

INDEX OF SHEETS ON SHEET NO. 3

36 WF 170 } 4 beams
36 WF 194 } 9 beams

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
**PLANS FOR PROPOSED
FEDERAL AID INTERSTATE HIGHWAY**
F.A.I. ROUTE I-290 (EISENHOWER EXPRESSWAY)
SECTION 1983-042BR - COOK COUNTY
PROJECT: I-IR-290-4(11)96
**LOOMIS ST., PAULINA ST., OGDEN AVE.,
DAMEN AVE. & LEAVITT ST.
OVER
EISENHOWER EXPRESSWAY
BRIDGE REHABILITATION**
C-91-059-80

016-0092

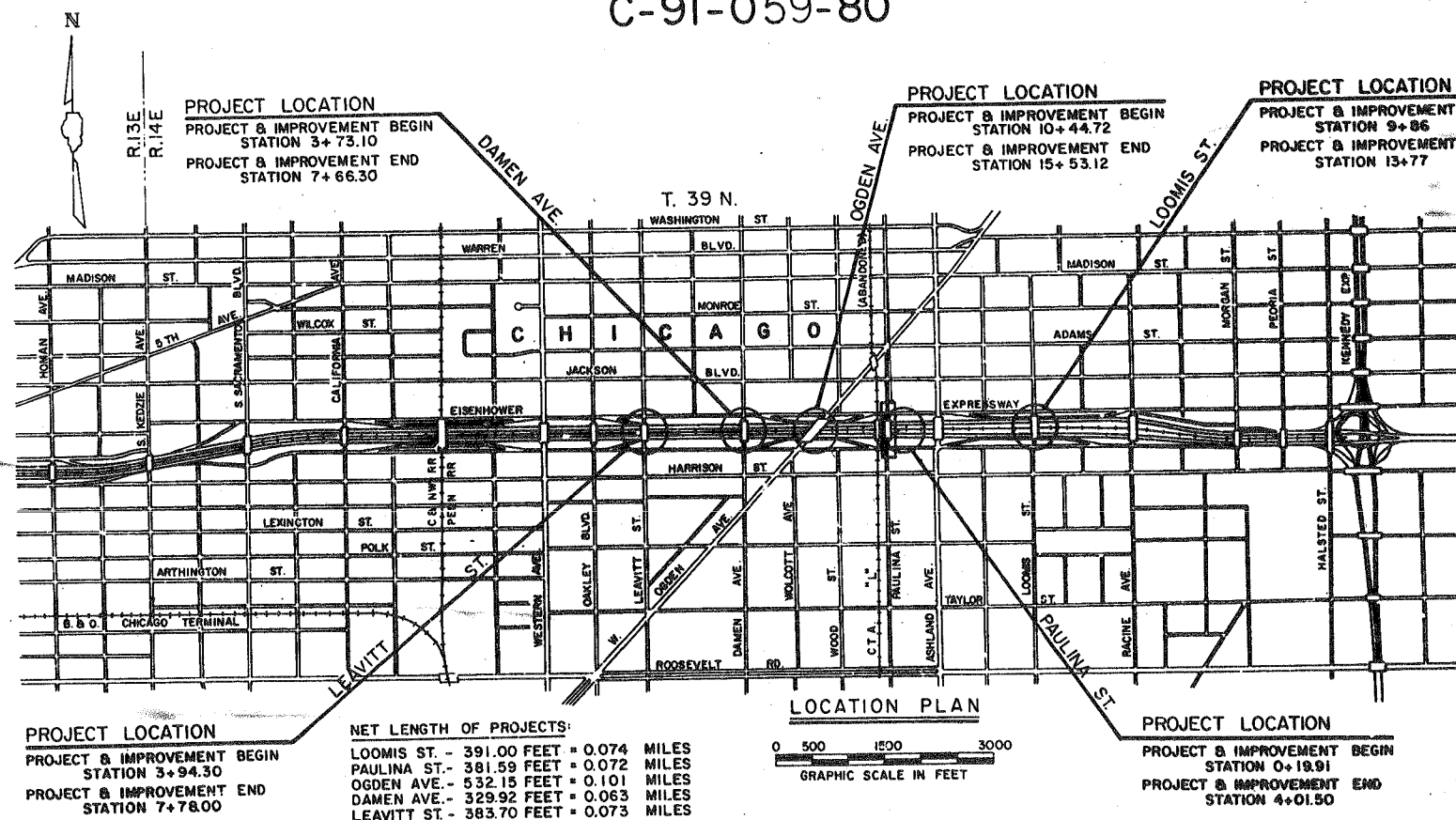
PROJECT AND ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
I-290	1983-042BR	COOK	113	1
FED. ROAD DIST. NO. 4				



DESCRIPTION OF IMPROVEMENT

THE IMPROVEMENT CONSISTS OF REHABILITATING THE STRUCTURES CARRYING LOOMIS STREET, PAULINA STREET, OGDEN AVENUE, DAMEN AVENUE AND LEAVITT STREET OVER F.A.I.-290. INCLUDED IS THE REMOVAL OF THE EXISTING BITUMINOUS SURFACING ON THE DECK AND APPROACH PAVEMENTS; THE RAISING OF THE EXISTING SUPERSTRUCTURE; THE PATCHING OF THE CONCRETE DECK; THE REMOVAL AND REPLACEMENT OF THE CONCRETE DECK AND SIDEWALK AT DAMEN AVENUE; CONSTRUCTING A NEW CONCRETE PARAPET WITH FENCE; THE REMOVAL AND REPLACEMENT OF THE TRANSVERSE EXPANSION JOINTS AT THE ABUTMENTS; REMOVING THE EXISTING CONCRETE DECK BY SCARIFICATION; PLACING A BRIDGE DECK OVERLAY; THE REPLACEMENT OF THE EXISTING BEARINGS (EXPANSION) WITH ELASTOMERIC BEARINGS AT DAMEN AVENUE; THE REHABILITATION OF THE EXISTING SUBSTRUCTURE; THE REMOVAL AND ELIMINATION OF THE LONGITUDINAL EXPANSION JOINT AT LOOMIS STREET AND OGDEN AVENUE; THE REMOVAL AND REPLACEMENT OF THE SIDEWALK ON THE APPROACHES; THE REMOVAL AND REPLACEMENT OF TWO DAMAGED STEEL BEAMS AT PAULINA STREET.

STRUCTURE NO.	
LOOMIS ST.	016-2114
PAULINA ST.	016-0098
OGDEN AVE.	016-0235
DAMEN AVE.	016-2080
LEAVITT ST.	016-2079



PROJECT LOCATION
PROJECT & IMPROVEMENT BEGIN
STATION 3+73.10
PROJECT & IMPROVEMENT END
STATION 7+66.30

NET LENGTH OF PROJECTS:	
LOOMIS ST. -	391.00 FEET = 0.074 MILES
PAULINA ST. -	381.59 FEET = 0.072 MILES
OGDEN AVE. -	532.15 FEET = 0.101 MILES
DAMEN AVE. -	329.92 FEET = 0.063 MILES
LEAVITT ST. -	383.70 FEET = 0.073 MILES

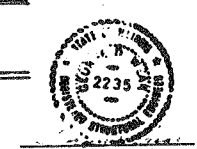
LOCATION PLAN
0 500 1000 3000
GRAPHIC SCALE IN FEET

PROJECT LOCATION
PROJECT & IMPROVEMENT BEGIN
STATION 0+19.91
PROJECT & IMPROVEMENT END
STATION 4+01.50

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED: JUNE 23 1983
FORWARDED: 7-1 1983
PASSED: 7-1 1983
APPROVED: 7-1 1983

SIGNATURES: [Signatures]
DISTRICT COMMISSIONER
CHIEF ENGINEER
SUPERVISOR OF DESIGN
DIRECTOR DIVISION OF HIGHWAYS



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: _____
DIVISION ADMINISTRATOR DATE

PLANS PREPARED BY:
PAC CONCOR TOWNSHIP, INC.
CONSULTING ENGINEERS
CHICAGO, ILLINOIS

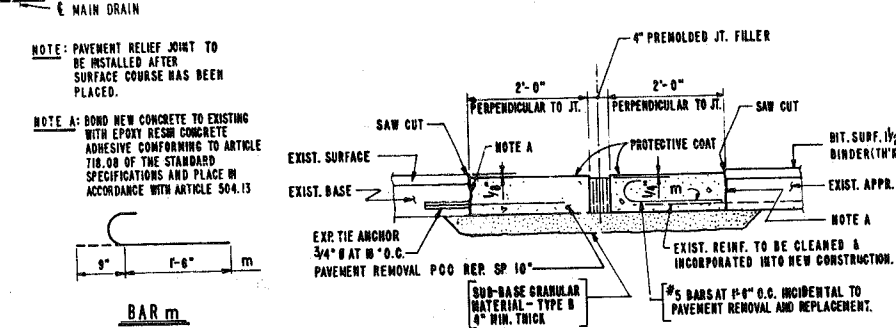
COMPLETELY REVISED SET 7-18-83

CONTRACT NO. 36-38

COOK COUNTY SECTION 1983-042BR F.A.I. ROUTE I-290

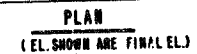
28 OF 228

M. HEAD BOLT ON HYDRANT AT N.E. CORNER
PAULINA AND VAN BUREN, EL. 13.92

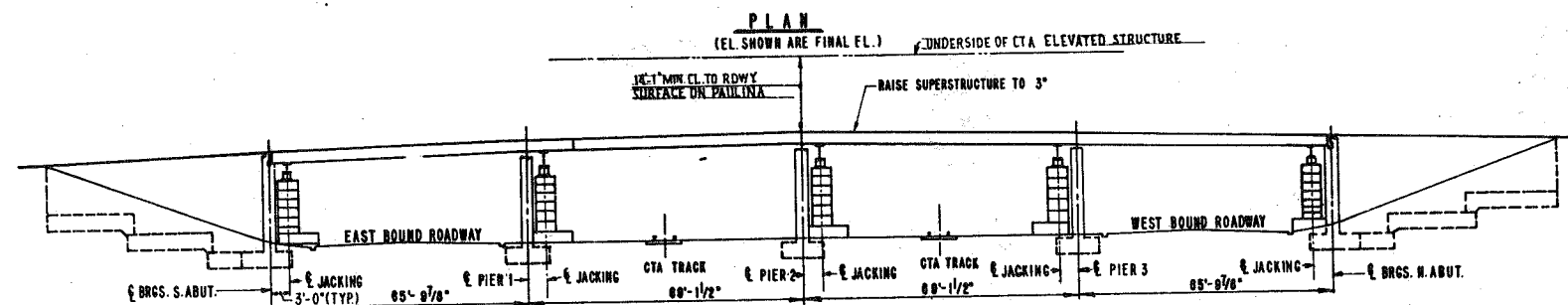
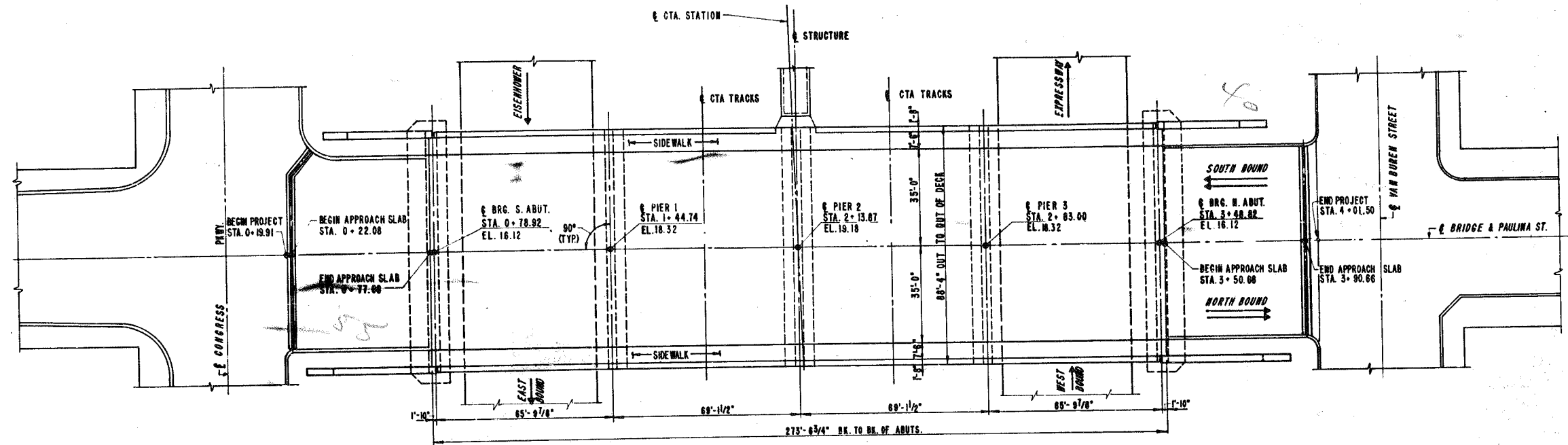


DETAIL OF PAY'T. REMOVAL
AND PCC REPLACEMENT SPL 10"

(See Sheet 22B)



ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN & ELEVATION
STRUCTURE REHABILITATION
PROJECT I-IR - 200 - 4 ()
FAI 200
SECTION 1003-042 BR
COOK COUNTY
PAULINA STREET
SCALE:
DATE:



EXISTING DRAINAGE AND DITCHES DISTURBED BY THE CRIBBING FOOTING SHALL BE RESTORED TO THEIR CONDITION AFTER CRIBBING REMOVAL.

FOR GENERAL NOTES SEE SHEET 18
FOR TRAFFIC CONTROL STAGES SEE SHEETS 78, 218 & 228

THE CRIBBING, JACKS AND BEAMS SHALL BE SET LEVEL AND TRUED VERTICALLY. THE CONTRACTOR SHALL VERIFY THE BEARING PRESSURES ON THE BASE MATERIAL.

ELEVATION (PROPOSED LOCATION OF JACKS AND CRIBBINGS)

NOTE: CRIBBING MAY BE EXTENDED BELOW GROUND TO TOP OF THE PIER FOOTING UPON APPROVAL BY ENGINEER.

- NOTE:
C.T.A. CLEARANCES ARE AS FOLLOWS:
- 1) 7'-2" HORIZONTAL CLEARANCE SHALL BE MAINTAINED AT ALL TIMES FROM $\frac{1}{2}$ OF NEAREST TRACK.
 - 2) 12'-4" VERTICAL CLEARANCE SHALL BE MAINTAINED AT ALL TIMES FROM TOP OF RUNNING RAIL.

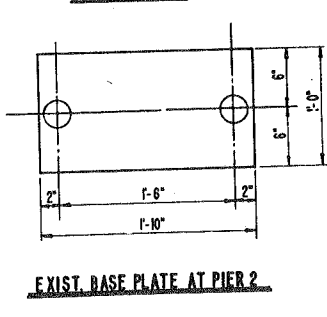
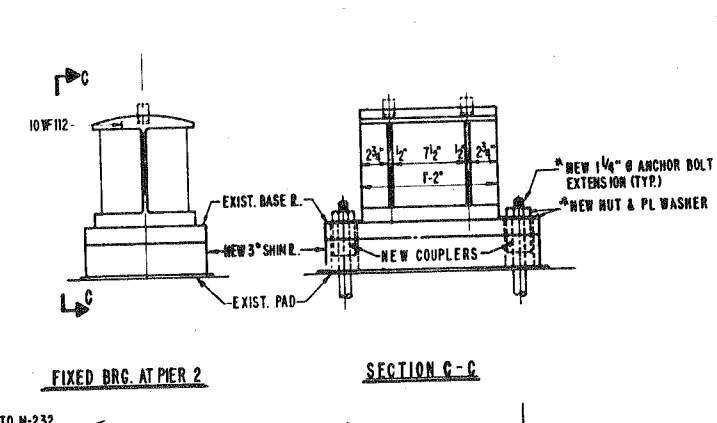
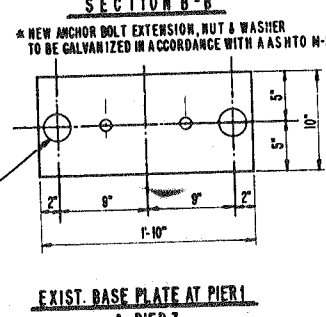
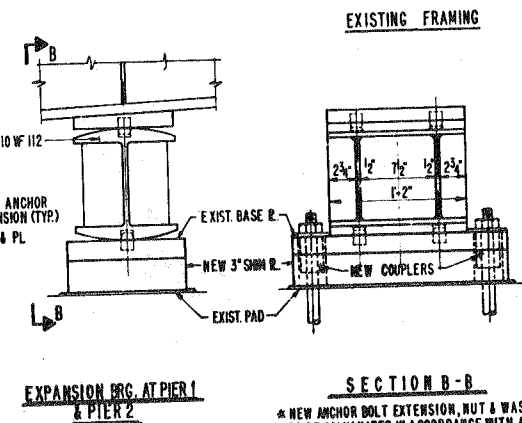
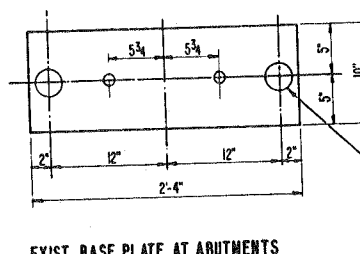
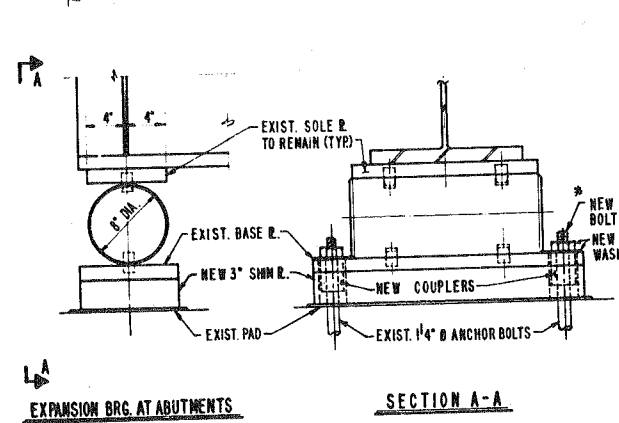
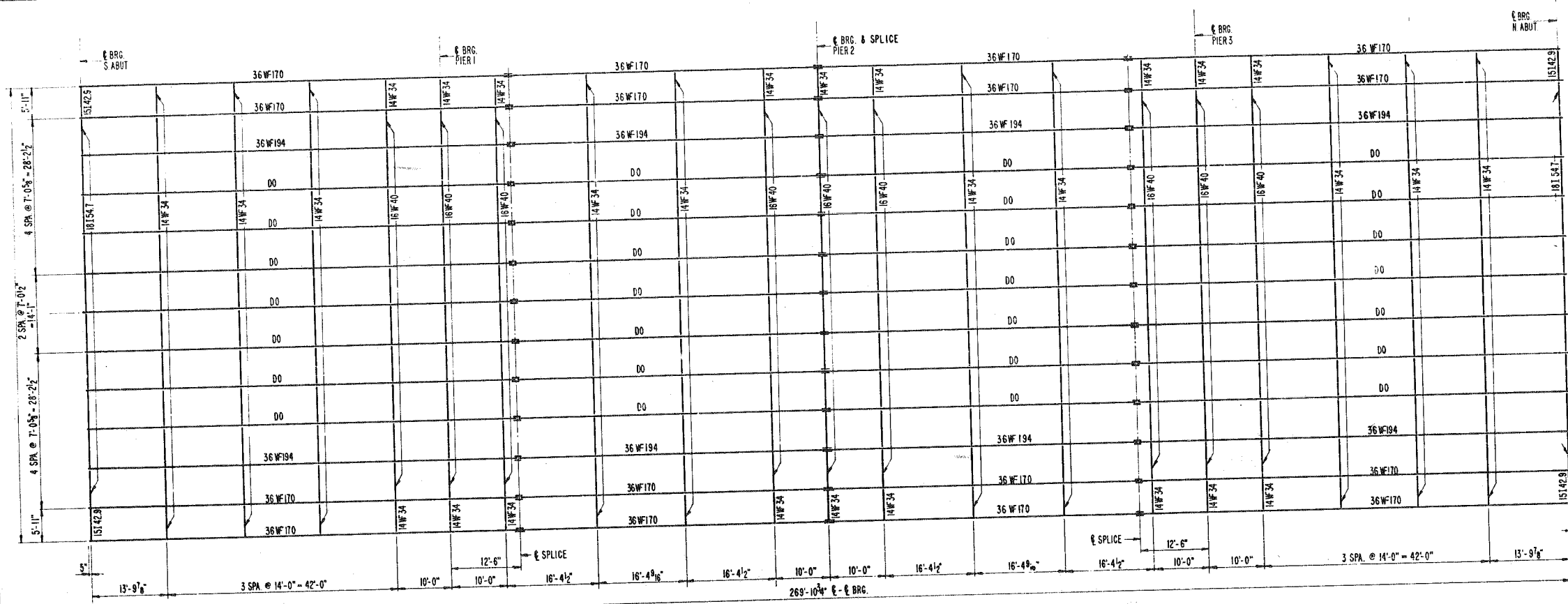
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAN AND ELEVATION (SUPERSTRUCTURE RAISING)
STRUCTURE RENOVATION
PROJECT 1-IR-290-4 ()
FAI 290
SECTION 1983-042 BR
COOK COUNTY
PAULINA STREET

SCALE:
DATE:

DRAWN BY: C.A.S.
CHECK BY:

ROUTE NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
1-290	183-042BR	COOK	113	25
PROJECT: 1-TR-290-4()				



NEW SHIM PLATE INSTALLATION PROCEDURE

1. PAULINA STREET BRIDGE IS TO BE RAISED 3"
2. REMOVE NUTS & CLEAN THREADS OF EXISTING ANCHOR BOLTS.
3. RAISE BRIDGE TO 4 1/2" (±)
4. TEMPORARILY REMOVE EXISTING BEARING ASSEMBLY INCLUDING BASE PLATE (AND SHIM PLATE IF ANY). LEAVE EXISTING SOLE PLATE ON FLANGE.
5. PROVIDE NEW SLEEVE NUTS & EXTEND ANCHOR BOLTS.
6. PROVIDE NEW 3" THICK SHIM PLATE OF SAME SIZE AS EXIST. BASE PLATE OVER EXISTING PAD. SHIM PLATE TO HAVE 2-2 3/4" Ø HOLES (OVERSIZED) FOR EXISTING ANCHOR BOLTS.
7. ENLARGE EXISTING ANCHOR BOLT HOLES IN EXISTING BASE PLATE (AND SHIM PLATE IF ANY) TO 2 3/4" Ø BY DRILLING OR REAMING.
8. CLEAN EXISTING BEARING ASSEMBLY BY METHOD 1 AND GIVE FULL COAT OF DULL ORANGE PRIMER.
9. PLACE THE ENTIRE BEARING ASSEMBLY BACK IN PLACE ON TOP OF NEW SHIM PLATE.
10. PROVIDE NEW PL WASHERS AND TIGHTEN NUTS.
11. LOWER BRIDGE ONTO RAISED BEARINGS.

REPOSITIONING OF EXPANSION BEARINGS:

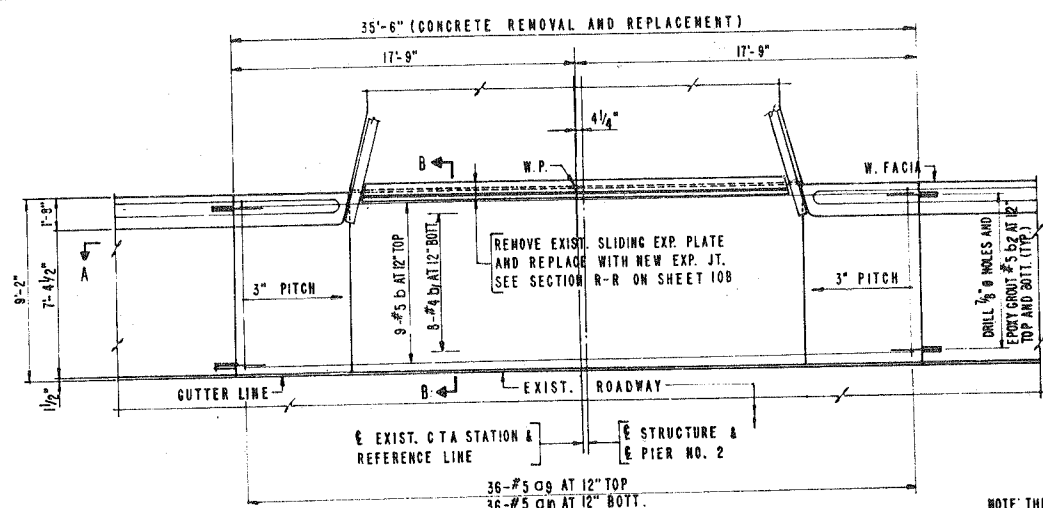
INCREASE THE DIMENSION BY 1/8" PER EACH 100' OF EXPANSION FOR EVERY 15° ABOVE THE NORMAL TEMPERATURE OF 50°F.
DECREASE THE DIMENSION BY 1/8" PER EACH 100' OF EXPANSION FOR EVERY 15° BELOW THE NORMAL TEMPERATURE OF 50°F.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION	
NAME	DATE	SHIM PLATES AND DETAILS	
		SUPERSTRUCTURE RAISING	
		PROJECT 1-TR-290-4()	
		FAI 290	
		SECTION 183-042 BR	
		COOK COUNTY	
		PAULINA STREET	
		SCALE:	DRAWN BY: C.A.S.
		DATE:	CHECK BY:

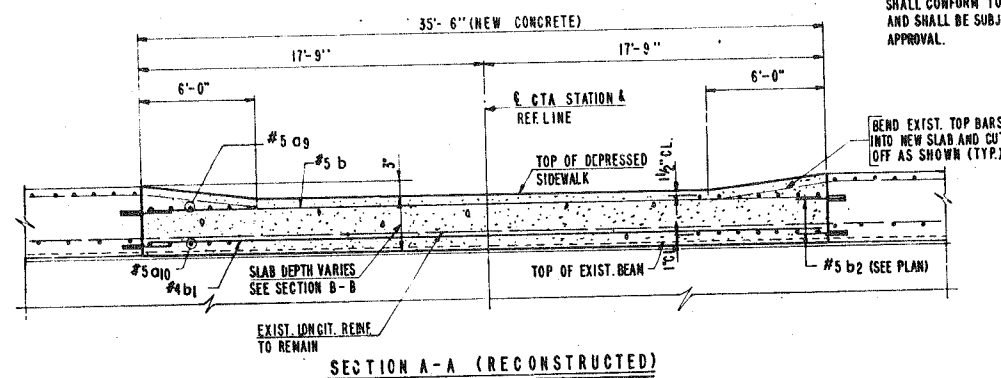
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-200	1003-042 BR	COOK	113	26
ILLINOIS PROJECT 1-10-200-41				
BR OF 228				

BILL OF REINFORCEMENT				
BAR	NO	SIZE	LENGTH	SHAPE
Q9	36	5	9'-3"	
Q10	36	4	9'-1"	
b	9	5	35'-3"	
b1	18	4	35'-3"	
b2	36	5	3'-6"	

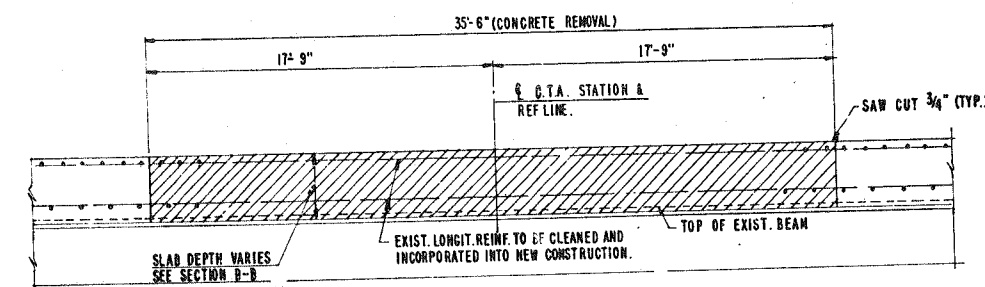
BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
CONCRETE REMOVAL	CU. YDS.	15.6
CLASS X CONCRETE	CU. YDS.	16.8
REINFORCEMENT BARS	LBS.	1450



PLAN

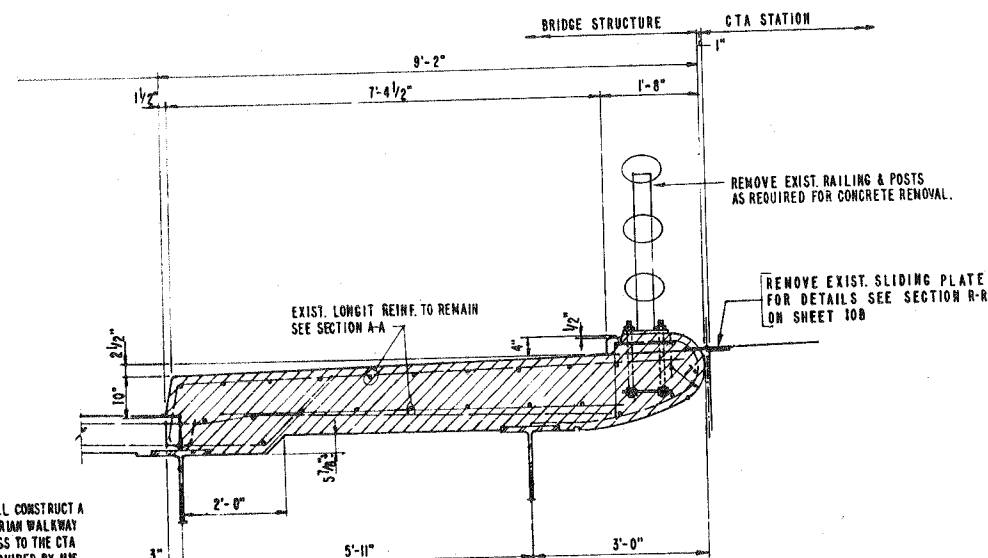


SECTION A-A (RECONSTRUCTED)

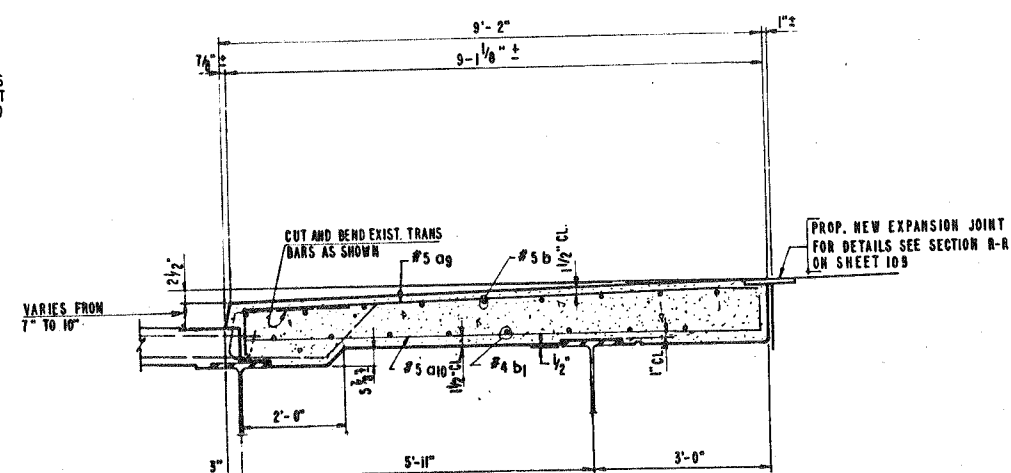


SECTION A-A (EXISTING)

NOTE: THE CONTRACTOR SHALL CONSTRUCT A TEMPORARY PORTABLE PEDESTRIAN WALKWAY TO PROVIDE INGRESS & EGRESS TO THE CTA STATION AT ALL TIMES AS REQUIRED BY HIS CONSTRUCTION OPERATIONS. THE WALKWAY SHALL CONFORM TO C.T.A. & O.S.H.A. STANDARDS AND SHALL BE SUBJECT TO THE ENGINEERS APPROVAL.



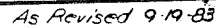
SECTION B-B
(SHOWING CONCRETE REMOVAL)



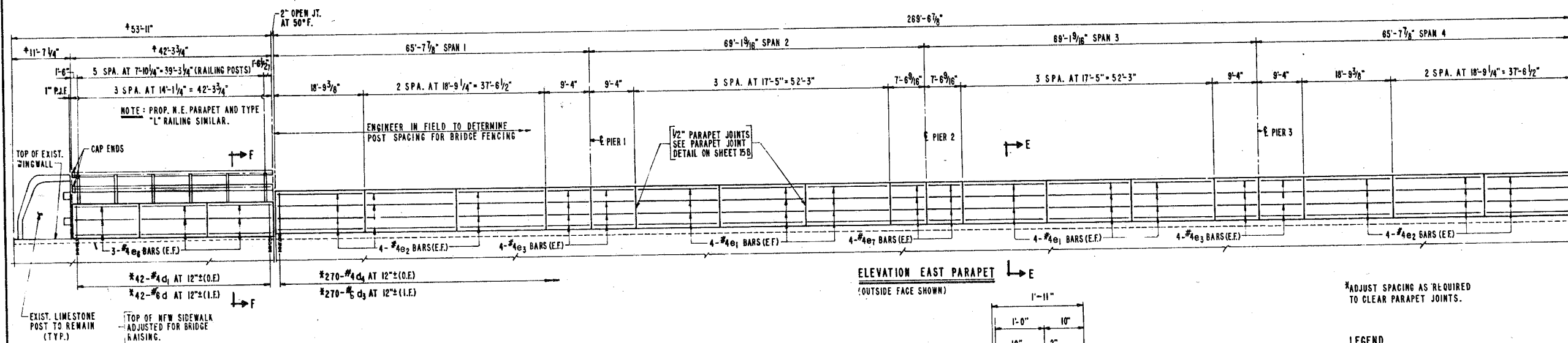
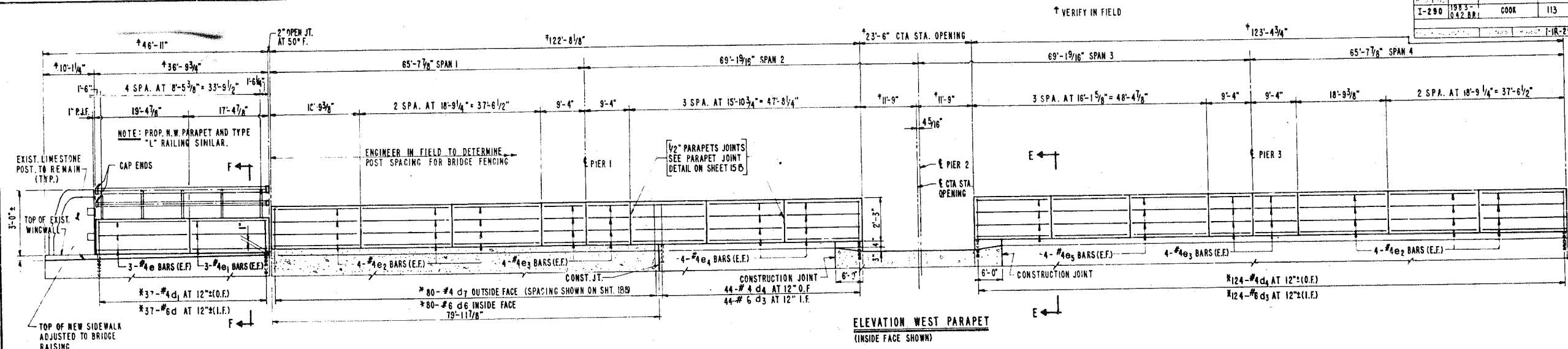
SECTION B-B
(SHOWING PROP. CONSTRUCTION)

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK DETAILS AT CTA ENTRANCE
SUPERSTRUCTURE RAISING
STRUCTURE REMEDIATION
PROJECT 1-10-200-41
FRI 200
SECTION 1003-042 BR
COOK COUNTY
PAULINA STREET
SCALE:
DATE: FEB., 1985
DRAWN BY:
CHECK BY:



1-290	1983-042 BR	COOK	113	264
		1-18-290-41		1

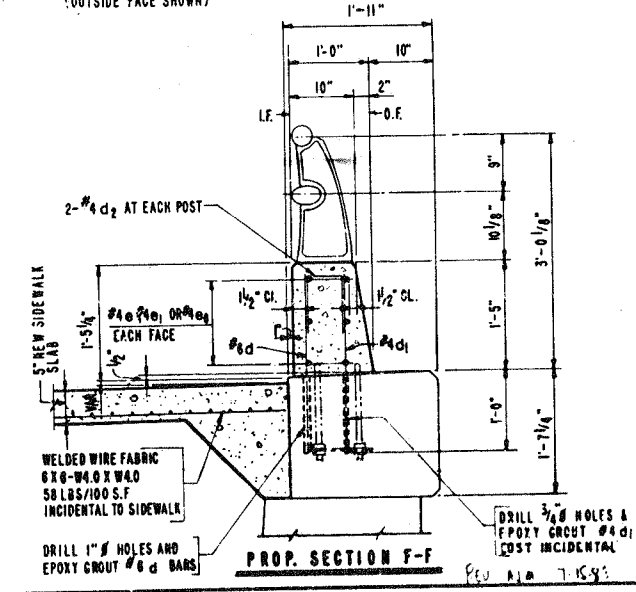
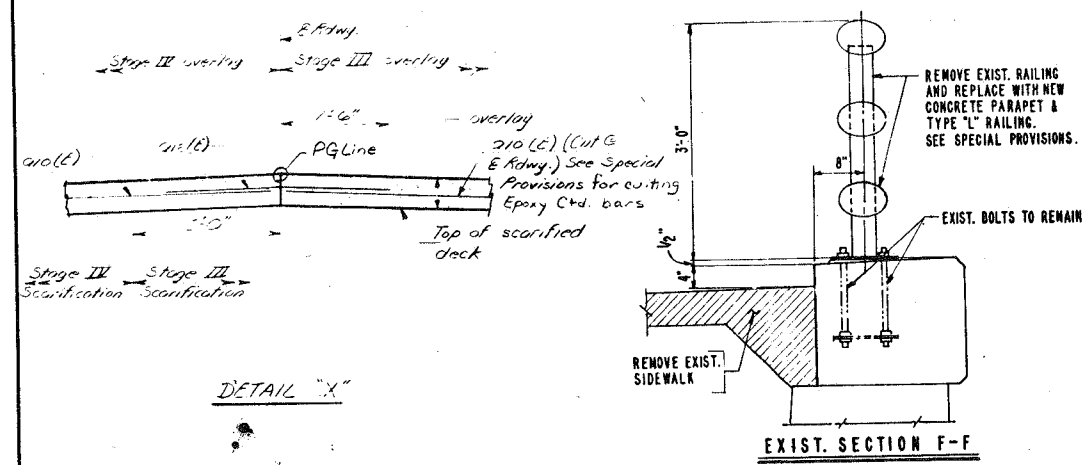


*ADJUST SPACING AS REQUIRED TO CLEAR PARAPET JOINTS.

LEGEND

- I.F. - INSIDE FACE
- O.F. - OUTSIDE FACE
- E.F. - EACH FACE

FOR SECTION E-E SEE SHEET 10B



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
PARAPET AND RAILING DETAILS
STRUCTURE REHABILITATION
PROJECT 1-SR-290-41
FAI 290
SECTION 1803-042 BR
COOK COUNTY
PAULINA STREET

SCALE: DATE:

DRAWN BY: G.S.
CHECK BY: G.S.

1-280	1883-06288	COOK	113	294
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PROJECT -	1-IR-200-4()
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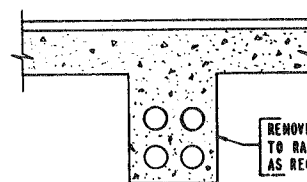
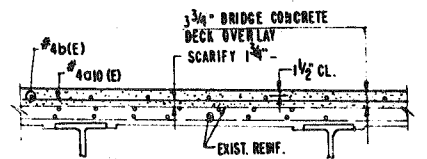
BILL OF REINFORCEMENT				
BAR	NO	SIZE	LENGTH	SHAPE
a	16	#5	37'-8"	
a ₁	16	#5	37'-6"	
a ₂	8	#5	10'-11"	
a ₃	16	#5	6'-1"	
a ₄	8	#5	6'-1"	
a ₅	16	#6	36'-5"	
a ₆	8	#6	8'-4"	
a ₇	8	#6	7'-11"	
a ₈	8	#5	9'-2"	
a ₉	140	#5	3'-5"	
a ₁₀ (E)	555	#4	24'-6"	
b (E)	660	#4	31'-7"	
(size)	185	#4	3'-0"	
c	158	#6	2'-3"	
d ₁	158	#4	2'-3"	
d ₂	218	#4	2'-1"	
d ₃	438	#6	3'-1"	
d ₄	438	#4	3'-1"	
e	12	#4	19'-1"	
e ₁	48	#4	17'-1"	
e ₂	72	#4	18'-6"	
e ₃	48	#4	9'-1"	
e ₄	18	#4	15'-7"	
e ₅	18	#4	15'-10"	
e ₆	36	#4	13'-10"	
e ₇	12	#4	7'-3"	

3	3	#6	6'-0"	6
2	2	#4	5'-0"	5
1	3	#8	1'-5"	4

BILL OF MATERIAL		
ITEM	UNIT	QUANTITY
CONCRETE REMOVAL	CU.YDS.	22.0
CLASS X CONCRETE	CU.YDS.	55.3
REINFORCEMENT BARS	LBS.	6,110
REINFORCEMENT BARS EPOXY	LBS.	16,940

* SEE SHEET 108 FOR BENDING DIAGRAMS

○ SUBSTRUCTURE BARS



SECTION T-T (PROPOSED)

NE SHOWN, SE SIMILAR

WORK THIS SHEET WITH SHEET 10B

ILLINOIS DEPARTMENT OF TRANSPORTATION
DECK DETAILS
STRUCTURE RENOVATION
PROJECT 1-R-200-4()
FAI 290
SECTION 1983-042 BR
COOK COUNTY
PAULINA STREET

SECTION 1983-042 B
COOK COUNTY
PAULINA STREET

SECTION 1983-042 B
COOK COUNTY
PAULINA STREET

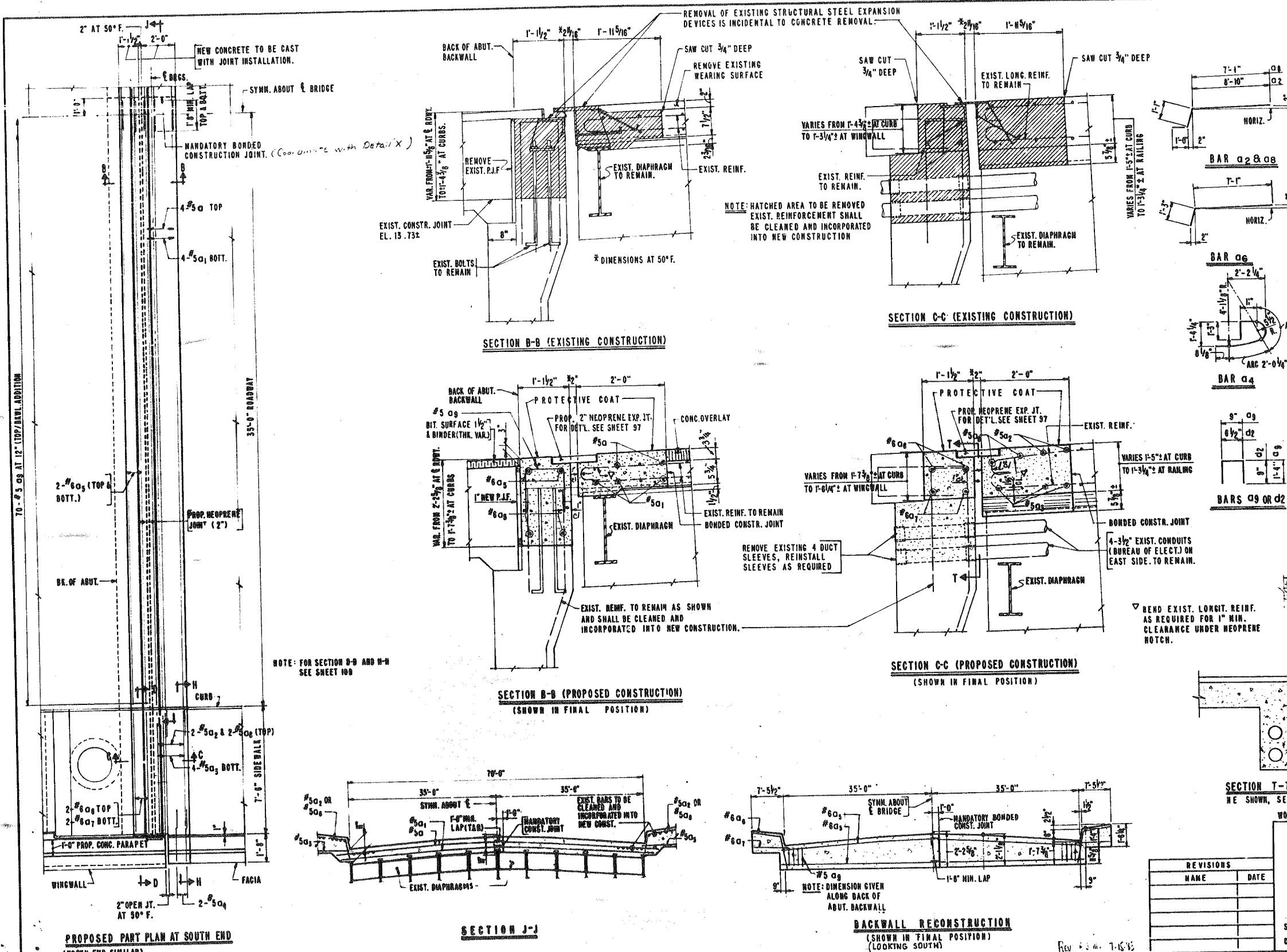
SECTION 1983-042 B
COOK COUNTY
PAULINA STREET

SECTION 1983-042 B
COOK COUNTY
PAULINA STREET

SECTION 1983-042 B
COOK COUNTY
PAULINA STREET

DRAWN BY: C.E.

CHECK BY: CUB



PROPOSED PART PLAN AT SOUTH END
(NORTH END SIMILAR)

Revised 9-19-8

SECTION B-B (EXISTING CONSTRUCTION)

SECTION B-B (PROPOSED CONSTRUCTION)
(SHOWN IN FINAL POSITION)

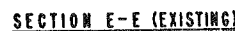
SECTION J-J

SECTION C-C' (EXISTING CONSTRUCTION)

SECTION C-C (PROPOSED CONSTRUCTION)
(SHOWN IN FINAL POSITION)

BACKWALL RECONSTRUCTION
(SHOWN IN FINAL POSITION)
(LOOKING SOUTH)

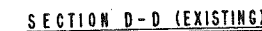
Rev. 4-3-84 7-15-84



NOTE: SECTION E-E (EXIST. & PROP.)
APPLY TO SE, NW & NE
QUADRANTS ONLY. FOR SECTION L-L
NW QUADRANT SEE SHEET 18B



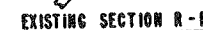
NOTE: SECTIONS D-D & H-H APPLY TO
SE. NW & NE QUADRANTS ONLY



The sealant for sealing joints between the expansion joint units and the bolts and plugs shall be a high solids, one-part polyurethane based sealant that cures quickly, without shrinkage, into a rubber with high elongation characteristics and excellent adhesion. It shall be capable of being applied by brush and neoprene without the use of primer. Once cured, the sealant shall possess excellent abrasion resistance and shall resist attack by salt, oil, and road chemicals. The sealant to be used shall provide a watertight seal between the expansion joint and the pavement with the approval of the manufacturer of the neoprene expansion joint.

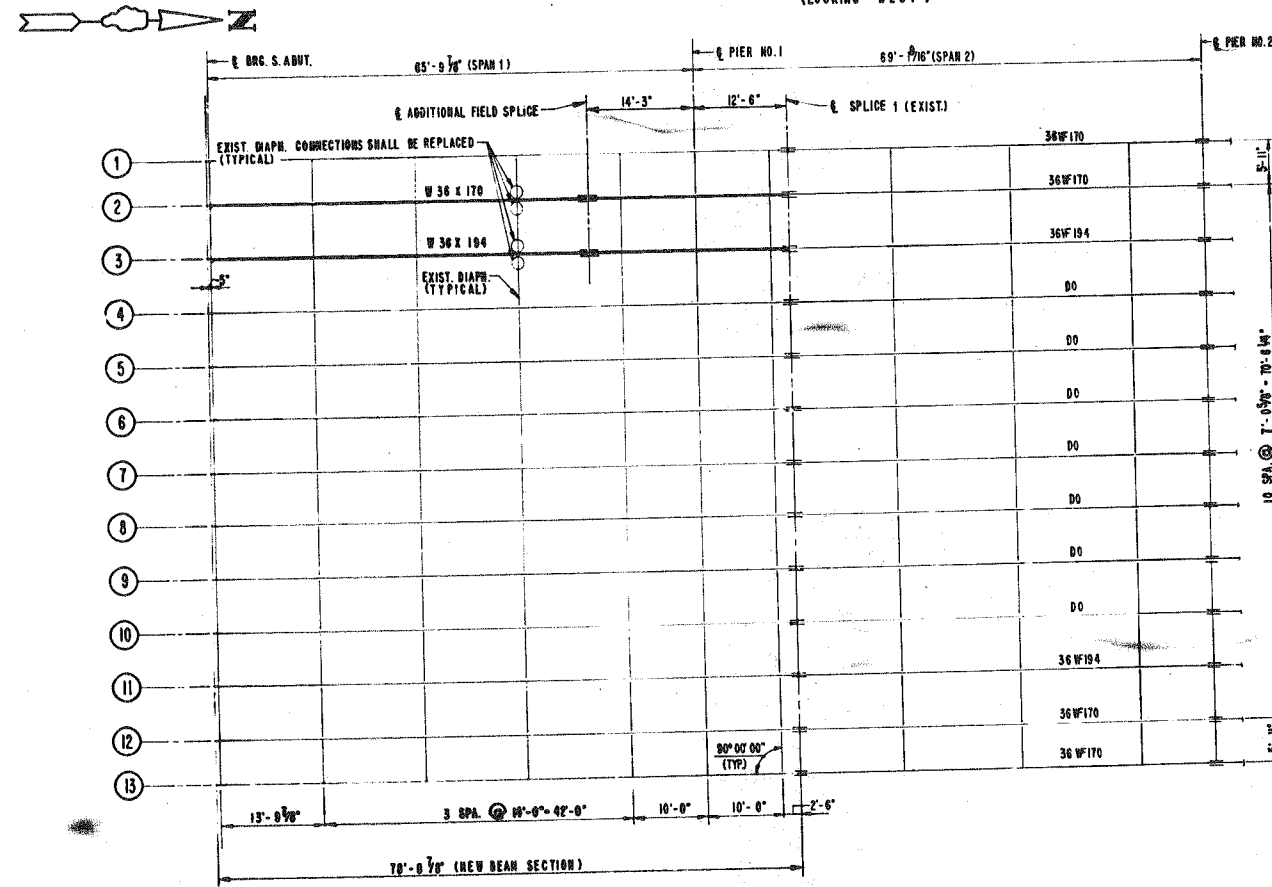
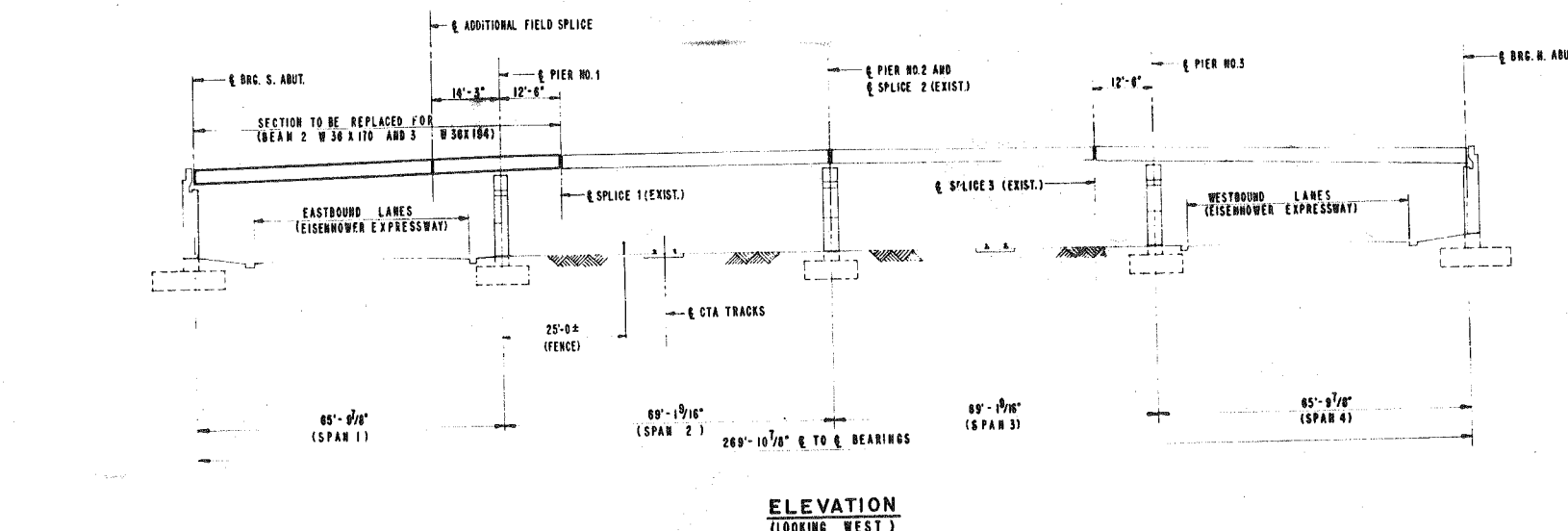
SCALE: ..
DATE: NOV. , 1981

CASE NO: C.S.
CASE NO: C.S.



Rev. A.J.M. 7-15-87

1-200	1083-042 BR	COOK	113	37
1-12-200-41				
170 OF 228				



PARTIAL DECK FRAMING PLAN

- SUGGESTED BEAM REPAIR PROCEDURE**
(TRAFFIC CONTROL ON PAULINA HAS BEEN IMPLEMENTED PRIOR TO REPAIR)
1. PROVIDE TRAFFIC CONTROL ON EASTBOUND EISENHOWER IN ORDER TO INSTALL SHIELDING. METHOD OF SUPPORT SHALL BE APPROVED BY THE ENGINEER. LANES MAY BE CLOSED TO TRAFFIC AS DETERMINED BY THE ENGINEER AND AS PROVIDED IN THE SPECIAL PROVISIONS.
 2. INSTALL TEMPORARY SHORING FOR BEAMS 2 AND 3 UNDER EXISTING SPICE NO. 1. SEE SPECIAL PROVISIONS FOR WORK ADJACENT AND/OR OVER THE CHICAGO TRANSIT AUTHORITY. METHOD OF SUPPORT SHALL BE APPROVED BY THE ENGINEER.
 3. PROTECT AND TEMPORARILY SUPPORT UTILITY CABLES PRIOR TO REMOVING DECK.
 4. DRILL HOLES THROUGH DECK IN SPAN 3 AND PLACE SUPPORT RODS AROUND EXISTING BEAM AS INDICATED ON THE PLANS FOR STRONGBACK BEAM.
 5. POSITION STRONGBACK BEAM IN SPAN 3.
 6. REMOVE EXISTING DECK SLAB AS INDICATED ON PLANS.
 7. THIS WORK TO BE DONE ON SUNDAY. SEE SPECIAL PROVISIONS. REMOVE DIAPHRAGMS AS REQUIRED TO FACILITATE THE REMOVAL AND REPLACEMENT OF ONE DAMAGED BEAM. INSTALL NEW BEAM AND DIAPHRAGMS PREVIOUSLY REMOVED USING ALL NEW HIGH STRENGTH BOLTS.
 8. THE FOLLOWING SUNDAY THE SECOND DAMAGED BEAM IS TO BE REPLACED IN THE SAME MANNER AS THE FIRST BEAM. SEE STEP 7. REMOVE TEMPORARY SHORING UNDER EXISTING SPICE NO. 1.
 9. PLACE FORMWORK FOR NEW DECK AND FOUR NEW SLAB.
 10. AFTER THE NEW CONCRETE HAS CURED, REMOVE STRONGBACK BEAM PATCH AND PLUG HOLES THROUGH DECK. REMOVE FORMWORK.
 11. PAINT NEW STEEL AND DAMAGED AREAS. SEE SPECIAL PROVISIONS.

GENERAL NOTES - BEAM REPAIRS

ALL NEW STRUCTURAL STEEL SHALL CONFORM TO A.A.S.H.T.C. CLASSIFICATION M-103.

ALL NEW HIGH STRENGTH BOLTS SHALL BE A.A.S.H.T.C. CLASSIFICATION M-164.

HOLES SHALL BE SUBPUNCHED OR SUBDRILLED $\frac{1}{16}$ " ϕ AND REAMED TO $\frac{15}{16}$ " ϕ FOR $\frac{7}{8}$ " ϕ N.S. BOLTS IN THE FIELD, EXCEPT AS NOTED ON THE PLANS, AND AFTER THE NEW BEAM IS PROPERLY FITTED INTO POSITION. SEE NEW BEAM SECTION DETAILS ON SHEETS 10 AND 11.

EASTBOUND LANES ON EISENHOWER EXPRESSWAY SHALL BE CLOSED ON SUNDAY BETWEEN ONE AM AND NOON DURING REMOVAL AND REPLACEMENT OF BEAMS 2 AND 3.

ALL NEW STRUCTURAL STEEL SHALL RECEIVE ONE (1) SHOP COAT OF RED LEAD PAINT. THE BASIC LEAD SILICO CHROMATE SYSTEM SHALL BE USED FOR SHOP AND FIELD PAINTING OF STRUCTURAL STEEL.

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATION.

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.

ALL CONTACT SURFACES OF JOINTS FOR THE DIAPHRAGMS SHALL BE FREE OF PAINT OR LACQUER.

AT THE PRECONSTRUCTION MEETING THE CONTRACTOR SHALL BE FURNISHED BY THE DEPARTMENT OF DESIGN A TEMPORARY SLAB SUPPORT SYSTEM. THE TEMPORARY SYSTEM WILL BE PAID FOR AT AN AGREED UNIT PRICE OR IN ACCORDANCE WITH SECTION 109.04 OF THE STANDARD SPECIFICATIONS.

FIELD WELDING OF CONSTRUCTION ACCESSORIES WILL NOT BE PERMITTED TO THE BOTTOM FLANGE OF BEAMS OR UNDER WORK 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.

BILL OF MATERIAL - BEAM REPAIRS

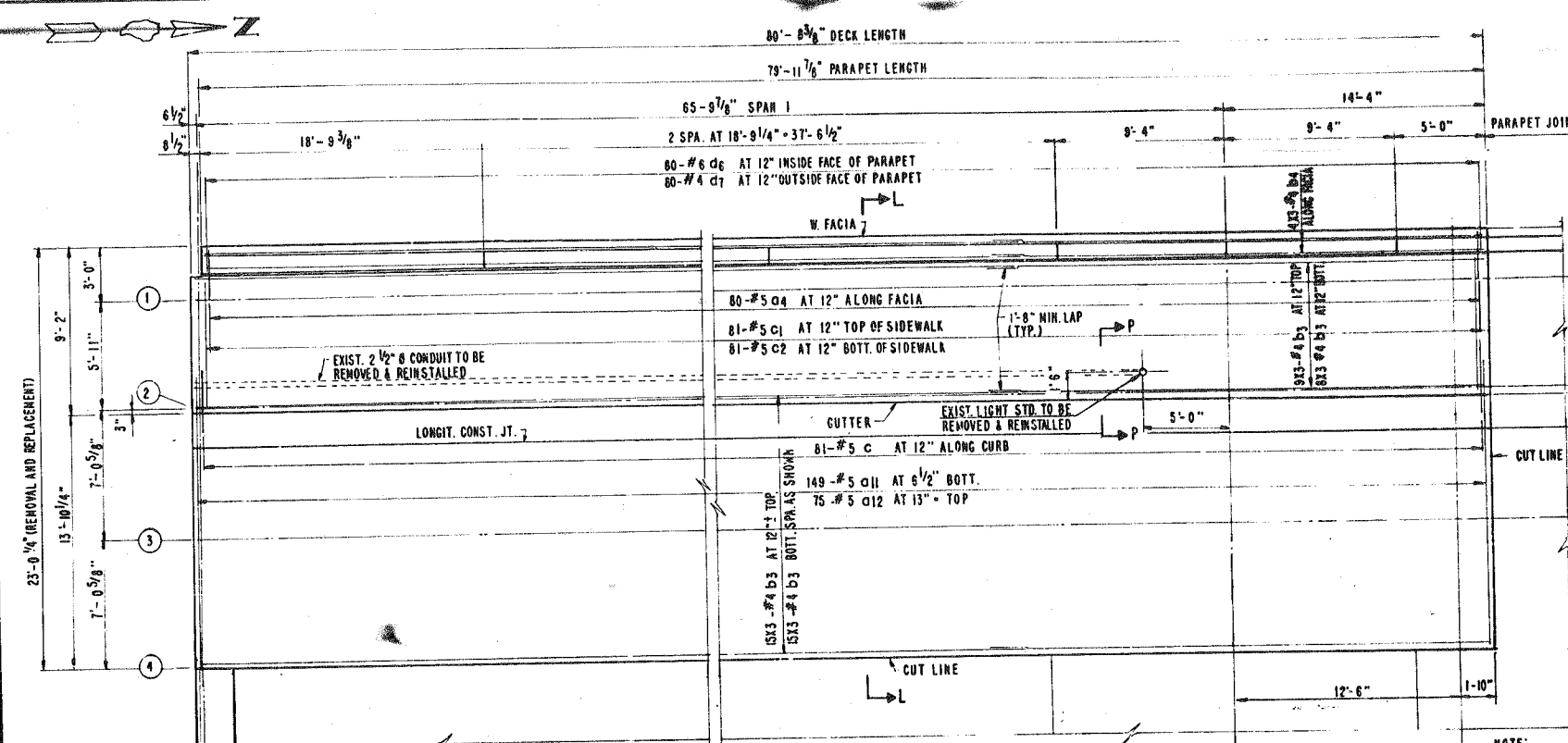
ITEM	UNIT	TOTAL
CLASS X CONCRETE	CU. YDS.	74.1
CONCRETE REMOVAL	CU. YDS.	84.1
STRUCTURAL STEEL	LBS.	30,500
TRAFFIC CONTROL - FAI 200	L.S.	1
REINFORCEMENT BARS	LBS.	11,000

REVISIONS	
NAME	DATE

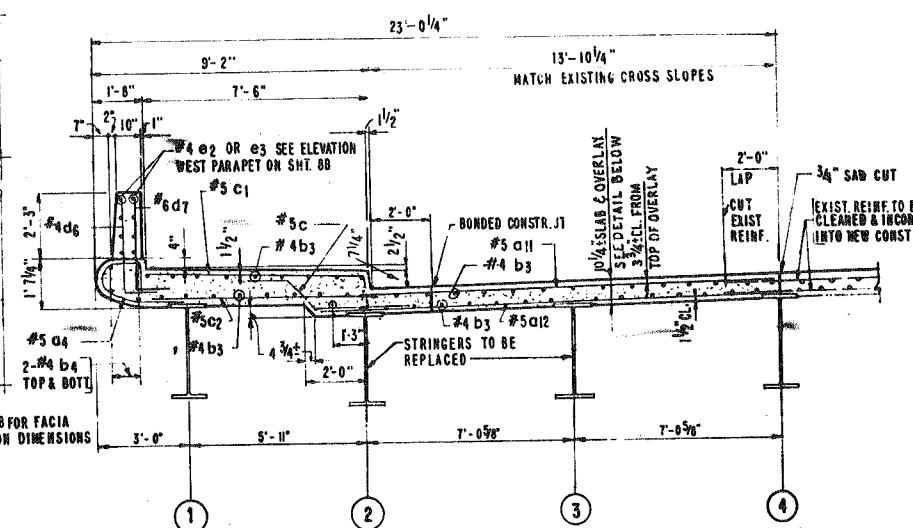
ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAN AND ELEVATION - BEAM REPAIRS
STRUCTURE REHABILITATION
PROJECT 1-1R-200-41
FAI 200
SECTION 1083-042 BR
COOK COUNTY
PAULINA STREET

SCALE:
DATE:

DRAWN BY: G.S.
CHECK BY: A.J.H.



NOTE:
HATCHED AREAS IN DECK TO BE REPLACED WITH CLASS X CONCRETE.



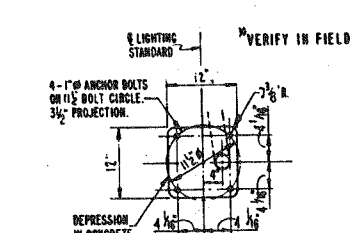
NOTE:
SEE SHEET 108 FOR FACIA
CONFIGURATION DIMENSIONS
NOT SHOWN.

PART DECK PLAN

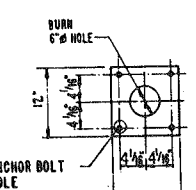
SECTION L-L

BILL OF REINFORCEMENT				
BAR	NO	SIZE	LENGTH	SHAPE
a4	80	5	6'-1"	C
a11	149	5	17'-0"	—
a12	75	5	16'-7"	—
b3	198	4	27'-11"	—
b4	12	4	27'-8"	—
c	81	5	6'-5"	—
c1	81	5	8'-10"	—
c2	81	5	7'-6"	—
d6	80	6	4'-5"	—
d7	80	4	4'-7"	—

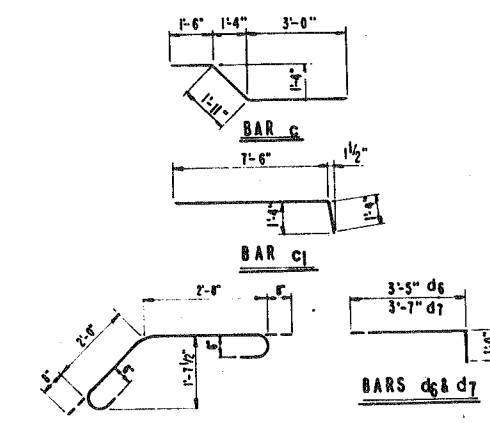
FOR TOTAL BILL OF MATERIAL - BEAM REPAIR
SEE SHEET 170



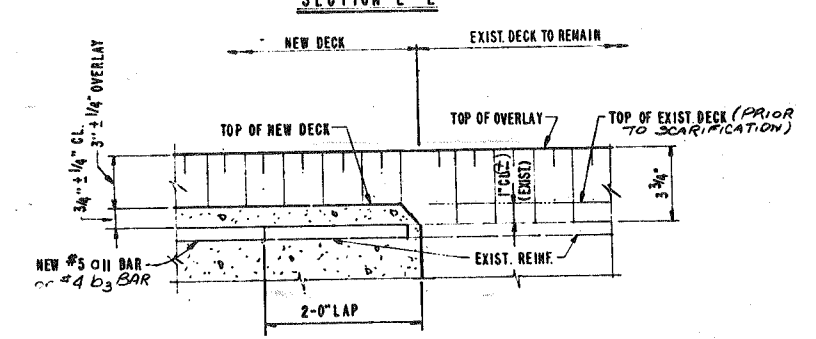
ANCHOR BOLT AND CONDUIT SETTING PLAN



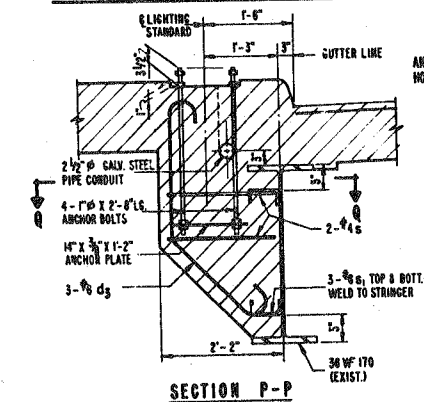
DETAIL OF ANCHOR PLATE



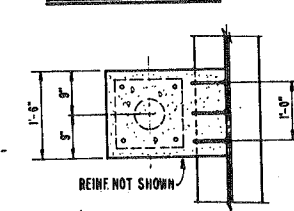
NOTE: FOR BAR BENDING DIAGRAMS
NOT SHOWN, SEE SHEET 98



SLAB DETAIL



SECTION P-P

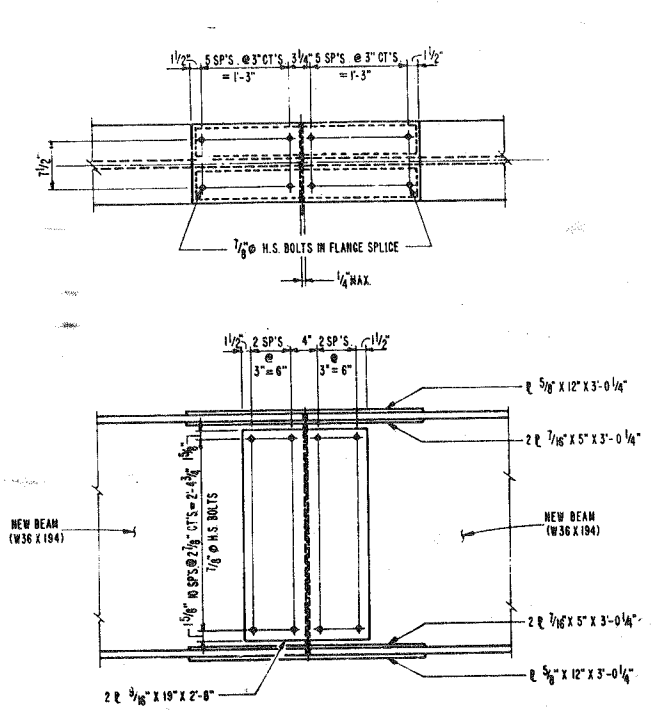


SECTION Q-Q

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BEAM REPAIR DETAILS
STRUCTURE REHABILITATION
PROJECT 1-IR-290-4()
FAI 280
SECTION 1983-042 BR
COOK COUNTY
PAULINA STREET
SCALE:
DATE:
DRAWN BY: S.S.
CHECK BY: A.J.R.

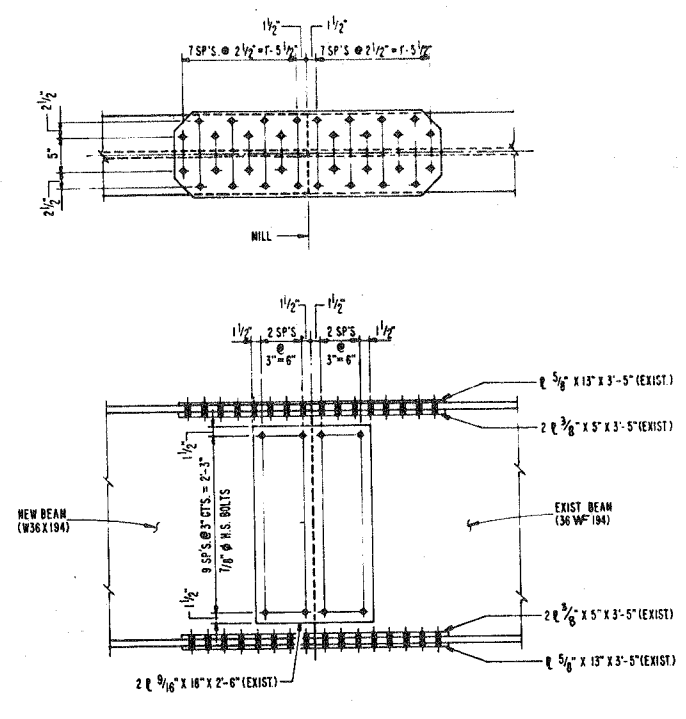
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-200	1883-042 BR	COOK	143	39
FED. ROAD DIST. NO.		ILLINOIS PROJECT-		1-IR-200-41
IS 8 OF 22 B				



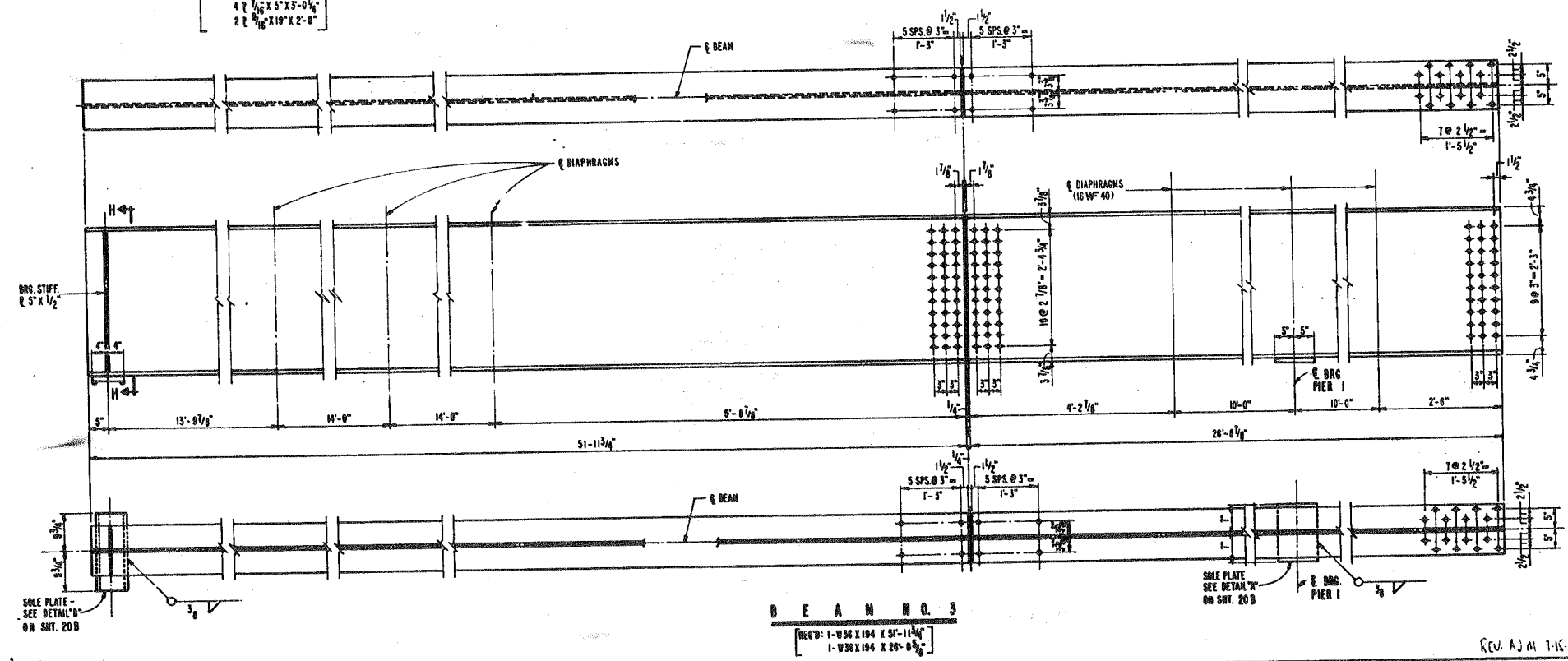
DETAIL OF ADDITIONAL FIELD SPLICE
FOR BEAM NO. 3

REV'D: 2 R 5/8" X 12' X 3'-0 1/4"
4 R 1/2" X 5' X 3'-0 1/4"
2 R 3/8" X 19' X 2'-0"

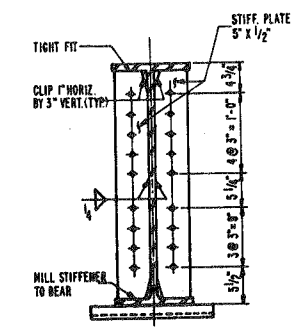
NOTE:
HOLES FOR SPLICES ARE 5/16" Ø
FOR 7/8" Ø H.S. BOLTS.



DETAIL OF FIELD SPLICE I (EXISTING)
FOR BEAM NO. 3



BEAM NO. 3
REV'D: 1-W36 X 104 X 51'-11 1/4"
1-W36 X 104 X 20'-0 1/4"



SECTION H-H

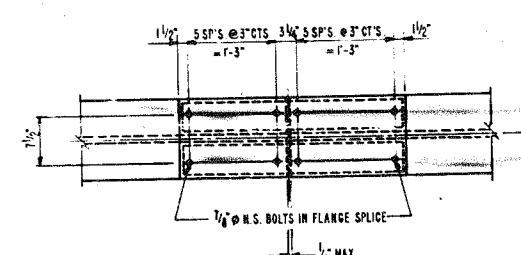
REV'D: 2 R 5' X 1/2"
NOTE: ALL HOLES 1/2" Ø
FOR 7/8" Ø H.S. BOLTS
© STIFFENERS ONLY

REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BEAM REPAIR DETAILS
STRUCTURE REHABILITATION
PROJECT 1-IR-200-4 ()
FAI 290
SECTION 1983-042 BR
COOK COUNTY
PAULINA STREET
SCALE:
DATE:
DRAWN BY: G.S.
CHECKED BY: A.J.N.

REV. A) M 7-15-93

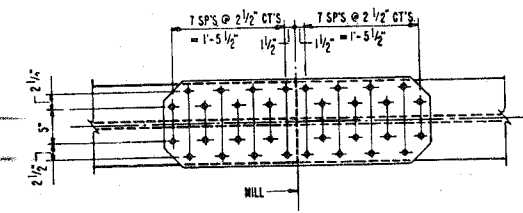
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-290	1983-042 BR	COOK	113	40
FED. ROAD DIST. NO.	ILLINOIS	PROJECT	IR-1-290-4(1)	208 OF 228



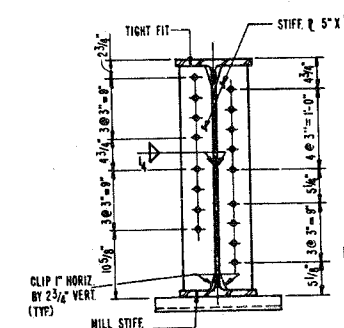
DETAIL OF ADDITIONAL FIELD SPLICE
FOR BEAM NO. 2

REINFORCING: 2 #5 @ 12\"/>

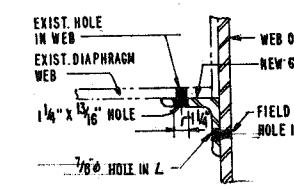
NOTE:
HOLES FOR SPLICES ARE 1 1/8\"/>



DETAIL OF FIELD SPLICE 1 (EXISTING)
FOR BEAM NO. 2

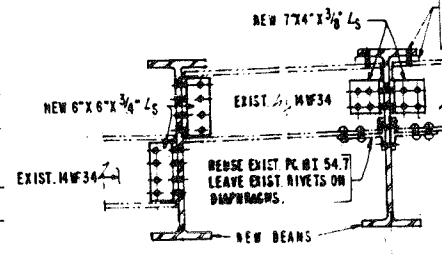


SECTION A-A
(REINFORCING: 2 #5 @ 12\"/>



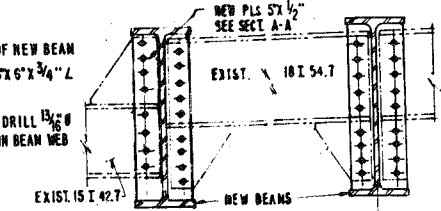
SECTIONAL PLAN AT DIAPHRAGM
NOTE: PLAN ALSO TYPICAL AT OTHER L_S AT BEAM 3

* NOTE: USE HARDENED WASHERS OVER ALL 1/8\"/>



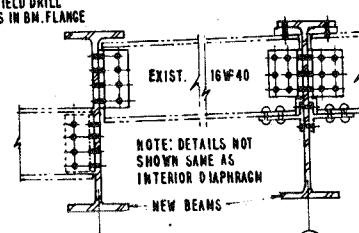
INTERIOR DIAPHRAGM

NOTE: DIAPHRAGMS TO BE REINSTALLED TO ORIGINAL LOCATION.



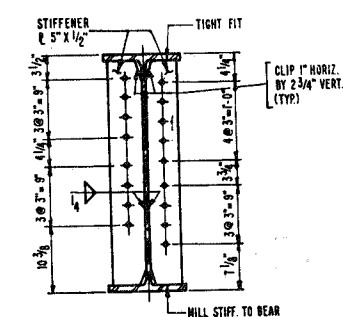
DIAPHRAGM AT ABUTMENTS

NOTE: ALL HOLES IN DIAPHRAGMS, BRACKET PLATES AND STIFFENERS ARE 1 1/8\"/>

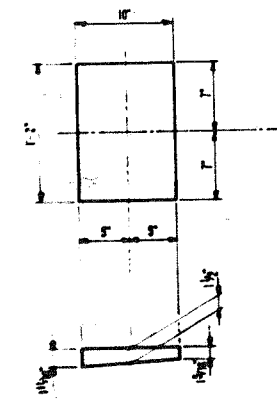


DIAPHRAGM AT CONSTRUCTION JOINTS

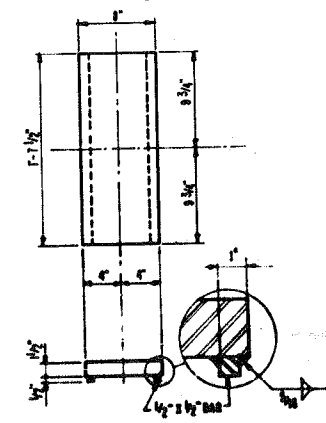
NOTE: DETAILS NOT SHOWN SAME AS INTERIOR DIAPHRAGM



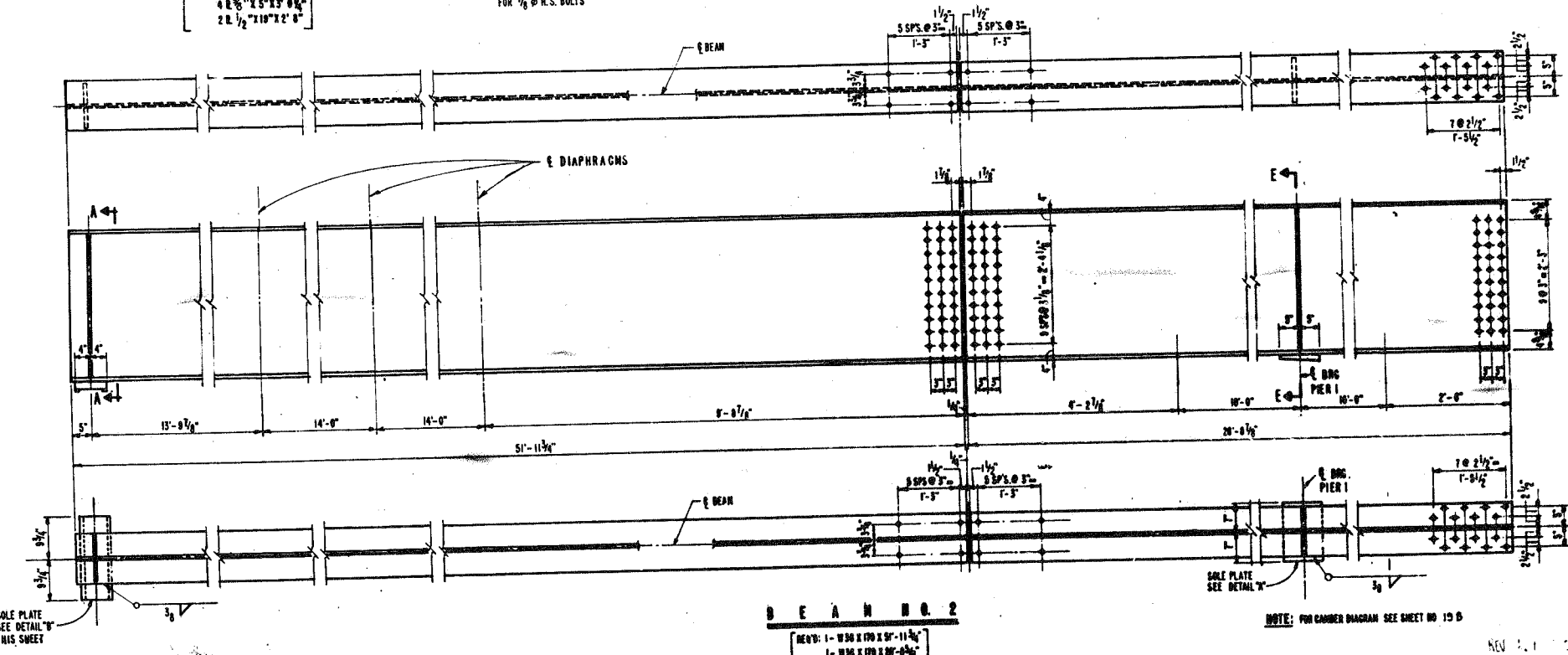
SECTION E-E
(REINFORCING: 2 #5 @ 12\"/>



DETAIL A
(REINFORCING: 1 #5 @ 12\"/>



DETAIL B
(REINFORCING: 1 #5 @ 12\"/>



BEAM NO. 2

REINFORCING: 1- #5 @ 12\"/>

NOTE: FOR CAMBER DIAGRAM SEE SHEET NO. 15 D

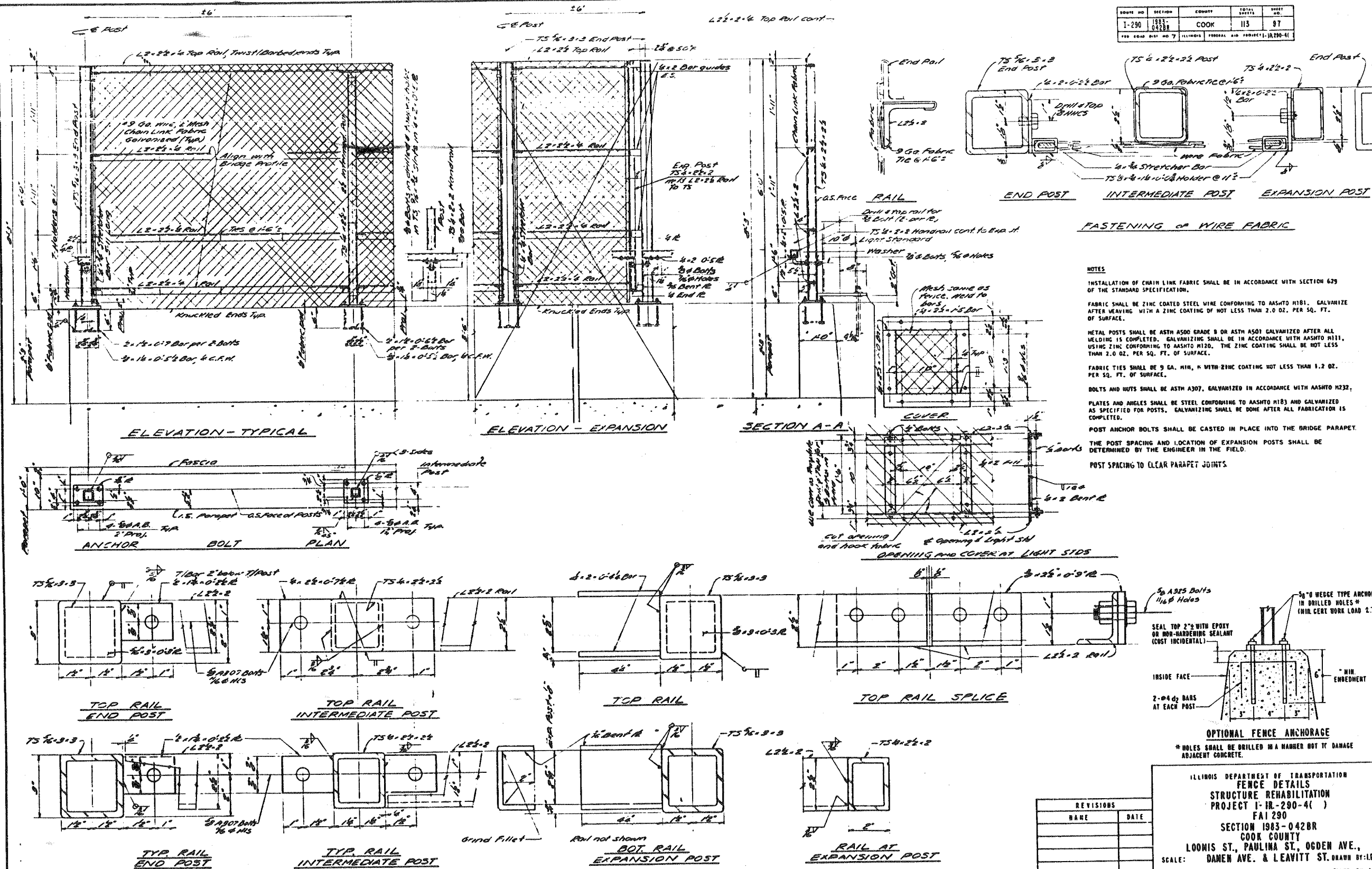
REVISIONS	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
BEAM REPAIR DETAILS
STRUCTURE RENOVATION
PROJECT 1-IR-290-4(1)
FAI 290
SECTION 1903-042 BR
COOK COUNTY
PAULINA STREET

SCALE:
DATE:

DRAWN BY: G.S.
CHECKED BY: A.J.A.

DATE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-290	1983-042BR	COOK	115	97
FED. ROAD DIST. NO. 7	ILLINOIS	FEDERAL AID PROJECT 1-10290-41		



Joint Size	"C" at 50°F	"D" at 50°F
2	2"	1 1/2" min
2 1/2	2 1/2"	1 3/4" min
4	3"	2 1/2" min

INSTALLATION NOTES

Use anchor blocks and continuous seal as anchor bolt location templates.

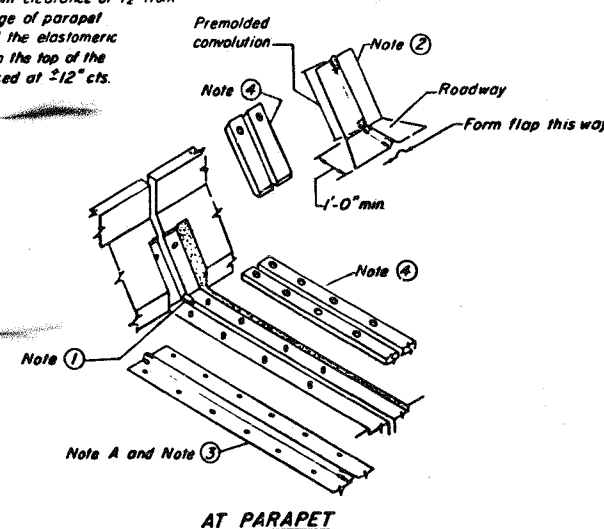
1. Install sponge mandrels into positions shown to form flap convolution.
2. Install parapet or sidewalk piece (trim roadway flap to fit before applying epoxy).
3. Install continuous seal in roadway.
4. Install anchor blocks as indicated.

NOTE A - Maximum spacing of anchor bolts shall be 12" centers

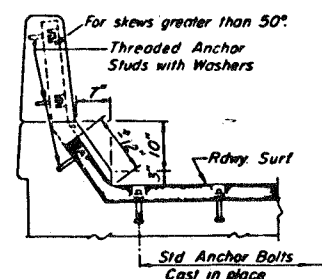
SKEW LIMITATIONS

The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews.

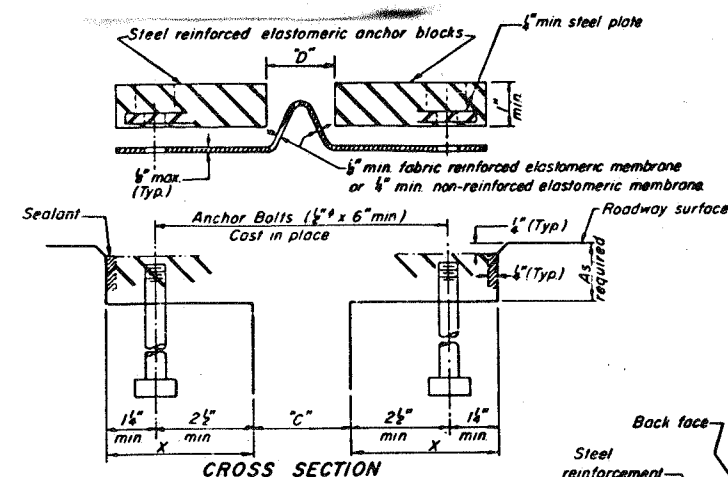
For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed in accordance with dimension "D", might require modifications to insure a minimum clearance of 1 1/2" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at ±12" cts.



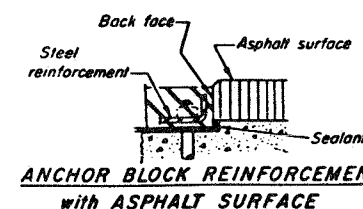
AT PARAPET



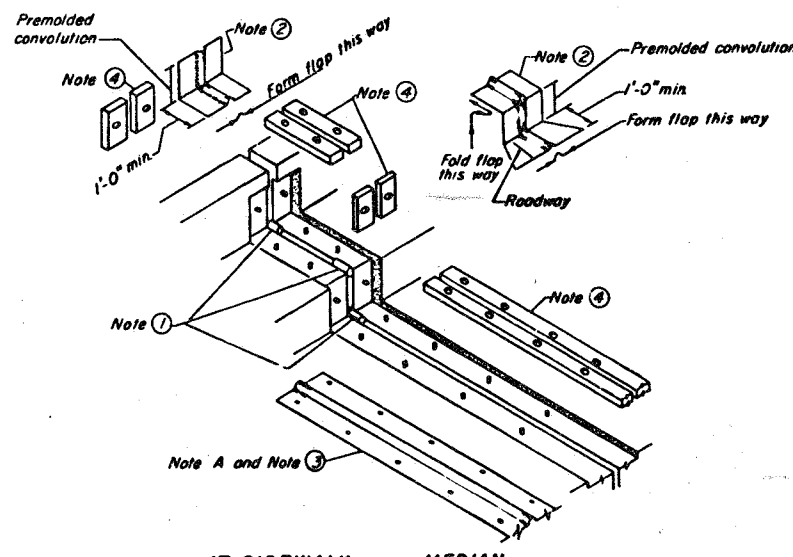
AT PARAPET



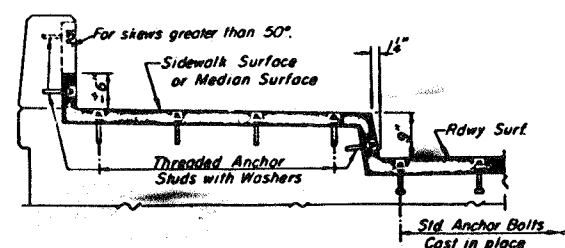
CROSS SECTION



ANCHOR BLOCK REINFORCEMENT with ASPHALT SURFACE

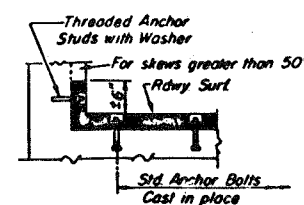


AT SIDEWALK or MEDIAN

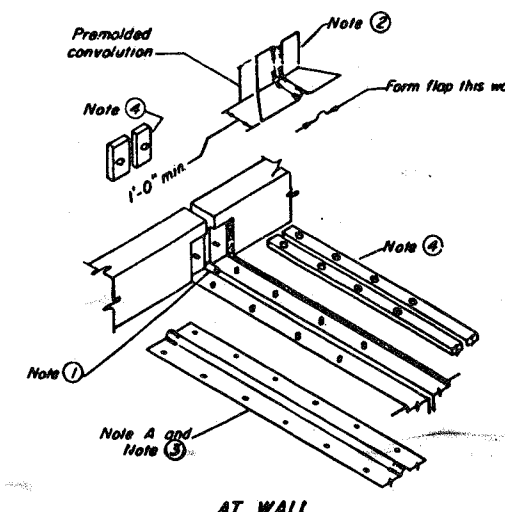


AT SIDEWALK or MEDIAN

TYPICAL END TREATMENTS



AT WALL



AT WALL

DATE	REVISION	BY	DATE
1-290	1983-0428R	COOK	113
PROJECT IIR-290-41		98	

GENERAL NOTES

Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane. See Special Provisions.

The elastomeric membrane shall be premolded with a single or a double upward convolution, that will have a "memory" to return to its molded position upon joint closure.

The steel reinforcement must extend up the back face of anchor blocks when asphalt surfaces are used but is optional in concrete blockout.

The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed.

Joint openings shall be adjusted in accordance with Article 503.07(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

The parapet and sidewalk flaps may be furnished factory vulcanized to the roadway membrane provided the centerline of the convolution is maintained and the process and method meet the approval of the Engineer.

CONTINUOUS SEAL TYPE NEOPRENE EXPANSION JOINTS For 2", 2 1/2" and 4" Movement

STRUCTURE REHABILITATION
PROJECT I-IR-290-41
FAI 290
SECTION 1983-0428R
COOK COUNTY

LOOMIS ST., PAULINA ST., OGDEN AVE.,
SCALE: DAMEN AVE. & LEAVITT ST. DRAWN BY: LDOT.
DATE: JUNE 1983 CHECKED BY:

REVISIONS	
NAME	DATE