

46th STREET SOUTH
W.L. LOT 14, BLK. I, SOUTH BROADWAY
INDUSTRIAL PARK ADDn TO W.L. SANTA FE

&

4-12'x13' R.C.B.C.

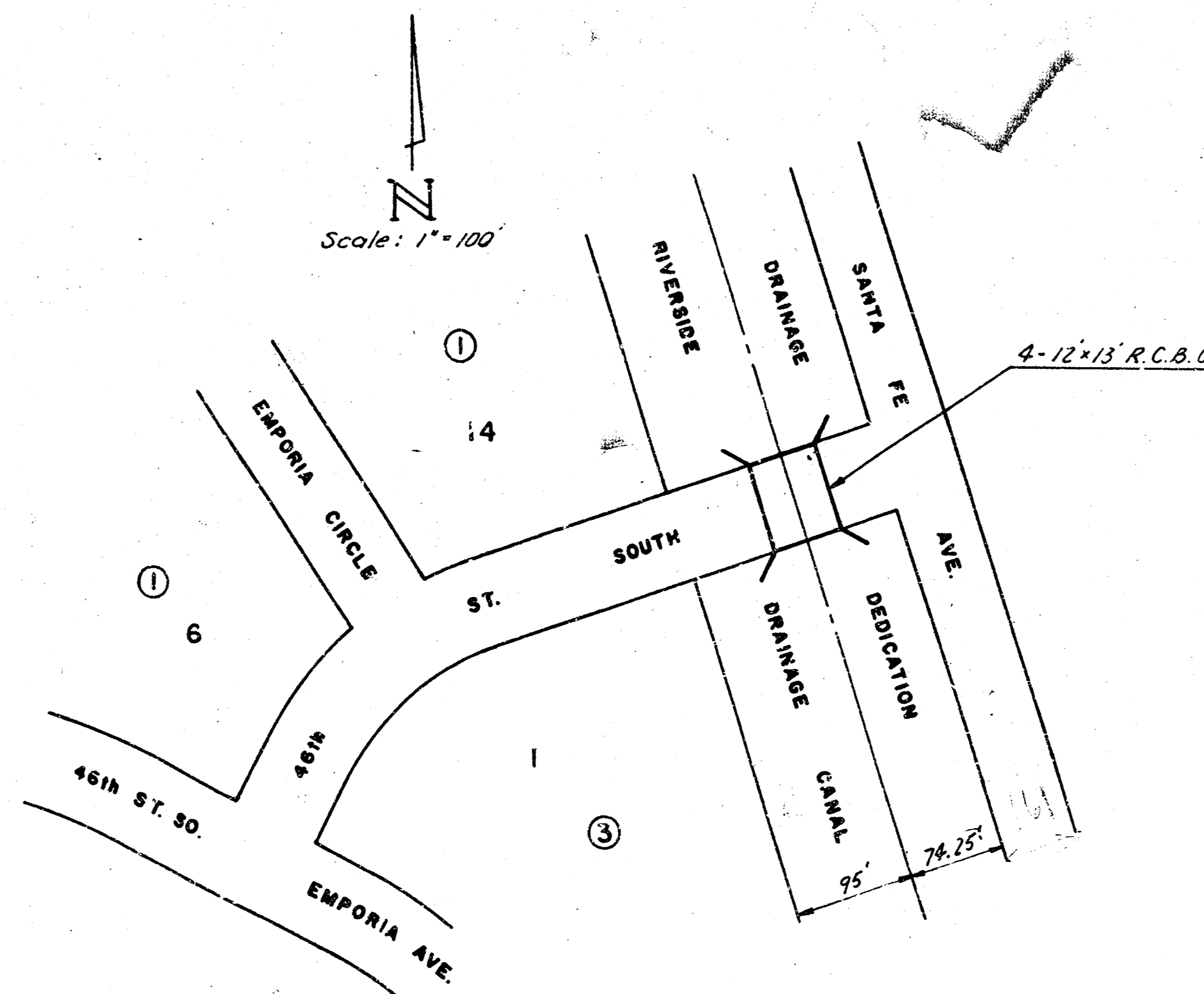
46th STREET SOUTH &
RIVERSIDE DRAINAGE CANAL

CITY OF WICHITA, KANSAS

R. W. BRUGGEMAN DIRECTOR OF ENGINEERING / CITY ENGINEER

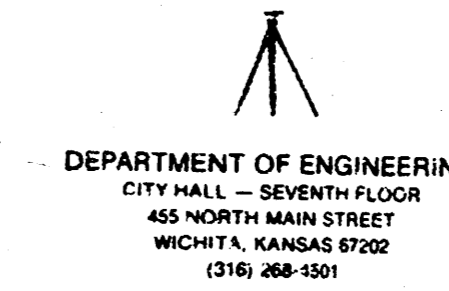
DATE:

PROJ. NO. 472 76 245 80756 000 000 001



LOCATION MAP

THE CITY OF WICHITA



January 11, 1982

Mr. Scott Stuckey
4805 South Minneapolis
Wichita, Kansas 67216

Dear Mr. Stuckey:

The following information is in answer to the questions that you raised at the meeting of the Riverside Drainage District with Chris Breitenstein and with me on Friday, January 9, 1982.

The latest Flood Insurance Administration 100-year water surface at the 46th Street South bridge is 83.6 City Datum. The inside top of the bridge at 46th Street South is 84.2 City Datum, which is .6 of a foot above the latest Flood Insurance Administration 100-year water surface.

The 46th Street South bridge, which consists of four 12'x13' openings has a total opening of 624 square feet. With the bottom being filled to the elevation as shown on the plans that were sent to you, there is an opening of approximately 364 square feet. This compares with the Broadway Bridge which consists of three 7'x7' openings with a total opening of 147 square feet. The inside top of the bridge at Broadway is 83.9 City Datum.

The bridge at 47th Street South is three 8'x10' openings which is a total opening of 240 square feet. The top inside of the bridge at 47th Street South is 82.2 City Datum.

This information verifies that the proposed 46th Street Bridge is designed to provide the necessary opening to carry the design flow in the Riverside Drainage ditch at this location.

Please call me at 268-4266 if you have further questions.

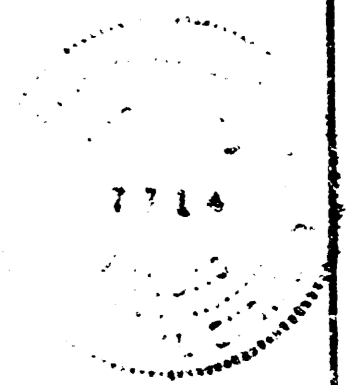
Yours truly,
R. W. Bruggeman
R. W. Bruggeman, P.E.
Director of Engineering

RWB:gr
cc: Roland Saindon

January 25, 1982

The Directors of The Riverside Drainage District are hereby approving the 14 pages of the 46th Street Bridge over The Riverside Drainage Ditch. The letter of R. W. Bruggeman, P. E. dated January 11, 1982 (which is attached to the plans) has been a major consideration by the Directors in the approval of these plans. Resolved this date by the following Directors:

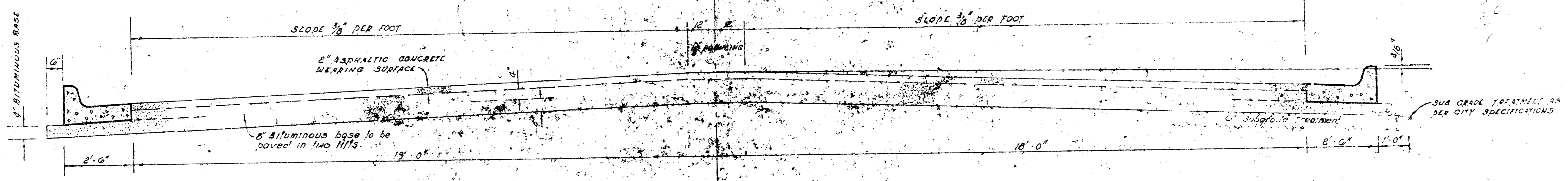
OK by *[Signature]*
[Signature]
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1/14

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46th STREET SOUTH
 W.L. LOT 14, BLK I, SOUTH BROADWAY INDUSTRIAL PARK
 TO W.L. SANTA FE AVE.
 4 - 12'x13' RCBC
 46th STREET SOUTH &
 RIVERSIDE DRAINAGE CANAL



TYPICAL SECTION

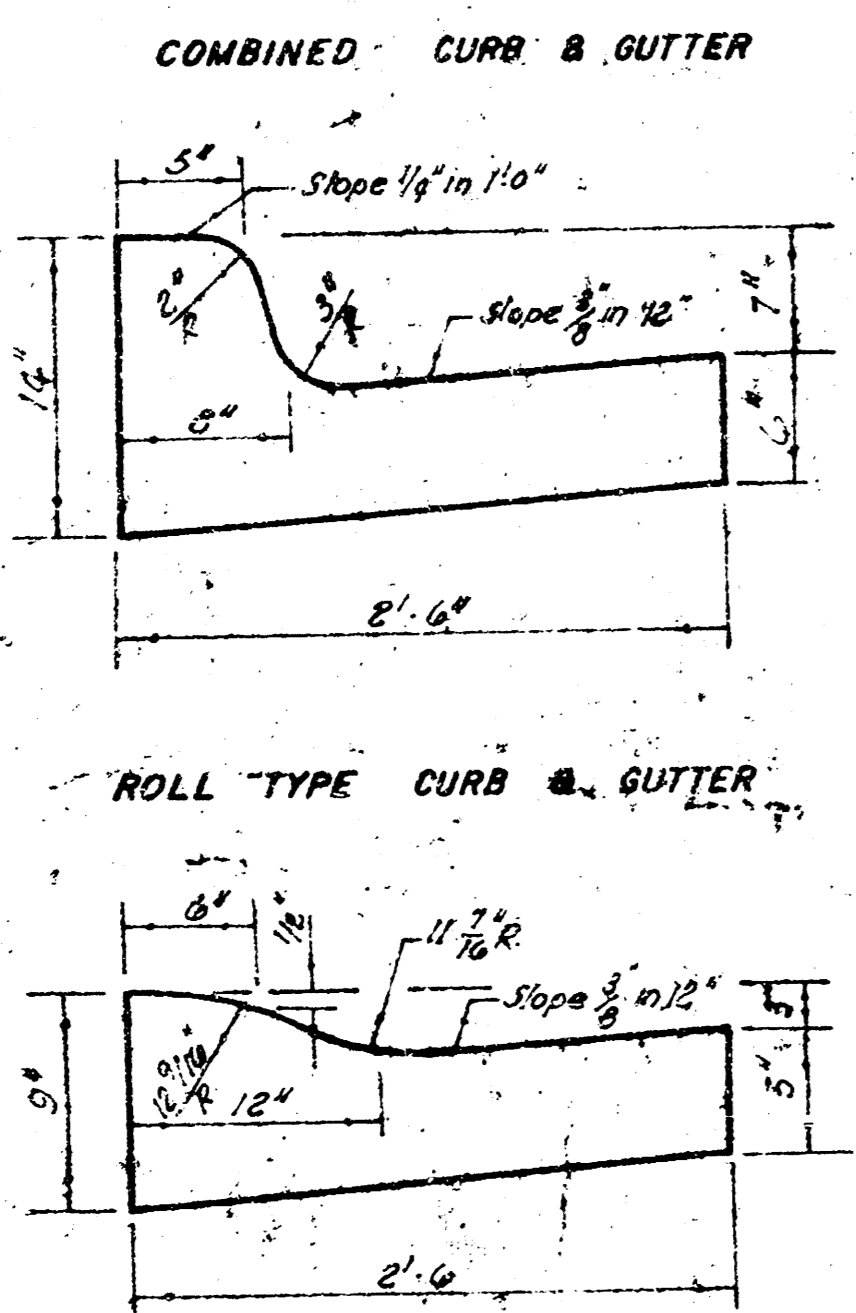
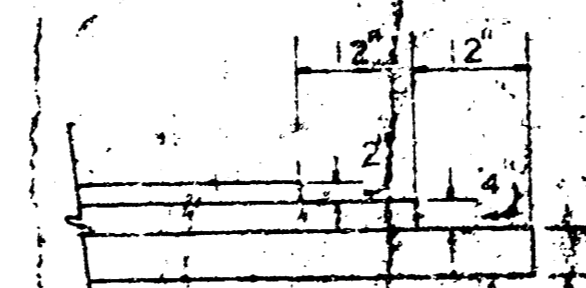
The A.C. pavement between the comb curb & gutter shall be paid as 30 yds 10" A.C. pavement (6" Bituminous Base). The Bituminous base under the comb curb & gutter shall be paid as 50 yds 6" Bituminous Base.

4" ASPHALTIC CONCRETE PAVEMENT WITH BITUMINOUS BASE

A TACK COAT OF EMULSIFIED ASPHALT SHALL BE APPLIED AT AN APPROXIMATE RATE 0.05 GALLONS PER SQ YD BETWEEN LIFTS OF ASPHALTIC MATERIALS WHEN ORDERED BY THE ENGINEER. TACK COAT WILL NOT BE PAID FOR DIRECTLY AND SHALL BE CONSIDERED AS SUBSIDIARY TO PRICE BID FOR ASPHALTIC PAVEMENT. BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR SLOPE AND GRADE. CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF 10' FROM JOINTS IN PRECEDING LIFTS AND SUCH THAT A JOINT WILL BE CONSTRUCTED ON THE PAVEMENT CENTERLINE IN THE TOP LIFT.

DETAIL OF TRANSVERSE CONSTRUCTION JOINTS

TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT TEMPORARILY ENDS TO FACILITATE FUTURE PAVEMENT CONSTRUCTION AS SHOWN BY DETAIL. THE COST OF CONSTRUCTING THE TRANSVERSE CONSTRUCTION JOINTS SHALL NOT BE MEASURED OR PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS OF ASPHALTIC CONCRETE PAVEMENT.

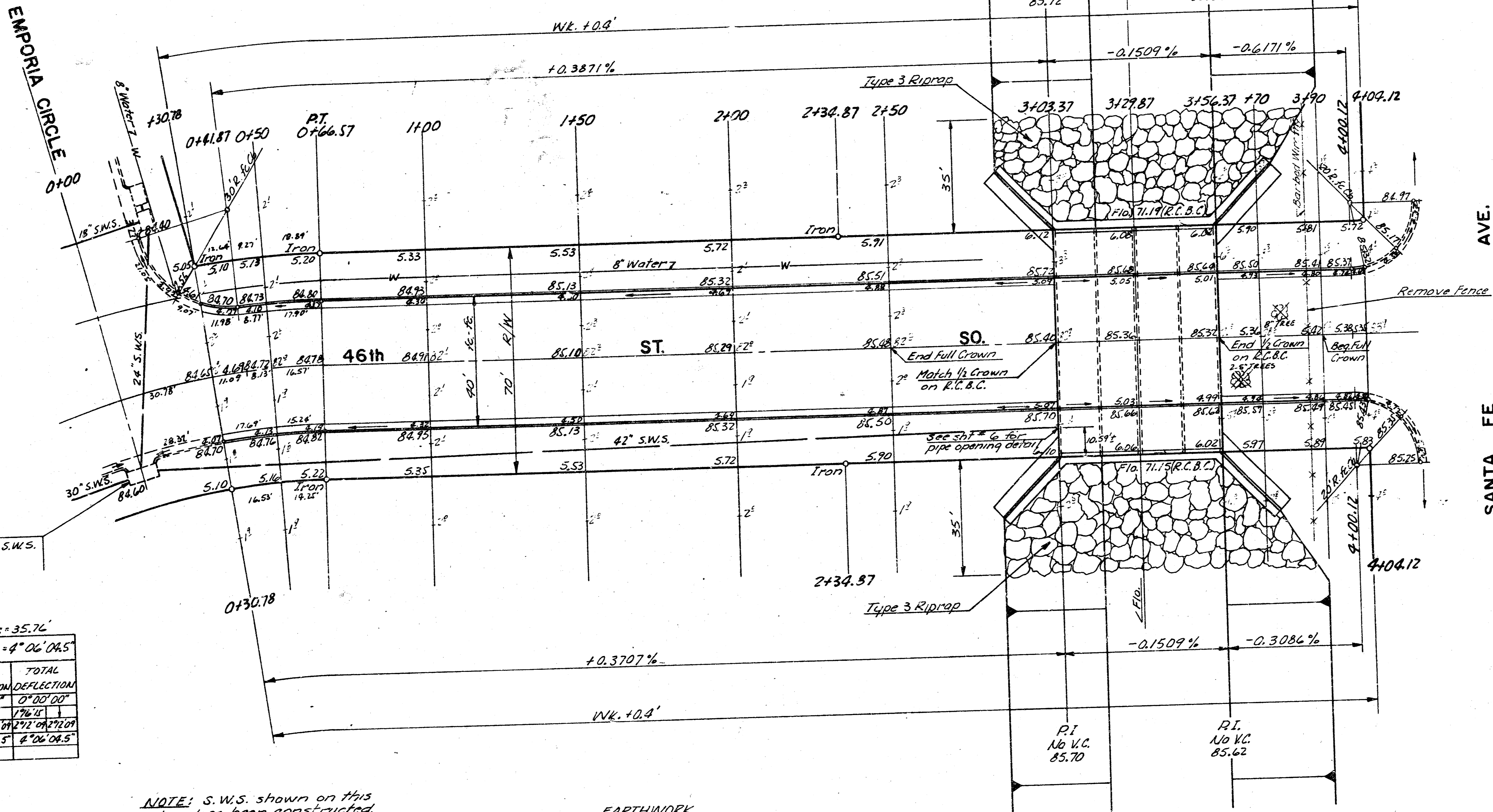


2/14

CITY OF WICHITA, KANSAS
 DEPARTMENT of PUBLIC WORKS - Engineering
 Division.
 DATE _____
 PROJ. NO. 472 75 245 80756 000 000 001

D.M. 86.845 Broadway & 47th St. S., 28'E & 28.3' - Sag. Cur.
 B.M. 86.18 N. Side 47th St. S., Approx. 50' W. of Santa Fe Ave. Square cut in N.E. Cor. Box Culvert

Scale: 1" = 20'



THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY RIGHTS. THE CONTRACTOR SHALL BE RESPONSIBLE TO BE SURE THAT ALL PROPERTY RIGHTS WHICH ARE AFFECTED BY HIS CONTRACT ARE PROPERLY HANDLED. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF WICHITA AND THE STATE OF KANSAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF WICHITA AND THE STATE OF KANSAS.

All curb inlets & S.W.S. pipe by others

$\Delta = 8^{\circ}12'04''$ $R = 250'$ $T = 179.3'$ $L = 35.79'$ $L_c = 35.76'$
 CURVE DATA BASED ON Δ RAD, $\frac{\Delta}{2} = 4^{\circ}06'04.5''$

STA.	ARC	CHORD LENGTH		TOTAL DEFLECTION	
		CHORD LENGTH	DEFLECTION	DEFLECTION	DEFLECTION
0+30.78			0' 00" 00"	0' 00" 00"	0' 00" 00"
0+41.87	11.09	12.33	176' 11"	176' 11"	176' 11"
0+50	8.13	9.04	170' 06"	170' 06"	170' 06"
0+66.57	16.57	18.82	173' 55.5"	173' 55.5"	173' 55.5"

Deflect. = 6.87552 min./ft.

NOTE: S.W.S. shown on this plan has been constructed.

SUBGRADE
 TYPE OF SUBGRADE TREATMENT SHALL BE DETERMINED BY THE FIELD ENGINEER. SUBGRADE TREATMENT MAY CONSIST OF LIME TREATMENT, CEMENT TREATMENT, SUBGRADE MODIFICATION, OR ANY COMBINATION OF THESE.

NOTE: Trees to be removed are marked thus \otimes except that any tree marked for removal, which in the opinion of the Engineer can be saved, shall be spared.

EARTHWORK

EXCAVATION	COMPACTED FILL
27.3 C.Y.	875.7 C.Y.
+10% 2.7	+10% 87.6
Total 30.0 C.Y.	Total 963.3 C.Y.
BORROW	
127.2 C.Y.	

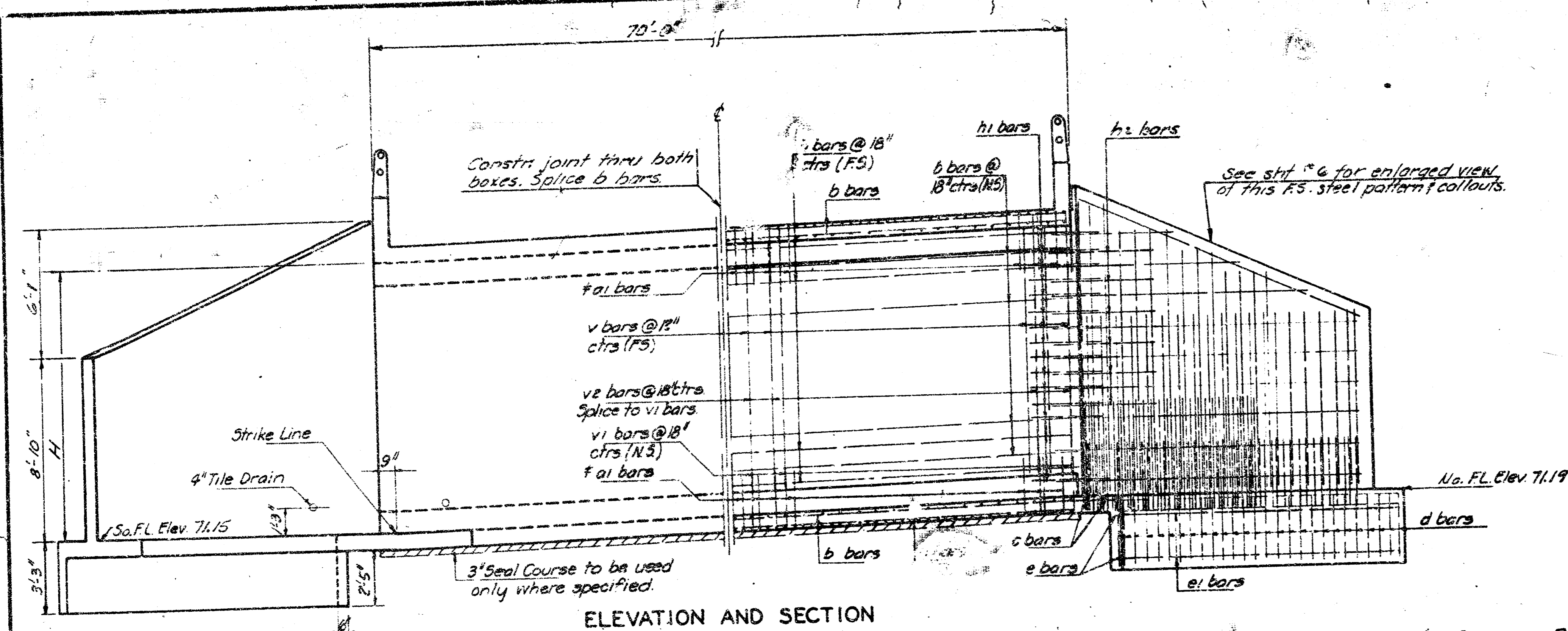
NOTE: Excess dirt from channel excavation to be used for loose fill and compacted fill on 46th St. So.

Total Manipulation = 1530.5 CY

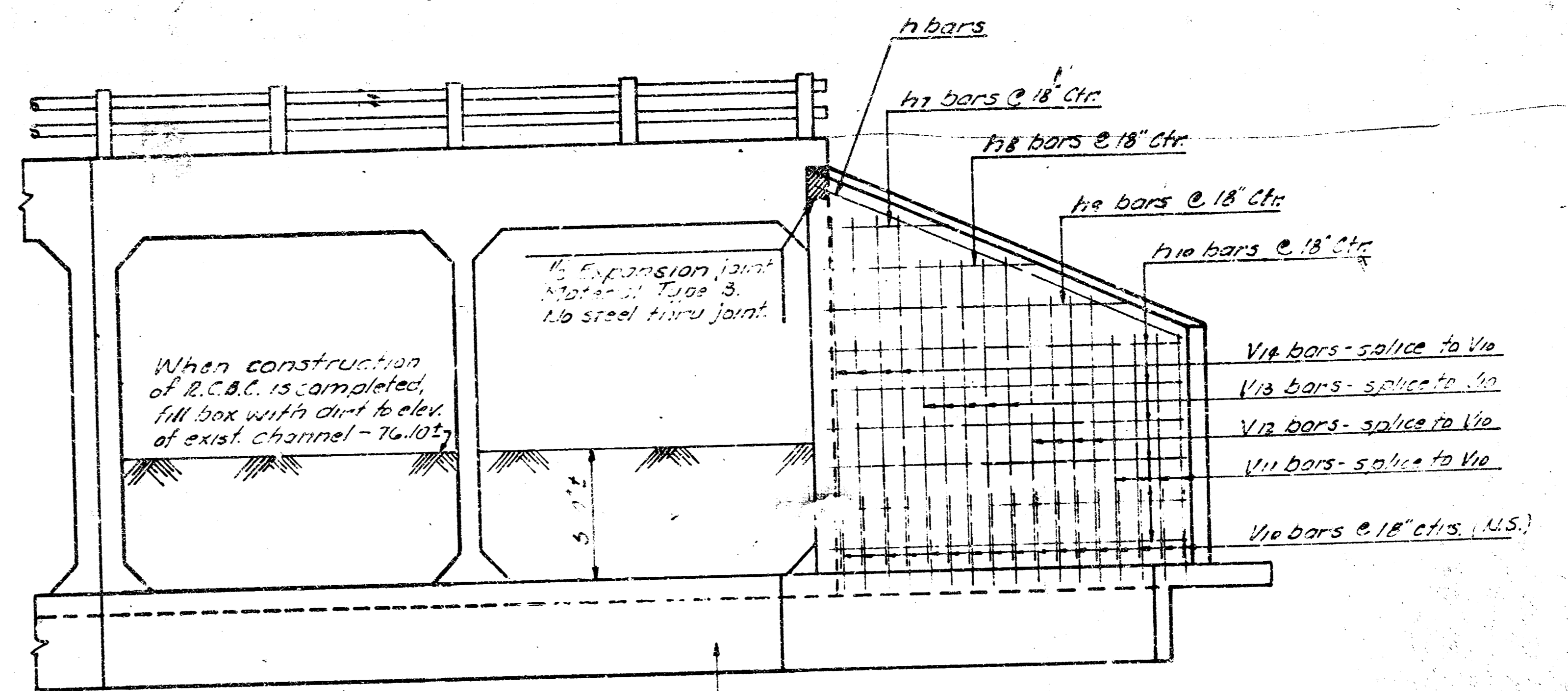
46th STREET SOUTH
 W. L. LOT 14, BLK I, SOUTH
 BROADWAY INDUSTRIAL PARK
 TO W. L. SANTA FE AVE.
 CITY OF WICHITA, KANSAS

DATE
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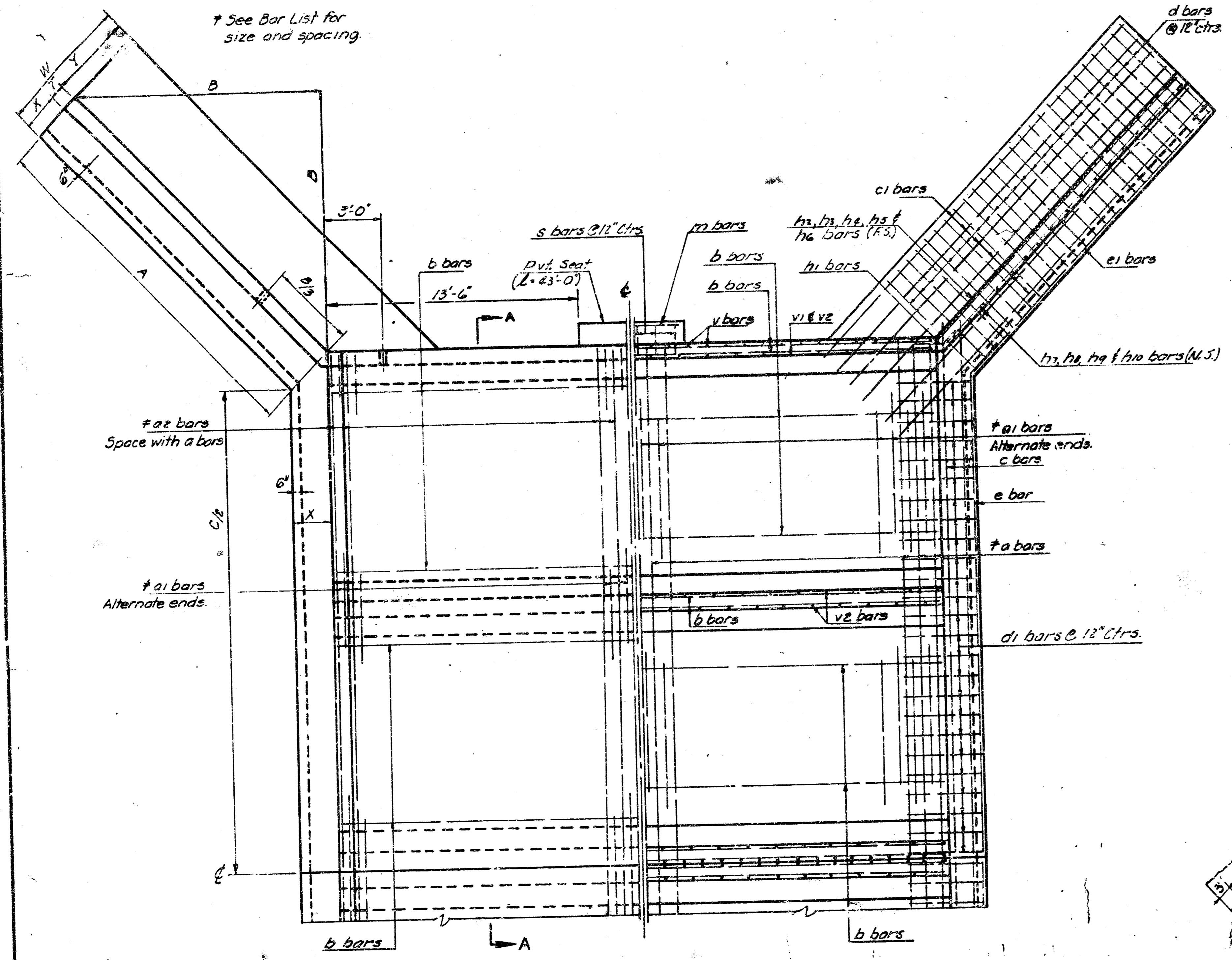
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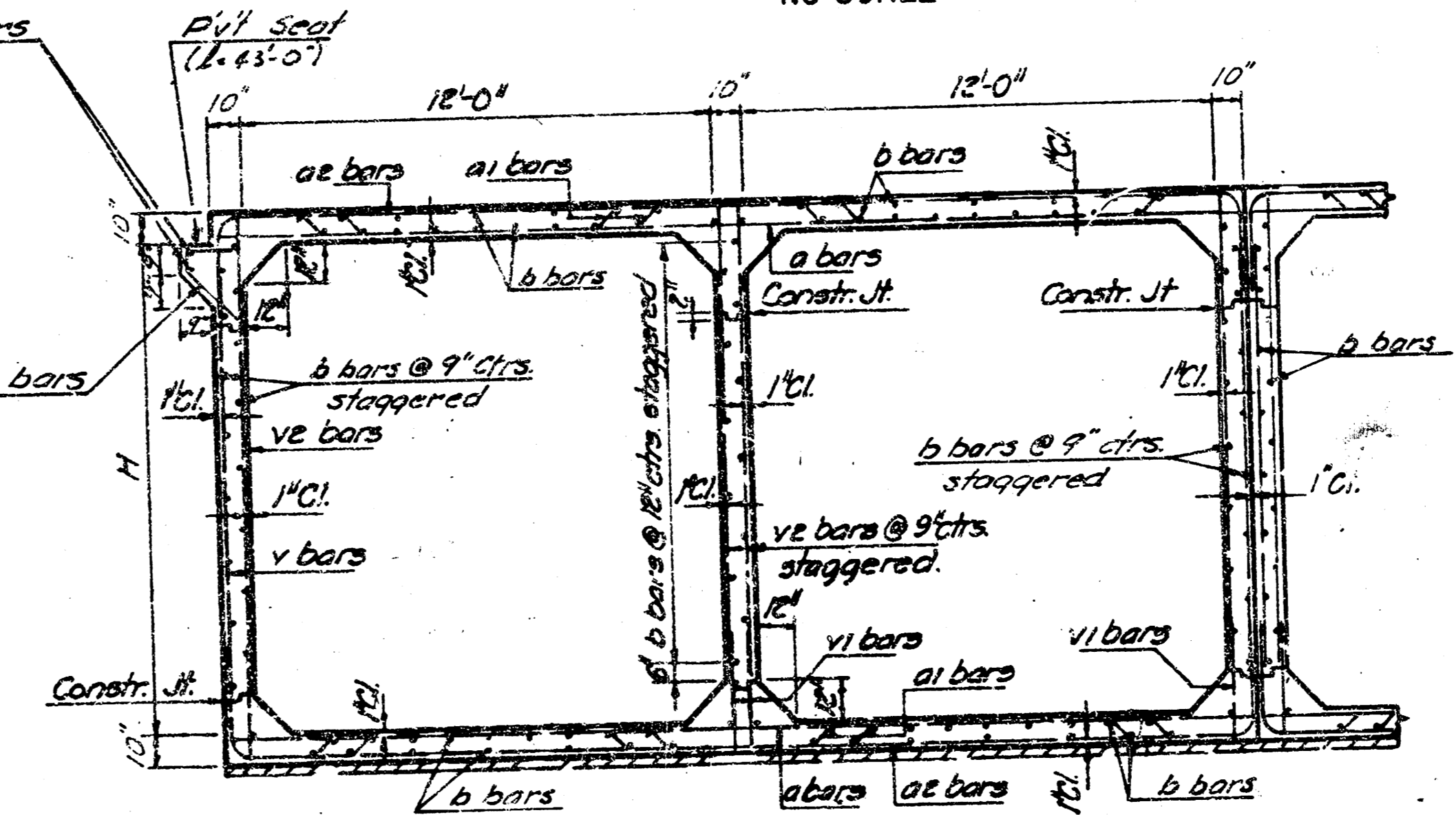
ELEVATION AND SECTION
NO SCALE



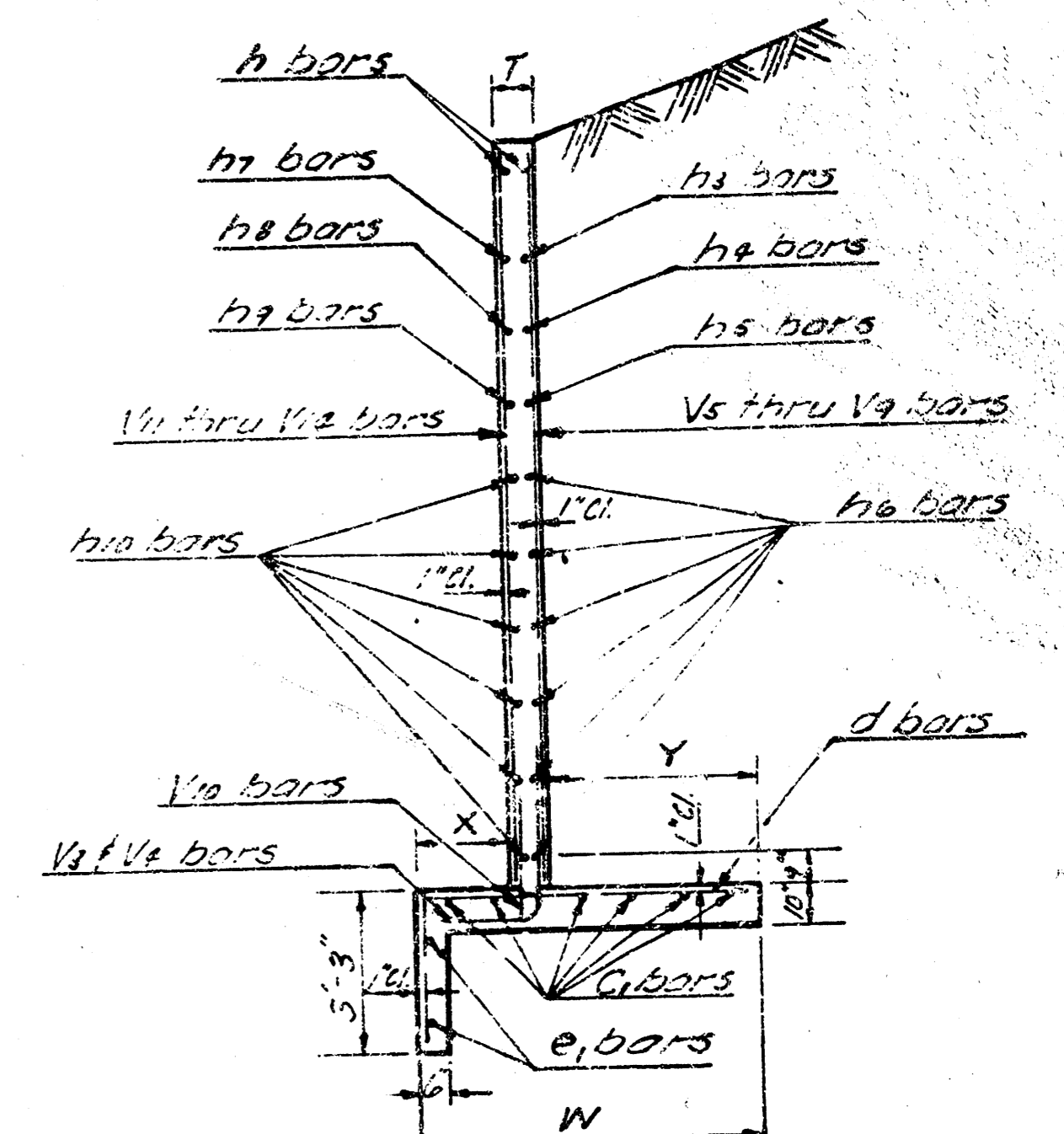
HALF END ELEVATION
NO SCALE



PLAN & SECTION
(1/2 OF 4-12X13)
NO SCALE



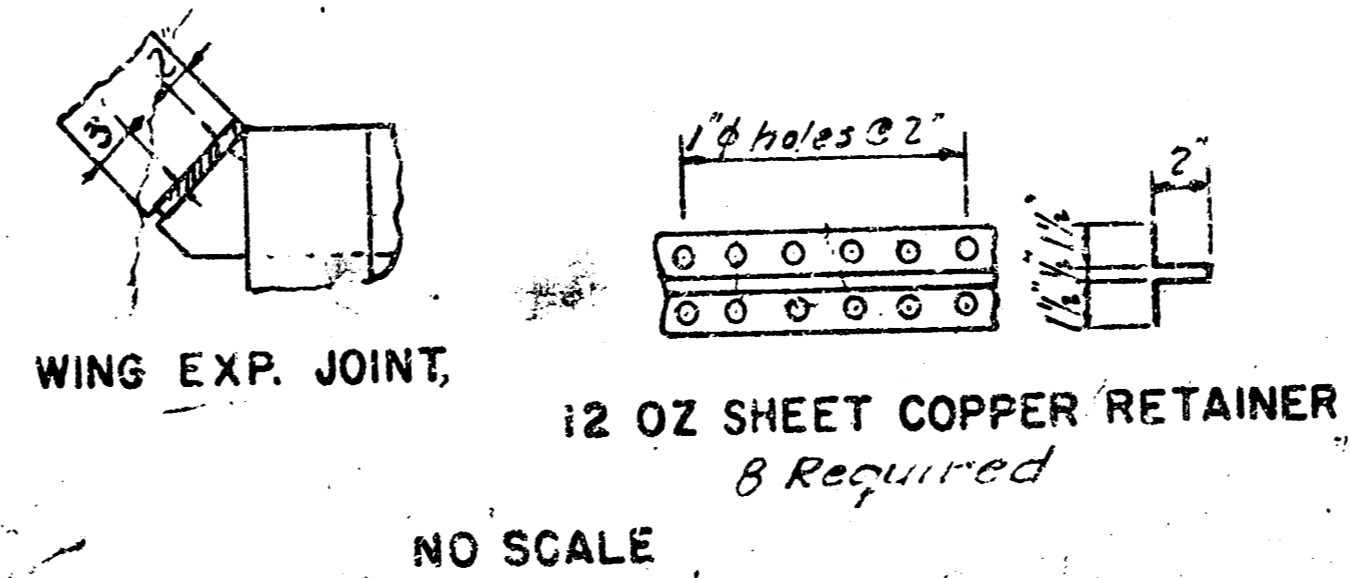
SECTION A-A THRU BOX
(1/2 OF 4-12X13)
NO SCALE



SECTION THRU WING
NO SCALE

LIST OF BARS AND DIMENSIONS

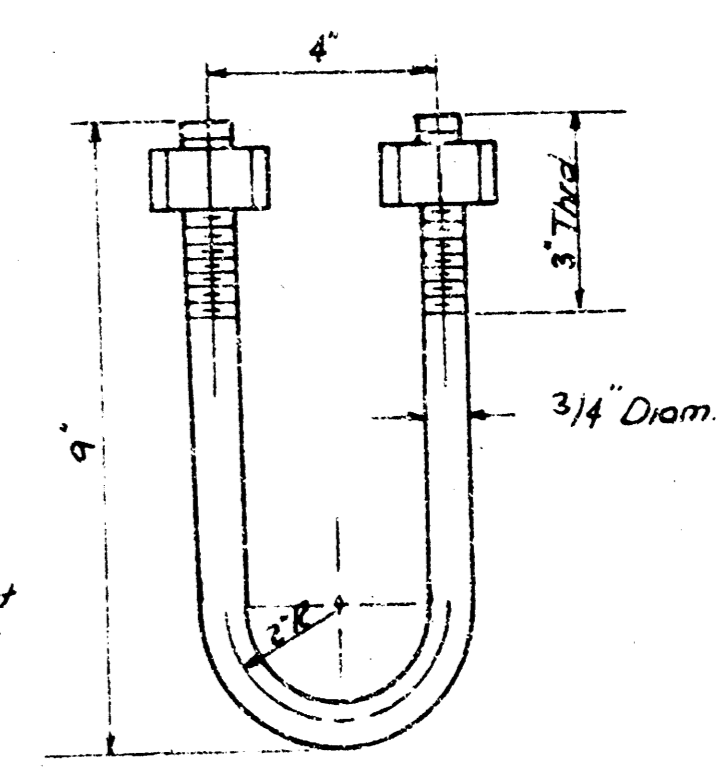
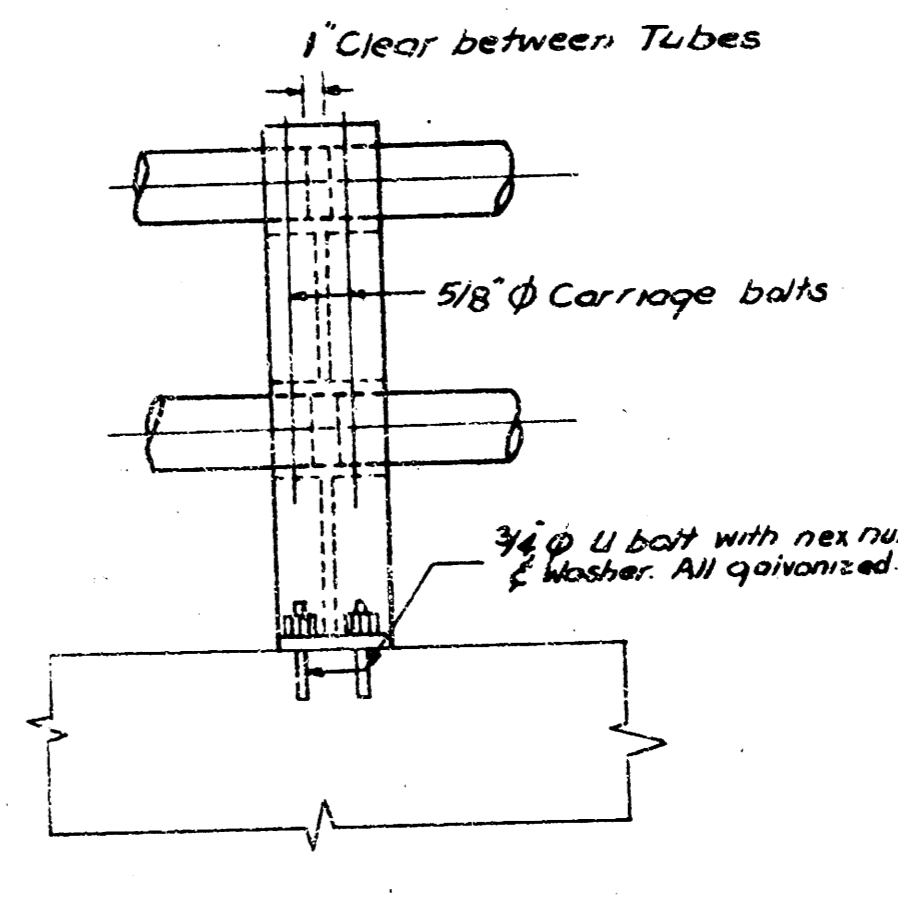
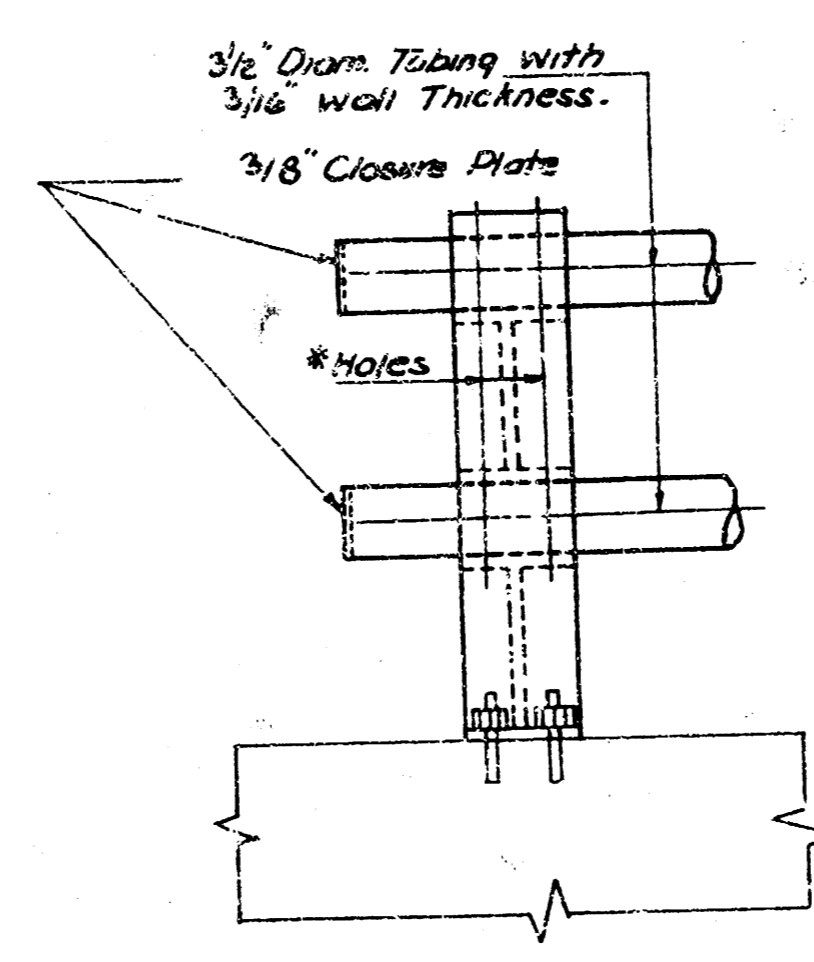
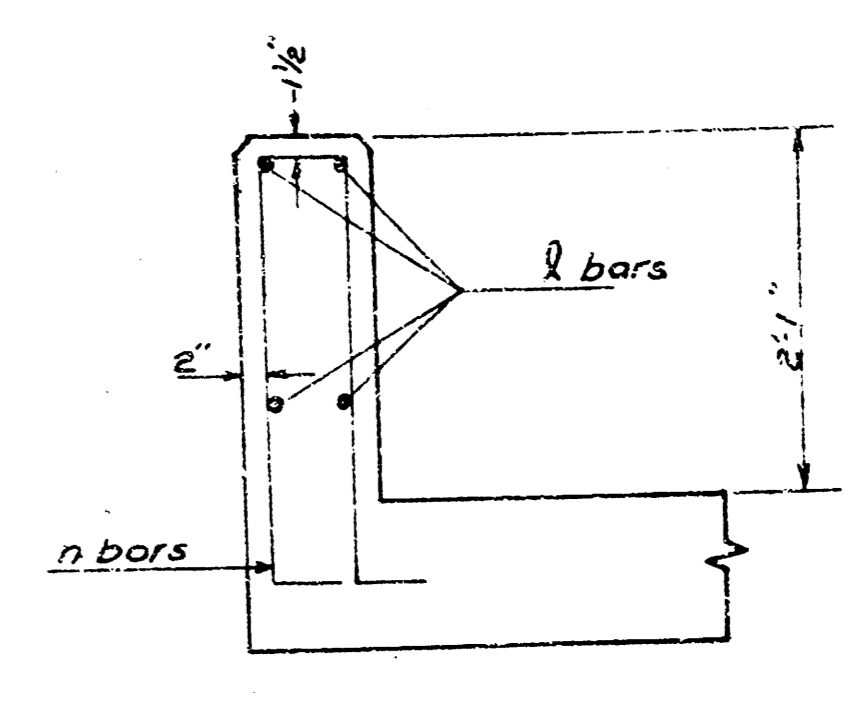
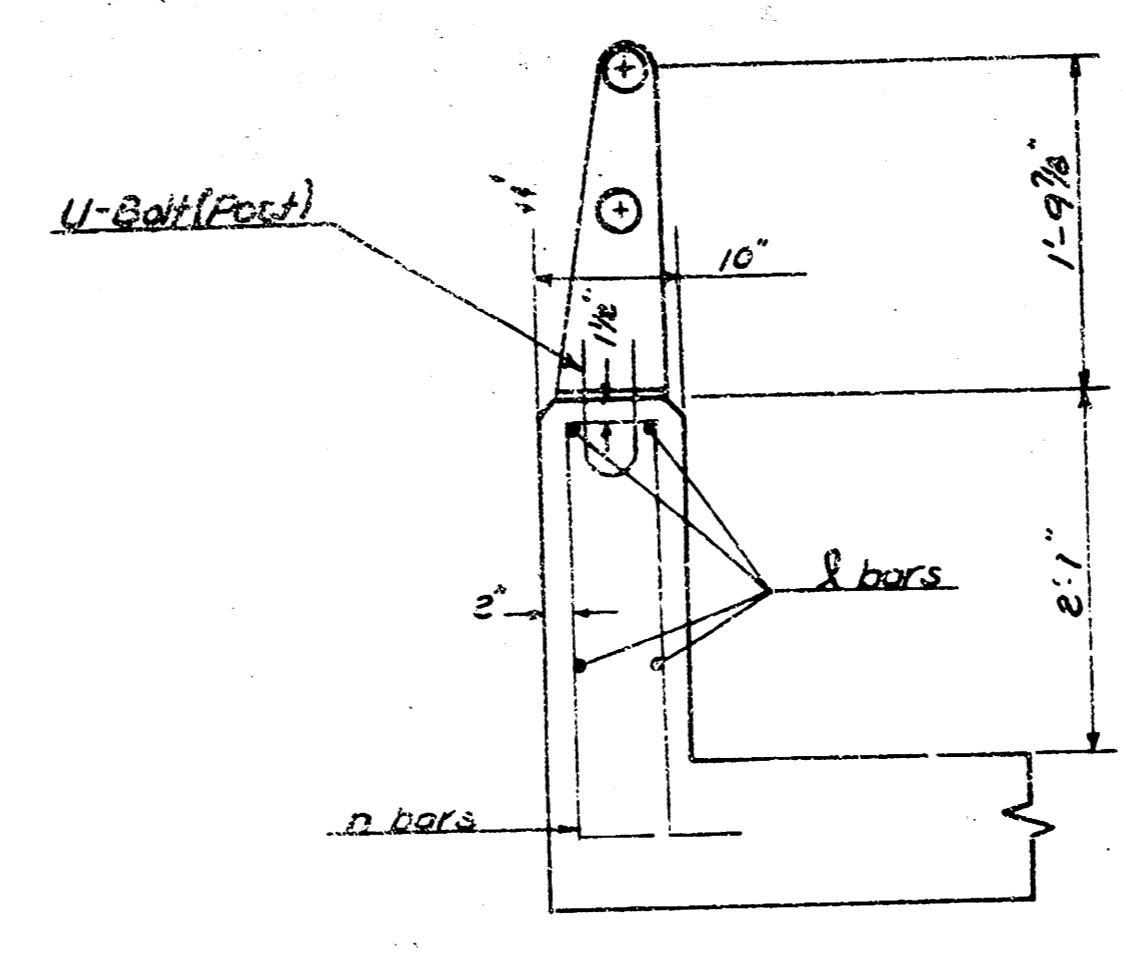
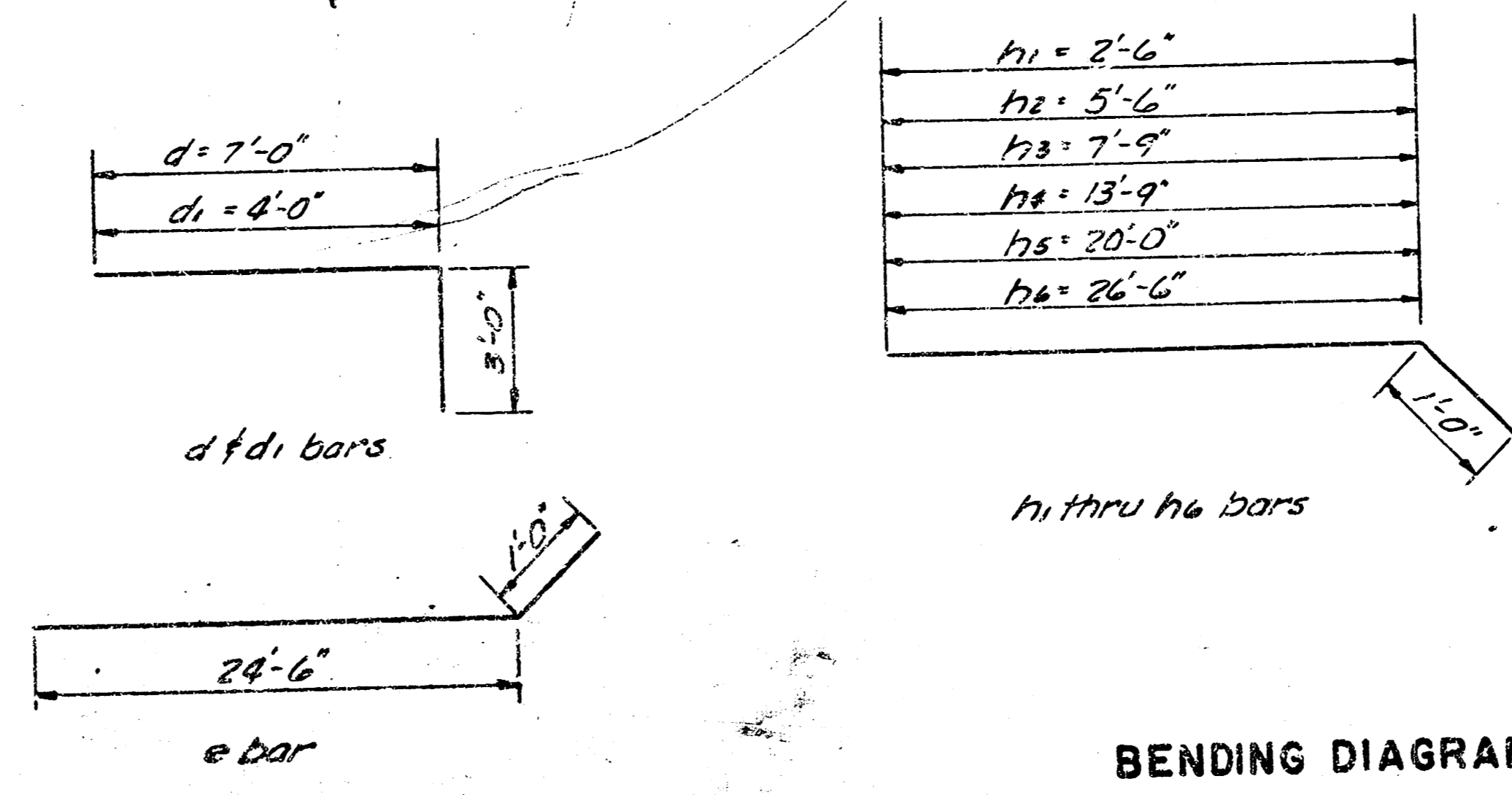
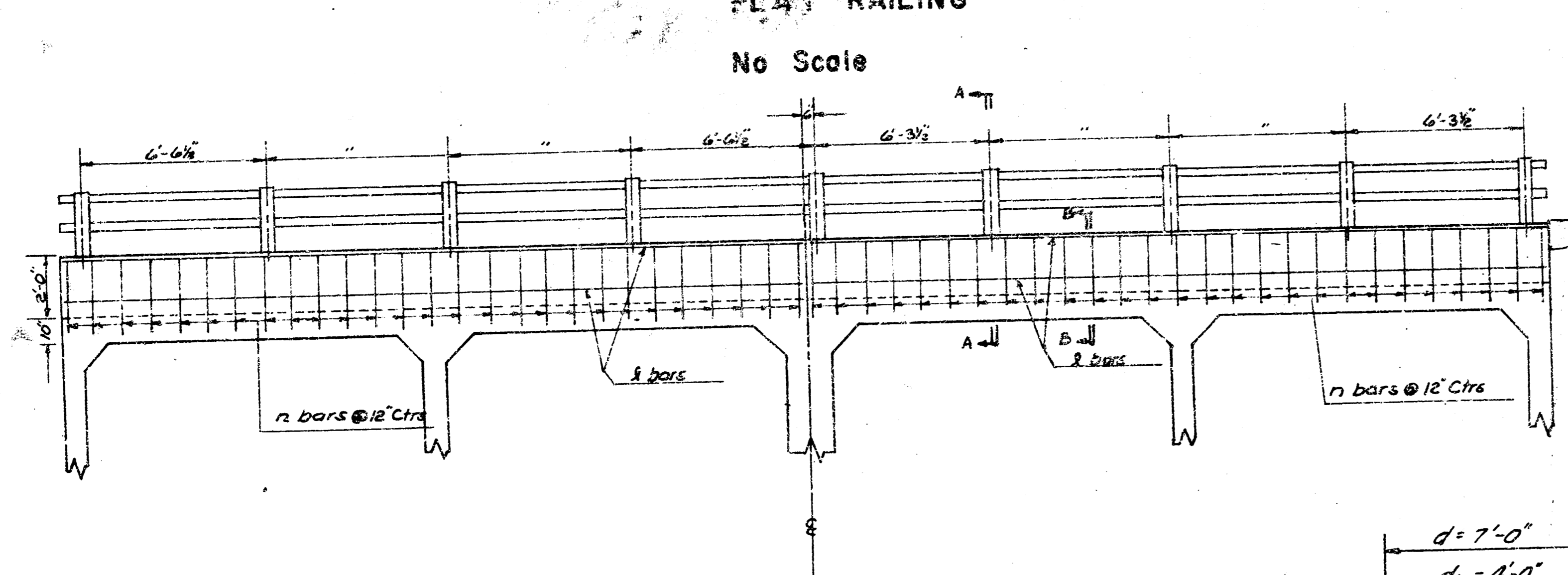
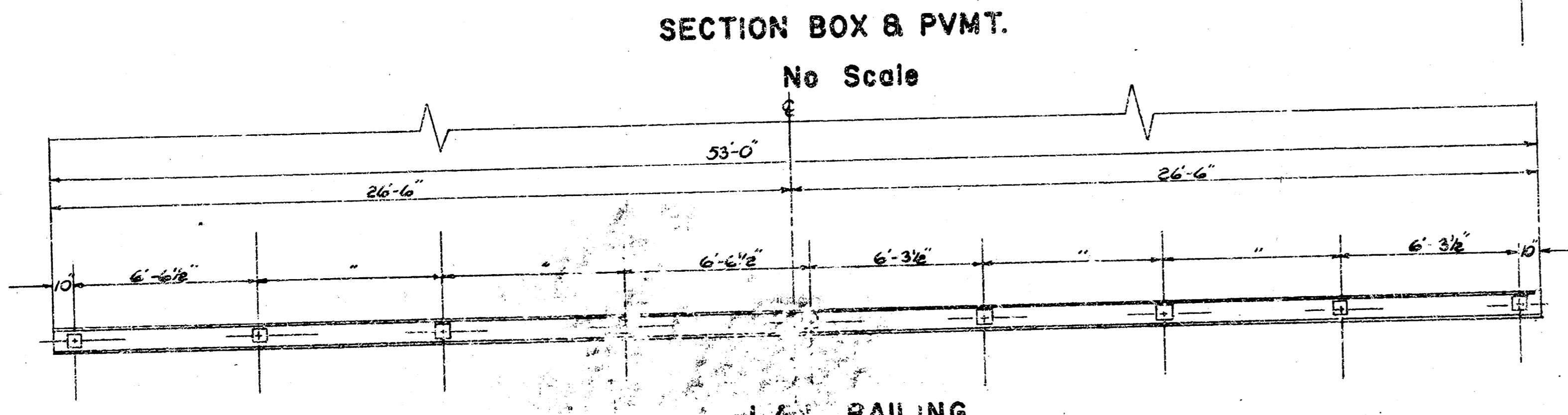
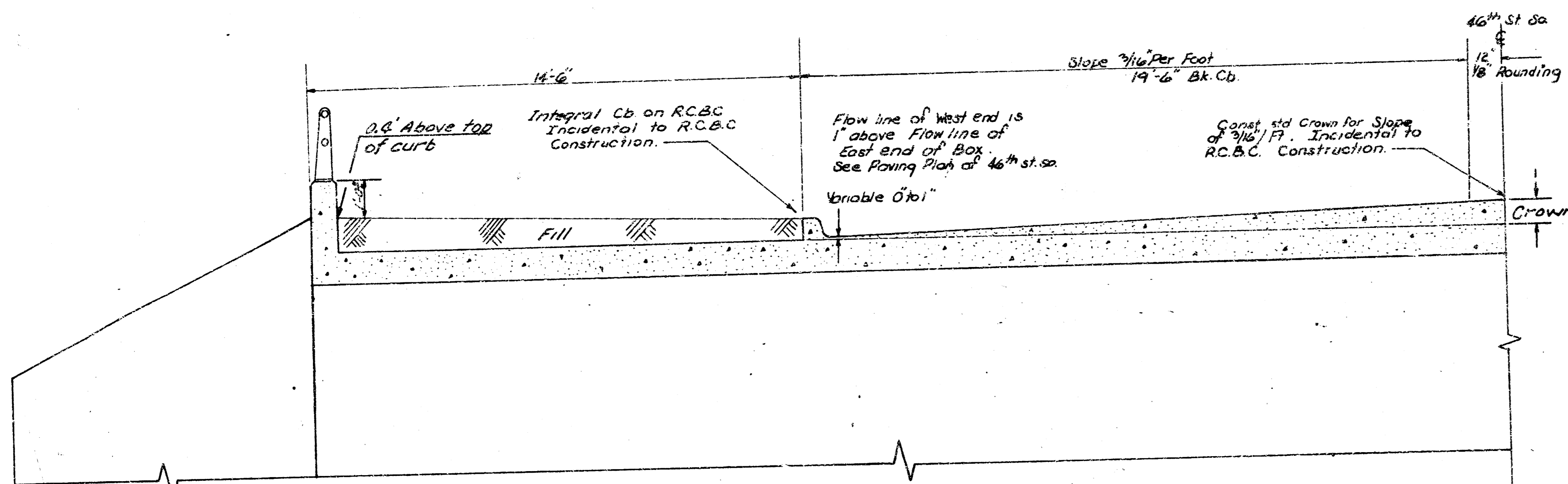
Bar No.	4-12x13x70										4-12x13x70									
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t
Length	28'-0"	34'-0"	28'-0"	32'-0"	27'-6"	3'-0"	0'-0"	2'-0"	3'-6"	2'-6"	2'-6"	2'-6"	2'-6"	2'-6"	2'-6"	2'-6"	2'-6"	2'-6"	2'-6"	2'-6"



4-12'x13' R.C.B.C.
46th ST. SOUTH &
RIVERSIDE DRAINAGE CANAL
CITY OF WICHITA, KANSAS

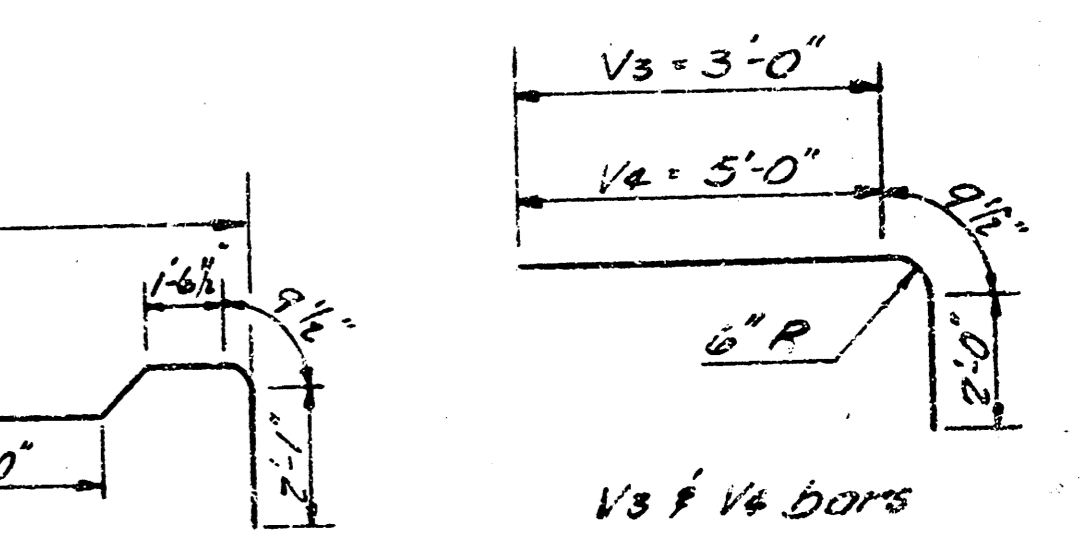
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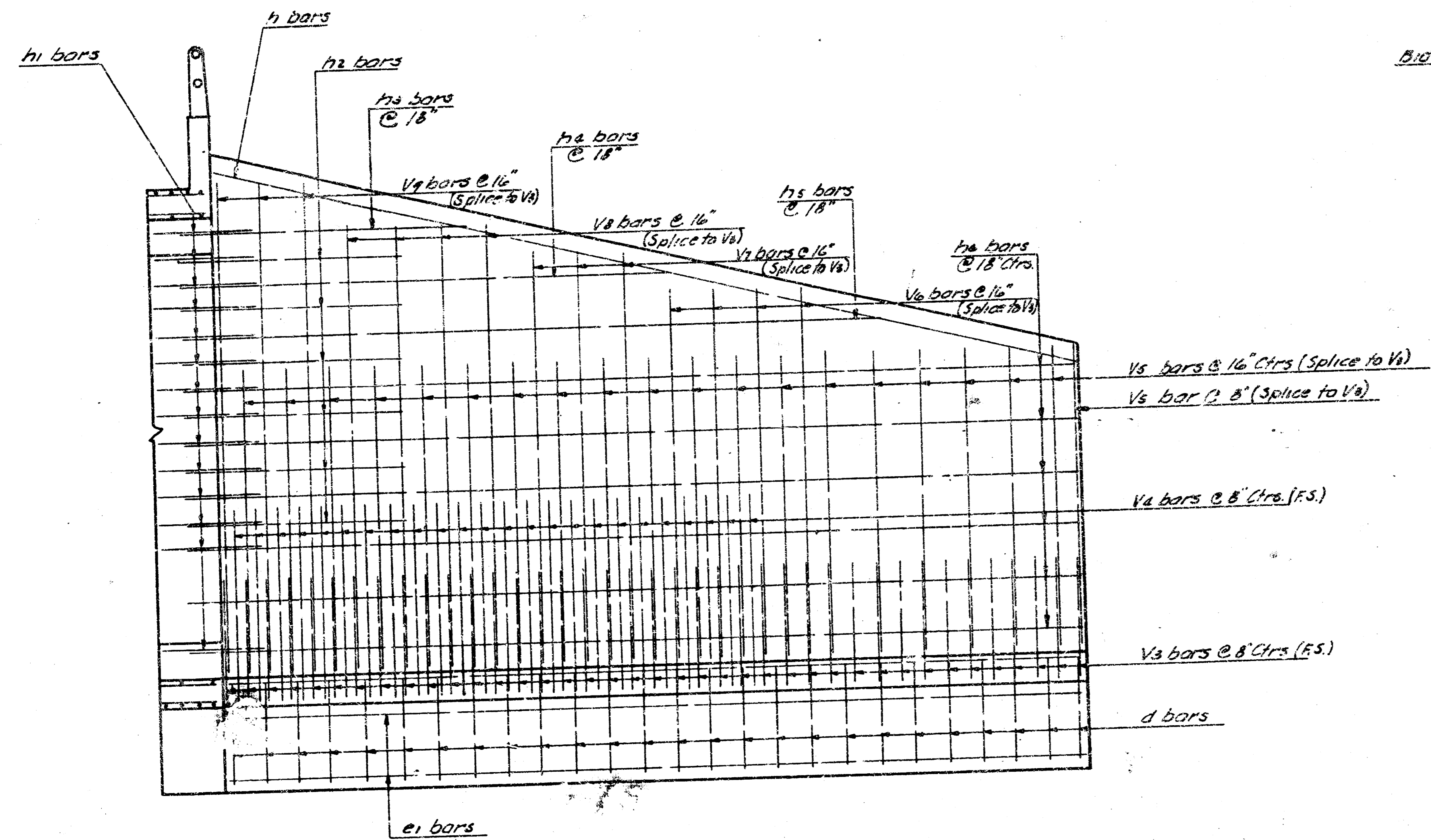
* Holes 1 1/16 square holes in post under head and 1 1/16 round holes under nuts for 5/8 x 3/4 carriage bolts with hex nuts.

Note: Aluminum Handrail Aluminum posts shall be Reynolds Aluminum Highway Products Bridge Railing System No. 2R19A or equal. Top and Bottom rails shall be 3/8 O.D. x 3/16 wall Tube of 6063-T6 Aluminum. Aluminum shims between concrete and post base may be used. The space below post shall be thoroughly calked with Alumastic Compound or other approved material.

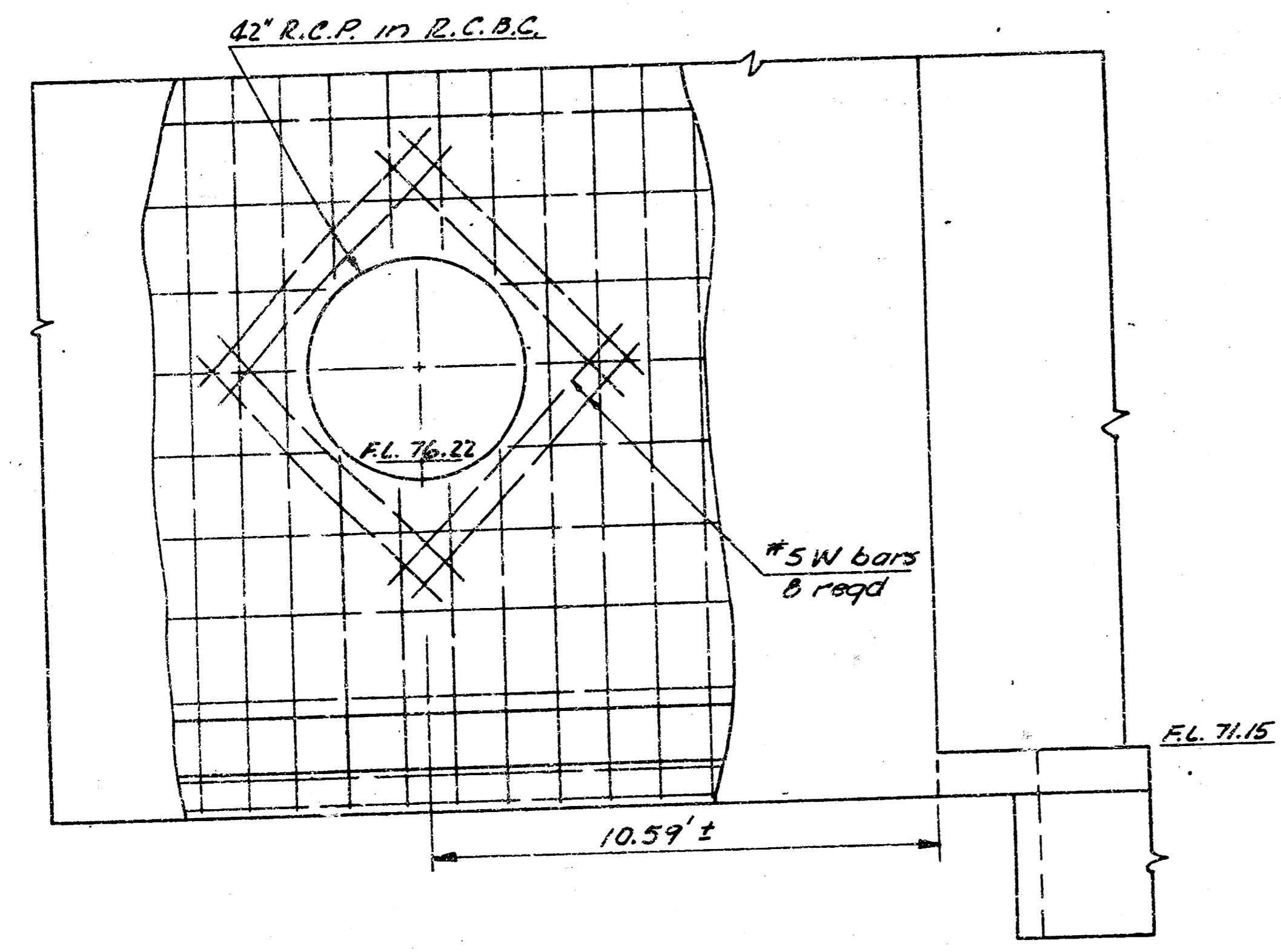


4-12'x13' R.C.B.C.
46th ST. SOUTH &
RIVERSIDE DRAINAGE CANAL
CITY OF WICHITA, KANSAS
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WINGWALL STEEL PATTERN (FS)
3/8"=1' 0"



DETAIL - OPENING FOR PIPE
NO SCALE

BILL OF MATERIALS		
ITEMS	QUANTITY	UNIT
Class A-AE Concrete	523.5	C.Y.
Reinforcing Steel	75,526.6	Lbs
Hand Excavation	26.8	C.Y.
Aluminum Handrail	106.0	L.F.
Class A Concrete - Seal Course	34.8	C.Y.
* Excavation	4,432.6	C.Y.
* Compacted Fill	553.2	C.Y.
Type 3 Riprap	641.8	S.Y.

Lump Sum Bid
Bid Items

* Includes quantities for R.C.B.C. channel

GENERAL NOTES

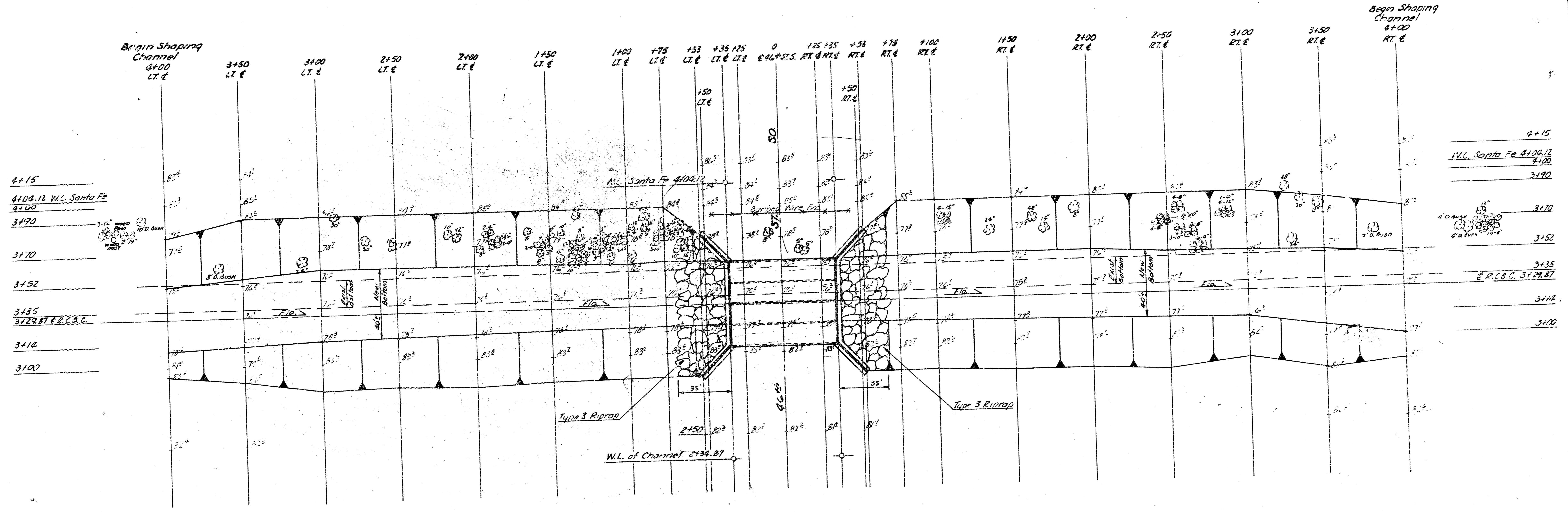
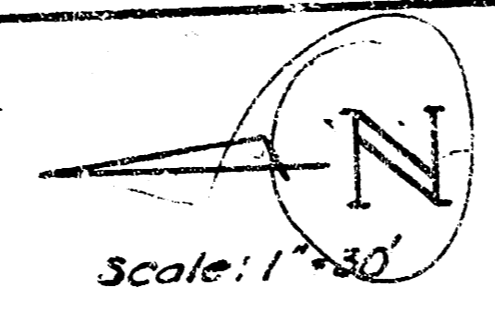
1. CLASS A-AE CONCRETE SHALL BE USED THROUGHOUT ON THE STRUCTURE. THE REINFORCING STEEL SHALL CONFORM TO A.S.T.M. SPECIFICATIONS.
2. BENCHWORK - ALL BENCHWORK SHALL BE CONSIDERED AS "COMMON EXCAVATION" EXCEPT FOR THE TOWALL. TOWALL EXCAVATION SHALL BE INCLUDED IN "LUMP SUM BID".
3. BACKFILL - ALL BACKFILL AND EXCAVATION TO EXTEND TO (2') BEYOND SIDES OF BOX AND WING-WALLS.
4. BEVEL - ALL EXPOSED EDGES OF CONCRETE WITH 3/4" TRIANGULAR BEVELING.
5. WEEDHOLES - COURSE AGGREGATE SHALL BE DEPOSITED BEHIND EACH WEEDHOLE TO OCCUPY A SPACE EXTENDING (15") IN ALL DIRECTIONS ABOVE WEEDHOLE FIRM LINE. THIS WORK SHALL NOT BE PAID FOR DIRECTLY, BUT SHALL BE CONSIDERED A PART OF THE EXCAVATION WORK.
6. SEAL COURSE - A SEAL COURSE CONSISTING OF 3" CLASS "A" CONCRETE SHALL BE CONSTRUCTED ONLY WHERE SPECIFIED ON THE PLANS OF BY THE ENGINEER. REINFORCING SHALL BE PLACED UNTIL THE SEAL COURSE HAS GAINED SUFFICIENT STRENGTH TO PERMIT WORKING UPON IT WITHOUT DAMAGE.
7. LINING OF CULVERT - THE CULVERT SHALL BE BID AS A "LUMP SUM BID" WHICH SHALL INCLUDE THE FOLLOWING ITEMS: CLASS A-AE CONCRETE, REINFORCING STEEL, SAND EXCAVATION, AND ALUMINUM HAND RAIL. ALL OTHER ITEMS SHALL BE INCLUDED AS BID ITEMS.
8. THE QUANTITIES SHOWN IN THE "BILL OF MATERIALS OR ITEMS" WHICH ARE INCLUDED IN THE "LUMP SUM BID" OF THE CULVERT ARE FOR "INFORMATION PURPOSES ONLY". THE CONTRACTOR MUST SATISFY HIMSELF AS TO THE "QUANTITIES" AND THE ENGINEER ASSUMES NO RESPONSIBILITIES FOR THEIR ACCURACY. THE CONTRACTOR WILL HAVE THE FULL RESPONSIBILITY FOR PROVIDING ALL MATERIALS ON THE DETAILED PLANS NECESSARY TO COMPLETE THE PROJECT.

4-12' x 13' R.C.B.C.
46th ST. SOUTH &
RIVERSIDE DRAINAGE CANAL
CITY OF WICHITA, KANSAS

6/19

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NOTE: Excess dirt from channel excavation to be used for loose fill and compacted fill on 46th St. So.
Trees in area of channel excavation are not bid as separate removal item.

CHANNEL EXCAVATION

4-12' x 13' R.C.B.C.
46th ST. SOUTH &
RIVERSIDE DRAINAGE CANAL
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