

STREET IMPROVEMENTS CHARLES AVENUE

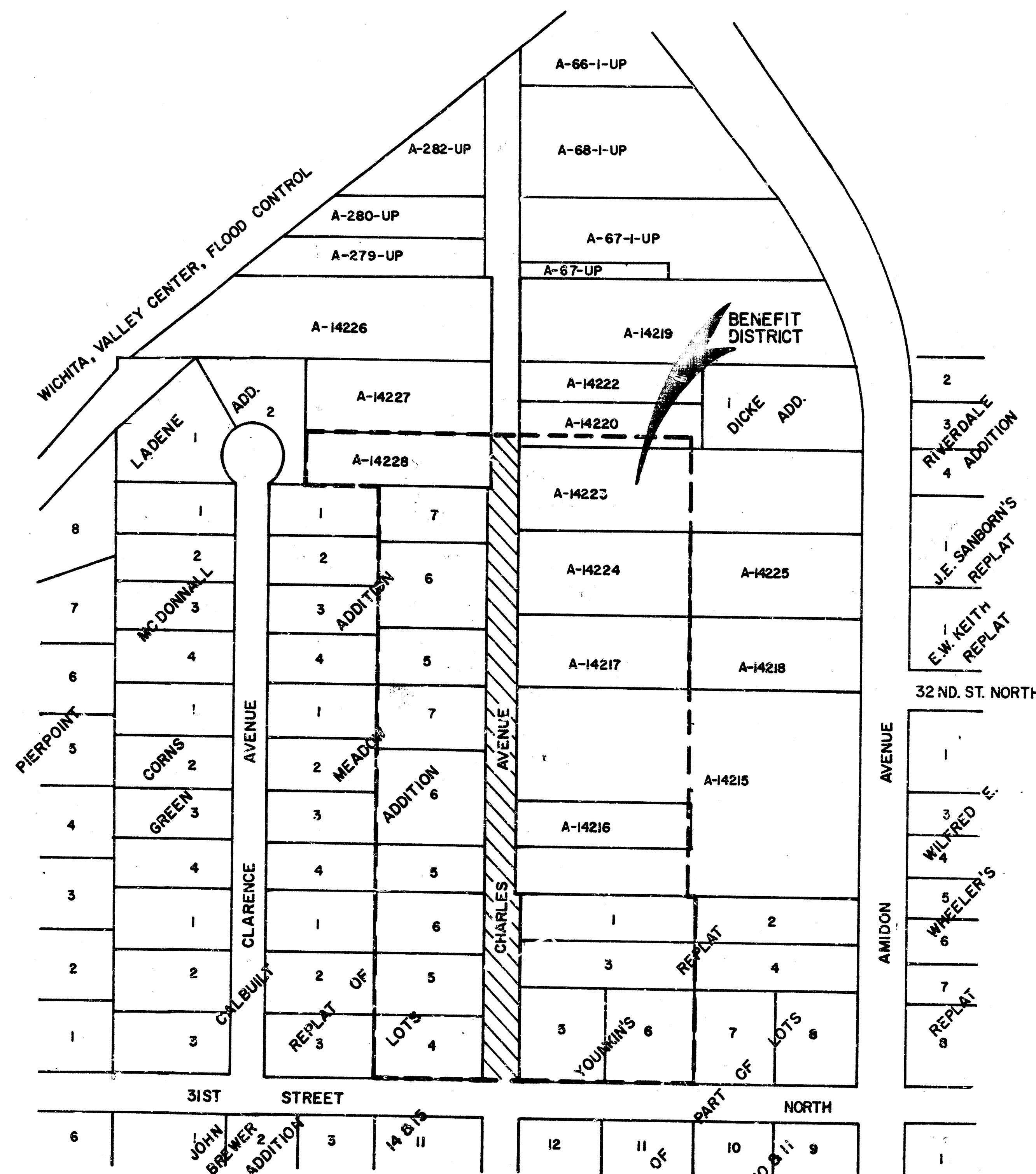
FROM 31ST STREET NORTH TO 1055 FEET NORTH

PROJECT NO. 472-76-245-81854-000-000-001
INDEX CODE 607234

CITY OF WICHITA, KANSAS
MICHAEL E. LINDEBAK CITY ENGINEER
MARCH 1989

GENERAL NOTES

- CHARLES STREET SHALL BE CLOSED UNTIL THE PAVEMENT, SUBGRADE MAINTENANCE, FIRST LIFT OF ASPHALTIC CONCRETE BASE COURSE, AND THE CURB AND GUTTER HAVE BEEN INSTALLED. AFTER THE ABOVE-MENTIONED ITEMS HAVE BEEN INSTALLED CHARLES STREET SHALL BE OPEN TO LOCAL TRAFFIC THROUGH THE DURATION OF THE STREET CONSTRUCTION.
- UTILITY SERVICE LINES, POLES, VALVE BOXES, METERS, AND MANHOLES 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 AVAILABLE FOR DESIGN. THE CONTRACTOR WILL BE REQUIRED TO WORK AROUND EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY WHICH DO NOT CONFLICT WITH PROPOSED CONSTRUCTION.
- 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 REVIEWED SEWERS WITHIN THE LIMITS OF THE PROJECT AND HAVE FOUND NO DEFECTS REQUIRING REPAIR. THE DIVISION SHALL BE NOTIFIED AND AFFORDED THE OPPORTUNITY TO REEVALUATE 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.
- THE CONTRACTOR SHALL NOTIFY PIPELINE COMPANIES AT LEAST 24 HOURS IN ADVANCE OF ANY WORK BEING PERFORMED OVER AND/OR ADJACENT TO PIPELINES.
- DRIVEWAY LOCATIONS SHOWN ON THE PLANS ARE TENTATIVE. CONTRACTOR WILL BE REQUIRED TO OBTAIN PROPERLY EXECUTED DRIVEWAY REQUEST FORM SIGNED BY PROPERTY OWNER OR HIS AUTHORIZED REPRESENTATIVE VERIFYING DRIVEWAY WIDTHS AND LOCATIONS. SUCH FORMS SHALL BE SUBMITTED TO THE ENGINEER FOR HIS REVIEW AND APPROVAL.
- MAILBOXES WITHIN THE LIMITS OF THE PROJECT SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AS APPROVED BY THE ENGINEER. CONTRACTOR WILL BE REQUIRED TO MAKE SATISFACTORY PROVISIONS FOR MAIL DELIVERY TO PROPERTIES AFFECTED BY THIS PROJECT DURING ITS CONSTRUCTION.
- TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT 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 SHED AND PROTECTED FROM DAMAGE.
- LIMITS OF EXISTING SHALL MATCH EXISTING GROUND ELEVATIONS AT THE RIGHT-OF-WAY LINE UNLESS OTHERWISE NOTED ON THE PLANS. A NEW FINISHED GRADE ELEVATION, WHEN A NEW FINISHED GRADE ELEVATION IS SHOWN, THE CONTRACTOR SHALL EXIST ONE FOOT BEYOND THE RIGHT-OF-WAY LINE AND THEN SLOPE UP OR DOWN USING PERMISSIBLE SLOPES TO MATCH THE EXISTING GROUND SURFACE.
- ALL ENTRANCE AND CROSS ROAD PILES WITHIN THE PROJECT LIMITS SHALL BE REMOVED BY THE CONTRACTOR UNLESS OTHERWISE NOTED ON THE PLANS. REMOVAL OF SUCH PILES SHALL CONFORM TO THE APPLICABLE SECTION OF THE STANDARD SPECIFICATIONS.
- CONTRACTOR SHALL GIVE PROPERTY OWNERS NOTIFYING THIS PROJECT. THESE YARDS WILL BE LOWER THAN THE NEW FINISHED GRADE ELEVATIONS AT THE RIGHT-OF-WAY LINE, AN OPPORTUNITY TO UTILITY EXCESS EXCAVATION ADJACENT FROM THE PROJECT TO REPAIR. THEIR YARDS TO DRAIN TO THE NEW PAVEMENT. CONTRACTOR WILL BE REQUIRED TO DUMP AND SPREAD THE EXCESS MATERIAL AS REQUIRED BY THE SPECIFICATIONS WHEN REQUESTED BY THE PROPERTY OWNER. THE CONTRACTOR SHALL ASCERTAIN THAT A DIRT ORDER FORM HAS BEEN PROPERLY SUBMITTED BY THE PROPERTY OWNER BEFORE ANY SUCH EXCESS MATERIAL IS DELIVERED TO SUCH PROPERTIES.
- THE CONTRACTOR WILL BE PERMITTED TO BID ONLY ONE OF THE ALTERNATE TYPES OF SUBGRADE TREATMENT. THE TYPE BID BY THE SUCCESSFUL BIDDER WILL BE THE TYPE OF SUBGRADE TREATMENT USED TO CONSTRUCT THE PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY TREES. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY TREES WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH TREES SHALL BE RE-ESTABLISHED BY A LICENSED LAND SCAPING OR A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH STATE LAWS.
- THE CONTRACTOR SHALL GIVE ALL PROPERTY OWNERS AND/OR TENANTS OF DEVELOPED PROPERTY NOTIFYING THE PROJECT LIMITS A MINIMUM OF TEN (10) DAYS ADVANCE NOTICE PRIOR TO START OF CONSTRUCTION.

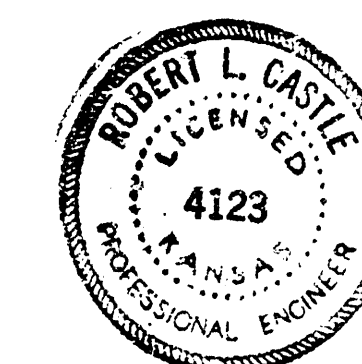


DRAWING INDEX

SHEET	TITLE
1	MAP AND BENEFIT DISTRICT
2	TYPICAL 3' PAVEMENT DETAILS
3	PLAN CHARLES AVENUE
4	PLAN CHARLES AVENUE
5	DETAIL STANDARD TYPE 1A CURB INLET
6	CROSS SECTIONS CHARLES AVENUE

LEGEND

OW	WATER METER
OG	GAS METER
WV	WATER VALVE
TP	TELEPHONE POLE
PP	POWER POLE
LPP	LIGHT & POWER POLE
MB	MAIL BOX
6" W	WATER LINE & SIZE
2" G	GAS LINE & SIZE
4" CH LK	CHAIN LINK FENCE & HEIGHT
6" WD	WOODEN FENCE & HEIGHT
PL	PROPERTY LINE

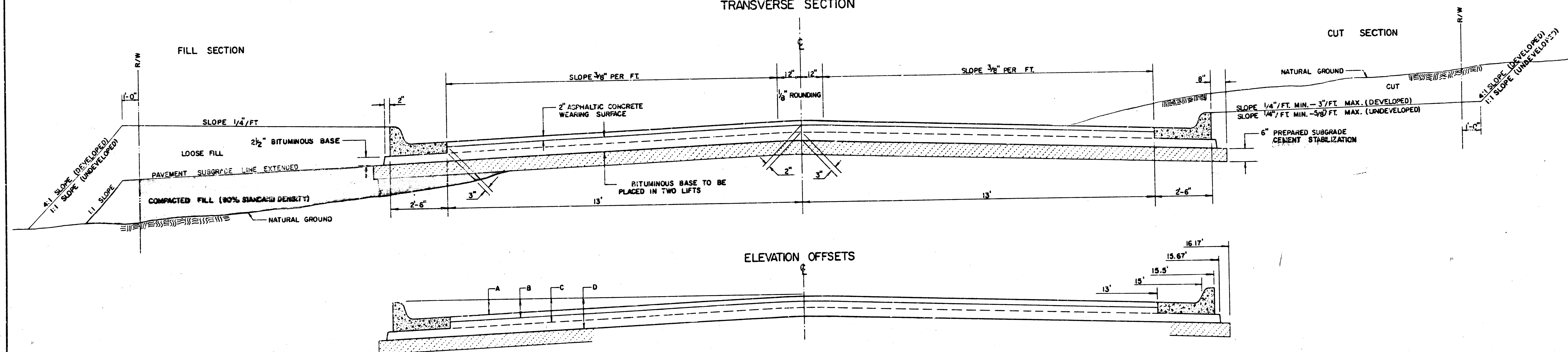


WICHITA, KANSAS	
STREET IMPROVEMENTS	
MAP AND BENEFIT DISTRICT	
CHARLES AVENUE	
PROJECT NO. 472-76-245-81854-000-000-001	
CASTLE & ASSOCIATES	DRG DOR
ENGINEERS	DR DOR
WICHITA, KANSAS	CH LK
DATE MARCH 1989	APP
DWG FILE NO. 8838-D-80,085	SHEET NO. 1 OF 6

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TYPICAL 31' PAVEMENT DETAILS

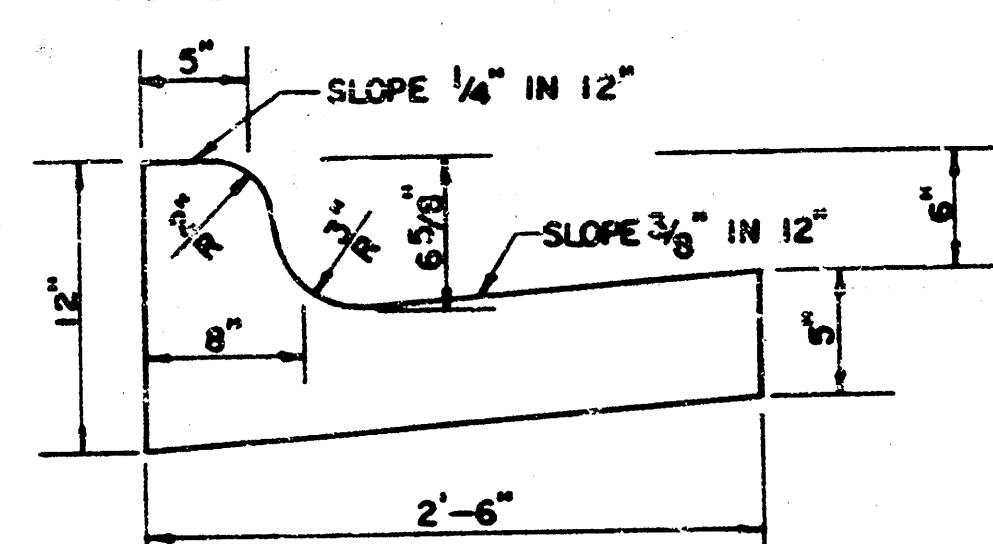
TRANSVERSE SECTION



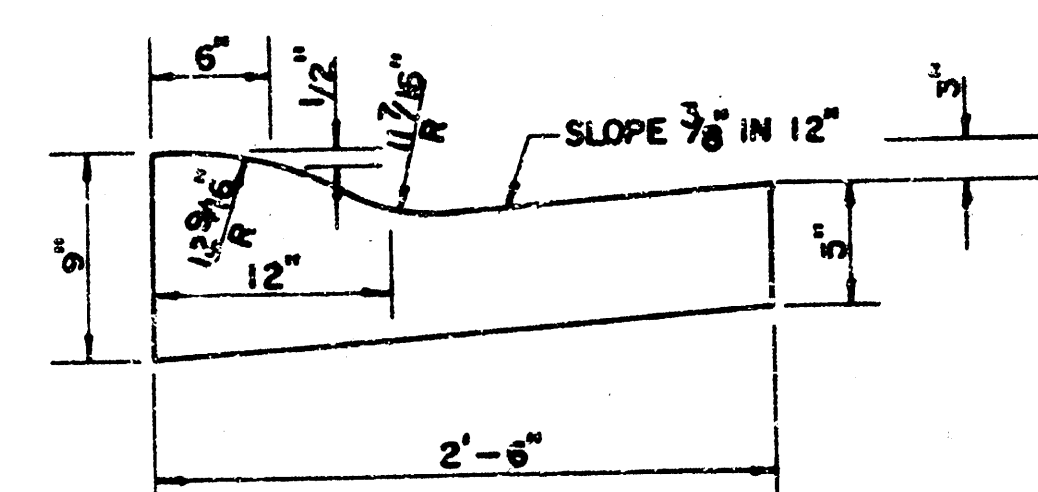
ELEVATION OFFSETS

	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	0.10	0.14	0.21	0.27	0.32	0.39	0.46	0.49	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	0.27	0.31	0.38	0.44	0.49	0.56	0.63	0.66	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	0.44	0.48	0.57	0.64	0.70	0.79	0.87	0.90	0.98	1.00	1.00	—
D: TOP OF CURBS TO TOP OF SUBGRADE	0.69	0.73	0.80	0.87	0.93	1.01	1.08	1.12	1.19	1.21	1.21	1.23

COMBINED CURB & GUTTER



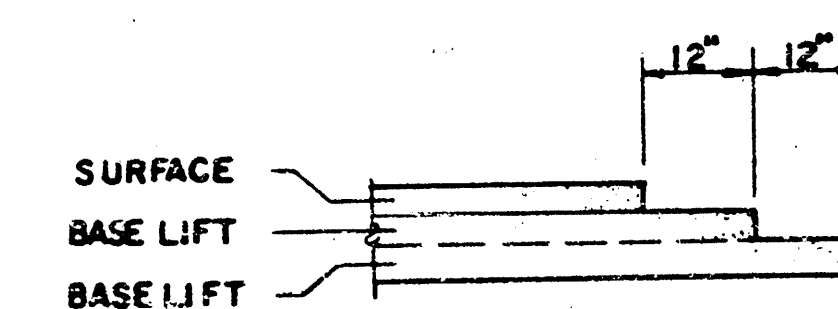
ROLL TYPE COMBINED CURB & GUTTER



GENERAL NOTES

- 1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).
- 2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 2 1/2" 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 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

7 INCH RESIDENTIAL ASPHALTIC CONCRETE
PAVEMENT WITH 5 INCH BITUMINOUS BASE
CITY OF WICHITA, KANSAS

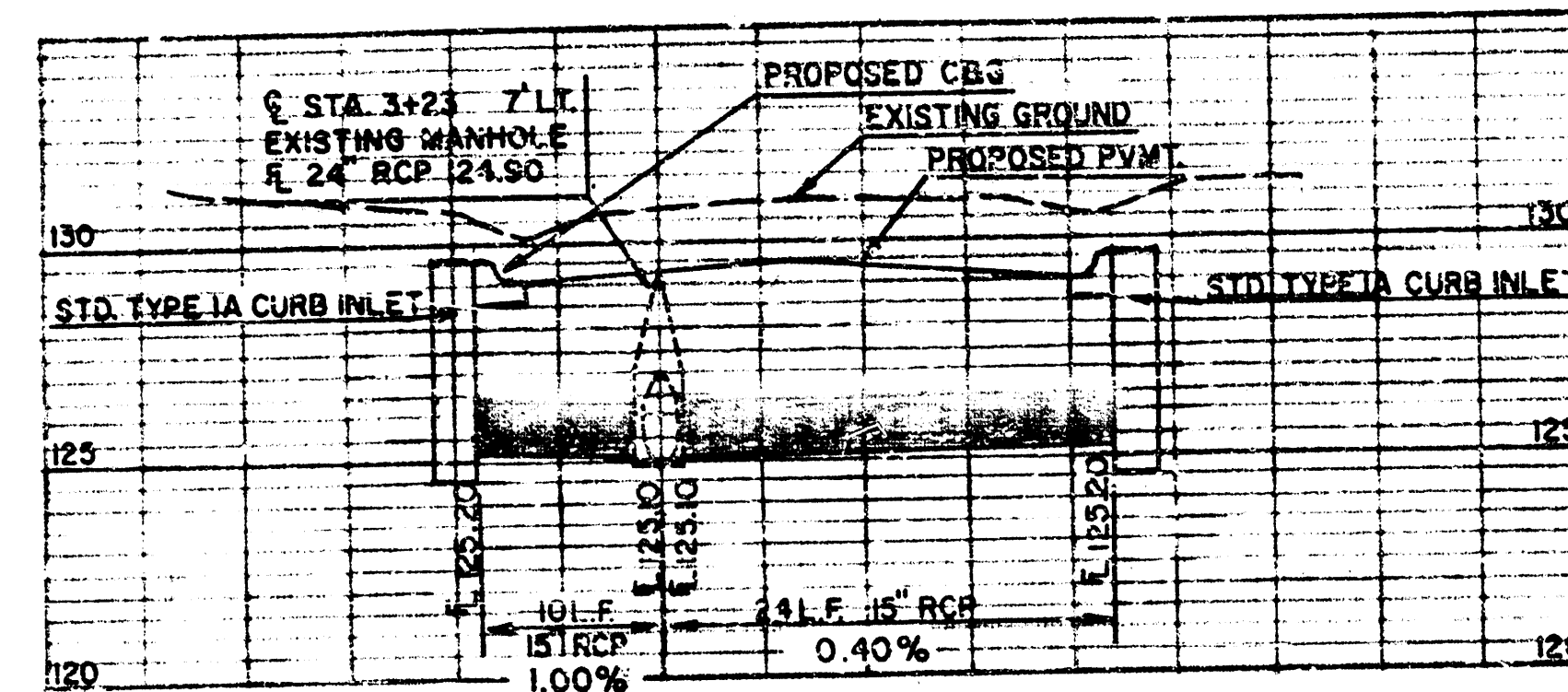
PROJECT NUMBER
472-35-245-0155-000-000-001

8838-D-80,000

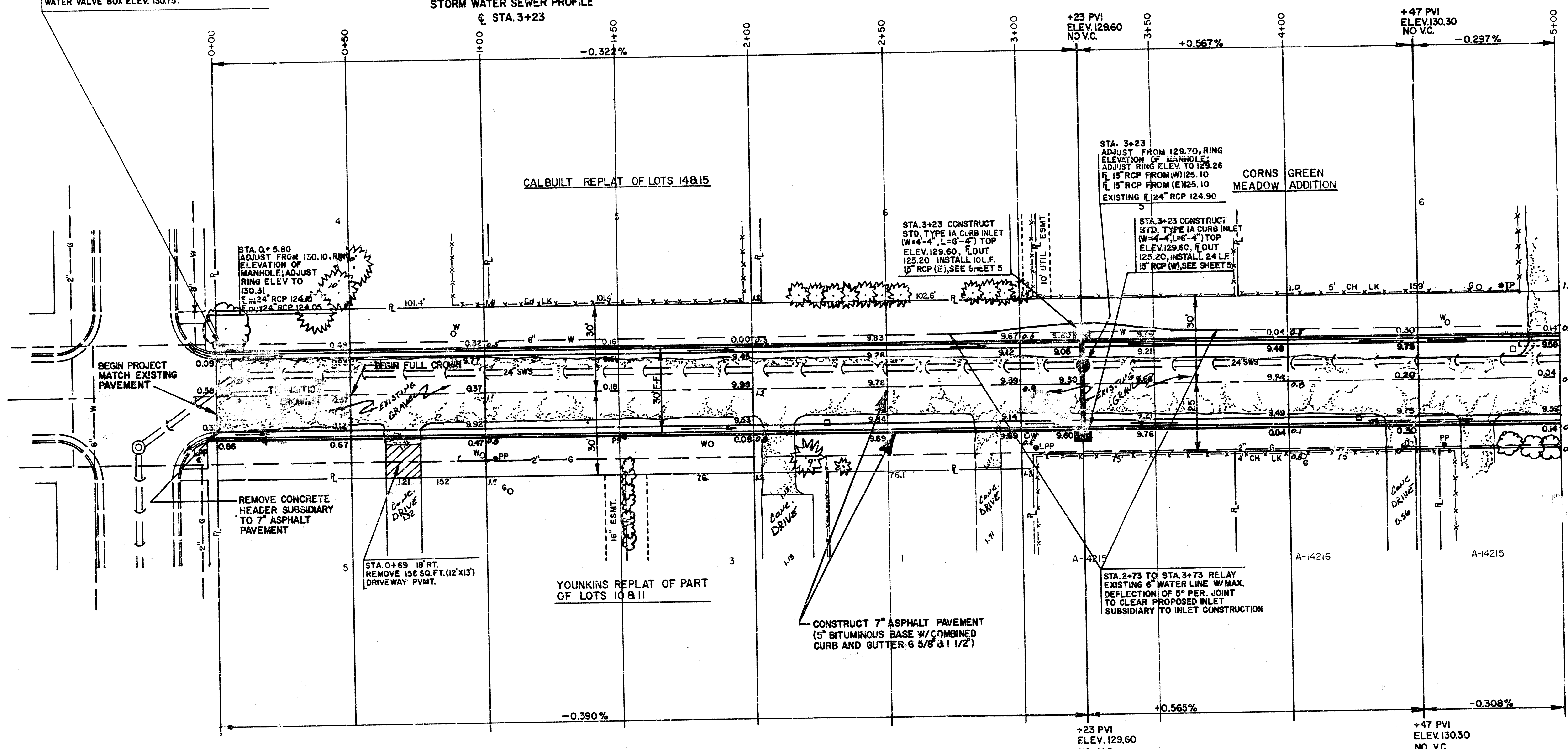
SHEET NO. 2 OF 6

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STA. 0+02 175' LT
EXISTING WATER VALVE BOX ELEV. 130.75 = PROPOSED
WATER VALVE BOX ELEV. 130.75.



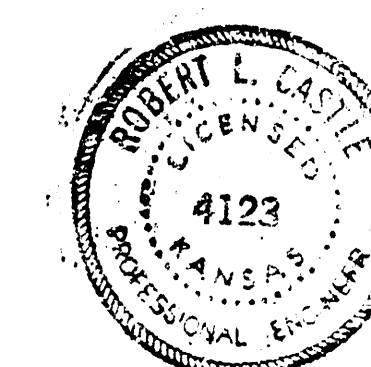
STORM WATER SEWER PROFILE
@ STA. 3+23



BENCHMARK:
BM 1 R.R. SP'VE IN WEST FACE OF POWER
POLE ON THE NE CORNER OF CHARLES
& 31 ST. STREET N. ELEV. 132.09
BM 2 R.R. SPIKE IN WEST FACE OF POWER
POLE ON EAST SIDE OF CHARLES
60' ± NORTH OF END OF PROJECT ELEV. 131.82

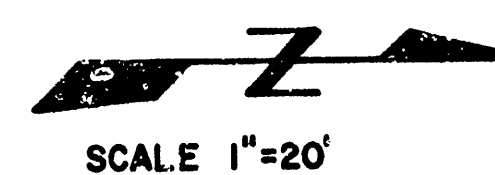
EXCAVATION 1669.73 C.Y.
+10% 166.97 C.Y.
TOTAL 1836.70 C.Y.

MANIPULATION 3794 S.Y.

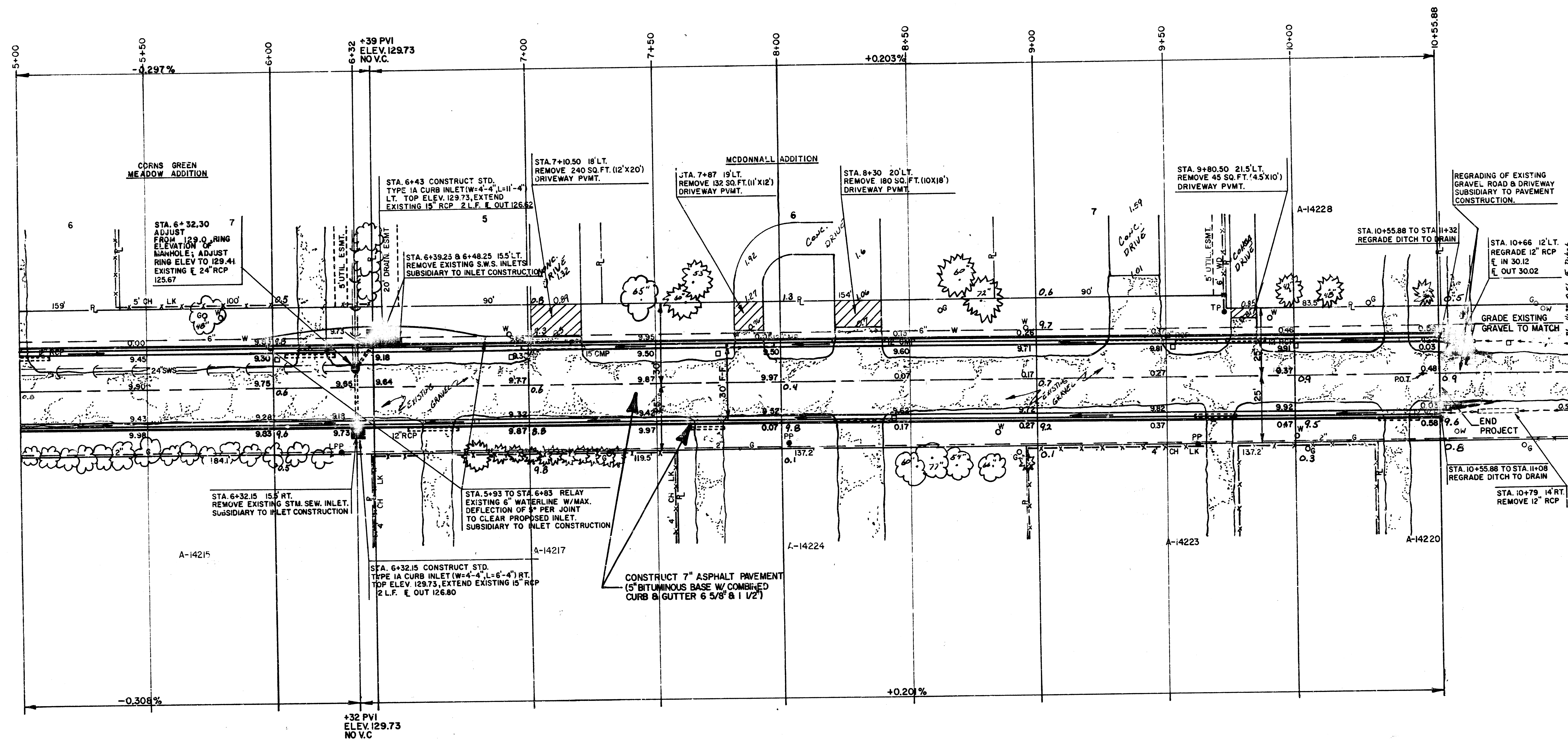


WICHITA, KANSAS STREET IMPROVEMENTS			
PLAN CHARLES AVENUE PROJECT NO. 472-76-245-81854-000-000-001			
CASTLE & ASSOCIATES ENGINEERS WICHITA, KANSAS	DWG. DOR DR. DOR CH. LJK	DWG. FILE NO. 8838-D-80,087	REV.
DATE MARCH 1989	APP	SHEET NO. 3 OF 6	

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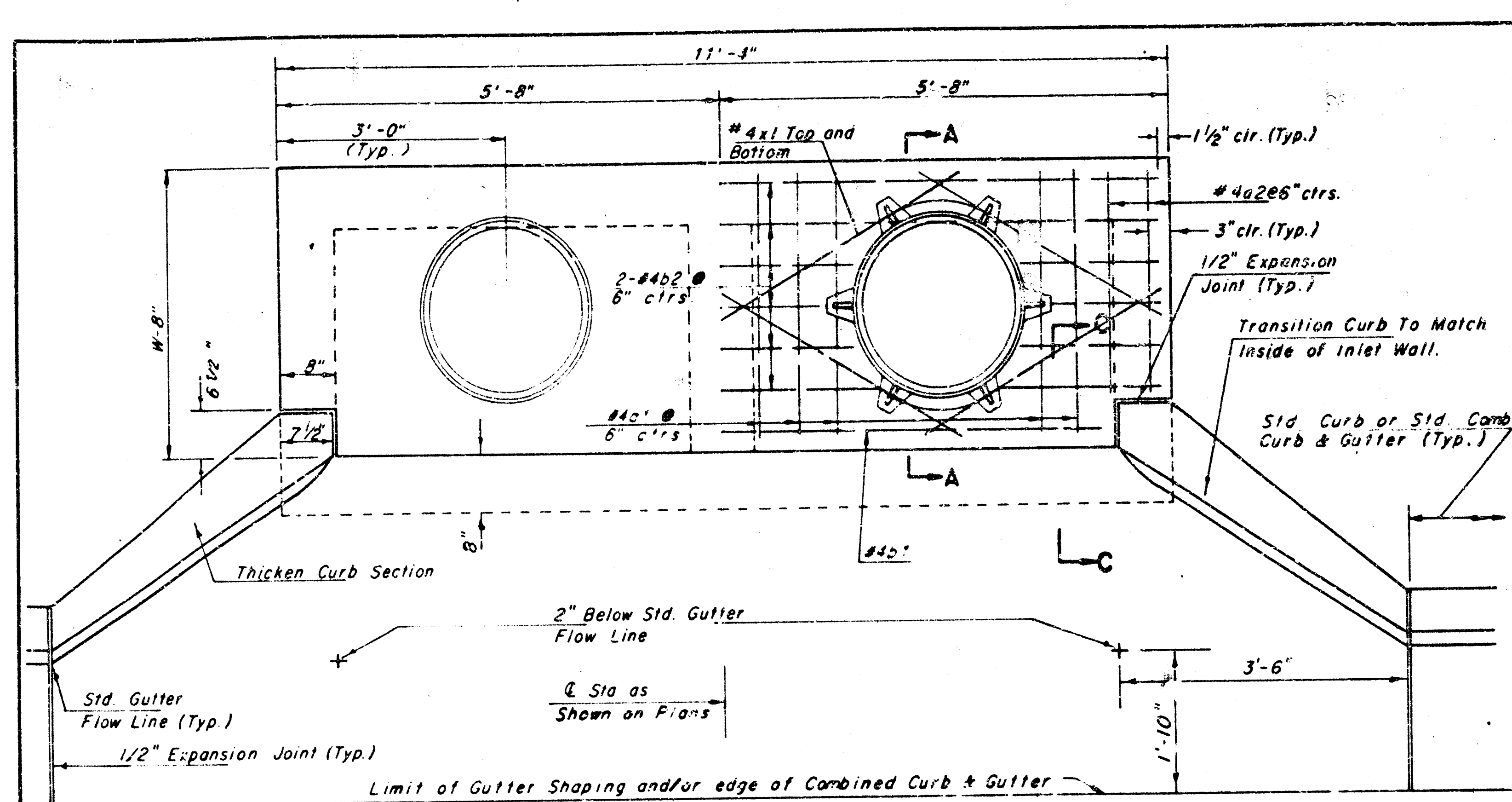


- P.O.T. STA. 10+50
1. 3/4" IRON PIPE 0.2' BELOW SURFACE ON C.
2. CTR. TOP CH. LNK. FNC. CORNER POST — 32.00' SE
3. R.R. SPIKE IN WEST FACE HLP — 61.45' NNE
4. CORP. STOP ON GAS METER — 51.90' NNW
5. CORP. STOP ON GAS METER — 34.03' SW

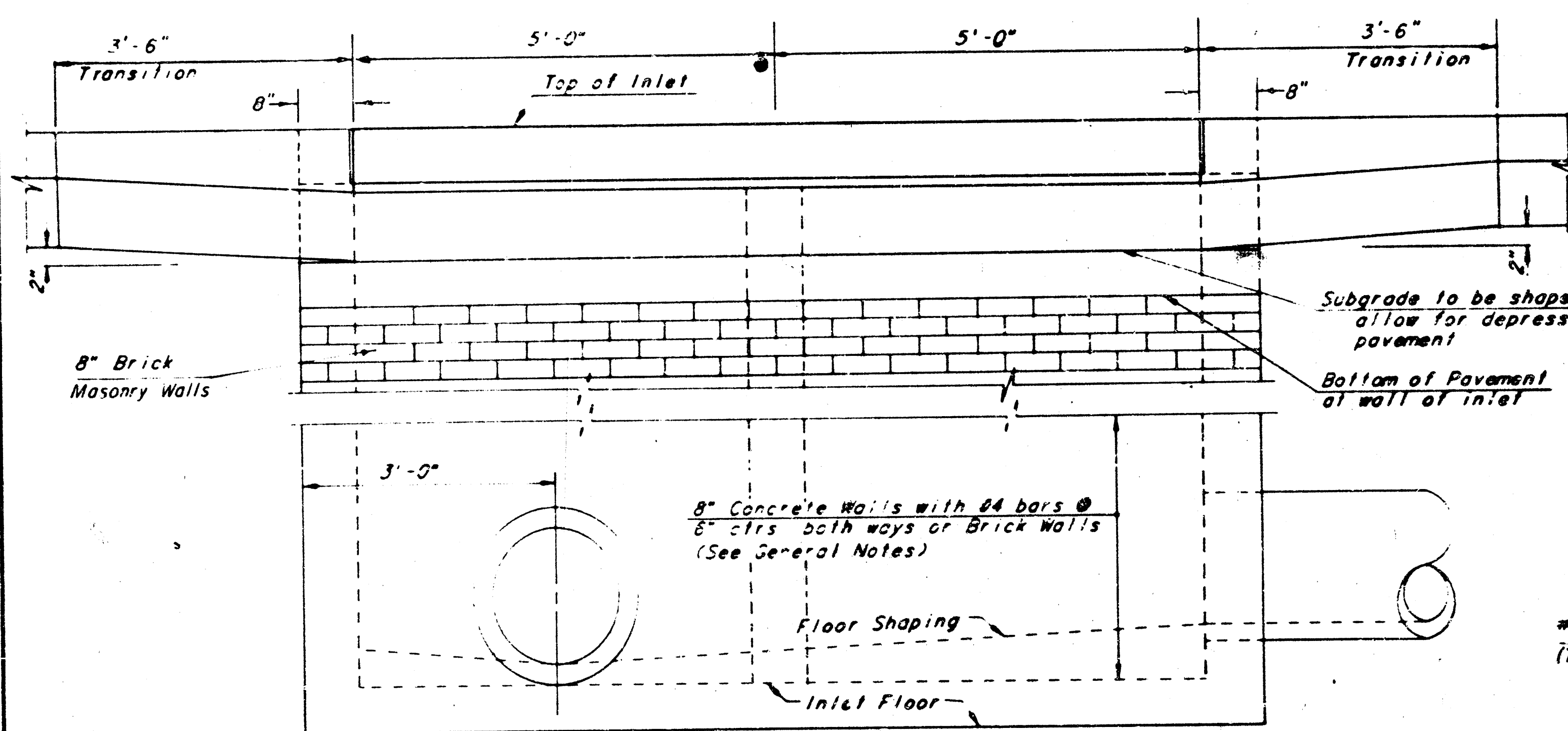


WICHITA, KANSAS			
STREET IMPROVEMENTS			
PLAN			
CHARLES AVENUE			
PROJECT NO. 472-76-245-81854-000-000-001			
CASTLE & ASSOCIATES ENGINEERS WICHITA, KANSAS	DSB DOR	DWG FILE NO	REV
	DR DOR	8838-D-80,088	
DATE	MARCH	1989	SHEET NO. 4 OF 6

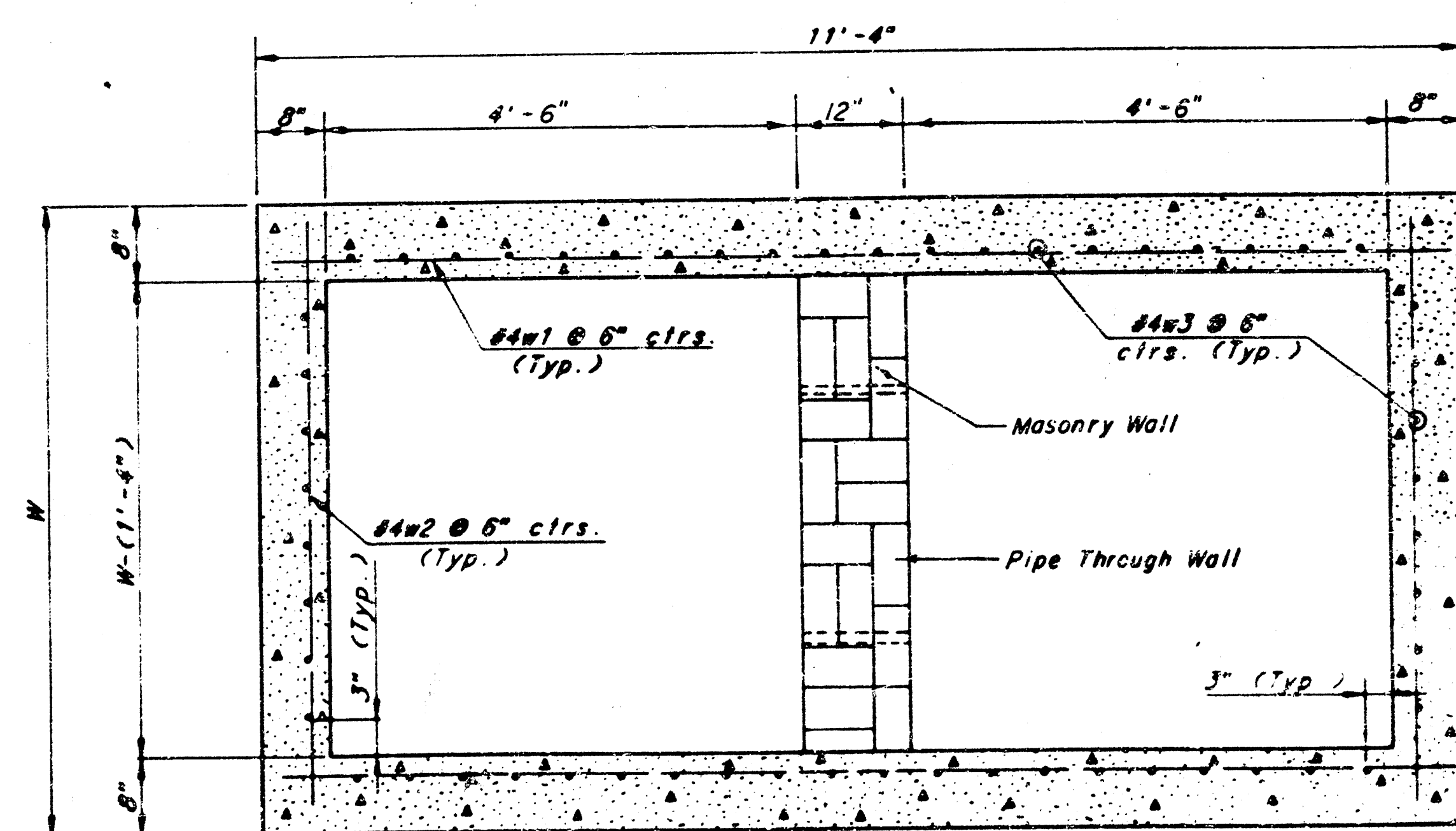
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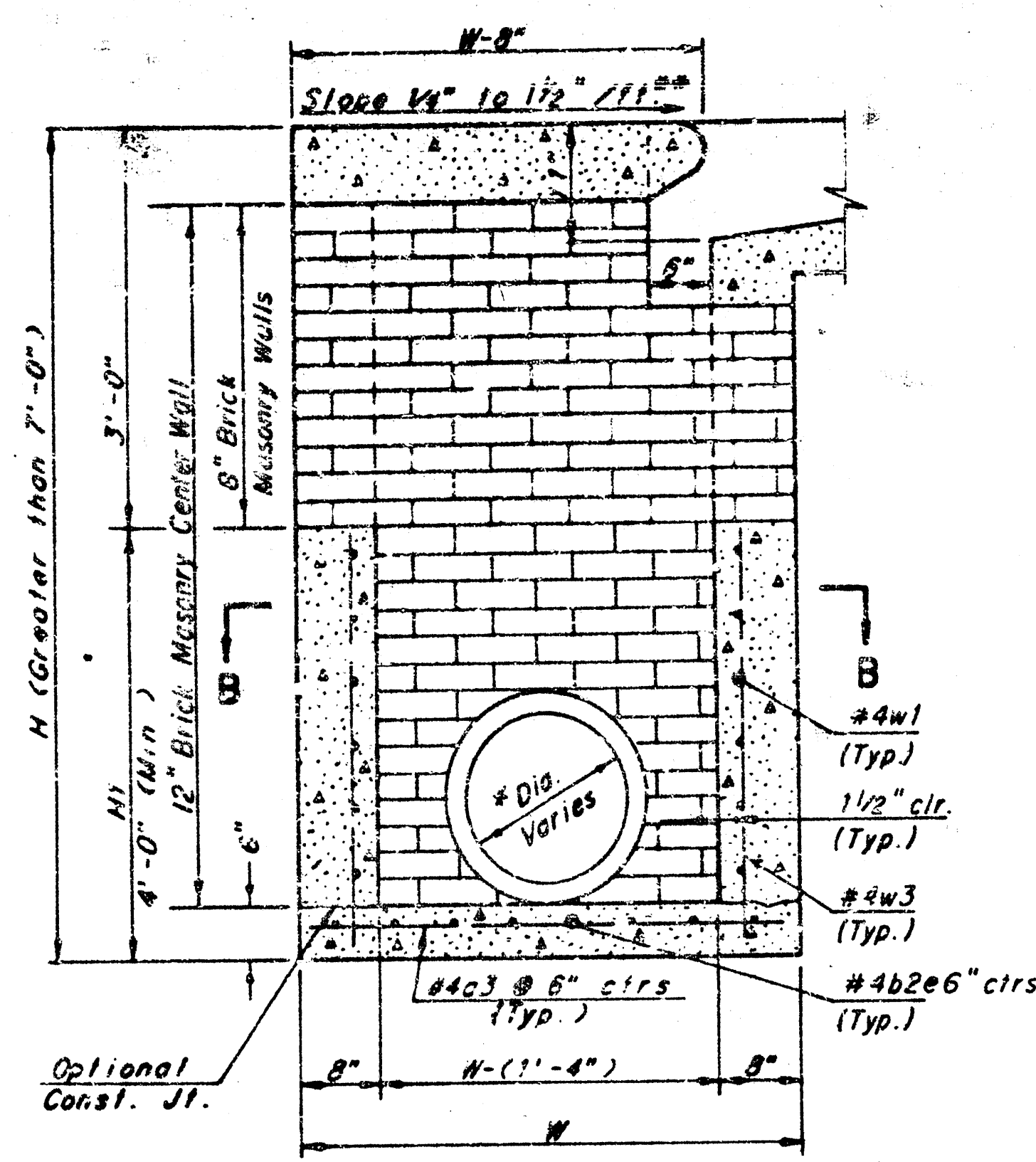
SLAB REINFORCING NOT SHOWN
SHOWING SLAB REINFORCING
NOTE: Expansion Joint only in Curb Area with Conc. Pavement.



ELEVATION



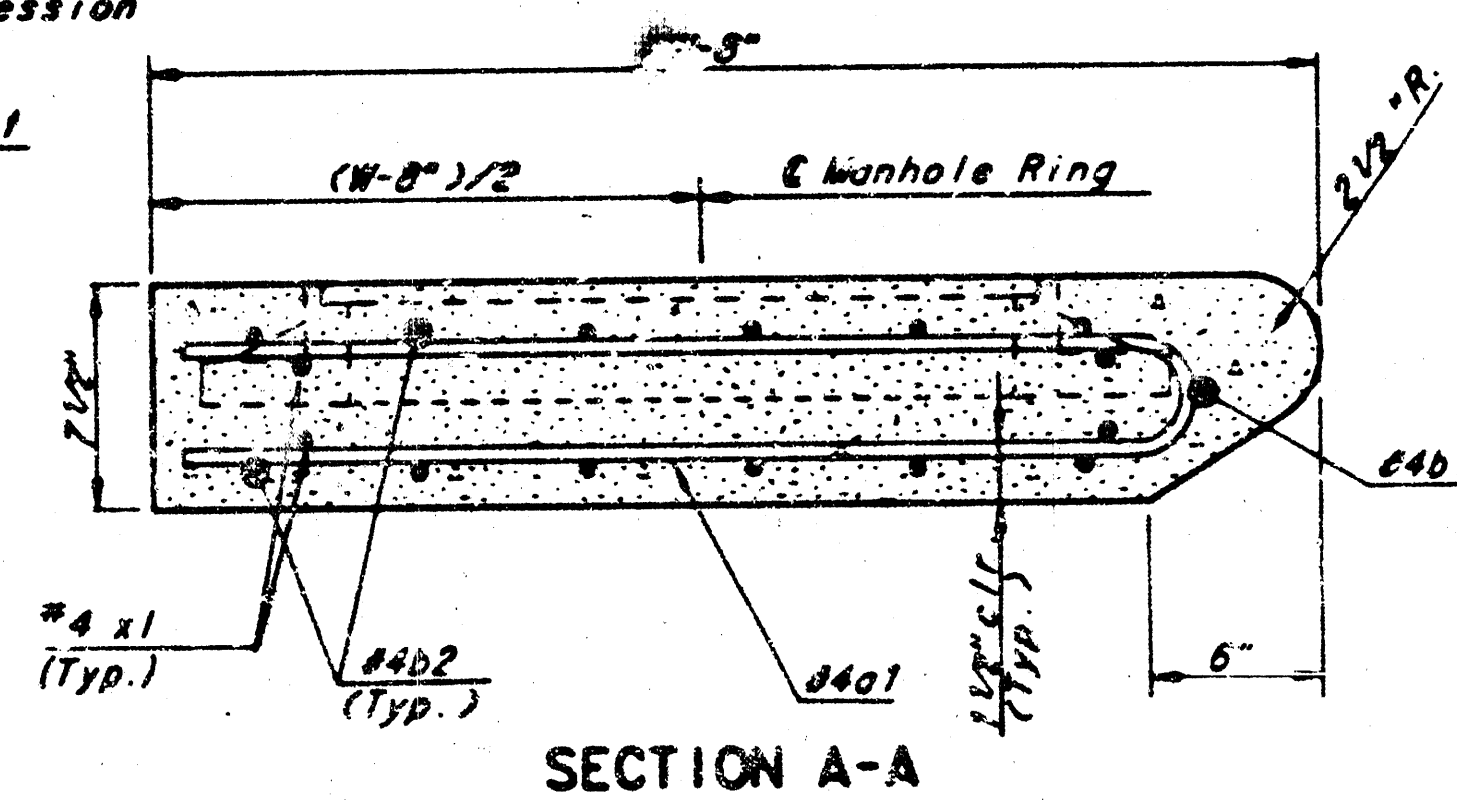
SECTION B-B



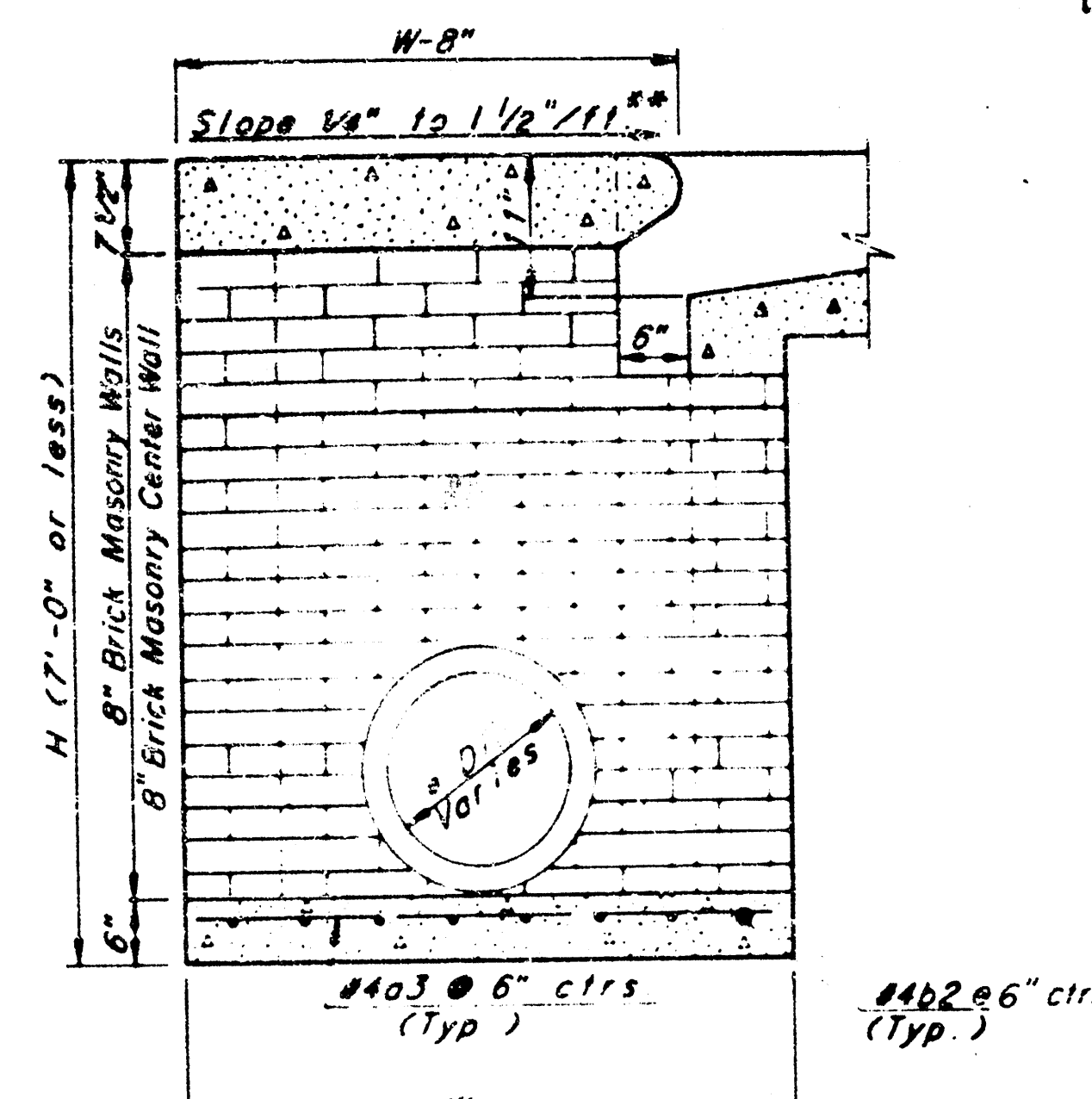
TYPICAL INLET SECTION AT CENTER WALL
(REINFORCED CONCRETE WALLS)

**NOTE: Slope of Inlet Tops to match Sidewalk or Parking Slopes within Limits indicated.

BENDING DIAGRAM

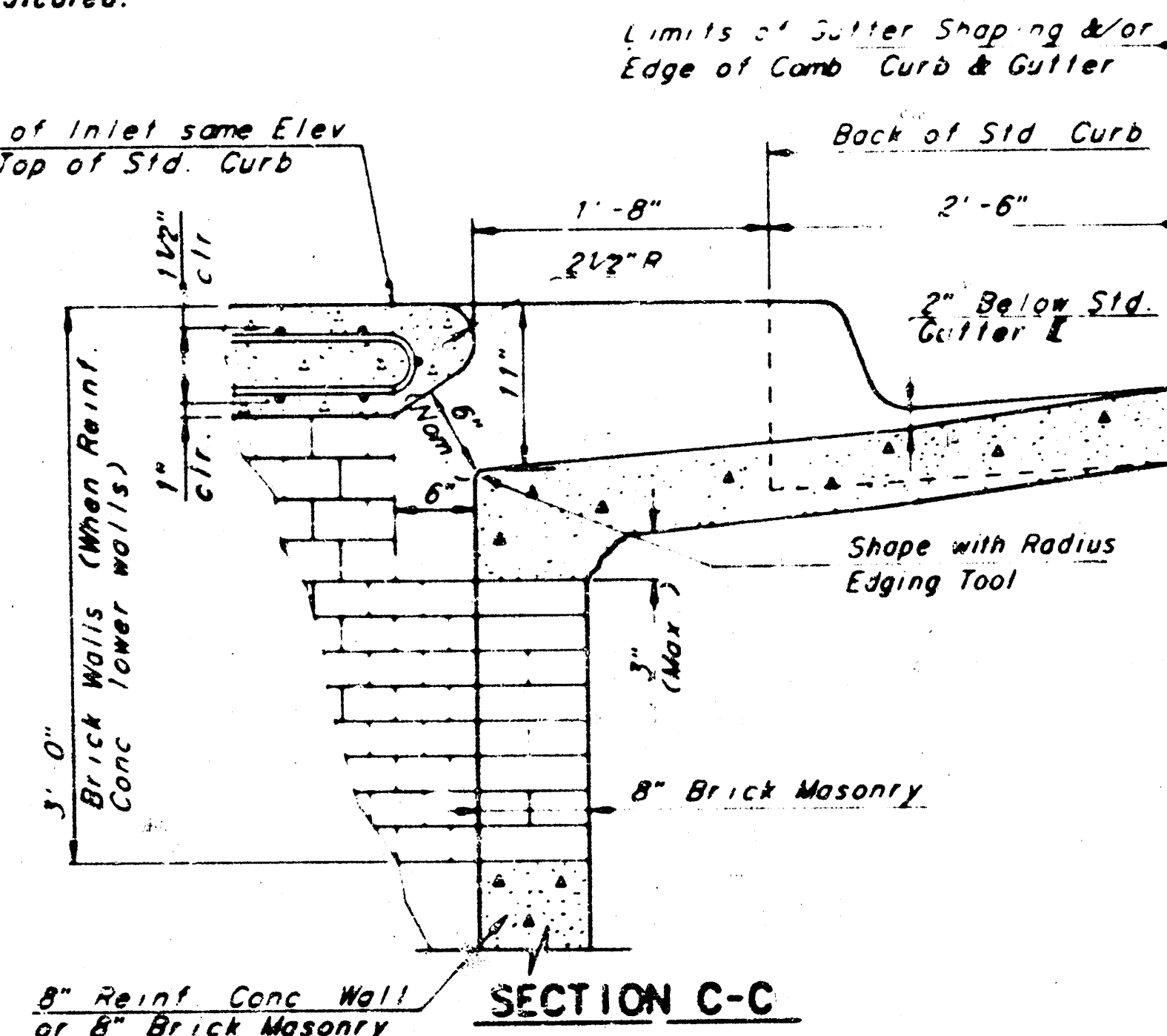


SECTION A-A



TYPICAL INLET SECTION AT CENTER WALL
(MASONRY WALLS)

* A center wall opening shall be provided by means of a section of reinforced concrete pipe. See Case I and Case II Below.

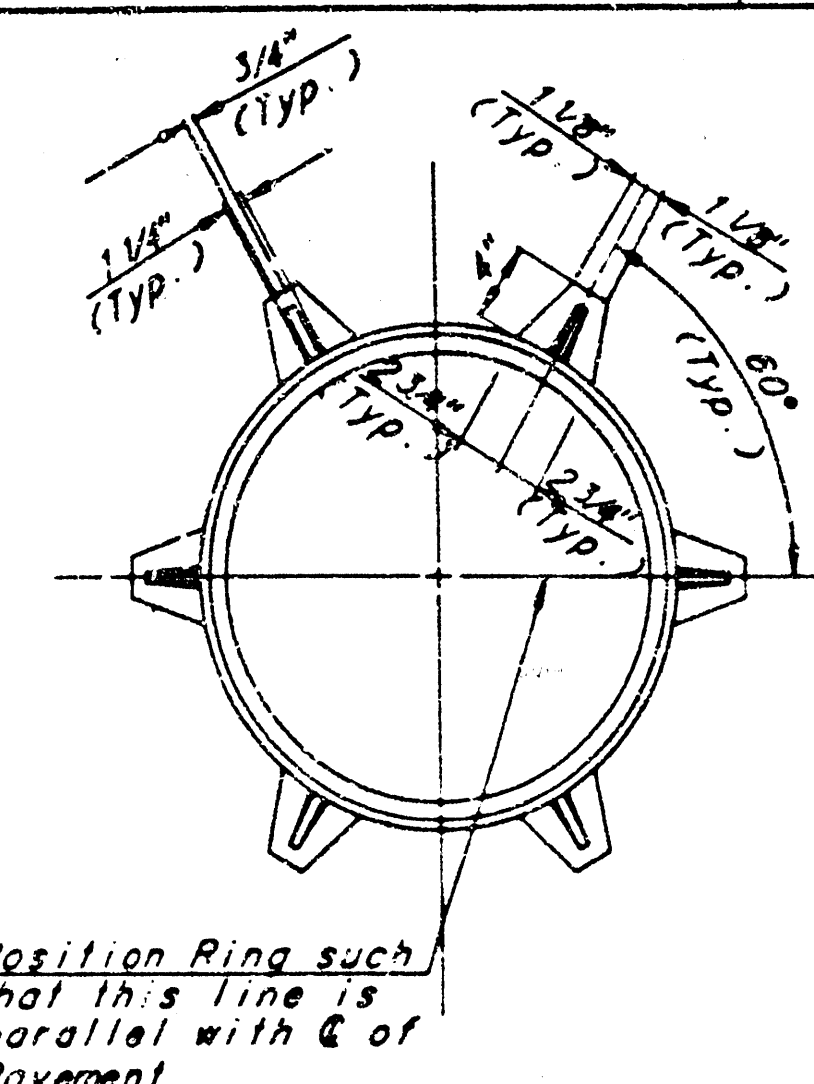


SECTION C-C

GENERAL NOTES

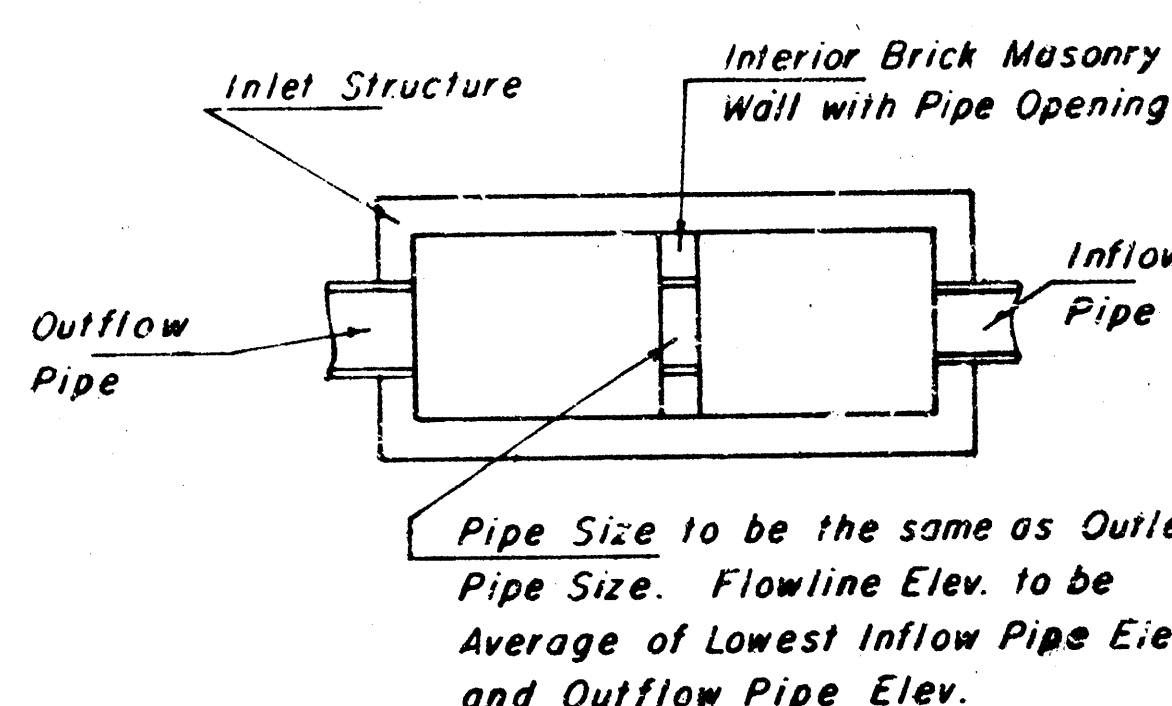
- THE CONTRACTOR SHALL BE REQUIRED TO CONSTRUCT 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W=6'-4" OR LESS AND H=7'-0" OR LESS. WHEN W IS GREATER THAN 6'-4" AND H IS LESS THAN 7'-0" THE OUTSIDE INLET WALLS BELOW THE BRICK STACK SHALL BE REINFORCED CONCRETE CONSTRUCTION AND THE CENTER WALL SHALL BE OF MASONRY CONSTRUCTION AS SHOWN FOR THE MASONRY WALL OPTION.
- 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.
- CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL BE CONCRETE PAVEMENT MIX.
- INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX. CENTERS. INLET LIDS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB BARS IN INLET TOP TO BE FIELD BENT OR CUT TO CLEAR MANHOLE RING.
- THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.

STANDARD CURB INLET PRECAST TOPS				
W	PRE-CAST TOP SIZE	SIDE OR INTERIOR WALL PIPE SIZE	CU. YD. CONC.	
4'-4"	3'-8" x 11'-4" x 7 1/2"	21" B. SMALLER	0.83 ±	
5'-4"	4'-8" x 11'-4" x 7 1/2"	24" B. 30"	1.09 ±	
6'-4"	5'-8" x 11'-4" x 7 1/2"	36" B. 42"	1.35 ±	
7'-4"	6'-8" x 11'-4" x 7 1/2"	48" B. 54"	1.61 ±	
8'-4"	7'-8" x 11'-4" x 7 1/2"	60" B. 66"	1.87 ±	

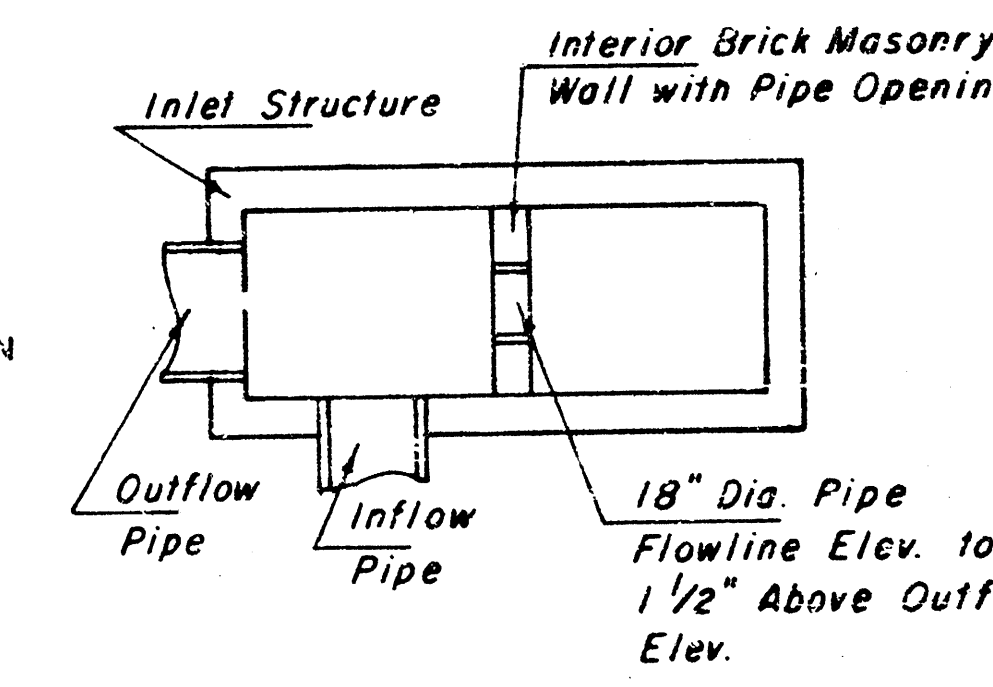


CAST IRON INLET RING
WT. = 180 lbs.

See City of Wichita Standard Manhole Frame and Cover Detail Sheet for Cover Details to be used with Inlet Frame.



CASE I



CASE II

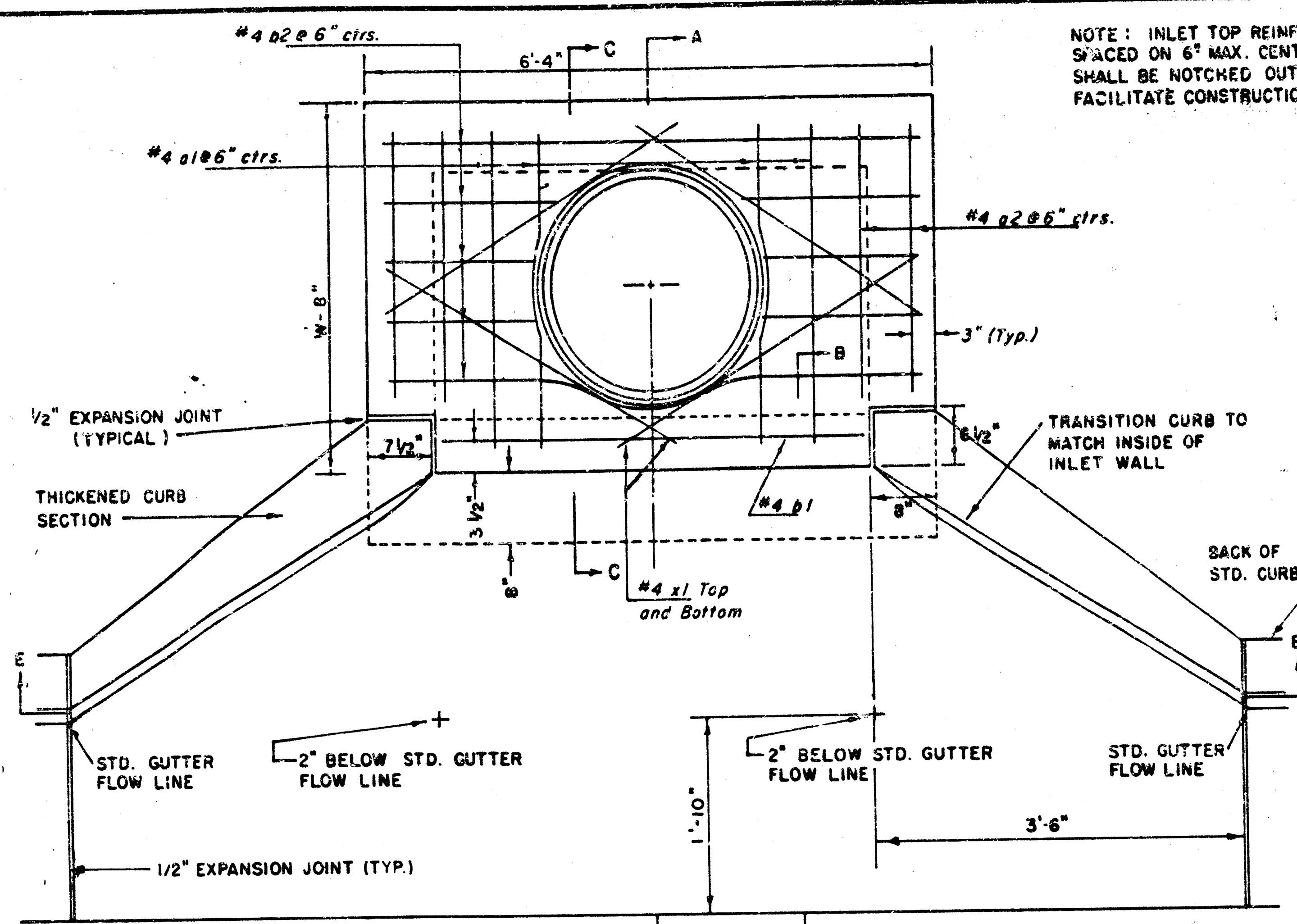
NOTE: Center Wall Pipe Size shall be as Specified in Inlet Construction No. 2 on the Plan/Profile Sheets for those Cases not shown here.

STANDARD TYPE 1A CURB INLET

INLET OPENING = 6" x 10'-0"

PROJECT NO. 472-76-245-81854-000-000-001
8838-D-80,089 WICHITA, KANSAS SHEET NO 5 OF 6
Designed by: B.E.P. K.J.S. AME Checked by: AME
Drawn by: JOP Date: Nov. 1984 Job No.

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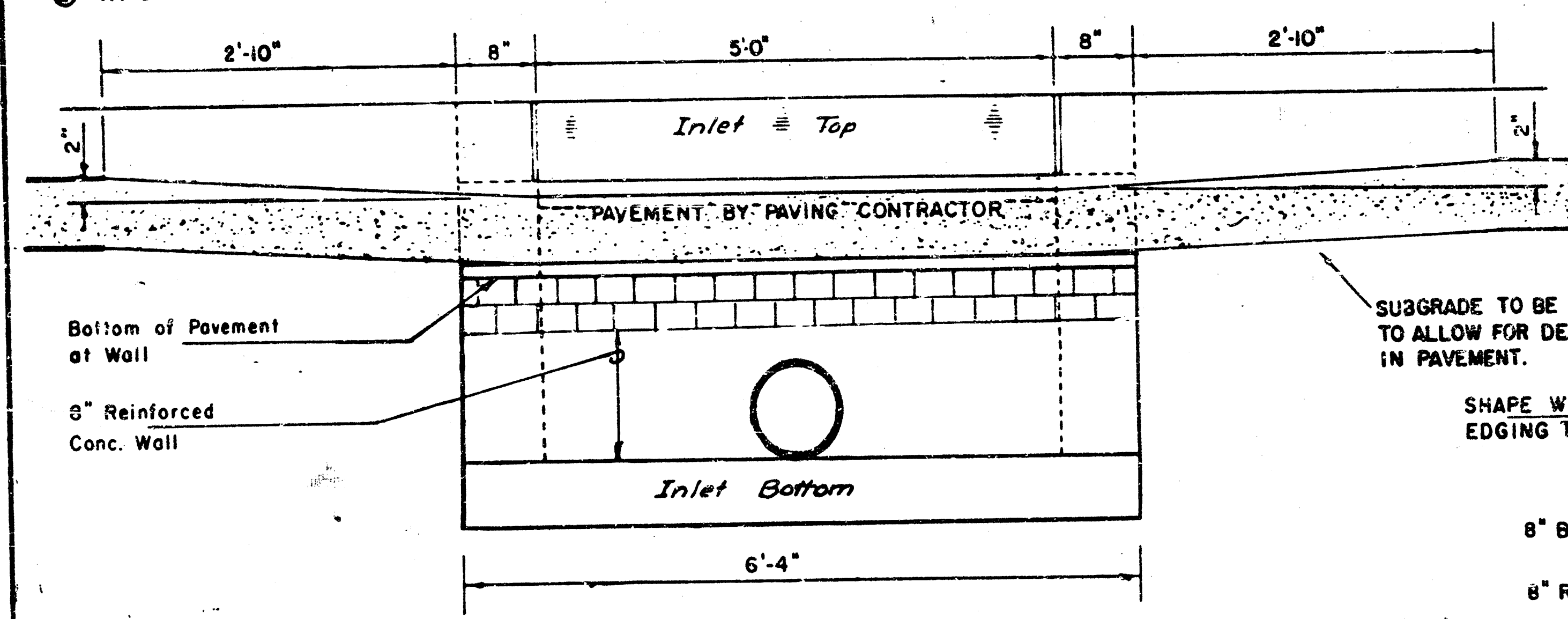


PLAN

PRECAST SLAB AND FLOOR REINFORCING									
Mark	Size	No.	Length	No.	Length	No.	Length	No.	Length
a1	#4	6	8'-7"	6	8'-7"	6	10'-7"	6	14'-7"
a2	#4	4	8'-0"	4	8'-0"	4	10'-0"	4	14'-0"
a3	#4	13	4'-1"	13	5'-1"	13	6'-1"	13	8'-1"
b1	#4	1	4'-9"	1	4'-9"	1	4'-9"	1	4'-9"
b2	#4	23	6'-1"	23	6'-1"	35	6'-1"	41	6'-1"
x1	#4	8	3'-10"	8	4'-2"	8	4'-6"	8	4'-10"

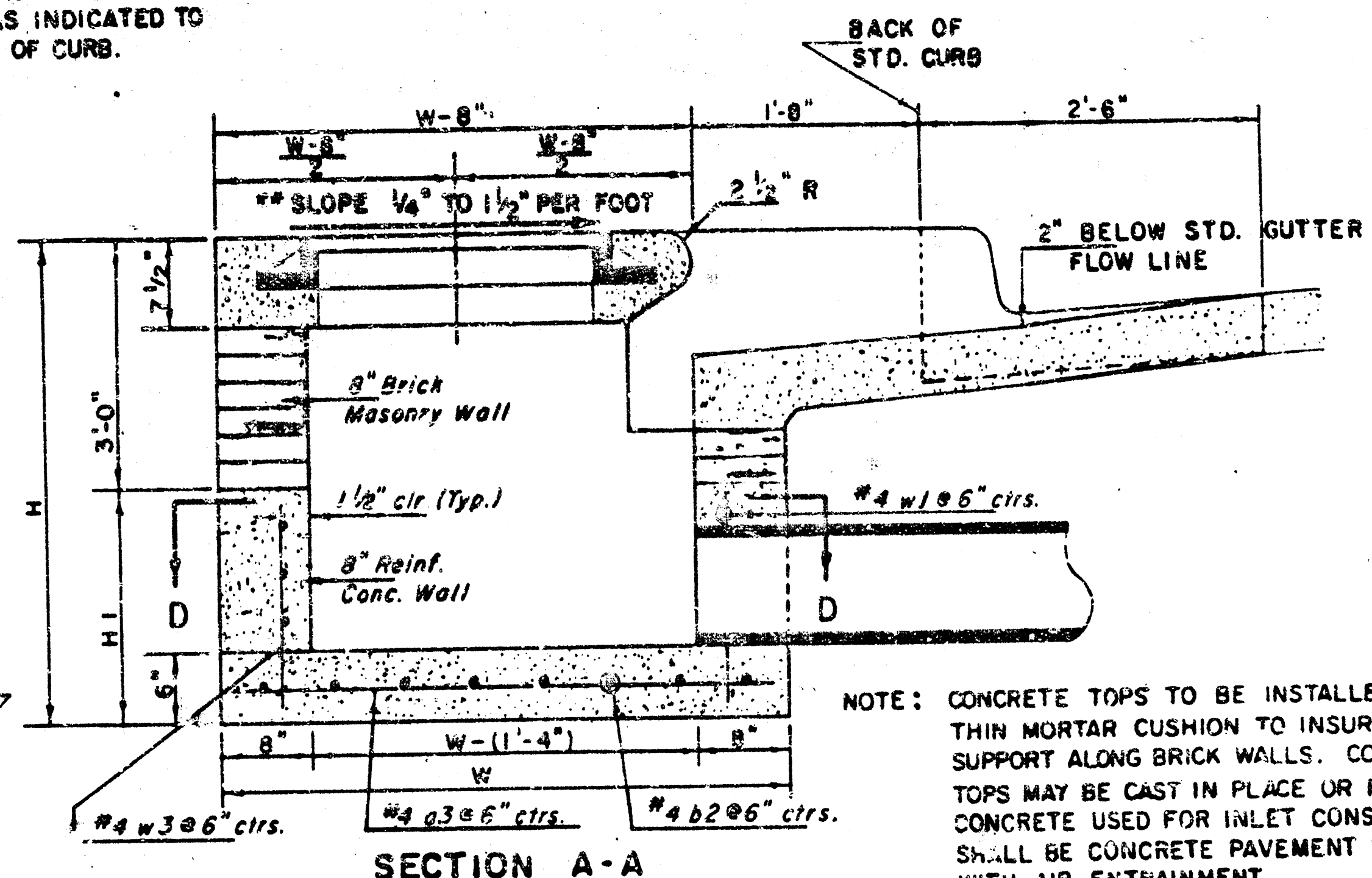
WALL REINFORCING									
Mark	Size	No.	Length	No.	Length	No.	Length	No.	Length
w1	#4	1	6'-1"	1	6'-1"	1	6'-1"	1	6'-1"
w2	#4	1	4'-1"	1	5'-1"	1	6'-1"	1	8'-1"
w3	#4	32	2	36	2	40	2	48	2

* Field bend or cut Reinforcing as required for clearance.
 ① 4(HI-12"); (HI-12") Round down to nearest 0.5"
 ② HI-3"



SECTION E-E

NOTE: INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX. CENTERS. INLET LIDS SHALL BE NOTCHED OUT AS INDICATED TO FACILITATE CONSTRUCTION OF CURB.



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.

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.

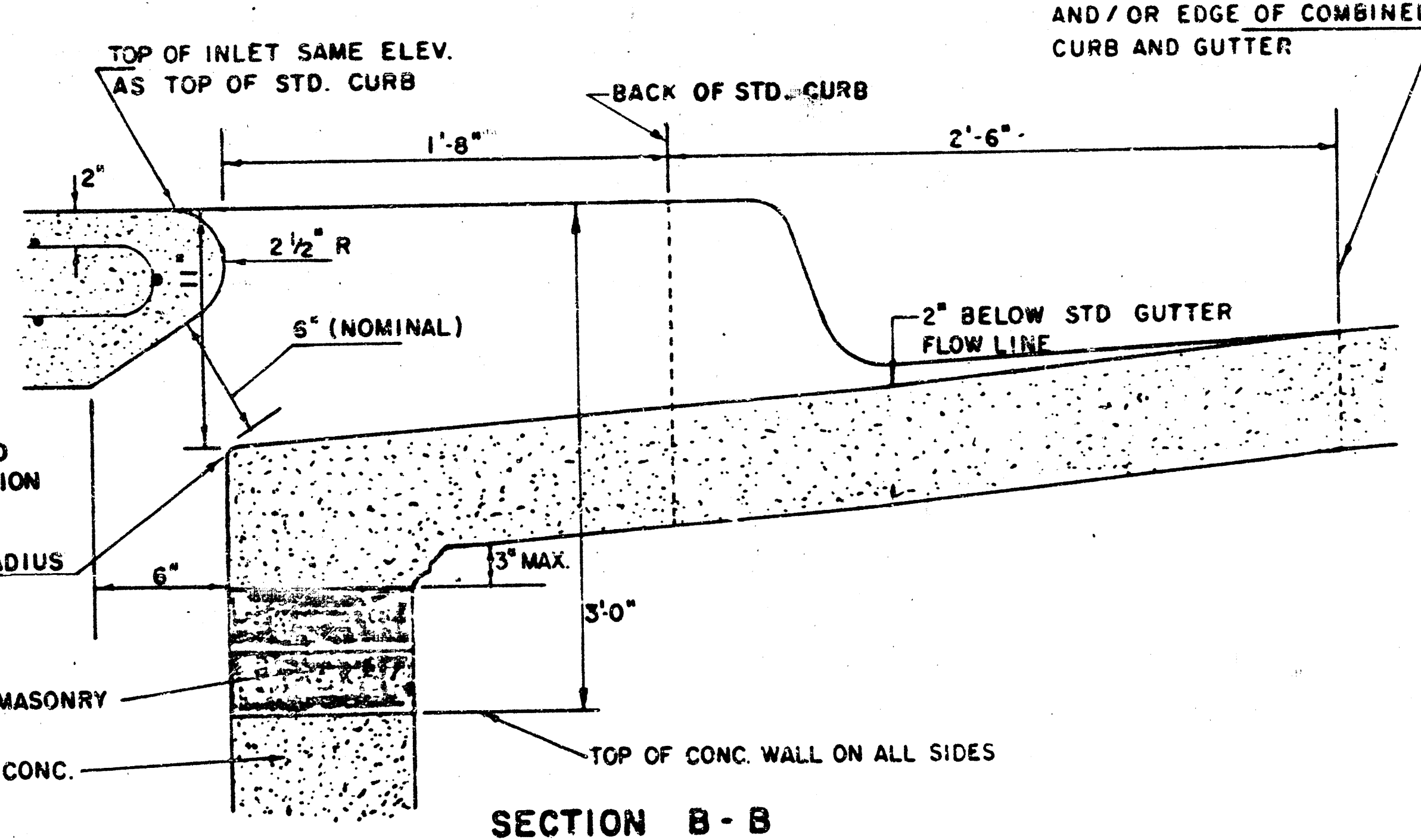
INLET INVERT SHALL BE SHAPED WITH SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.

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

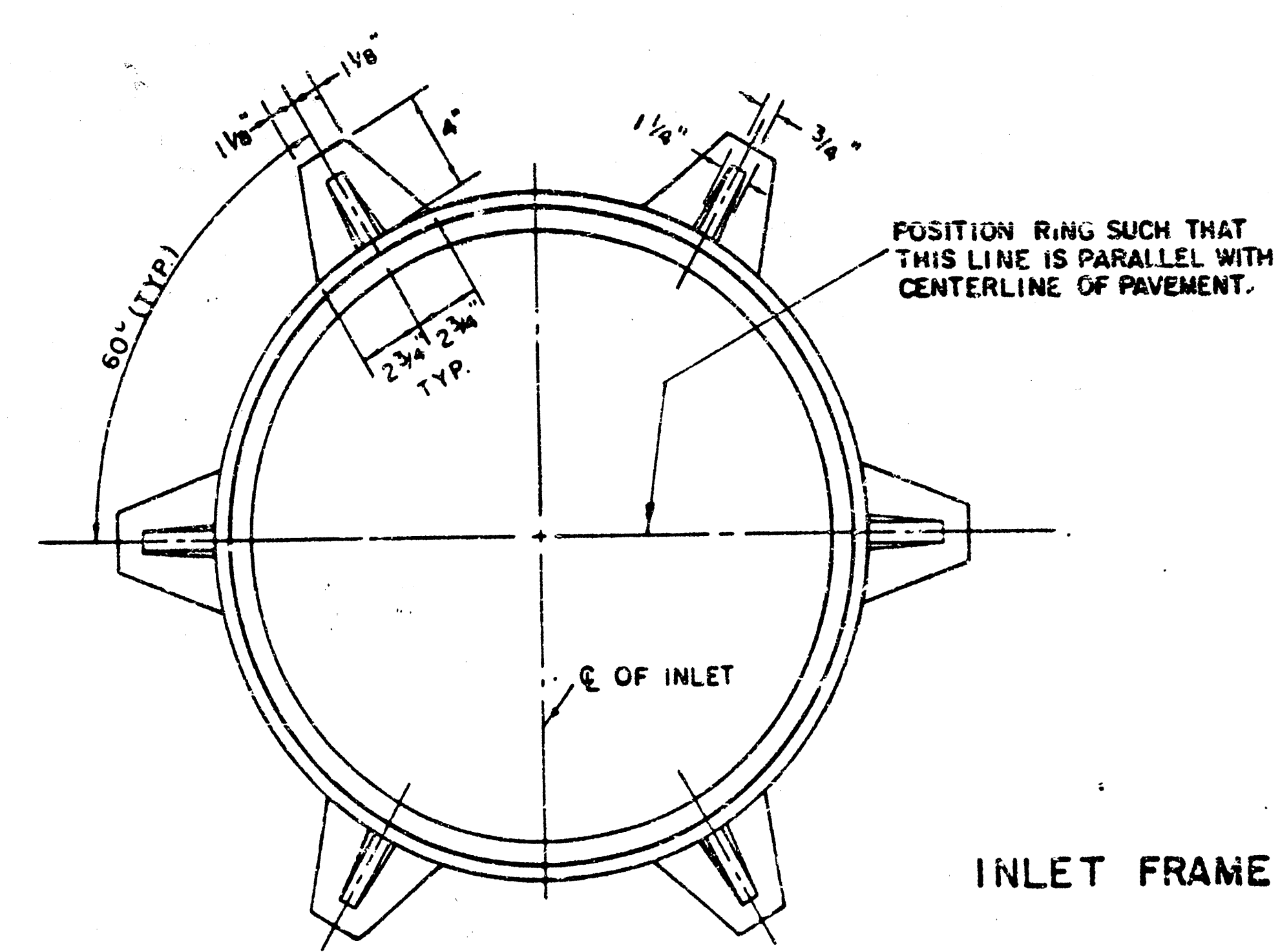
BENDING DIAGRAM

W	PRE-CAST TOP SIZE	PIPE SIZE	CU. YD. CONC.
4' 4"	3' 6" x 6' 4" x 7 1/2"	21" & SMALLER	0.39 ±
5' 4"	4' 8" x 6' 4" x 7 1/2"	24" & 30"	0.51 ±
6' 4"	5' 8" x 6' 4" x 7 1/2"	36" & 42"	0.64 ±
7' 4"	6' 8" x 6' 4" x 7 1/2"	48" & 54"	0.77 ±
8' 4"	7' 8" x 6' 4" x 7 1/2"	60" & 66"	0.90 ±

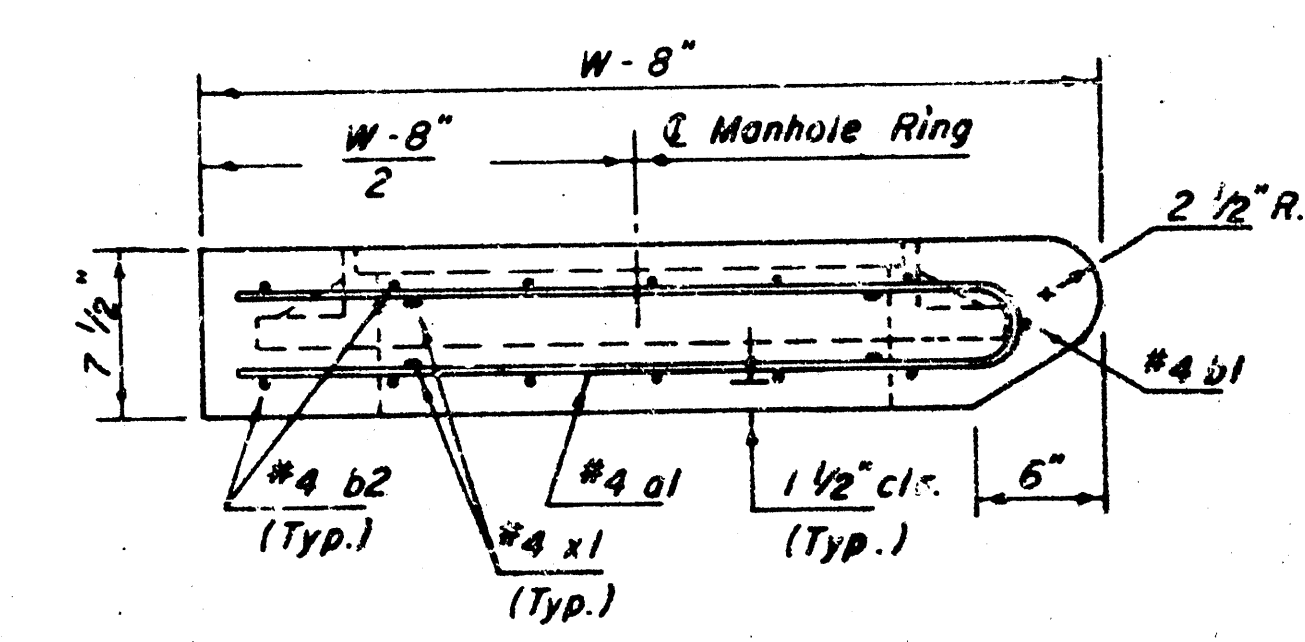
**NOTE: Slope of Inlet Tops to match Sidewalk or Parking Slopes within Limits indicated.



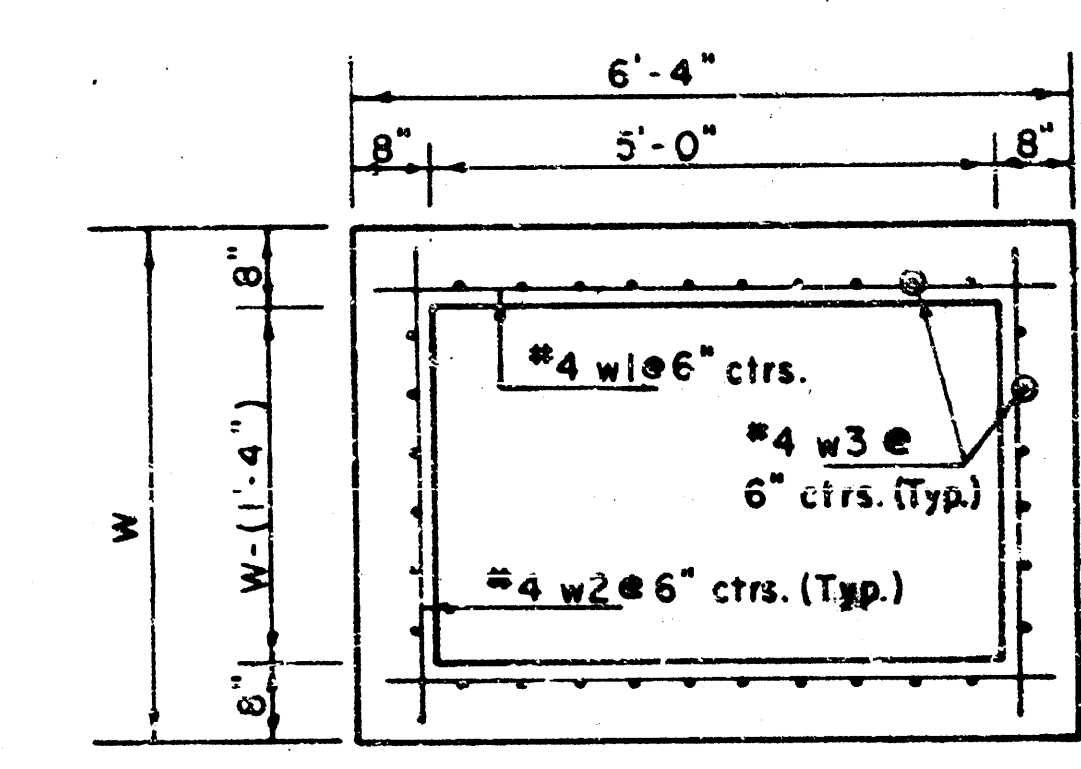
SECTION B-B



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



SECTION C-C



SECTION D-D

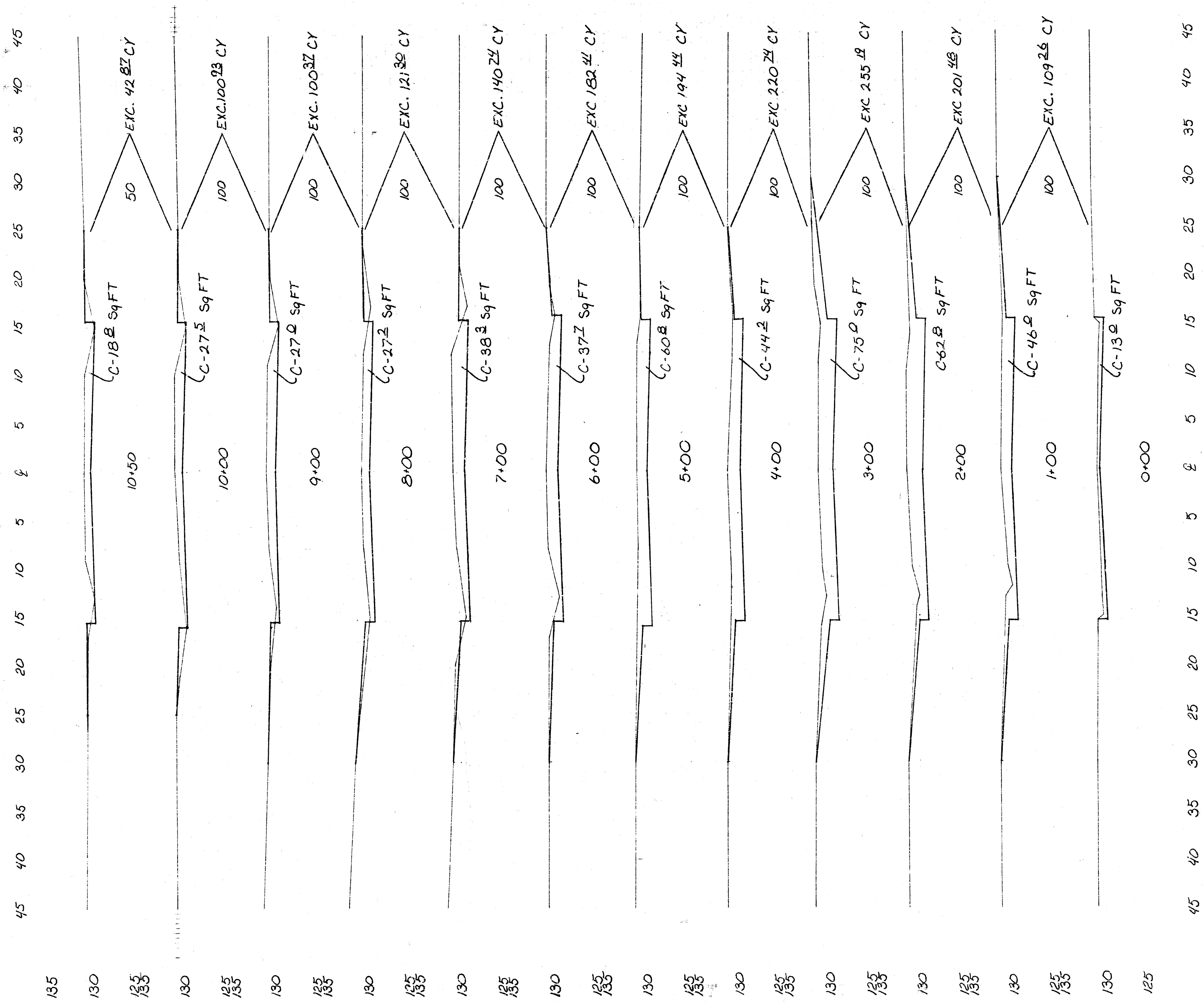
REVISED 11-30-1988
 REVISED 12-31-1984
 Revised 2-16-1989

DETAIL STANDARD TYPE IA CURB INLET
 CITY OF WICHITA, KANSAS
 INLET OPENING = 6" x 5' 0"

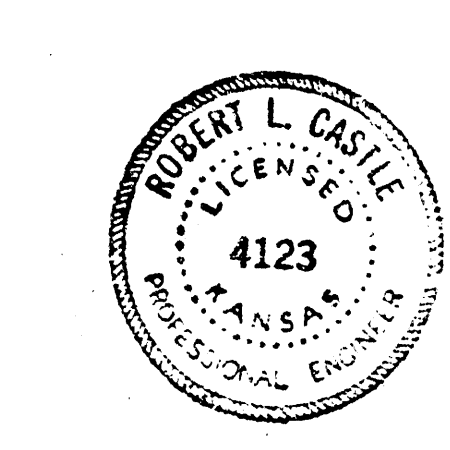
JUNE 1984

5A/6

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SHEET TOTAL
 1669.73 CY EXCAVATION
 10% 166.97
 TOTAL 1836.70 CY EXCAVATION



WICHITA, KANSAS STREET IMPROVEMENTS			
CROSS SECTIONS CHARLES AVENUE PROJECT NO 472-76-245-81854-000-000-001			
CASTLE & ASSOCIATES ENGINEERS WICHITA, KANSAS	DES DOR OR DOR CH LJK	DWG. FILE NO. 8938-D-80,090	SHEET NO. 6 OF 6
	DATE MARCH 1989	APP	

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