

CONVENTIONAL SIGNS

STATE LINE	-----
COUNTY LINE	-----
TOWNSHIP OR RANGE LINE	-----
SECTION LINE	-----
QUARTER LINE	-----
SIXTEENTH LINE	-----
RIGHT-OF-WAY LINE	-----
PRESENT RIGHT-OF-WAY LINE	-----
CONTROL OF ACCESS LINE	-----
PROPERTY LINE (Except Land Lines)	-----
VACATED PLATTED PROPERTY	-----
CORPORATE OR CITY LIMITS	-----
TRUNK HIGHWAY CENTER LINE	-----
RETAINING WALL	-----
RAILROAD	-----
RAILROAD RIGHT-OF-WAY LINE	-----
RIVER OR CREEK	-----
DRY RUN	-----
DRAINAGE DITCH	-----
ELECTRIC POWER LINE	-----
TELEPHONE OR TELEGRAPH LINE	-----
JOINT TELEPHONE AND POWER	-----
CONDUIT	-----
TELEPHONE CABLE - AERIAL	-----
TELEPHONE CABLE - UNDERGROUND	-----
POWER CABLE UNDERGROUND	-----
GAS MAIN	-----
CULVERT	-----
BIPOLE	-----
GUARD RAIL	-----
BARBED WIRE FENCE	-----
WOVEN WIRE FENCE	-----
CHAIN LINK FENCE	-----
RAILROAD SNOW FENCE	-----
STONE WALL OR FENCE	-----
HEDGE	-----
WATER PIPE	-----
SEWER PIPE	-----
DRAIN TILE	-----
SPRINGS	-----
MARSH	-----
TIMBER	-----
ORCHARD	-----
BRUSH	-----
NURSERY	-----
CATCH BASIN	-----
MANHOLE	-----
FIRE HYDRANT	-----
STREET LIGHT	-----
RAILROAD CROSSING SIGN	-----
RAILROAD CROSSING BELL	-----
ELECTRIC WARNING SIGN	-----
CROSSING GATE	-----
CATTLE GUARD	-----
OVERPASS (Highway Over)	-----
UNDERPASS (Highway Under)	-----
BRIDGE	-----
BUILDING (One Story Frame)	-----
F FRAME	-----
CONCRETE	-----
STONE	-----
TILE	-----
BRICK	-----
STUCCO	-----
IRON PIPE OR ROD	-----
MONUMENT (STONE, CONCRETE, OR METAL)	-----
WOODEN PUS	-----
GRAVEL PIT	-----
SAND PIT	-----
BORDO PIT	-----
ROCK QUARRY	-----
MEANDER CORNER	-----

Fed. Proj. No. \_\_\_\_\_

STATE OF MINNESOTA  
DEPARTMENT OF HIGHWAYS

CONSTRUCTION PLAN FOR BRIDGE DECK REPAIR

Isanti County Highway No. 3

Between CSAH. I - E. RIVER ROAD And CSAH. II - FOLEY BLVD.

A PT. 1000' E. & 525' N. OF THE CENTER OF SEC. 26, T.31 N., R.24 W. A PT. 1665' E. & 120' N. OF THE CENTER OF SEC. 26, T.31 N., R.24 W.

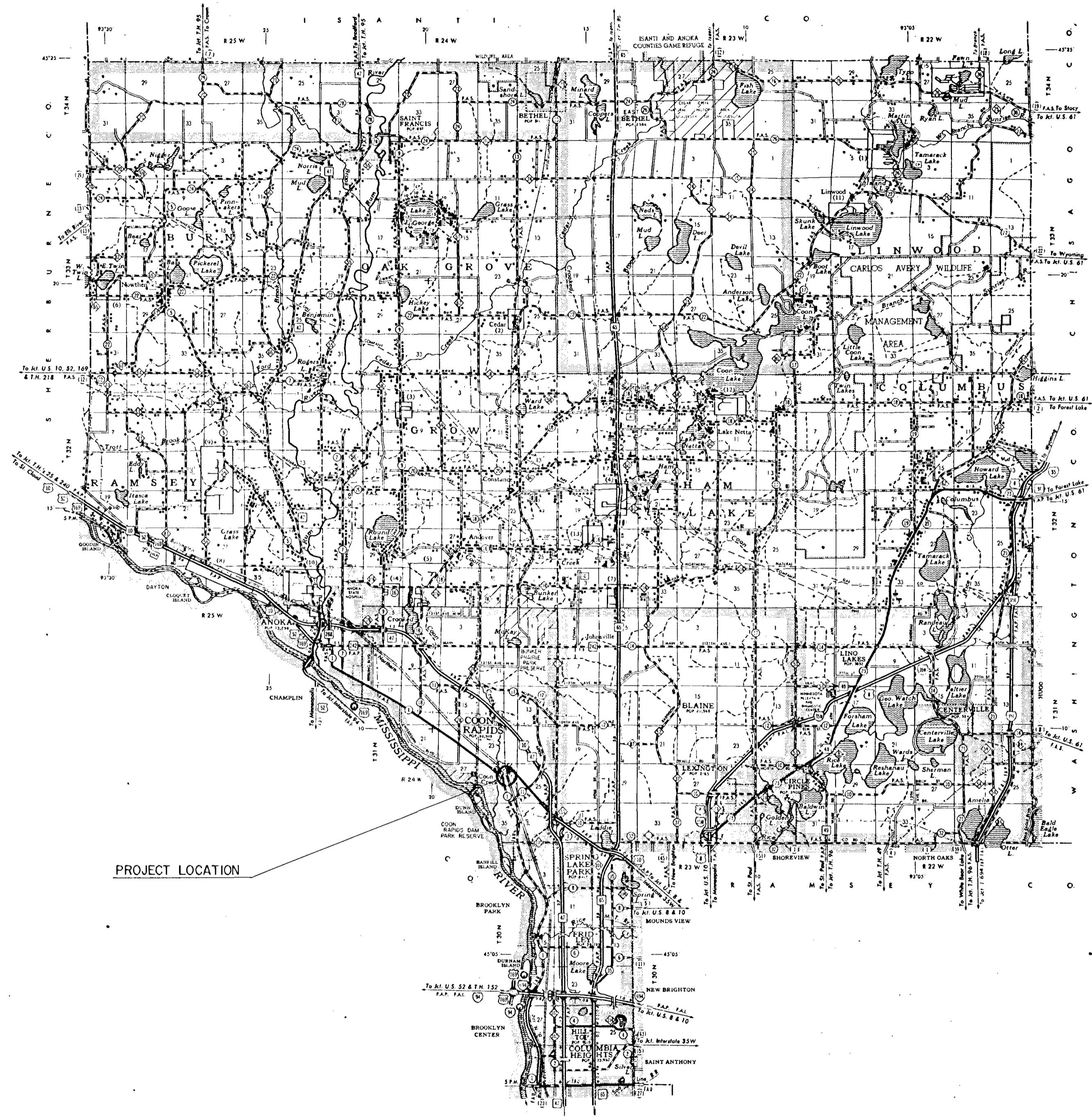
From SEC. 26, T.31 N., R.24 W. To SEC. 26, T.31 N., R.24 W.

Give proper reference to Sections, Township and Range

GROSS LENGTH	0	FEET	0	MILES
BRIDGES-LENGTH	451.76	FEET	.09	MILES
EXCEPTIONS-LENGTH	0	FEET	0	MILES
NET LENGTH	451.76	FEET	.09	MILES

- INDEX OF SHEETS
- Sheet No. 1A Title Sheet & Layout Map
  - No. 1 Est. Quantities & Typical Sec.
  - No. 2-3 General Plan Elevation
  - No. 4-10 Removal & Reconstruction
  - No. 11 Median & Railing Details
  - No. 12 Waterproof Expansion Device
  - No. 13 Traffic Control Details

THERE ARE 14 SHEETS IN THIS PLAN.



DESIGN DESIGNATION

ADT (CURRENT YEAR) 14,700

ADT (FUTURE YEAR) 29,400

T (HEAVY COMMERCIAL)

9 Ton Design

Design Speed 45 MPH

Design Speed not achieved at:

STA \_\_\_\_\_ TO STA \_\_\_\_\_ MPH \_\_\_\_\_

STA \_\_\_\_\_ TO STA \_\_\_\_\_ MPH \_\_\_\_\_

SPECIFICATIONS

THE "STANDARD" SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, DATED JAN. 1, 1978, SHALL GOVERN.

ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND ORDINANCES WILL BE COMPLIED WITH, IN THE CONSTRUCTION OF THIS PROJECT.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Paul K. Lund COUNTY ENGINEER DATE 7-12-83

ANOKA COUNTY REG. NO. 6549

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 19 \_\_\_\_\_ DISTRICT ENGINEER

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 19 \_\_\_\_\_

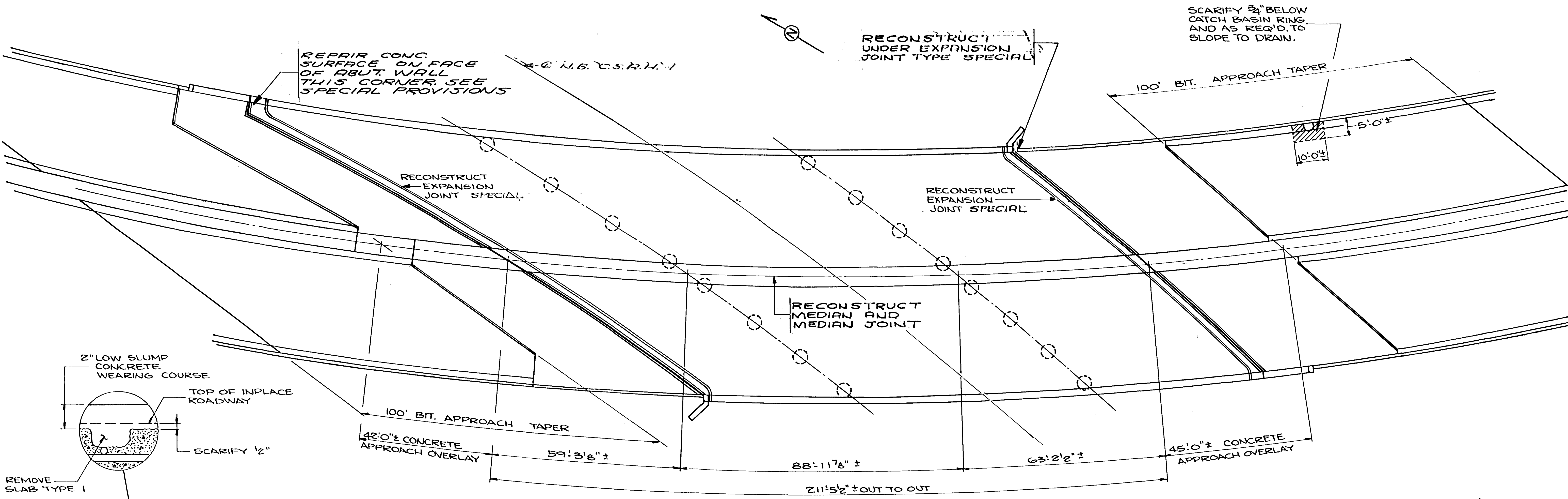
APPROVED \_\_\_\_\_ 19 \_\_\_\_\_ STATE AID ENGINEER

Minn. Proj. No. \_\_\_\_\_ County Proj. No. 83-08-03

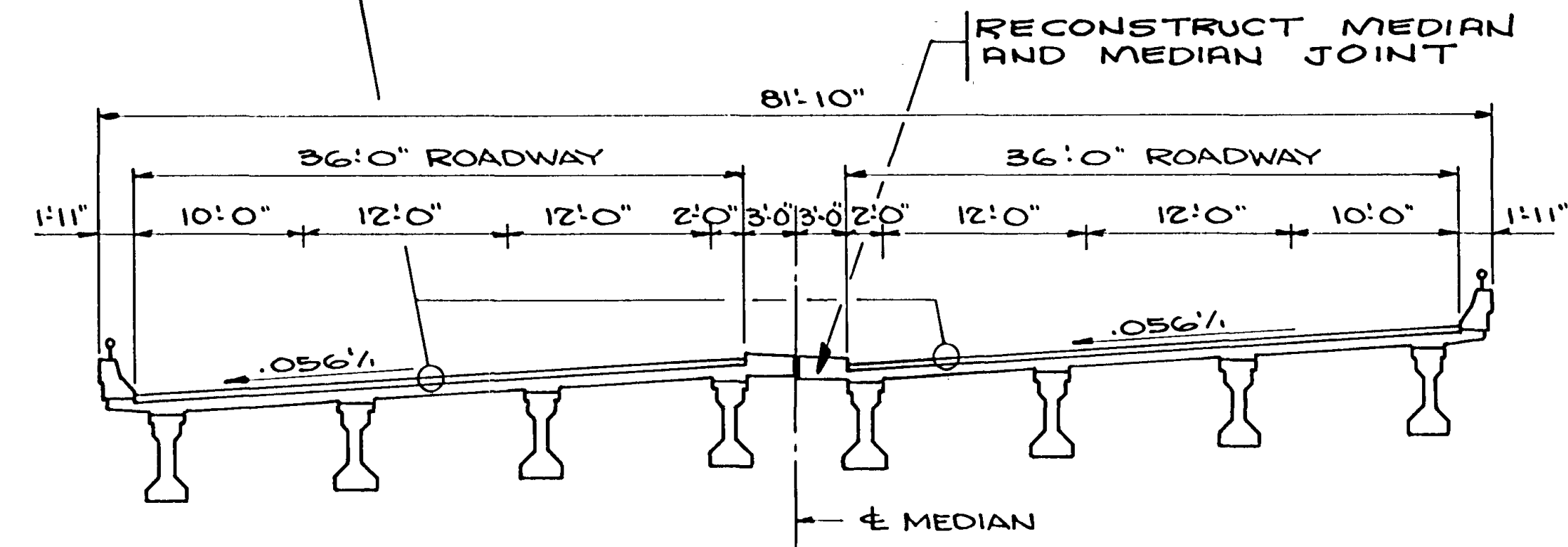
State Proj. No. \_\_\_\_\_ S. A. P. \_\_\_\_\_



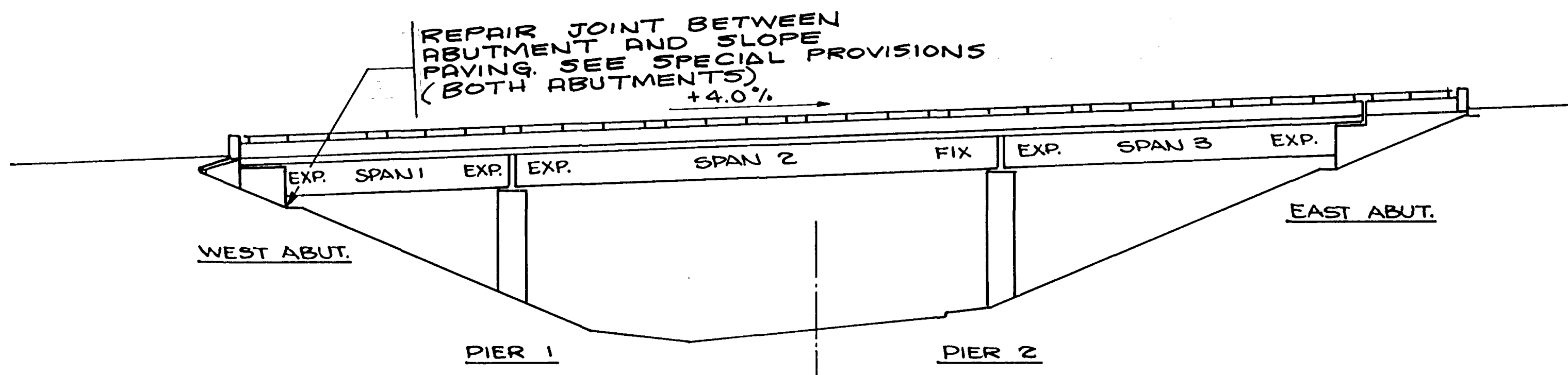




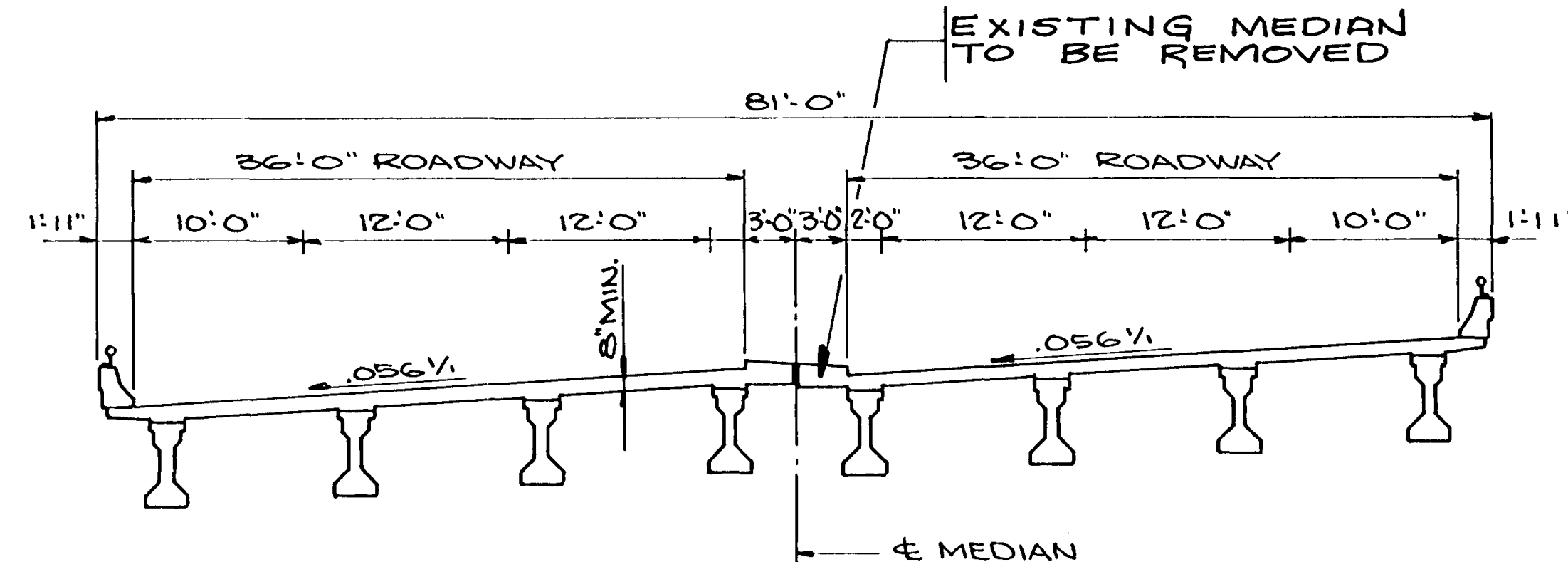
GENERAL PLAN



TYPICAL SECTION PROPOSED

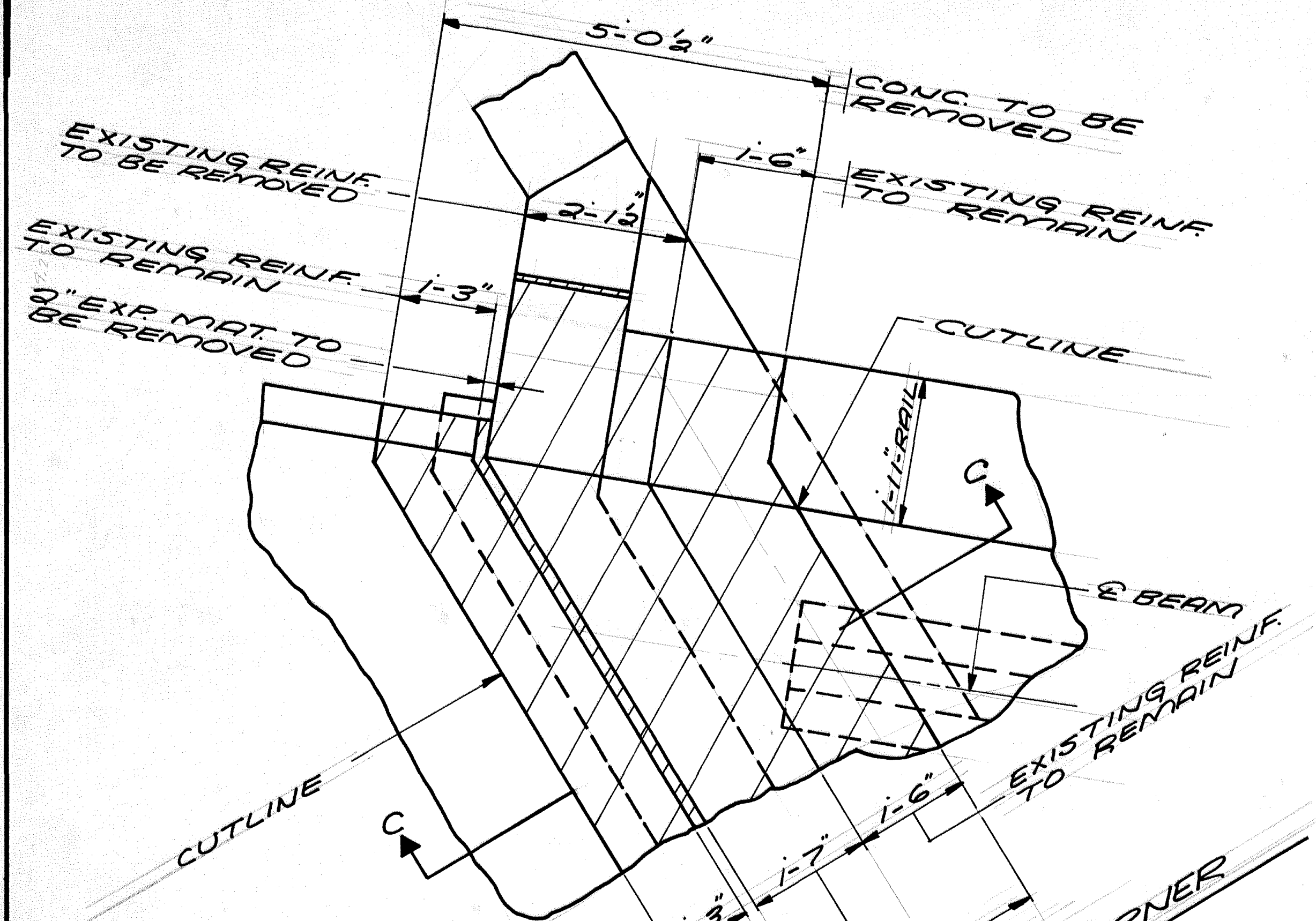


GENERAL ELEVATION

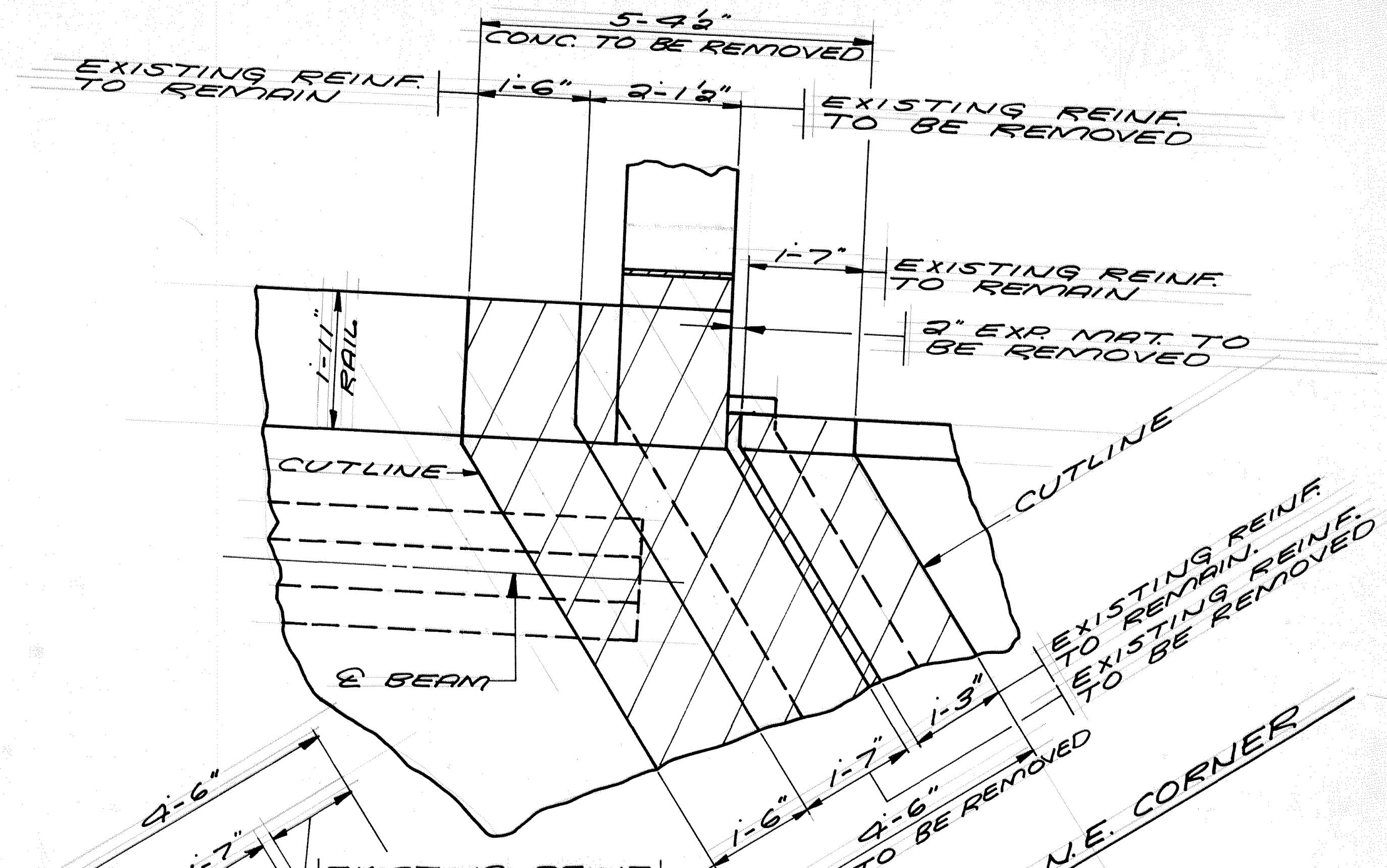


TYPICAL SECTION INPLACE

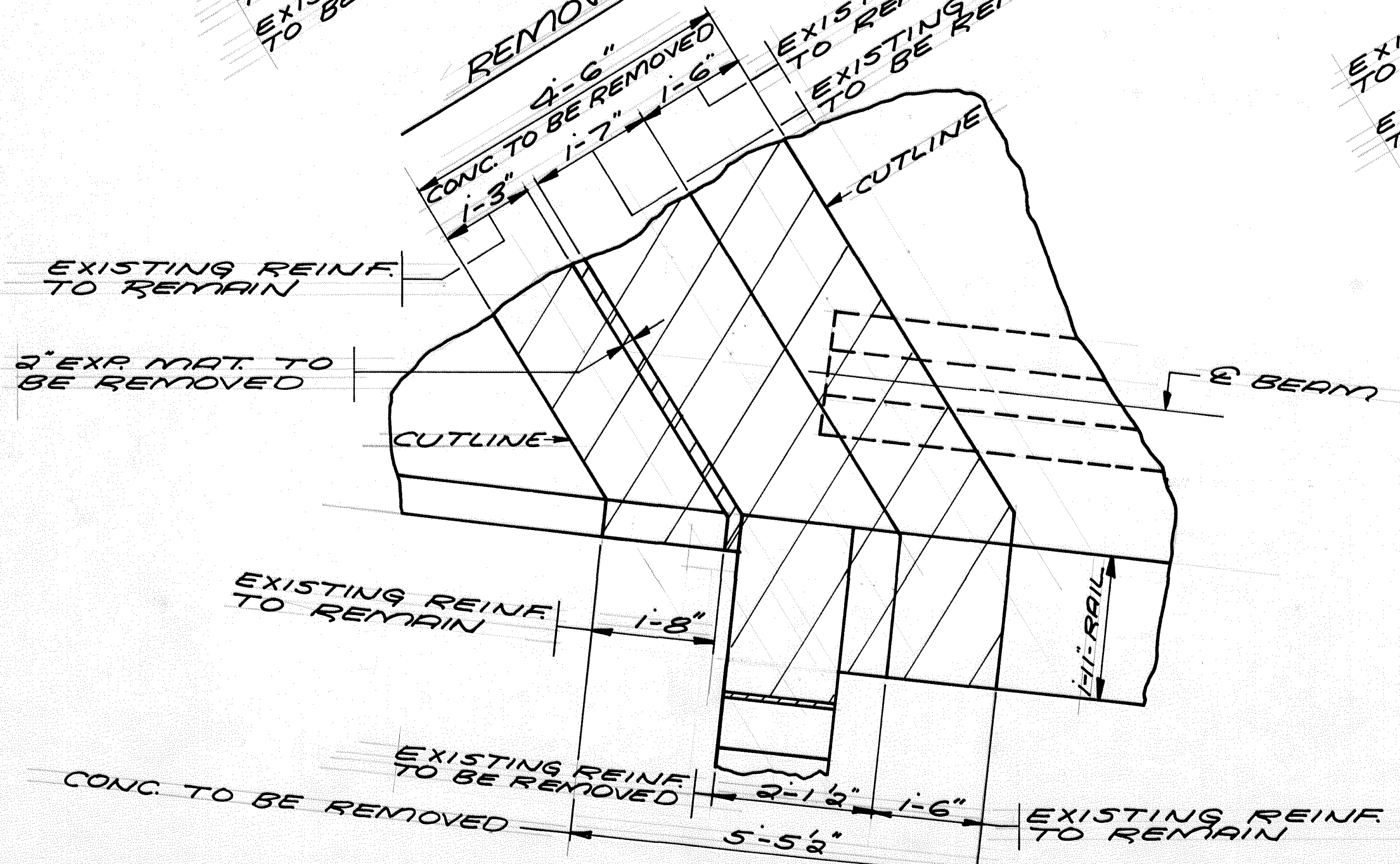
GENERAL PLAN & ELEVATION		DES:	DR: R.H.	APPROVED:	BRIDGE NO. 02522
C.S.A.H. 3 (COON RAPIDS BLVD. BY-PASS) OVER EAST RIVER RD. N.B. (C.S.A.H. 1) IN COON RAPIDS.		CHK:	CHK.		
SHEET NO. 3 of 13 SHEETS					



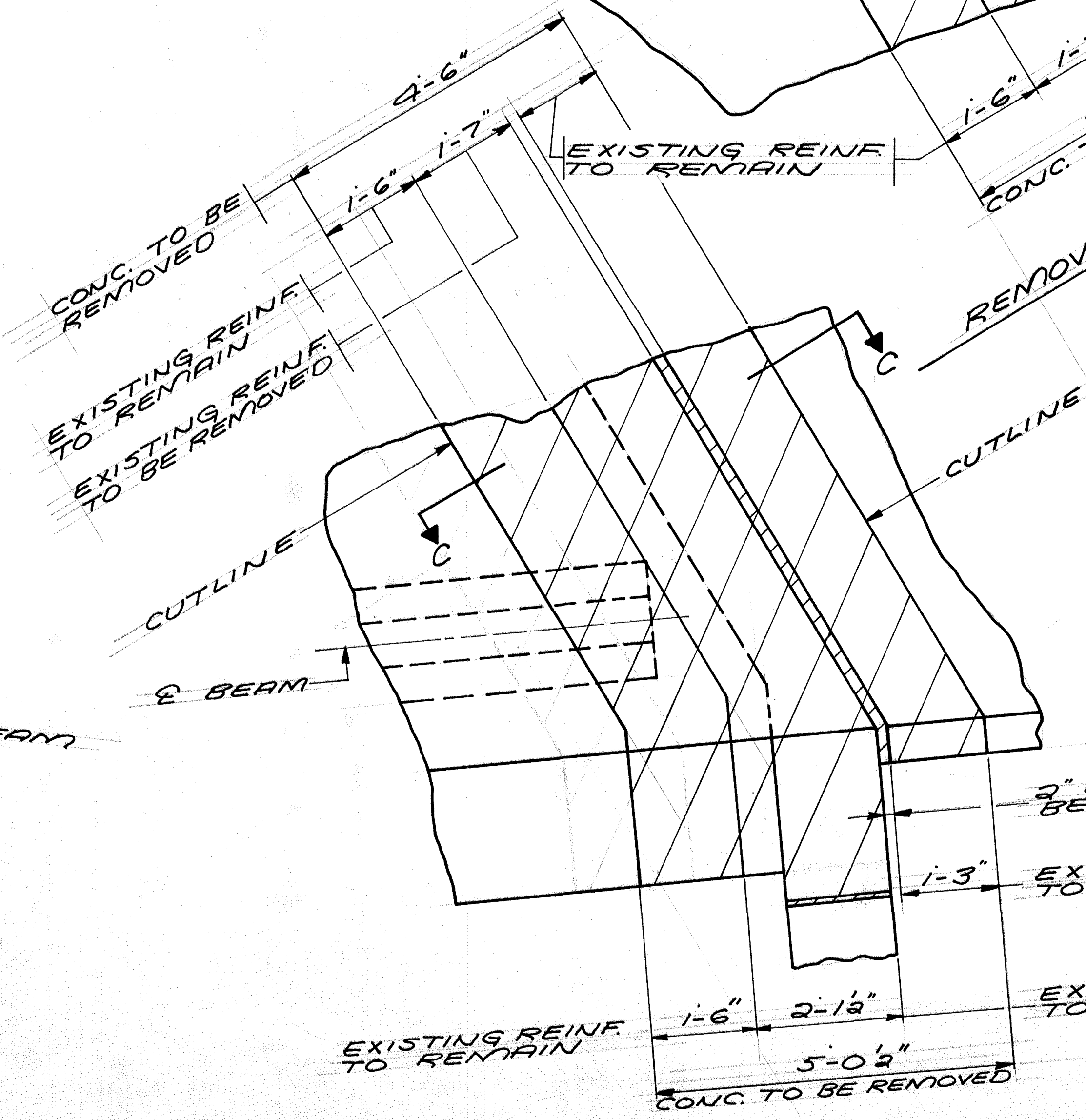
REMOVAL PLAN N.W. CORNER



REMOVAL PLAN N.E. CORNER



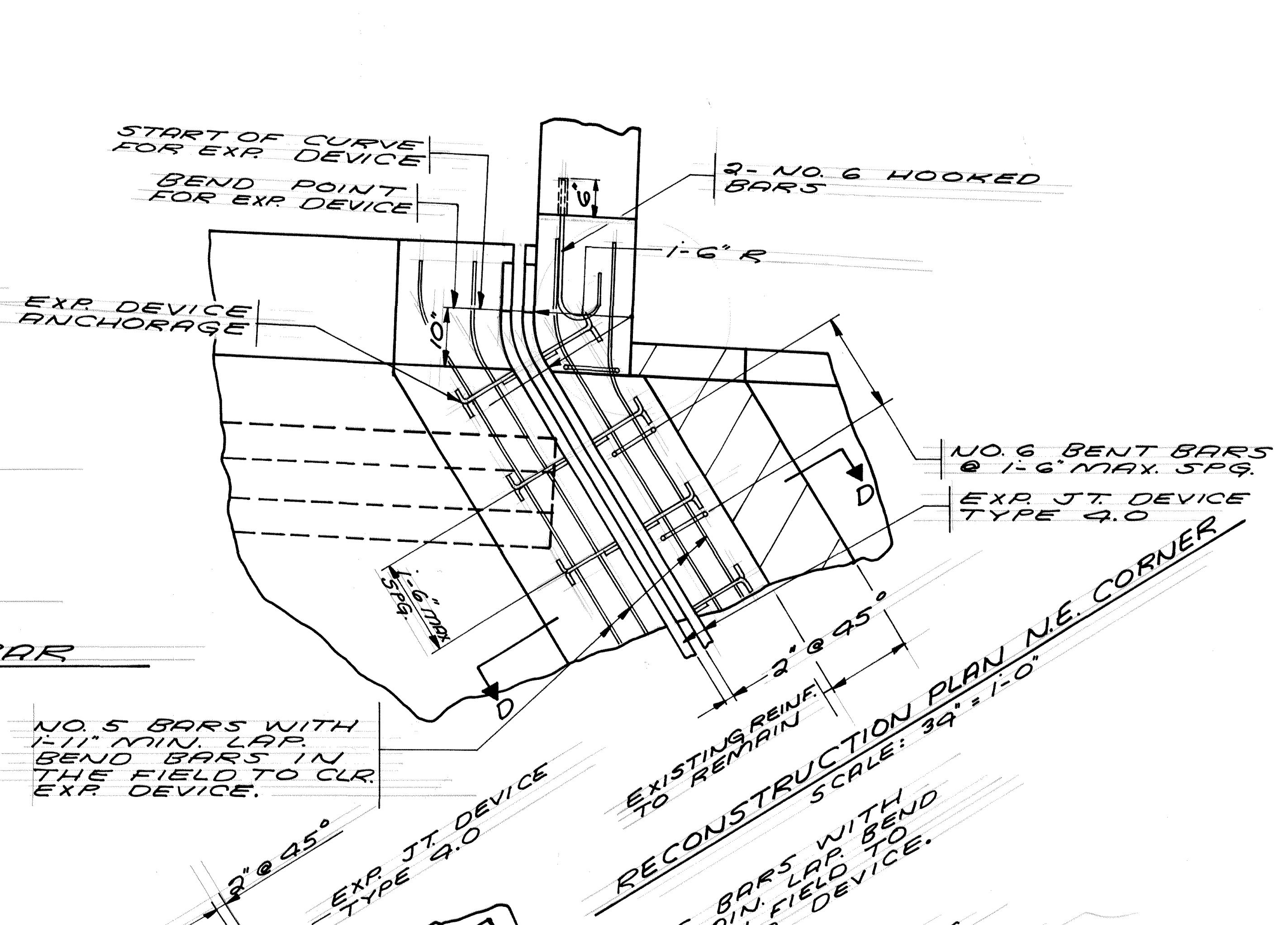
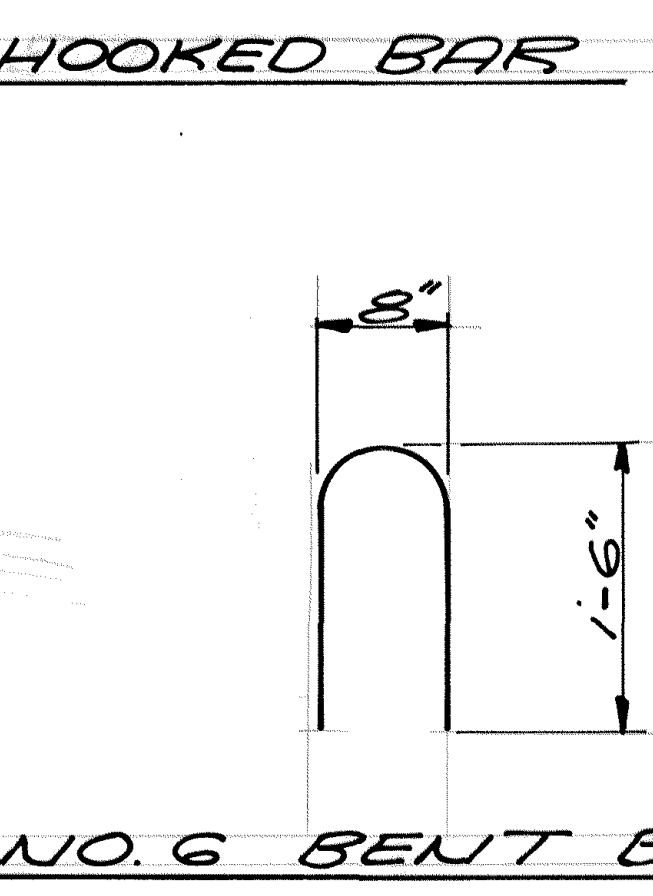
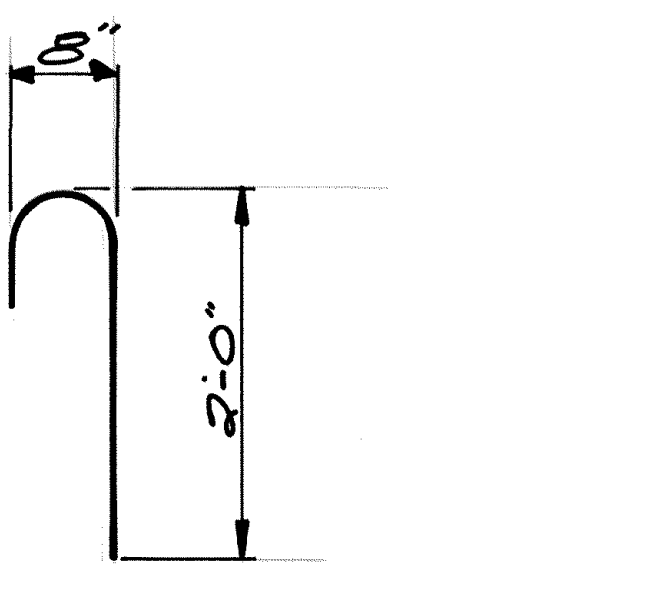
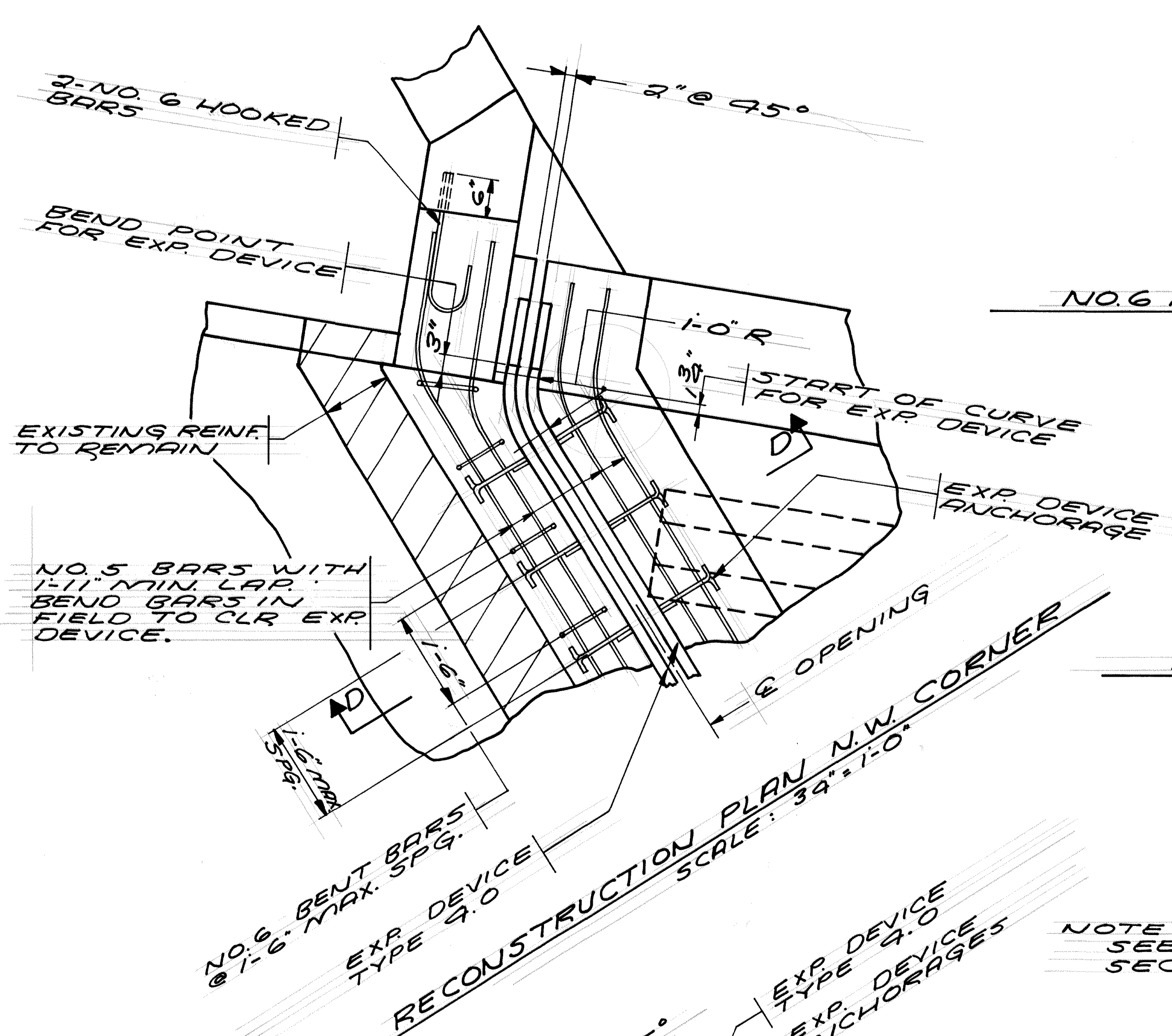
REMOVAL PLAN S.W. CORNER



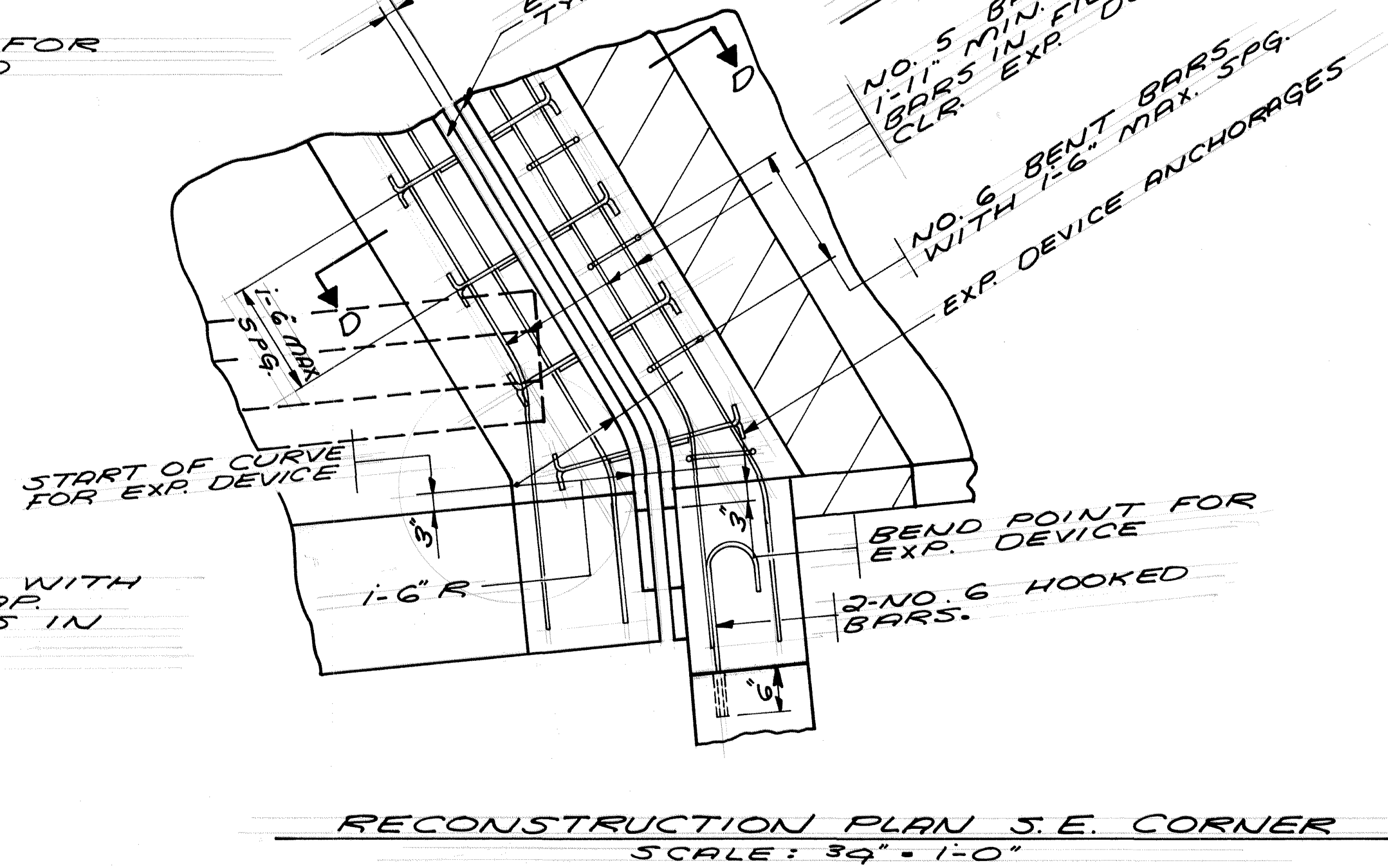
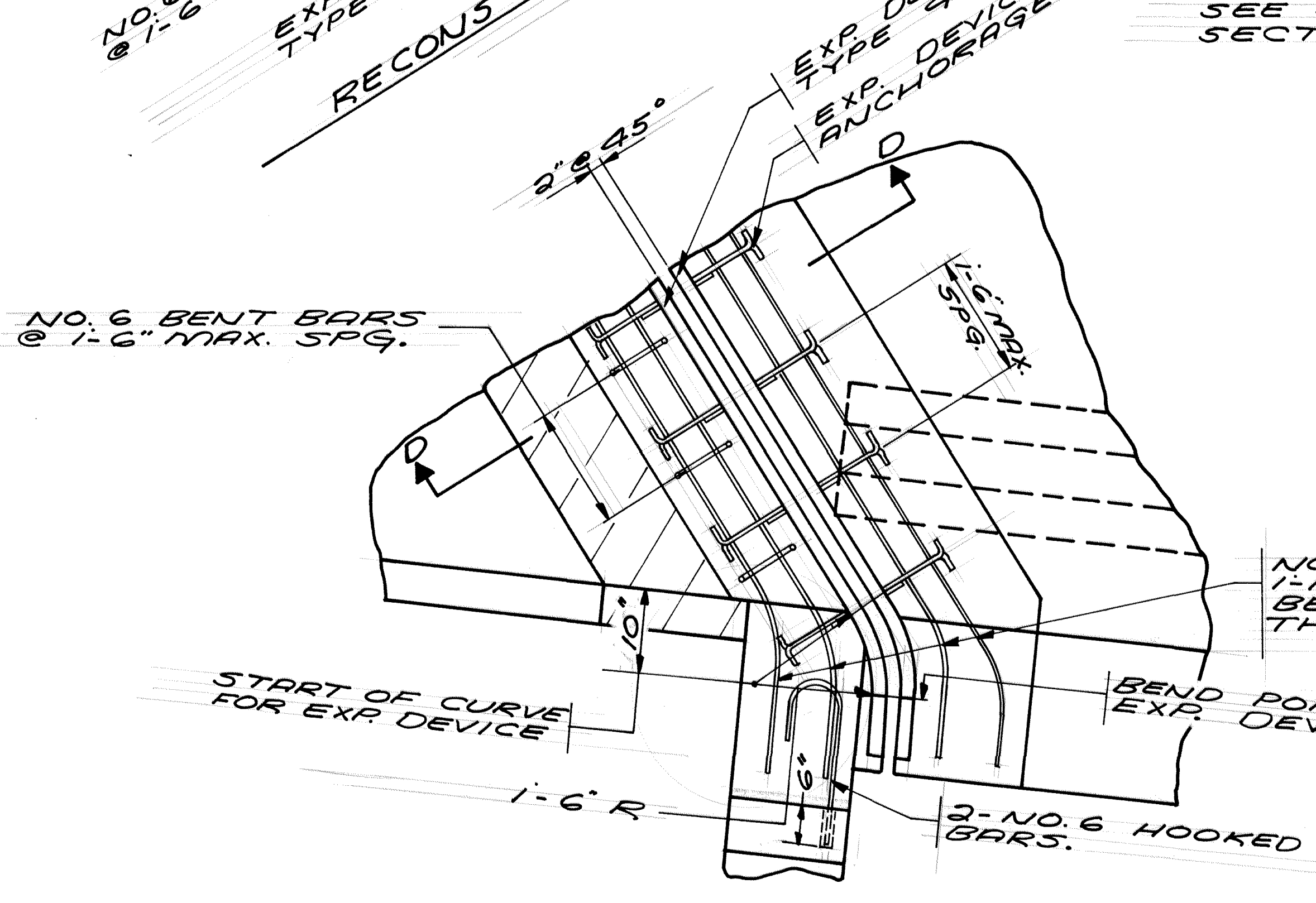
REMOVAL PLAN S.E. CORNER

NOTE:  
SEE SHEET 6 FOR  
SECTION C-C

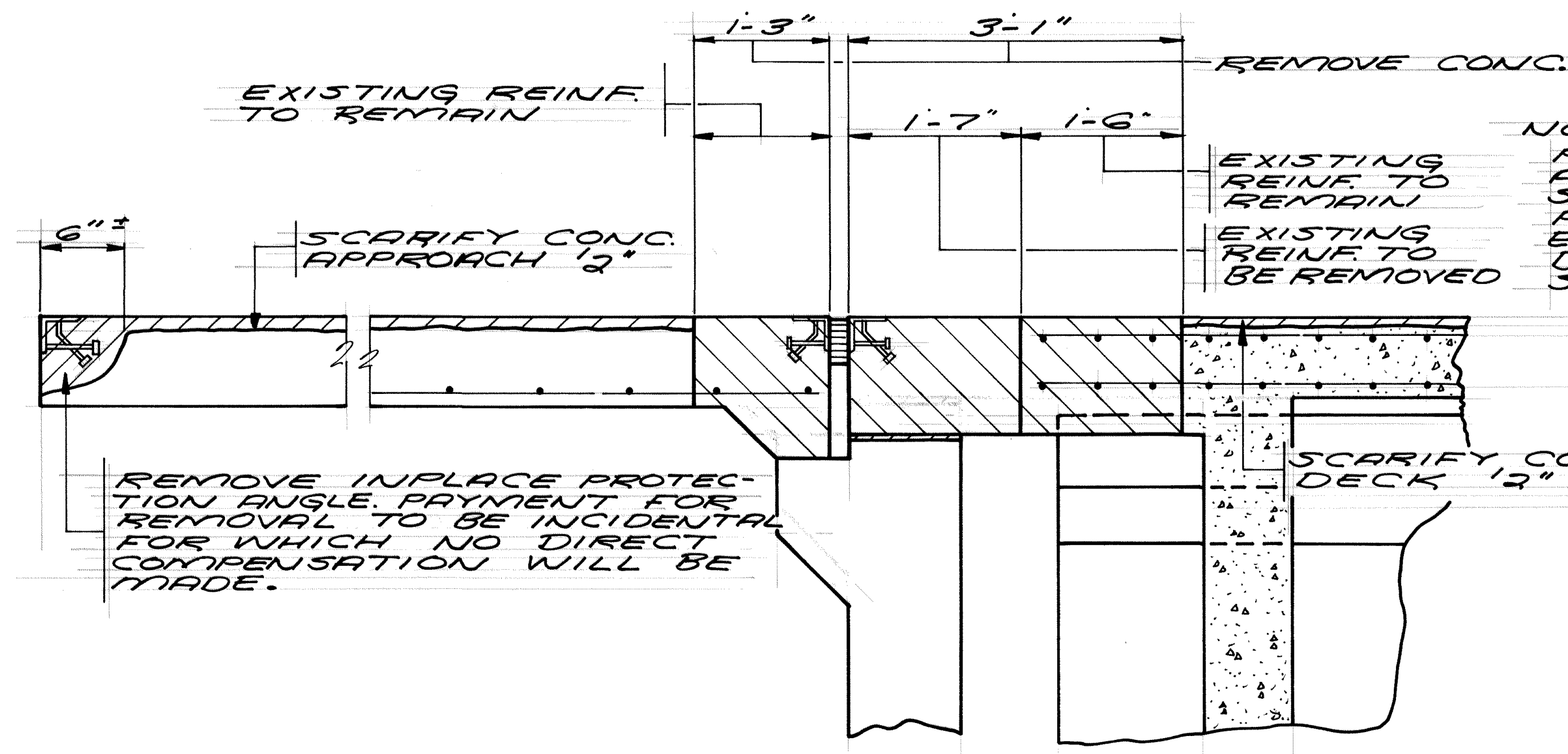
REMOVAL PLAN FOR EXP. DEVICE	DRAWN:	CHECKED:	APPROVED:	BRIDGE NUMBER 02521
	D.J.V.	R.R.T.		
	SHEET 4 OF 13 SHEETS			



NOTE  
SEE SH. 6 FOR  
SECTION D-D

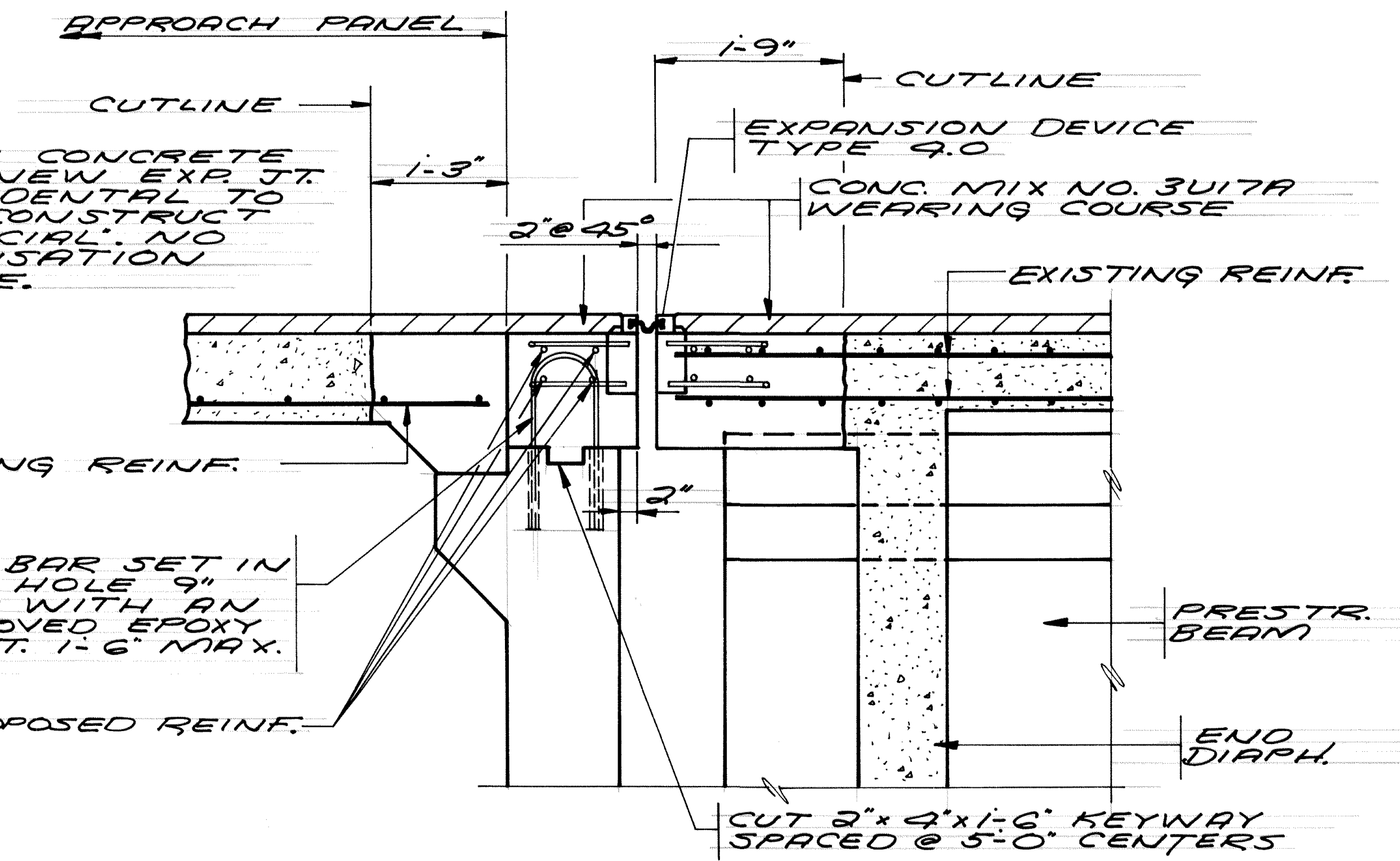


RECONSTRUCTION PLAN	DRAWN: D.J.V.	CHECKED R.R.T.	APPROVED	BRIDGE NUMBER 02521
	SHEET 5 OF 13 SHEETS			



**SECTION C-C - REMOVAL**  
SCALE: 1" = 1'-0"

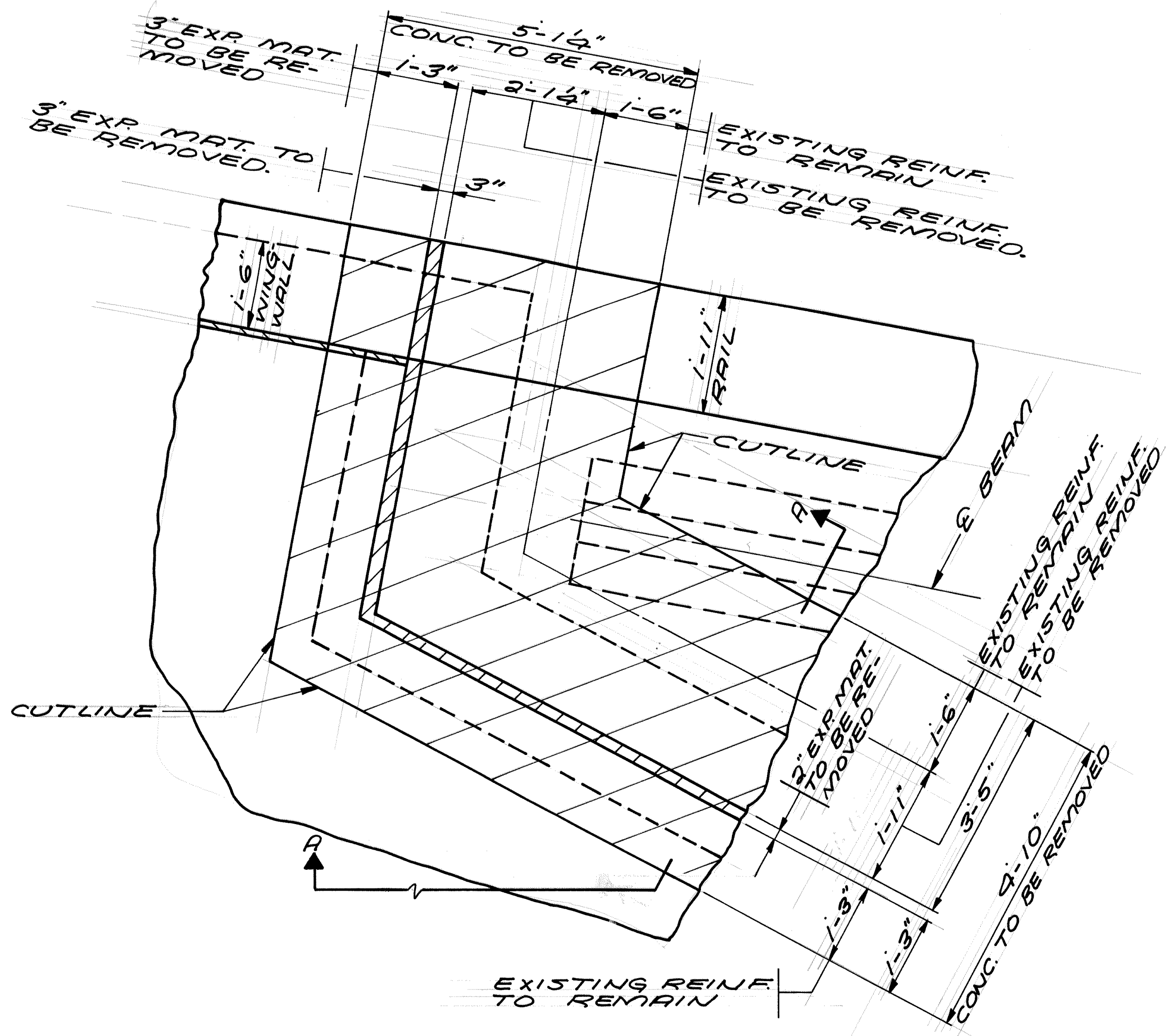
**NOTE:**  
PROPOSED NEW CONCRETE AND REINF. @ NEW EXP. JT. SHALL BE INCIDENTAL TO PAY ITEM "RECONSTRUCT EXP. JOINT SPECIAL". NO DIRECT COMPENSATION SHALL BE MADE.



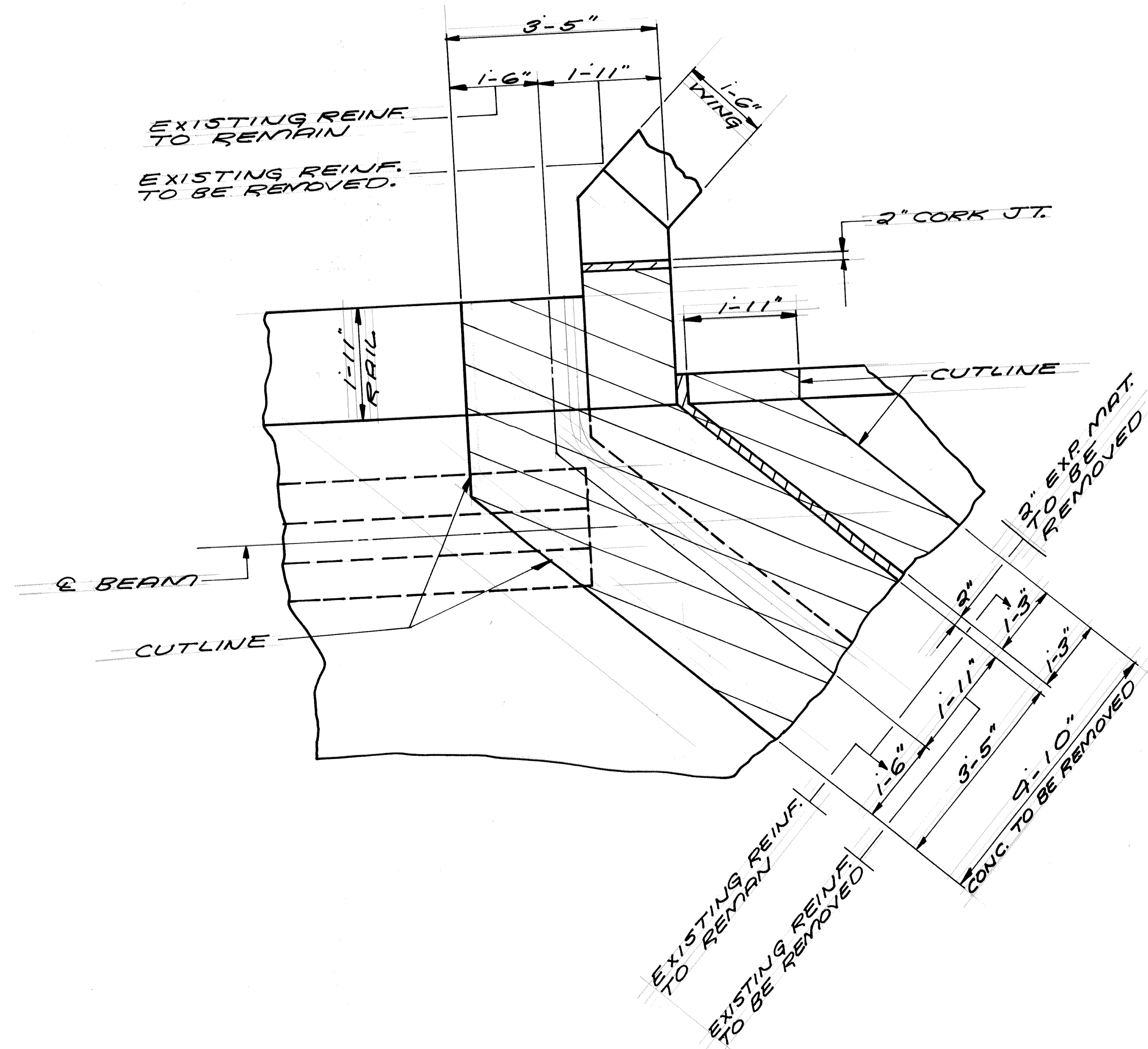
**SECTION D-D - RECONSTRUCTION**  
SCALE: 1" = 1'-0"

**NOTE:**  
REMOVAL OF RAILING CONC. & REINF. FOR PLACING OF NEW EXP. JOINTS SHALL BE INCIDENTAL TO PAY ITEM "RECONSTRUCT EXP. JOINT DEVICE SPECIAL". NO DIRECT COMPENSATION SHALL BE MADE.  
RAILING REINF. SHALL BE BENT OR CUT TO PROVIDE CLEARANCE FOR EXP. DEVICE AS DIRECTED BY THE ENGINEER IN THE FIELD.  
ADDITIONAL REINF. AT RAILING SHALL BE PLACED AS DIRECTED BY THE ENGINEER IN THE FIELD. INCLUDED IN PRICE BID FOR "RECONSTRUCT EXP. JT. SPECIAL."

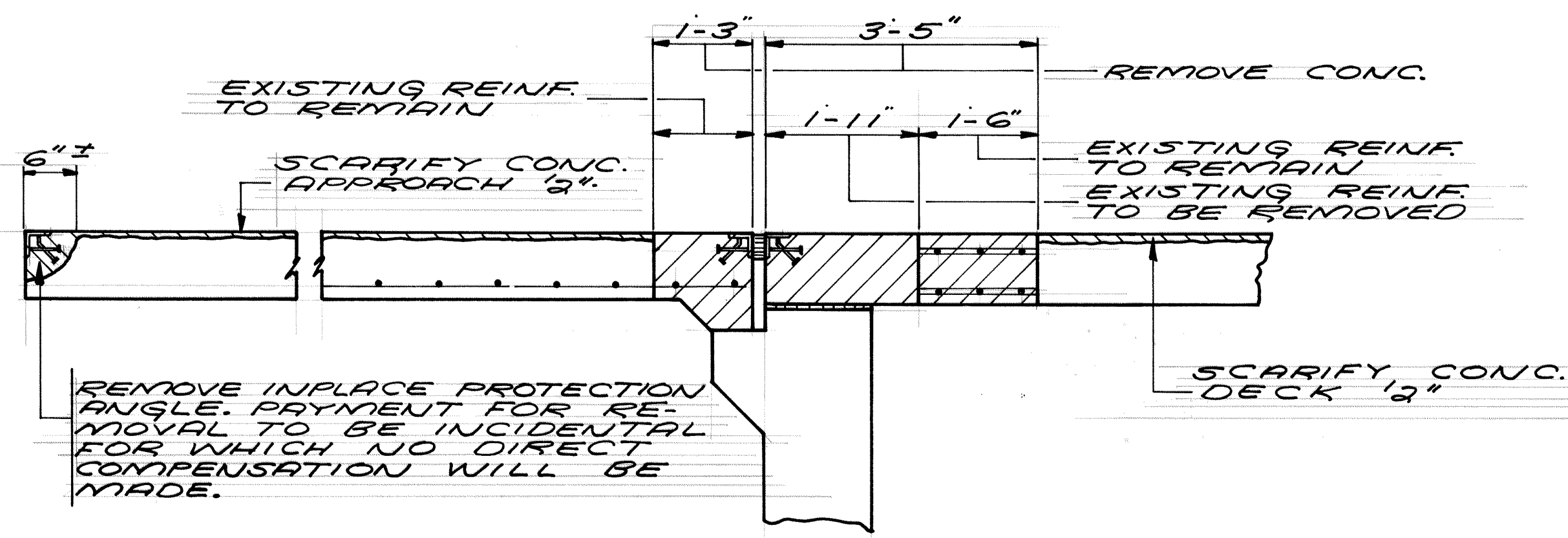
REMOVAL AND RECONSTRUCTION DETAILS	DRAWN: D.J.V.	CHECKED: R.R.T.	APPROVED:	BRIDGE NUMBER 02521
	SHEET 6 OF 13 SHEETS			



REMOVAL PLAN N.W. CORNER

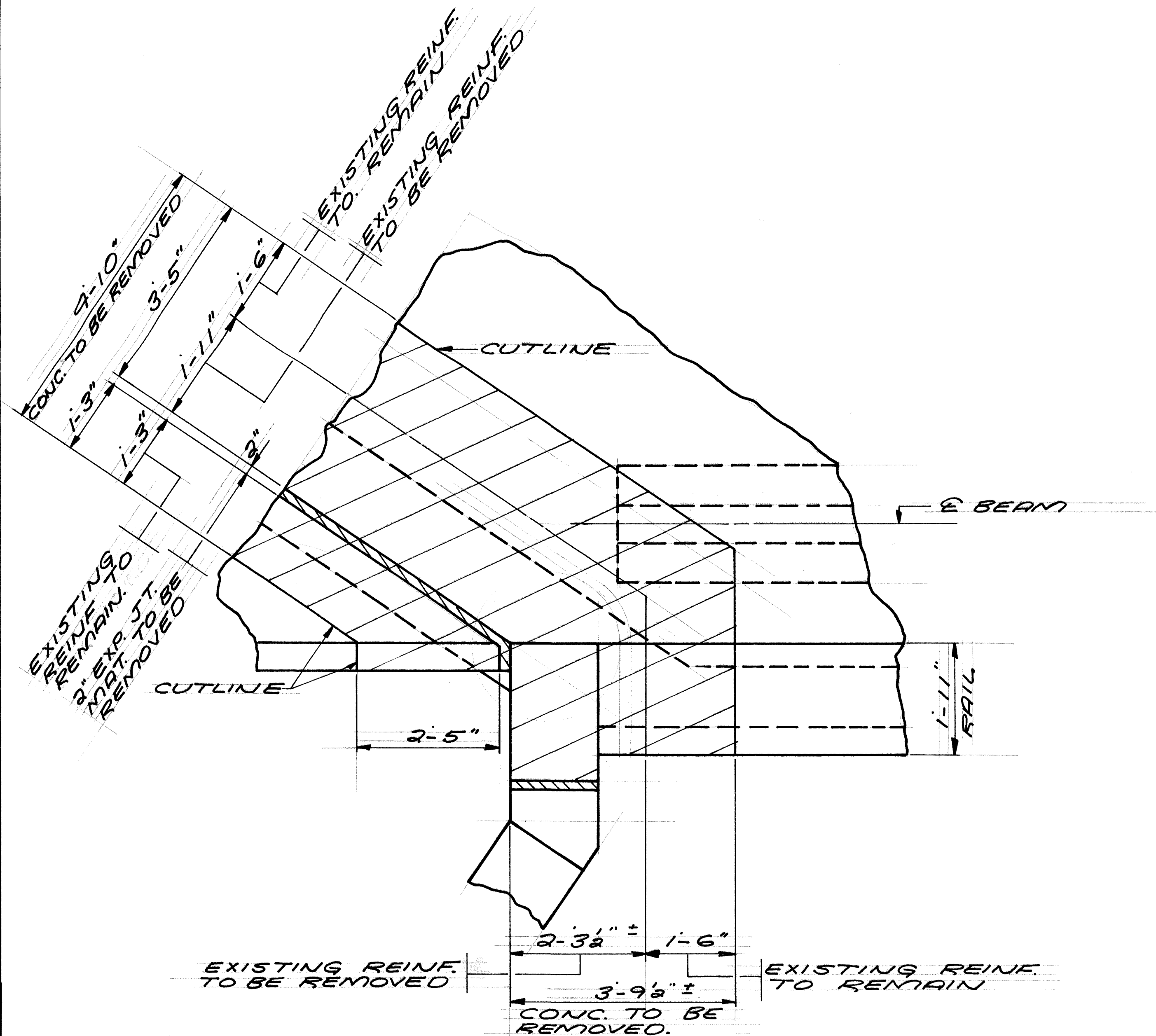


REMOVAL PLAN N.E. CORNER

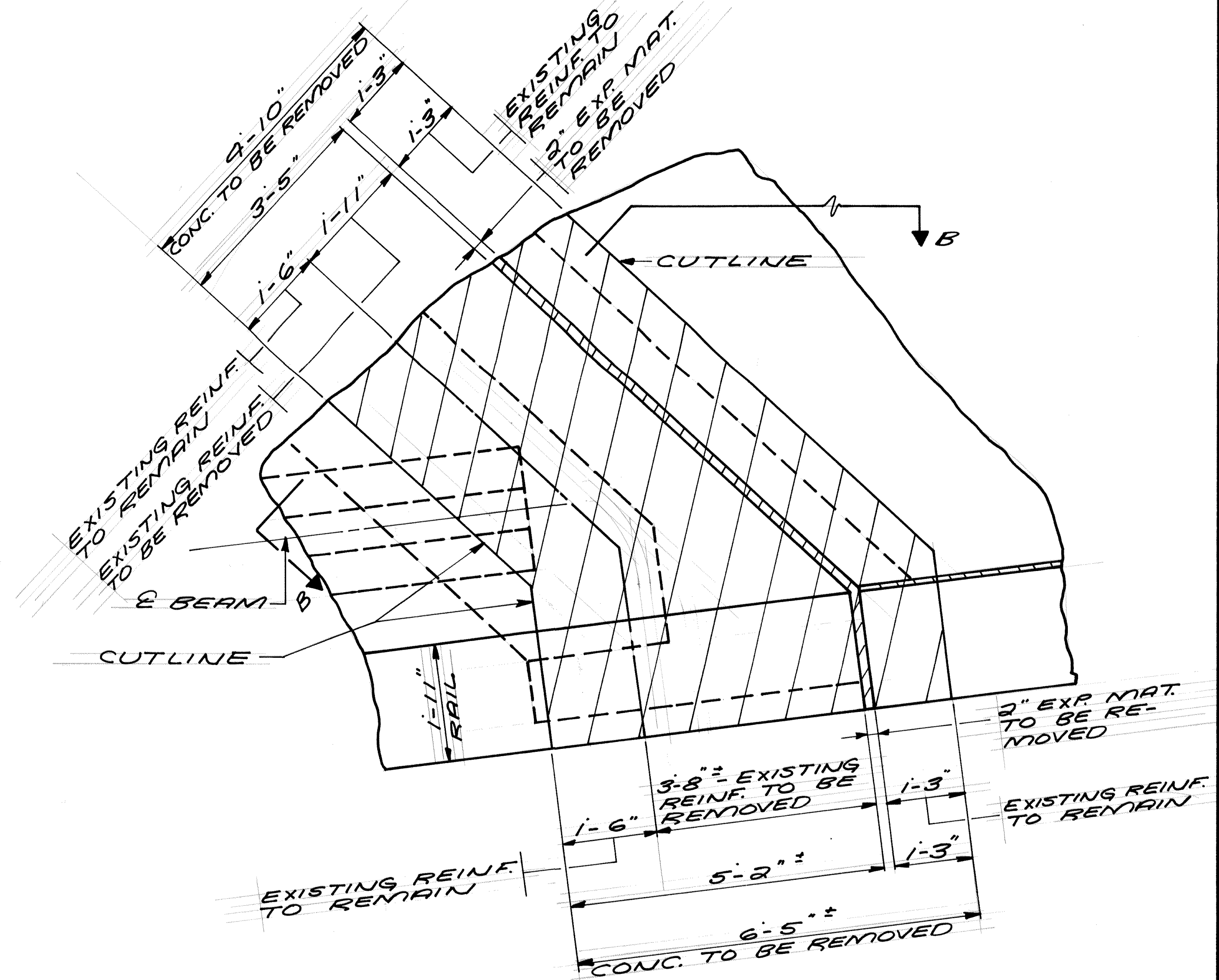


REMOVAL PLAN @ N.W. & N.E. CORN.	DRAWN: D.J.V.	CHECKED: R.R.T.	APPROVED	BRIDGE NUMBER 02522
	SHEET 7 OF 13 SHEETS			

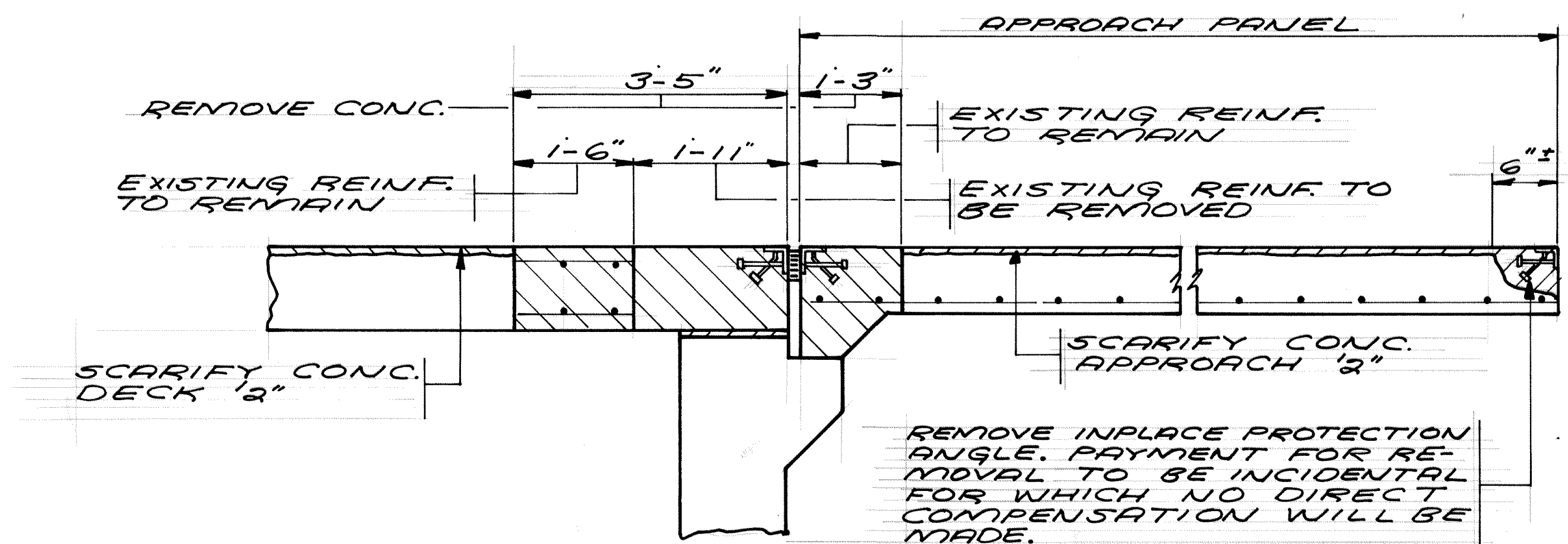




REMOVAL PLAN S.W. CORNER

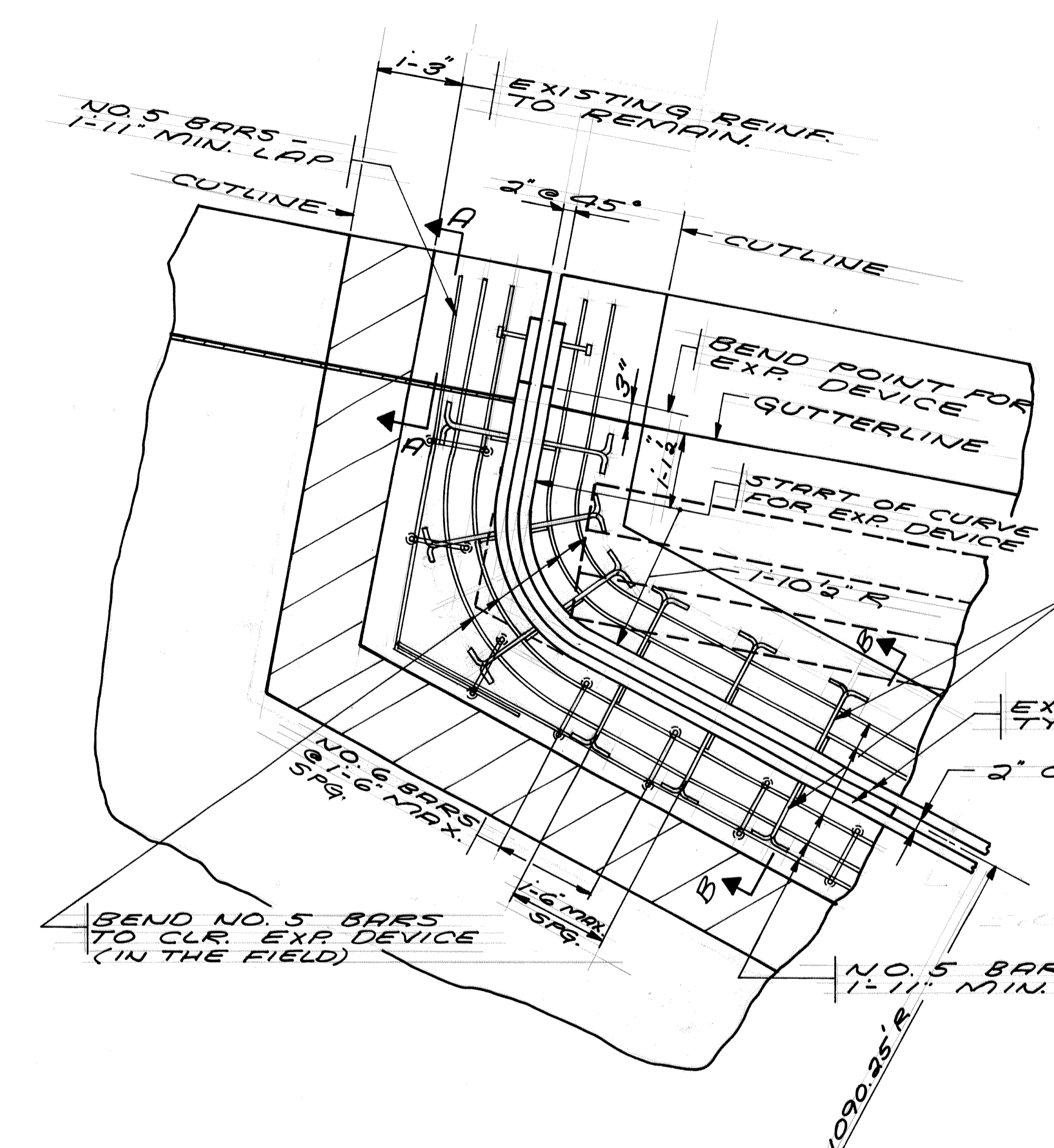


REMOVAL PLAN S.E. CORNER



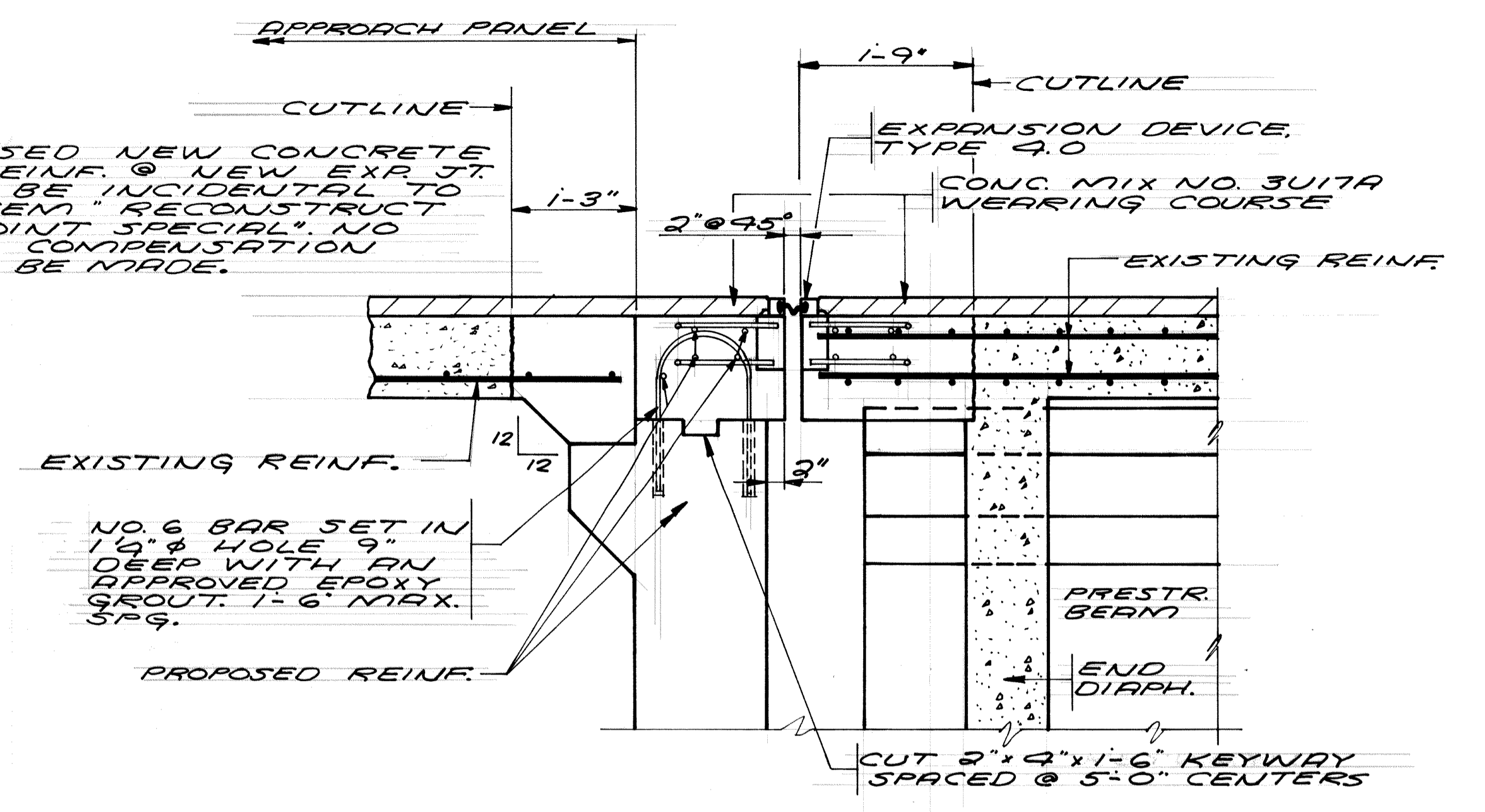
SECTION B-B

REMOVAL PLAN @ S.W. & S.E. CORNS.	DRAWN:	CHECKED:	APPROVED:	BRIDGE NUMBER 02522
	D.J.V.	R.R.T.		
SHEET 8 OF 13 SHEETS				

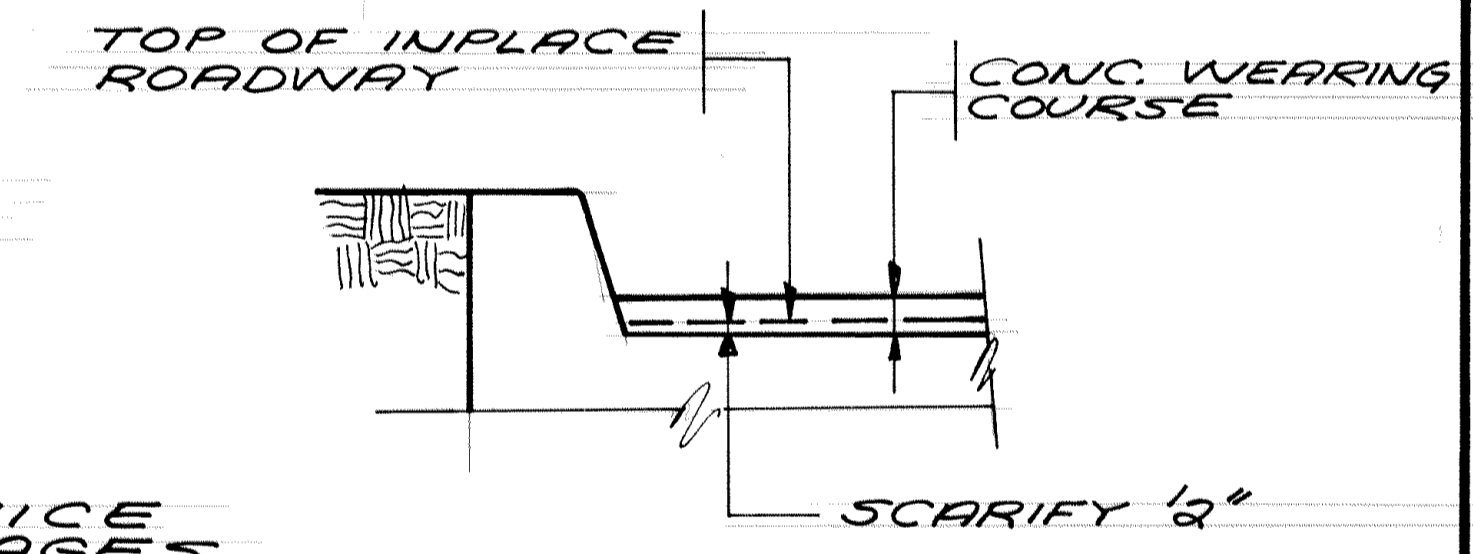


**RECONSTRUCTION PLAN N.W. CORNER**  
SCALE: 3/4" = 1'-0"

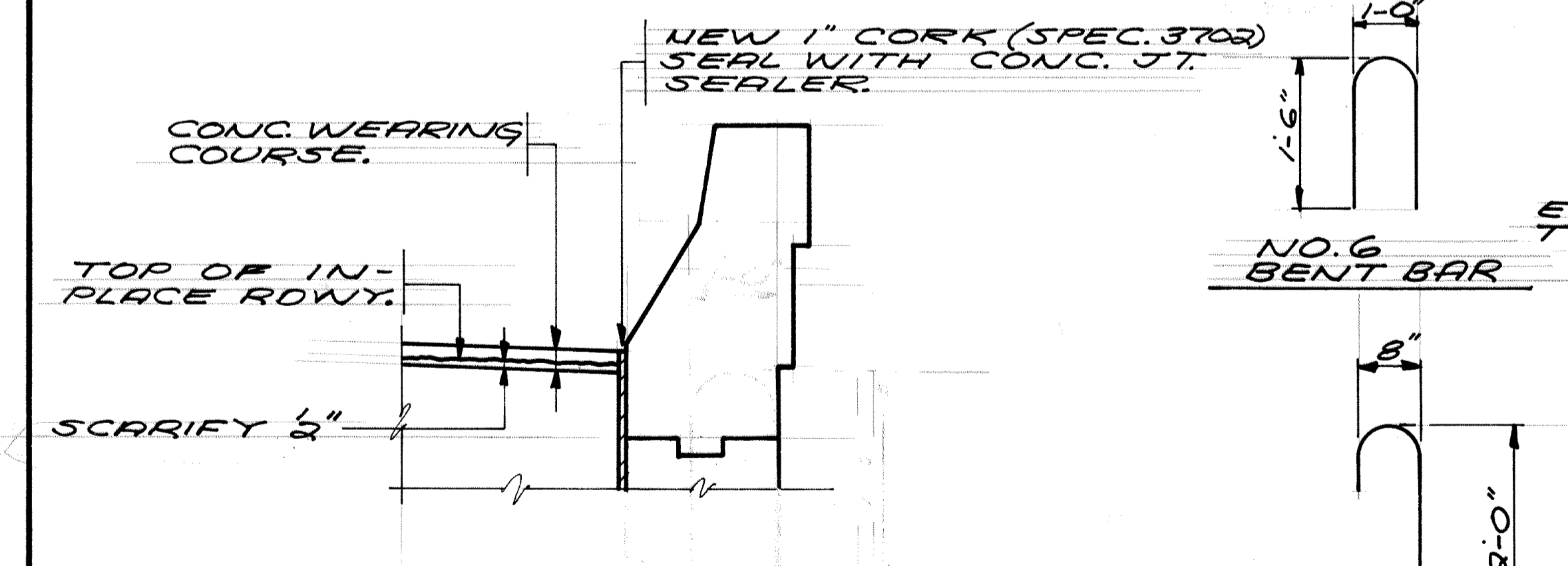
**NOTE:**  
PROPOSED NEW CONCRETE AND REINF. @ NEW EXP. JT. SHALL BE INCIDENTAL TO PAY ITEM "RECONSTRUCT EXP. JOINT SPECIAL". NO DIRECT COMPENSATION SHALL BE MADE.



**SECTION B-B - RECONSTRUCTION**  
SCALE: 1" = 1'-0"

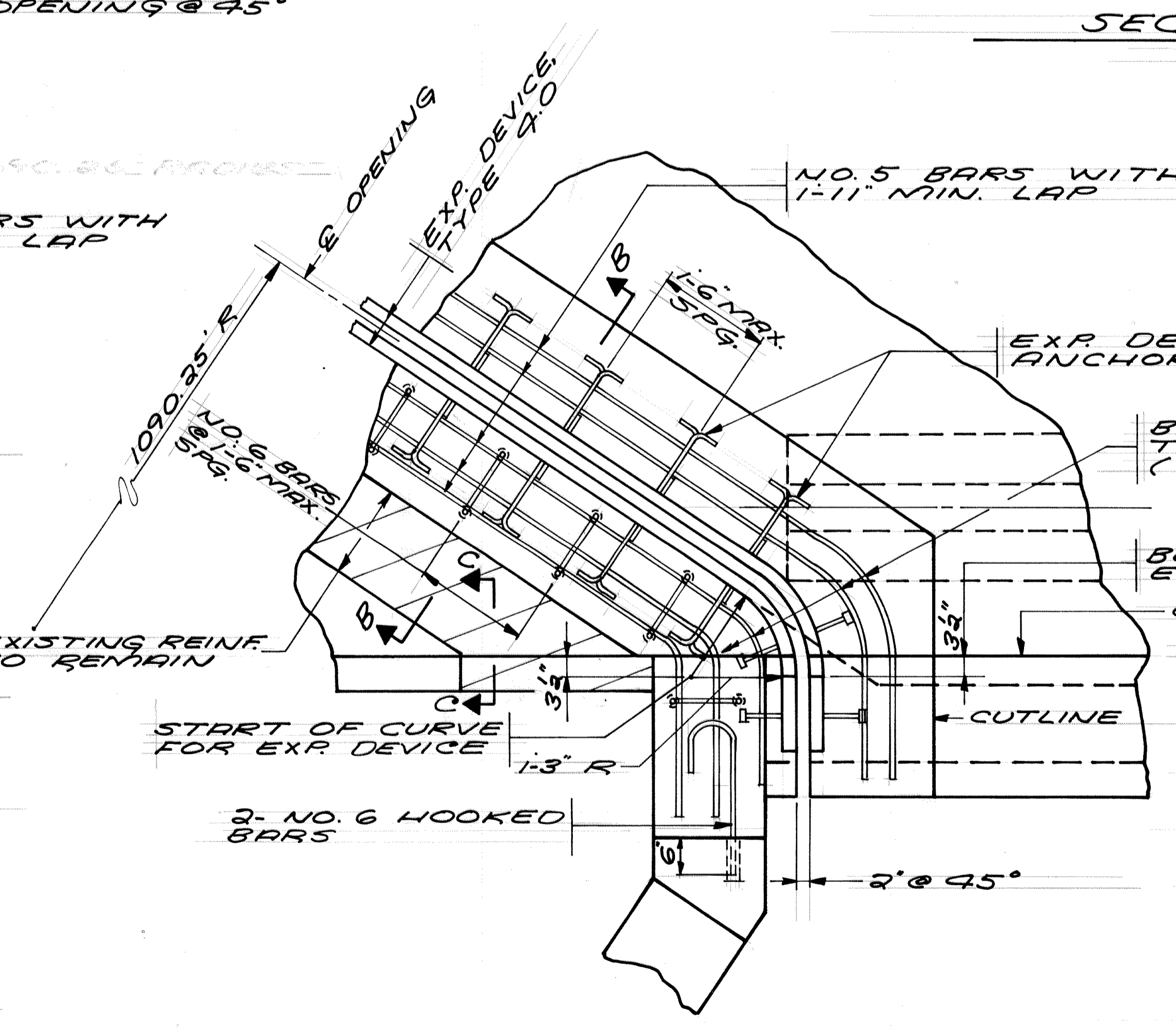


**SECTION C-C**



**SECTION A-A**

**NO. 6 HOOKED BAR**

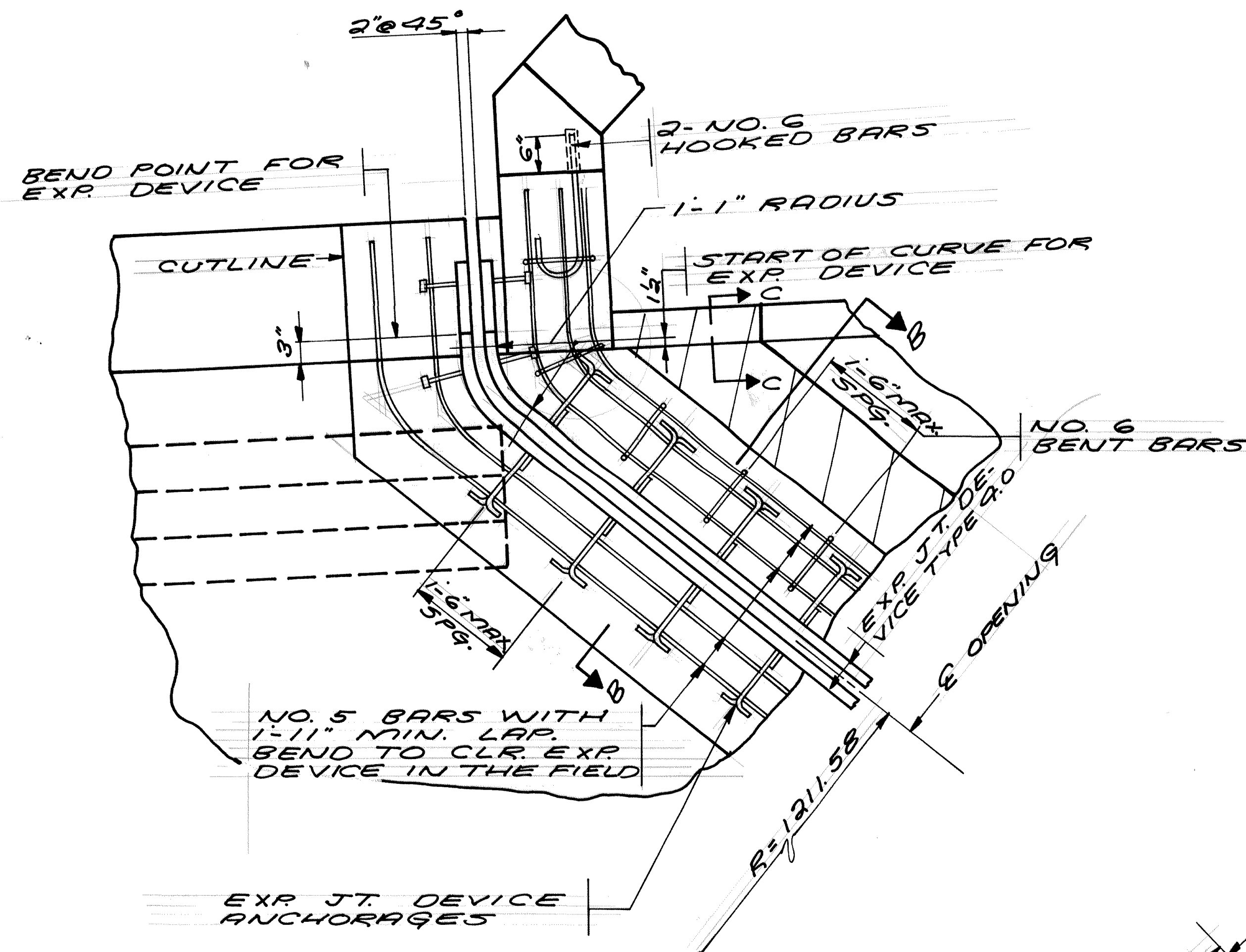


**RECONSTRUCTION PLAN S.W. CORNER**  
SCALE: 3/4" = 1'-0"

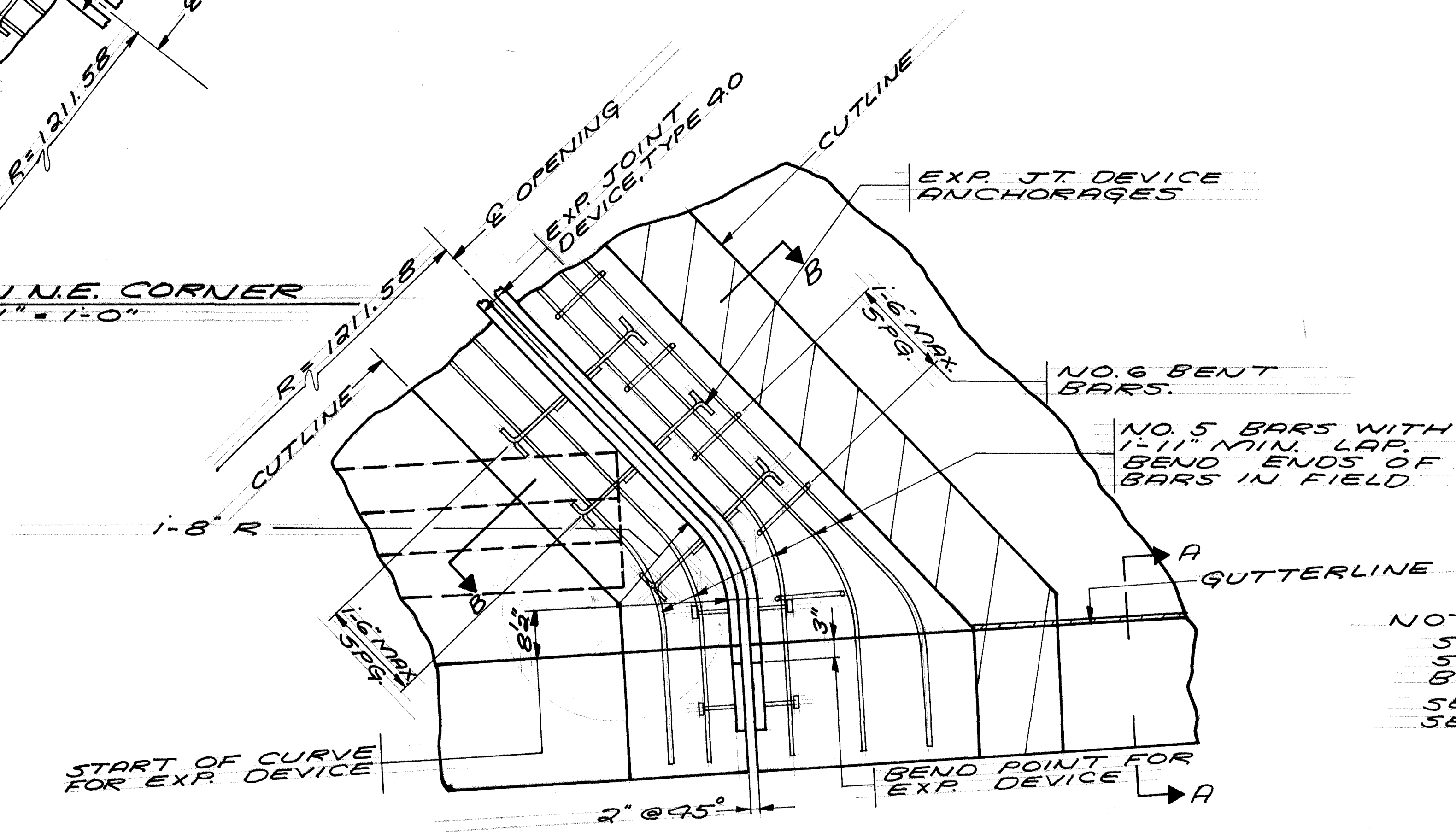
**NOTE:**  
REMOVAL OF RAILING CONC. & REINF. FOR PLACING OF NEW EXP. JOINT SHALL BE INCIDENTAL TO PAY ITEM "RECONSTRUCT EXP. JOINT DEVICE SPECIAL". NO DIRECT COMPENSATION SHALL BE MADE.  
RAILING REINF. SHALL BE BENT OR CUT TO PROVIDE CLEARANCE FOR EXP. DEVICE AS DIRECTED BY THE ENGINEER IN THE FIELD.  
ADDITIONAL REINF. AT RAILING SHALL BE PLACED AS DIRECTED BY THE ENGINEER IN THE FIELD.

**NOTE:**  
NEW 1" CORK JOINT & CONC. JT. SEALER TO BE INCLUDED IN PAY ITEM "RECONSTRUCT EXP. JT. SPECIAL"

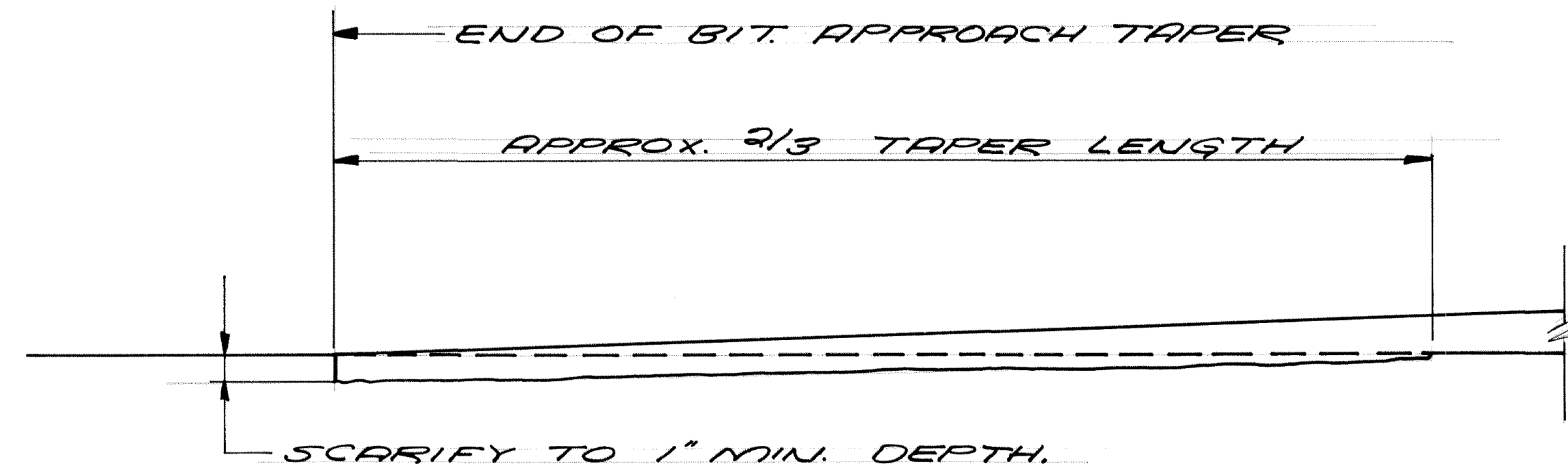
RECONSTRUCTION N.W. & S.W. CORNERS	DRAWN: D.J.V.	CHECKED: R.R.T.	APPROVED	BRIDGE NUMBER 02522
SHEET 9 OF 13 SHEETS				



**RECONSTRUCTION PLAN N.E. CORNER**  
SCALE: 1" = 1'-0"



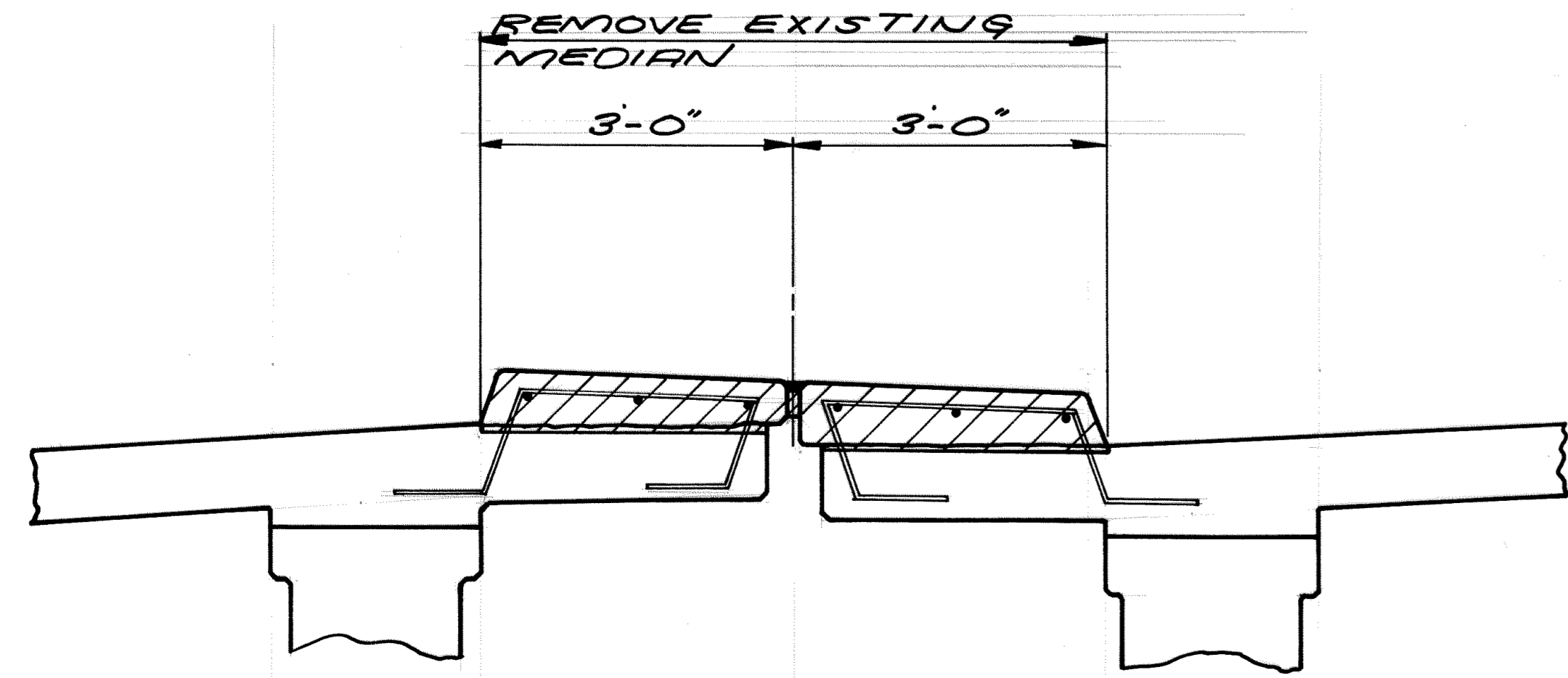
**RECONSTRUCTION PLAN S.E. CORNER**



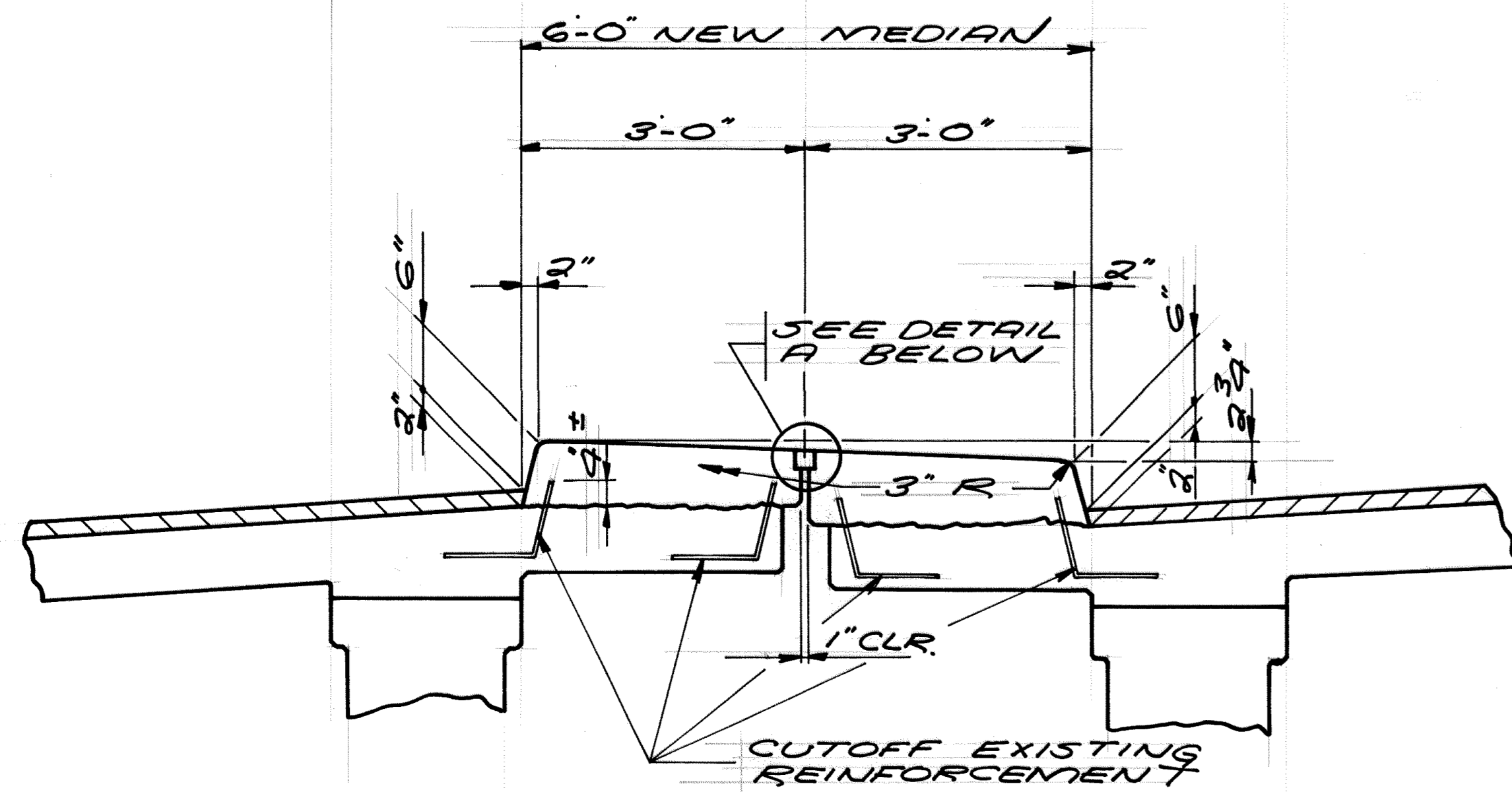
**BITUMINOUS TAPER DETAIL**  
TYPICAL ON BRIDGES 02521 & 02522

NOTE:  
SEE SHEET 9 FOR SECTION B-B AND BENT BAR DETAILS.  
SEE SHEET 9 FOR SECTIONS A-A & C-C

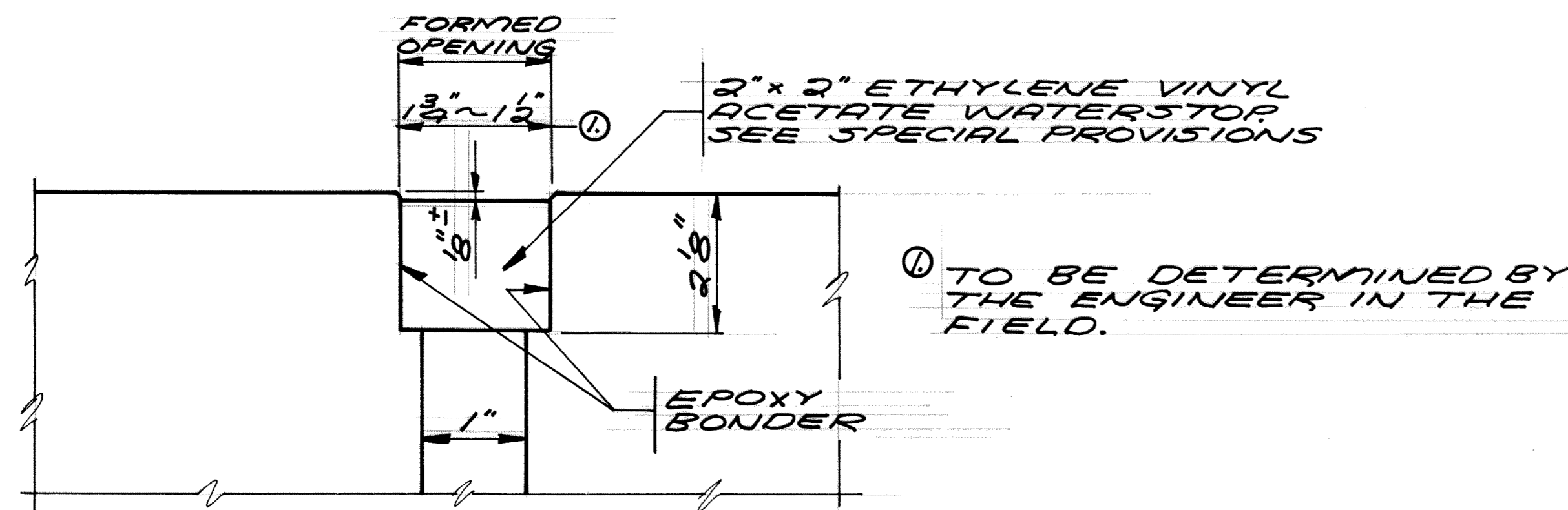
RECONSTRUCTION N.E. & S.E. CORNERS	DRAWN: D.J.V.	CHECKED: R.R.T.	APPROVED:	BRIDGE NUMBER 02522
	SHEET 10 OF 13 SHEETS			



REMOVAL OF EXISTING MEDIAN



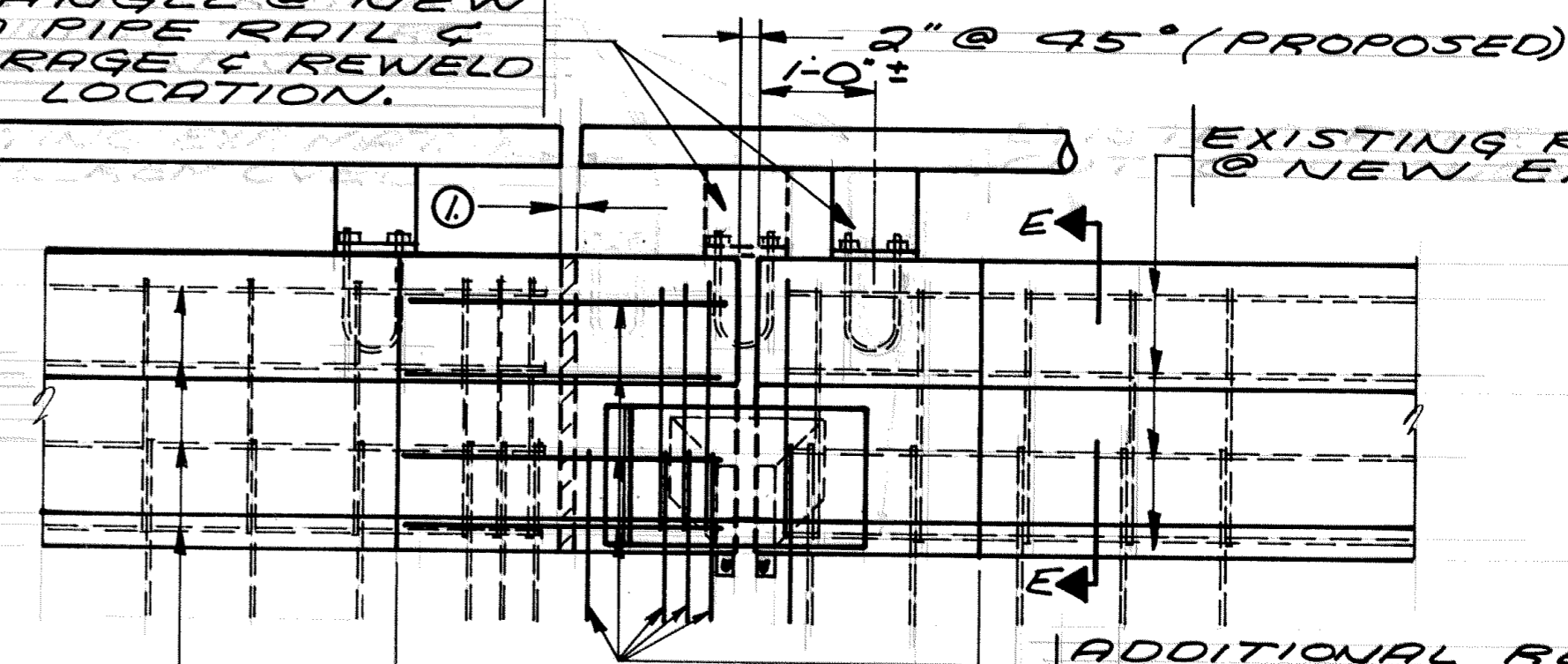
RECONSTRUCT NEW MEDIAN



DETAIL A-VINYL ACETATE WATERSTOP  
NO SCALE

CUT EXISTING ANGLE @ NEW OPENING FROM PIPE RAIL & RESET ANCHORAGE & REWELD TO PIPE @ NEW LOCATION. REPAIR RAIL & ANGLE WITH GALVA. STICK.

EXISTING EXP. MAT. TO BE REMOVED.



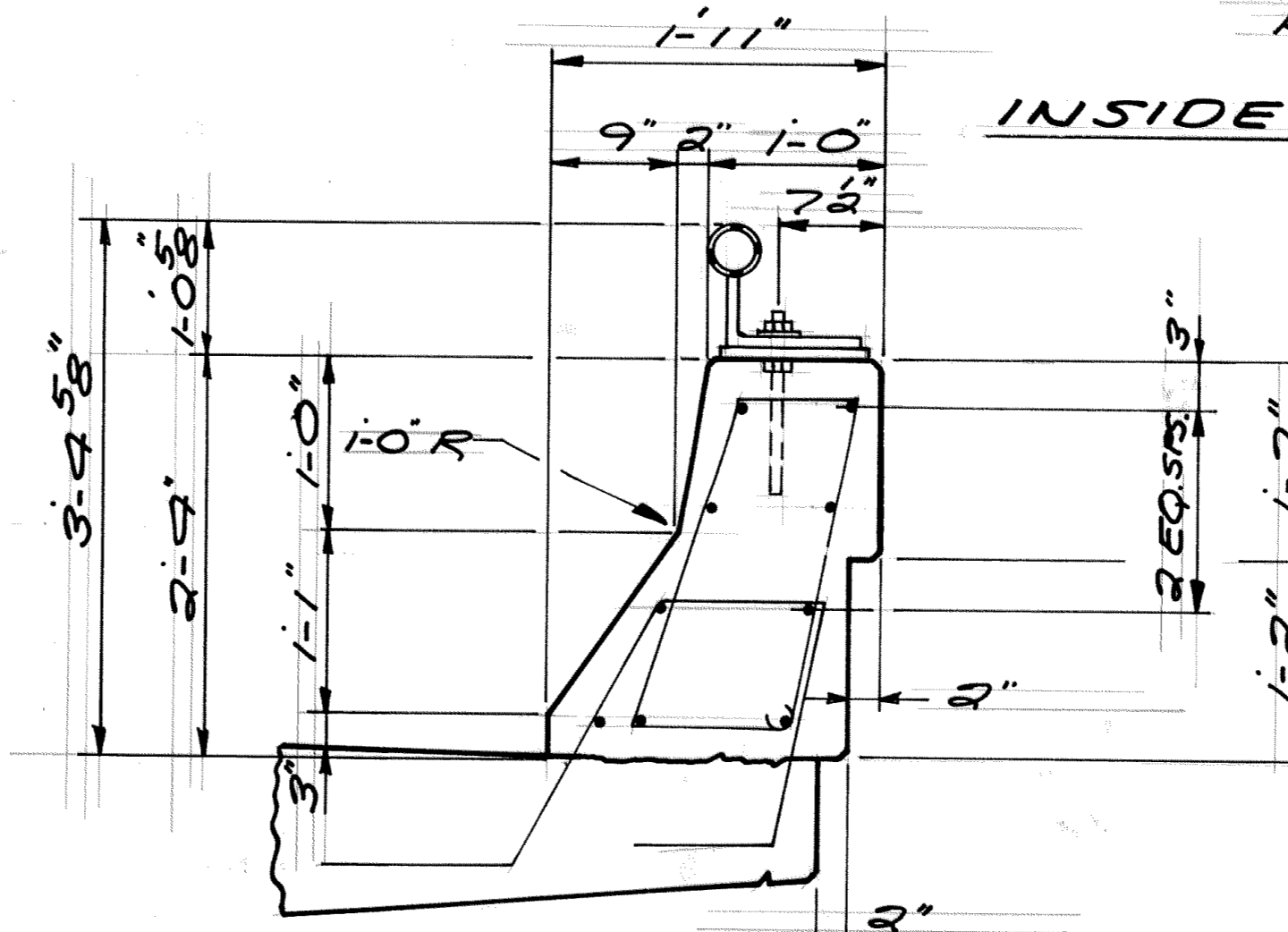
EXISTING REINF. TO BE CUTOFF @ NEW EXP. JT. OPENING.

EXISTING REINF.

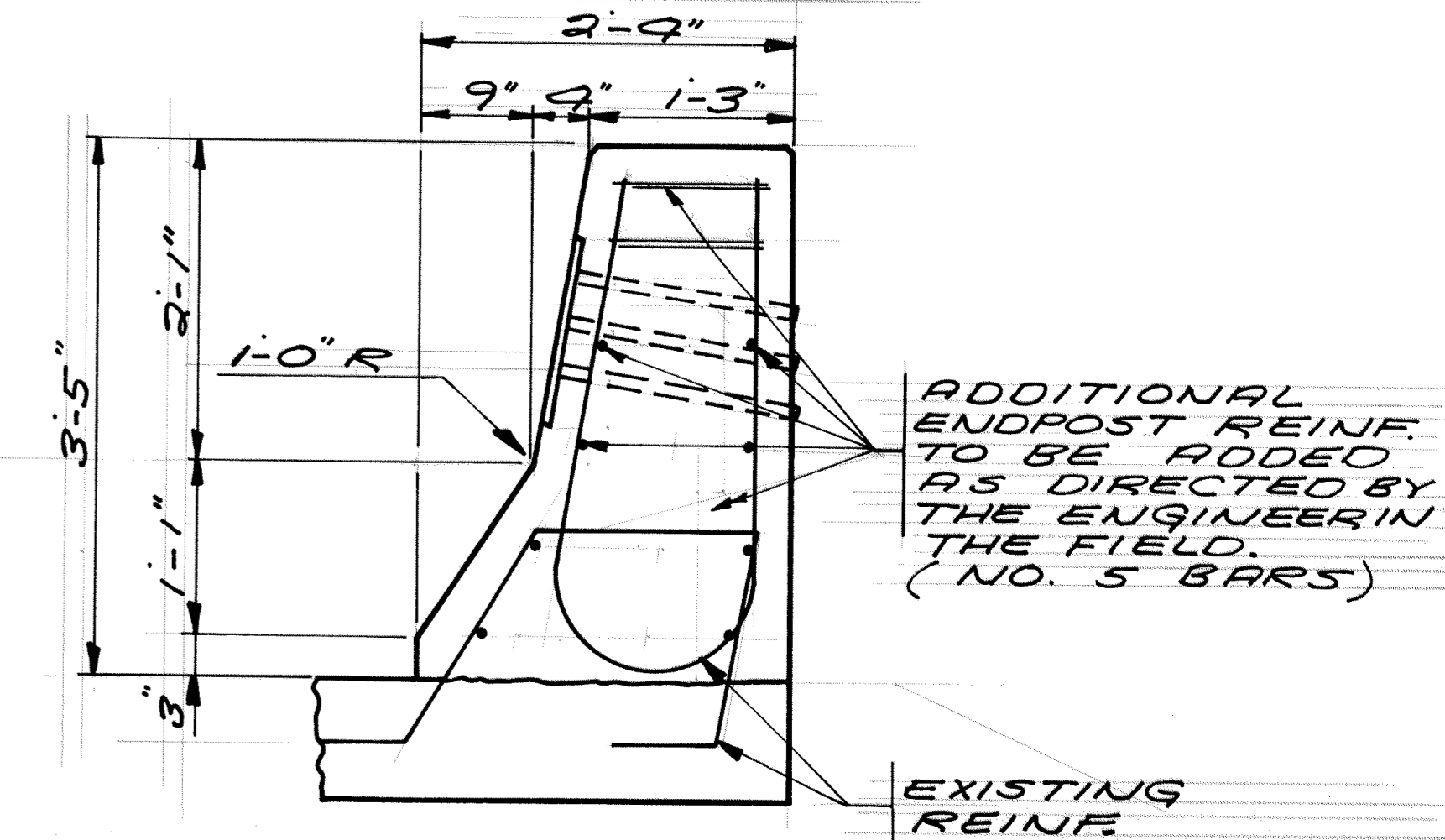
EXISTING CONC. TO BE REMOVED. NEW EXP. JT. DEVICE PLACED. ADDITIONAL REINF. PLACED & NEW RAIL CONC. POURED.

ADDITIONAL REINF. (NO. 5 BARS) TO BE ADDED AS DIRECTED BY THE ENGINEER IN THE FIELD

INSIDE RAIL ELEVATION @ N.W. & S.E. CORNERS  
BR. NO. 02522



SECTION E-E

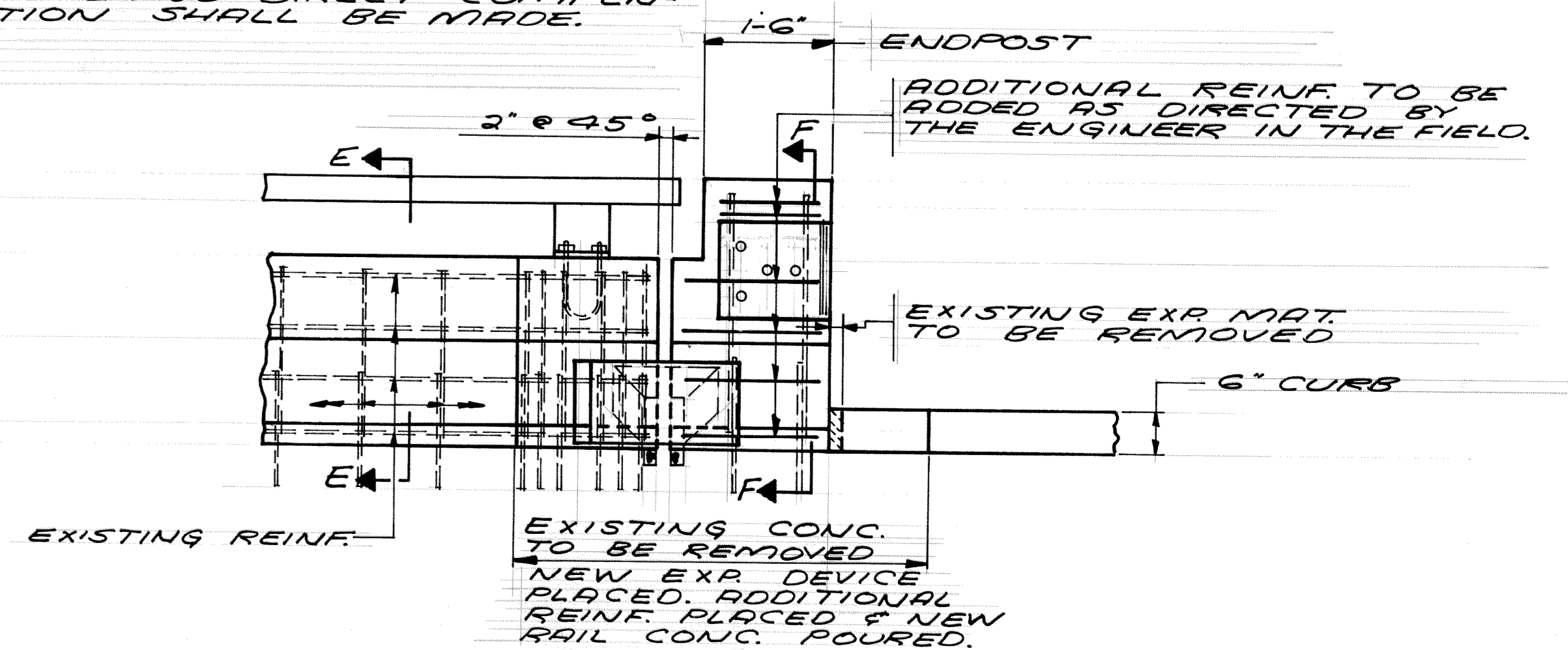


ADDITIONAL ENDPOST REINF. TO BE ADDED AS DIRECTED BY THE ENGINEER IN THE FIELD. (NO. 5 BARS)

EXISTING REINF.

SECTION F-F  
AT ENDPOST

NOTE:  
ALL CONC., REINF. & ETC. NEEDED TO REPAIR RAILINGS WHERE NEW EXP. DEVICES HAVE BEEN INSTALLED SHALL BE INCIDENTAL TO PAY ITEM "RECONSTRUCT EXP. JT. DEVICE SPECIAL". NO DIRECT COMPENSATION SHALL BE MADE.



EXISTING REINF.

EXISTING CONC. TO BE REMOVED. NEW EXP. DEVICE PLACED. ADDITIONAL REINF. PLACED & NEW RAIL CONC. POURED.

EXISTING EXP. MAT. TO BE REMOVED

6" CURB

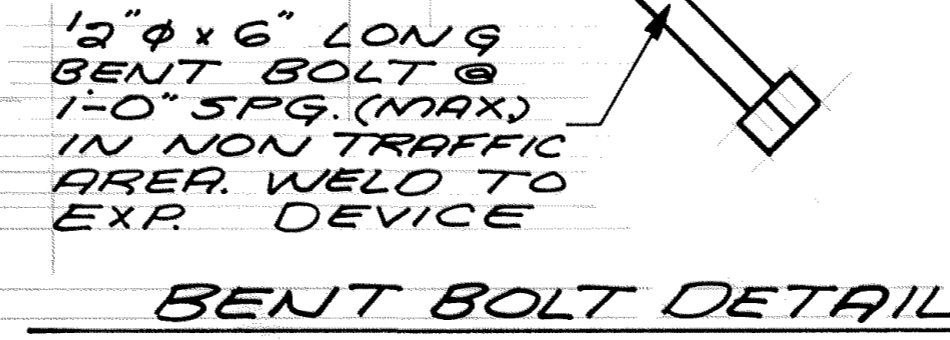
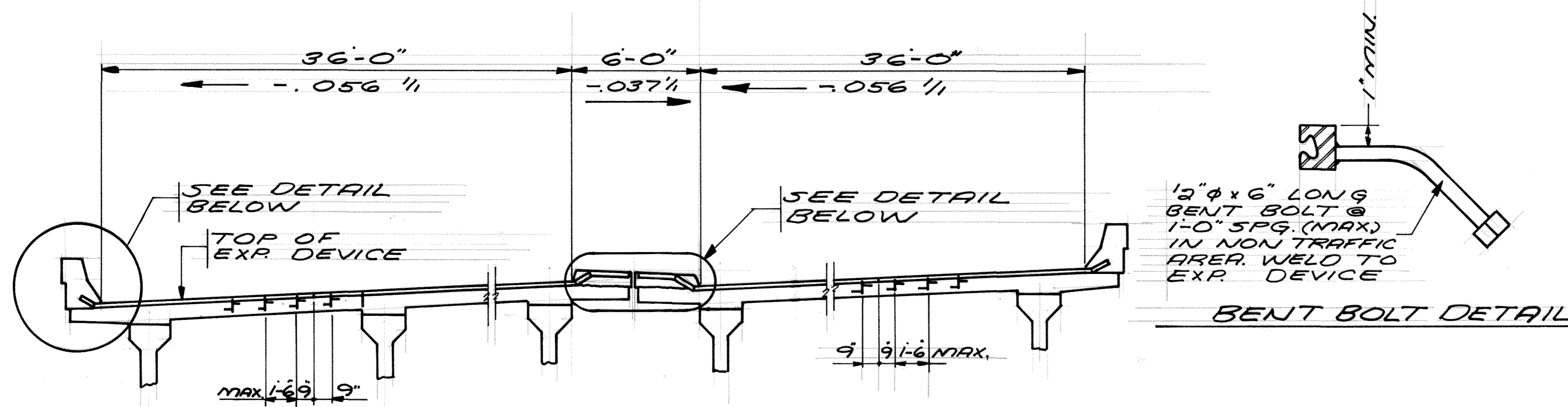
TYP. INSIDE RAIL ELEVATION @ CORNERS WITH ENDPOST

MEDIAN & RAILING DETAILS	DRAWN D.J.V.	CHECKED R.R.T.	APPROVED	BRIDGE NUMBERS
	SHEET 11 OF 13 SHEETS			02521 & 02522

**NOTES**

GALVANIZE STRUCTURAL STEEL AFTER FABRICATION PER SPEC. 3394.  
 JOINTS IN ROWS, R. OR EXTRUSION SHALL BE LOCATED AT BREAKS IN TRANSVERSE PROFILE & AS OTHERWISE REQUIRED, JOINTS SHALL BE CLOSE FIT & WELDED. REPAIR AFTER WELDING AS PER SPEC. 3471.3L.  
 STRUCTURAL STEEL SHALL COMPLY WITH SPEC. 3306, SPEC. 3307, & SPEC. 3309.  
 EXP. DEVICE SHALL BE STRAIGHTENED TO A TOLERANCE OF 1/8" IN 10 FT.  
 CAP SCREWS SHALL BE COUNTERSUNK 1/16" BELOW TOP OF PLATE.  
 GALVANIZE SCREWS & NUTS PER SPEC. 3392.  
 NEW REINFORCEMENT BARS ARE TO HAVE THE SAME TREATMENT AS THE INPLACE REINFORCEMENT.  
 WHEN EXP. DEVICES ARE USED AT ENDS OF BRIDGE, THE BRIDGE CONTRACTOR SHALL FURNISH EXPANSION DEVICE & GLAND.

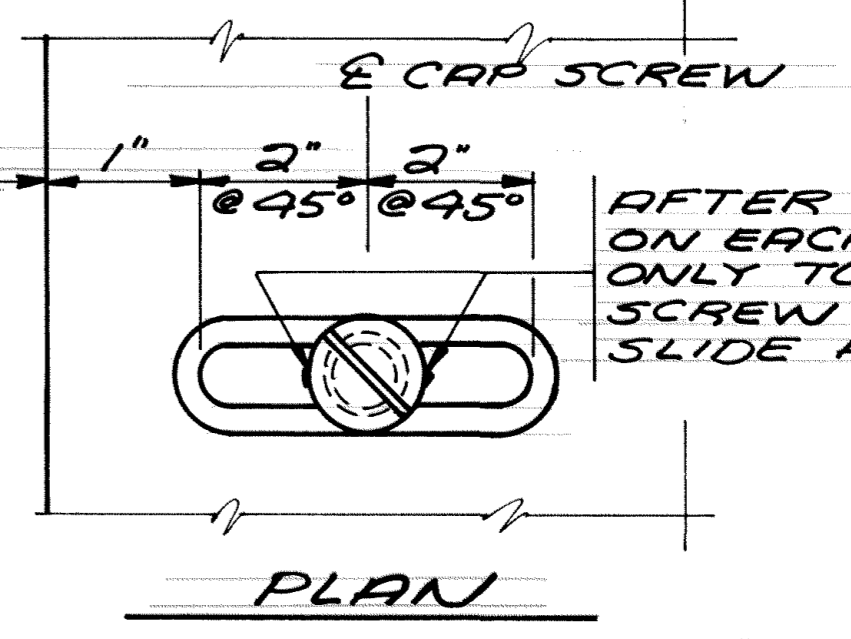
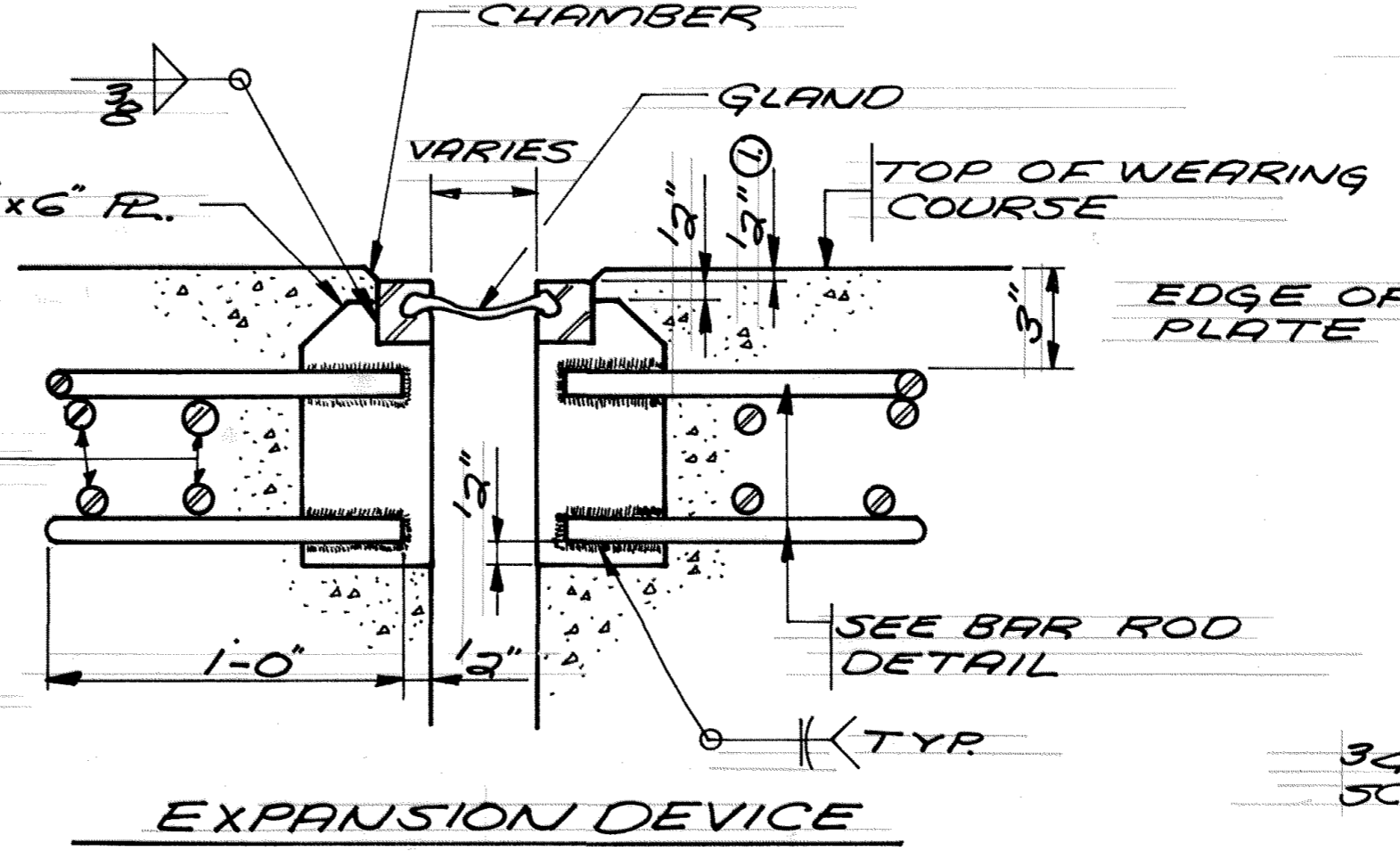
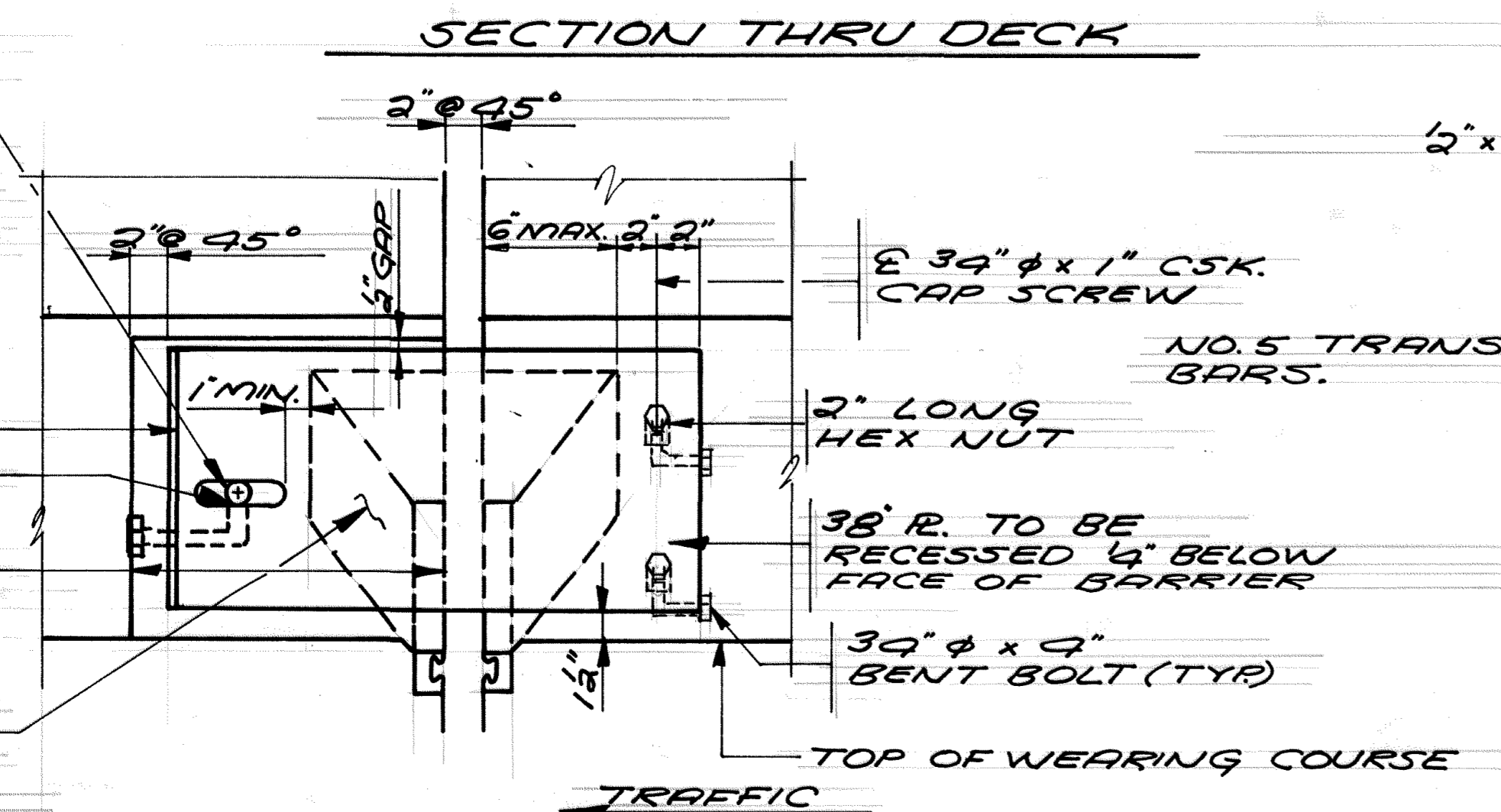
① 5/8" MAX. WHEN SNOWPLOW FINGERS ARE USED. USE 1/8" (WITH 1/4" MAX.) WHEN SNOWPLOW FINGERS ARE NOT USED.



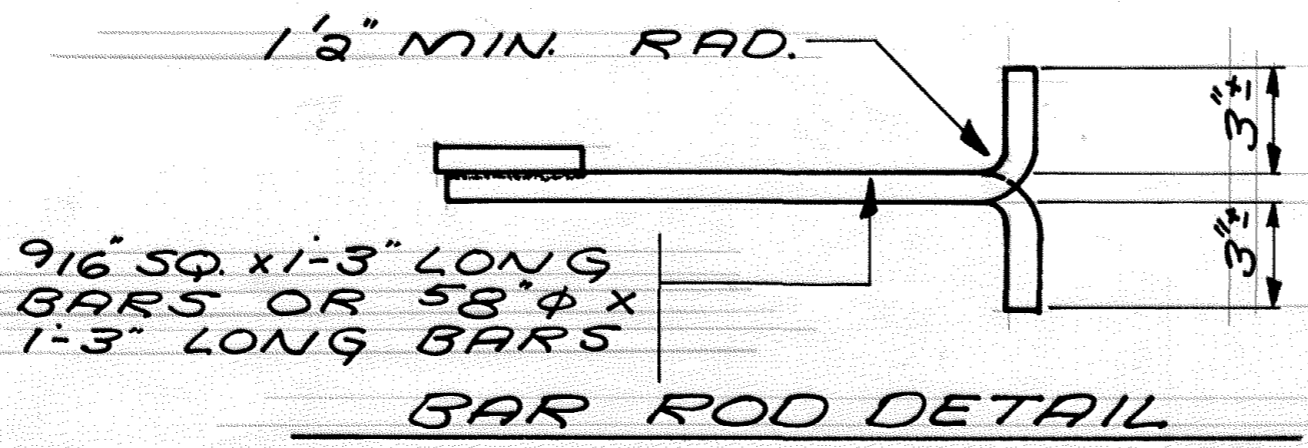
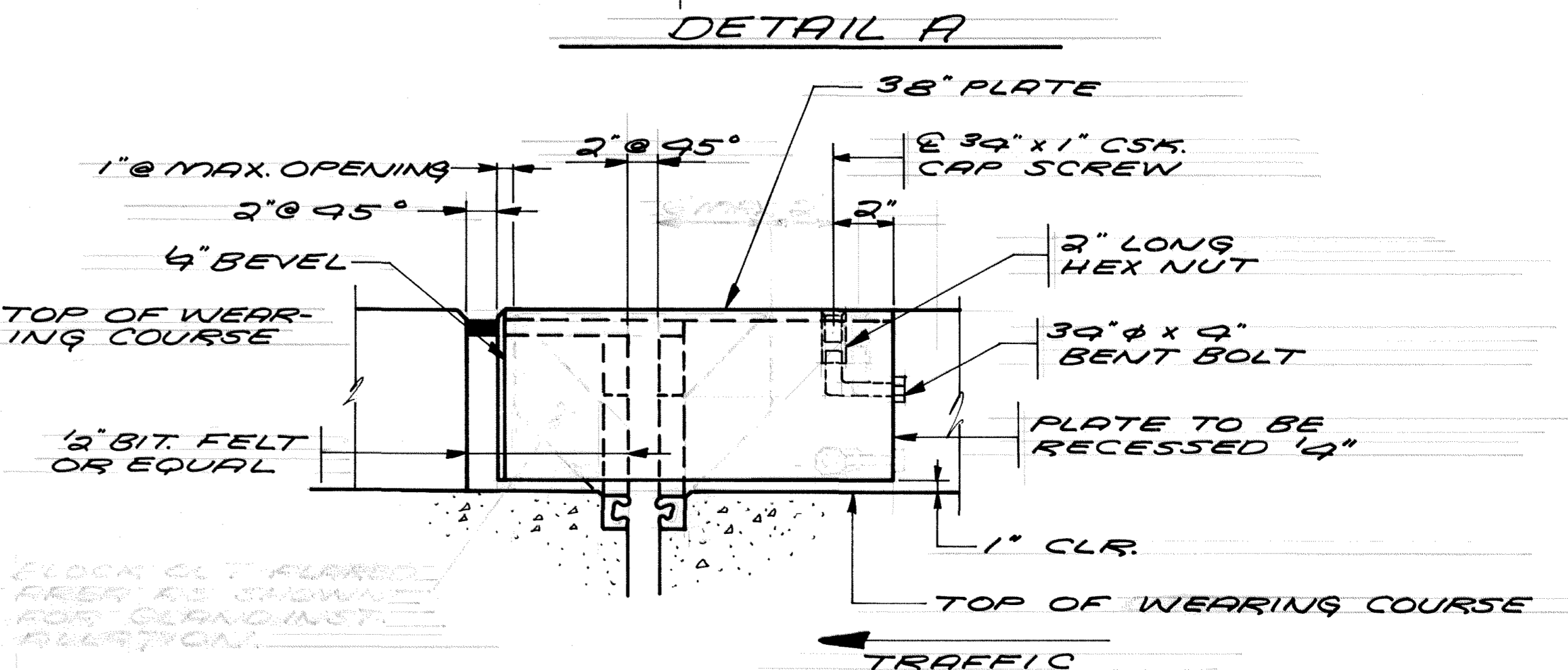
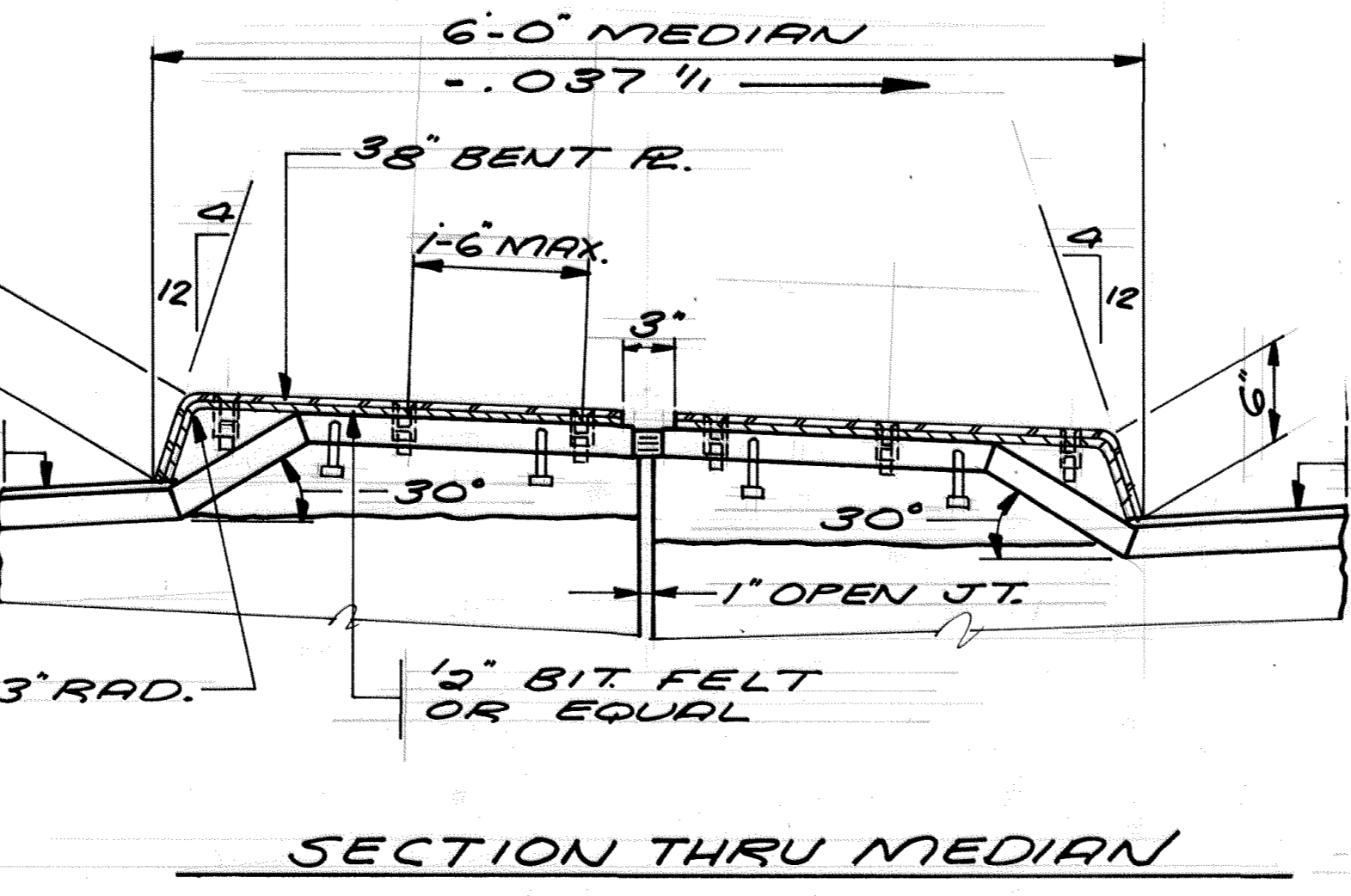
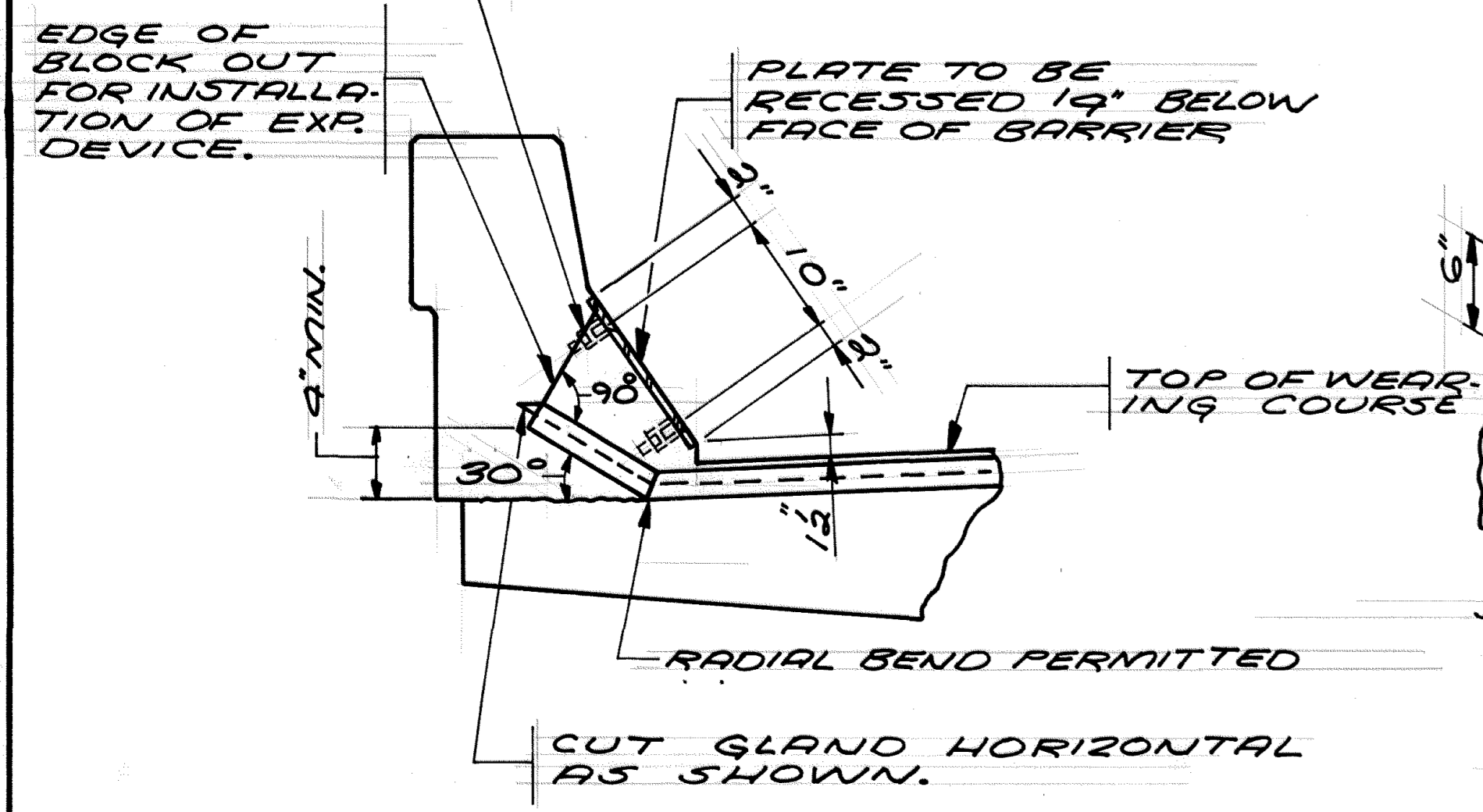
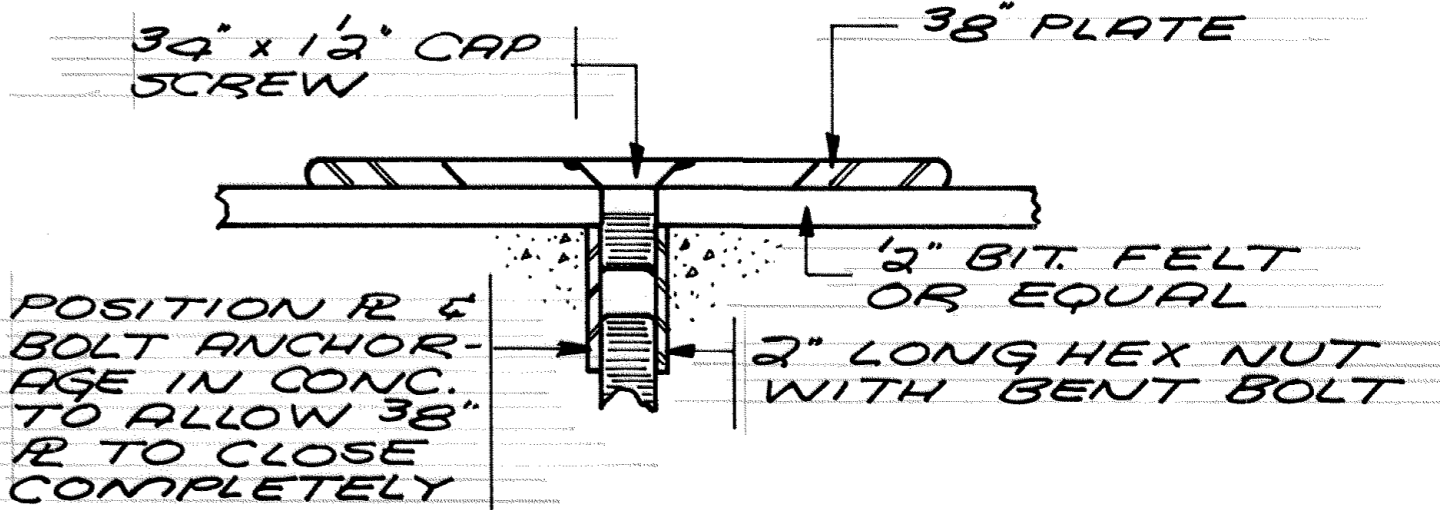
1" x 5" SLOTTED HOLE FOR 3/4" x 1 1/2" CSK. CAP SCREW WITH 2" LONG HEX NUT & 3/4" x 9" BENT BOLT. DO NOT TIGHTEN DOWN CAP SCREW

1/2" BIT FELT OR EQUAL

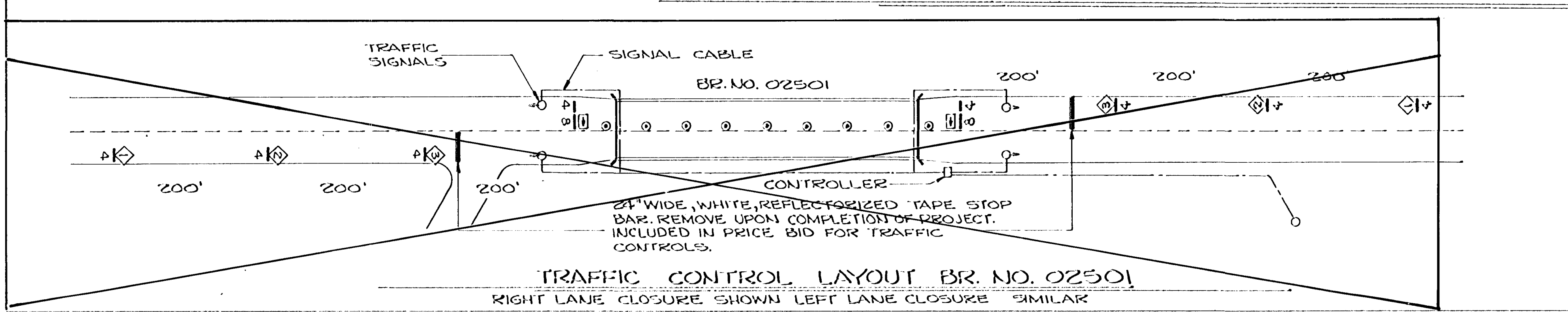
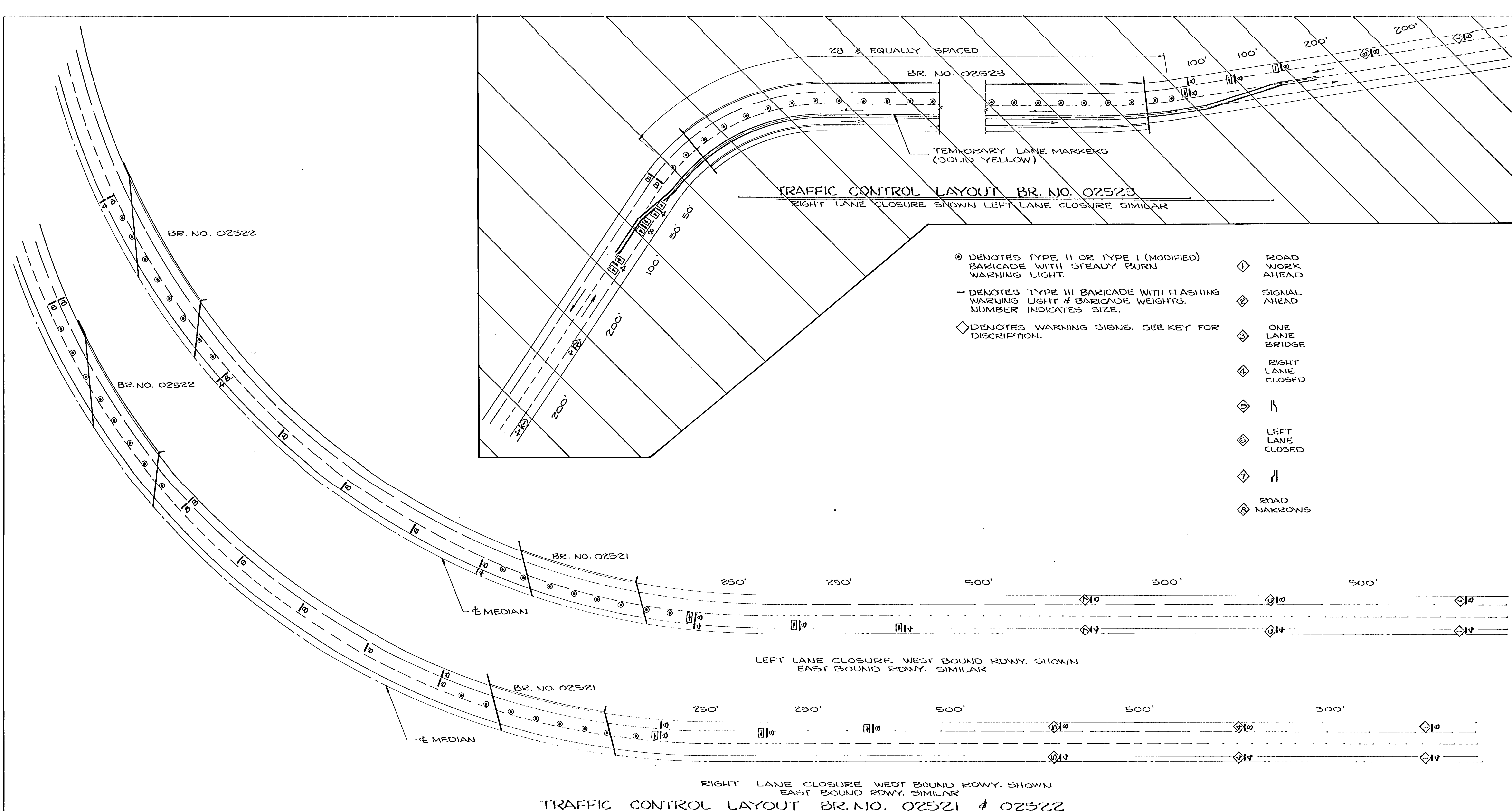
BLOCK OUT FLARED AREA AS SHOWN FOR GLAND INSTALLATION



AFTER ASSEMBLY, FIELD WELD LUGS ON EACH EDGE OF CAP SCREW ONLY TO PREVENT TURNING. CAP SCREW MUST BE ABLE TO SLIDE ALONG SLOT.



WATERPROOF EXPANSION DEVICE	DRAWN: D.J.V.	CHECKED: R.R.T.	APPROVED:	BRIDGE NUMBERS
	SHEET 12 OF 13 SHEETS			02521 & 02522



**TRAFFIC CONTROL  
DETAILS**

DES:	DR: R.H.	APPROVED:	BRIDGE NO.
CHK:	CHK:		02501
			02521
			02522
			02523

SHEET NO. 13 OF 13 SHEETS