68-5HB-1	Montgomery	31	18
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 11
13 SHEETS



TOP PLAN



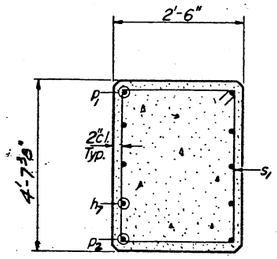
ELEVATION

END VIEW

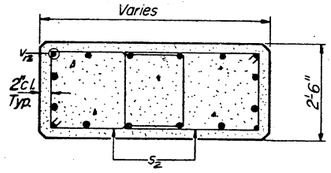
BAR p3

PILE LAYOUT & DIMENSIONS
REINFORCEMENT

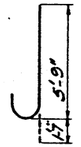
FOOTING PLAN



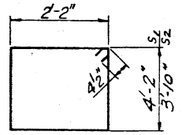
SECTION A-A



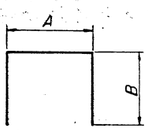
SECTION B-B



BAR n2



BARS s1 & s2



BARS n1, s3 s4 & s5

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h7	6	#5	22'-0"	—
h8	8	#5	16'-6"	—
h9	8	#6	16'-0"	—
n1	19	#7	9'-10"	⊔
n2	32	#11	7'-4"	⊃
p1	5	#8	27'-3"	—
p2	10	#8	25'-6"	—
p3	10	#5	8'-0"	⅂
s1	13	#6	13'-5"	□
s2	52	#5	12'-9"	□
s3	24	#5	10'-6"	⊓
s4	8	#5	8'-6"	⊓
s5	19	#7	9'-6"	⊓
t1	20	#10	7'-2"	—
v½	32	#11	20'-0"	—
w1	6	#10	22'-8"	—
Class X Concrete			Cu. Yds.	45.8
Reinforcement Bars			Lbs.	9480
Steel Piles (10BP42)			Lin. Ft.	221
Test Pile Steel (10BP42)			Each	1

A&B DIMENSIONS

Bar	A	B
n1	1'-10"	4'-0"
s3	2'-2"	4'-2"
s4	2'-2"	3'-2"
s5	1'-10"	3'-10"

PILE DATA
Type - Steel (10BP42)
Capacity - Drive to refusal
Est. Length 17'
No. Required 13 plus 1 test pile

DESIGNED	Charles O'Steen
CHECKED	SHEN, TJAI FA
DRAWN	Leona Heeren
CHECKED	SHEN, TJAI FA

EXAMINED April 10 1972
Adolf Thuman — ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED W.E. Baumann — ENGINEER OF DESIGN
APPROVED Richard H. Hollerman — CHIEF HIGHWAY ENGINEER

P-11 11-18-69

PIER I
F.A.I. RT. 55 SEC. 68-5HB-1
MONTGOMERY COUNTY
STATION 916+44.59

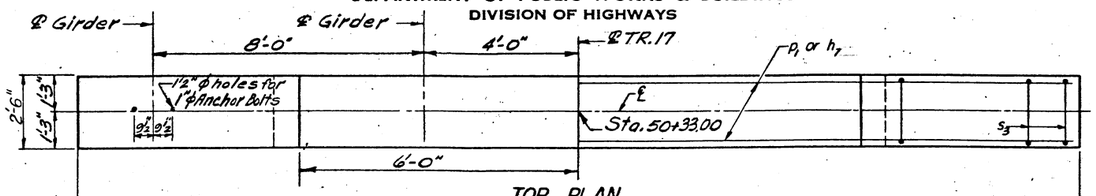
NOTES:

Space reinforcement in cap to miss anchor bolts.
All edges shall have standard ¾" chamfers except as noted.
Pour steps monolithically with cap.

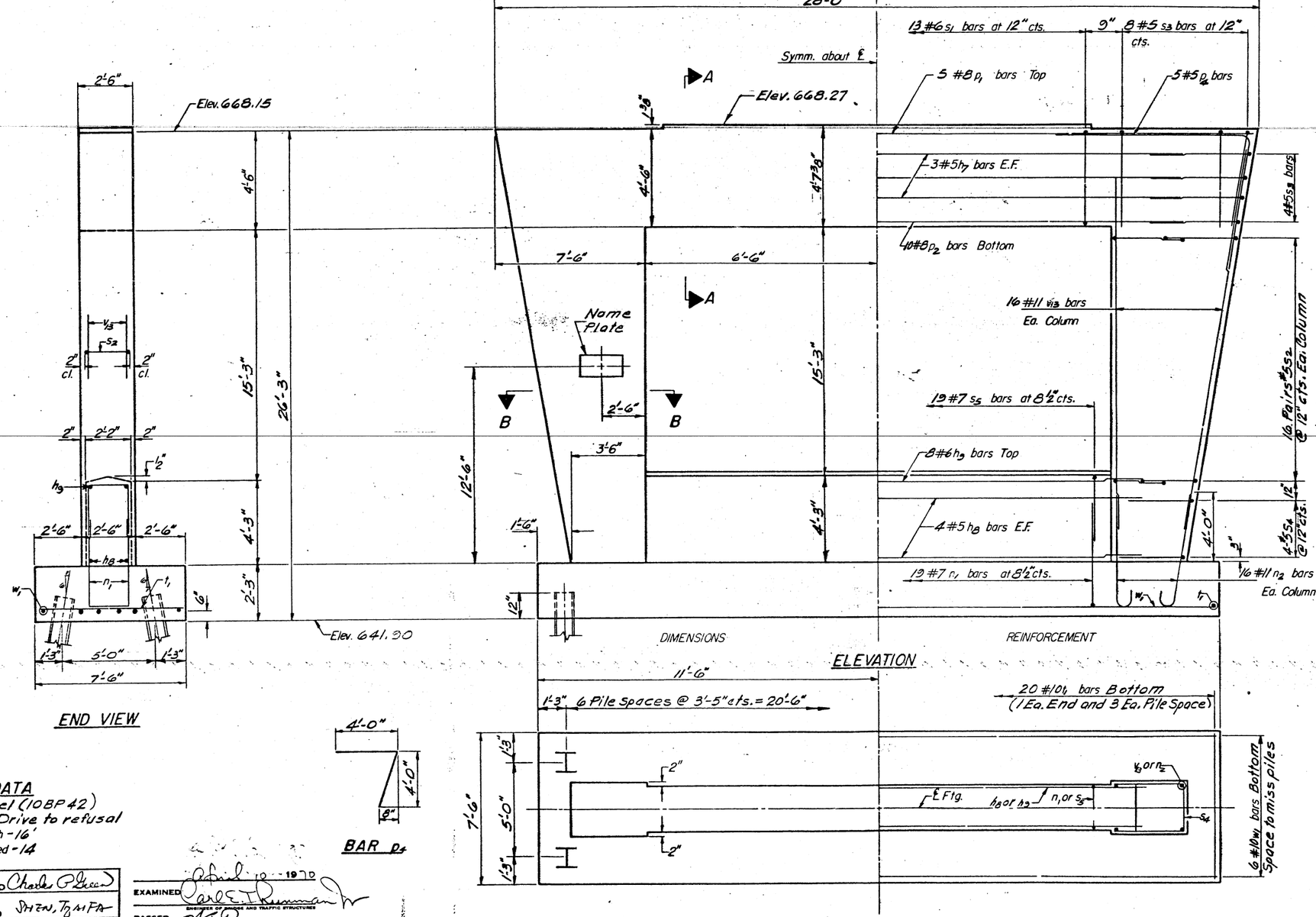
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. 55	68-5HB-1	Montgomery	31	19
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 12
13 SHEETS



TOP PLAN



FOOTING PLAN

END VIEW

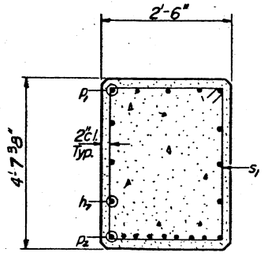
BAR p4

PILE DATA
Type Steel (10BP42)
Capacity - Drive to refusal
Est. Length - 16'
No. Required - 14

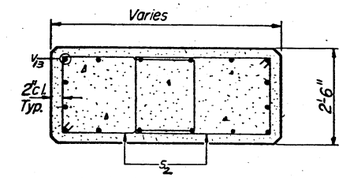
DESIGNED	Charles G Sheen
CHECKED	SHEN, TJ & I FA
DRAWN	Leona Heeren
CHECKED	SHEN, TJ & I FA

EXAMINED April 10, 1970
Earl E. Runman Jr. — ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
PASSED W. E. Bamman — ENGINEER OF DESIGN
APPROVED Richard H. Holtzman — CHIEF HIGHWAY ENGINEER

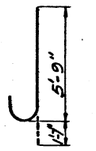
P-11 11-18-69



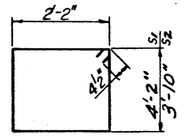
SECTION A-A



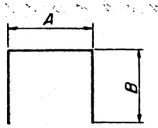
SECTION B-B



BAR n2



BARS s1 & s2



BARS n1, s3, s4 & s5

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h7	6	#5	22'-0"	
h8	8	#5	16'-6"	
h9	8	#6	16'-0"	
n1	19	#7	9'-10"	U
n2	32	#11	7'-4"	
p1	5	#8	27'-3"	
p2	10	#8	25'-6"	
p4	10	#5	8'-0"	
s1	13	#6	13'-5"	
s2	64	#5	12'-9"	
s3	24	#5	10'-6"	
s4	8	#5	8'-6"	
s5	19	#7	9'-6"	
l1	20	#10	7'-2"	
v13	32	#11	23'-0"	
w1	6	#10	22'-8"	
Class X Concrete			Cu. Yds.	48.8
Reinforcement Bars			Lbs.	10150
Steel Piles (10BP42)			Lin. Ft.	224

A&B DIMENSIONS

Bar	A	B
n1	1'-10"	4'-0"
s3	2'-2"	4'-2"
s4	2'-2"	3'-2"
s5	1'-10"	3'-10"

PIER 2
F.A.I. RT. 55 SEC. 68-5HB-1
MONTGOMERY COUNTY
STATION 916+44.59