STREET IMPROVEMENTS FOR

WICHITA STREET

S. L. WATERMAN ST. TO 420' NORTH OF S.L. WATERMAN ST.

PROJECT NO.

472-76-245-81482 000-000-001

NOTE: CONTRACTOR WILL BE REQUIRED TO CARRY LOCAL BUSINESS TRAFFIC GENERATED WITHIN PROJECT LIMITS THROUGH CONSTRUCTION. [redacted]. CONTRACTOR WILL BE REQUIRED TO COORDINATE HIS SEQUENCING FOR HANDLING SUCH LOCAL TRAFFIC WITH THE OWNERS OF THE INVOLVED BUSINESSES OR THEIR AUTHORIZED REPRESENTATIVES. CONTRACTOR WILL BE REQUIRED TO SPECIFICALLY PROVIDE TEN (10) DAYS PRIOR NOTICE TO SUCH OWNERS IN ADVANCE OF ANY WORK WHICH WOULD IMPAIR THE NORMAL DAILY OPERATIONS OF SUCH BUSINESSES.

ACCESS INTO THE AREA NORTH OF THE PROJECT SHALL BE FROM THE NORTH OFF OF DOUGLAS WHEN IT IS NOT POSSIBLE TO PROVIDE ACCESS FROM WATERMAN. CONTRACTOR MUST COORDINATE ACCESS FROM DOUGLAS WITH TRAFFIC ENGINEERING.

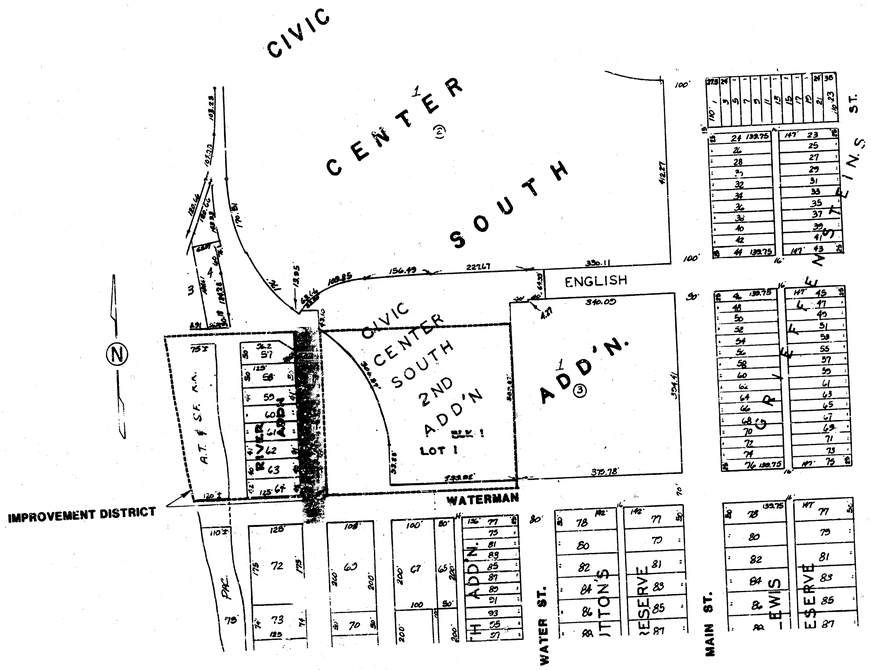
A SAW CUT OF AT LEAST ONE-HALF THE DEPTH OF EXISTING SURFACE COURSES OR ONE-FOURTH THE DEPTH OF THE EXISTING TOTAL PAVEMENT THICKNESS SHALL BE PROVIDED AT LOCATIONS WHERE PROPOSED CONSTRUCTION ABUTS AN EXISTING SURFACE COURSE OR PAVEMENT FOR WHICH PARTIAL REMOVAL OF THAT SURFACE OR PAVEMENT IS REQUIRED. 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.

CONTRACTOR SHALL CONTACT K.G.& E. TO ARRANGE FOR ADJUSTMENT OF TWO (2) MANHOLES DURING CONSTRUCTION.

NOTE: SIX INCH (6") SANITARY SEWER CONSTRUCTED AS A PART OF THIS PROJECT IS FOR INTERIM USE ONLY UNTIL PROPERTY SERVED BY SUCH LINE REDEVELOPES AT WHICH TIME SUCH SIX INCH (6") LINE IS TO BE ABANDONED.

CONTRACTOR SHALL COORDINATE THE LAYING OF THE SURFACE LIFT OF ASPHALT WITH THE TRAFFIC ENGINEERING DIVISION, O & M DEPARTMENT, CITY OF WICHITA, KANSAS, SO THAT STRIPING MAY BE INSTALLED. CONTRACTOR SHALL CONTACT RALPH PECK, 268-4129, ONE WEEK BEFORE SURFACE ASPHALT IS TO BE PLACED.

INDEX



LOCATION & IMPROVEMENT DISTRICT MAP

GENERAL NOTES

1. Contractor shall coordinate the construction of Wichita Street with the Parking Lot Improvements for Century II Exhibition Center, project no. 472-76-245-81501-000-000-001, and Waterman Street Improvements, project no. 472-76-245-81483-000-000-001.
2. The 10" water main and fire hydrant shall be relocated by "others" prior to pavement construction. The abandoned pipe shall be removed within project limits as part of this project.
3. [redacted] All abandoned pipe shall be removed within project limits as part of this project.
4. Contractor shall replace all storm sewer manhole rings and covers (asphalt-filled type) with new rings and covers per City of Wichita standard.
5. [redacted]
6. Driveway construction on west side of Wichita shall be by properly executed driveway request forms as required by standard specifications.

EARTHWORK QUANTITIES

EXCAVATION	448 CU.YDS.
SUBGRADE STABILIZATION	2120 SQ.YDS.

CITY OF WICHITA, KS.

MICHAEL E. LINDEBAK CITY ENGINEER

MARCH 1986

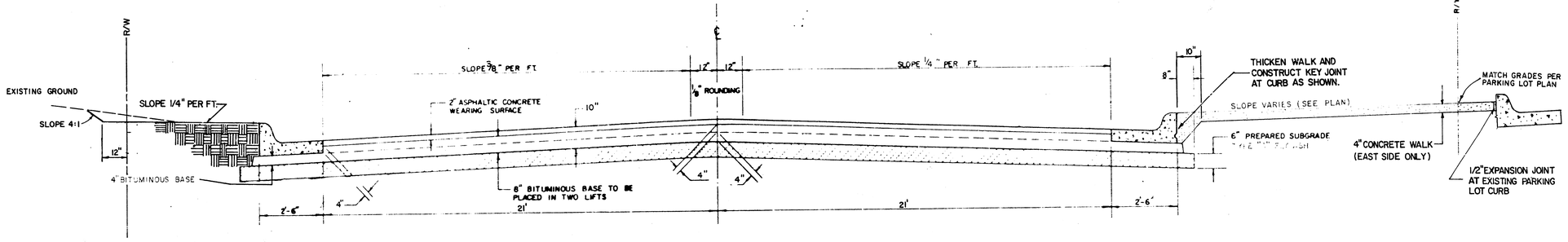
BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 · 330 LAURA · WICHITA, KANSAS 67211

1/12 (1/9)

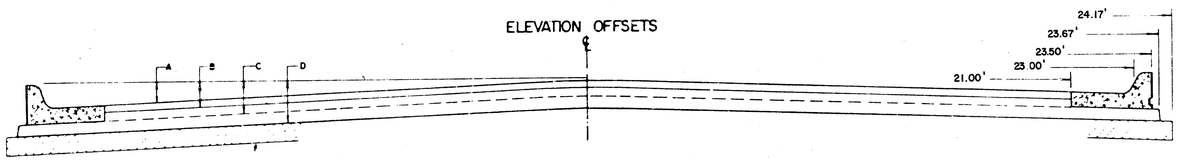
TYPICAL 47' PAVEMENT DETAILS

STA. 0+62.09 TO STA. 1+12.00

TRANSVERSE SECTION



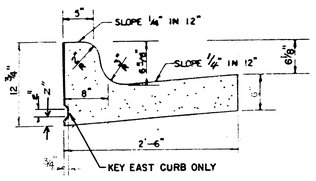
ELEVATION OFFSETS



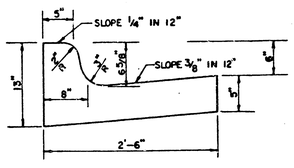
	DISTANCE FROM CENTERLINE (RT.)														
	0	2	4	6	8	10	12	14	16	18	21	23	23.50	23.67	24.17
A: TOP OF CURBS TO TOP OF SURFACE LIFT	0.09	0.12	0.16	0.21	0.25	0.29	0.33	0.37	0.41	0.45	0.51	——	——	——	——
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	0.26	0.29	0.33	0.38	0.42	0.46	0.50	0.54	0.58	0.62	0.68	——	——	——	——
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	0.59	0.62	0.66	0.71	0.75	0.79	0.83	0.87	0.91	0.95	1.01	1.05	1.06	1.07	——
D: TOP OF CURBS TO TOP OF SUBGRADE	0.92	0.95	0.99	1.04	1.08	1.12	1.16	1.20	1.24	1.28	1.34	1.38	1.40	1.40	1.41

	DISTANCE FROM CENTERLINE (LT)														
	0	2	4	6	8	10	12	14	16	18	21	23	23.50	23.67	24.17
A	-0.14	-0.09	-0.03	0.03	0.09	0.16	0.22	0.28	0.34	0.41	0.50	——	——	——	——
B	0.03	0.08	0.14	0.20	0.26	0.33	0.39	0.45	0.51	0.58	0.67	——	——	——	——
C	0.36	0.41	0.47	0.53	0.59	0.66	0.72	0.78	0.84	0.91	1.00	1.06	1.08	1.08	——
D	0.69	0.74	0.80	0.26	0.92	0.99	1.05	1.11	1.17	1.24	1.33	1.39	1.41	1.41	1.43

COMBINED CURB & GUTTER (EAST)



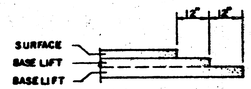
COMBINED CURB & GUTTER (WEST)



GENERAL NOTES

1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 10" ASPHALTIC CONCRETE (8" BITUMINOUS BASE).
2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 4" 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 TEMPORARILY ENDS AS SHOWN BY THE DETAIL. THE COST OF CONSTRUCTION JOINTS SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

WICHITA STREET

47' A. C. PAVEMENT DETAIL

CITY OF WICHITA, KS.

PROJECT NO.

472-76-245-31482-000-000-001

2/12

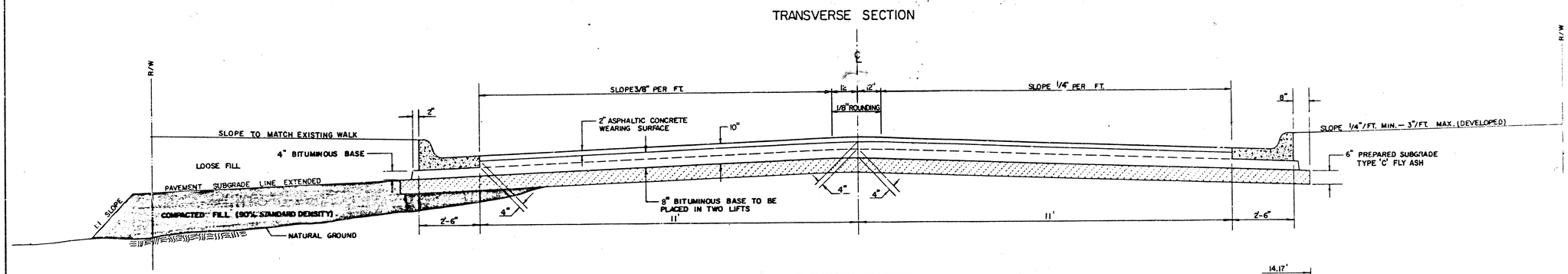
BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 • 330 LAURA • WICHITA KANSAS 67211

2/3

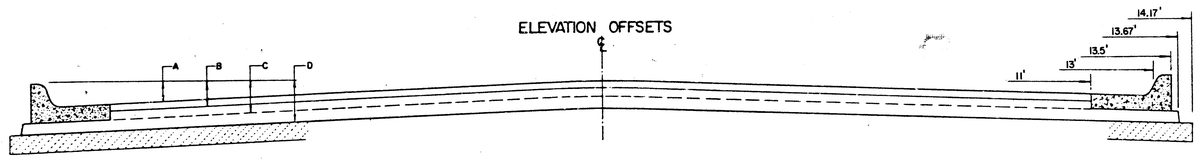
TYPICAL 27' PAVEMENT DETAILS

STA. 2+27.37 TO STA. 3+00

TRANSVERSE SECTION



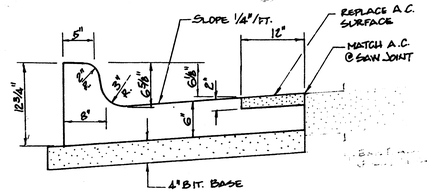
ELEVATION OFFSETS



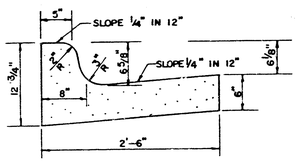
	DISTANCE RIGHT FROM ℄ PVMT.										
	0'	2'	4'	6'	8'	10'	11'	13'	13.5'	13.67'	14.17'
A: TOP OF CURBS TO TOP OF SURFACE LIFT	0.29	0.32	0.36	0.41	0.45	0.49	0.51	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	0.46	0.49	0.53	0.58	0.62	0.66	0.68	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	0.79	0.82	0.86	0.91	0.95	0.99	1.01	1.05	1.07	1.07	—
D: TOP OF CURBS TO TOP OF SUBGRADE	1.12	1.15	1.19	1.25	1.29	1.33	1.34	1.38	1.40	1.40	1.41

	DISTANCE LEFT FROM ℄ PVMT.										
	0'	2'	4'	6'	8'	10'	11'	13'	13.5'	13.67'	14.17'
A	0.17	0.22	0.28	0.35	0.41	0.47	0.50	—	—	—	—
B	0.34	0.39	0.45	0.52	0.58	0.64	0.67	0.73	0.75	0.75	0.77
C	0.67	0.72	0.78	0.85	0.91	0.97	1.00	1.06	1.08	1.08	1.10
D	1.00	1.05	1.11	1.18	1.24	1.30	1.33	1.39	1.41	1.41	1.43

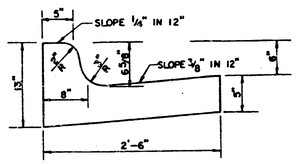
SPECIAL COMBINED CURB & GUTTER



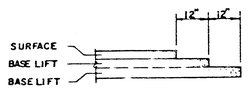
COMBINED CURB & GUTTER (EAST)



COMBINED CURB & GUTTER (WEST)



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 10" ASPHALTIC CONCRETE (8" BITUMINOUS BASE).

GENERAL NOTES

1) THE ASPHALTIC CONCRETE PAVEMENT BETWEEN THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 10" ASPHALTIC CONCRETE (8" BITUMINOUS BASE).

2) THE BITUMINOUS BASE UNDER AND BEHIND THE COMBINED CURB AND GUTTER SHALL BE PAID AS SQUARE YARDS OF 4" BITUMINOUS BASE.

3) A TACK COAT OF EMULSIFIED ASPHALT (SS-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.

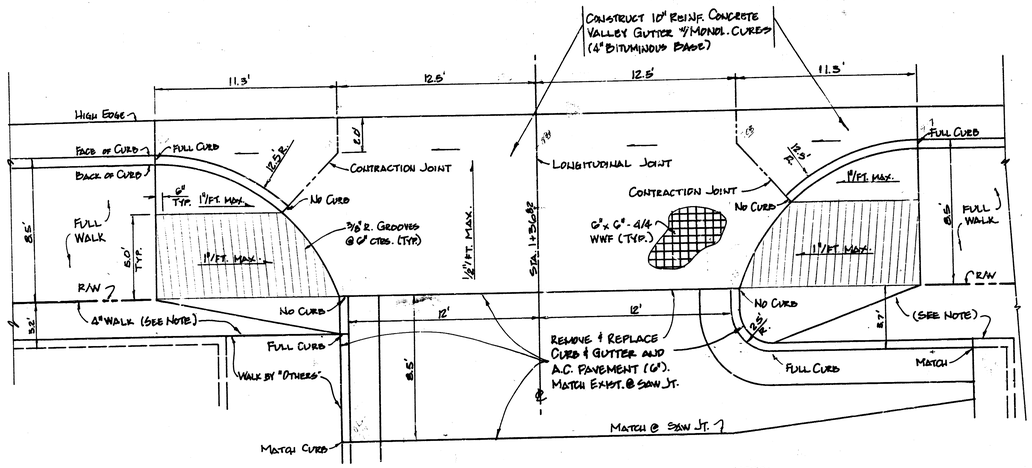
WICHITA STREET
27' A. C. PAVEMENT DETAIL
CITY OF WICHITA, KS.

PROJECT NO.
472-76-245-81482-000-000-001

3/12

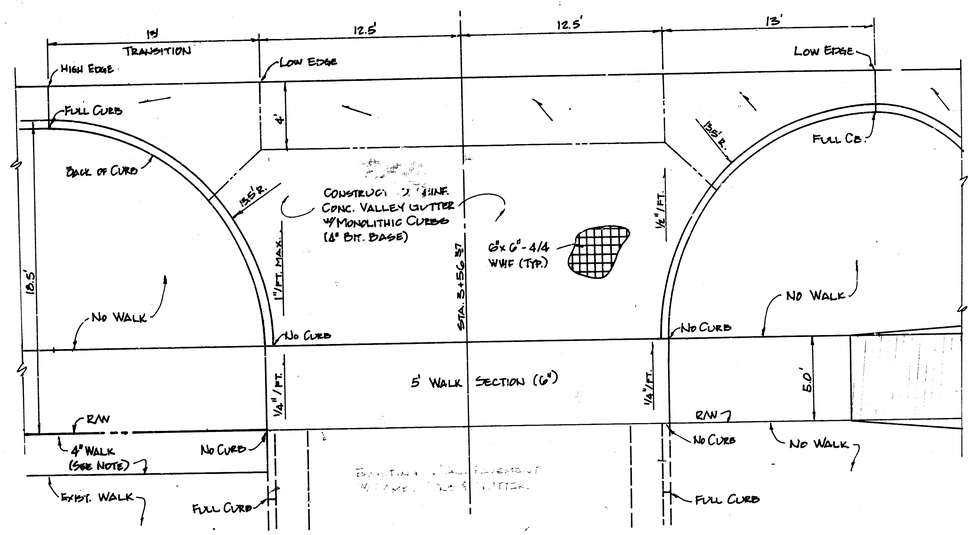
BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316.262-7271 · 300 LAURA · WICHITA, KANSAS 67211

3/9

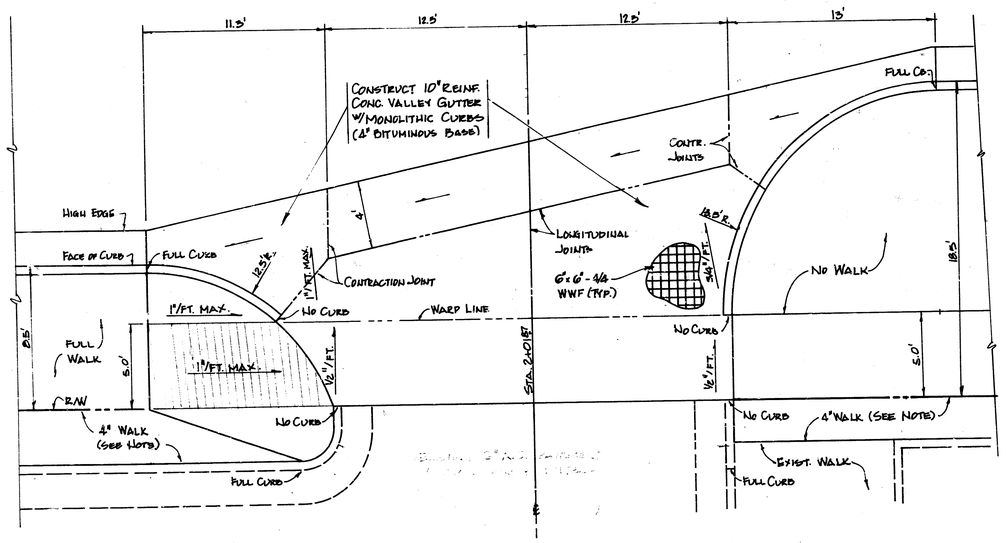


DRIVE APPROACH DETAIL
STA. 1+36.82

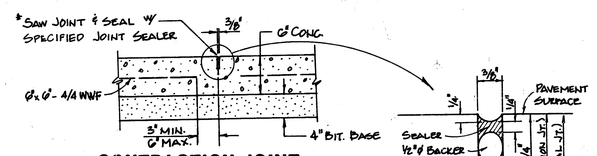
NOTE:
CONSTRUCTION OF SIDEWALK SHALL BE COORDINATED WITH PARKING LOT IMPROVEMENTS, PROJ. NO. 81501. A ½" EXPANSION JT. SHALL BE INSTALLED AT THE BACK OF PARKING LOT CURBS WHERE SIDEWALK ABUTS CURB. NO EXPANSION JOINT WILL BE REQUIRED ALONG PROPERTY LINE.



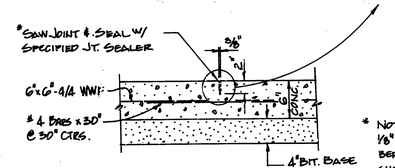
DRIVE APPROACH DETAIL
STA. 3+56.37



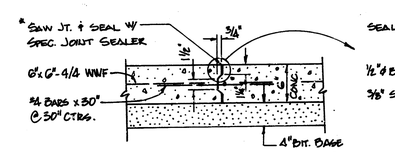
DRIVE APPROACH DETAIL
STA. 2+01.87



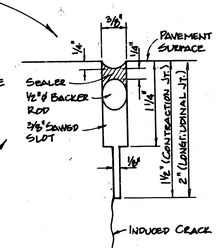
CONTRACTION JOINT FOR VALLEY GUTTER



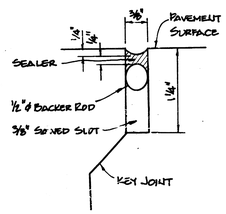
LONGITUDINAL JOINT DETAIL FOR VALLEY GUTTER

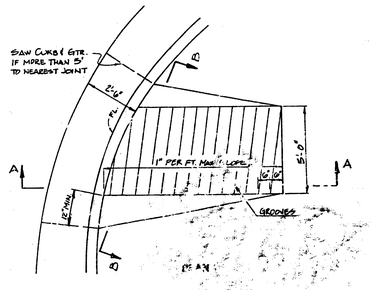


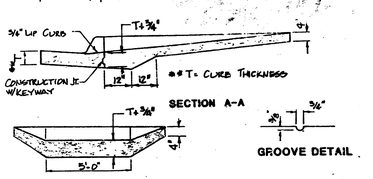
LONGITUDINAL JOINT DETAIL FOR VALLEY GUTTER (ALTERNATE)



* NOTE: INITIAL SAW SLOT SHALL BE 1/8" WIDE. 3/8" SLOT SHALL BE SAWED BEFORE SEALING. SEALER MATERIAL SHALL CONFORM TO ASTM D-3569 OR ASTM D-1190.







SECTION B-B

WHEELCHAIR RAMP

WICHITA STREET
DRIVE APPROACH AND PAVEMENT DETAILS
CITY OF WICHITA, KS.

PROJECT NO.
472-76-245-81482-000-000-001

4/12

BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 • 330 LAURA • WICHITA, KANSAS 67211

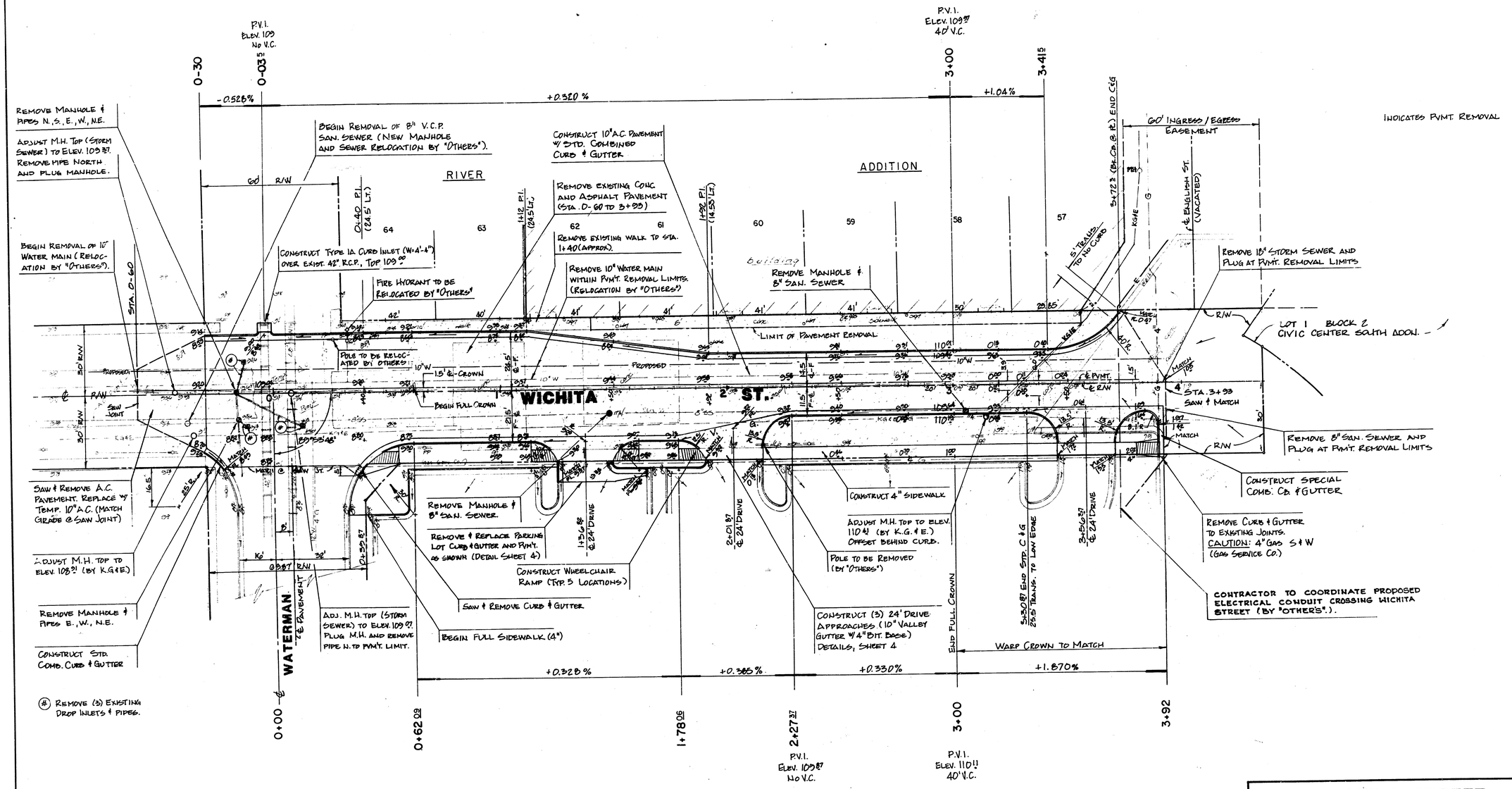
4/9

BENCH MARKS:

HEADBOLT BETWEEN "MUELLER" AND "CHATTANOOGA" ON FIRE HYDRANT @ N.W. COR. WATERMAN AND WICHITA, ELEV. 111.56

"+" IN CONC. PVMT ON ℄ WICHITA, STA. 3+50, ELEV. 110.28

SCALE 1" : 20'



NOTE: CONTRACTOR WILL BE REQUIRED TO FERTILIZE AND SEED WEST PARKING WITHIN PROJECT CONSTRUCTION LIMITS. THIS WORK WILL NOT BE PAID FOR DIRECTLY AND THIS COST SHALL BE CONSIDERED AS SUBSIDIARY TO OTHER PAY ITEMS OF WORK.

NOTE: SPLASH BLOCKS SHALL BE CONSTRUCTED UNDER ROOF DRAIN DOWNSPOUTS IN THE AREA WHERE SIDEWALK IS REMOVED ON THE WEST SIDE OF WICHITA. SUCH BLOCKS SHALL CONSIST OF FOUR INCH (4") SIDEWALK PAVEMENT DIMENSIONED AS DIRECTED BY THE ENGINEER.

WICHITA STREET

S.L. WATERMAN TO 420' NORTH OF S.L. WATERMAN ST.

CITY OF WICHITA, KS.

PROJECT NO.

472-76-245-81482-000-000-001

5/12

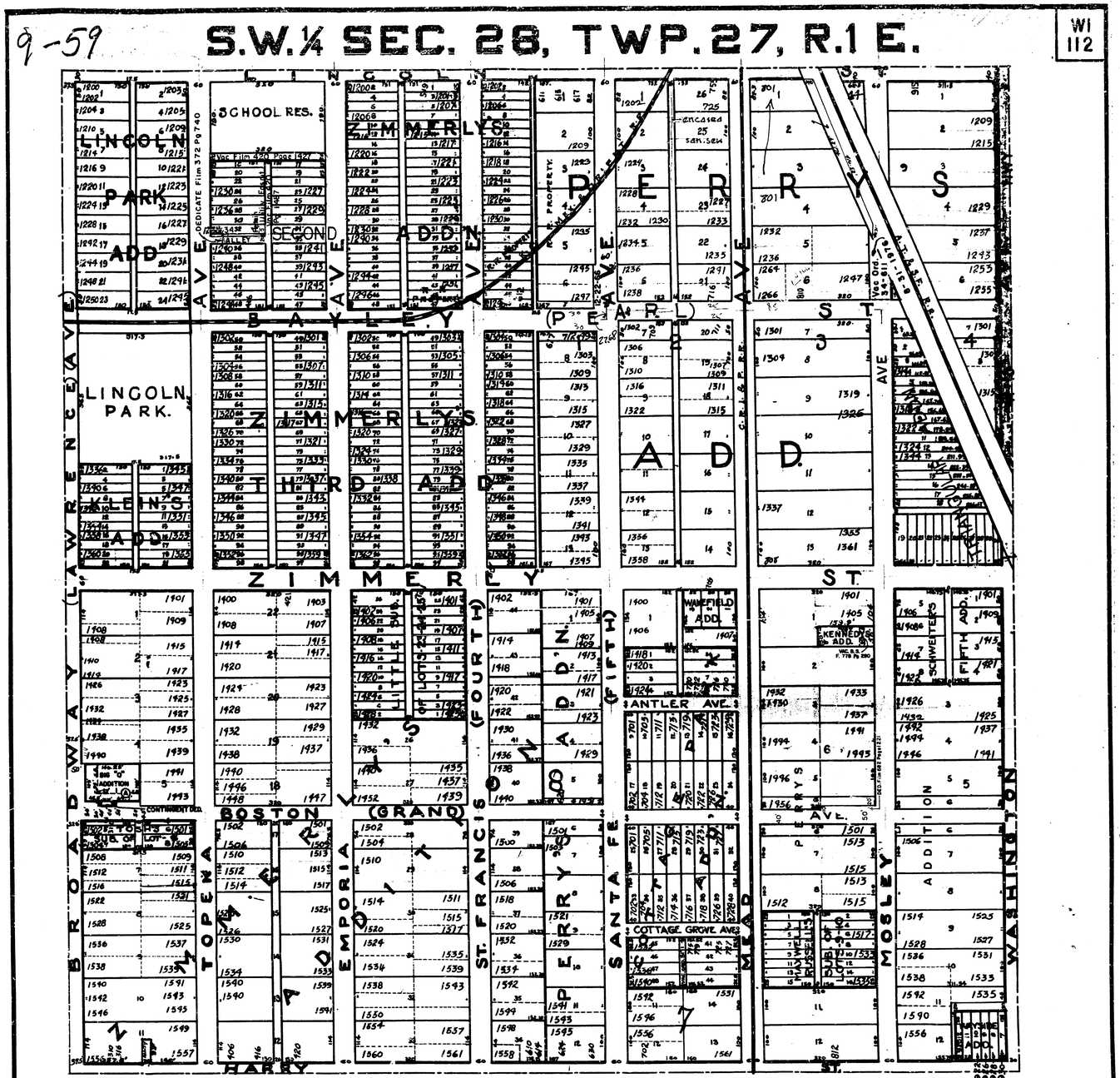
BAUGHMAN COMPANY, P.A.
SURVEYING & ENGINEERING
316/262-7271 • 330 LAURA • WICHITA, KANSAS 67211

5/9

9-59

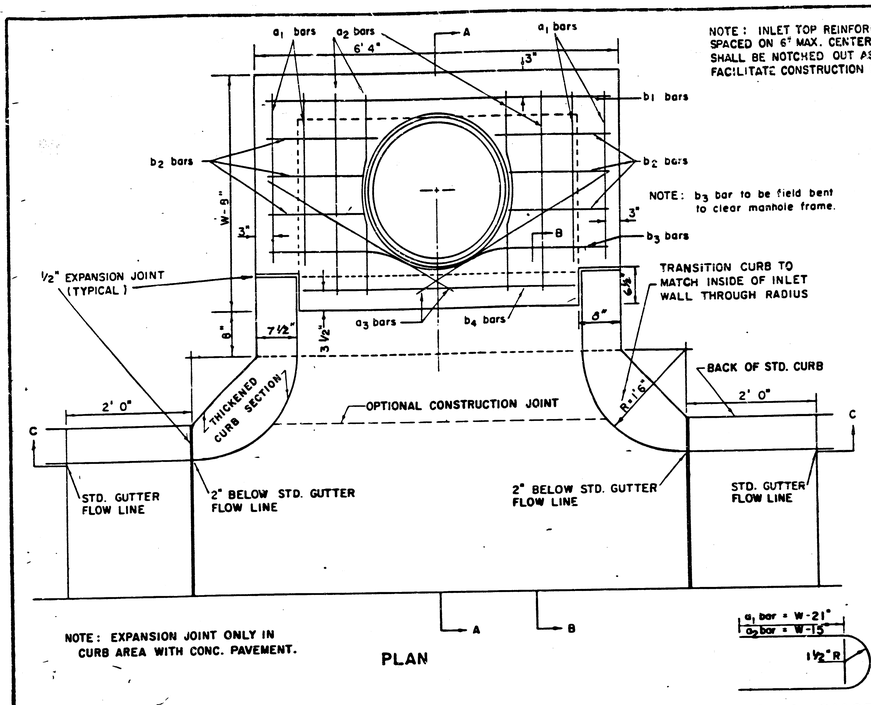
S.W.¼ SEC. 28, TWP. 27, R.1 E.

WI 112



THIS SHEET PREPARED UNDER SUPERVISION OF
DON WRIGHT , SEDGWICK COUNTY CLERK

5A



NOTE: EXPANSION JOINT ONLY IN CURB AREA WITH CONC. PAVEMENT.

PLAN

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

NOTE: b_3 bar to be field bent to clear manhole frame.

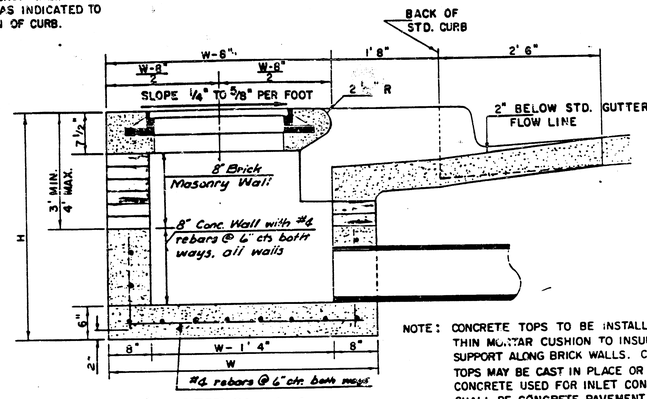
BENDING DIAGRAM

STEEL SCHEDULE

BAR		a_1	a_2	a_3*	b_1 W=4'4"	W=5'4"	W=6'4"	W=7'4"	W=8'4"	b_2	b_3	b_4	WT. LBS.
NUMBER		4	4	2	1	3	5	7	9	6	1	1	
SIZE		#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#6	
LENGTH	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_3 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"	3'8"x 6'4" x7 1/2"	21" & SMALLER	0.38 ±
5' 4"	4'8"x 6'4" x7 1/2"	24" & 30"	0.51 ±
6' 4"	5'8"x 6'4" x7 1/2"	36" & 42"	0.64 ±
7' 4"	6'8"x 6'4" x7 1/2"	48" & 54"	0.77±
8' 4"	7'8"x 6'4" x7 1/2"	60" & 66"	0.90±



SECTION A-A

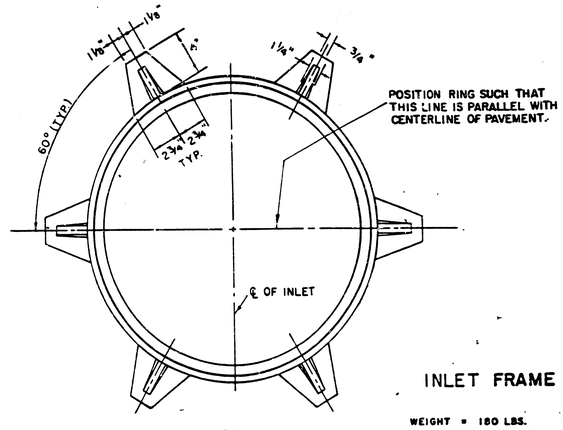
NOTE: CONCRETE TOPS TO BE INSTALLED ON THIN MORTAR CUSHION TO INSURE FULL SUPPORT ALONG BRICK WALLS. CONCRETE TOPS MAY BE CAST IN PLACE OR PRECAST. CONCRETE USED FOR INLET CONSTRUCTION SHALL BE CONCRETE PAVEMENT MIX.

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.

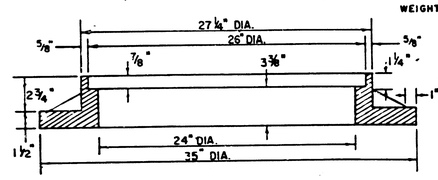
INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.

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

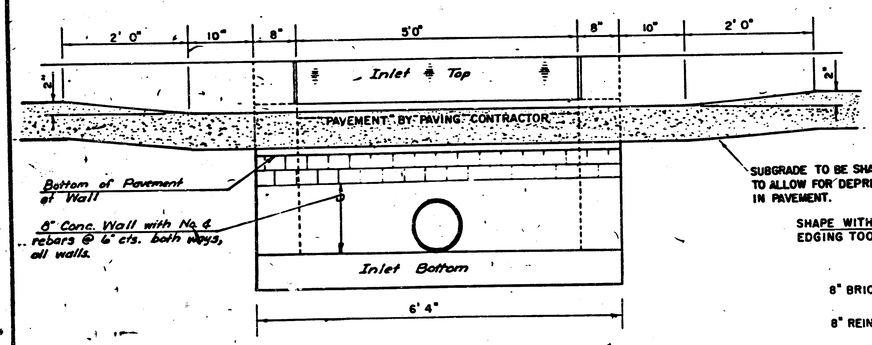


INLET FRAME

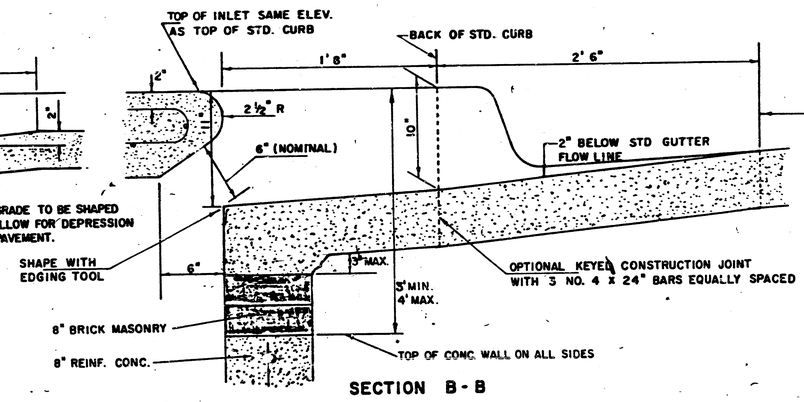
WEIGHT = 180 LBS.



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



SECTION C-C



SECTION B-B

REVISED 12-21-1984

DETAIL STANDARD TYPE IA CURB INLET

CITY OF WICHITA, KANSAS

INLET OPENING = 6" x 5' 0"

PROJECT NO. 472-76-245-81482-000-000-001

JUNE 1984

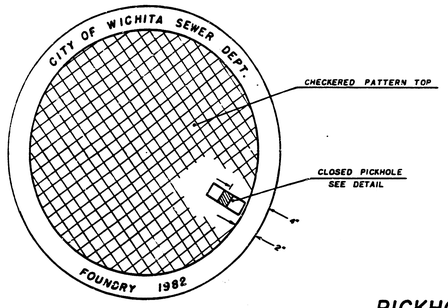
6/12

6/9

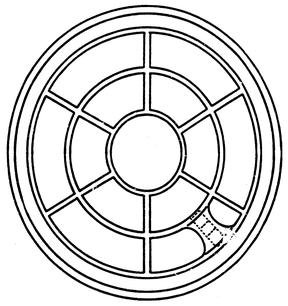
MANHOLE FRAME AND COVER DETAIL

ADOPTED AS STANDARD DESIGN
BY
City of Wichita, Kansas

MANHOLE COVER
Weight: 180 Lbs.

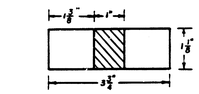


TOP VIEW



BOTTOM VIEW

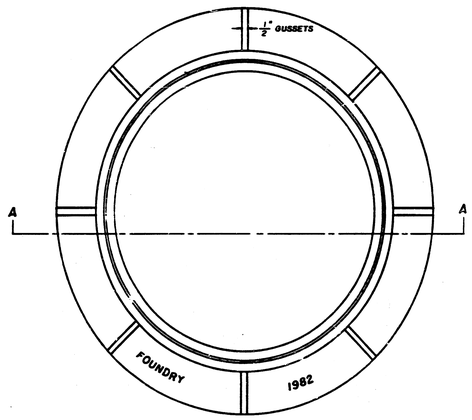
PICKHOLE DETAIL



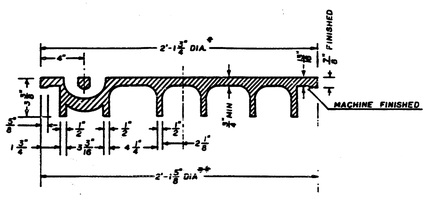
TOP VIEW

SECTION VIEW

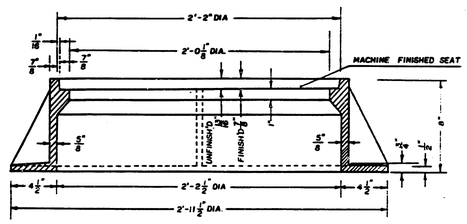
MANHOLE FRAME
Weight: 240 Lbs.



TOP VIEW



SECTION VIEW



SECTION A-A

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

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 OR 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.

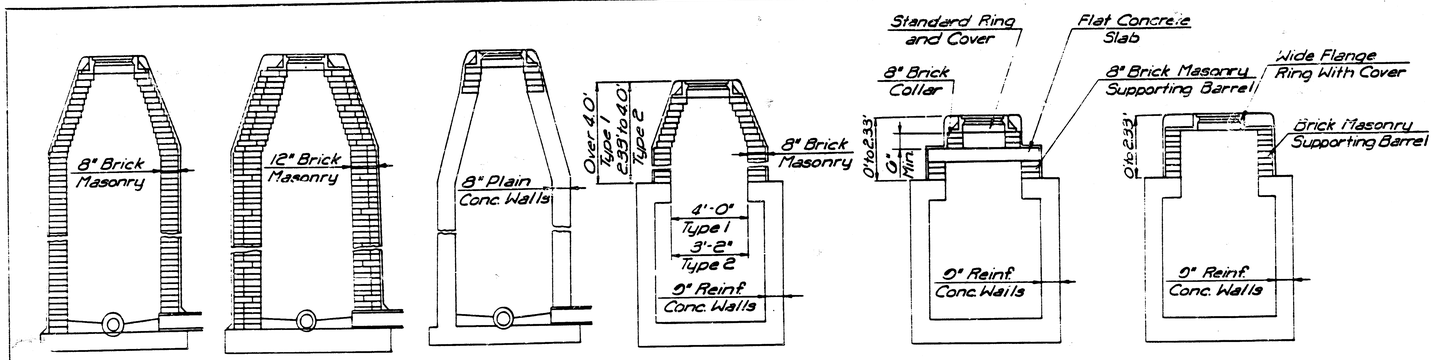
3. MANHOLE CASTINGS SHALL BE MANUFACTURED SUCH THAT A COVER MANUFACTURED BY ANY ONE FOUNDRY WILL FIT INTERCHANGEABLY INTO A FRAME MANUFACTURED BY ANOTHER FOUNDRY AND STILL MEET ALLOWABLE CLEARANCES AND NON-ROCKING REQUIREMENTS. THIS WILL REQUIRE MANUFACTURING OF THE MATCHING FACES ON THE COVER AND THE 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.

JNL DEC. 1981

PROJECT NO. 472-76-81482-000-000-001



TYPE A
Single Wall Brick Masonry

TYPE B
Double Wall Brick Masonry

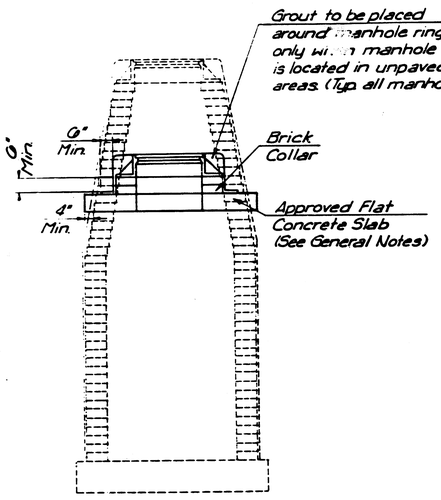
TYPE C & D
Cast in Place
(Type D is plastic lined & has brick draw)

TYPE 1 & 2
Reinforced Concrete

TYPE 3
Reinforced Concrete

TYPE 4
Reinforced Concrete
~~(Wide Flange Ring)~~

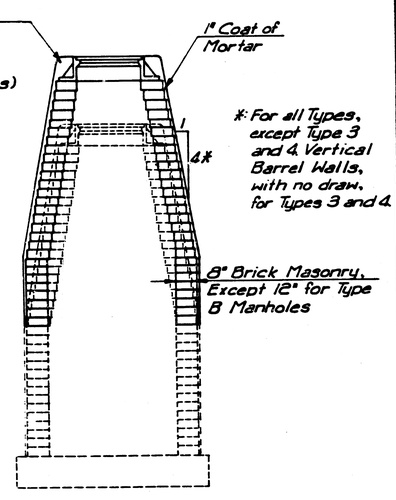
DEFINITION SKETCHES - CITY OF WICHITA STANDARD MANHOLES



DOWNWARD ADJUSTMENT (GREATER THAN 12")
All Types

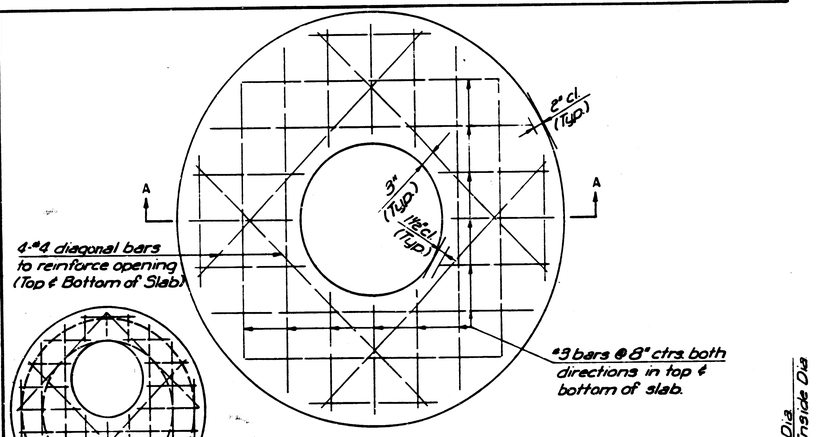
THE APPROPRIATE PORTIONS OF THE DRAW AND BARREL OF TYPE A, B, C, D, 1 AND 2 MANHOLES SHALL BE REMOVED. A FLAT CONCRETE SLAB SHALL BE PLACED AND THE RING AND COVER RESET. ALL WORK AND MATERIALS SHALL CONFORM TO THE DETAILS SHOWN AND THE GENERAL NOTES.

COURSES OF BRICK BARREL SUPPORTING THE WIDE FLANGE RING FOR TYPE 4 MANHOLES AND FLAT CONCRETE SLAB FOR TYPE 3 MANHOLES SHALL BE REMOVED AS NECESSARY PRIOR TO RESETTING THE WIDE FLANGE RING OR FLAT CONCRETE SLAB AND RING. ALL WORK AND MATERIALS SHALL CONFORM TO THE DETAILS SHOWN AND THE GENERAL NOTES.



UPWARD ADJUSTMENT (GREATER THAN 12")
All Types

THE ENTIRE DRAW OF TYPES A, B, C, D, 1 AND 2 MANHOLES SHALL BE REMOVED. THE MANHOLE BARREL RAISED THE APPROPRIATE AMOUNT, A NEW DRAW CONSTRUCTED, AND THE RING AND COVER RESET. THE UPPER PORTION OF TYPE 3 MANHOLES SHALL BE REMOVED TO THE BOTTOM OF THE FLAT CONCRETE SLAB, THE BRICK MASONRY BARREL SUPPORTING THE SLAB SHALL BE RAISED THE APPROPRIATE AMOUNT, AND THE SLAB AND RING AND COVER RESET. THE WIDE FLANGE RING AND COVER OF TYPE 4 MANHOLES SHALL BE REMOVED, THE BRICK MASONRY BARREL SUPPORTING THE RING SHALL BE RAISED THE APPROPRIATE AMOUNT AND THE RING AND COVER RESET. ALL WORK REQUIRED FOR A GREATER THAN TWELVE INCH (12") UPWARD ADJUSTMENT OF ANY MANHOLE SHALL BE ACCOMPLISHED WITH BRICK MASONRY IN ACCORDANCE WITH THE DETAILS SHOWN AND THE GENERAL NOTES.



*: To be used only if necessary to keep ring and cover from conflicting with curb or combined curb and gutter. Flat concrete slab shall be rotated on existing manhole to position ring and cover in pavement or behind curb.

FLAT CONCRETE SLAB DETAILS

PROJECT NO. 472-76-245-81482-000-000-001

MANHOLE ADJUSTMENT DETAILS

8/12 (8/5)

CITY OF WICHITA, KANSAS
M. E. LINDEBAK – CITY ENGINEER

Designed by		Checked by	
Drawn by		Date	JOB No.

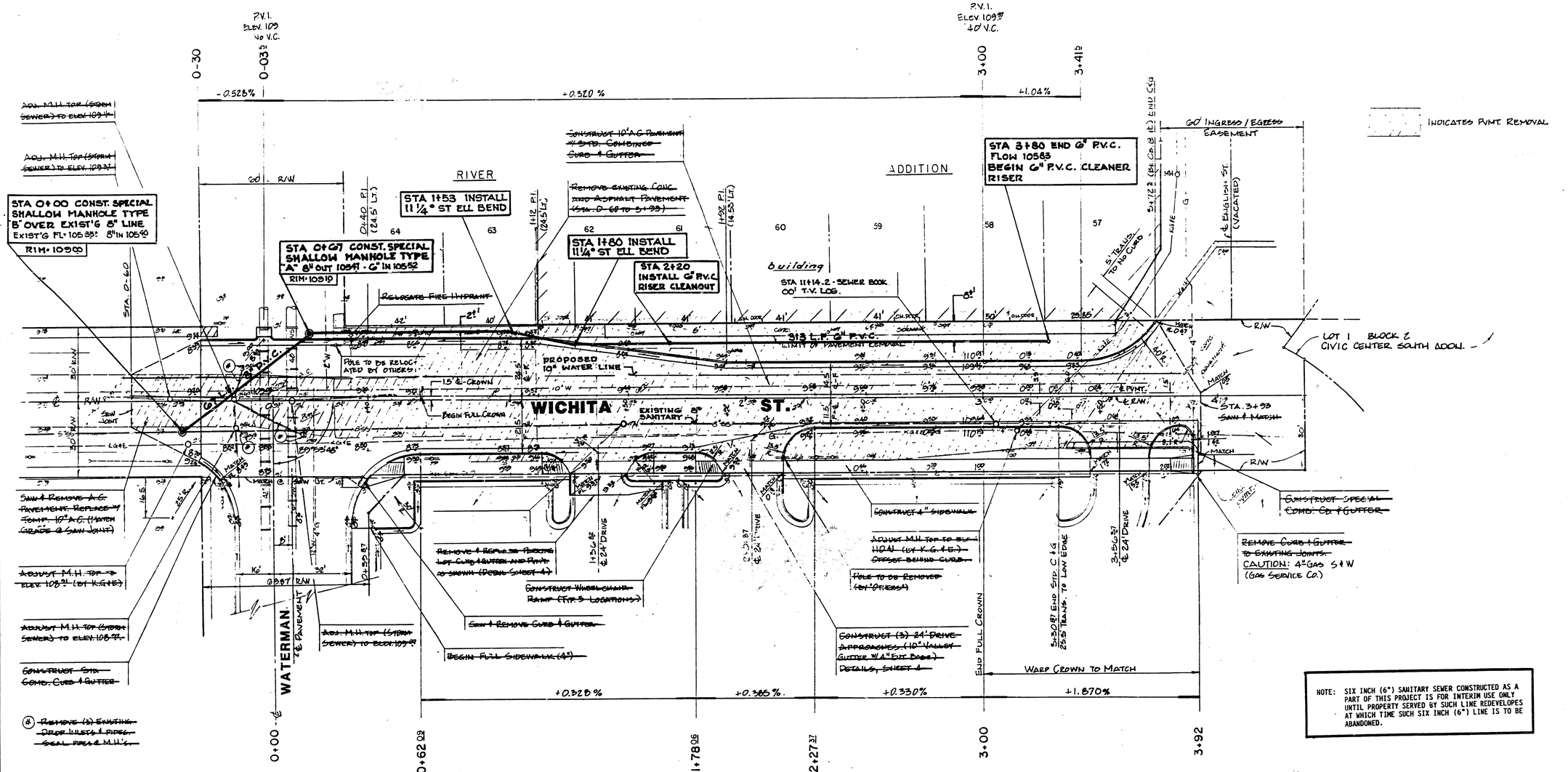
BENCH MARKS:

HEADBOLT BETWEEN "MUELLER" AND "CHATTANOOGA" ON FIRE HYDRANT @ N.W. COR. WATERMAN AND WICHITA, ELEV. 111.56

"+" IN CONC. PVMT ON ℄ WICHITA, STA. 3+50, ELEV. 110.28

SCALE 1" : 20'

INDICATES PVMT. REMOVAL



NOTE: SIX INCH (6") SANITARY SEWER CONSTRUCTED AS A PART OF THIS PROJECT IS FOR INTERIM USE ONLY UNTIL PROPERTY SERVED BY SUCH LINE REDEVELOPES AT WHICH TIME SUCH SIX INCH (6") LINE IS TO BE ABANDONED.

•• GENERAL NOTES ••

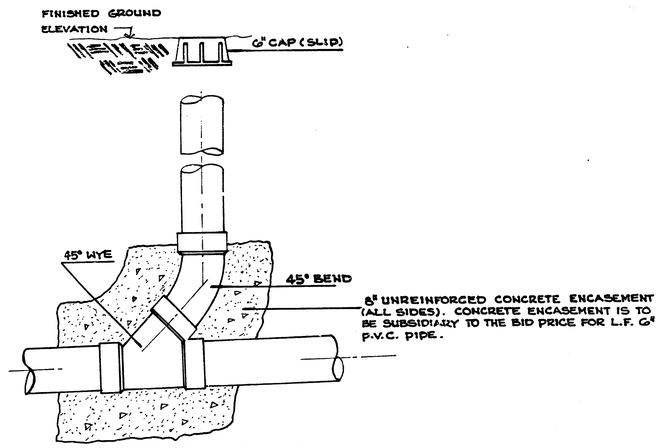
1. PRICE BID PER LINEAL FOOT OF 8" OR 6" P.V.C. SHALL INCLUDE THE COST OF ALL MATERIAL, LABOR, EQUIPMENT, EXCAVATION, BACKFILLING AND OTHER INCIDENTALS NECESSARY TO COMPLETE THE WORK.
2. CLEANOUTS SHALL BE MEASURED AND PAID FOR AS LINEAL FEET OF 6" P.V.C.
3. ONLY ACTIVE BUILDING SEWER LINES WHICH CONNECT ACTUAL BUILDINGS TO THE SEWER SYSTEM ARE TO BE RECONNECTED TO THE NEW SEWER CONSTRUCTION. IT WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN WHICH SUCH BUILDING SEWER LINES AND/OR CONNECTIONS ARE ACTIVE AND WHICH SEWERS AND/OR CONNECTIONS HAVE BEEN ABANDONED.
4. CONTRACTOR TO CONTACT JERRY BLAINE 268-4210 FOR T.V. LOG OF EXISTING SEWER.

RECONSTRUCT A PORTION OF LATERAL N, WEST SUBMAIN A, ON LEWIS, SANITARY SEWER NO. 1

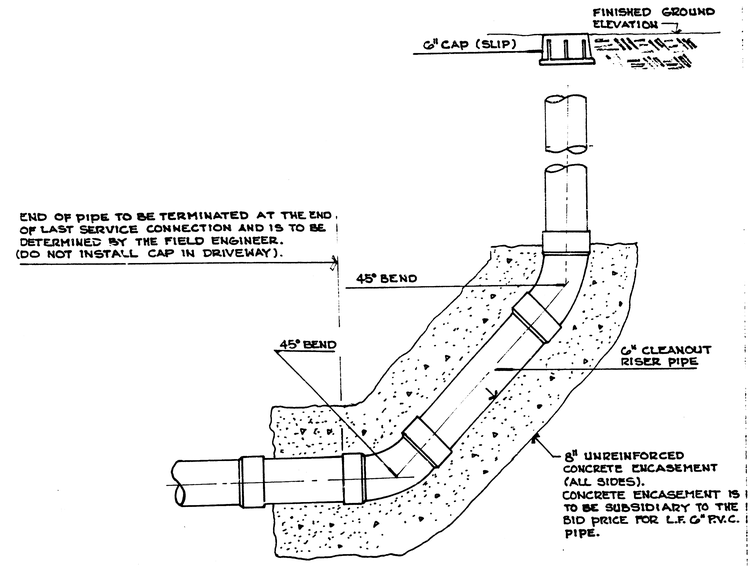
9/12

PROJECT NO.
468-76-245-81558-000-000-001

8/A

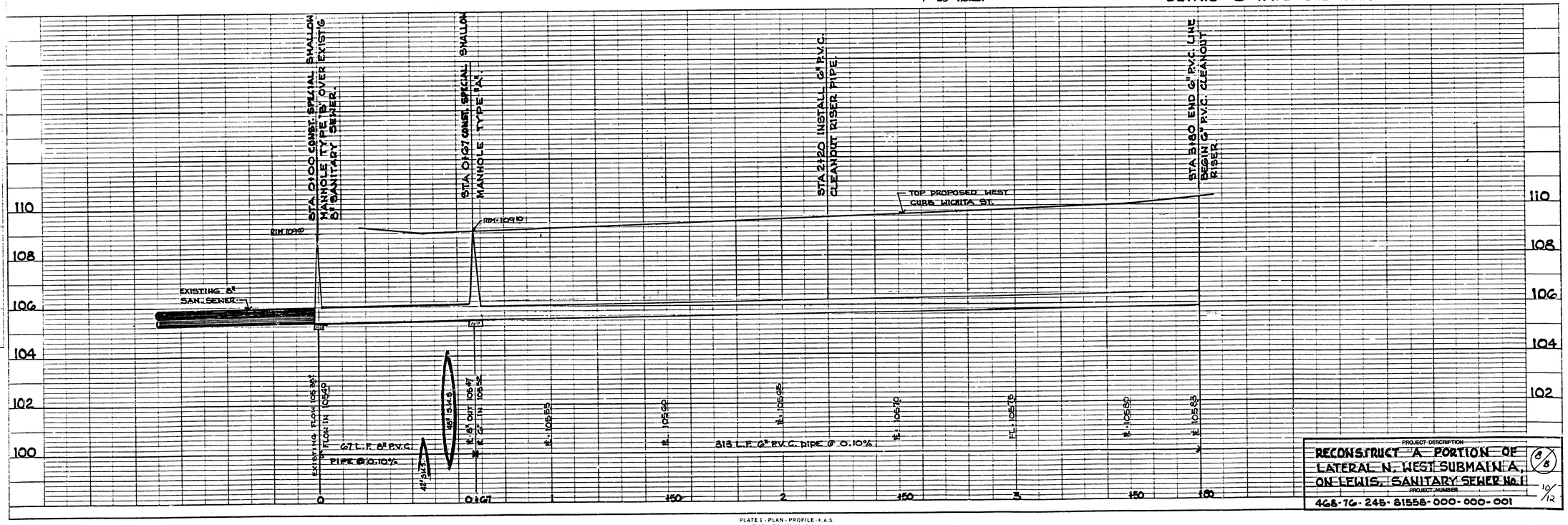


DETAIL 6" P.V.C. CLEANOUT RISER



DETAIL 6" P.V.C. CLEANOUT RISER - END OF LINE -

PROFILE SCALE
1" = 1' VERT.
1" = 20' HORZ.

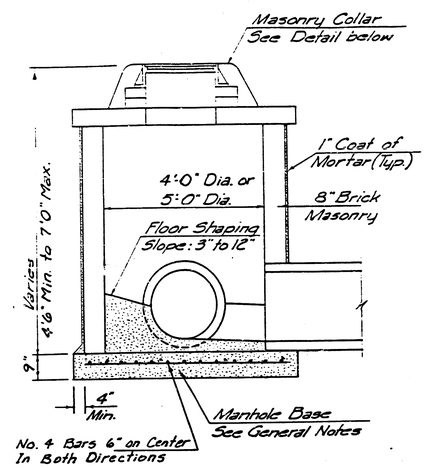


PROJECT DESCRIPTION
RECONSTRUCT A PORTION OF LATERAL N, WEST SUBMAIN A, ON LEWIS, SANITARY SEWER No. I

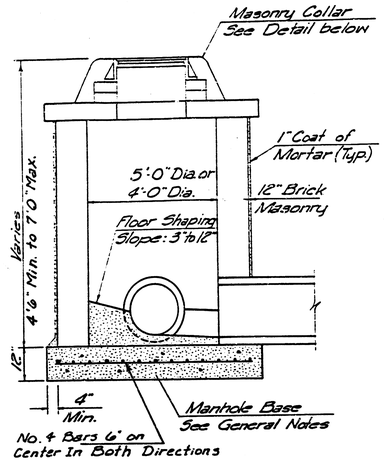
PROJECT NUMBER
468-76-245-81558-000-000-001

8 8
10/12

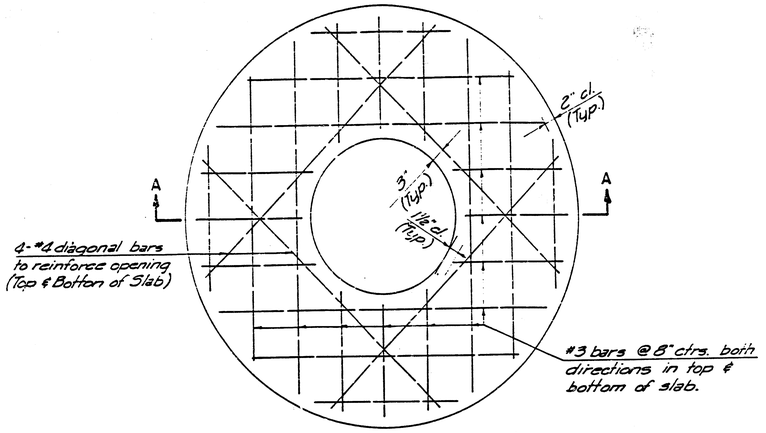
PLATE 1 - PLAN - PROFILE - F.A.S.
CLEARPRINT PAPER CO., S.F. CAL.
NO. 1000H-1



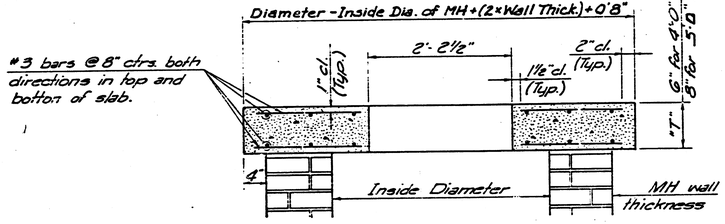
SHALLOW TYPE "A" MANHOLE



SHALLOW TYPE "B" MANHOLE



PLAN

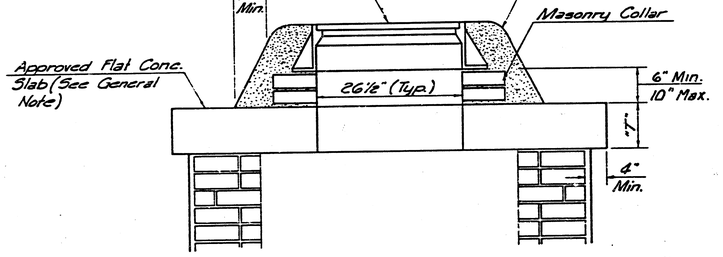


SECTION A-A

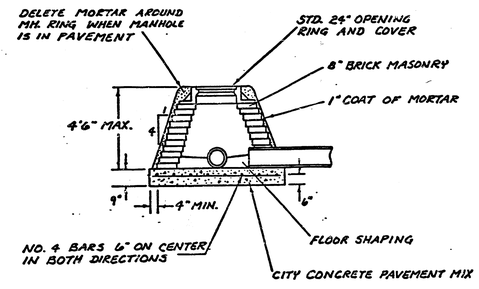
FLAT CONCRETE SLAB DETAILS

GENERAL NOTES

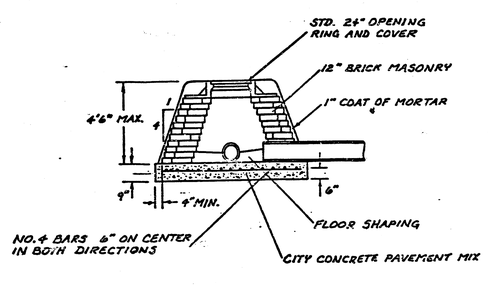
1. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING SPECIFICATIONS USING CITY CONCRETE CEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. TYPE "A" SHALLOW MANHOLES CAN BE USED ON SEWERS WHEN THE MANHOLE IS NOT LOCATED WITHIN PUBLIC STREET PAVEMENT. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE SMALLER THAN 24" SHALL HAVE AN INSIDE DIAMETER OF 4'. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 24" OR LARGER SHALL HAVE AN INSIDE DIAMETER OF 5'. COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
2. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED 6" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
3. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS. MANHOLE FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH MANHOLES SHALL HAVE THE TOP HALF REMOVED TO MEAT LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
4. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. WHEN CLAY PIPE IS USED, THE CRADLE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MANHOLE. THE CRADLE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF CRADLE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
5. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWINGS.
6. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
7. STANDARD SHALLOW MANHOLES TYPE "A" AND "B" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR THE TYPE AND DIAMETER INDICATED. STANDARD SPECIAL SHALLOW MANHOLES TYPE "A" AND "B" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH FOR THE TYPE INDICATED. ALL STANDARD SHALLOW MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.



MASONRY COLLAR DETAIL



SPECIAL SHALLOW TYPE 'A' MANHOLE



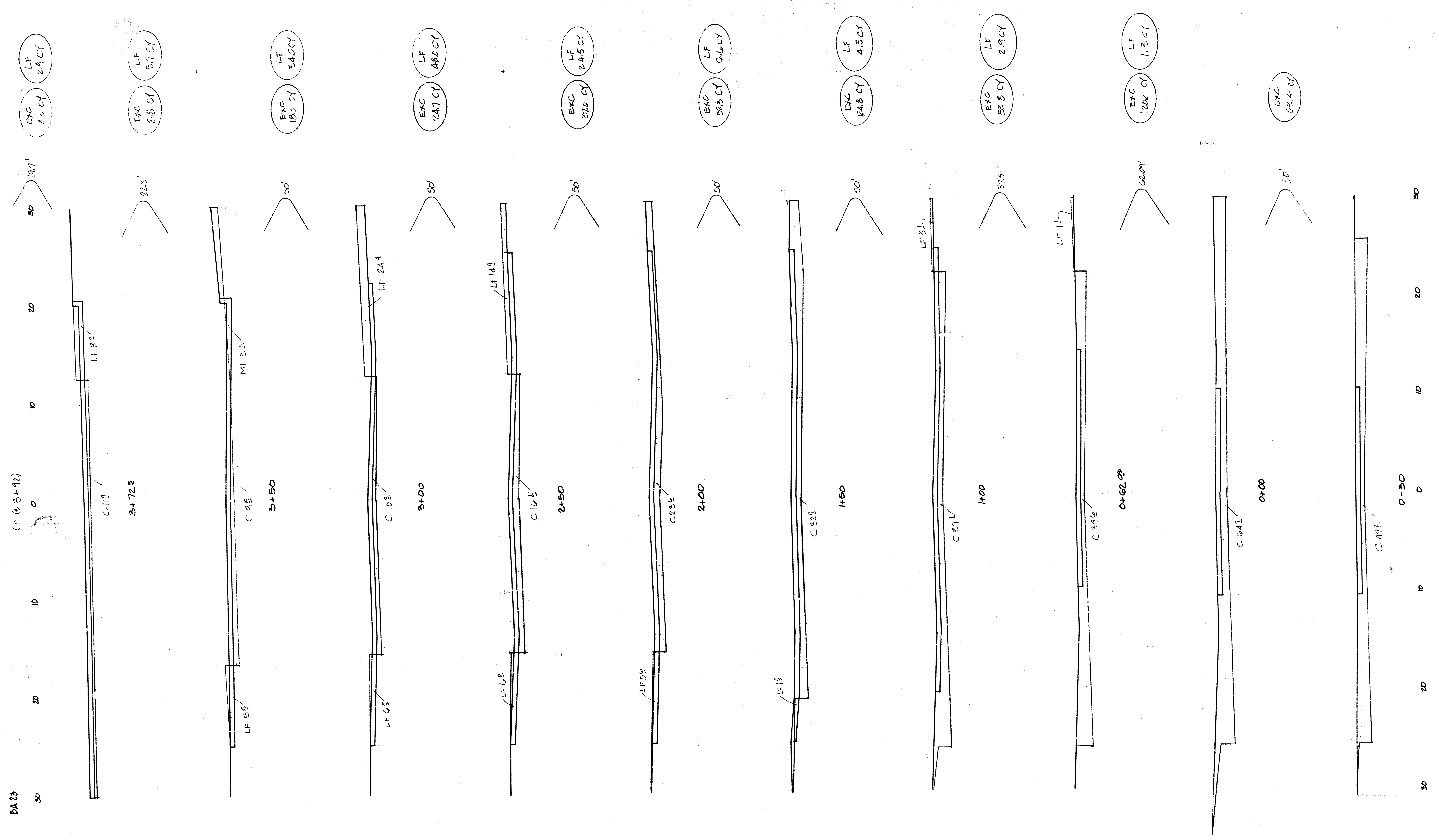
SPECIAL SHALLOW TYPE 'B' MANHOLE

CITY OF WICHITA, KANSAS
STANDARD SHALLOW MANHOLES
TYPE 'A' AND TYPE 'B'

PROJ. No. 468-76-245-81558-000-000-001

Designed by		Checked by	
Drawn by		Date	Job No.

9/C 11/12



EARTHWORK TOTAL:
447.6 CU.YDS. EXCAVATION
130.2 CU.YDS. LOOSE FILL

WICHITA STREET
PROJ. NO. 472-76-245-81462-000-000-001