

# PAVING IMPROVEMENT OF NEW JERSEY

FROM  
 OLIVER TO SOUTH LINE OF LOT 3, BLOCK I, REPLAT OF BLOCK I & J, WASHINGTON HEIGHTS ADDITION

IN

## THE CITY OF WICHITA

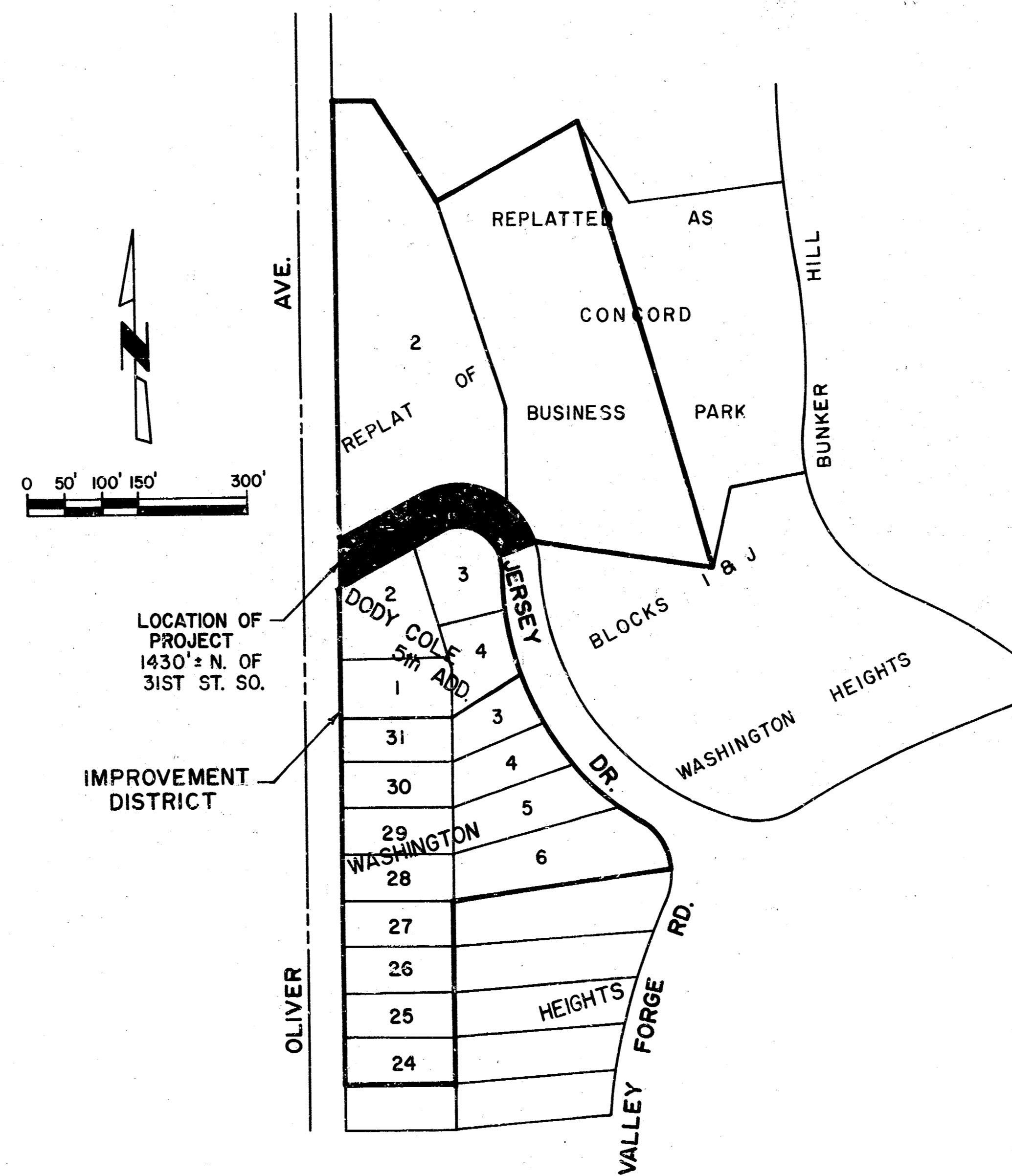
SEDGWICK COUNTY, KANSAS  
 MICHAEL E. LINDEBAK, P.E., CITY ENGINEER

CITY PROJECT NO. 472-76-245-81809-000-000-001

**INDEX #602755**

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9. Cross Sections (Street)
10. Cross Sections (Ditch)



SHEET 5 REVISED 11-7-88

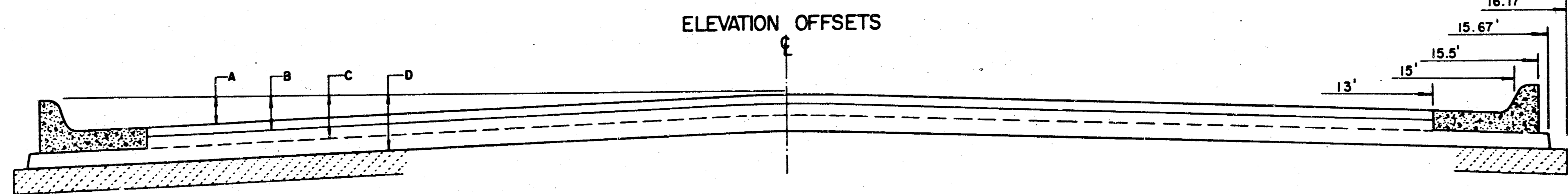
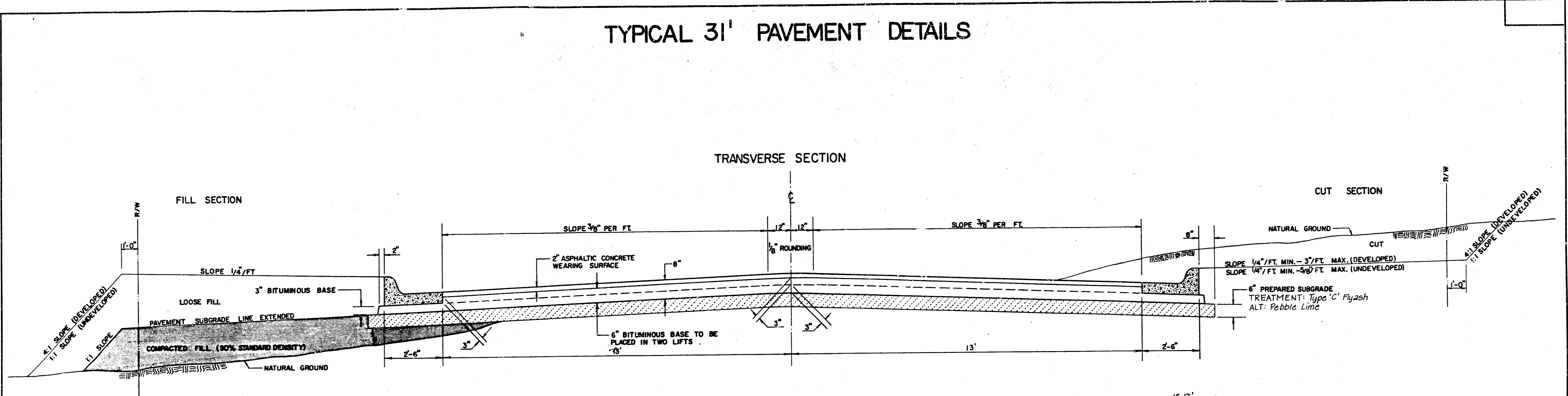
JULY, 1988

**Booker/Freund**  
 Engineers Architects Planners

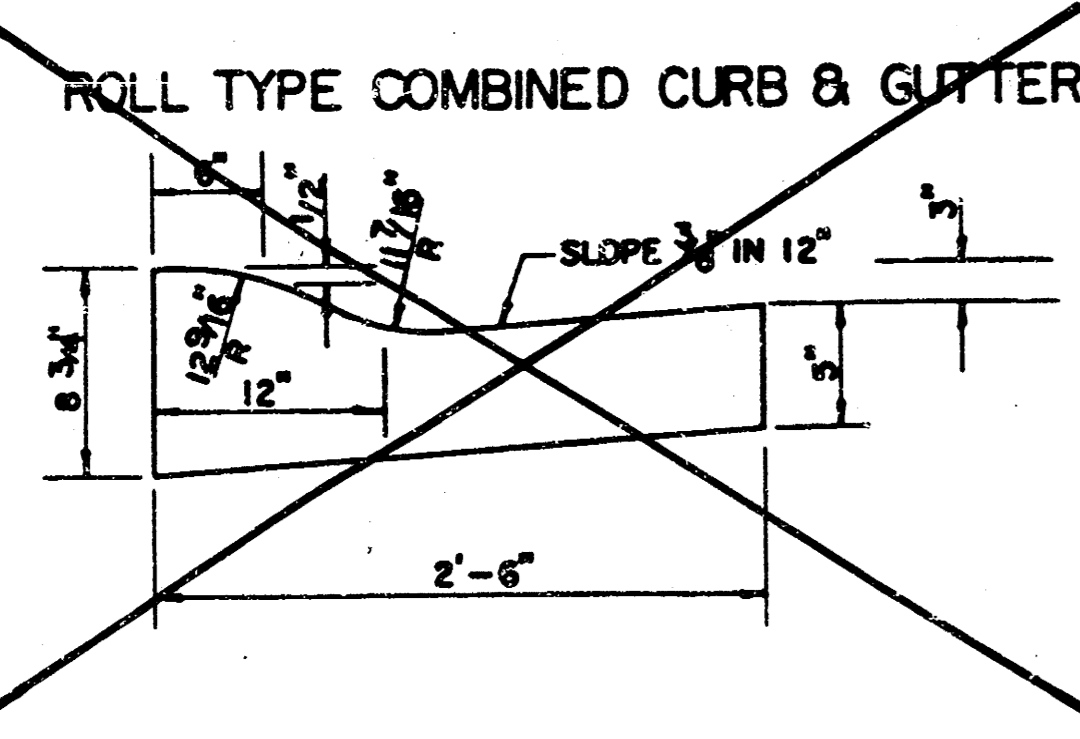
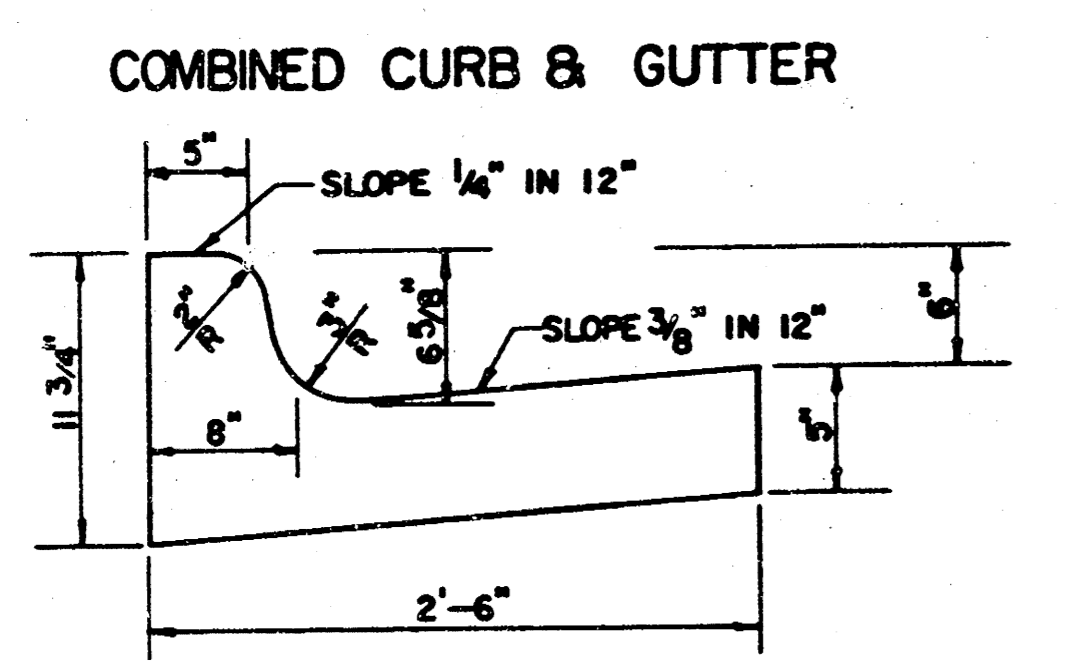
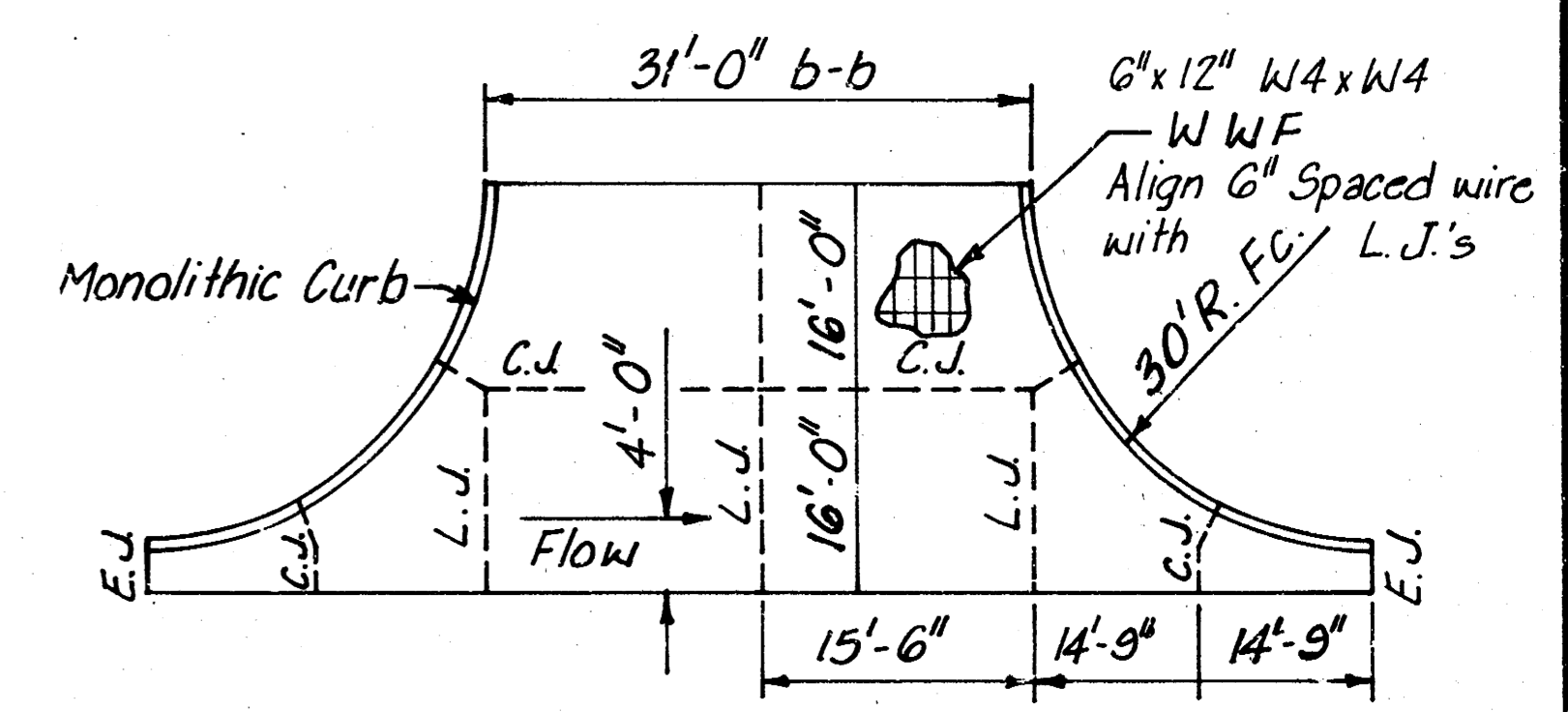


APP. CIV. TR. DR. DE. FLOT. SERV.

# TYPICAL 31' PAVEMENT DETAILS



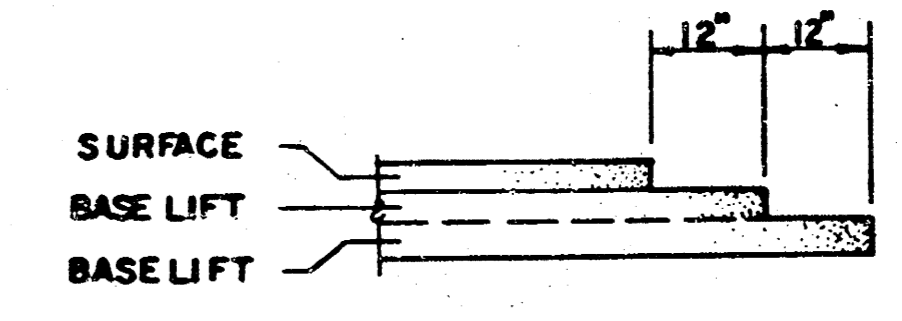
	DISTANCE FROM CENTERLINE (LT. & RT.)											
	0'	2'	4'	6'	7.5'	10'	12'	13'	15'	15.5'	15.67'	16.17'
A: TOP OF CURBS TO TOP OF SURFACE LIFT	.10	.14	.21	.27	.32	.39	.46	.49	---	---	---	---
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	.27	.31	.37	.44	.48	.56	.62	.65	---	---	---	---
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	.52	.56	.62	.69	.73	.81	.87	.90	.97	.98	.99	---
D: TOP OF CURBS TO TOP OF SUBGRADE	.77	.81	.87	.94	.98	1.06	1.12	1.15	1.22	1.23	1.24	1.25



### GENERAL NOTES

- 1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 8" ASPHALTIC CONCRETE (6" BITUMINOUS BASE).
- 2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 3" BITUMINOUS BASE.
- 3) A TACK COAT OF EMULSIFIED ASPHALT (SC-1H OR CSS-1H) SHALL BE APPLIED AT AN APPROXIMATE RATE OF 0.05 GALLONS PER SQUARE YARD BETWEEN EACH LIFT OF ASPHALTIC MATERIAL.
- 4) BITUMINOUS BASE AND ASPHALTIC CONCRETE WEARING SURFACE SHALL BE PLACED WITH A LAYDOWN MACHINE HAVING AUTOMATIC CONTROLS FOR LINE AND GRADE.
- 5) CONSTRUCTION JOINTS IN EACH LIFT SHALL BE STAGGERED A MINIMUM DISTANCE OF ONE (1) FOOT FROM JOINTS IN PRECEDING LIFTS AND PLACED SO THAT A JOINT WILL BE CONSTRUCTED ON THE CENTERLINE OF THE TOP LIFT.
- 6) CONTRACTOR TO BID ONLY ONE SUBGRADE TREATMENT ALTERNATE WHEN ALTERNATES ARE PROVIDED IN THE PROPOSAL AND CONTRACT. THE ALTERNATE CHOSEN BY THE SUCCESSFUL BIDDER SHALL BE USED IN CONSTRUCTING THIS PROJECT.

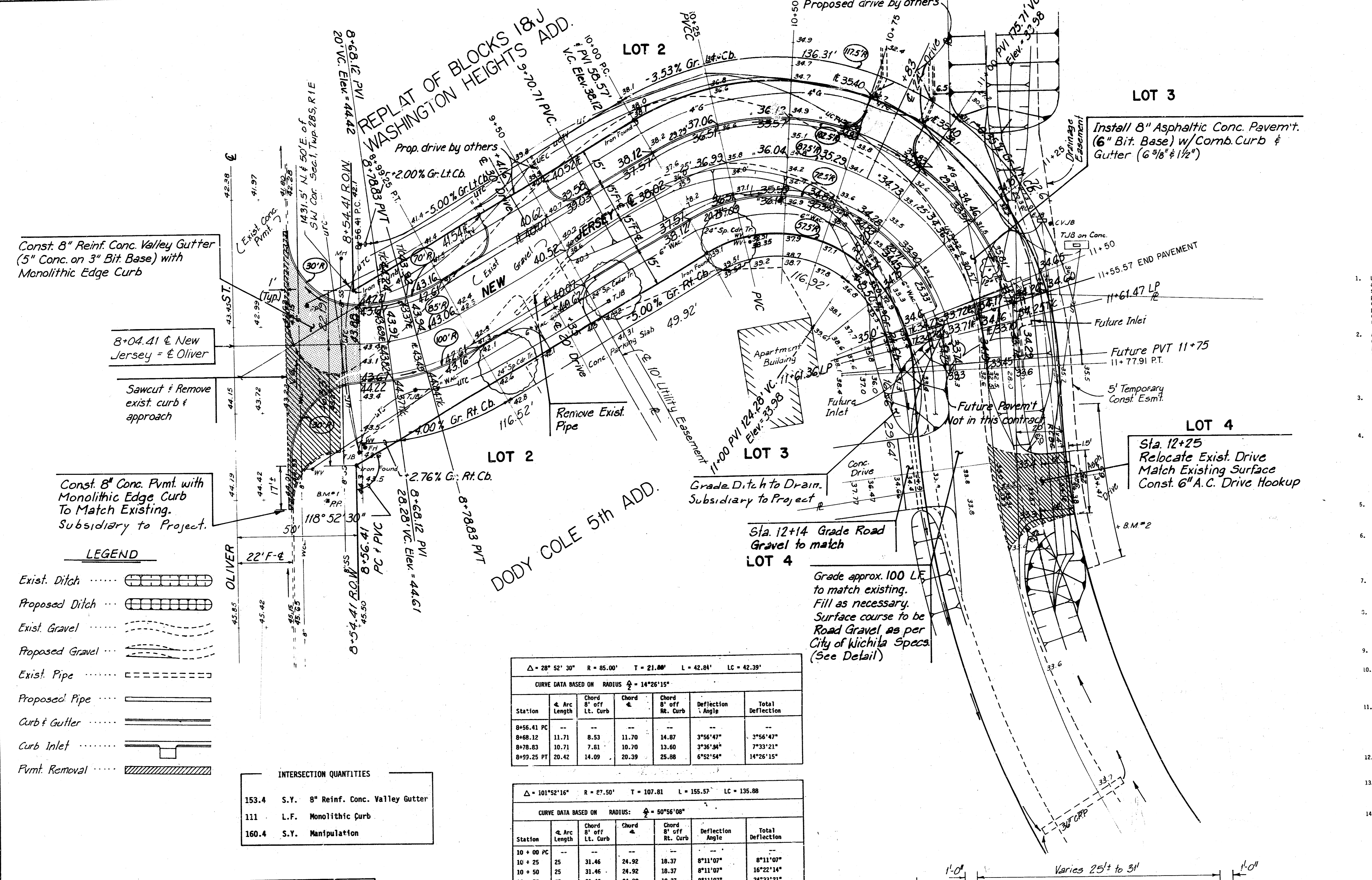
### TRANSVERSE CONSTRUCTION JOINTS



TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT JOINS EXISTING FLEXIBLE BASE PAVEMENT AS SHOWN BY THE DETAIL. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE TRANSVERSE JOINT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS 8" ASPHALTIC CONCRETE (6" BITUMINOUS BASE).

8 INCH RESIDENTIAL ASPHALTIC CONCRETE PAVEMENT WITH 6 INCH BITUMINOUS BASE  
**CITY OF WICHITA, KANSAS**  
 PROJECT NUMBER 472-76-245-81809-000-000-001  
 DWG. No. 2 of 10

APF. CKD. TR. DS. PLOT. SURV.



Const. 8" Reinf. Conc. Valley Gutter (5" Conc. on 3" Bit Base) with Monolithic Edge Curb

8+04.41 & New Jersey = & Oliver

Sawcut & Remove exist. curb & approach

Const. 8" Conc. Pmnt. with Monolithic Edge Curb To Match Existing. Subsidiary to Project.

**LEGEND**

- Exist. Ditch
- Proposed Ditch
- Exist. Gravel
- Proposed Gravel
- Exist. Pipe
- Proposed Pipe
- Curb & Gutter
- Curb Inlet
- Pmnt. Removal

**INTERSECTION QUANTITIES**

153.4	S.Y.	8" Reinf. Conc. Valley Gutter
111	L.F.	Monolithic Curb
160.4	S.Y.	Manipulation

**EARTHWORK**

	Excav.	Comp. Fill
Crosssection	242.5 CY	311.9 CY
10%	24.2 CY	31.2 CY
<b>Total</b>	<b>266.7 CY</b>	<b>343.1 CY</b>
<b>Total Manipulated Fill</b>	<b>=</b>	<b>1162 SY</b>
<b>Borrow Excav.</b>	<b>=</b>	<b>905.6 CY</b>

**CURVE DATA BASED ON RADIUS = 14°26'15"**

Station	Chord Length	Chord 8' off Lt. Curb	Chord 8' off Rt. Curb	Deflection Angle	Total Deflection
8+56.41 PC					
8+68.12	11.71	8.53	11.70	3°56'47"	3°56'47"
8+78.83	10.71	7.51	10.70	3°36'34"	7°33'21"
8+99.25 PT	20.42	14.09	20.39	6°52'54"	14°26'15"

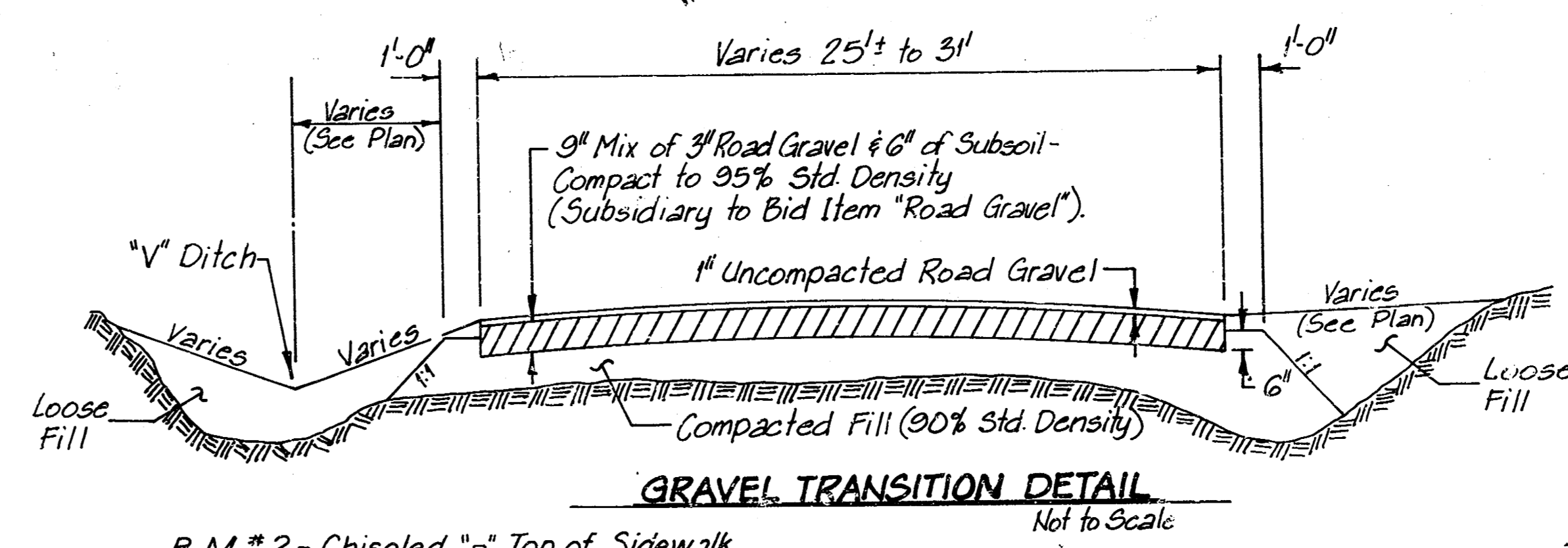
**CURVE DATA BASED ON RADIUS = 50°56'08"**

Station	Chord Length	Chord 8' off Lt. Curb	Chord 8' off Rt. Curb	Deflection Angle	Total Deflection
10+00 PC					
10+25	25	31.46	24.92	8°11'07"	8°11'07"
10+50	25	31.46	24.92	8°11'07"	16°22'14"
10+75	25	31.46	24.92	8°11'07"	24°33'21"
11+00	25	31.46	24.92	8°11'07"	32°44'28"
11+25	25	31.46	24.92	8°11'07"	40°55'35"
11+55.57	30.57	38.41	30.42	10°00'33"	50°56'08"

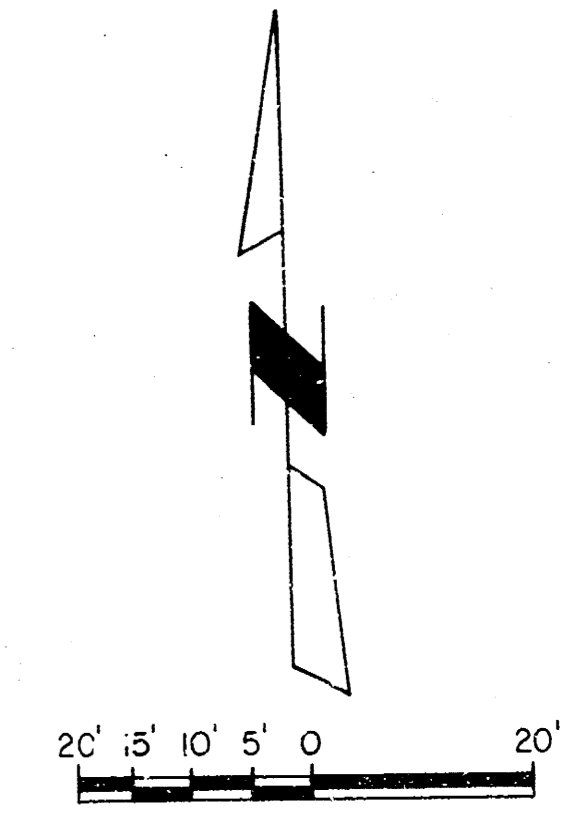
Oliver & George Washington Boulevard  
 City of Wichita Bench Mark Disk, 44.2' west of center line Oliver and 55' northeast of centerline George Washington Blvd.  
 J.F.G. 1971 Elev. 123.63

B.M. #1-50d Step in P.P., Sta. 8+16, 36' Rt. El. = 145.85

Grade approx. 100 LF to match existing. Fill as necessary. Surface course to be Road Gravel as per City of Wichita Specs. (See Detail)



B.M. #2 - Chiseled "a" Top of Sidewalk Sta. 12+50, 46' Lt. El. = 135.33



All dimensions are to the face of curb.

**GENERAL NOTES**

- Utility service lines, poles, valve boxes, meters, etc., are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. 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, except when such saw cuts are within three (3) feet of an existing joint. The limits of removal shall be extended 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.
- Excavation 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. Location there, in the opinion of the Engineer, will leave an unsightly appearance will not be approved.
- Properties within the project limits may have underground sprinkler systems in public right-of-way which conflict with new construction. Contractor will be required to remove such improvements should they not be removed by their owner at the time of construction of the project. The Contractor will be required to salvage all sprinkler heads and/or valves and give such material to their owner. Portions of underground sprinkler systems not in conflict with new construction shall be protected from damage and shall remain in place. All work in connection with underground sprinkler systems shall be considered as subsidiary to the contract pay items of work.
- Trees and shrubs in public right-of-way which are indirect conflict with proposed new construction shall be removed by the Contractor with the Engineer's approval. Trees and shrubs which are not in direct conflict with proposed new construction shall be saved and protected from damage.
- Limits of earthwork shall match existing ground elevations at the right-of-way line unless otherwise noted on the plans with a new finished grade elevation. When a new finished grade elevation is shown, the earthwork shall extend one foot beyond the right-of-way line and then sloped up or down using permissible slopes to match the existing ground surface.
- All entrance and cross road pipe within the project limits shall be removed by the Contractor unless otherwise noted on the plans. Removal of such pipes shall conform to the applicable section of the Standard Specifications.
- The Contractor shall be responsible for preserving property lines. The Contractor will be required to re-establish any property lines which are damaged or destroyed by his construction operations. Such lines shall be re-established by a licensed land surveyor or a licensed professional engineer in accordance with state laws.
- Construction of concrete parking lot pavement will be paid as square feet of drive for the thickness indicated.
- Driveway widths and locations shown on the plan are tentative. Contractor will be required to obtain properly executed driveway request form signed by property owner or his authorized representative verifying such driveway widths and locations. Such forms shall be submitted to the Engineer for his review and approval.
- The Contractor shall adjust Water Valve Boxes and Fire Hydrants as directed by the Engineer at the price bid for said adjustments. The Water Department shall locate water valves one time during construction when requested by the Contractor. It shall be the Contractor's responsibility to present such field locations during the construction process. Damaged water valves, m.e., valve boxes or fire hydrants damaged during construction shall be repaired by the Contractor at his own expense.
- The Contractor shall give all property owners and/or tenants of developed property abutting the project limits a minimum of ten (10) days advance notice prior to start of construction.
- Interurban traffic generated outside the project area is not to be carried through construction. Local business or apartment traffic generated within the project area is to be carried through construction as further promulgated by project special provisions.
- The City of Wichita's Sewer Maintenance Division of the Department of Water and Pollution Control has televised 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.
- No more than three drives 25 feet in width, or equivalent combinations thereof, are to be constructed with this project.

CITY OF WICHITA, KANSAS  
 MICHAEL E. LINDEBAK, P.E., CITY ENGINEER

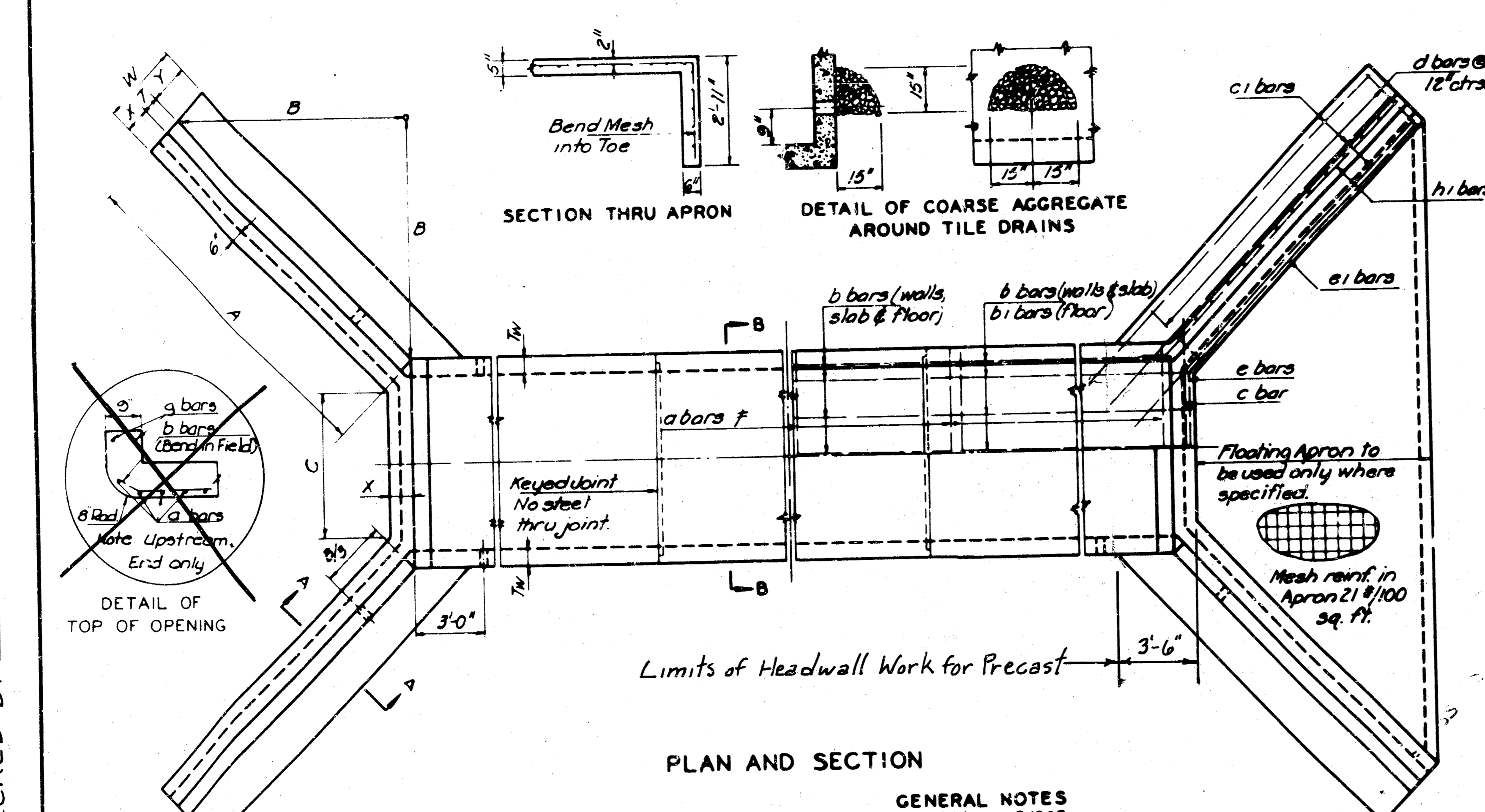
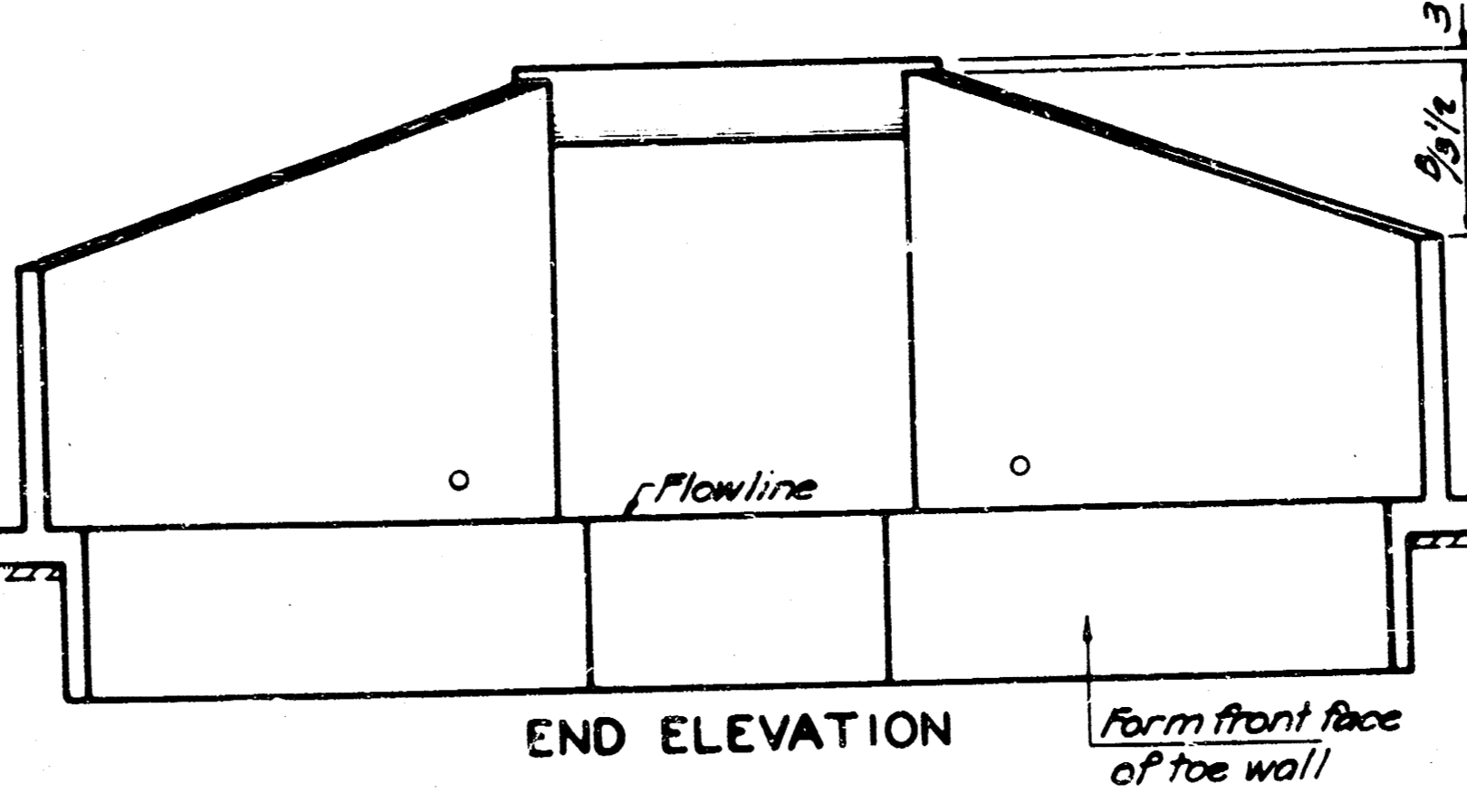
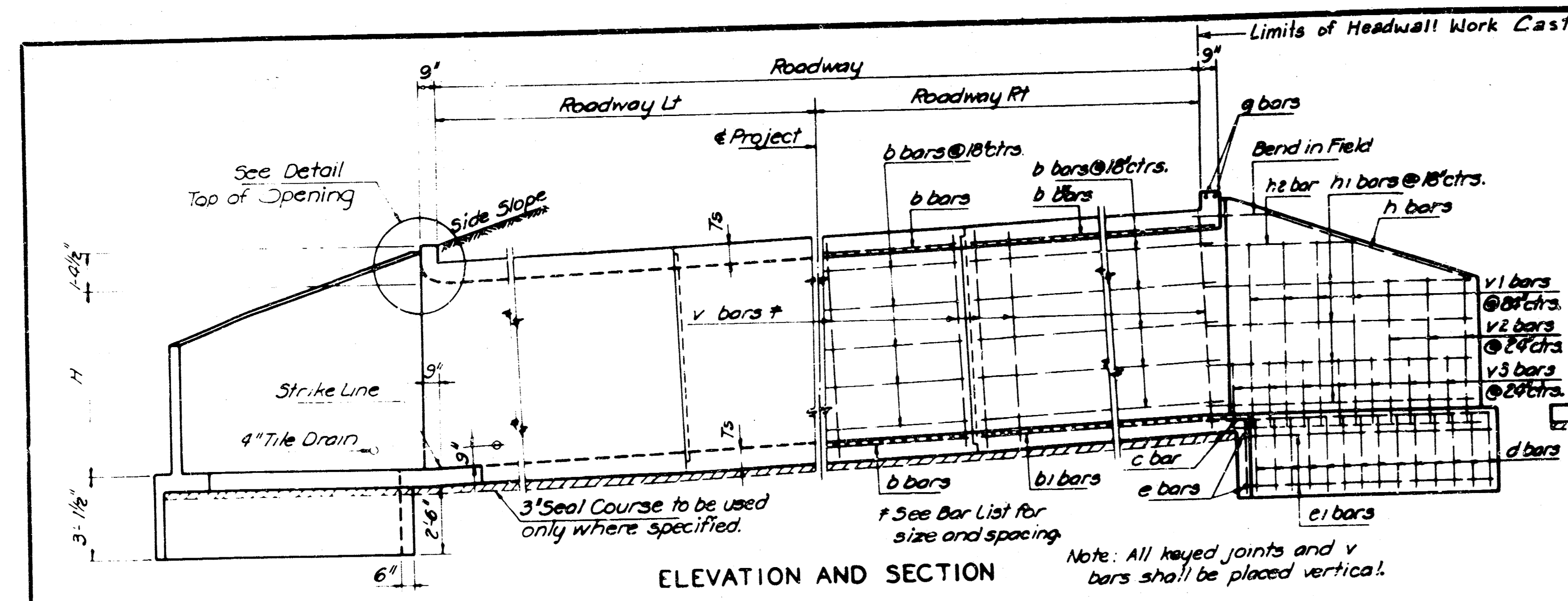
**PAVING IMPROVEMENT OF NEW JERSEY FROM OLIVER TO 370 ± EAST**

CITY PROJECT NO. 472-76-245-81809-000-001

**Booker/Freund** 3/10  
 Engineers Architects Planners

SCALE 1" = 20' DATE JULY, 1988 DWG. NO. 3 of 10





**GENERAL NOTES**

LOADING: H20-44 AASHTO Specifications, Edition of 1963.

UNIT STRESSES:  $f'_c = 3,000$  p.s.i.;  $f'_t = 1,200$  p.s.i.;  $f_s = 20,000$  p.s.i.

Class A Concrete shall be used throughout. Bevel all exposed edges with a  $\frac{3}{8}$ " triangular molding unless otherwise noted.

All dimensions relative to reinforcing steel are to center line of bar unless otherwise noted.

Seal Course, consisting of 3" of Class A Concrete, shall be constructed only where specified on the Plans or by the Engineer. No reinforcing shall be placed until the Seal Course has gained sufficient strength to permit working upon it without injury.

Floating Apron shall be constructed only between downstream wings in locations subject to scour where specified on the Plans or by the Engineer.

Wire reinforcing mesh shall be electrically welded and shall be composed of No. W14 wire at 6" centers each way. Weight of reinforcing mesh shall be classified as pounds of reinforcing steel.

Payment for additional quantities resulting from including Seal Course and or Floating Apron as a change in the original plans, shall be made at the Unit Price bid for the various items involved.

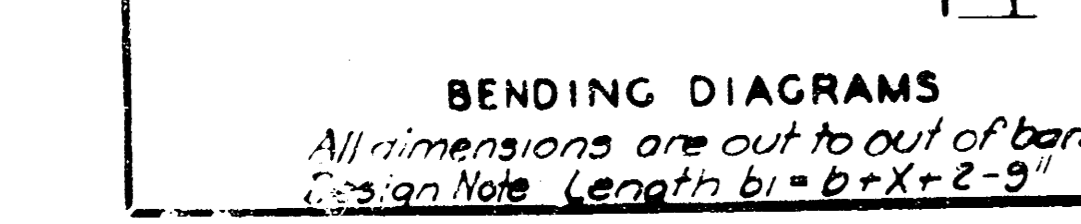
Coarse aggregate shall be deposited behind each weep hole to occupy a space extending 15" in all directions above the weep hole flowline. This work shall not be paid for directly, but shall be considered a part of the excavation work.

Keyed Joints shall be provided as shown on all culverts where the box length is 40' or more. These joints shall be spaced so as to divide the box into sections of equal length. The number of joints to be used shall be as follows; 40' to 80' - 1 joint; 80' to 120' - 2 joints; 120' to 160' - 3 joints, etc.

The quantities shown in Culvert Summary include Apron and or Soil Saver quantities if they are to be constructed.

The Contractor may, at his option, substitute No. 4 steel reinforcing bars for the keyed construction joints. Rebars are to be a minimum of thirty (30) inches in length, set so the joint divides the bar equally and these extra rebars will be required in each plane of steel in the culvert. The extra steel required will not be paid for directly but will be considered subsidiary to other items in the contract.

CALCULATED BY \_\_\_\_\_ DATE \_\_\_\_\_  
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_



**LIST OF BARS AND DIMENSIONS**

Letter	A	B	C	H	R	T	Ts	Tw	W	X	Y	Bar	a	v
<b>7x</b>														
Apron Steel (One)	Lbs. Seal Course										CY Hdwl. Concrete (One)	C.Y.		
Apron Concrete (One)	6X Apron Seal Course										CY Concrete Per Ft of Box	C.Y.		
Dimension	7x										Space			
Bar	a	b	b1	c	c1	d	e	e1	g	h	h1	he	v	v1
Number	10	2	12	4	8	4	8	4	8	4	8	4	20	16
Size	#4	#4	#4	#4	#4	#4	#4	#4	#5	#5	#4	#4	#4	#4
Length	10'-0"			10'-0"	10'-0"	5'-7"	8'-0"	8'-3"	7'-9"	8'-3"	9'-6"		5'-2"	4'-0"
<b>7x3x</b>														
Apron Steel (One)	23 Lbs Seal Course										CY Hdwl. Concrete (One)	6.778 C.Y.		
Apron Concrete (One)	1.8476 6X Apron Seal Course										CY Concrete Per Ft of Box	C.Y.		
Dimension	7x3x										Space			
Bar	a	b	b1	c	c1	d	e	e1	g	h	h1	he	v	v1
Number	10	2	12	36	4	8	4	8	4	8	4	2	24	6
Size	#4	#4	#4	#4	#4	#4	#4	#4	#5	#5	#4	#4	#4	#4
Length	10'-0"	10'-0"	5'-7"	8'-0"	8'-3"	7'-9"	8'-3"	9'-6"					5'-2"	4'-0"
<b>7x8x167'</b>														
Apron Steel (One)	30 Lbs Seal Course										CY Hdwl. Concrete (One)	4.360 C.Y.		
Apron Concrete (One)	2.393 6X Apron Seal Course										CY Concrete Per Ft of Box	C.Y.		
Dimension	7x8x167'										Space			
Bar	a	b	b1	c	c1	d	e	e1	g	h	h1	he	v	v1
Number	728	75	5	1	6	22	2	4	2	4	2	224	6	6
Size	#5	#4	#4	#4	#4	#4	#4	#4	#5	#5	#4	#4	#4	#4
Length	7'-9"	33'-2"	37'-0"	10'-0"	12'-3"	5'-1"	8'-0"	10'-3"	7'-9"	11'-3"	11'-6"	8'-8"	5'-0"	5'-10"
<b>7x5x</b>														
Apron Steel (One)	39 Lbs Seal Course										CY Hdwl. Concrete (One)	11.208 C.Y.		
Apron Concrete (One)	3.000 6X Apron Seal Course										CY Concrete Per Ft of Box	C.Y.		
Dimension	7x5x										Space			
Bar	a	b	b1	c	c1	d	e	e1	g	h	h1	he	v	v1
Number	10	2	12	52	4	8	4	8	4	8	4	2	16	12
Size	#4	#4	#4	#4	#4	#4	#4	#4	#5	#5	#4	#4	#4	#4
Length	10'-0"	14'-9"	5'-0"	8'-0"	12'-3"	7'-9"	13'-0"	13'-6"	7'-6"				6'-3"	5'-2"
<b>7x6x</b>														
Apron Steel (One)	47 Lbs Seal Course										CY Hdwl. Concrete (One)	14.998 C.Y.		
Apron Concrete (One)	3.679 6X Apron Seal Course										CY Concrete Per Ft of Box	C.Y.		
Dimension	7x6x										Space			
Bar	a	b	b1	c	c1	d	e	e1	g	h	h1	he	v	v1
Number	10	2	12	60	4	8	4	8	4	8	4	2	20	12
Size	#4	#4	#4	#4	#4	#4	#4	#4	#5	#5	#4	#4	#4	#4
Length	10'-0"	17'-0"	5'-7"	8'-0"	14'-3"	7'-9"	13'-9"	13'-6"	10'-0"				7'-0"	5'-2"
<b>7x7x</b>														
Apron Steel (One)	57 Lbs Seal Course										CY Hdwl. Concrete (One)	18.83 C.Y.		
Apron Concrete (One)	4.412 6X Apron Seal Course										CY Concrete Per Ft of Box	C.Y.		
Dimension	7x7x										Space			
Bar	a	b	b1	c	c1	d	e	e1	g	h	h1	he	v	v1
Number	10	2	12	68	4	8	4	8	4	8	4	2	20	16
Size	#4	#4	#4	#4	#4	#4	#4	#4	#5	#5	#4	#4	#4	#4
Length	10'-0"	19'-6"	6'-0"	8'-0"	16'-3"	7'-11"	17'-9"	17'-7"	8'-10"				8'-0"	16'-2"
<b>7x</b>														
Apron Steel (One)	Lbs Seal Course										CY Hdwl. Concrete (One)	C.Y.		
Apron Concrete (One)	6X Apron Seal Course										CY Concrete Per Ft of Box	C.Y.		
Dimension	7x										Space			
Bar	a	b	b1	c	c1	d	e	e1	g	h	h1	he	v	v1
Number	10	2	12	4	8	4	8	4	8	4	8	4	4	4
Size	#4	#4	#4	#4	#4	#4	#4	#4	#5	#5	#4	#4	#4	#4
Length	10'-0"			10'-0"										

NOTE: Wings on Outlet End only. Square off Entrance End. Entrance End Is To Have A Construction Joint. Finish To Allow Future Extension.

NOTE: All earthwork to be subsidiary to Bid Price for Box.

NOTE: At Contractor's Option The RCB May Be Precast And Set Into Place With A Headwall Cast In Place And Connected To The RCB Sections. Precast RCB Shall Conform To A.S.T.M. C.789.

**CULVERT SUMMARY**

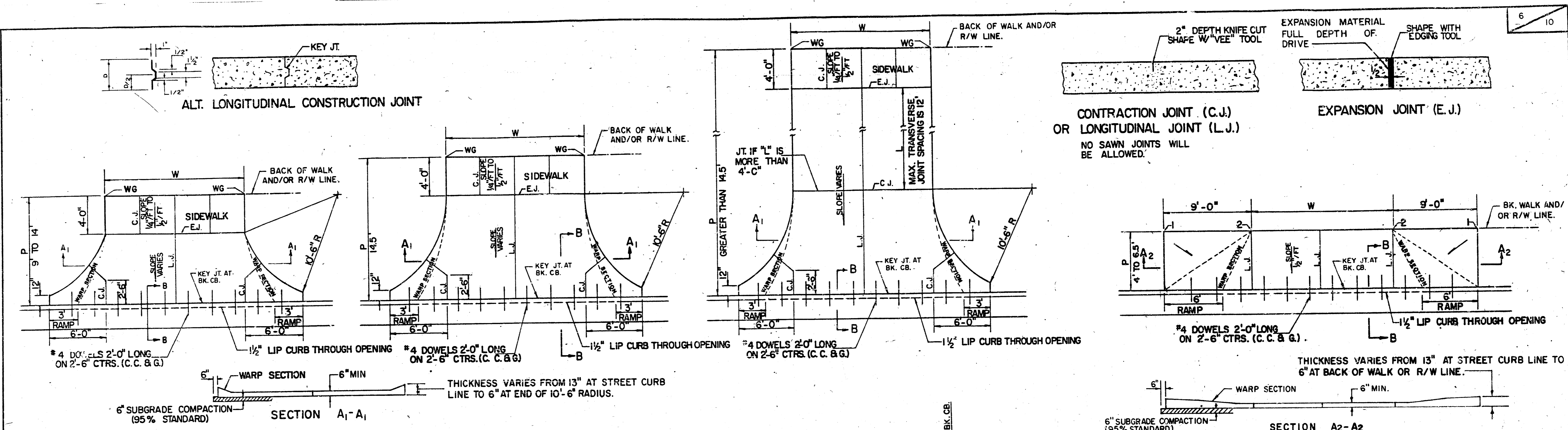
Station	Size	Crown or Elev.	Flowline Elev.		Rdwy Horiz.		Lgth. along Box		Sections No. Length	Apron	Soil Saver	Design Full P.S.	C/A Conc. Cu. Yds.	Reinf. Steel Lbs.
			Lt.	Rt.	Lt.	Rt.	Lt.	Rt.						

4-5-79 Re-bar Quan. Rev. Conc. & N.L.H. L.R.P.  
 4-26-77 Keyed Joint Option N.L.H. L.R.P.  
 7-10-73 Wire Reinf. Mesh Changed to W14 N.L.H. K.G.L.  
 7-10-72 Wire Size AA312 Des. #32-727 N.L.H. K.G.L.  
 5-19-72 Removed 12" Uniform Sp. Sections N.L.H. K.G.L.

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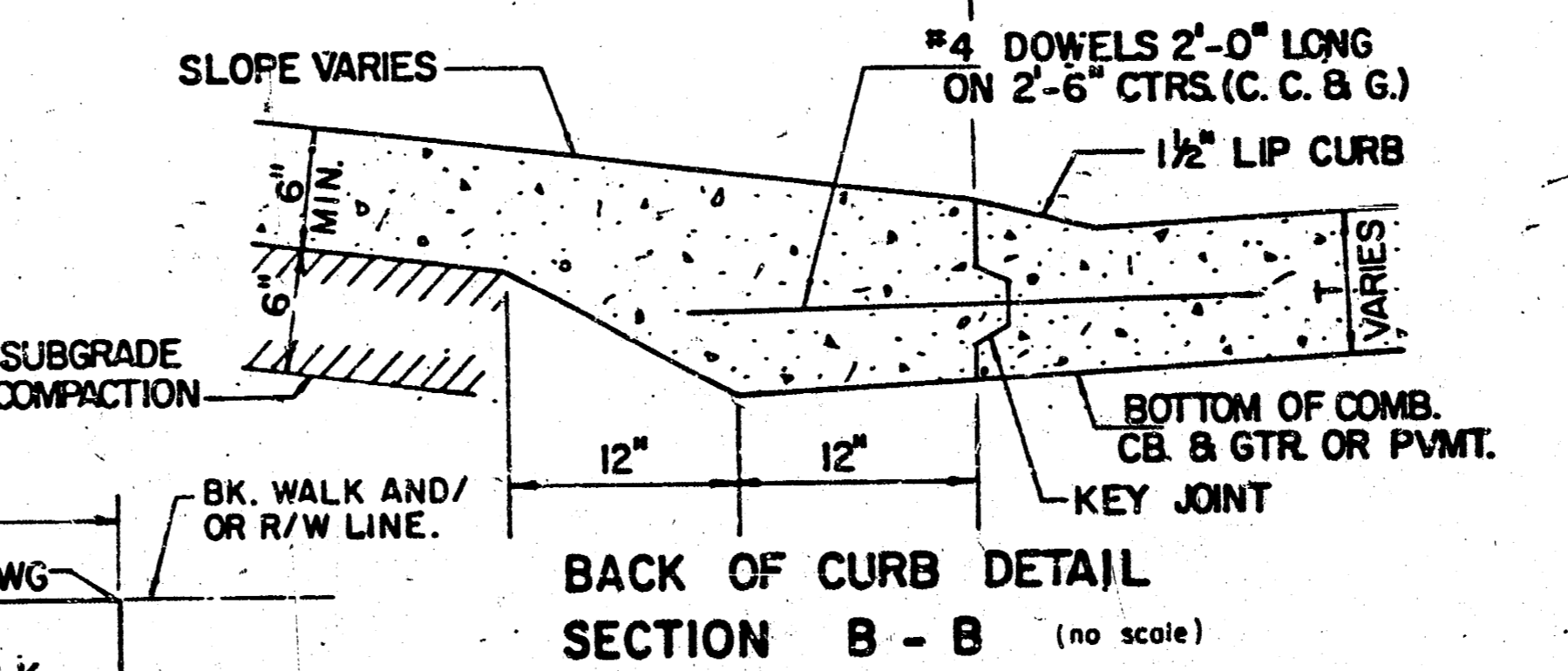
**R.C. BOX CULVERT**  
**7 FT. SPAN**  
**REVISED 11-7-88 KK**

SHEET NO 5 OF 7 SCALE: APPROX 1" = 20'-0" QUANTITIES CHECKED BY: BOOTH DESIGNER: BOOTH DETAIL: CR. QUAN. CK: CANNON TRACE: CR. HOCHT



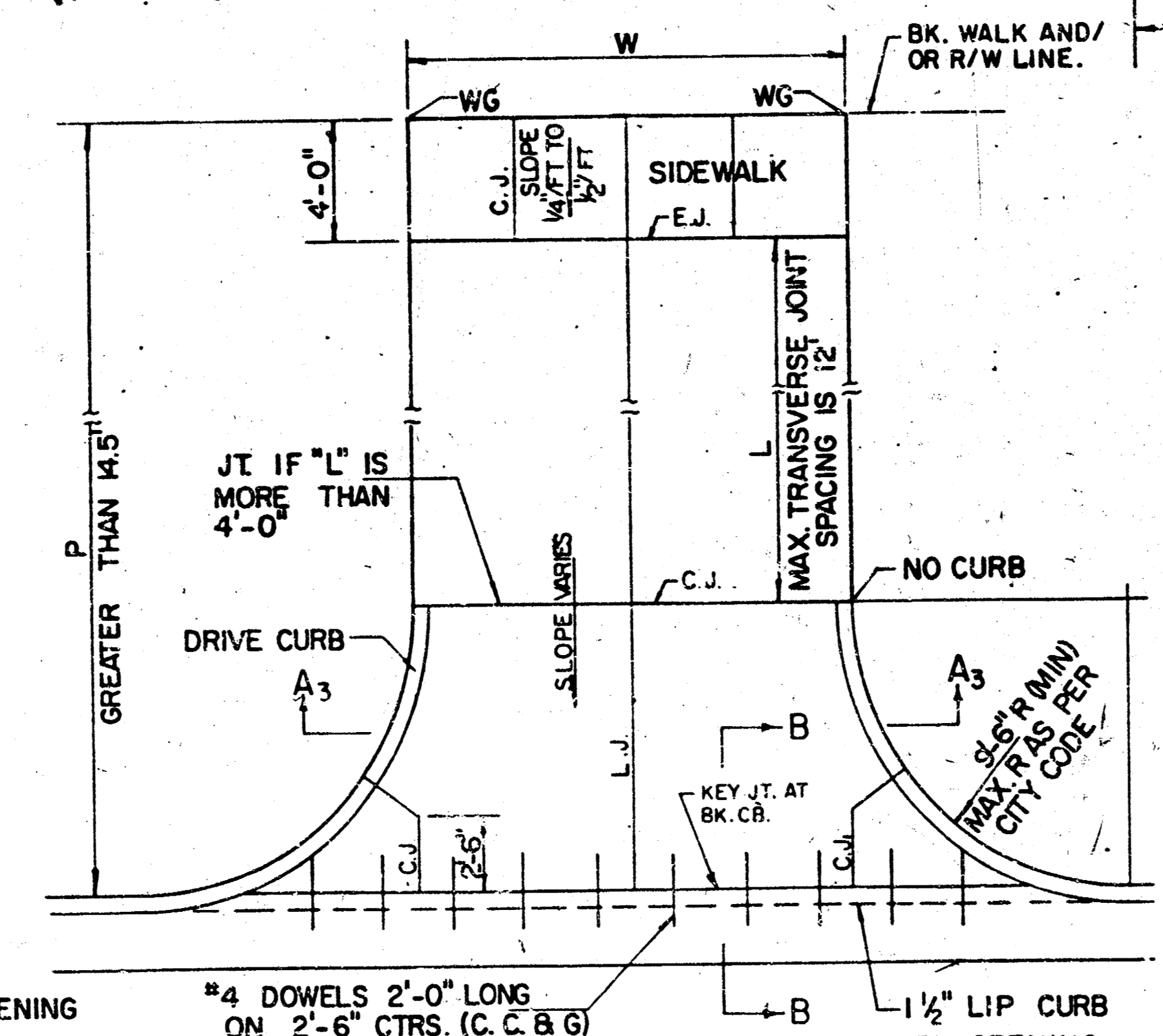
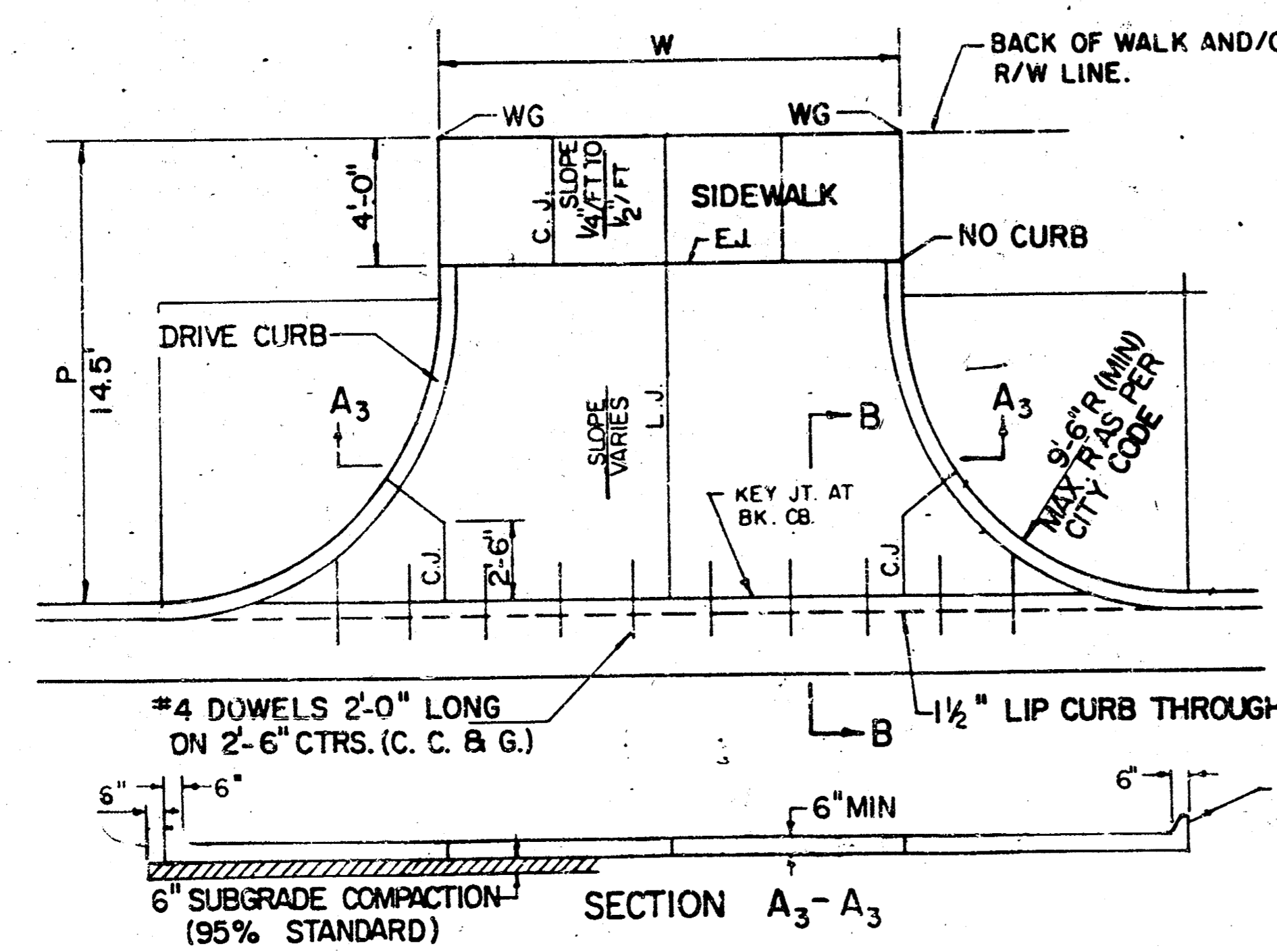
PARKING WIDTH "P"		9'	10'	11'	12'	13'	14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE	MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.35'	0.35'	0.40'	0.45'	0.60'	0.80'	1.35'	1.85'	2.35'	2.85'	3.35'	3.85'	4.35'
OPTIMUM	MAX. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.35'	0.35'	0.40'	0.45'	0.60'	0.70'	1.04'	1.30'	1.56'	1.82'	2.08'	2.34'	2.60'
OPTIMUM	MIN. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	0.19'	0.21'	0.23'	0.25'	0.27'	0.30'	0.42'	0.52'	0.62'	0.72'	0.82'	0.92'	1.02'
ABSOLUTE	MIN. DIST. OF PT. "WG" ABOVE OR BELOW TOP OF FULL CURB	-1.19'	-1.15'	-1.13'	-1.10'	-1.06'	0.00'	0.00'	0.15'	0.25'	0.35'	0.45'	0.55'	0.65'

**RADIUS RAMP DRIVES (P = 9.0' & GREATER)**



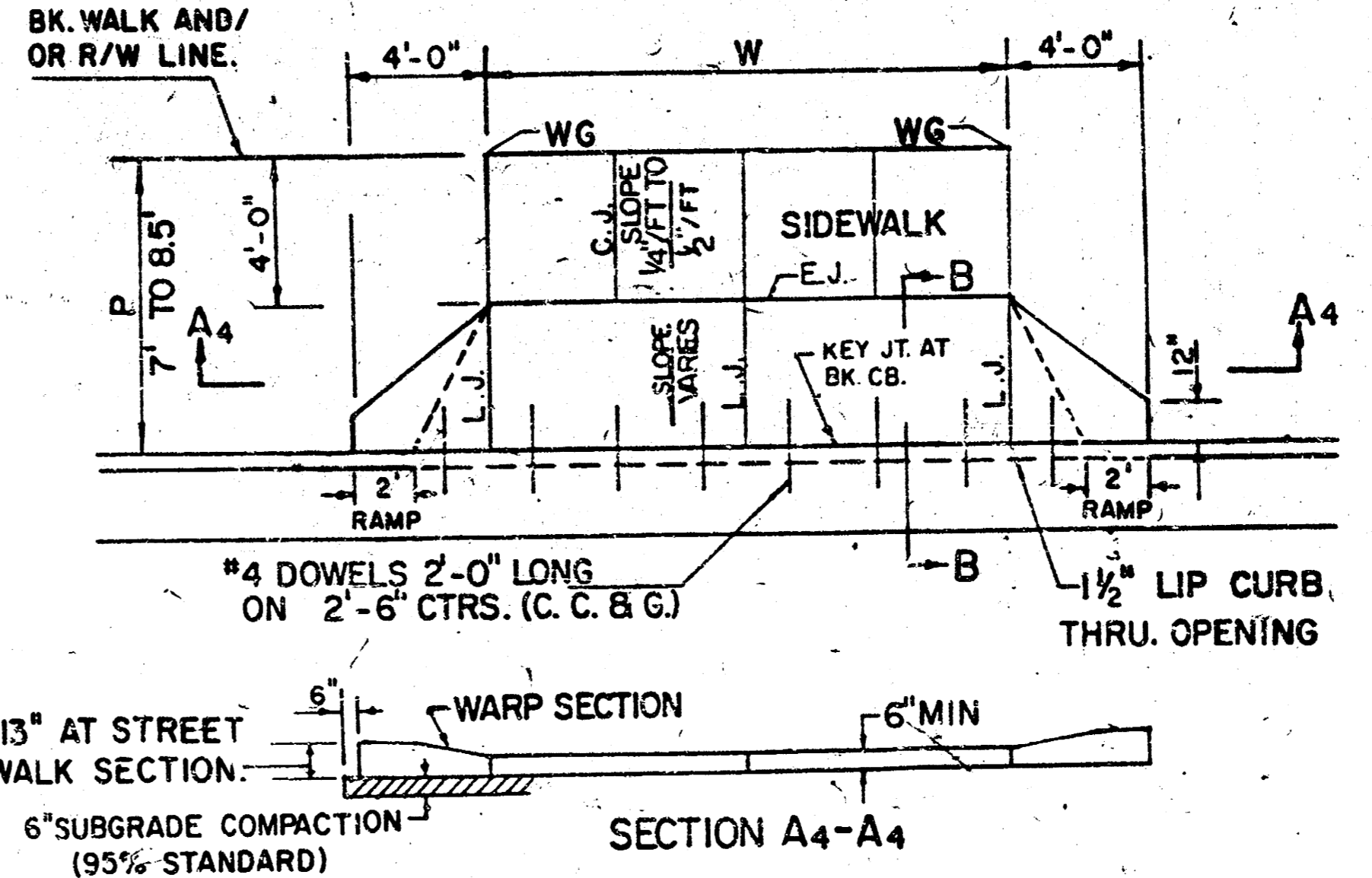
PARKING WIDTH "P"		4'	4.5'	5'	5.5'	6'	6.5'
DIST. OF PT. "P" ABOVE TOP OF FULL CB.		0.08'	0.09'	0.10'	0.12'	0.13'	0.14'
DIST. OF PT. "P" BELOW TOP OF FULL CB.		-0.26'	-0.24'	-0.22'	-0.20'	-0.18'	-0.16'

**FULL RAMP DRIVE (P = 4.0' TO 6.5')**



PARKING WIDTH "P"		14.5'	20'	25'	30'	35'	40'	45'	50'
ABSOLUTE	MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.80'	1.35'	1.85'	2.35'	2.85'	3.35'	3.85'	4.35'
OPTIMUM	MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.70'	1.04'	1.30'	1.56'	1.82'	2.08'	2.34'	2.60'
OPTIMUM	MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.30'	0.42'	0.52'	0.62'	0.72'	0.82'	0.92'	1.02'
ABSOLUTE	MIN. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.00'	0.00'	0.15'	0.25'	0.35'	0.45'	0.55'	0.65'

**FULL RADIUS DRIVES (P = 14.5' & GREATER)**



PARKING WIDTH "P"		7'	7.5'	8'	8.5'
ABSOLUTE	MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.00'	0.10'	0.20'	0.30'
OPTIMUM	MAX. DIST. OF PT. "WG" ABOVE TOP OF FULL CB.	0.00'	0.10'	0.20'	0.30'
OPTIMUM	MIN. DIST. OF PT. "WG" BELOW TOP OF FULL CB.	-0.15'	-0.16'	-0.17'	-0.17'
ABSOLUTE	MAX. DIST. OF PT. "WG" BELOW TOP OF FULL CB.	-0.25'	-0.20'	-0.20'	-0.20'

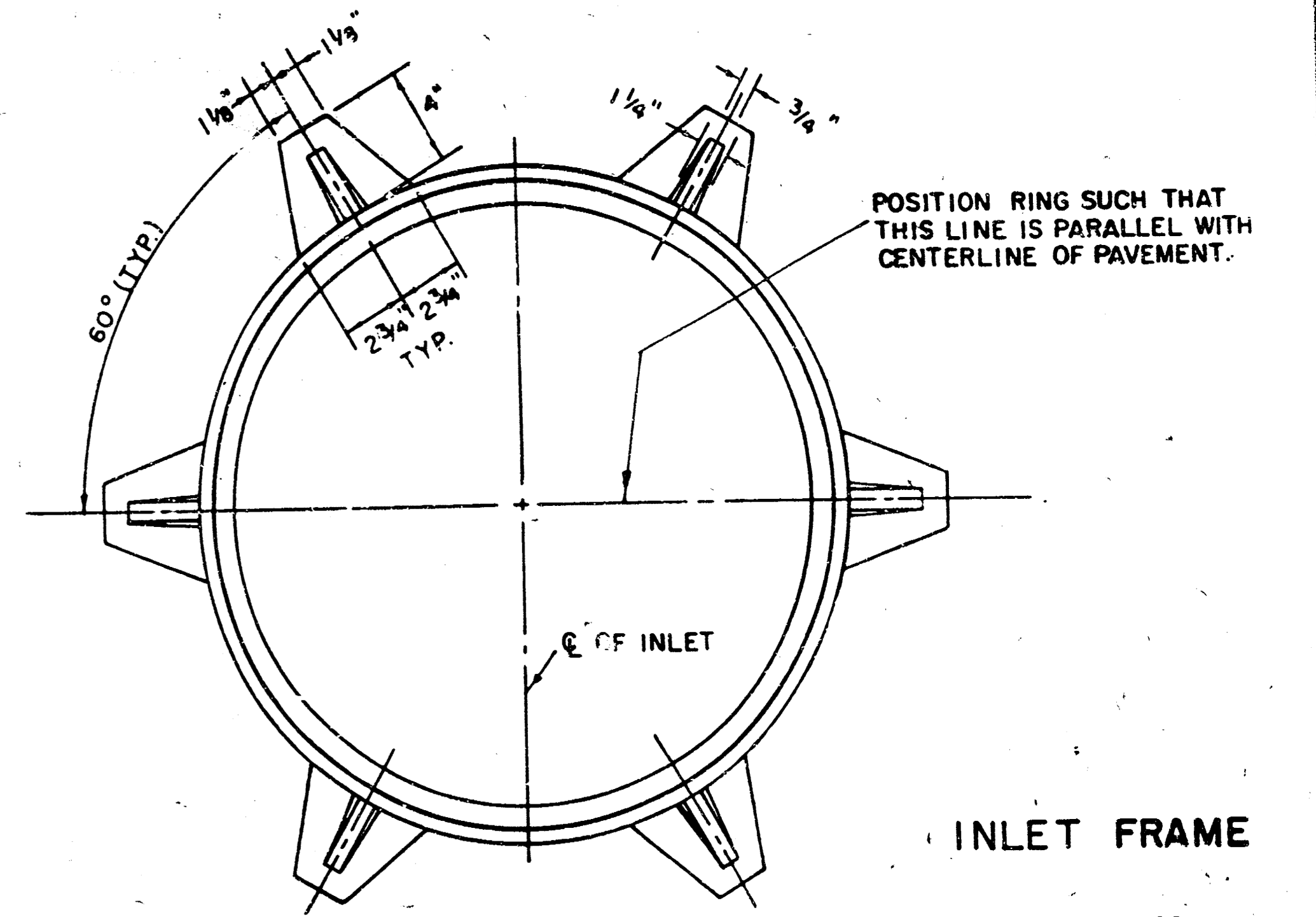
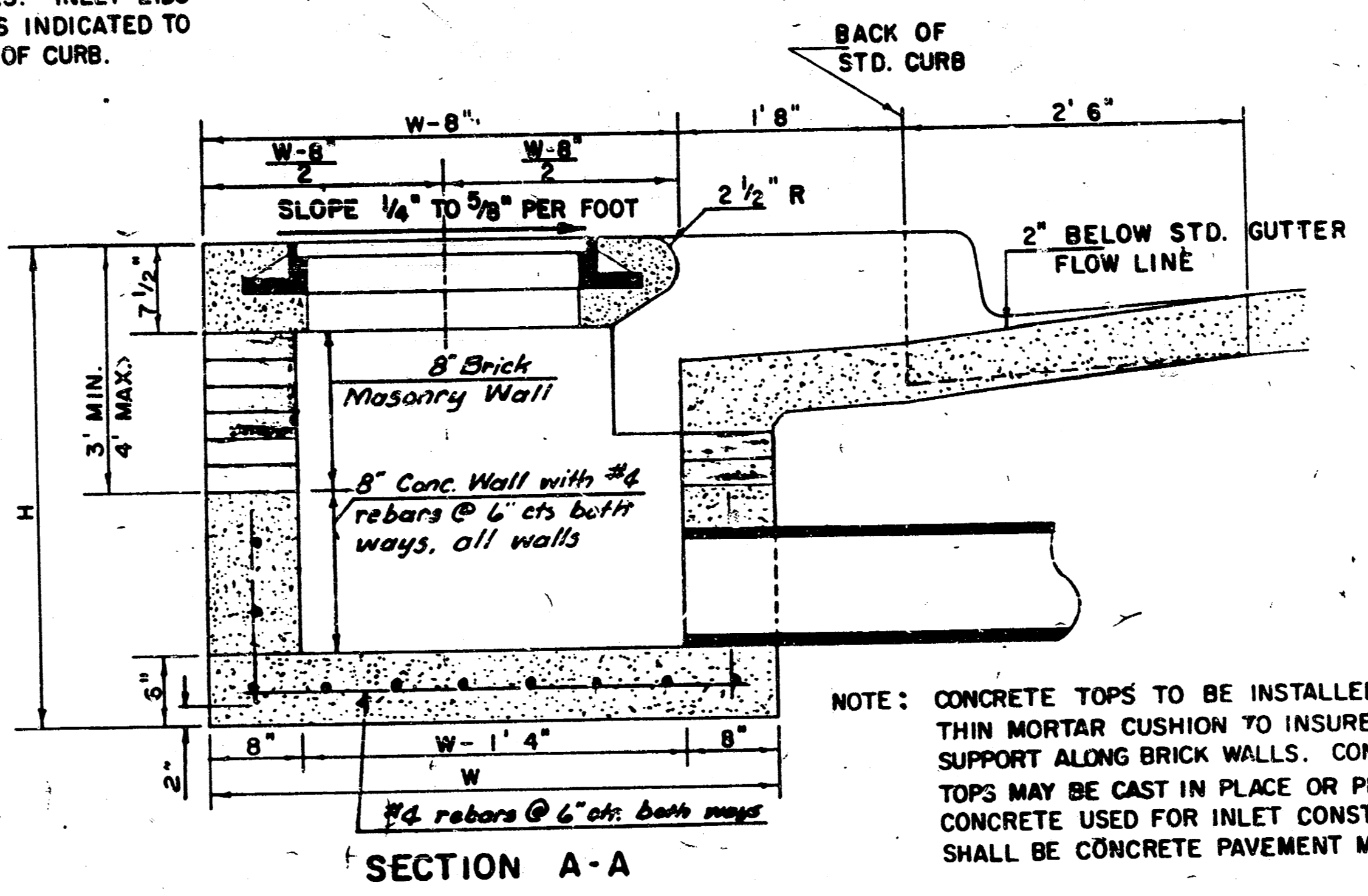
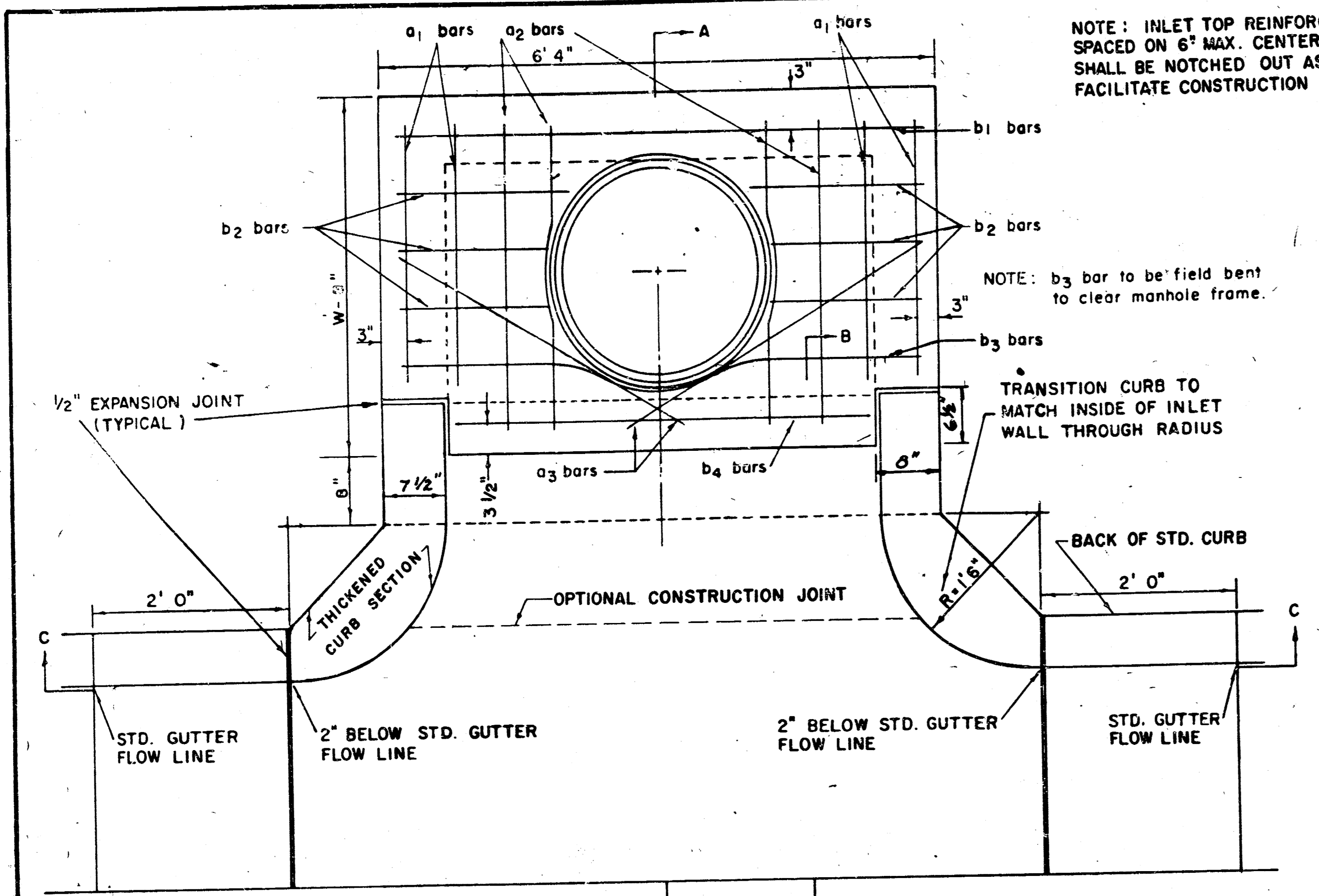
**FULL RAMP DRIVE (P = 7.0' TO 8.5')**

- GENERAL NOTES**
- DRIVEWAY CONSTRUCTION DETAILED ON THIS SHEET IS FOR USE WITH FULL HEIGHT STREET CURBS AND IN AREAS WITHOUT FULL WALK CONSTRUCTION IN THE PARKING. SEE OTHER DETAIL SHEETS FOR DRIVEWAY CONSTRUCTION WITH ROLL CURB AND/OR FULL WALK.
  - ONE LONGITUDINAL JOINT SHALL BE CONSTRUCTED ALONG THE CENTERLINE OF DRIVES HAVING A "P" DIMENSION OF 24' OR LESS. TWO LONGITUDINAL JOINTS SHALL BE CONSTRUCTED WITH EQUAL SPACINGS NOT TO EXCEED 10' FOR DRIVES WITH A "P" DIMENSION GREATER THAN 24'.
  - DRIVEWAY WIDTH DENOTED AS "W" ON THE DETAIL DRAWINGS SHALL BE A MINIMUM OF 10' AND A MAXIMUM OF 30'. THE MAXIMUM OPENING FOR RADIUS TYPE DRIVES WITH CURBS THROUGH THE RADIUS SHALL NOT EXCEED 52' AT THE STREET CURB LINE.
  - CONTRACTION JOINT SPACING IN THE DRIVEWAY WALK SECTION SHALL BE A MINIMUM OF 6' AND A MAXIMUM OF 24'. JOINTS SHALL BE EQUALLY SPACED WITHIN THIS RANGE. WALK SECTION SHALL BE CONSTRUCTED TO THE SAME THICKNESS AS THE DRIVEWAY.
  - DOVEL BARS SHALL BE OMITTED FROM THE KEYED CONSTRUCTION JOINT ALONG THE BACK OF THE STREET CURB LINE WHEN DRIVEWAYS ARE CONSTRUCTED IN CONJUNCTION WITH NEW CONCRETE PAVEMENT CONSTRUCTION.
  - ADDITIONAL THICKNESS OF DRIVE AS INDICATED IN THE DRAWINGS WILL NOT BE PAID FOR DIRECTLY AND THIS COST SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE DRIVEWAY CONSTRUCTION.
  - ONE HALF INCH EXPANSION JOINTS SHALL BE INSTALLED WHEREVER DRIVE CONSTRUCTION ADJUTS SIDEWALK. ONE HALF INCH EXPANSION JOINTS SHALL ALSO BE INSTALLED ALONG THE PROPERTY LINE AND/OR BACK OF WALK LINE WHEN DRIVE CONSTRUCTION ALONG THIS LINE ADJUTS CONCRETE PARKING LOTS OR CONCRETE DRIVE EXTENSION.
  - ALL DRIVEWAYS SHALL BE A MINIMUM OF 6" IN THICKNESS AND SHALL BE WITHOUT REINFORCEMENT. DRIVEWAYS MAY BE CONSTRUCTED THINNER THAN 6" AND THEY MAY BE REINFORCED WITH #3@12" #4-#4 WELDED WIRE FABRIC WHEN PROPERLY AUTHORIZED BY THE PROPERTY OWNER WITH THE ENGINEER'S CONCUERANCE.
  - OPTIMUM DRIVEWAY ELEVATIONS SHOWN IN THE TABLES ARE TO BE USED WHEREVER POSSIBLE. ABSOLUTE MAXIMUM AND MINIMUM ELEVATIONS ARE TO BE USED ONLY WHEN THESE VALUES WILL PERMIT NEW CONSTRUCTION TO MATCH EXISTING DRIVES OR PARKING LOTS. VALUES SHOWN IN THE TABLES ARE BASED ON A FULL CURB HEIGHT ELEVATION OF 0.55' ABOVE THE GUTTER FLOW LINE AND MUST BE ADJUSTED ACCORDINGLY FOR OTHER CURB HEIGHTS. VALUES SHOWN IN THE TABLES WITH MINUS SIGNS INDICATE ELEVATIONS BELOW TOP OF FULL HEIGHT CURB.

REVISED OCTOBER 1985  
SCALE: 1" = 5'

**STANDARD DRIVE ENTRANCES**  
**FULL HEIGHT CURB**  
CITY OF WICHITA, KANSAS

PROJECT NUMBER  
472 76 245 81809 000 000 001



BENDING DIAGRAM

STEEL SCHEDULE

BAR NUMBER	a		b		c		d		e		WT. LBS.
	a <sub>1</sub>	a <sub>2</sub>	b <sub>1</sub>	b <sub>2</sub>	c <sub>1</sub>	c <sub>2</sub>	d <sub>1</sub>	d <sub>2</sub>	e <sub>1</sub>	e <sub>2</sub>	
4	4	2	1	3	5	7	9	6	1	1	
SIZE	#4	#4	#4	#4	#4	#4	#4	#4	#4	#6	
W=4'4"	5'7"	6'7"	4'0"	6'1"	-	-	-	1'9"	6'2"	4'8"	60±
W=5'4"	7'7"	8'7"	5'0"	6'1"	-	-	-	1'9"	6'2"	4'8"	81±
W=6'4"	9'7"	10'7"	6'0"	6'1"	-	-	-	1'9"	6'2"	4'8"	101±
W=7'4"	11'7"	12'7"	7'0"	6'1"	-	-	-	1'9"	6'2"	4'8"	121±
W=8'4"	13'7"	14'7"	8'0"	6'1"	-	-	-	1'9"	6'2"	4'8"	141±

\* NOTE: a<sub>3</sub> BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER

STANDARD CURB INLET PRECAST TOPS

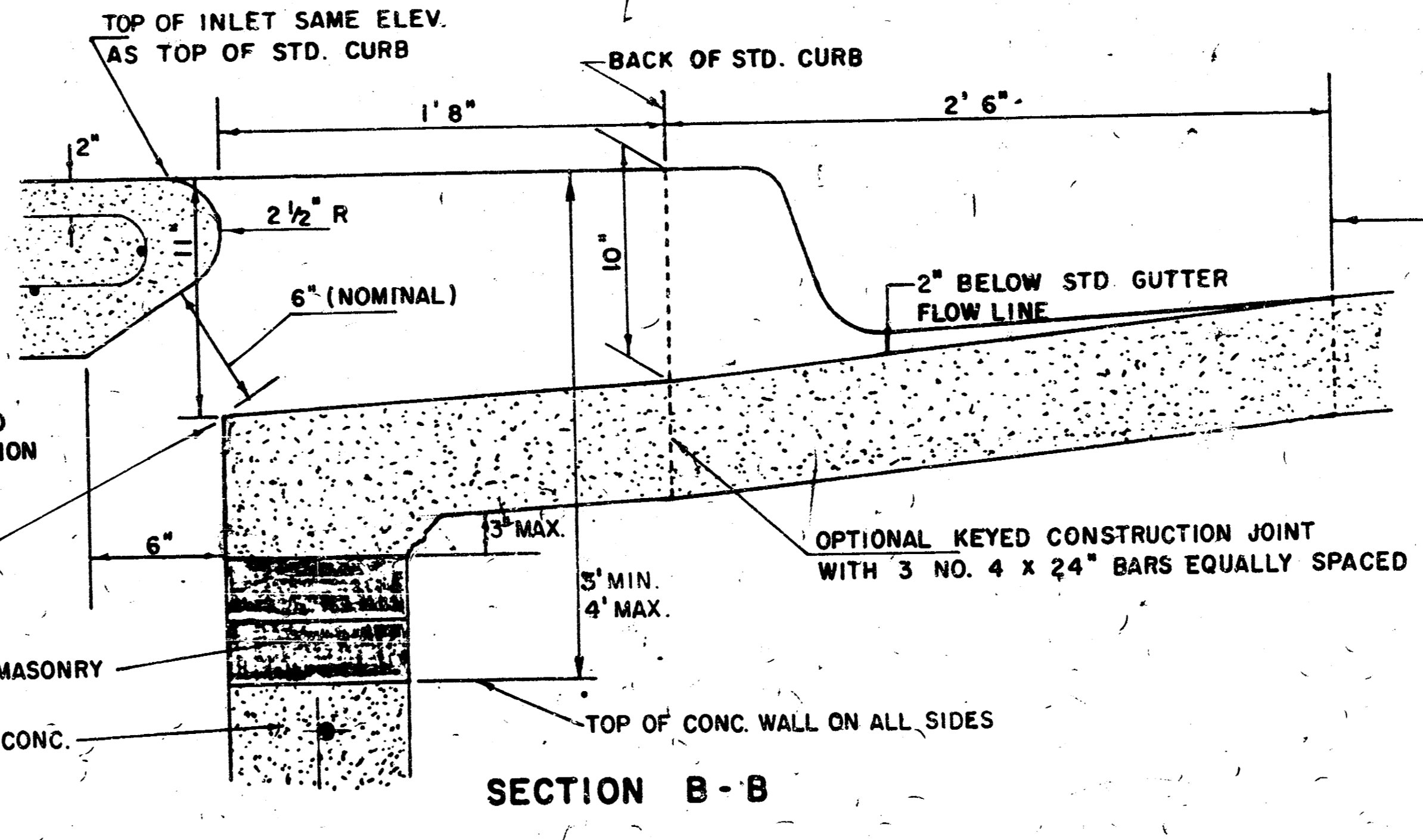
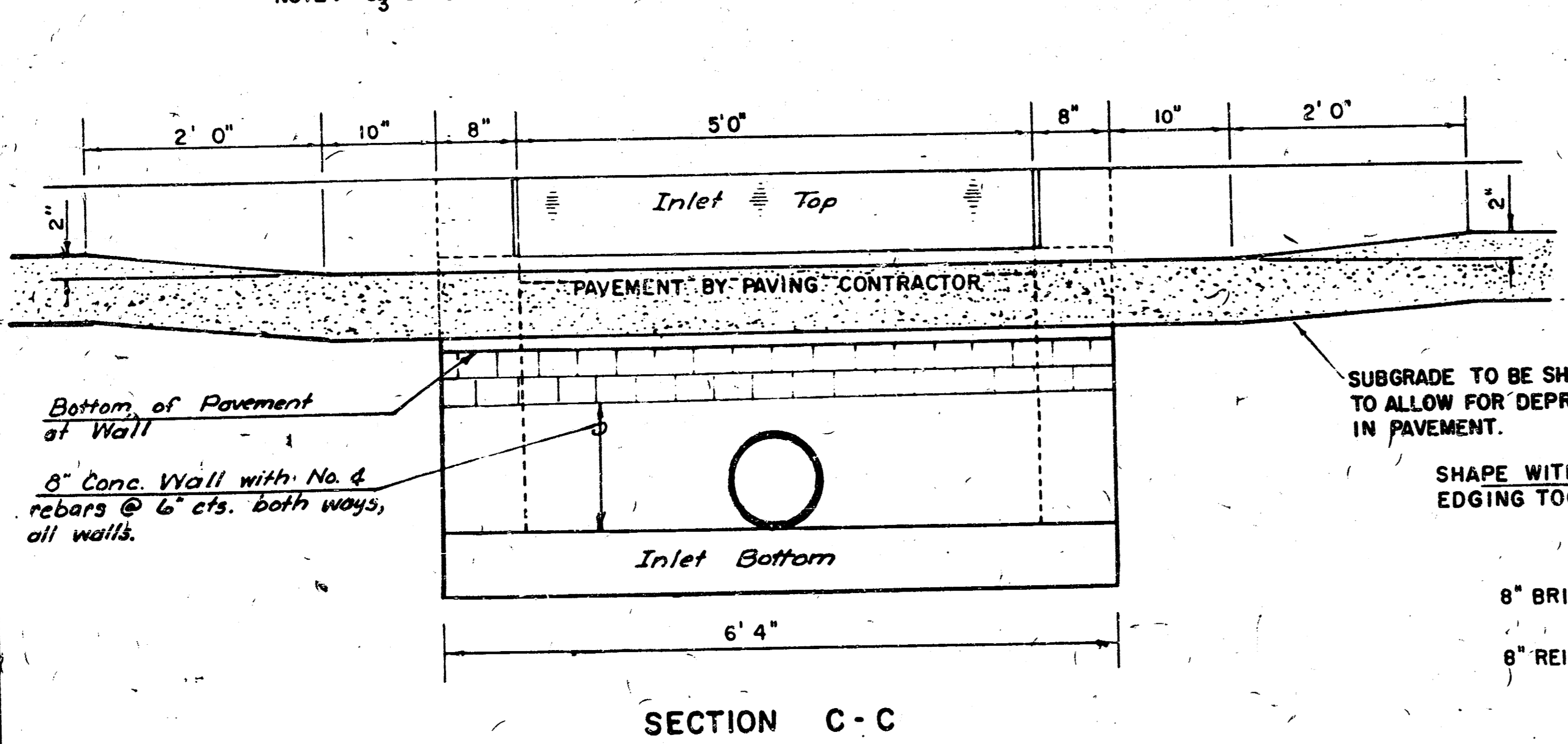
W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4' 4"	3' 6" x 6' 4" x 7 1/2"	21" B SMALLER	0.58 ±
5' 4"	4' 6" x 6' 4" x 7 1/2"	24" B 30"	0.51 ±
6' 4"	5' 6" x 6' 4" x 7 1/2"	36" B 42"	0.64 ±
7' 4"	6' 6" x 6' 4" x 7 1/2"	48" B 54"	0.77 ±
8' 4"	7' 6" x 6' 4" x 7 1/2"	60" B 66"	0.90 ±

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.

ADDITIONAL CURB AND GUTTER CONSTRUCTION NECESSARY TO CONNECT SET-BACK INLET TO PAVEMENT WILL BE PAID FOR AT THE UNIT PRICE BID FOR EACH INLET HOOKUP.

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.



REVISED 12-21-1984

4-12 76 245 81809 000 000 001

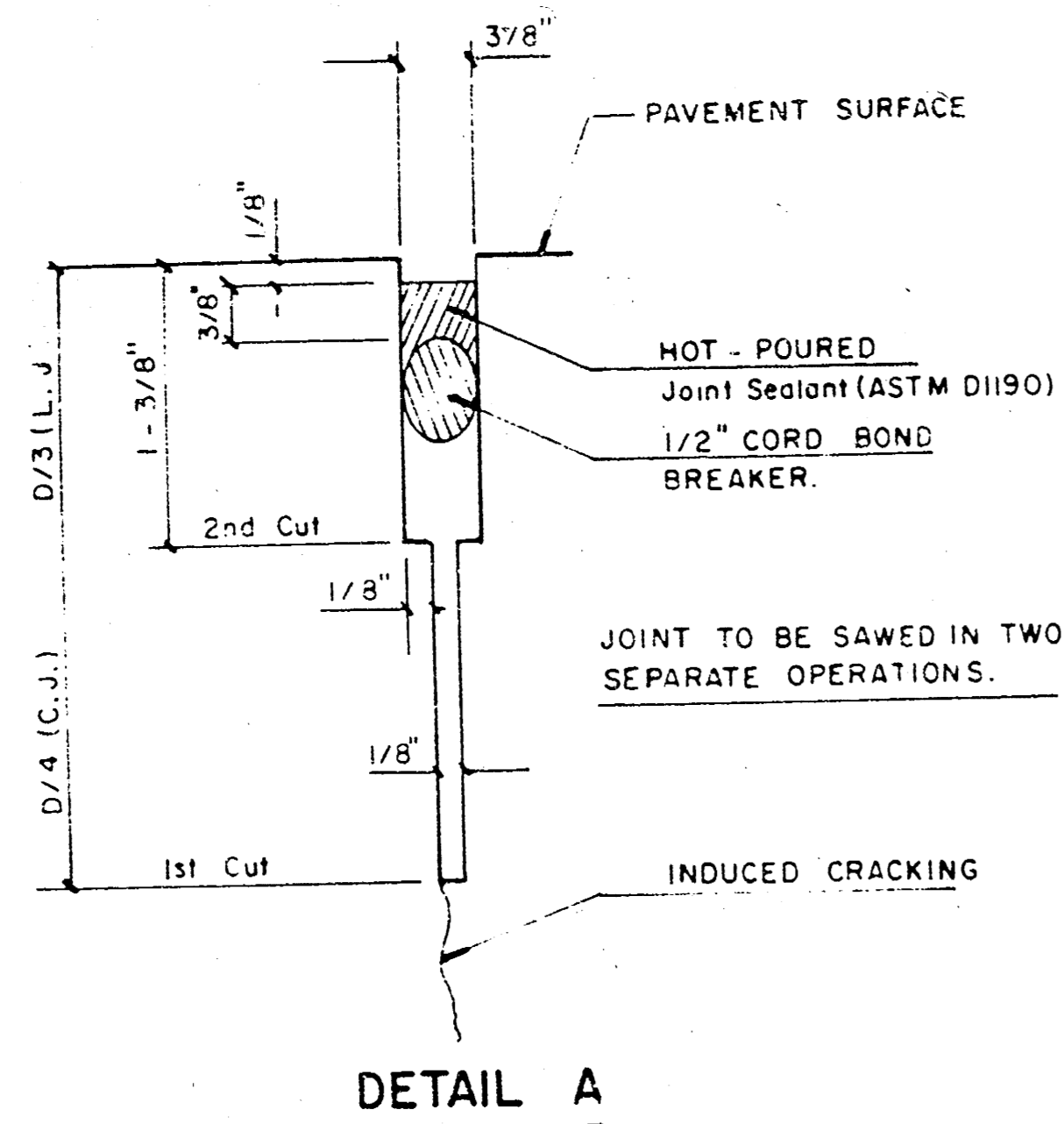
DETAIL STANDARD TYPE IA CURB INLET

CITY OF WICHITA, KANSAS

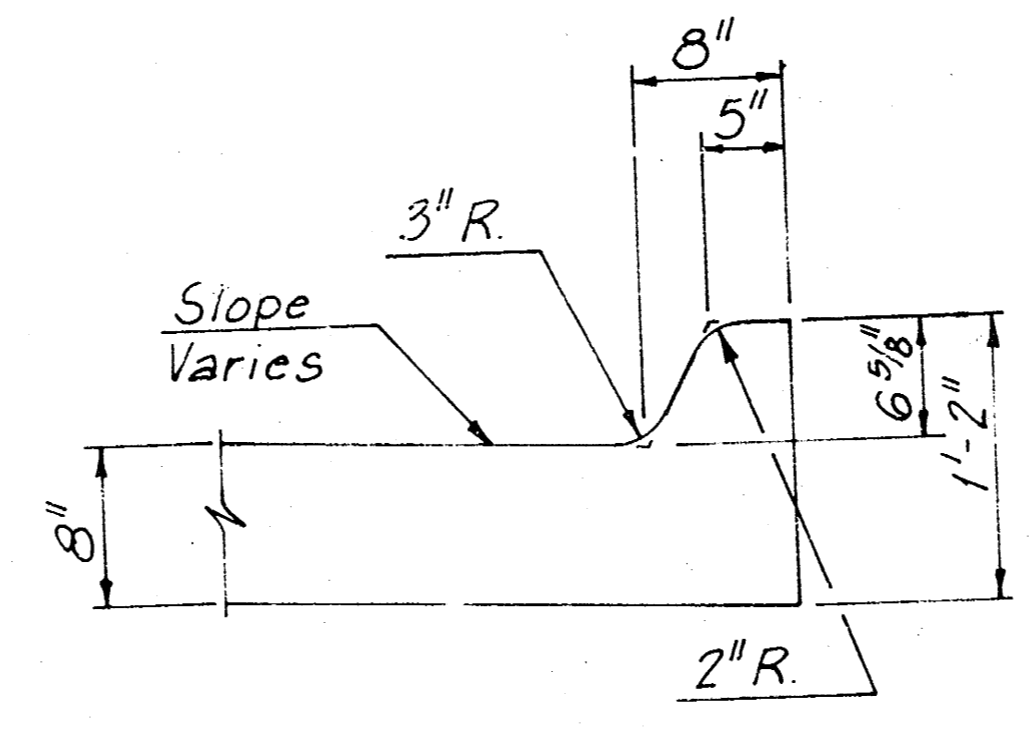
INLET OPENING = 6" x 5'0"

JUNE 1984

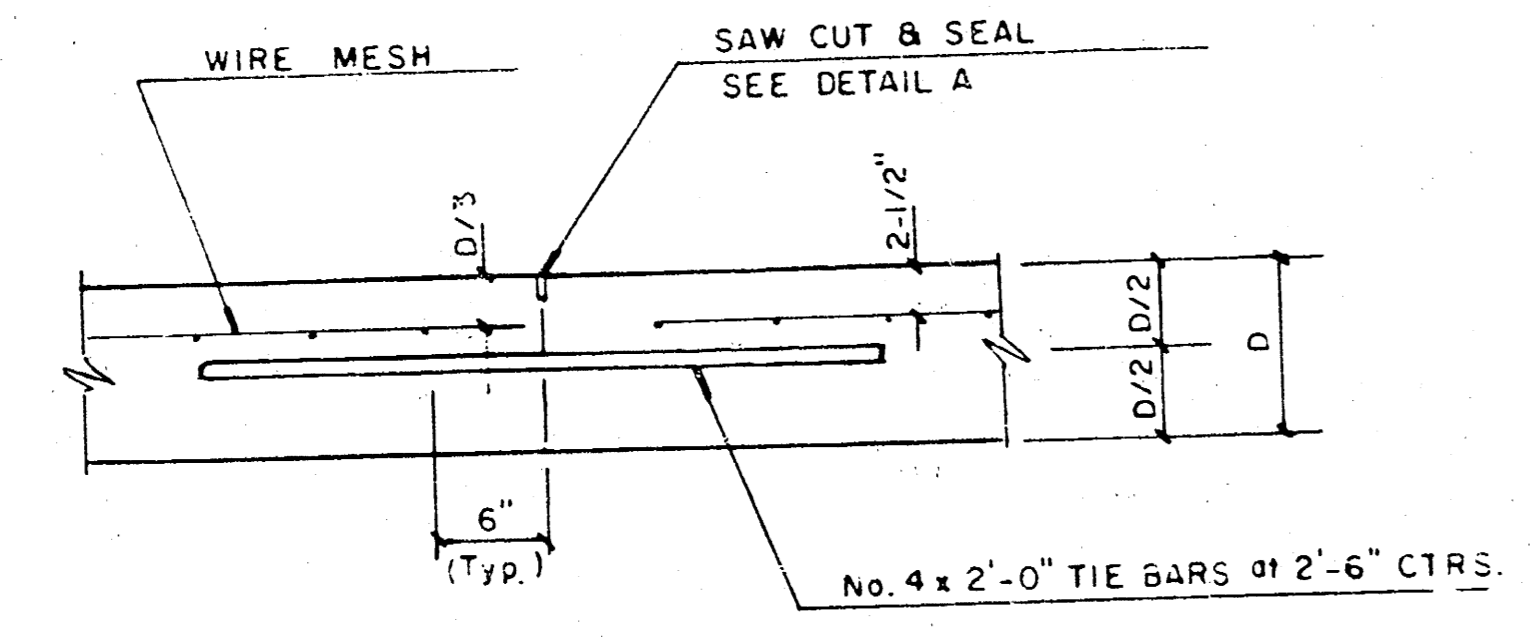
7/0



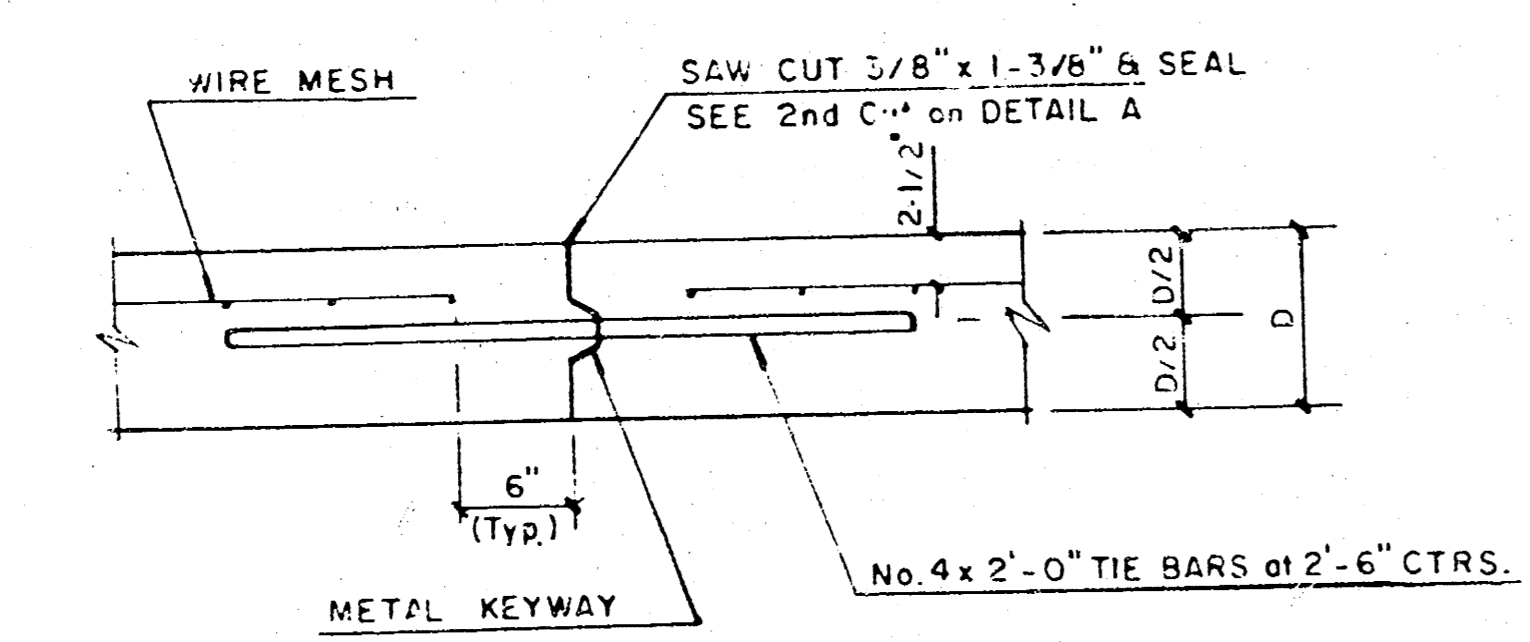
DETAIL A



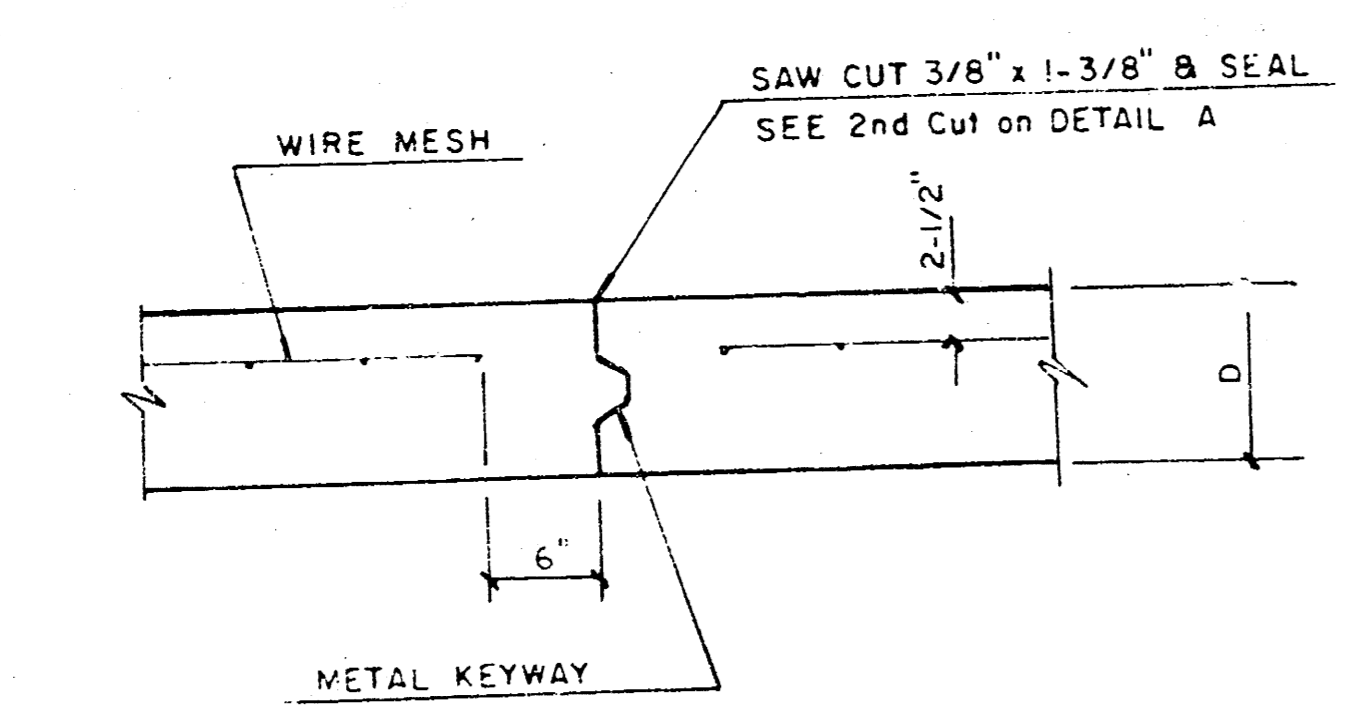
MONOLITHIC EDGE CURB  
(Construct Curb Monolithically With Pavement)



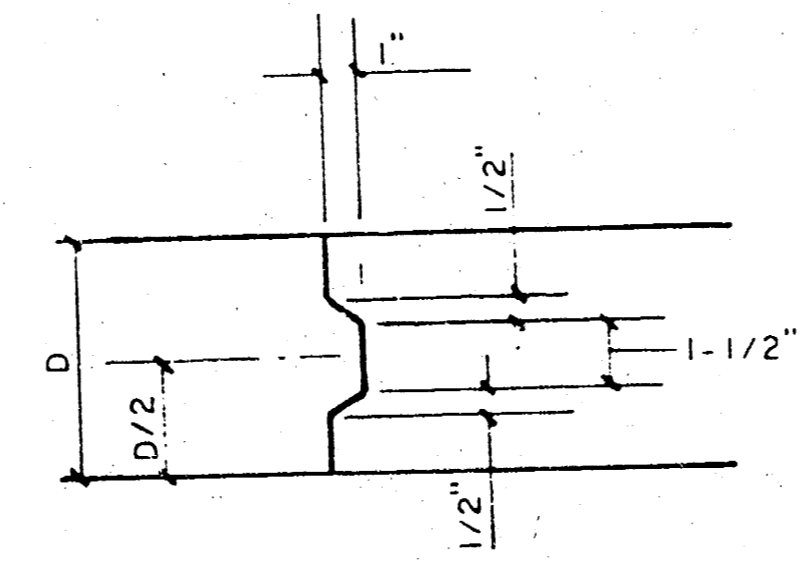
LONGITUDINAL JOINT DETAIL (L.J.)



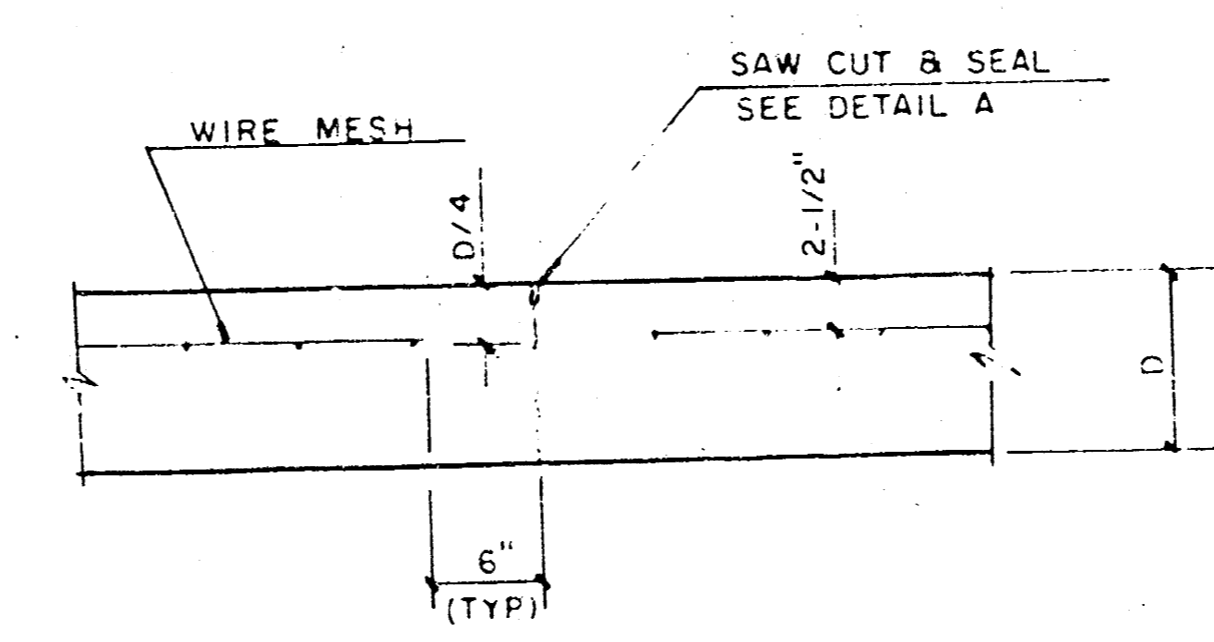
OPTIONAL LONGITUDINAL CONSTRUCTION JOINT (L.J.)  
(Alternate L.J.)



OPTIONAL CONTRACTION CONSTRUCTION JOINT (C.J.)  
(Alternate C.J.)



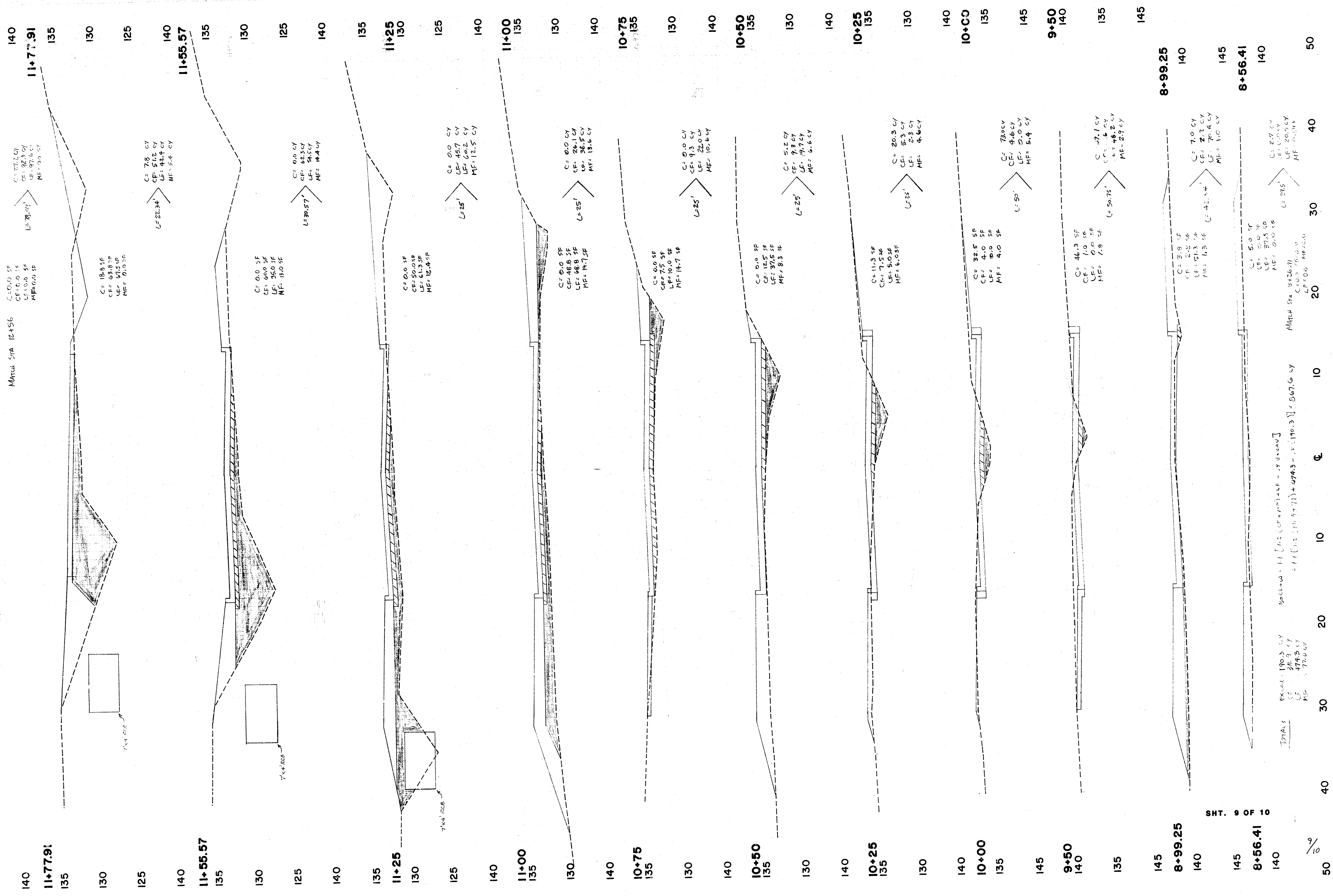
KEYWAY DETAIL



CONTRACTION JOINT DETAIL (C.J.)

SURV. PLOT. DISE. DR. TR. CRD. APP.

CITY OF WICHITA, KANSAS		
MICHAEL E. LINDEBAK, P.E., CITY ENGINEER		
PAVING IMPROVEMENT OF NEW JERSEY FROM OLIVER TO 370 ± WEST		
CITY PROJECT NO. 472-76-245-81809-000-000-001		
<b>Booker/Freund</b>		
Engineers Architects Planners		
SCALE N.T.S.	DATE JULY, 1986	DWG. No. 8 of 10



SHT. 9 OF 10

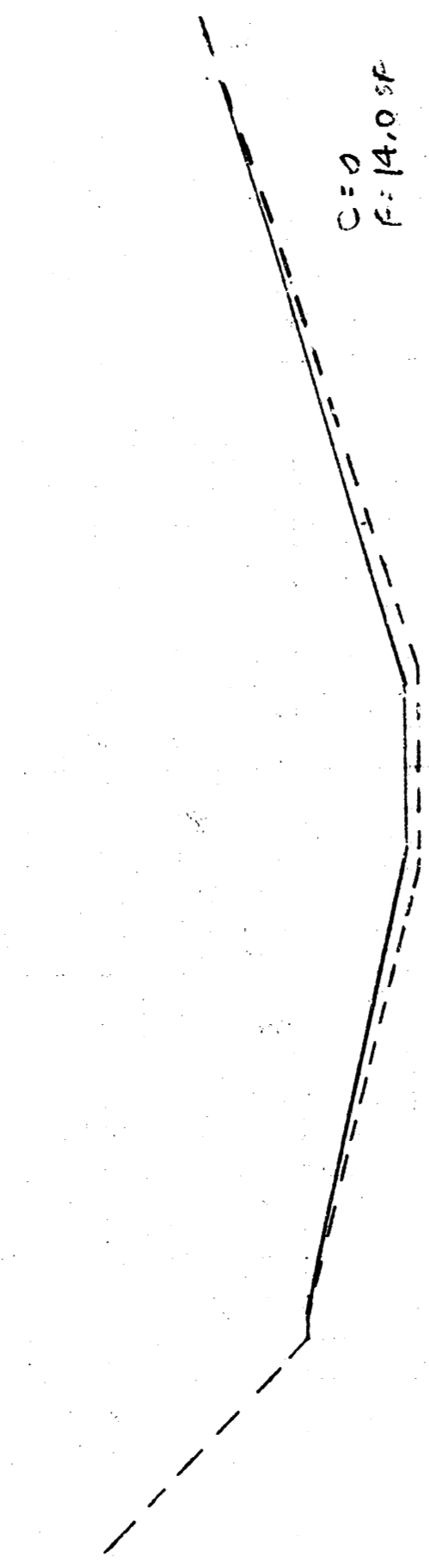
50  
40  
30  
20  
10  
0  
10  
20  
30  
40  
50

LOOKING NORTH

20 15 10 5 0 5 10 15 20

1425  
C=0  
F=0

> C=0  
F=10.6 cy



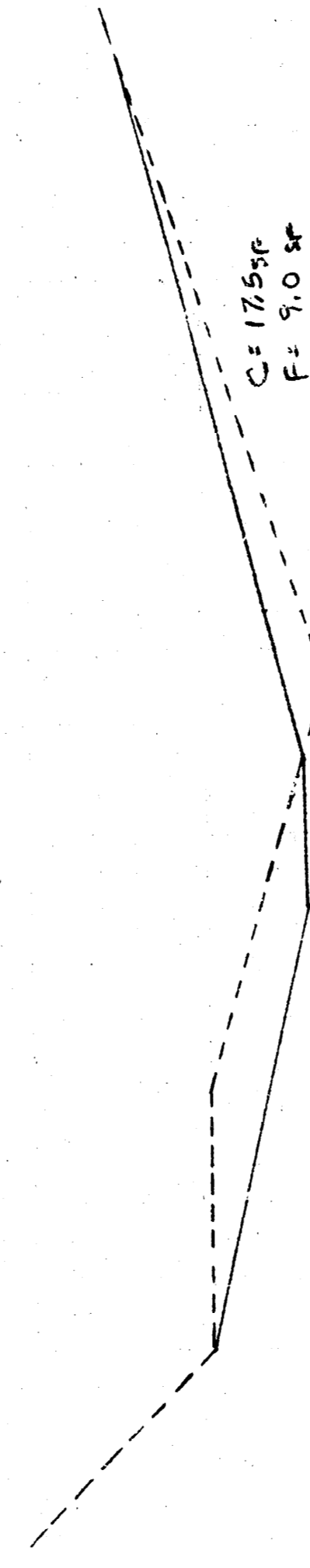
C=0  
F=14.0 sf

135 -1+00  
130  
125

WEST

135 -0+75  
130  
125  
EAST

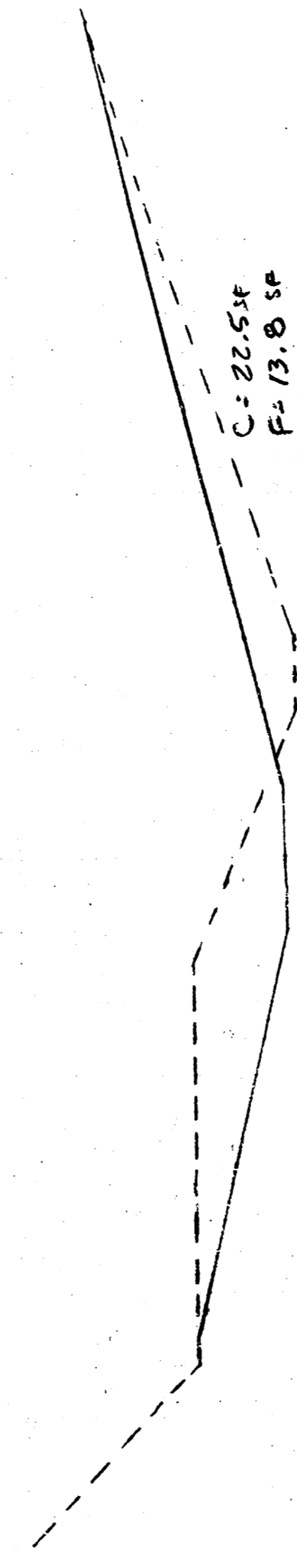
> C=8.1 cy  
F=10.6 cy



C=17.5 sf  
F=9.0 sf

> C=18.5 cy  
F=10.6 cy

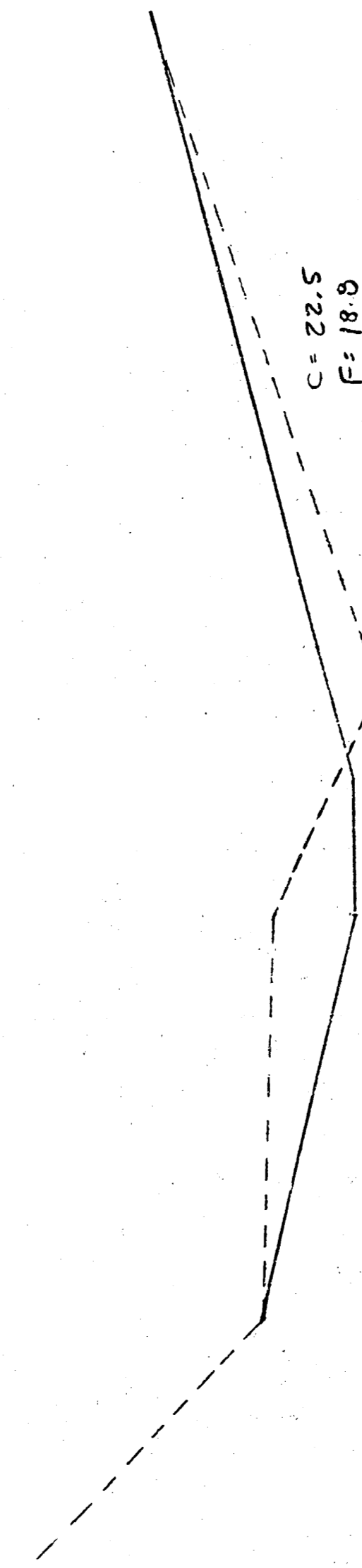
135 -0+50  
130  
125



C=22.5 sf  
F=13.0 sf

> C=20.8 cy  
F=15.1 cy

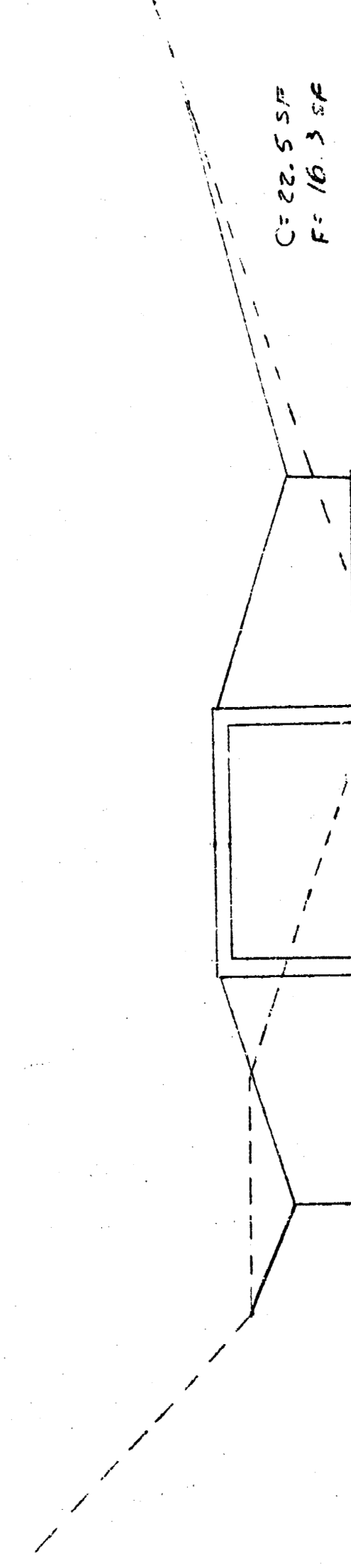
135 -0+25  
130  
125



C=22.5  
F=18.0

> C=20.8 cy  
F=16.3 cy

135 0+00  
130  
125  
DITCH  
SECTIONS



C=22.5 sf  
F=16.3 sf

TOTAL C=68.2 cy  
F=59.1 cy

Volume = 1.1 (1425 + 50) = 1.1 (1475) = 1622.5 sf (52.4) = 58.0 cy

25 20 15 10 5 0 5 10 15 20