

WICHITA, KANSAS

PAVEMENT REMOVAL AND RECONSTRUCTION

IN CONNECTION WITH RUBBERIZED

RAILROAD CROSSING INSTALLATION

1985 C.I.P. PHASE II

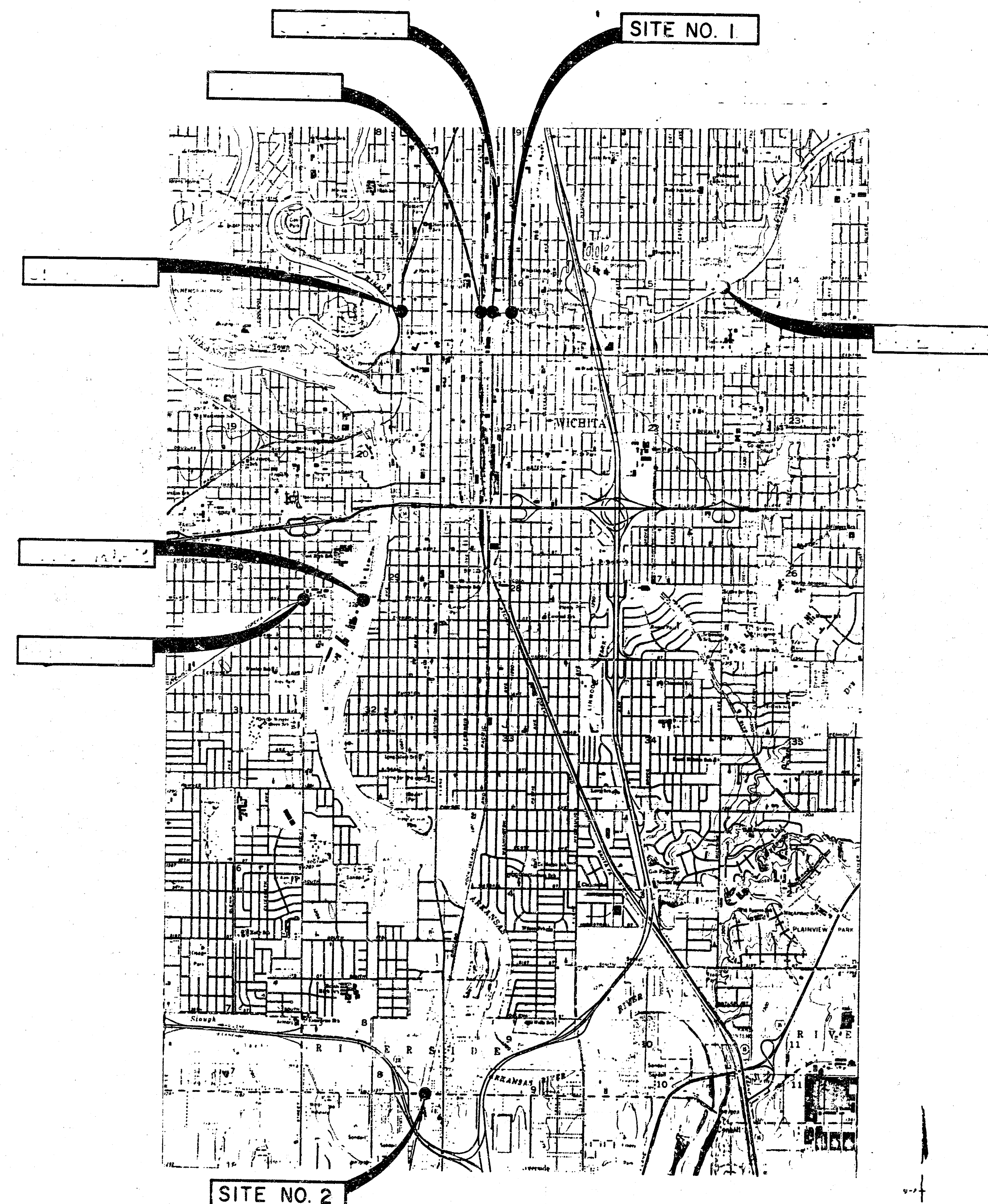
SITE LOCATIONS

SITE 1: WASHINGTON AT MURDOCK (B. N. R.R.)
SITE 2: MacARTHUR WEST OF BROADWAY
(UNION PAC. R.R.)

INDEX TO DRAWINGS

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4	8" ASPHALTIC PAVEMENT (CONC. BASE) CROSSING DETAILS
5	RUBBERIZED CROSSING INSTALLATION DETAILS
6	WASHINGTON AT MURDOCK PLAN
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9	TYPE I INLET DETAIL
10	MANHOLE ADJUSTMENT DETAIL



LOCATION MAP

SCALE: 1" = 3000' (APPROX.)

— EARTHWORK —
EXCAVATION, BORROW, IF ANY, AND COMPACTED FILL,
EXCEPT THE COMPACTED FILL IN THE 6" IMMEDI-
ATELY UNDER THE PAVEMENT, SHALL BE INCIDENTAL
TO OTHER BID ITEMS OF WORK.

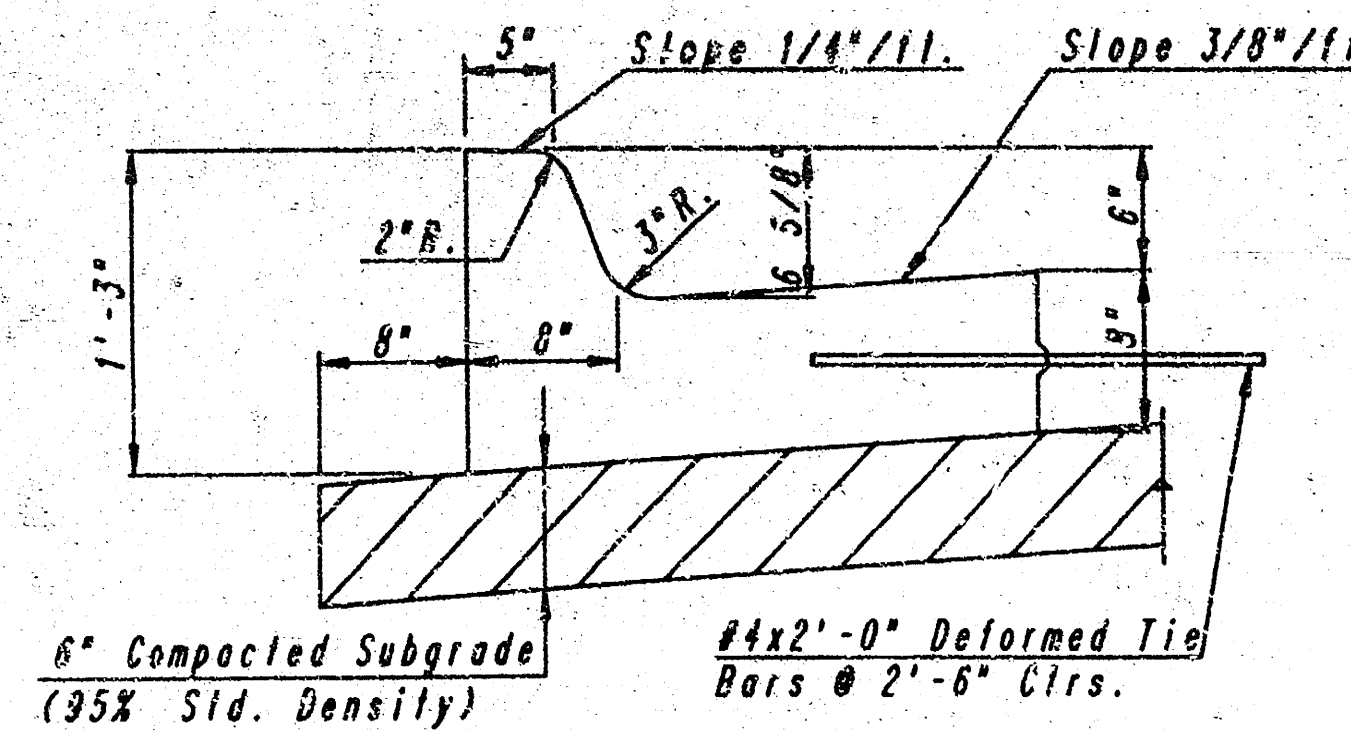
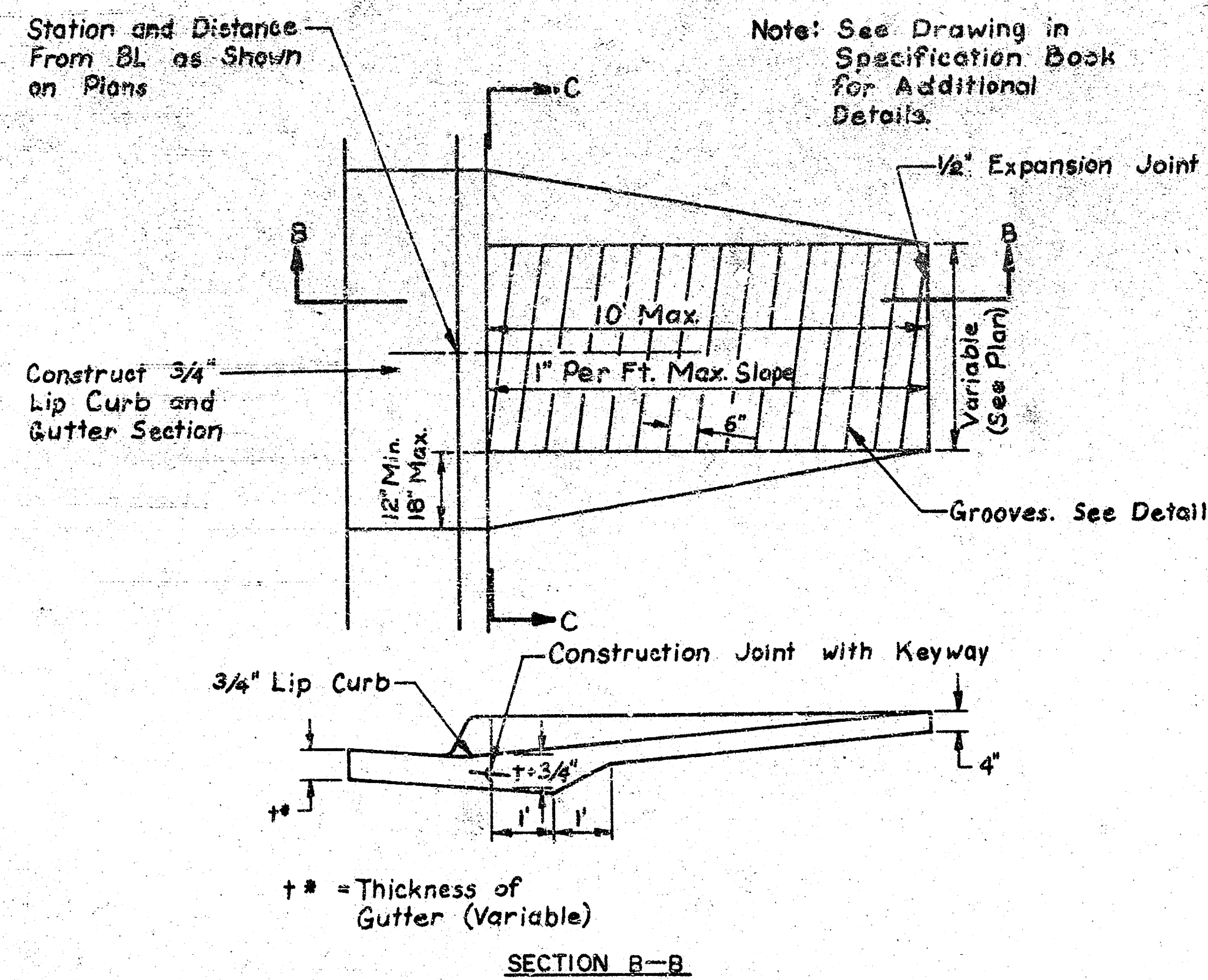
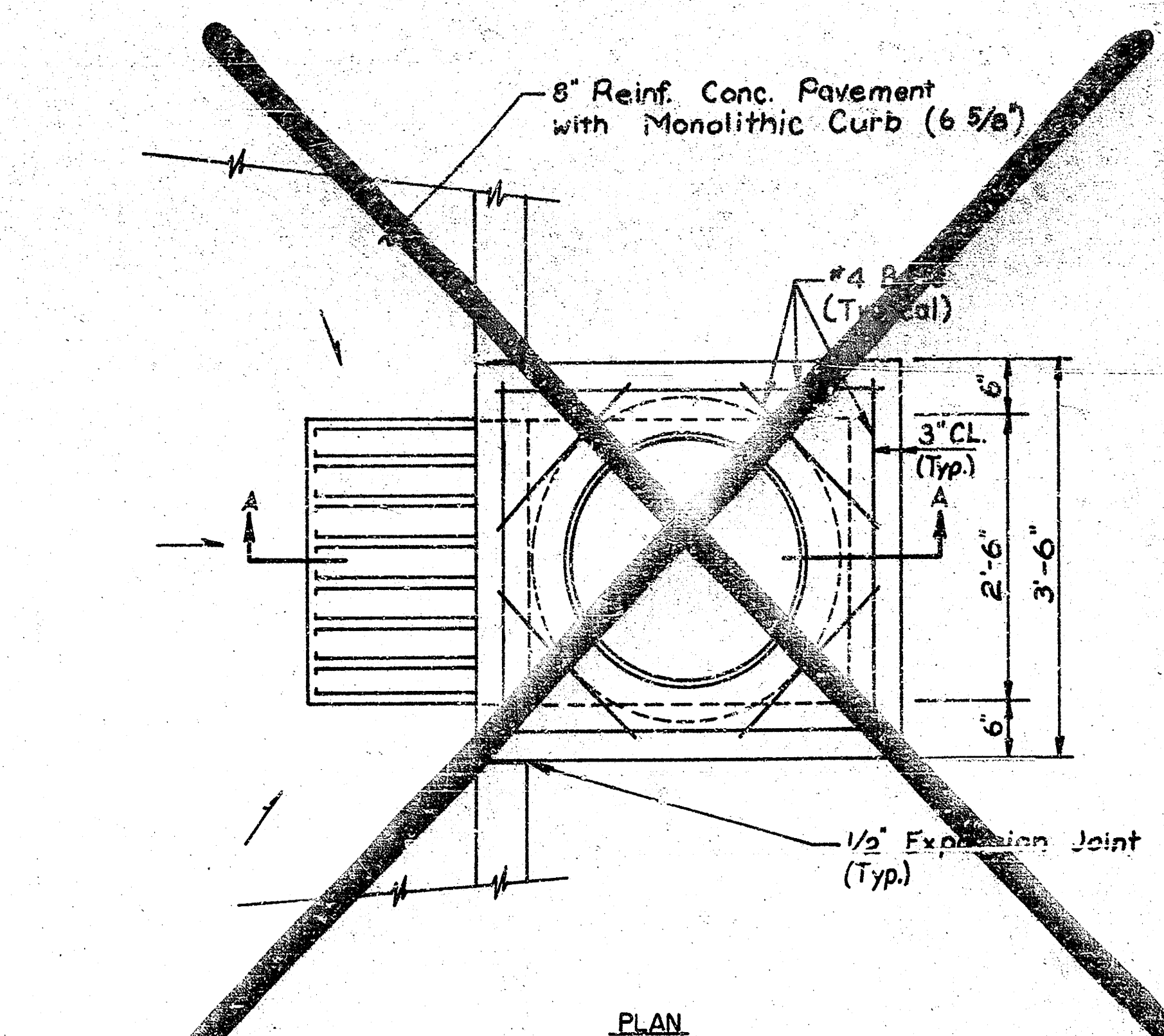
MIKE LINDEBAK, P.E.
CITY ENGINEER
CITY OF WICHITA, KANSAS
PROJECT NO. 472-76-245-81499-000-001
INDEX NO. 603225
APRIL 1989



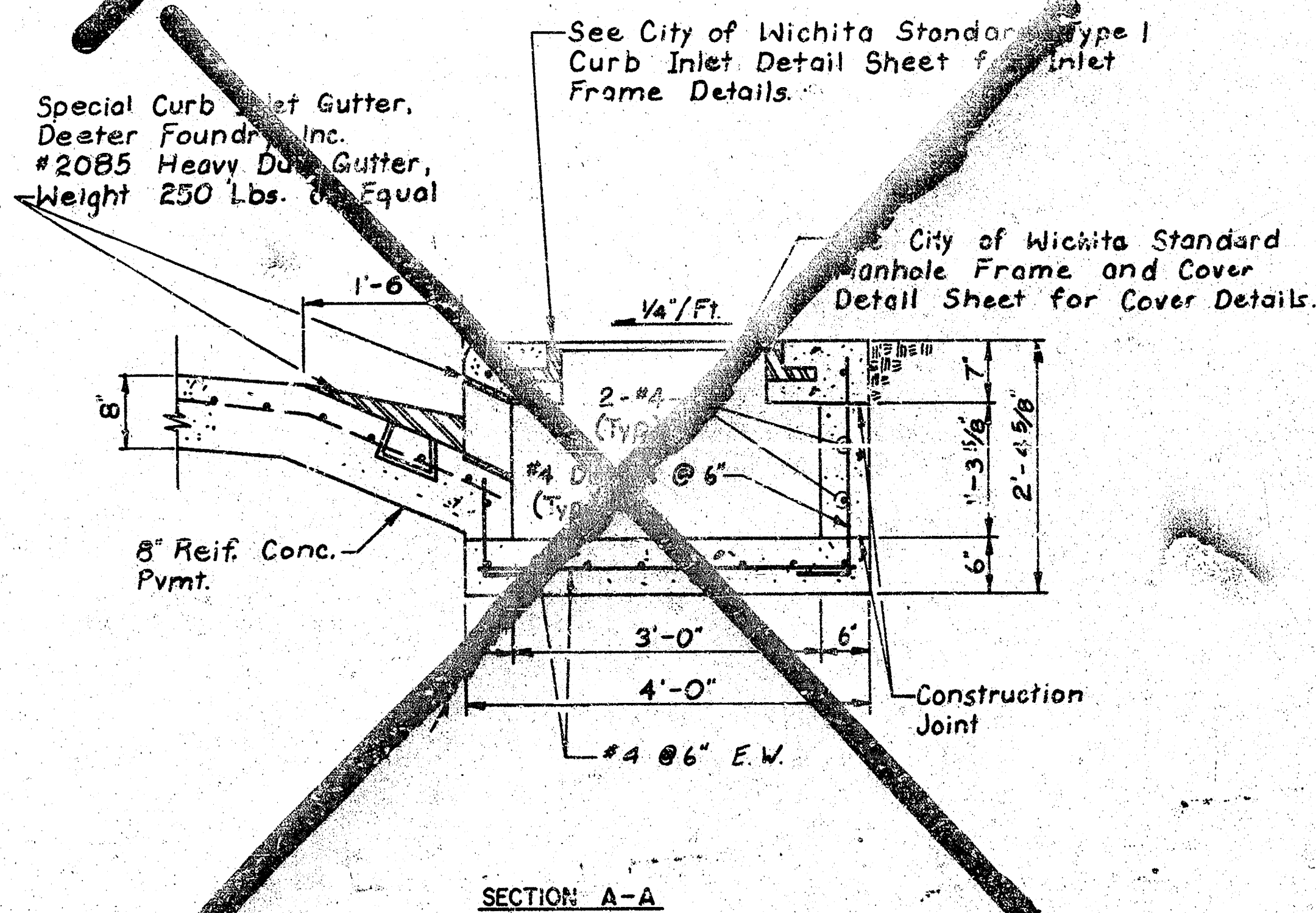
**WILSON
& COMPANY**
ENGINEERS &
ARCHITECTS
WICHITA - KANSAS

SHEET 1 OF 10

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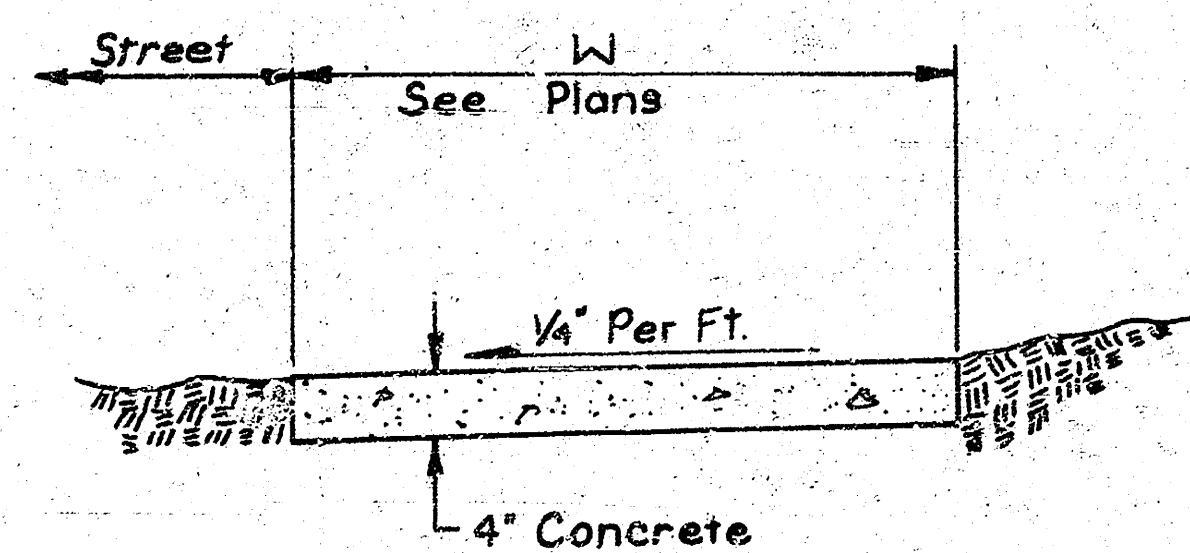
COMBINED CURB & GUTTER (6 5/8")



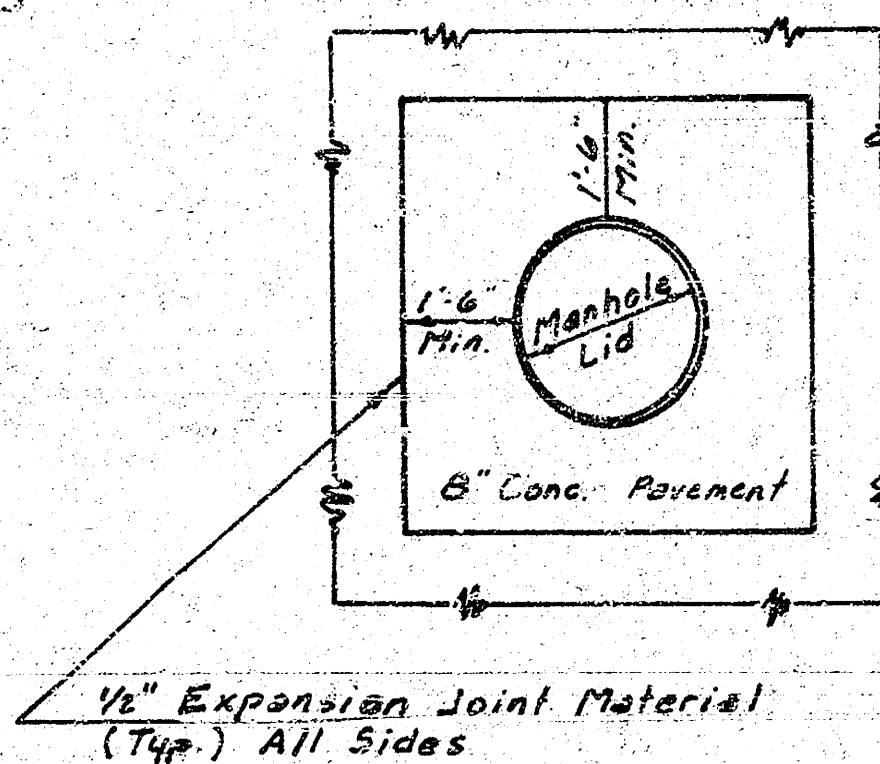
SPECIAL CURB INLET DETAIL
Scale: 3/4" = 1'-0"

Note: This detail shows a typical installation. Some installations are non-typical (see plans). The cost of all work shall be included in the unit price bid for wheelchair ramp. Price shall include costs of compaction of subgrade and necessary area grading.

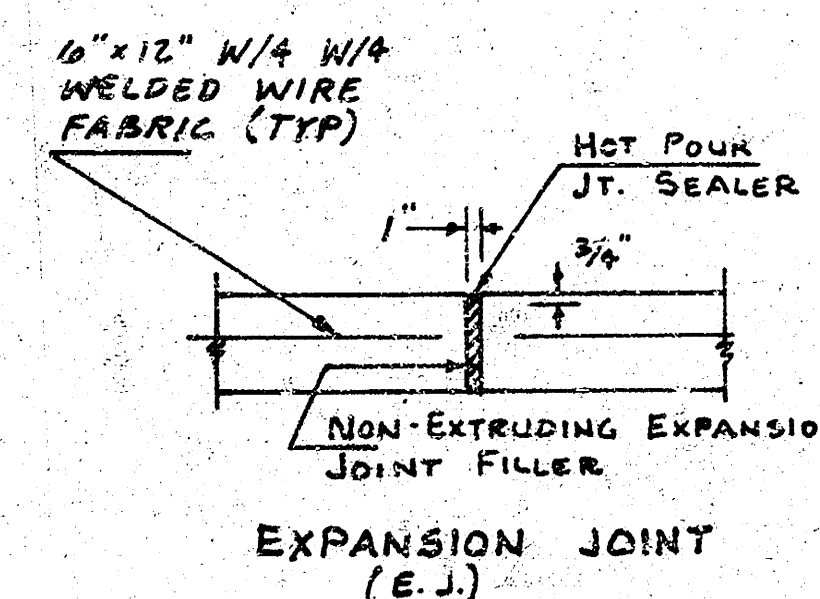
WHEELCHAIR RAMP DETAIL
N.T.S.



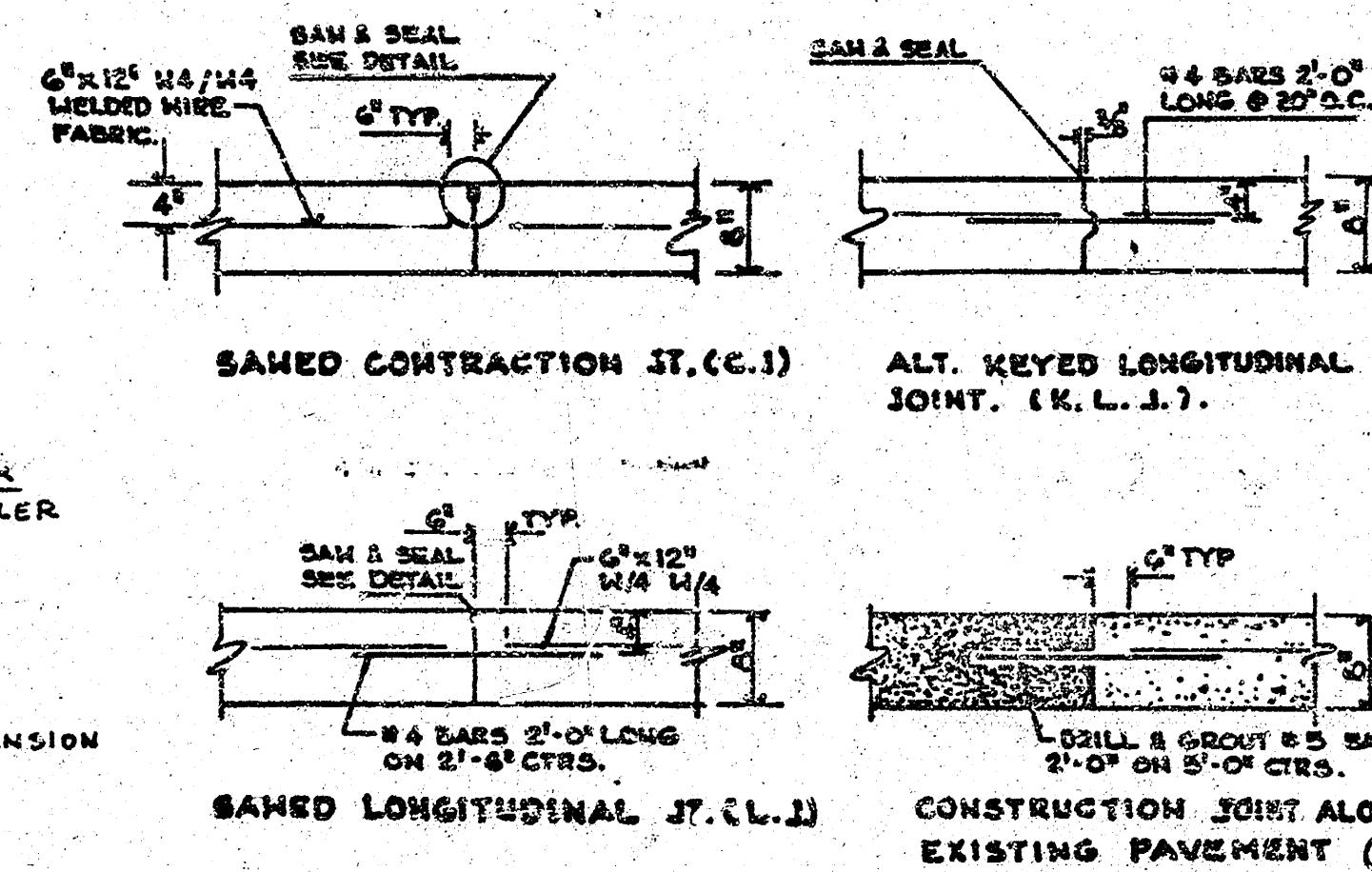
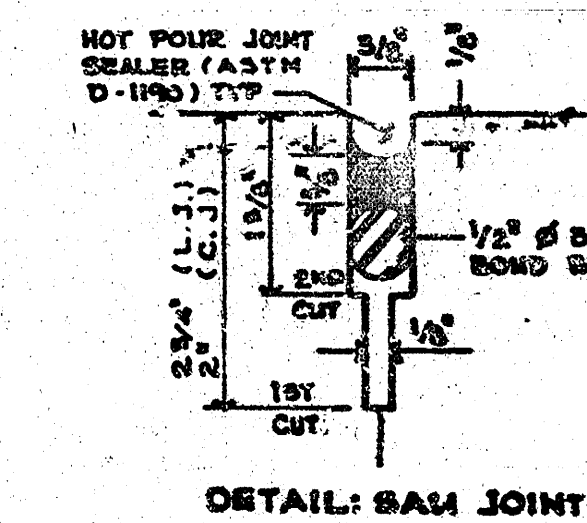
STANDARD SIDEWALK DETAIL
N.T.S.



TYPICAL MANHOLE BLOCKOUT
(CONC. PAVEMENT)



NOTE: Conc. Pavement and Base to be reinforced with 6"x12" W4-W4 Welded Wire Fabric. The Fabric shall be placed such that the Wire on 6" spacing shall be parallel with the Longitudinal Joints.



PAVEMENT JOINT DETAILS

- PROJECT WILL BE CLOSED TO THROUGH TRAFFIC DURING THE TIMEFRAME THE RAILROAD COMPANY IS INSTALLING RUBBERIZED CROSSING MATERIAL. PROJECT MUST BE REOPENED TO THROUGH TRAFFIC IMMEDIATELY AFTER THE RAILROAD COMPANY HAS COMPLETED THEIR WORK INVOLVED WITH INSTALLATION OF THE RUBBER CROSSING MATERIAL UNLESS THE CITY ELECTS TO NOT REQUIRE SUCH THROUGH TRAFFIC TO BE MAINTAINED DURING THE NEXT PHASE OF CONSTRUCTION. DETOUR SIGNING AND CONSTRUCTION TRAFFIC CONTROL SIGNING DURING THE TIME THE RAILROAD COMPANY IS WORKING ON THE CROSSING WILL BE THE RESPONSIBILITY OF THE PAVING CONTRACTOR AS FURTHER PROMULGATED BY PROJECT SPECIAL PROVISIONS. CONSTRUCTION OF TEMPORARY PAVEMENT REQUIRED TO FACILITATE MAINTENANCE OF SUCH THROUGH TRAFFIC WILL ALSO BE THE RESPONSIBILITY OF THE PAVING CONTRACTOR AS FURTHER PROMULGATED BY PROJECT SPECIAL PROVISIONS.
- UTILITY SERVICE LINES, POWER POLES, VALVE BOXES, METERS, ETCETERA, ARE TO BE ADJUSTED AS NECESSARY BY OTHERS PRIOR TO CONSTRUCTION UNLESS THE PLANS SPECIFICALLY CALL FOR THEIR ADJUSTMENT BY THE CONTRACTOR. EXISTING UTILITIES AND THEIR LOCATION, AS SHOWN ON THE PLANS, REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
- A SAW CUT OF AT LEAST ONE-HALF THE DEPTH OF EXISTING SURFACE COURSES OR ONE-FOURTH THE DEPTH OF THE EXISTING TOTAL PAVEMENT THICKNESS SHALL BE PROVIDED AT LOCATIONS WHERE PROPOSED CONSTRUCTION ABUTS AN EXISTING SURFACE COURSE OR PAVEMENT FOR WHICH PARTIAL REMOVAL OF THAT SURFACE OR PAVEMENT IS REQUIRED. SAWED JOINT TO FACILITATE REMOVAL WITHIN THREE (3) FEET OF EXISTING JOINTS WILL NOT BE PERMITTED AND FOR SUCH INSTANCES THE LIMITS OF REMOVAL SHALL EXTEND TO THE EXISTING JOINT. SUCH SAW CUTS WILL NOT BE PAID FOR DIRECTLY AND THIS COST SHALL BE CONSIDERED AS SUBSIDIARY TO THE REMOVAL OF THE SURFACE OR PAVEMENT.
- RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED.
- THE CITY OF WICHITA'S SEWER MAINTENANCE DIVISION OF THE DEPARTMENT OF WATER AND WASTE POLLUTION CONTROL HAS TELEVIEWED SEWERS WITHIN THE LIMITS OF THE PROJECT AND HAVE FOUND NO DEFECTS REQUIRING REPAIR. THE DIVISION SHALL BE NOTIFIED AND AFFORDED THE OPPORTUNITY TO RETELEVIEW SEWER LINES AFTER SUBGRADE WORK HAS BEEN COMPLETED AND PRIOR TO PAVEMENT CONSTRUCTION TO DETERMINE IF SUCH SEWER LINES HAVE BEEN DAMAGED BY THE CONTRACTOR'S OPERATIONS. DAMAGED SEWER LINES WILL BE REPAIRED BY THE CONTRACTOR, AS DIRECTED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE. TELEVISION LOGS ARE AVAILABLE FOR INSPECTION BY THE CONTRACTOR DURING NORMAL OFFICE HOURS AT THE SEWER MAINTENANCE DIVISION'S OFFICE AT CITY HALL.
- REMOVAL OF EXISTING CONCRETE PARKING LOT PAVEMENTS, ASPHALT PARKING LOT PAVEMENTS, ASPHALT DRIVEWAY PAVEMENTS AND/OR ASPHALT SIDEWALK PAVEMENTS WILL BE PAID FOR AS SQUARE FEET OF WALK AND DRIVE REMOVED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAWS.
- LIMITS OF EARTHWORK SHALL MATCH EXISTING GROUND ELEVATIONS AT THE RIGHT-OF-WAY LINE UNLESS OTHERWISE NOTED ON THE PLANS.
- CONCRETE JOINTING PATTERNS AND DIMENSIONS ARE APPROXIMATE. ENGINEER SHALL FIELD ADJUST AS REQUIRED TO MATCH EXISTING AND ADJACENT CONDITIONS.
- REPLACE ALL EXISTING ASPHALT FILLED MANHOLE LIDS IN AREAS TO BE PAVED WITH THE STANDARD CITY OF WICHITA MANHOLE FRAME AND COVER.
- THE 6" SUBGRADE IMMEDIATELY UNDER NEW PAVEMENT OR COMBINED CURB AND GUTTER SHALL BE COMPACTED TO 95% STANDARD DENSITY. TO BE PAID AS CU. YD. OF "COMPACTED FILL (95% STD. DENSITY)."

CITY OF WICHITA PROJECT NO. 472-76-245-81499-000-001

WICHITA, KANSAS
RUBBERIZED RAILROAD CROSSING
GENERAL NOTES AND MISCELLANEOUS DETAILS

DESIGN	DRAWN	DATE
MEK/CDN	JMR	OCT. 1986
WILSON & COMPANY		FILE NO.
ENGINEERS		85-345
ARCHITECTS		SHEET NO. 2
WICHITA - KANSAS		OF 10

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SPECIAL NOTES

1. ALL MATERIALS AND SUPPLIES SHALL BE OF THE BEST QUALITY AND SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR THE PROTECTION OF ALL EXISTING UTILITIES. ALL MATERIALS SHALL BE OF THE BEST QUALITY AND SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR THE PROTECTION OF ALL EXISTING UTILITIES.

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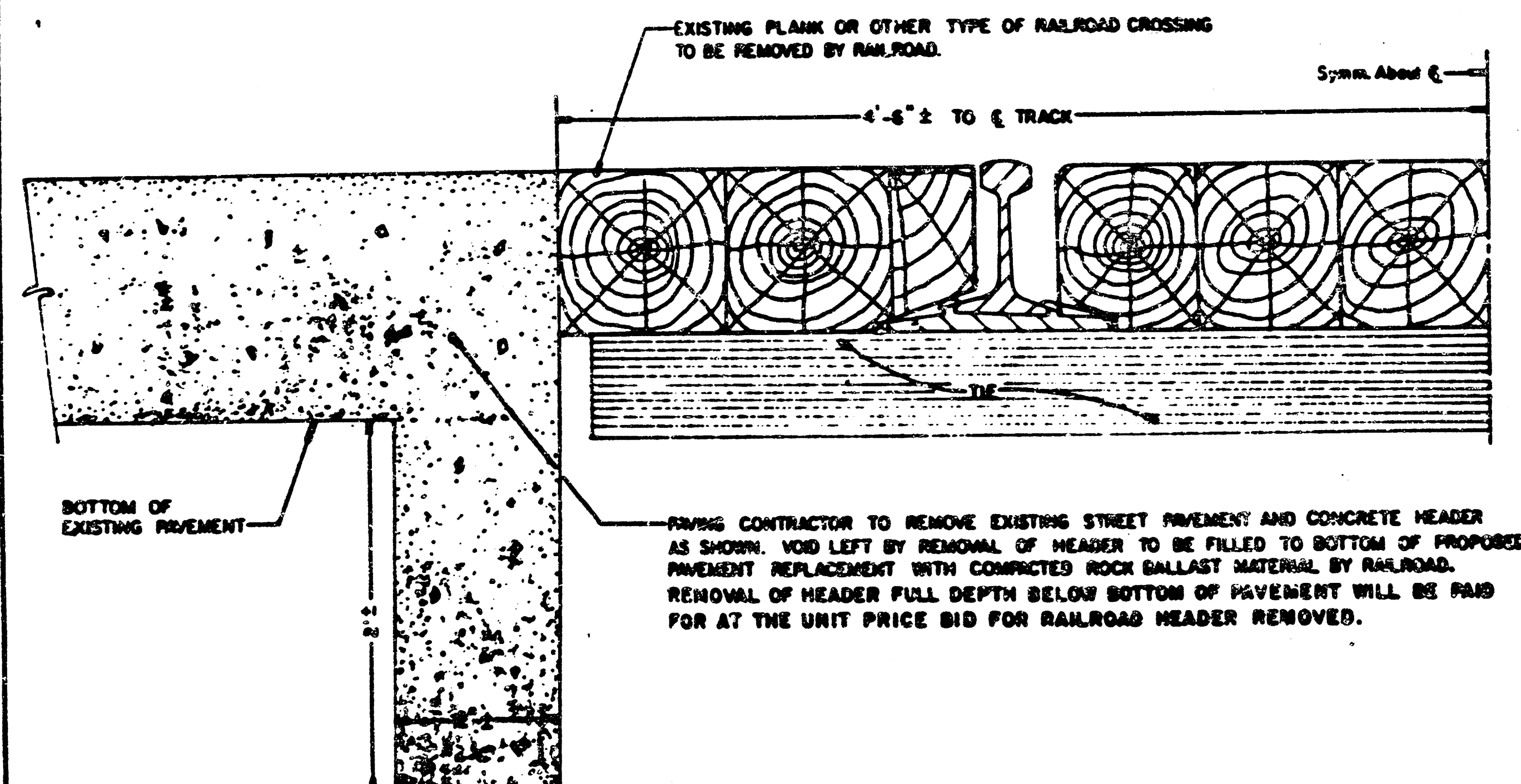
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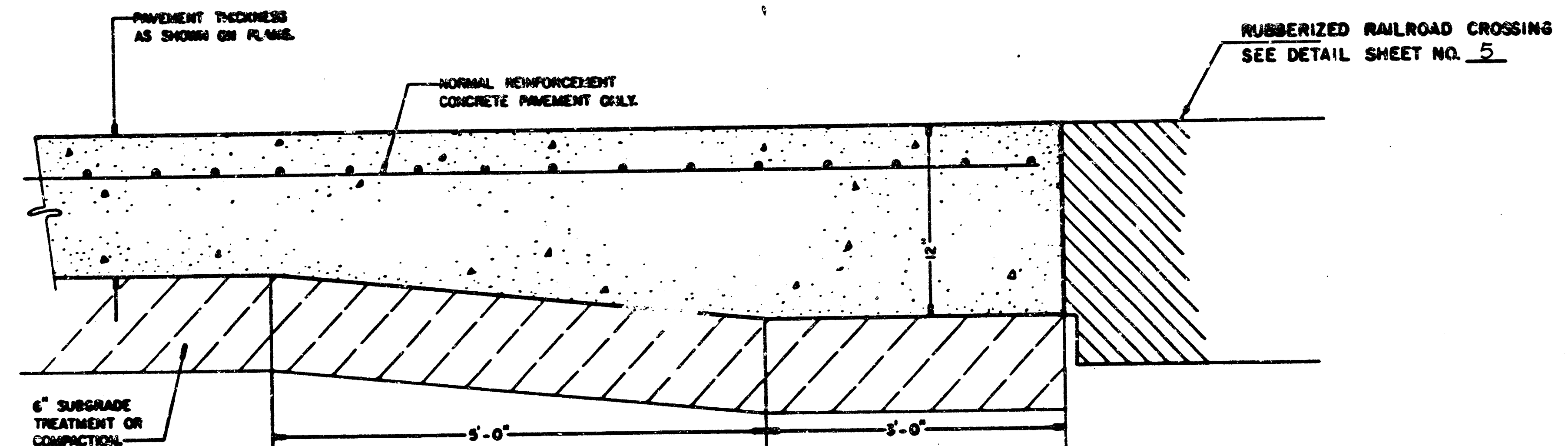
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES. ALL MATERIALS SHALL BE OF THE BEST QUALITY AND SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR THE PROTECTION OF ALL EXISTING UTILITIES.

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7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES. ALL MATERIALS SHALL BE OF THE BEST QUALITY AND SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR THE PROTECTION OF ALL EXISTING UTILITIES.



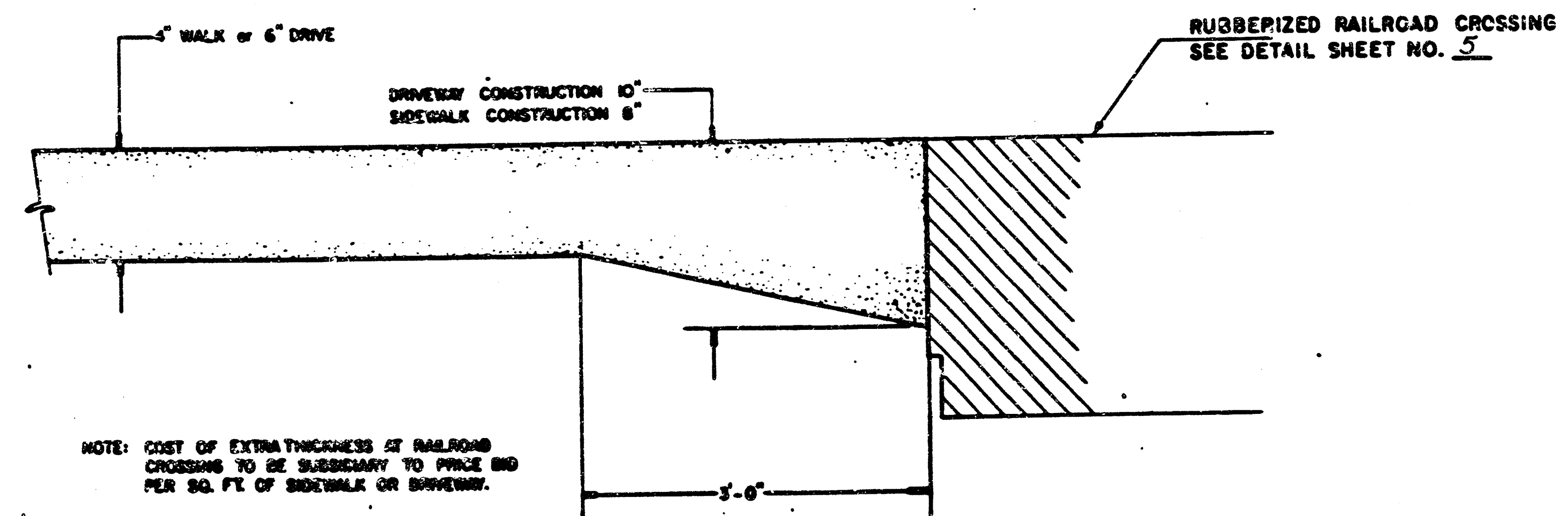
CROSS-SECTION DETAIL
PAVEMENT REMOVAL ABUTTING TRACKS
TO FACILITATE INSTALLATION OF
RUBBERIZED CROSSING
NO SCALE



NOTE: COST OF EXTRA THICKNESS AT RAILROAD CROSSING TO BE SUBSIDIARY TO PRICE BID PER SQ. YD. OF PAVEMENT.

NOTE: ONE THICKNESS OF TAR PAPER SHALL BE INSTALLED BY PAVING CONTRACTOR ON ALL MATING SURFACES BETWEEN PAVEMENT AND RAILROAD CROSSING MATERIAL TO BREAK ANY BOND BETWEEN PAVEMENT AND RAILROAD CROSSING MATERIAL.

CROSS-SECTION DETAIL
NEW PAVEMENT CONSTRUCTION
ABUTTING RUBBERIZED RAILROAD CROSSING
NO SCALE



NOTE: COST OF EXTRA THICKNESS AT RAILROAD CROSSING TO BE SUBSIDIARY TO PRICE BID PER SQ. FT. OF SIDEWALK OR DRIVEWAY.

NOTE: ONE THICKNESS OF TAR PAPER SHALL BE INSTALLED BY PAVING CONTRACTOR ON ALL MATING SURFACES BETWEEN SIDEWALK OR DRIVEWAY CONSTRUCTION AND RAILROAD CROSSING MATERIAL TO BREAK ANY BOND BETWEEN THE SIDEWALK OR DRIVEWAY PAVEMENT AND RAILROAD CROSSING MATERIAL.

CROSS-SECTION DETAIL
NEW SIDEWALK AND DRIVEWAY CONSTRUCTION
ABUTTING RUBBERIZED RAILROAD CROSSING
NO SCALE

CITY OF WICHITA, KANSAS
STANDARDS FOR PAVING MODIFICATION IN CONNECTION WITH
RUBBERIZED RAILROAD CROSSING INSTALLATION AT LOCATIONS WHERE
ALL EXISTING ABUTTING PAVEMENT IS REMOVED AND RECONSTRUCTED
8" REINFORCED CONCRETE PAVEMENT

SPECIAL NOTES

RUBBERIZED CROSSING MATERIAL SUPPLIER SHALL FURNISH ALL MATERIALS AND FASTENERS NECESSARY TO PROPERLY INSTALL THE RUBBERIZED CROSSING, INCLUDING RUBBER OR WOOD TIE SHIM CAP BOARD, AND ANY OTHER INCIDENTALS NECESSARY TO COMPLETE THE INSTALLATION. ALL SUCH MATERIALS SUPPLIED BY THE RUBBERIZED CROSSING MANUFACTURER SHALL BE INSTALLED BY THE INVOLVED RAILROAD COMPANY IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MATERIAL SUPPLIER.

INDIVIDUAL PIECES OF RUBBER OR WOOD CAP BOARDS SHALL NOT BE LESS THAN SIX (6) FEET LONG EXCEPT WHERE NECESSARY TO FURNISH SHORTER PIECES TO MATCH THE RUBBERIZED CROSSING LENGTH. SHORTER LENGTHS OF INDIVIDUAL RUBBER OR WOOD CAP BOARD PIECES SHALL NOT BE LESS THAN THREE (3) FEET. RUBBER OR WOOD CAPBOARDS SHALL BE INSTALLED SUCH THAT WHEN THE ABUTTING PAVEMENT IS CONSTRUCTED, THERE WILL BE SMOOTH VERTICAL SURFACES FORMED AT THE JUNCTURE BETWEEN THE PAVEMENT AND THE CAP BOARD FOR THE FULL DEPTH OF THE PAVEMENT WITHOUT ANY PAVEMENT COMING INTO DIRECT CONTACT WITH THE RAILROAD CROSS TIES. ONE THICKNESS OF TAPPAPER SHALL BE INSTALLED BY THE PAVING CONTRACTOR ON ALL MATING SURFACES BETWEEN THE PAVEMENT AND THE RAILROAD CROSSING MATERIAL TO BREAK ANY BOND BETWEEN THE PAVEMENT AND THE RAILROAD CROSSING MATERIAL.

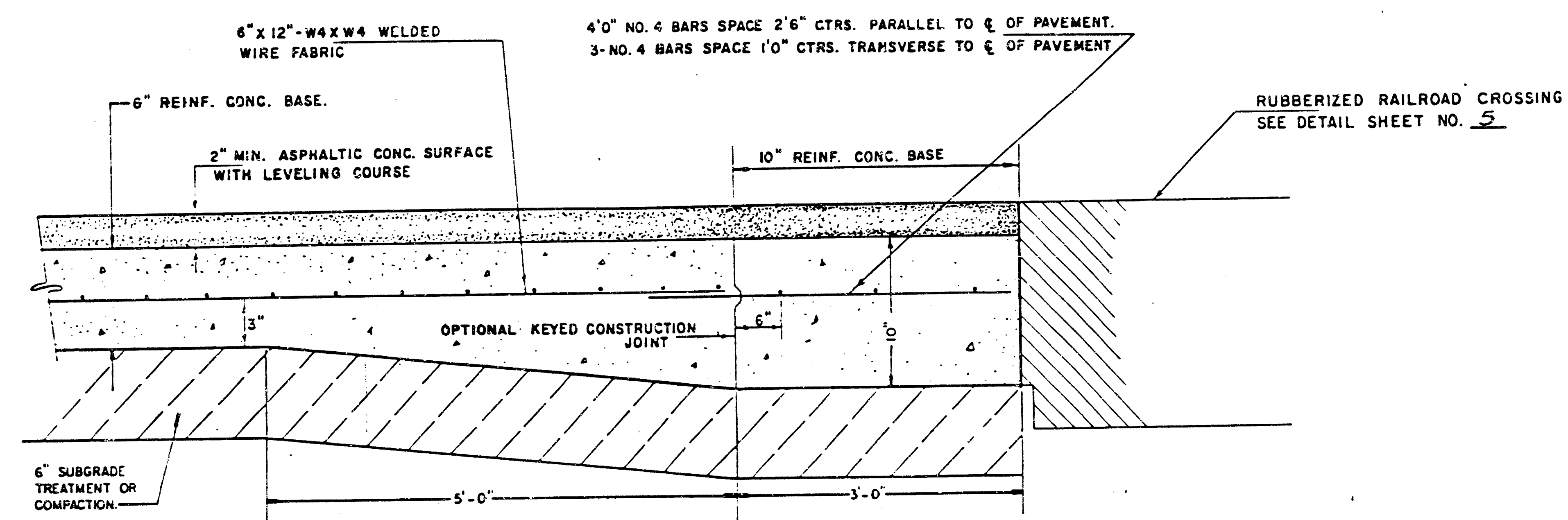
LOCATION OF RUBBER OR WOOD TIE SHIM CAP BOARD AS SHOWN ON DETAIL DRAWING WILL REQUIRE INSTALLATION OF REDWOOD SHIMS ON THE ENDS OF RAILROAD CROSS TIES WHICH ARE LESS THAN 4' - 3" FOR 8' - 6" TIES AND 4' - 6" FOR 9' - 0" TIES FROM CENTERLINE OF THE TRACK. LOCATION OF RUBBER OR WOOD TIE SHIM CAP BOARD AS SHOWN ON DETAIL DRAWINGS WILL ALSO REQUIRE ENDS OF RAILROAD CROSS TIES BE CUT OFF WHERE ENDS OF SUCH TIES ARE MORE THAN 4' - 3" FOR 8' - 6" TIES AND 4' - 6" FOR 9' - 0" TIES FROM THE CENTERLINE OF THE TRACK.

EXISTING PAVEMENT SHALL BE REMOVED BY THE PAVING CONTRACTOR. PAVEMENT IMMEDIATELY ADJACENT TO AND WITHIN THREE (3) FEET OF THE CROSSING SHALL BE REMOVED PRIOR TO THE INSTALLATION OF NEW RAILROAD CROSSING MATERIALS. PAVING CONTRACTOR SHALL COORDINATE THE PAVEMENT REMOVAL AT EACH CROSSING LOCATION WITH THE INVOLVED RAILROAD COMPANY. ALL EXPOSED JOINTS BETWEEN NEW CONSTRUCTION AND EXISTING PAVEMENT, WALK OR DRIVES SHALL BE TO MEET LINES FORMED EITHER BY SAW CUT OR EXISTING JOINT.

LENGTHS OF RUBBERIZED CROSSING MATERIAL SHOWN ON THE PLANS IN MOST CASES ARE TO EXTEND THREE (3) FEET BEYOND BOTH SIDES OF THE PAVED MAIN TRAFFICWAY FOR EACH LOCATION. WOOD PLANKING SHALL BE INSTALLED BY THE INVOLVED RAILROAD COMPANY OUTSIDE THE LIMITS OF THE RUBBERIZED INSTALLATION FOR SIDEWALK, DRIVEWAY AND SHOULDER CROSSINGS WHERE NECESSARY. THE INVOLVED RAILROAD COMPANIES SHALL ADJUST THEIR RAILS TO ELEVATIONS AS SHOWN ON THE PLANS FOR EACH CROSSING LOCATION. VARIATIONS FROM THE TOP OF RAIL ELEVATIONS SHOWN WILL BE PERMITTED ONLY WHEN APPROVED BY THE FIELD ENGINEER FOR ANTICIPATED TRACK SETTLEMENT.

SURFACE OF NEW PAVEMENT AND RUBBERIZED CROSSING MATERIAL SHALL BE SET TO IDENTICAL ELEVATIONS AT THEIR POINT OF JUNCTURE ONLY WHEN THE RAILROAD COMPANY USES APPROVED MECHANICAL EQUIPMENT TO COMPACT RAILROAD FILL AND BALLAST SUCH TO PRECLUDE TRACK SETTLEMENT. RAILROAD TRACK AND RUBBERIZED CROSSING MATERIAL ELEVATIONS OR PAVEMENT ELEVATIONS SHALL BE ADJUSTED IN A RANGE OF ONE-FOURTH (1/4) INCH TO ONE (1) INCH TO ALLOW FOR TRACK SETTLEMENT WHEN THE RAILROAD COMPANY USES HAND METHODS FOR COMPACTION OF RAILROAD FILL AND BALLAST OR USE OF OTHER COMPACTION METHODS WHICH MAY NOT PRECLUDE TRACK SETTLEMENT. THE EXACT ELEVATION DIFFERENTIAL BETWEEN CROSSING MATERIAL AND PAVEMENT SHALL BE DETERMINED BY THE RAILROAD BASED ON THEIR EXPERIENCE FOR TRACK SETTLEMENT WITH CONCURRENCE BY THE ENGINEER.

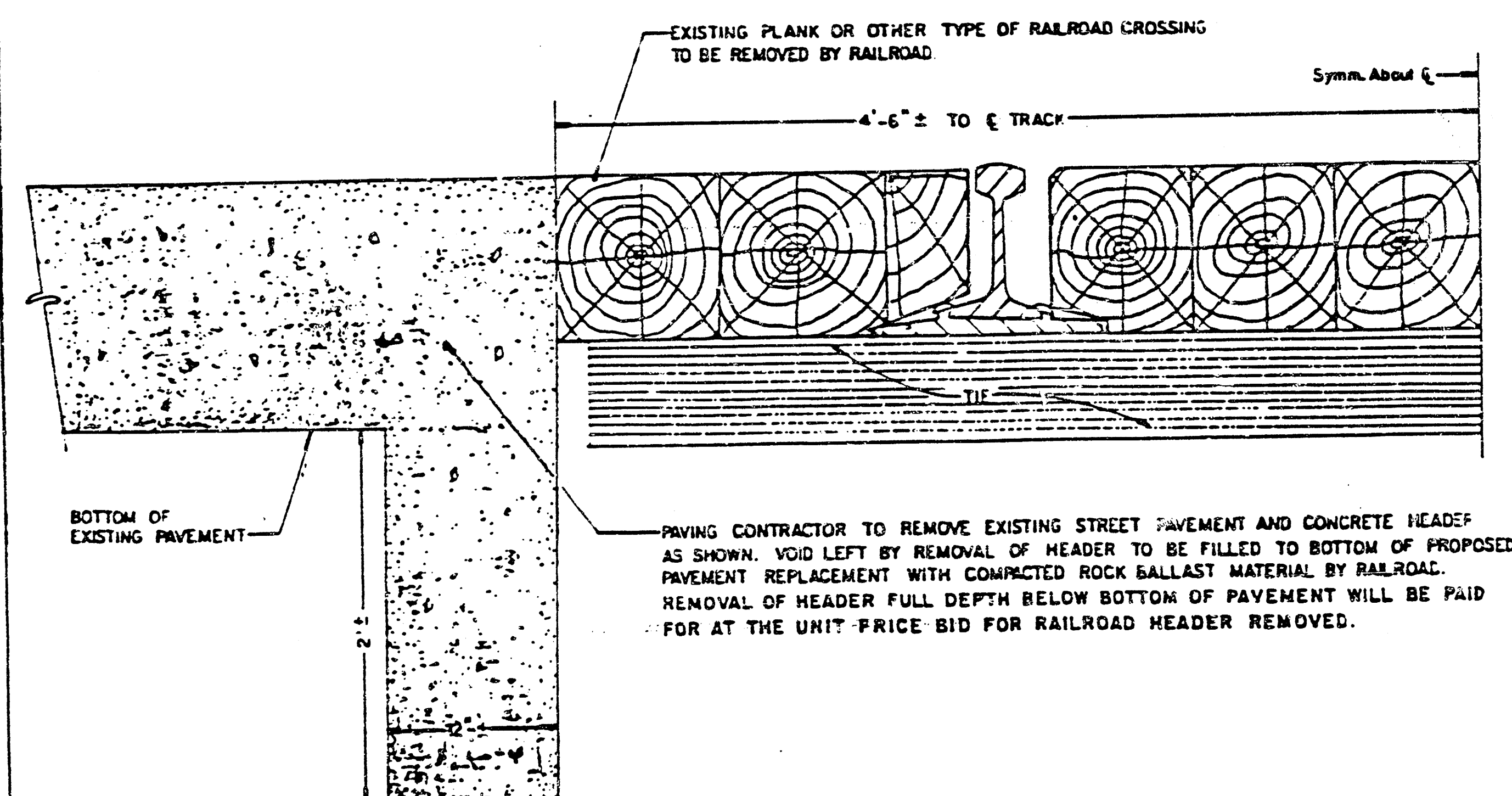
INDIVIDUAL SECTIONS OF THE RUBBERIZED CROSSING MATERIAL SHALL BE OFFSET AT LEAST ONE TIE SPACE FROM EACH OTHER SUCH THAT THE ENDS OF THE RUBBERIZED CROSSING WILL MORE CLOSELY CONFORM TO SIDEWALK OR PAVEMENT CURB ALIGNMENTS WHERE RAILROAD CROSSINGS ARE SKEWED THIRTY (30) DEGREES OR MORE TO THE STREET.



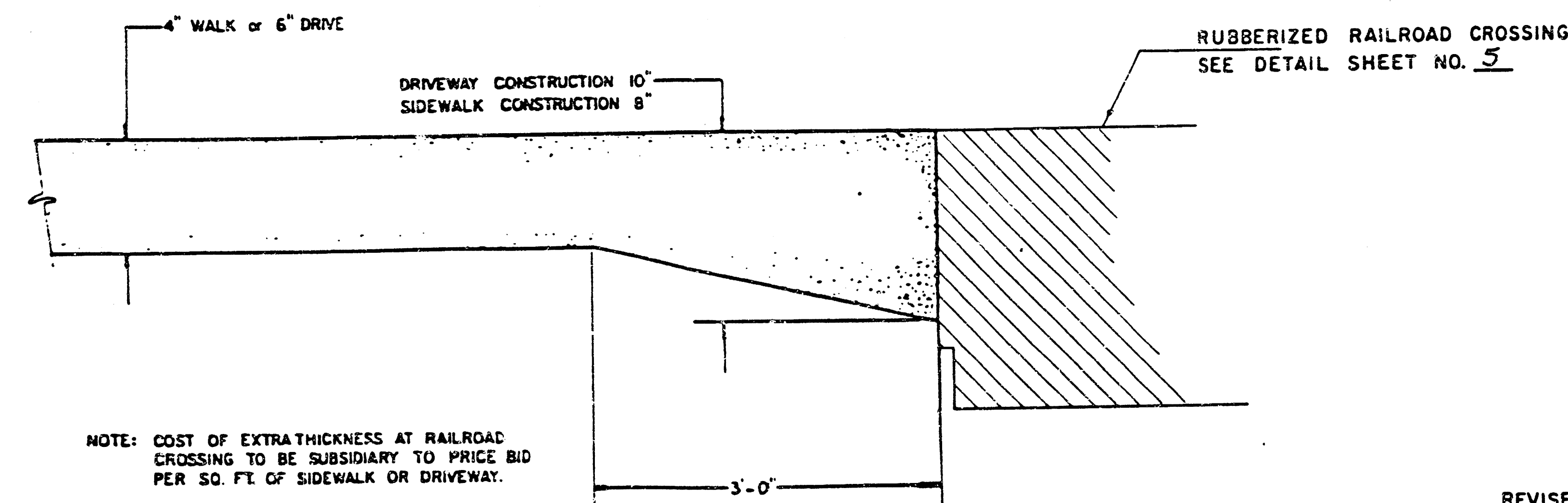
NOTE: COST OF EXTRA CONC. BASE THICKNESS AT RAILROAD CROSSING TO BE SUBSIDIARY TO PRICE BID PER SQ. YD. OF PAVEMENT.

NOTE: ONE THICKNESS OF TAR PAPER SHALL BE INSTALLED BY PAVING CONTRACTOR ON ALL MATING SURFACES BETWEEN PAVEMENT AND RAILROAD CROSSING MATERIAL TO BREAK ANY BOND BETWEEN PAVEMENT AND RAILROAD CROSSING MATERIAL.

CROSS-SECTION DETAIL
NEW PAVEMENT CONSTRUCTION
ABUTTING RUBBERIZED RAILROAD CROSSING
NO SCALE



CROSS-SECTION DETAIL
PAVEMENT REMOVAL ABUTTING TRACKS
TO FACILITATE INSTALLATION OF
RUBBERIZED CROSSING
NO SCALE



NOTE: COST OF EXTRATHICKNESS AT RAILROAD CROSSING TO BE SUBSIDIARY TO PRICE BID PER SQ. FT. OF SIDEWALK OR DRIVEWAY.

NOTE: ONE THICKNESS OF TAR PAPER SHALL BE INSTALLED BY PAVING CONTRACTOR ON ALL MATING SURFACES BETWEEN SIDEWALK OR DRIVEWAY CONSTRUCTION AND RAILROAD CROSSING MATERIAL TO BREAK ANY BOND BETWEEN THE SIDEWALK OR DRIVEWAY PAVEMENT AND RAILROAD CROSSING MATERIAL.

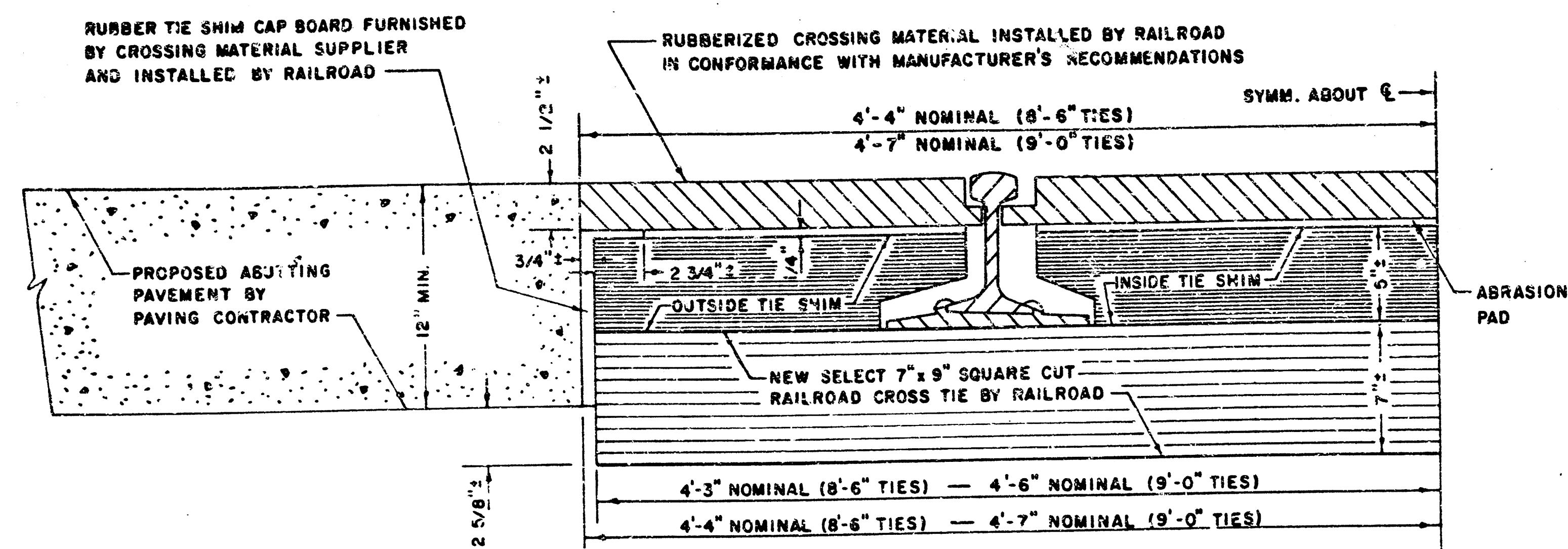
CROSS-SECTION DETAIL
NEW SIDEWALK AND DRIVEWAY CONSTRUCTION
ABUTTING RUBBERIZED RAILROAD CROSSING
NO SCALE

REVISED: MARCH 1988

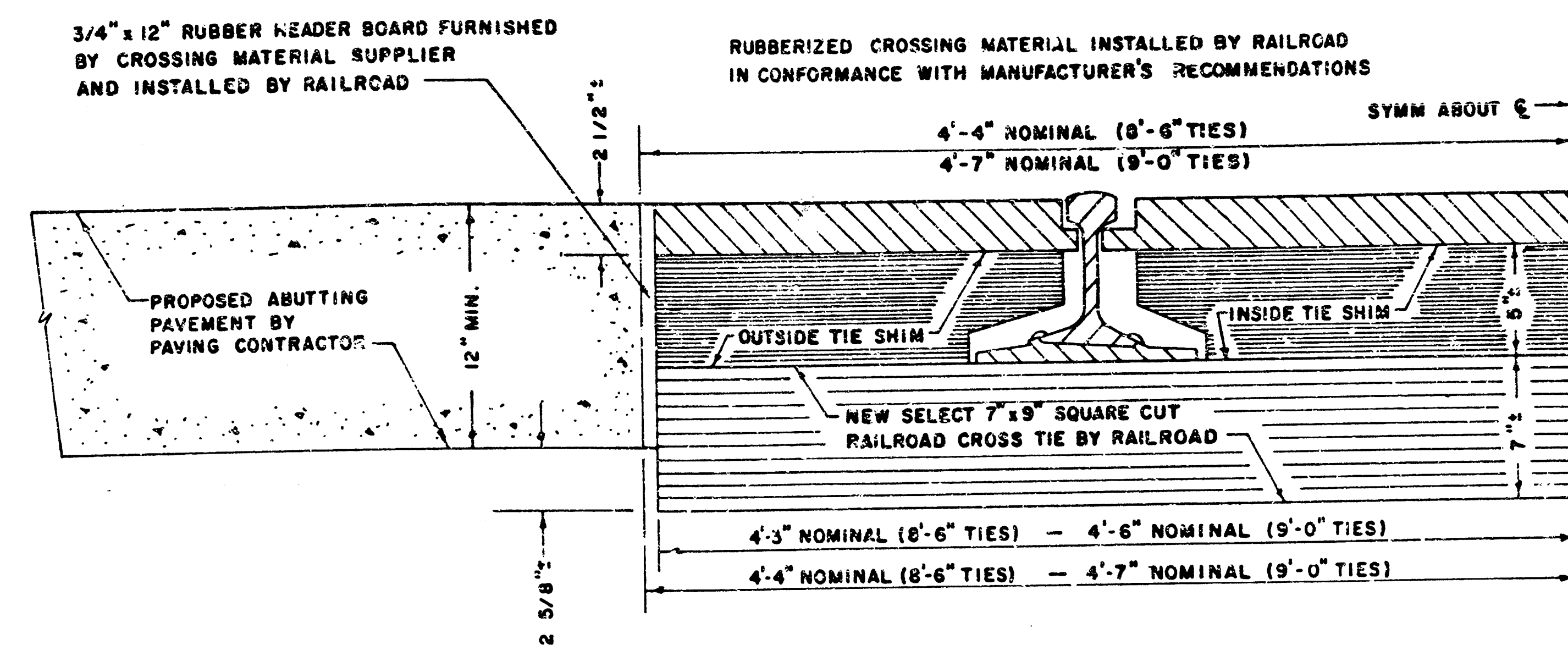
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CITY OF WICHITA, KANSAS
STANDARDS FOR PAVING MODIFICATION IN CONNECTION WITH
RUBBERIZED RAILROAD CROSSING INSTALLATION AT LOCATIONS WHERE
ALL EXISTING ABUTTING PAVEMENT IS REMOVED AND RECONSTRUCTED
8" PAVEMENT
(2" ASPH. CONC. SURFACE WITH 6" REINF. CONC. BASE)

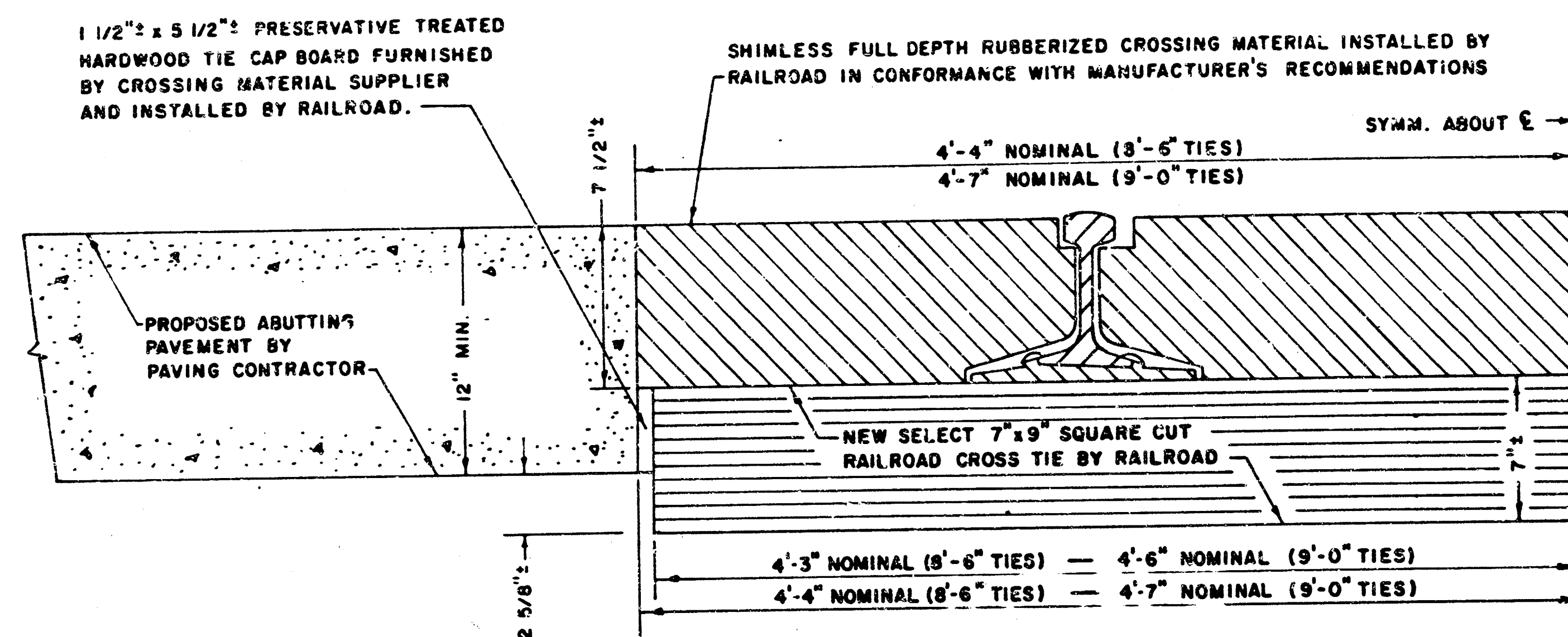
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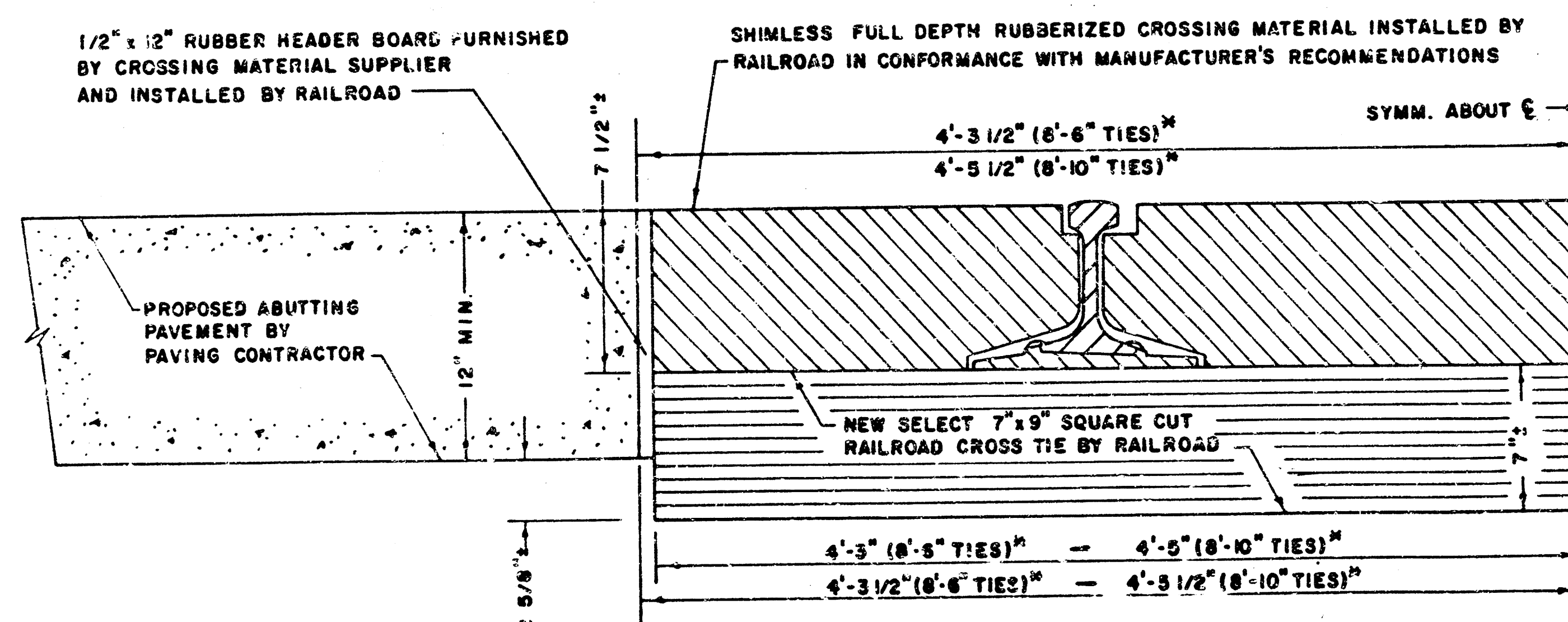
CROSS-SECTION DETAIL
RUBBER PADS WITH WOOD TIE SHIMS
NO SCALE



CROSS-SECTION DETAIL
RUBBER PADS WITH WOOD TIE SHIMS (ALTERNATE)
NO SCALE



CROSS-SECTION DETAIL
FULL DEPTH RUBBER PADS (ALTERNATE)
NO SCALE



* - TIES TO BE CUT AND FRAMED IN FACTORY OR IN FIELD.

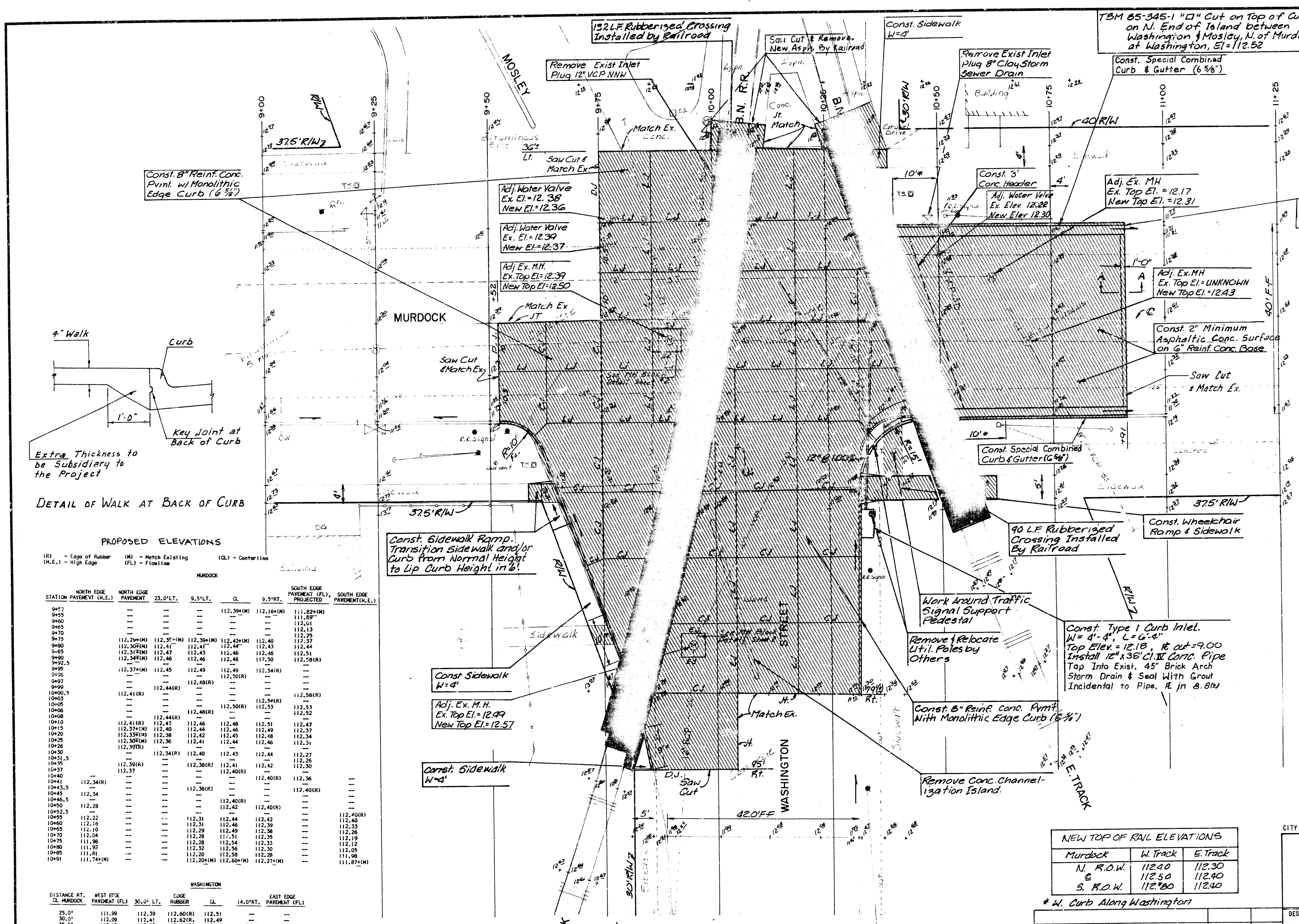
CROSS-SECTION DETAIL
FULL DEPTH RUBBER PADS
NO SCALE

NOTE: SEE SPECIAL NOTES ON PAVING MODIFICATION OR PAVING APPROACH DETAIL SHEET FOR ADDITIONAL APPLICABLE REQUIREMENTS PERTAINING TO WORK SHOWN ON THIS SHEET.

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CITY OF WICHITA, KANSAS
STANDARDS FOR:
RUBBERIZED RAILROAD CROSSING
INSTALLATION DETAILS

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LEGEND

SYMBOL

DESCRIPTION

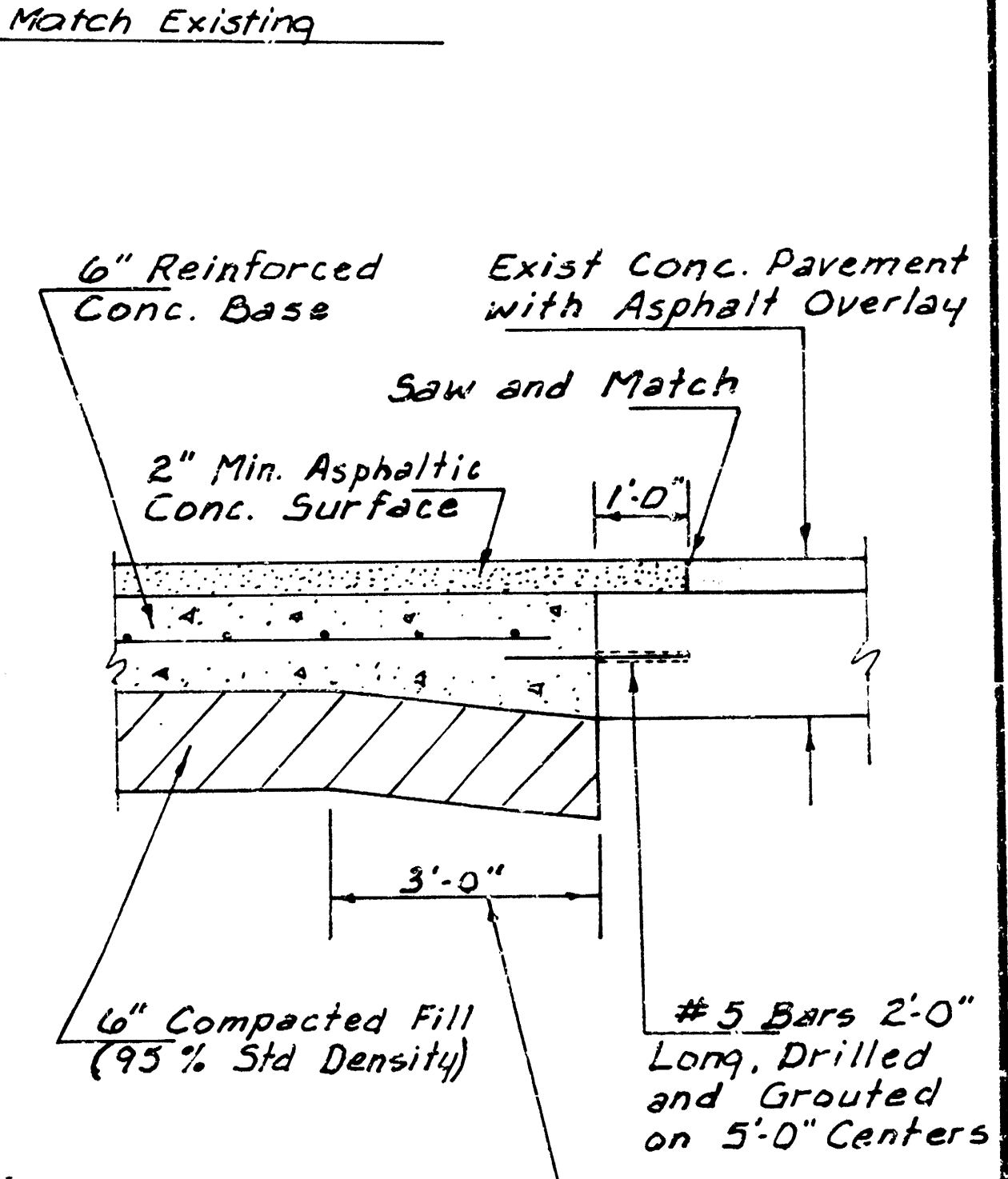
REMOVE EXISTING CONCRETE PAVT. CURB AND GUTTER, SIDEWALK AND BITUMINOUS PAVT. AND REPLACE AS SHOWN. (BY PAVING CONTRACTOR)

RUBBERIZED CROSSING MATERIAL (INSTALLED BY RAILROAD)

NOTES:

Transition curb from full height to no curb in length indicated.

Sidewalks are to be removed to the nearest existing joint.



SECTION A-A
WATER VALVE ADJUSTMENT TABLE

STA	LT & RT	EXIST'G EL.	NEW EL.
9+76	15' LT	112.39	112.30
9+77	21' LT	112.38	112.36
10+50	13.5' LT	112.22	112.30

NOTE: DUE TO RAILROAD COMPANIES BUDGET CONSTRAINTS, WORK ON THIS CROSSING WILL NOT PROCEED UNTIL SPRING OF 1990.

CITY OF WICHITA PROJECT NO. 472-76-275-81499-000-001

WICHITA, KANSAS

RUBBERIZED RAILROAD CROSSING

WASHINGTON AT MURDOCK (SITE NO. 1)

PAVING PLAN

DESIGN: CM

DRAWN: JAR/HEK

WILSON & COMPANY
ENGINEERS & ARCHITECTS
WICHITA - KANSAS

DATE: FEB. 1986

FILE NO. 85-345

SHEET NO. 6 OF 10

2-11-86

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TBM REBAR - Sta. 9+00 Rebar set in Ground at Approx. Middle of Grass Median 15' Lt. of R, El. = 91.59

LEGEND

SYMBOL	DESCRIPTION
	REMOVE EXISTING CONCRETE PAVT. CURB AND GUTTER, SIDEWALK AND BITUMINOUS PAVT. AND REPLACE AS SHOWN. (BY PAVING CONTRACTOR)
	RUBBERIZED CROSSING MATERIAL (INSTALLED BY RAILROAD)

NOTE:

* Transition curb from full height to no curb in 10'.

PROPOSED ELEVATIONS

(R) - Edge of Rubber (CL) - Centerline
(M) - Match Existing (FL) - Flowline
(H.F.) - High Edge

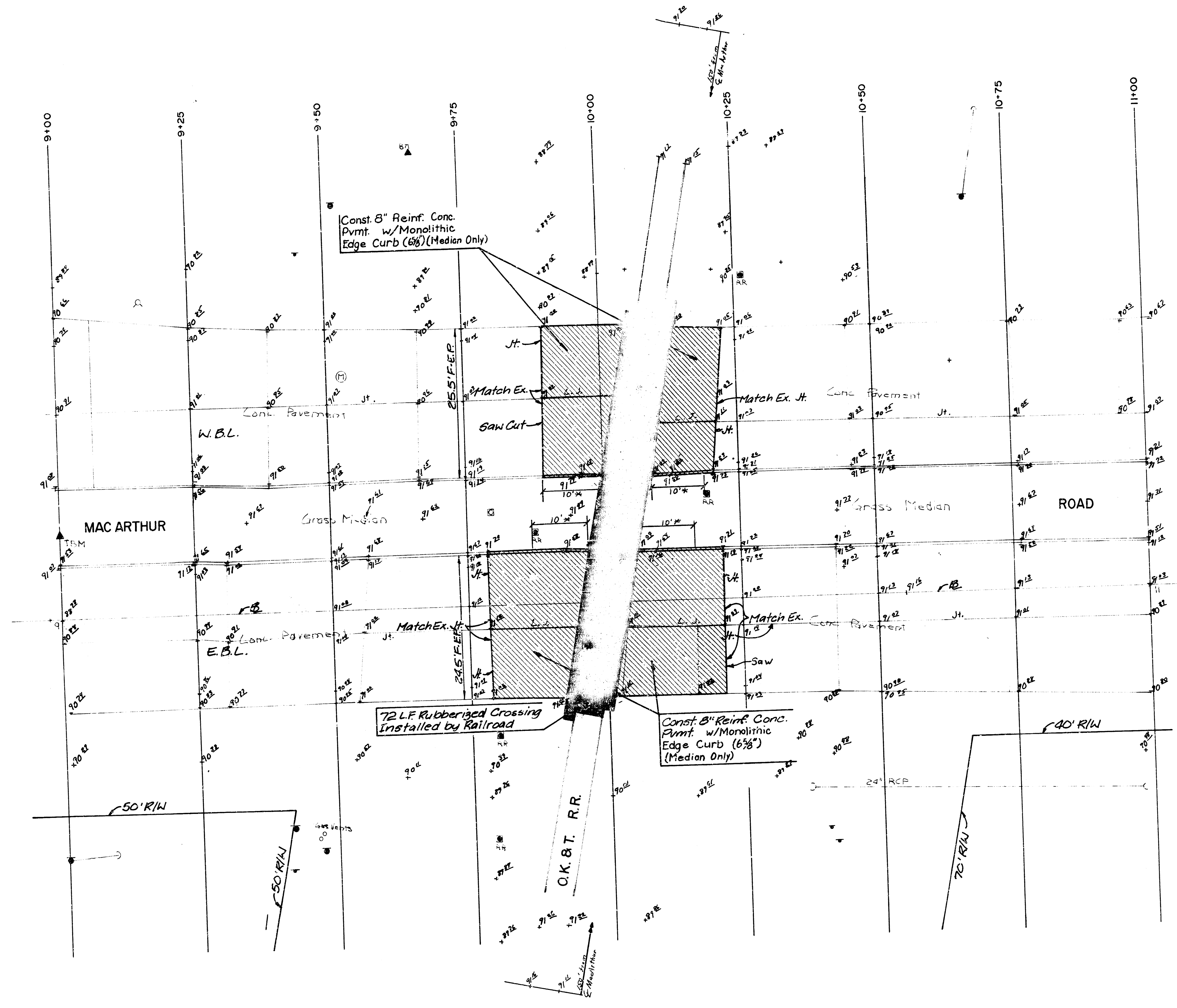
WEST BOUND LANES

STATION	NORTH EDGE PAVEMENT	CL	SOUTH EDGE PAVEMENT (FL)
9+89	91.00+(M)	91.00+(M)	91.18+(M)
9+95	91.08	91.09	91.15
10+00	91.14	91.17	91.20(R)
10+05	91.20(R)	---	---
10+09	---	---	91.20(R)
10+14	91.20(R)	91.17	91.21
10+20	91.10	91.12	91.23+(M)
10+23	91.05+(M)	---	---

EAST BOUND LANES

STATION	NORTH EDGE PAVEMENT (FL)	CL	SOUTH EDGE PAVEMENT
9+79	91.20+(M)	91.12+(M)	91.06+(M)
9+85	91.20	91.15	91.12
9+90	91.20	91.18	91.18
9+92	91.20	91.19	91.20(R)
9+95	91.20	91.20(R)	---
10+01	91.20(R)	---	91.20(R)
10+04	---	91.20(R)	91.17
10+06	91.20(R)	91.19	91.16
10+10	91.19	91.16	91.12
10+15	91.19	91.13	91.08
10+20	91.18	91.10	91.04
10+22	91.18+(M)	91.09+(M)	91.02+(M)

NOTE: Only a full thickness Rubberized Crossing material may be used for this Crossing.



MAC ARTHUR, WEST OF BROADWAY (SITE NO. 2)

NEW TOP OF RAIL ELEVATIONS	
	Track 1
N. Edge of Pavement	91.18
S. Edge of Pavement	91.20
	91.22

SCALE IN FEET
CITY OF WICHITA PROJECT NO. 472-76-245-81499-000-000-001

WICHITA, KANSAS
RUBBERIZED RAILROAD CROSSING
MACARTHUR, WEST OF BROADWAY (SITE NO. 2)
PAVING PLAN

REVISION	DATE	BY

DESIGN JMO/CM	DRAWN MEK/JMK	WILSON & COMPANY ENGINEERS & ARCHITECTS WICHITA - KANSAS	DATE: FEB. 1986
			FILE NO. 85-345
			SHEET NO. 7 OF 10

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MANHOLE FRAME AND COVER DETAIL

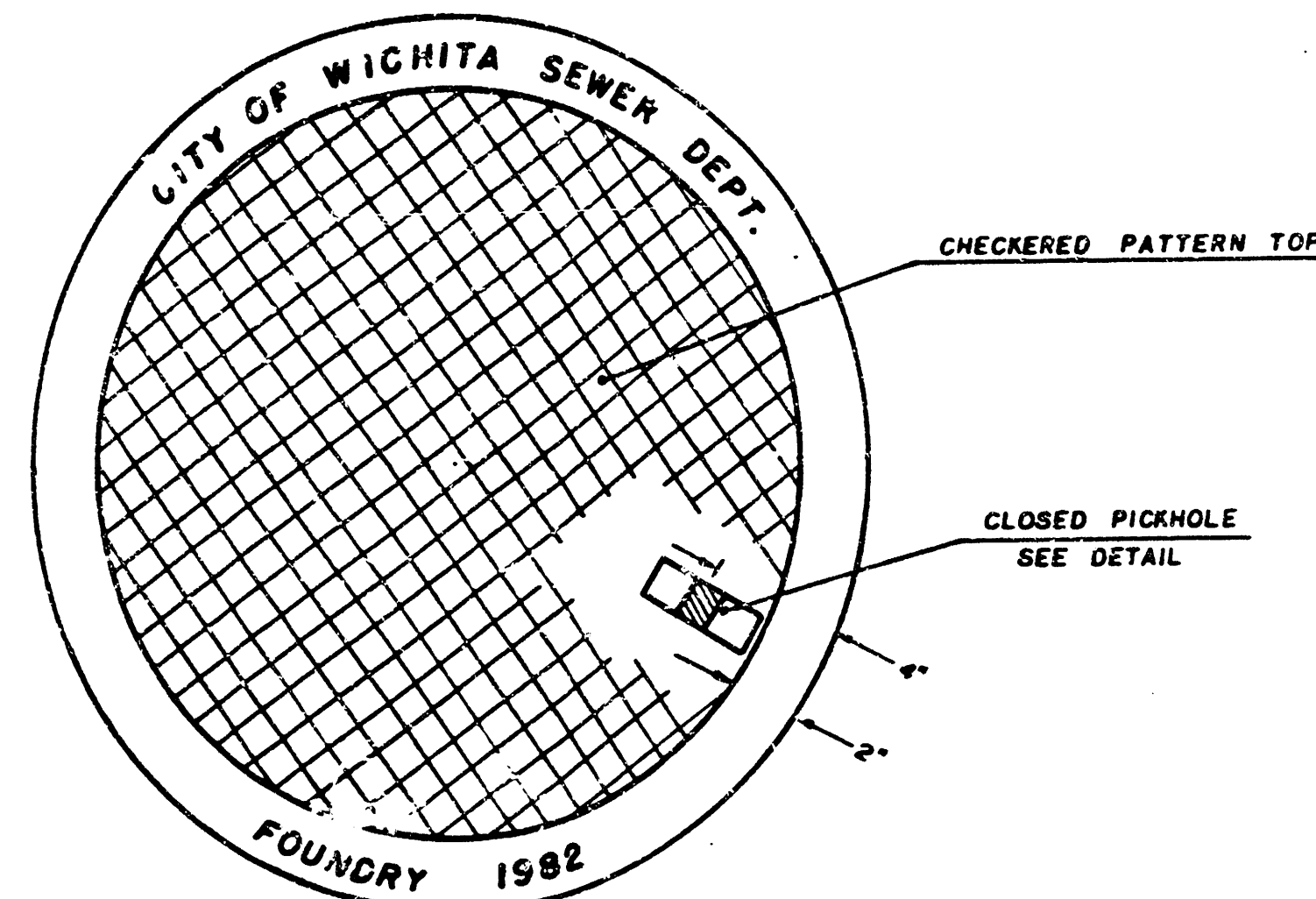
ADOPTED AS STANDARD DESIGN

BY

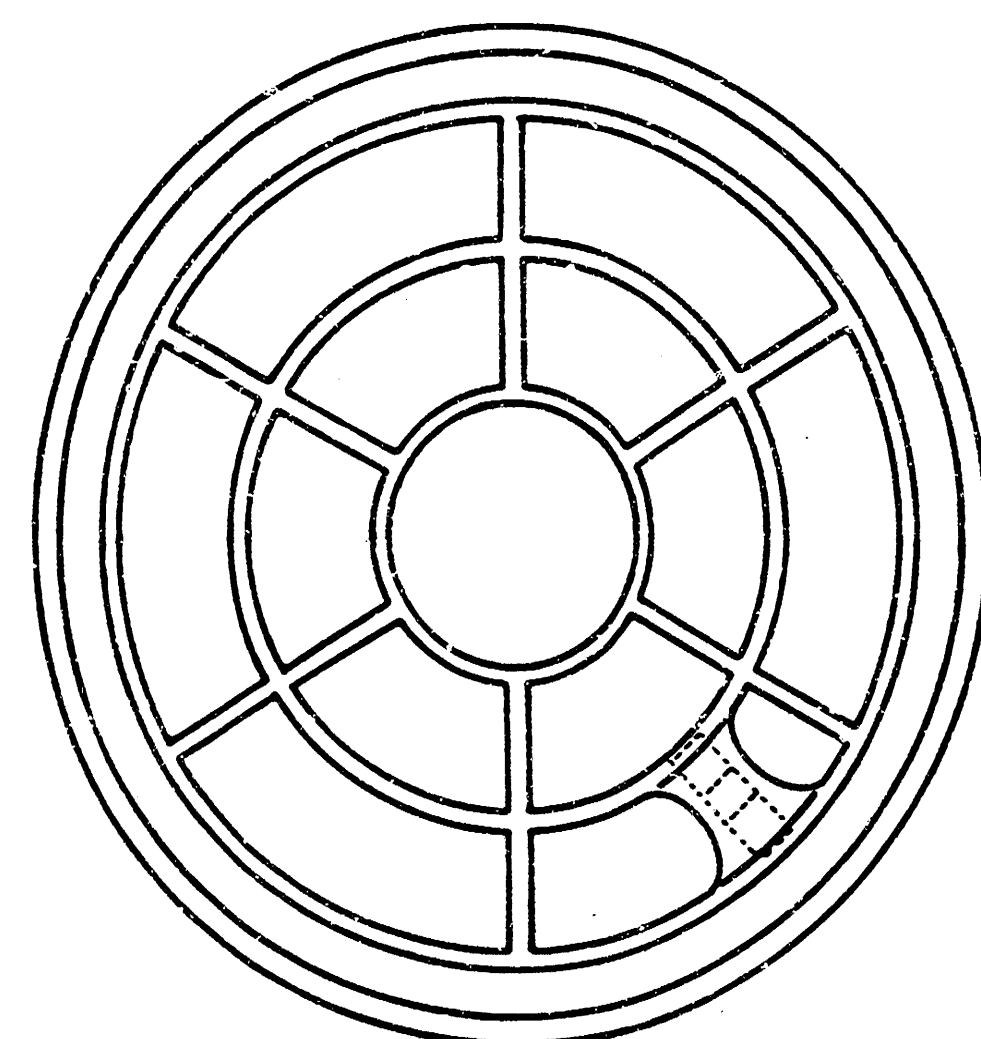
City of Wichita, Kansas

MANHOLE COVER

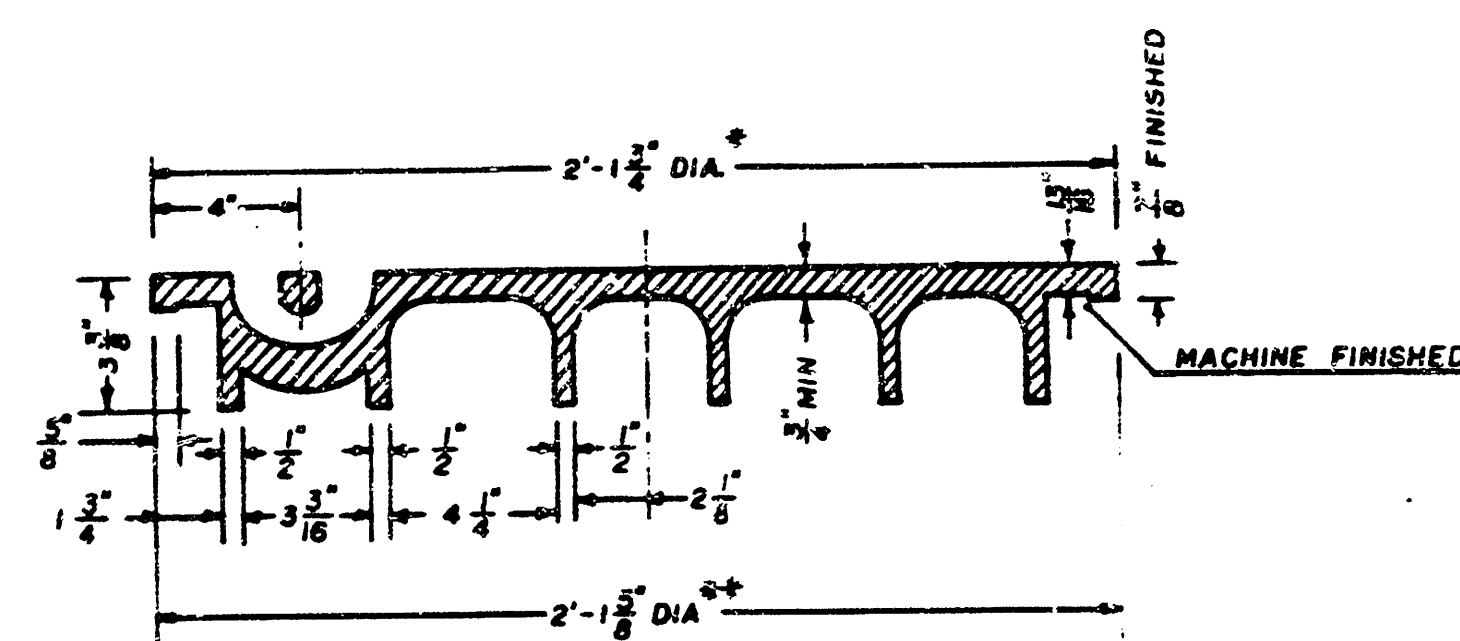
Weight: 180 Lbs.



TOP VIEW



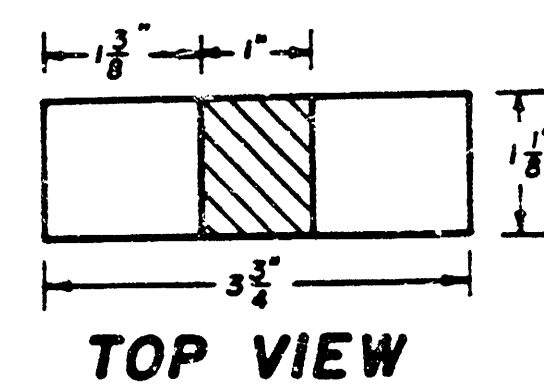
BOTTOM VIEW



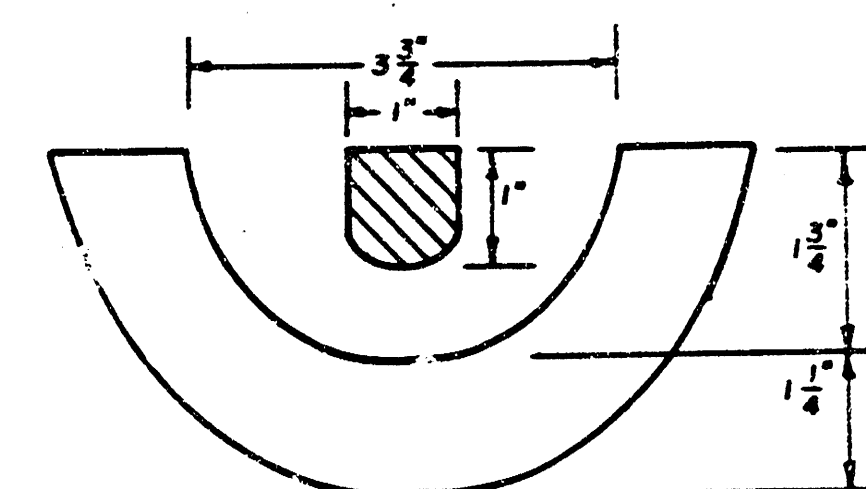
SECTION VIEW

* OUTSIDE DIA. TOP OF COVER
** OUTSIDE DIA. BOTTOM OF COVER

PICKHOLE DETAIL



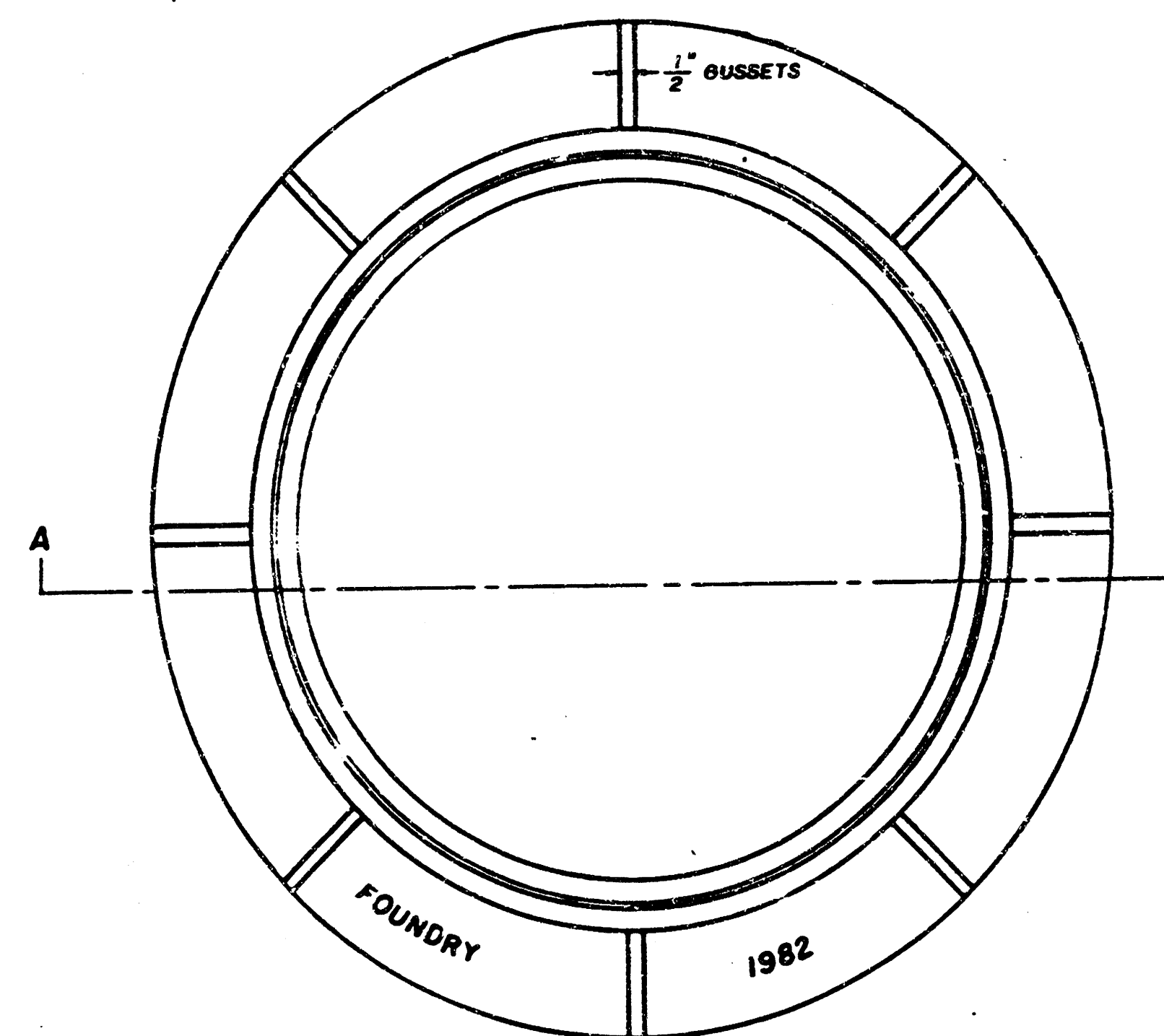
TOP VIEW



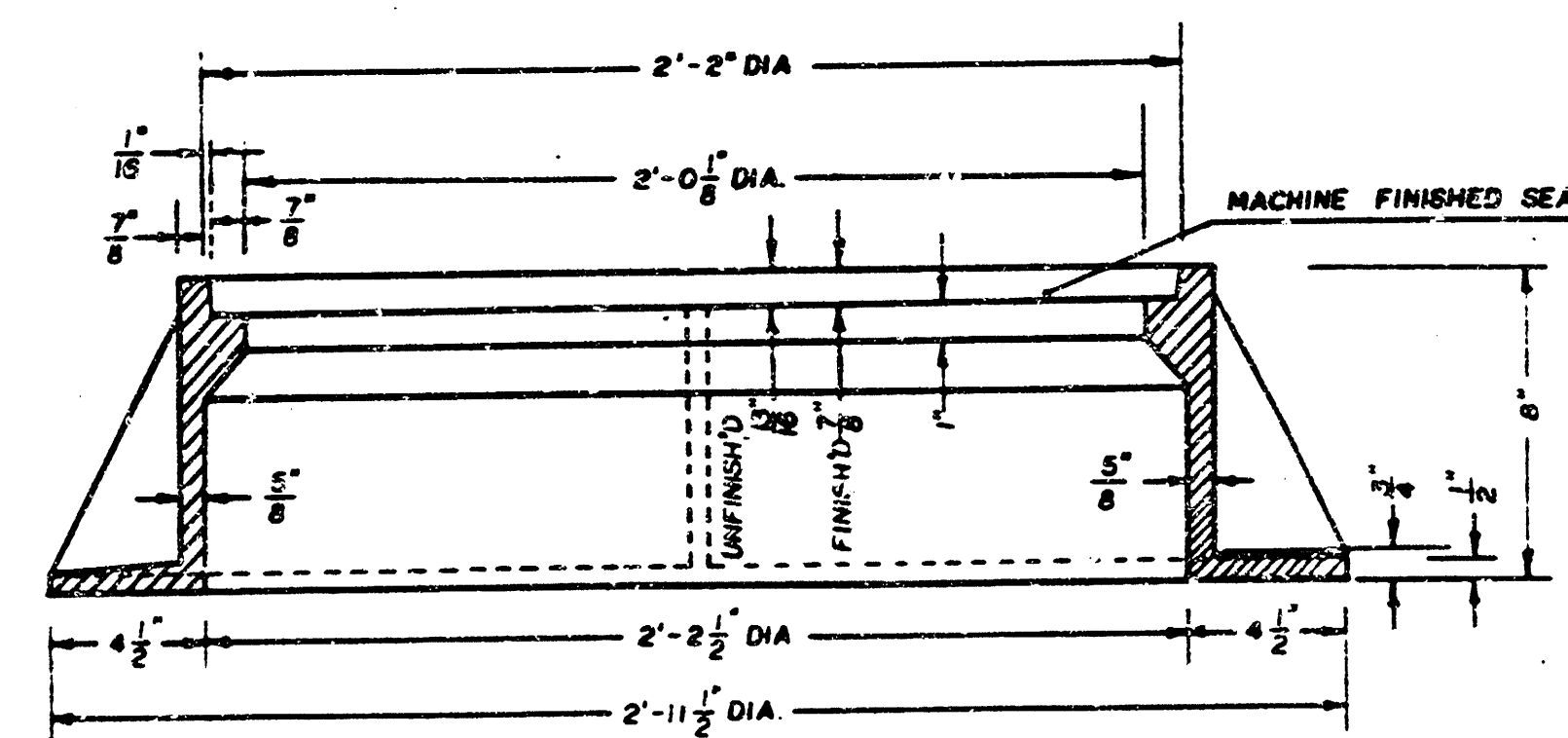
SECTION VIEW

MANHOLE FRAME

Weight: 240 Lbs.



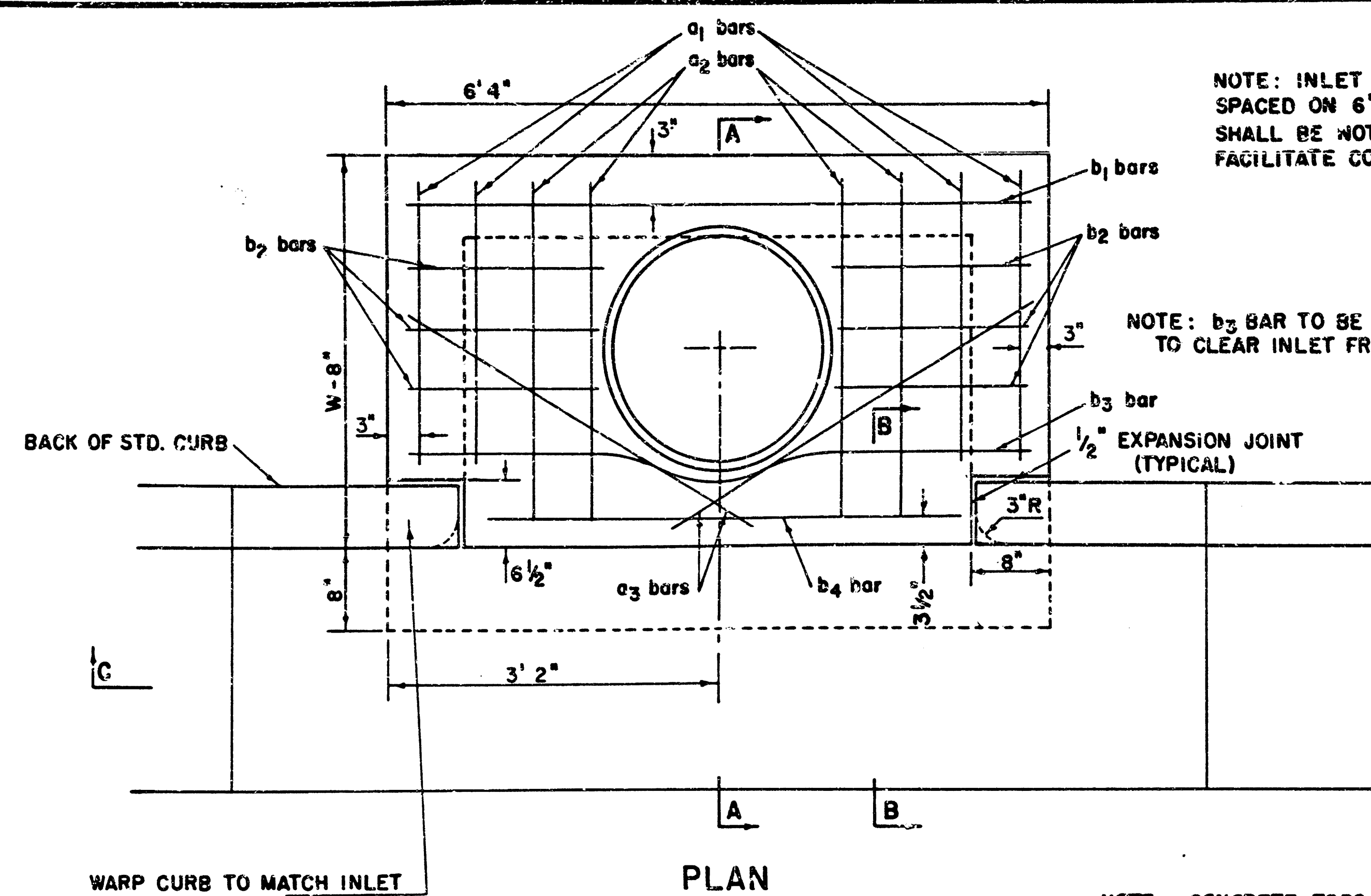
TOP VIEW



SECTION A-A

GENERAL NOTES

1. MANHOLE CASTINGS SHALL BE MANUFACTURED USING GOOD QUALITY GRAY IRON CONFORMING TO CLASS 30 OF A.S.T.M. DESIGNATION A-48. DIMENSIONS AND WEIGHTS SHOWN ON THE DETAILED DRAWINGS SHALL BE CONSIDERED AS MINIMUM REQUIREMENTS AND ANY DEVIATIONS FROM THE DIMENSIONS SHOWN MUST BE SPECIFICALLY APPROVED. THE FINISHED CASTINGS SHALL BE OF UNIFORM QUALITY, FREE FROM BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTIONS OF OTHER DEFECTS.
2. MANHOLE CASTINGS SHALL BE COATED WITH AN ASPHALT PAINT RESULTING IN A SMOOTH, TOUGH AND TENACIOUS COATING WHICH IS NOT BRITTLE OR TACKY.
3. MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE FRAME TO CLOSE TOLERANCES.
4. THE OUTSIDE CIRCUMFERENCE OF THE VERTICAL FACE OF THE COVER AND THE INSIDE CIRCUMFERENCE OF THE VERTICAL FACE IN THE FRAME RECESS SHALL BE MANUFACTURED TO TOLERANCES SUCH THAT THE CLEARANCE BETWEEN THE COVER AND FRAME WILL NOT EXCEED 1/8" AT ANY POINT AROUND THE CIRCUMFERENCE OF THE COVER. THE SEATING SURFACES BETWEEN THE COVER AND FRAME SHALL BE MACHINED SUCH THAT THESE SURFACES SHALL MAKE FULL CONTACT FOR THEIR FULL CIRCUMFERENCE TO PRECLUDE THE COVER FROM ROCKING IN THE FRAME.
5. THE MANHOLE FRAME AND COVER SHALL BE MARKED WITH LETTERING INDICATING THE NAME OF THE MANUFACTURER AND THE YEAR WHEN THE COVER OR FRAME WAS CAST. THE COVER SHALL BE FURTHER IDENTIFIED WITH REGARDS TO OWNERSHIP USING LETTERS AT LEAST 1" IN HEIGHT. THIS IDENTIFICATION SHALL BE "CITY OF WICHITA SEWER DEPARTMENT". THE WORD DEPARTMENT MAY BE ABBREVIATED. THE TEXTURE OF THE TOP SURFACE OF THE COVER SHALL BE MANUFACTURED IN A CHECKERED PATTERN DESIGN AS INDICATED ON THE DRAWINGS. SMOOTH BLOCKOUTS SHALL BE UTILIZED TO HIGHLIGHT THE LETTERING ON THE COVER SURFACE. THE TOTAL AREA OF SMOOTH SURFACE BLOCKOUT SHALL NOT EXCEED THE AREA AS INDICATED ON THE DRAWING. POSITIONING OF SMOOTH BLOCKOUTS AND LETTERING MAY VARY FROM THAT SHOWN ON THE DETAILED DRAWING.



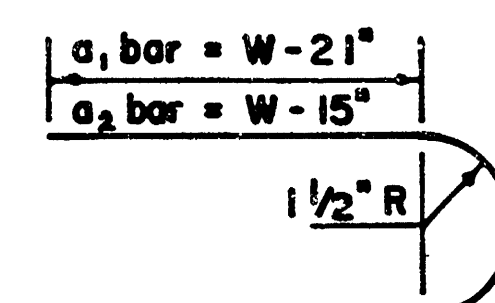
PLAN

STEEL SCHEDULE

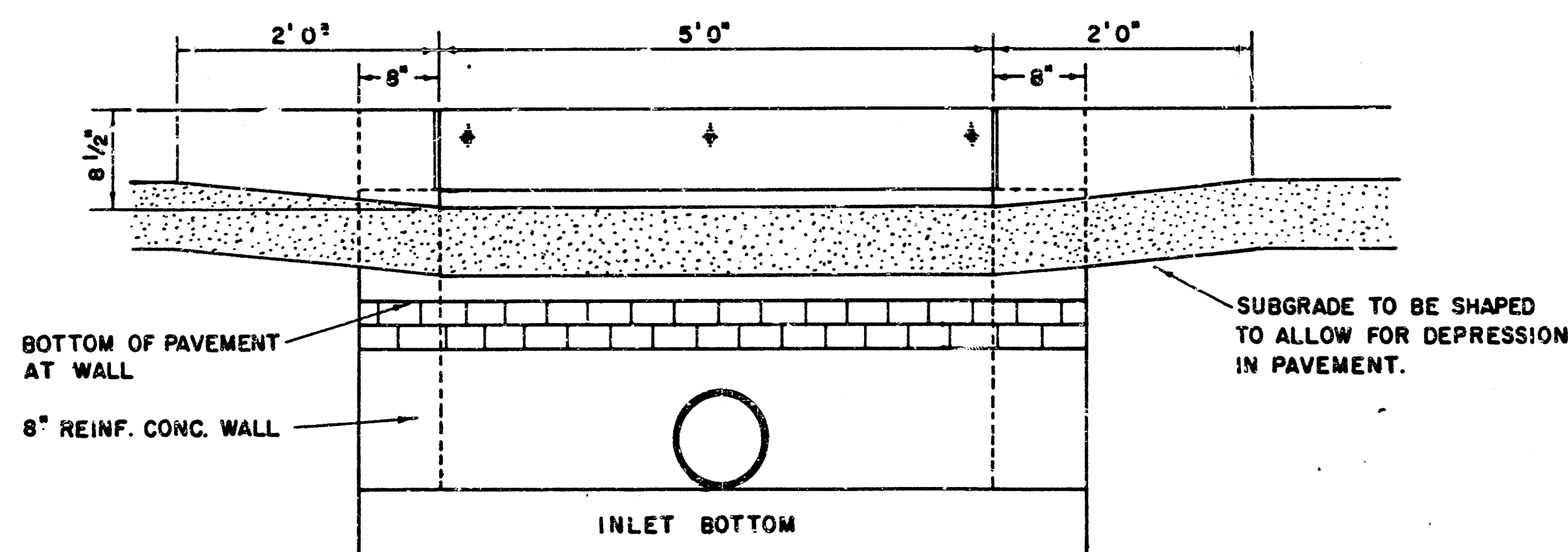
BAR	a ₁	a ₂	a ₃	b ₁	b ₂	b ₃	b ₄	WT. LBS.
NUMBER	4	4	2	1	3	5	7	9
SIZE	*4	*4	*4	*4	*4	*4	*4	*6
W = 4' 4"	5' 7"	6' 7"	4' 0"	6' 1"	-	-	-	1' 9"
W = 5' 4"	7' 7"	8' 7"	5' 0"	-	6' 1"	-	-	1' 9"
W = 6' 4"	9' 7"	10' 7"	6' 0"	-	-	6' 1"	-	1' 9"
W = 7' 4"	11' 7"	12' 7"	7' 0"	-	-	-	6' 1"	1' 9"
W = 8' 4"	13' 7"	14' 7"	8' 0"	-	-	-	-	6' 1"

NOTE: a₃ BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER.

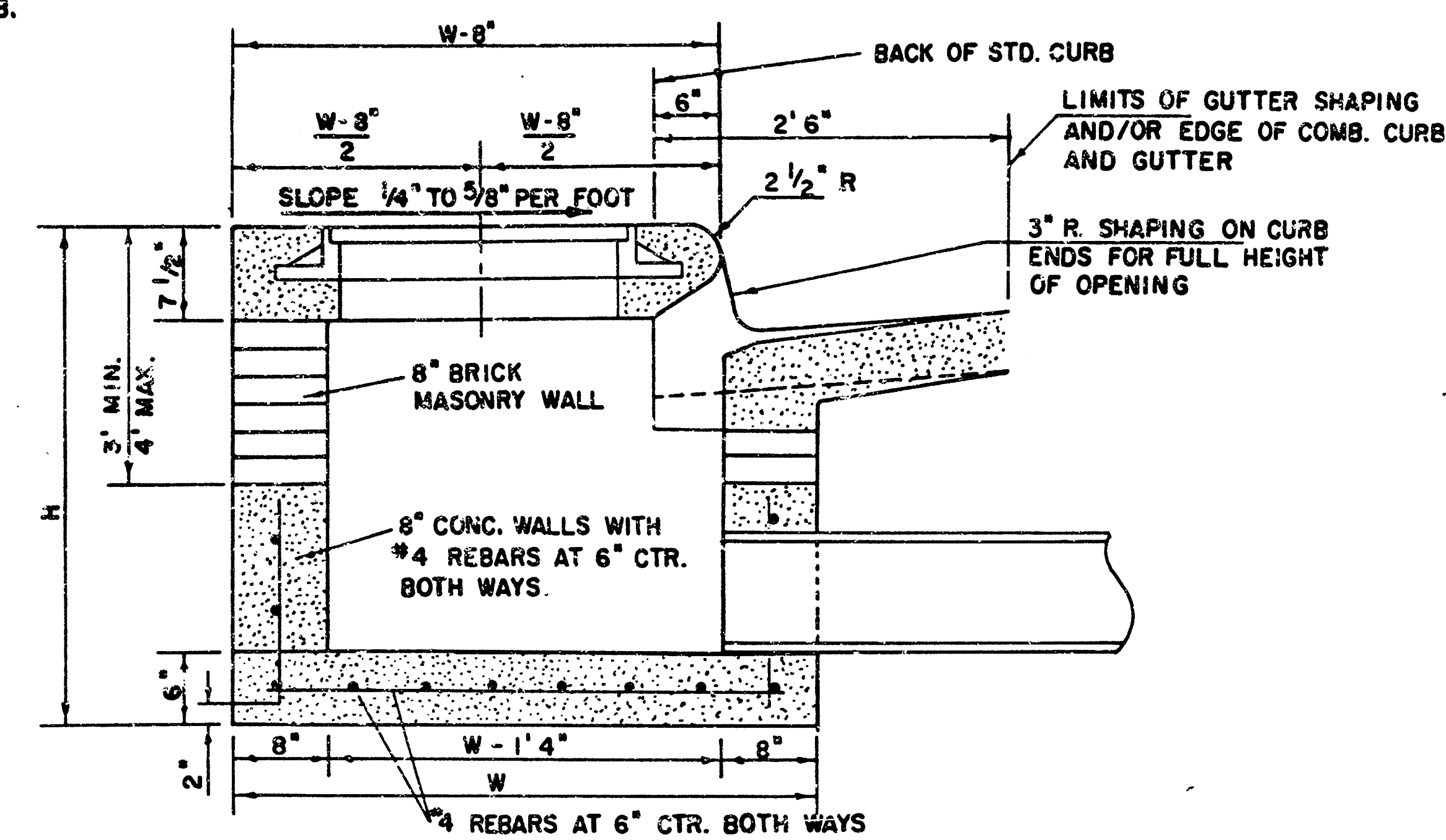
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4' 4"	5' 8" 6' 4" 7 1/2"	21" & SMALLER	0.38 ±
5' 4"	6' 8" 6' 4" 7 1/2"	24" & 30"	0.51 ±
6' 4"	7' 8" 6' 4" 7 1/2"	36" & 42"	0.64 ±
7' 4"	8' 8" 6' 4" 7 1/2"	48" & 54"	0.77 ±
8' 4"	9' 8" 6' 4" 7 1/2"	60" & 66"	0.90 ±



BENDING DIAGRAM



SECTION C-C

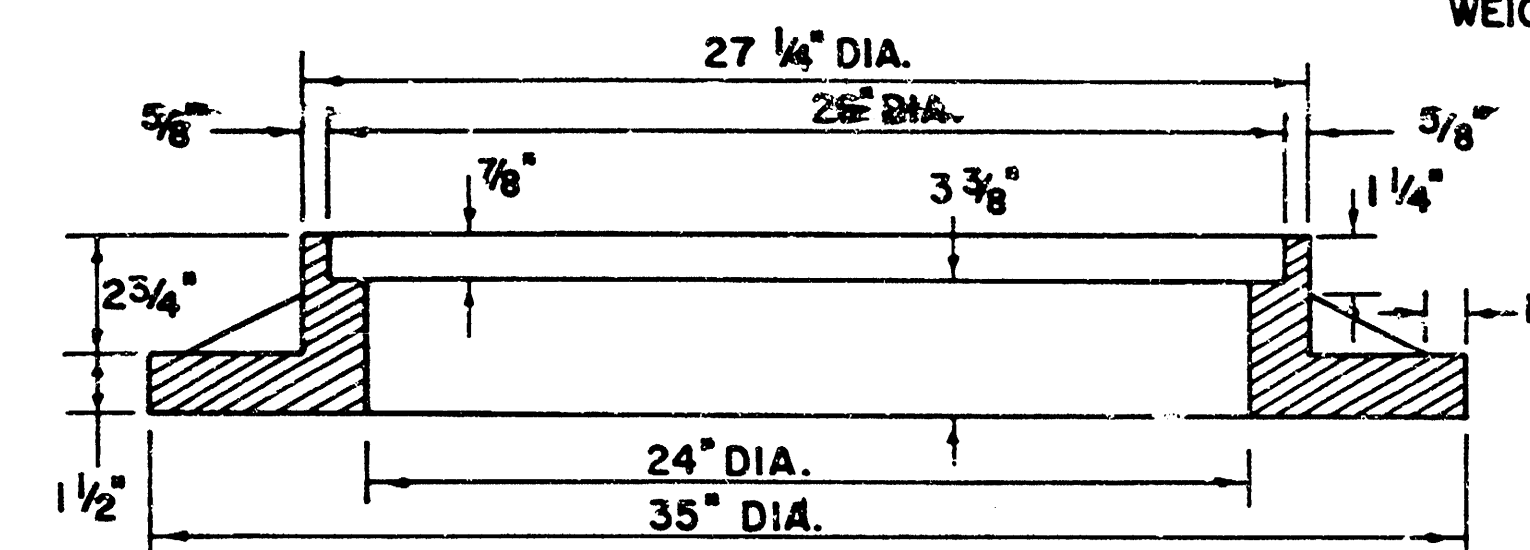
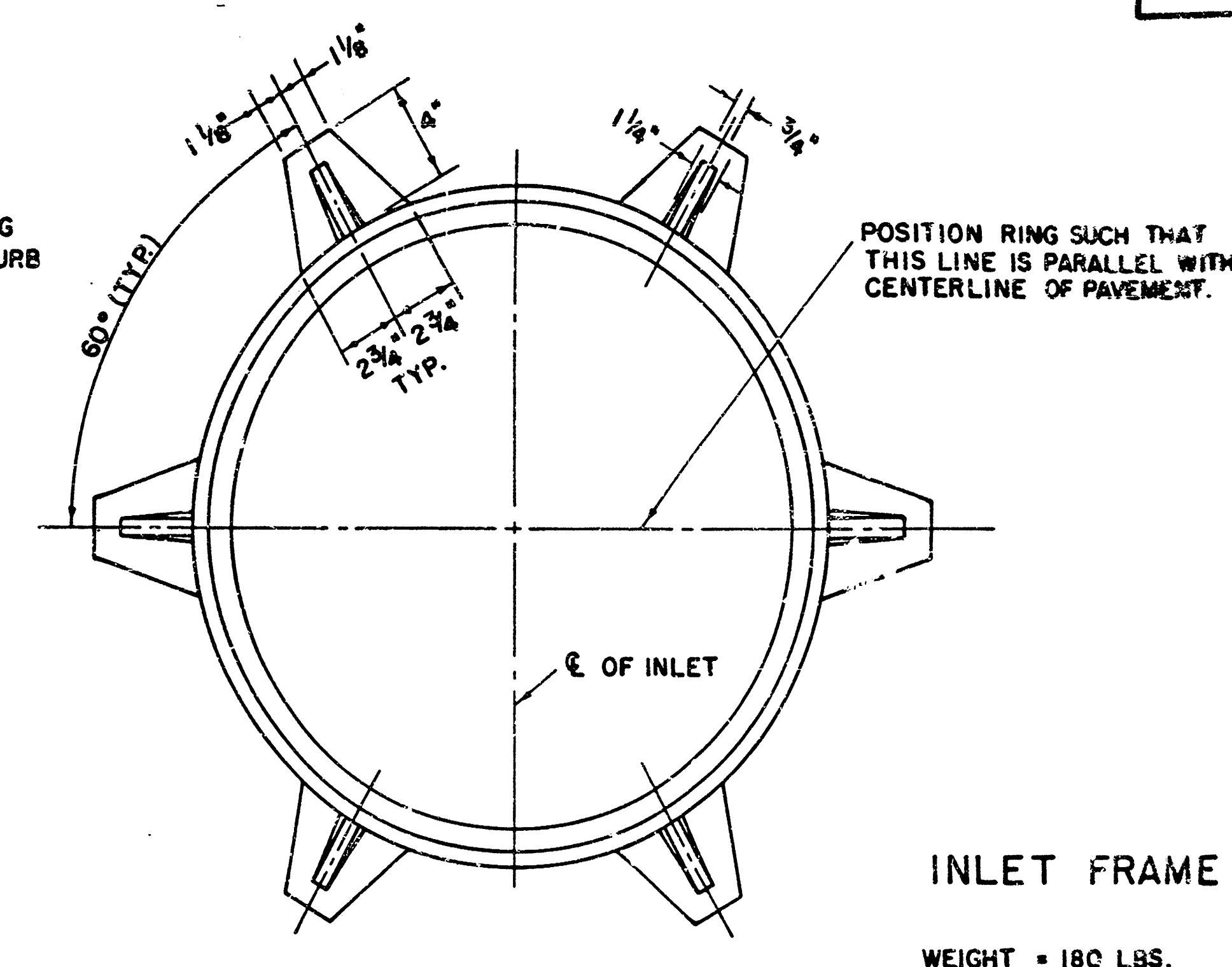


SECTION A-A

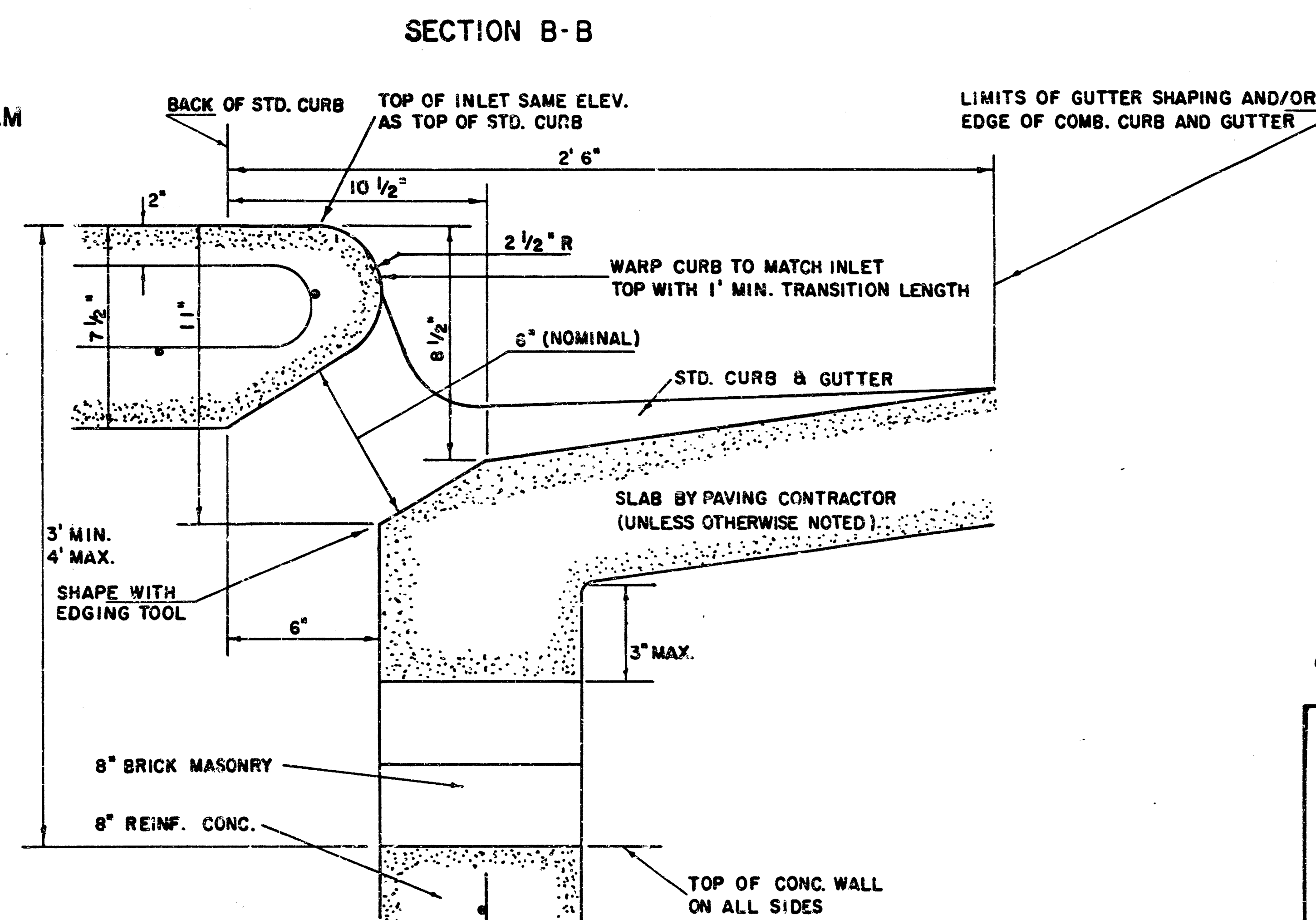
NOTE: CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W = 6' 4" AND H = 7' 0" OR LESS.

INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.

THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.



SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.



SECTION B-B

City of Wichita Project No. 472-76-245-81499-000-000-001
REVISED 12-21-1984

DETAIL STANDARD TYPE I CURB INLET

CITY OF WICHITA, KANSAS
INLET OPENING = 6" x 5' 0"

JUNE 1984 Sheet No. 9 of 10

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