

STREET IMPROVEMENTS FOR FOURTH ADDITION TO CEDAR RIDGE

MT. VERNON — FROM THE WEST LINE LOT 10, BLOCK 3, FOURTH ADDITION TO CEDAR RIDGE AND THE WEST LINE LOT 8, BLOCK 1, HEDGECLIFF 3RD ADDITION TO THE WEST LINE WEBB ROAD.

STACEY — FROM THE NORTH LINE MT. VERNON TO THE SOUTH LINE SKINNER

INDEX NO. 602177

CITY OF WICHITA, KANSAS

MIKE E. LINDEBAK

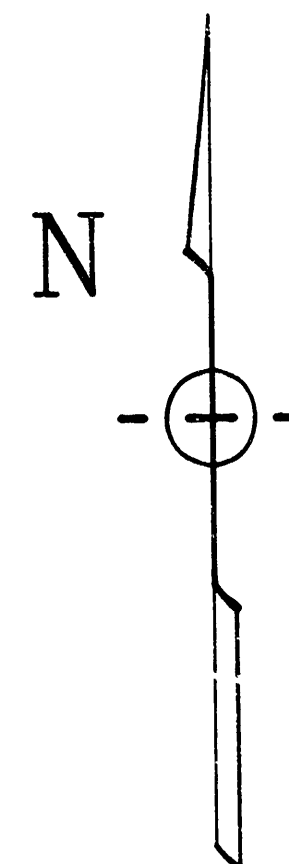
CITY ENGINEER

PROJECT NO.

472-76-245-81351-000-000-001

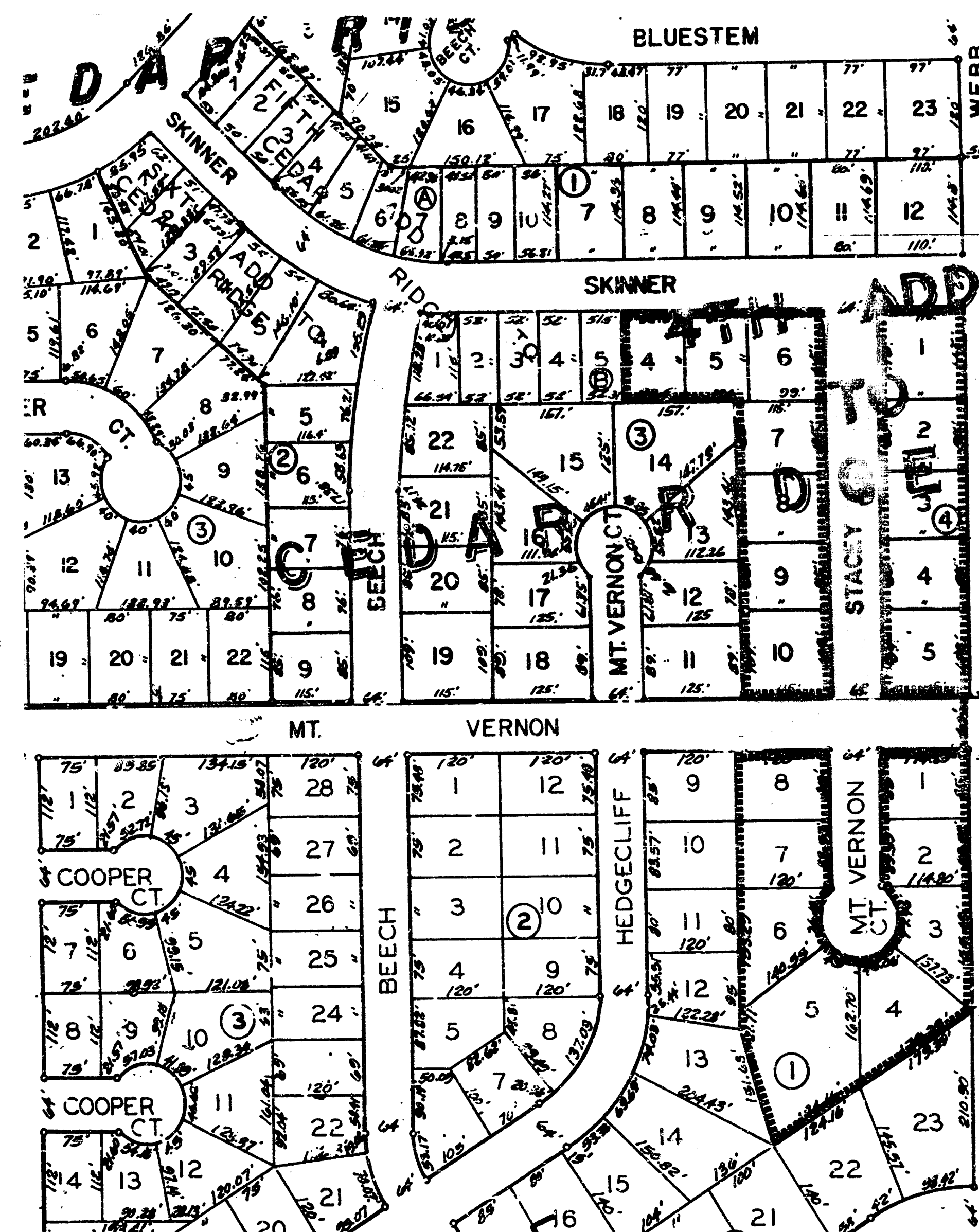
INDEX

Cover Sheet	1
37' Pavement Detail	2
35' Pavement Detail	3
Mt. Vernon	4
Stacey	5
Storm W. Sewer Extension Plan	6
Non-Standard Ditch Inlet Detail	7
Modified Shallow Type 'B' Manhole Detail	8
Earthwork Cross Sections	9-10



BENCH MARK — Elevation 182.48. City Standard Disc located 47' West and 44' North of 1/4 Section Corner at Webb Road and Mt. Vernon

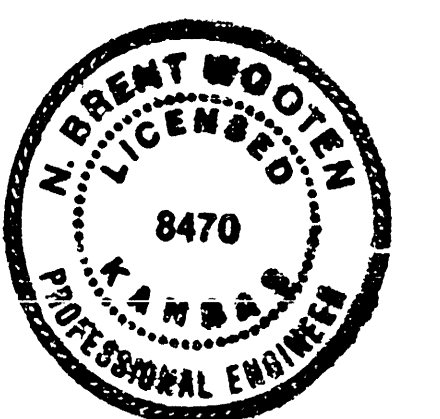
BENCH MARK — Elevation 173.50. "B" Cut in Top of Curb @ End of Return of Valley Gutter, East Side of Skinner & Beech.



BENEFIT DISTRICT

GENERAL NOTES

1. The Contractor shall notify pipeline companies at least 24 hours in advance of any work being performed over and/or adjacent to pipelines.
2. Utility service lines, poles, valve boxes, meters, and etcetera 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.
3. No more than 3 drives 20 feet in width, or equivalent combinations thereof, are to be constructed with this project.
4. 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.
5. 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 in accordance with state laws.
6. The Contractor shall contact Cliff Nies of Nies Construction for verification and location of the drives to be constructed with this project.
7. The Contractor shall coordinate construction of this project with Project number 472-76-245-81352-000-000-001, the paving to the west so that the construction of both projects occurs simultaneously.

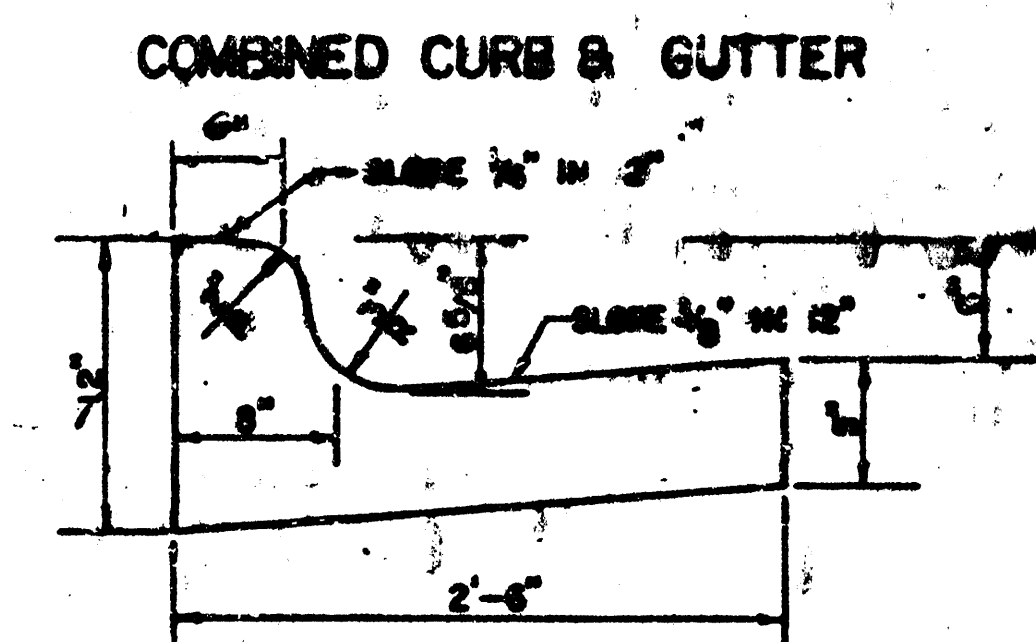
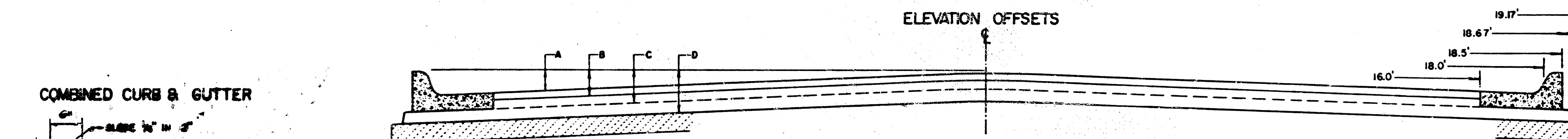
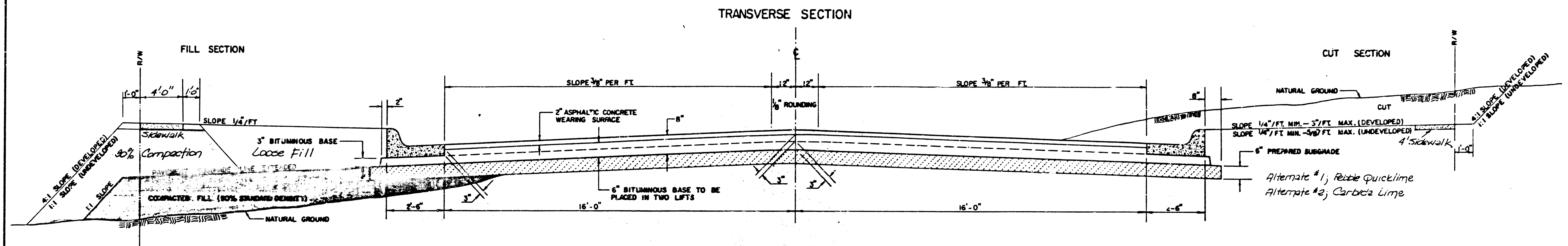


BOOKED: 1-11-89 MCG

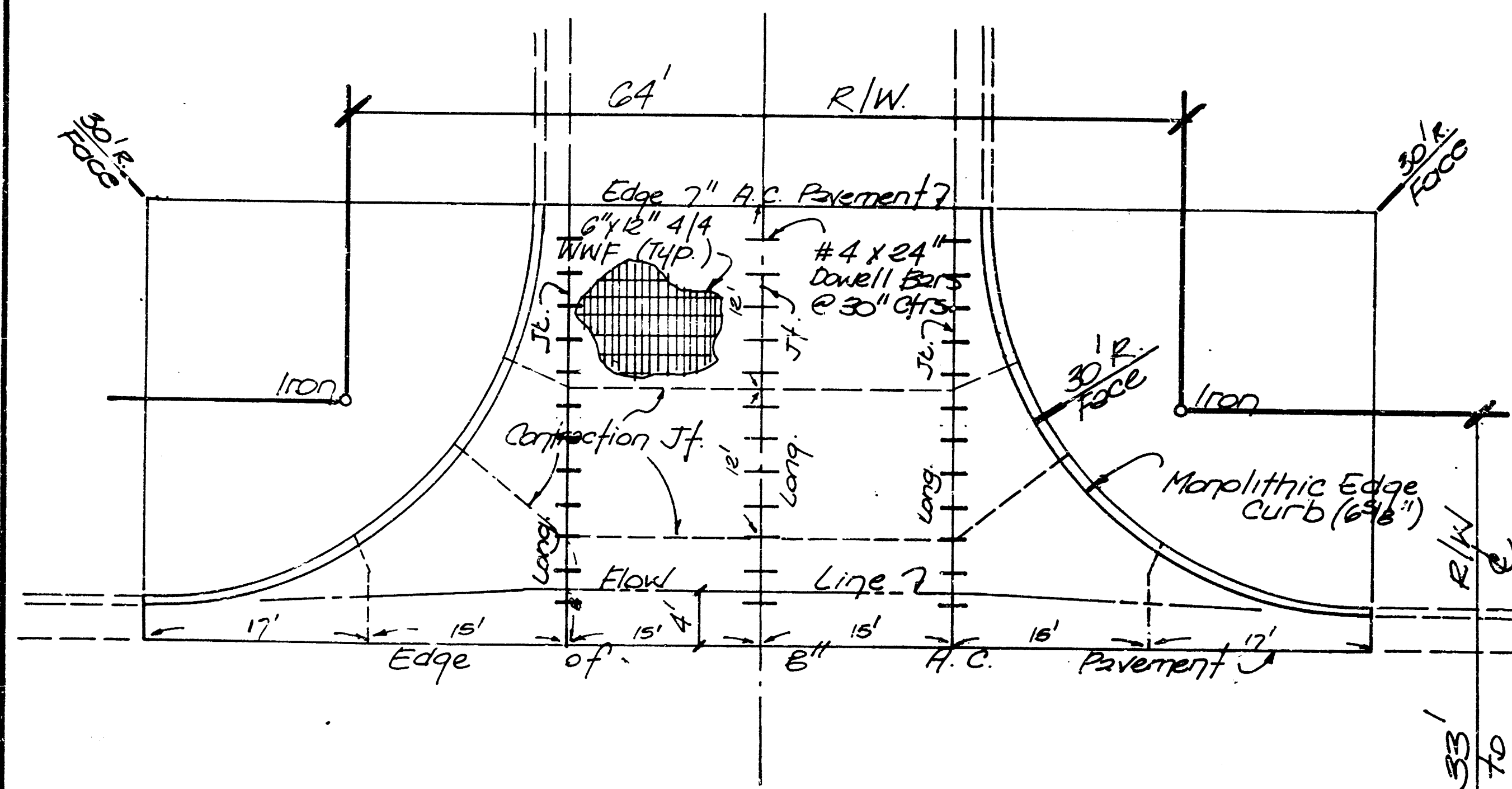
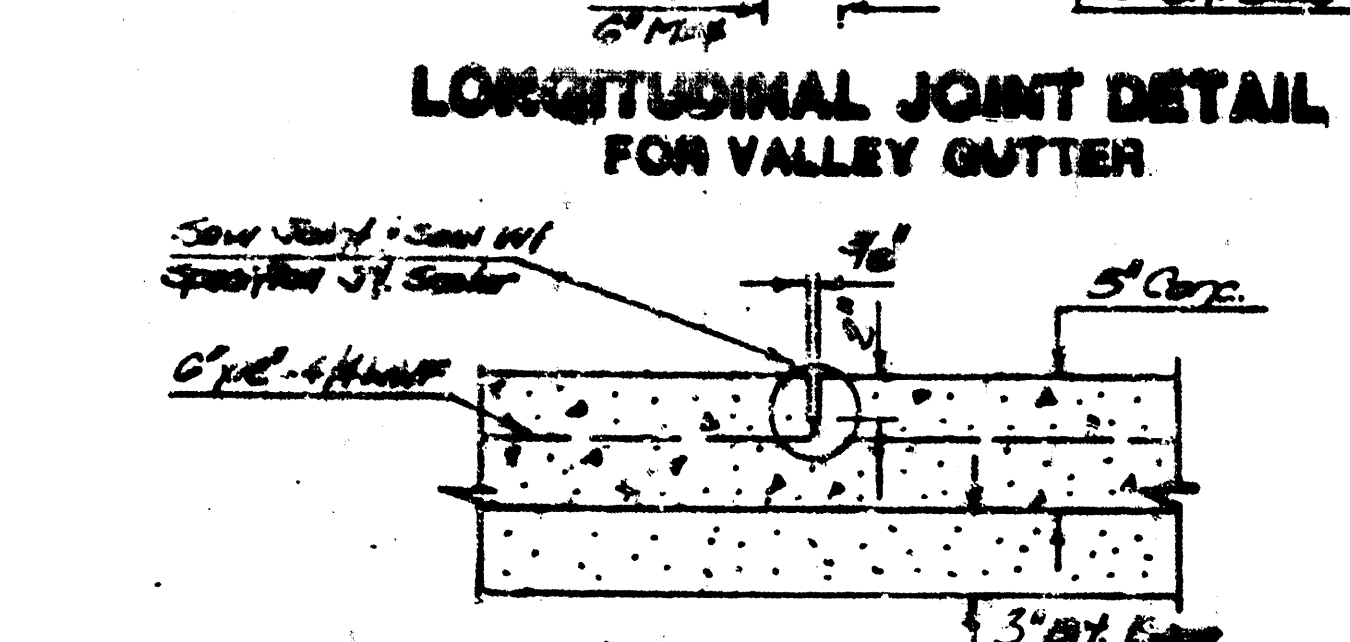
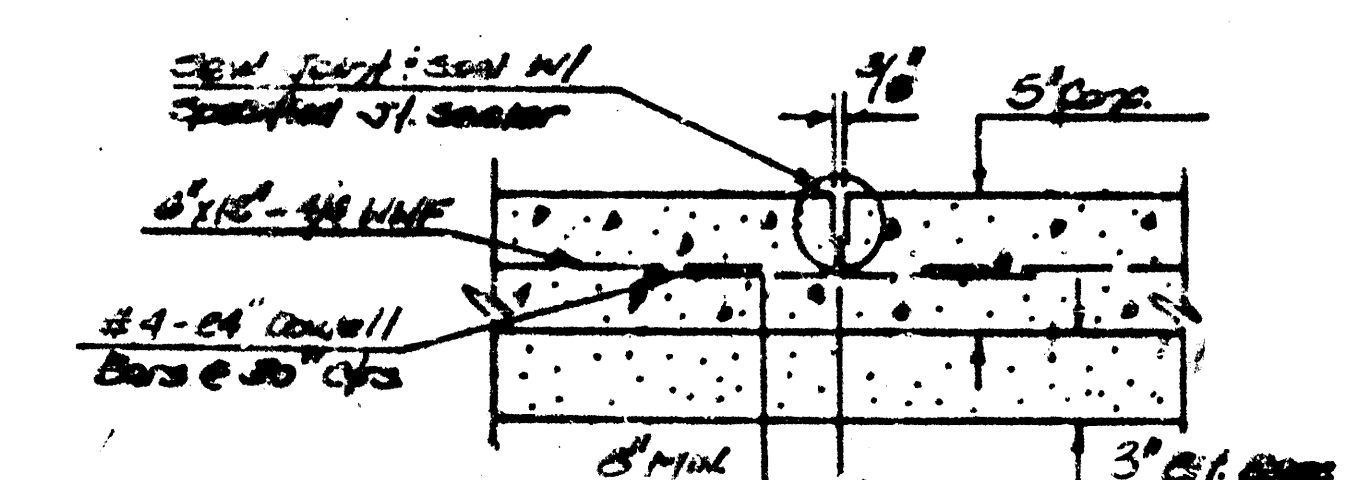
AUG. 4, 1988

BAUGHMAN COMPANY P. A.
SURVEYING & ENGINEERING
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211

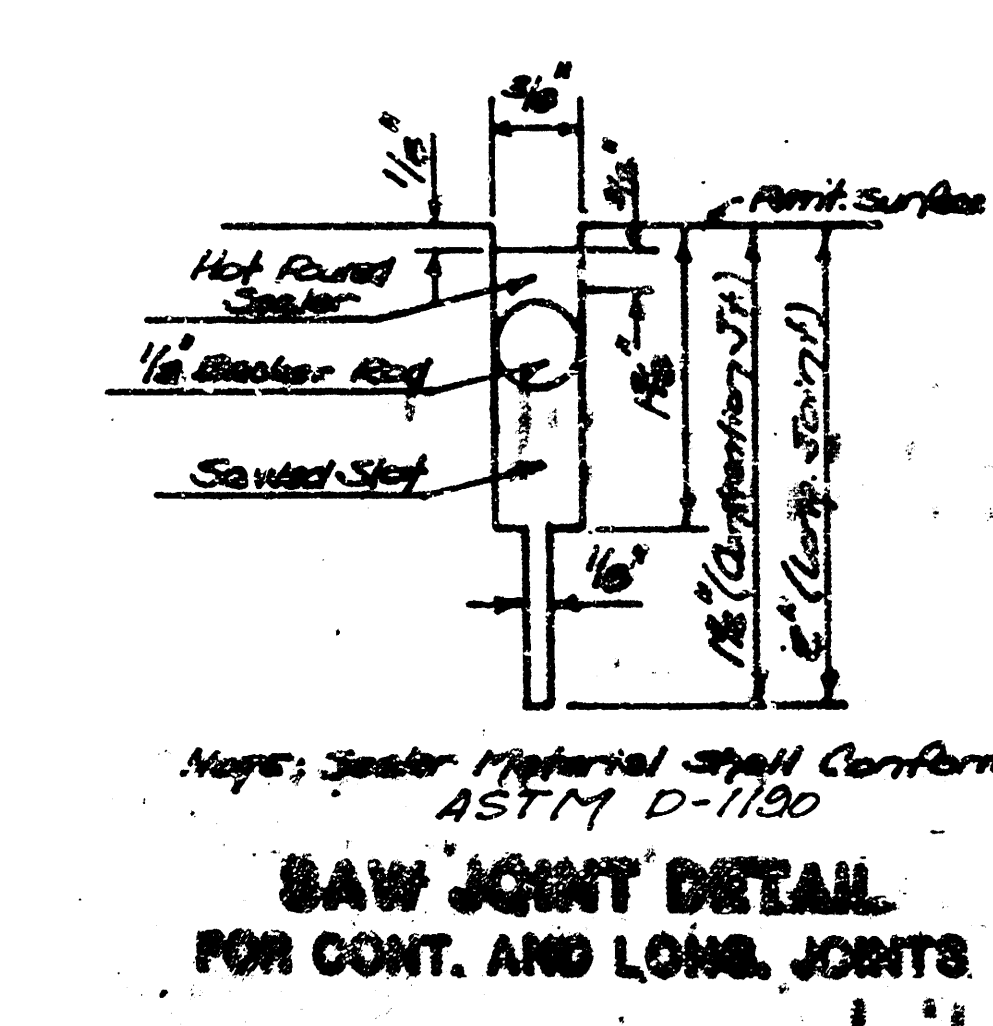
TYPICAL 37' PAVEMENT DETAILS MT. VERNON



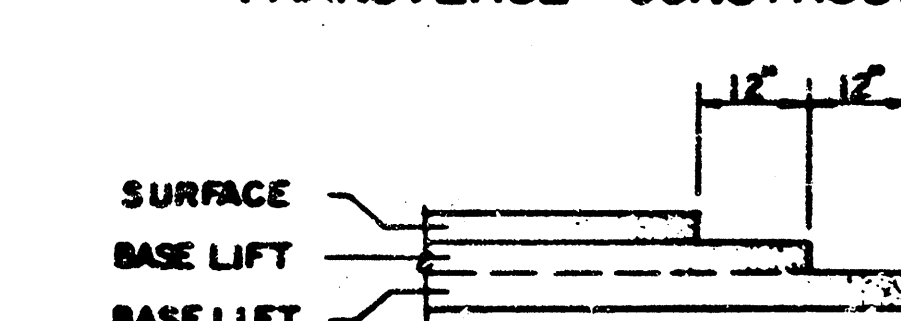
	DISTANCE FROM CENTERLINE (LT. & RT.)												
	0	2	4	6	8	10	12	14	16	18	18.5	18.67	19.17
A: TOP OF CURBS TO TOP OF SURFACE LIFT	.01	.05	.11	.18	.24	.30	.36	.43	.49	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	.17	.22	.28	.34	.40	.47	.53	.59	.65	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	.42	.47	.53	.59	.65	.72	.78	.84	.90	.97	.98	.99	—
D: TOP OF CURBS TO TOP OF SUBGRADE	.67	.72	.78	.84	.90	.97	1.03	1.09	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 CS-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.



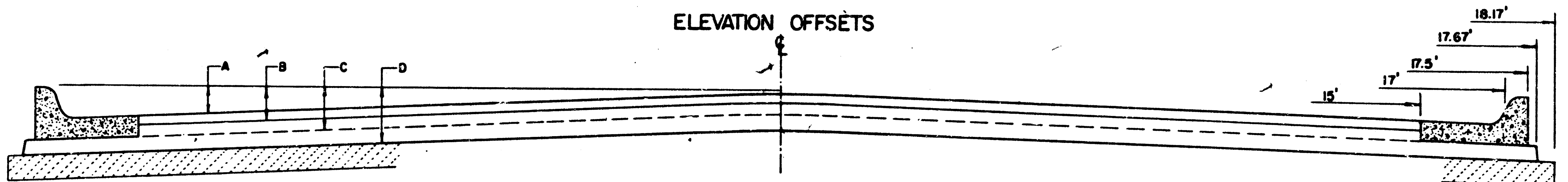
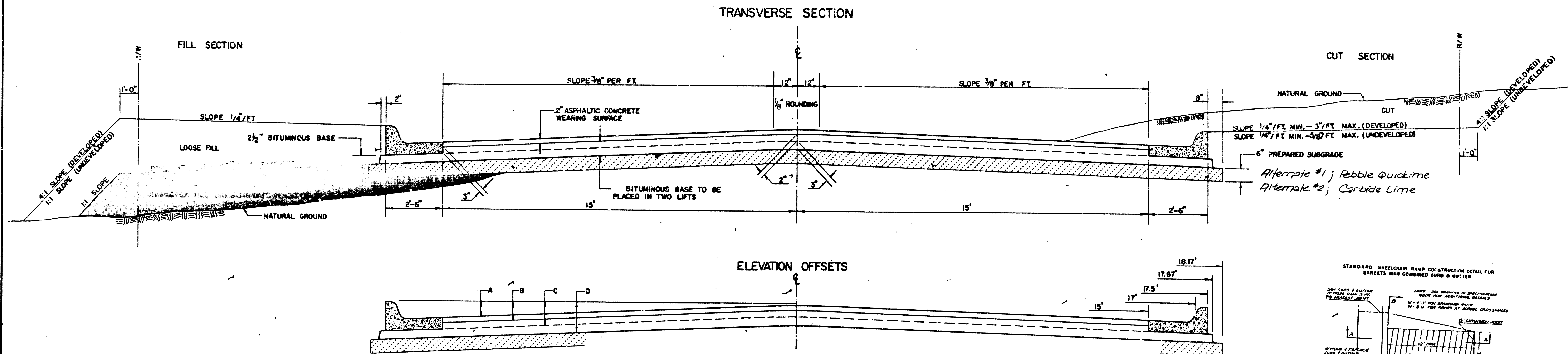
TRANSVERSE CONSTRUCTION JOINTS



TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE EXISTING FLEXIBLE BASE PAVEMENT JOINTS EXIST. 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).

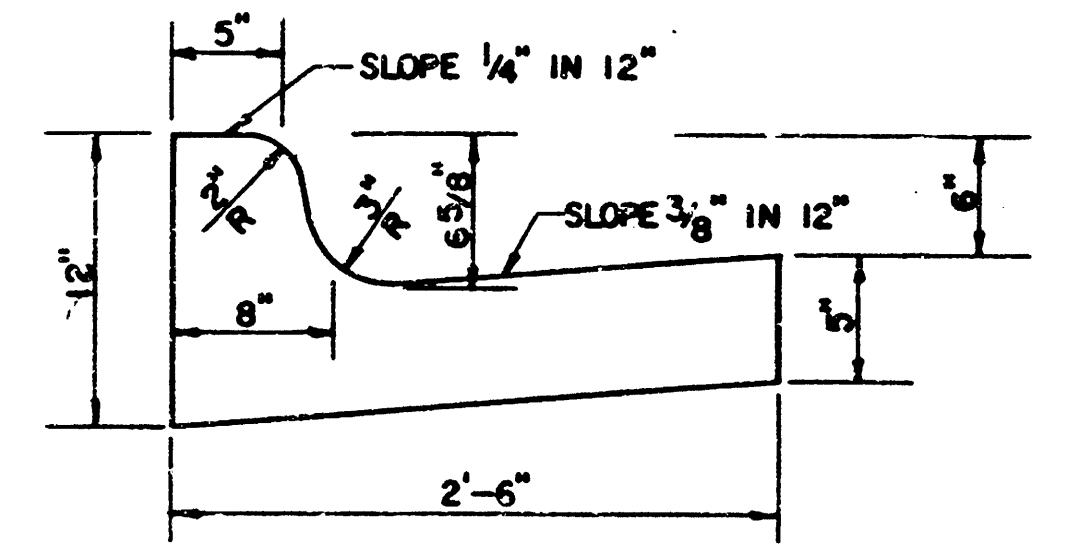
8 INCH RESIDENTIAL ASPHALTIC CONCRETE PAVEMENT WITH 6 INCH BITUMINOUS BASE
CITY OF WICHITA, KANSAS
PROJECT NUMBER
472-78-246-81351-006-000-091

TYPICAL 35' PAVEMENT DETAILS

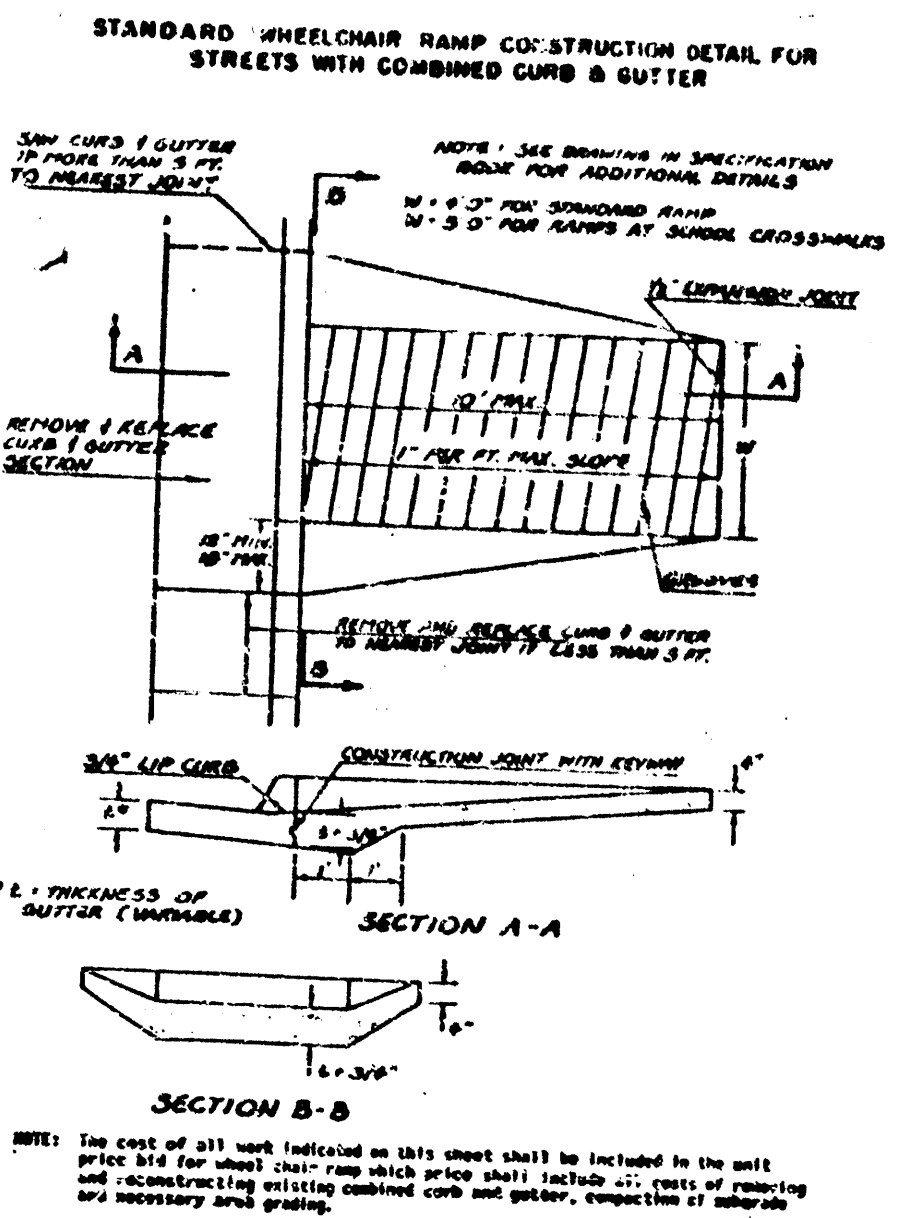
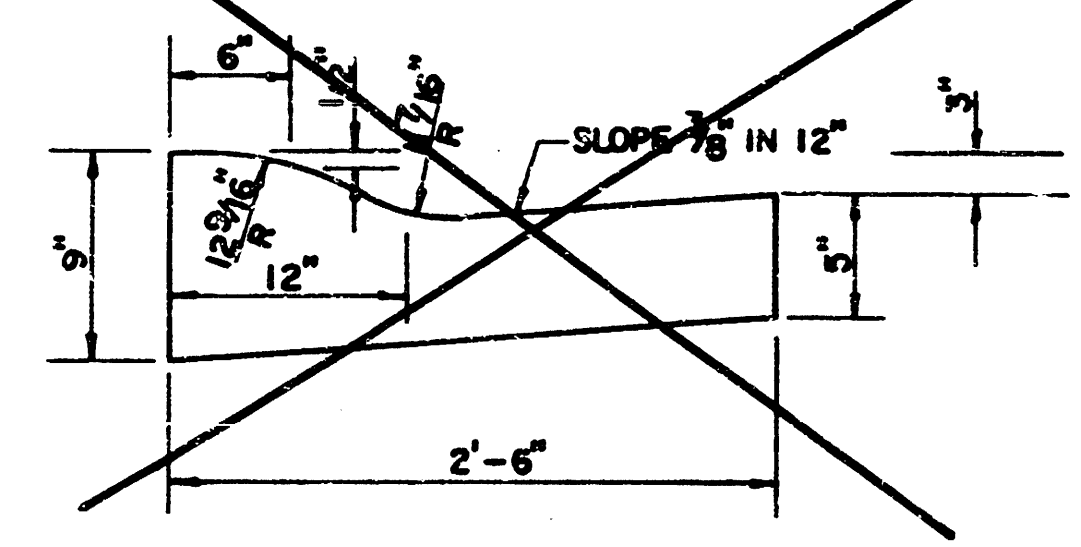


	DISTANCE FROM CENTERLINE (LT. & RT.)												
	0'	2'	4'	6'	8'	10'	12'	14'	15'	17'	17.5'	17.67'	18.17'
A: TOP OF CURBS TO TOP OF SURFACE LIFT	0.04	0.08	0.14	0.21	0.29	0.33	0.39	0.46	0.49	—	—	—	—
B: TOP OF CURBS TO TOP OF UPPER BASE LIFT	0.21	0.25	0.31	0.37	0.45	0.50	0.56	0.62	0.65	—	—	—	—
C: TOP OF CURBS TO TOP OF LOWER BASE LIFT	0.37	0.43	0.50	0.57	0.67	0.72	0.79	0.87	0.90	0.96	1.00	1.00	—
D: TOP OF CURBS TO TOP OF SUBGRADE	0.62	0.67	0.74	0.81	0.90	0.95	1.02	1.08	1.12	1.19	1.21	1.21	1.23

COMBINED CURB & GUTTER



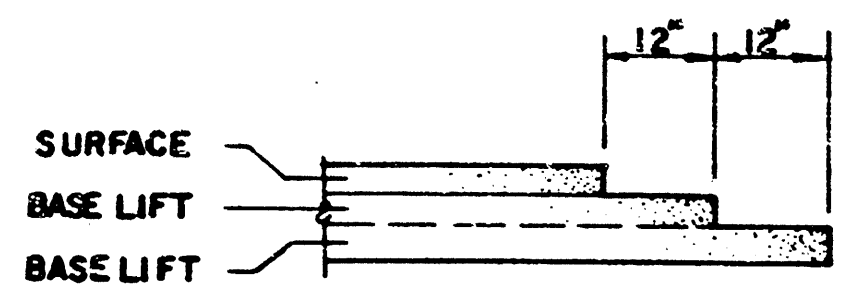
ROLL TYPE COMBINED CURB & GUTTER



GENERAL NOTES

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

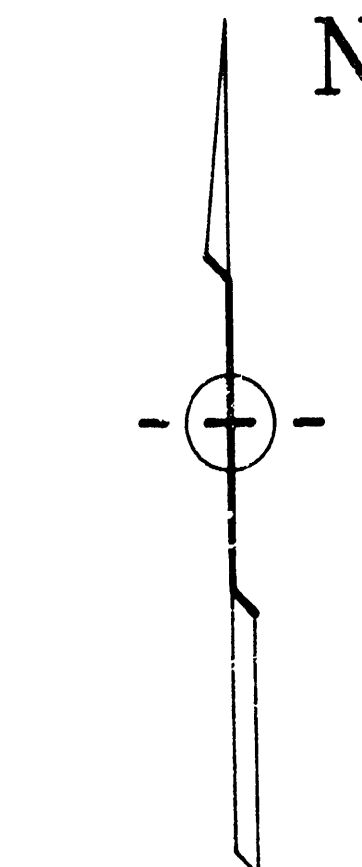
TRANSVERSE CONSTRUCTION JOINTS



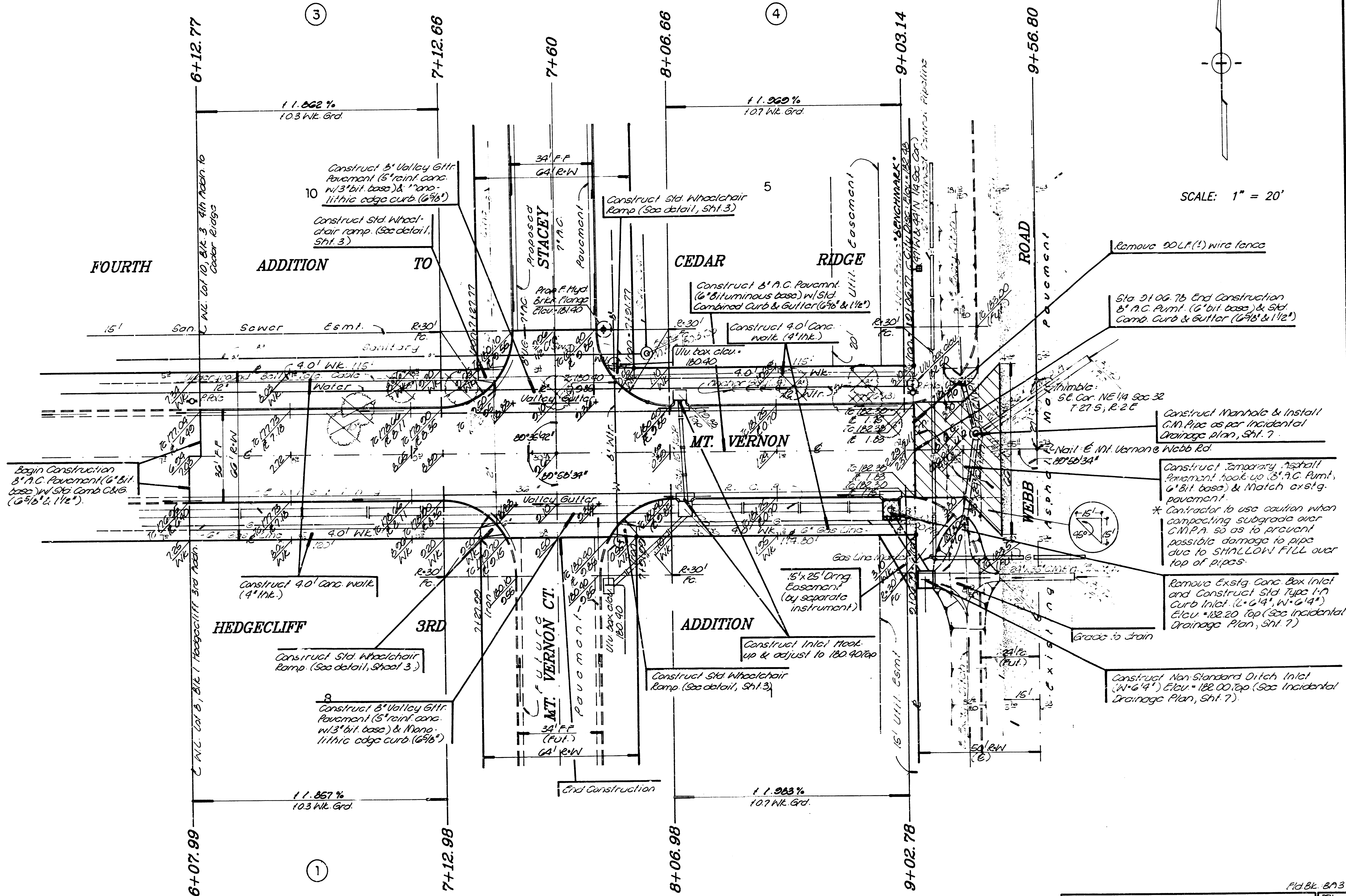
TRANSVERSE CONSTRUCTION JOINTS SHALL BE CONSTRUCTED IN FLEXIBLE BASE PAVEMENTS AT LOCATIONS WHERE PAVEMENT JOINS EXISTING FLEXIBLE BASE PAVEMENT AS SHOWN BY THE DETAIL. ALL COSTS ASSOCIATED WITH THE CONSTRUCTION OF THE TRANSVERSE JOINT SHALL BE INCLUDED IN THE BID PRICE FOR SQUARE YARDS 7" ASPHALTIC CONCRETE (5" BITUMINOUS BASE).

BENCHMARK:
City Disc Webb Rd. & Mt. Vernon
47' W., 44' N. of 1/4 Sec. Cor.
Elev. = 132.45

BENCHMARK: '0' CUL in Top of Curb
in Southeast Return & Mt. Vernon & Booth
Elev. = 173.70 City Datum



SCALE: 1" = 20'



INTERSECTION QUANTITIES

334.2	SY Concrete Pavement
157.1	SY Asphaltic Conc. Pavement (6" Bituminous Base)
	LF Combined Curb & Gutter
	LF Monolithic Edge Curb
	SP 4" Wheelchair Ramp
	SP 4" Walk
	CY Excavation
	CY Compacted Fill
	Lbs Reinforcing Steel
445.0	SY Manipulation
301.0	Tons Lime or Cement
	SY Valley Gtr. 5" Concrete & 3" Asphaltic Conc. Base

EARTHWORK QUANTITIES

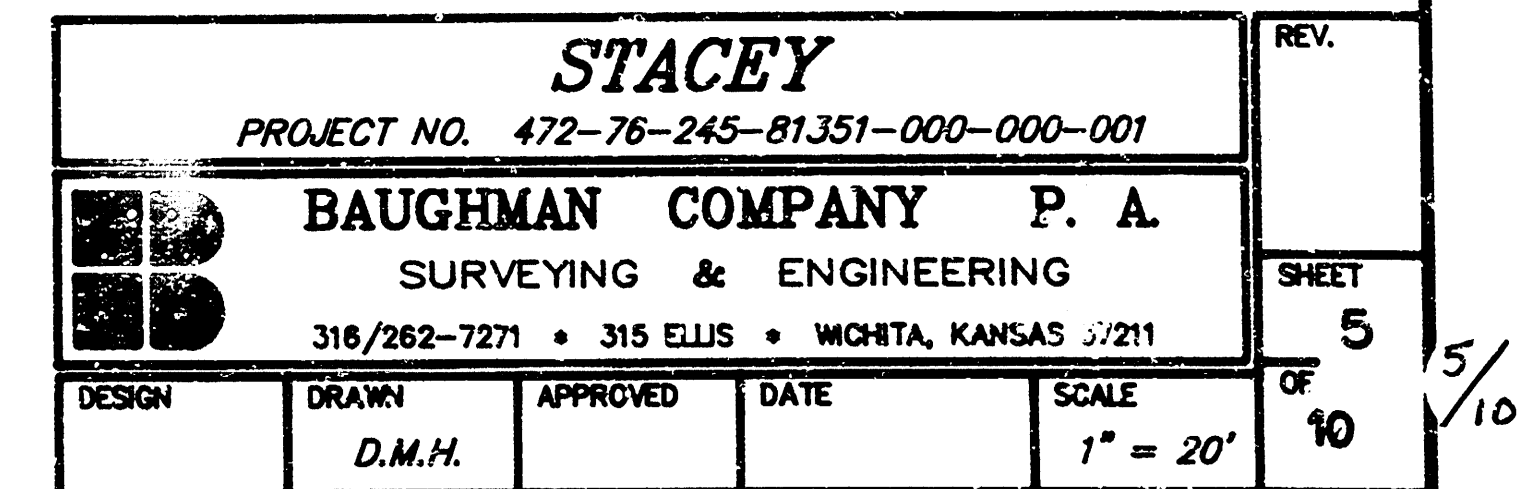
Excavation	1132.7	cy	Compacted Fill	64.0	cy
+10%	113.3		+10%	6.4	
Total	1246.0	cy	Total	70.4	cy
Subgrade Manipulation		3566.0	sq		
Borrow Material		0	cy		

Note:
Trass to be removed marked thus:

File No. 873

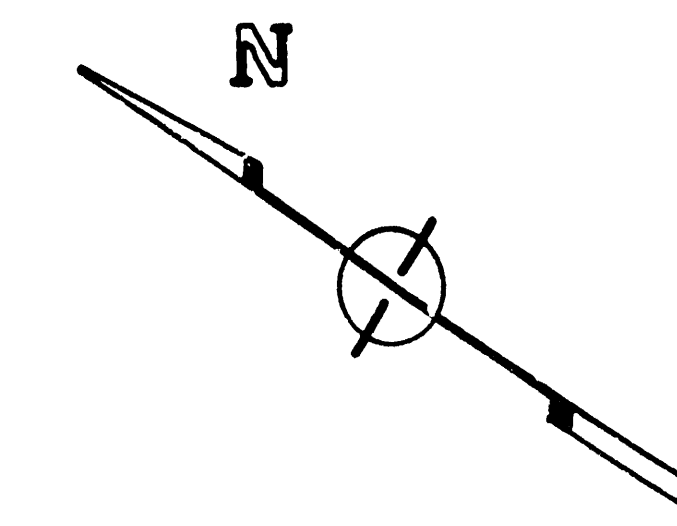
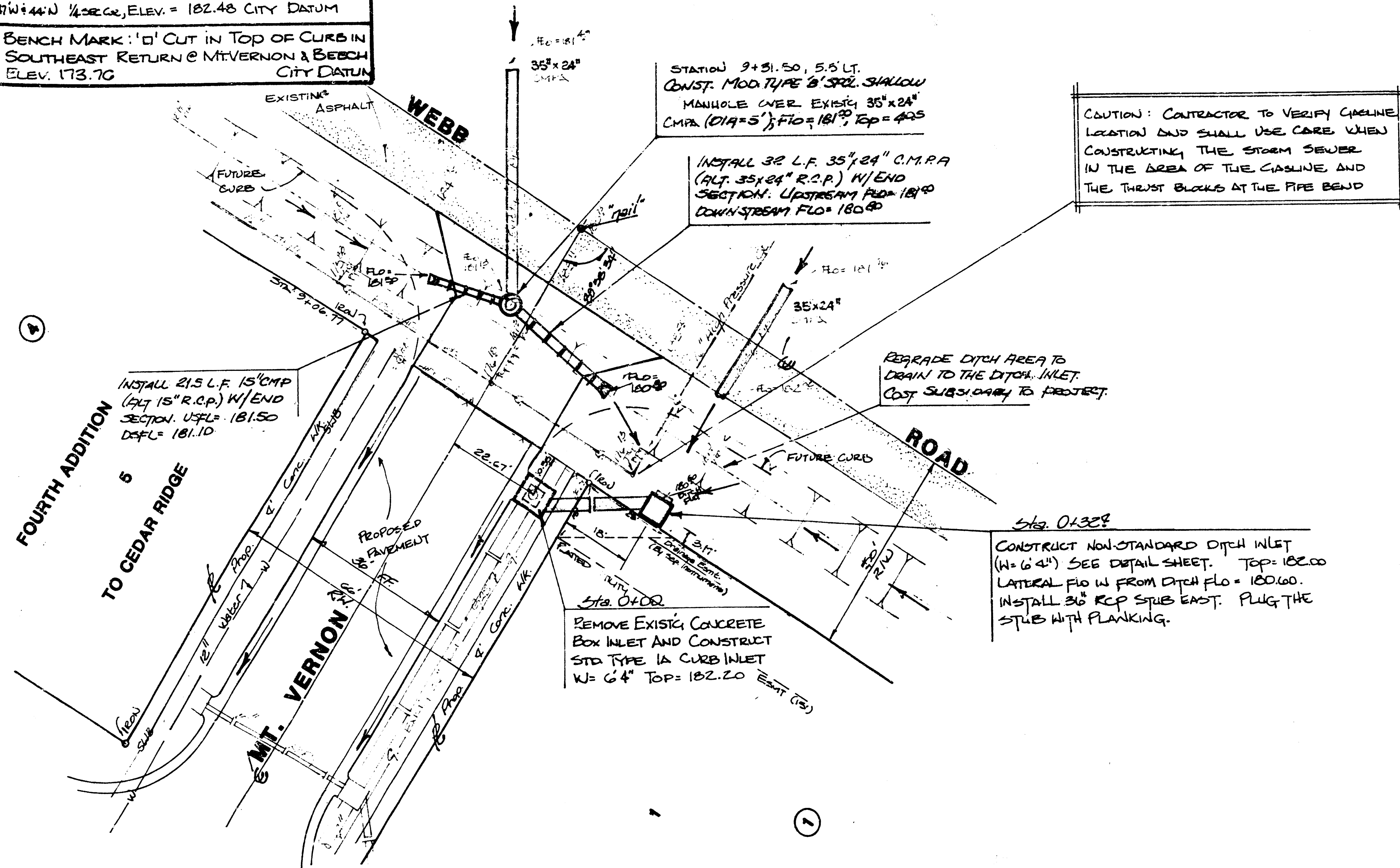
MT. VERNON			
PROJECT NO. 472-76-245-81351-000-000-001			
BAUGHMAN COMPANY P. A.			
SURVEYING & ENGINEERING			
316/262-7271 • 315 ELLIS • WICHITA, KANSAS 67211			
DESIGN	DRAWN	APPROVED	DATE
SCALE			1" = 20'
SHEET			4
OF			10

SCALE: 1" = 20'



BENCH MARK: CITY DSC, WEBB & MT. VERNON
 41W+44N 1/2 SEC 24, ELEV. = 182.48 CITY DATUM

BENCH MARK: 'D' CUT IN TOP OF CURB IN
 SOUTHEAST RETURN @ MT. VERNON & WEBB
 ELEV. 173.70 CITY DATUM



SCALE: 1"=20' PLAN
 1"=5' PROFILE

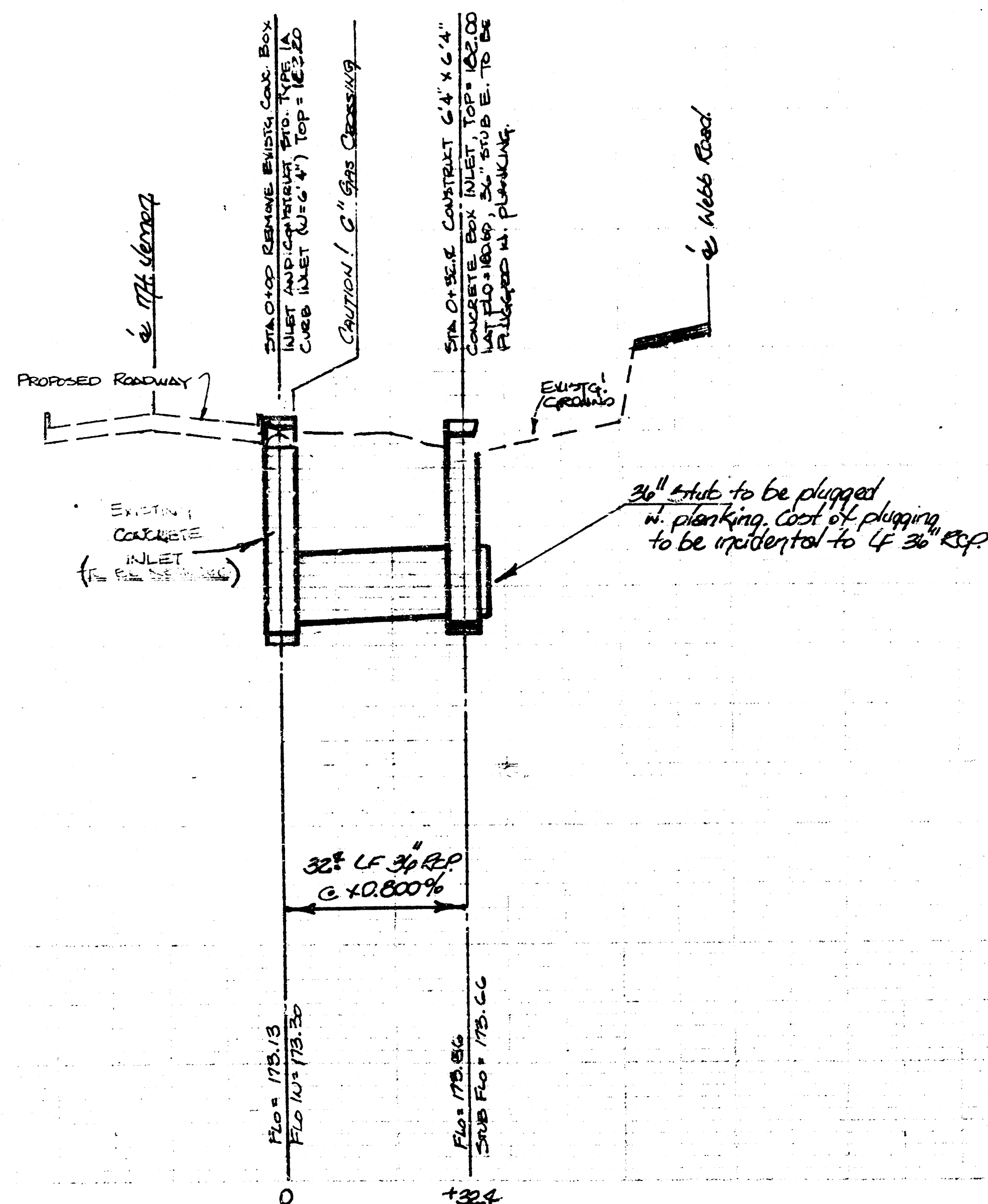
NOTES

- End sections shall be installed and considered as incidental to the bid item for lineal feet Pipe.
- The 36 inch R.C.P. stub to the east shall be plugged shut at the present time with the use of planking. The cost of the planking shall be considered as incidental to L.F. 36 inch R.C.P.
- The contractor shall regrade the disturbed areas in the ditch along Webb Road to properly drain and leave the ditch area in good condition. The cost of regrading shall be incidental to the project.
- The contractor shall contact Bill Hagemann, Northwest Central Pipeline Company, 324-0491, 48 hours prior to construction in the area around the 16 inch high pressure gas line in Webb Road.
- The contractor shall contact the necessary utility companies in order to verify if any underground lines exist within the Webb Road right-of-way area of construction.

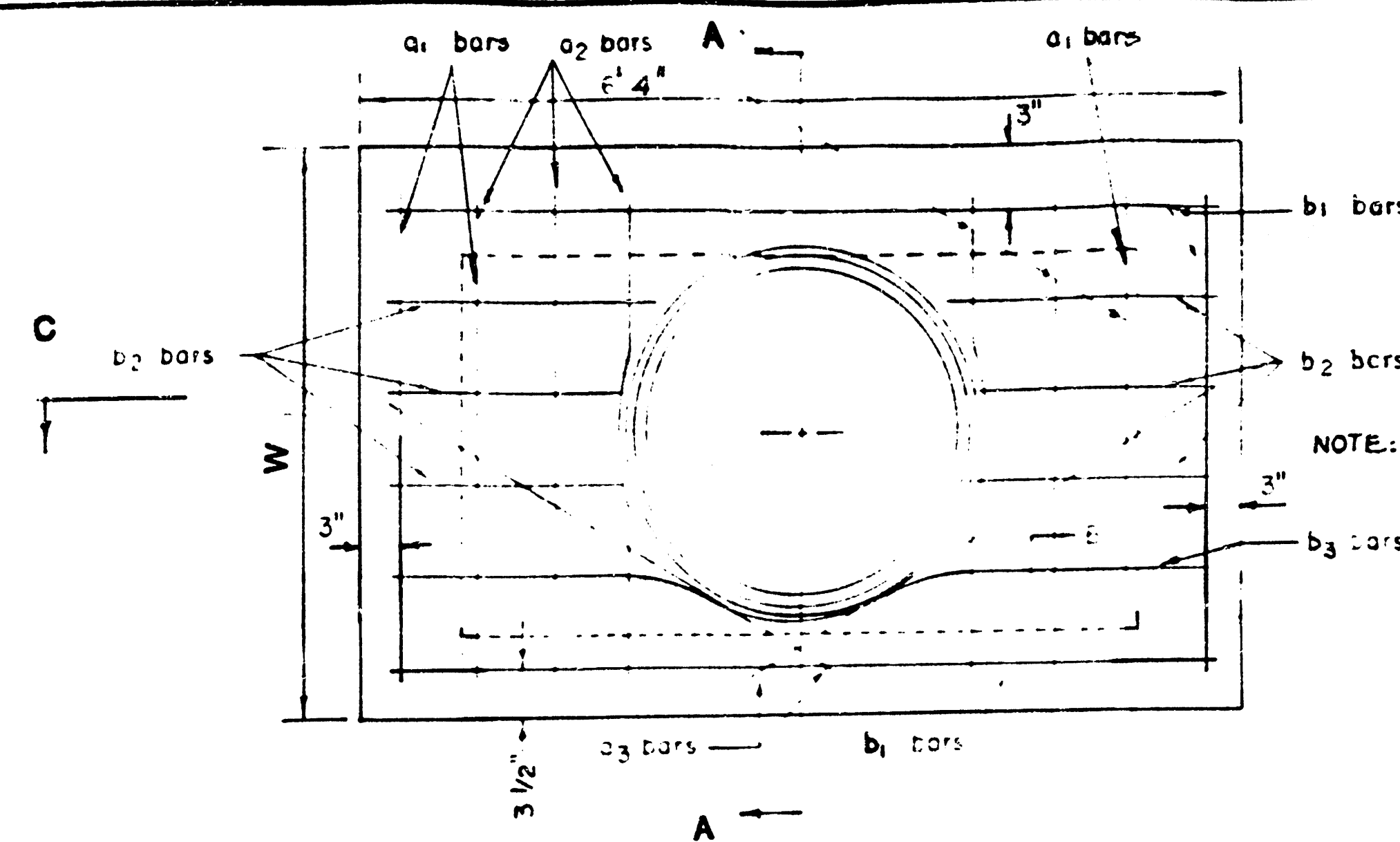
180

175

170

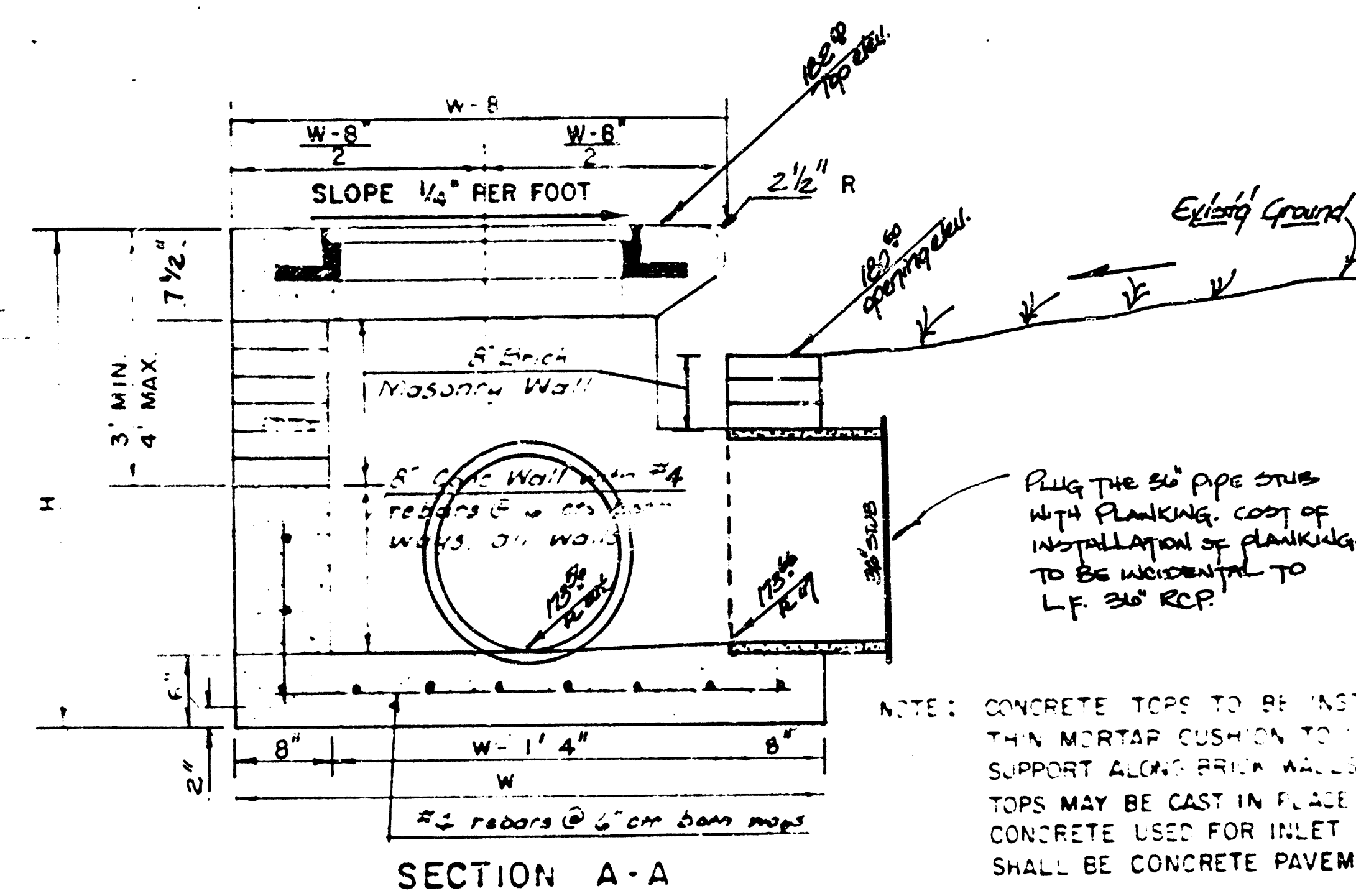


INCIDENTAL DRAINAGE					
BAUGHMAN COMPANY, P.A. SURVEYING & ENGINEERING 316282-7271 • 315 ELLIS • WICHITA, KANSAS 67211					
Design:	Drawn:	Approved:	Date:	Scale:	Sheet:
					6
Project Number: 472-76-245-31361-000-000-000					10

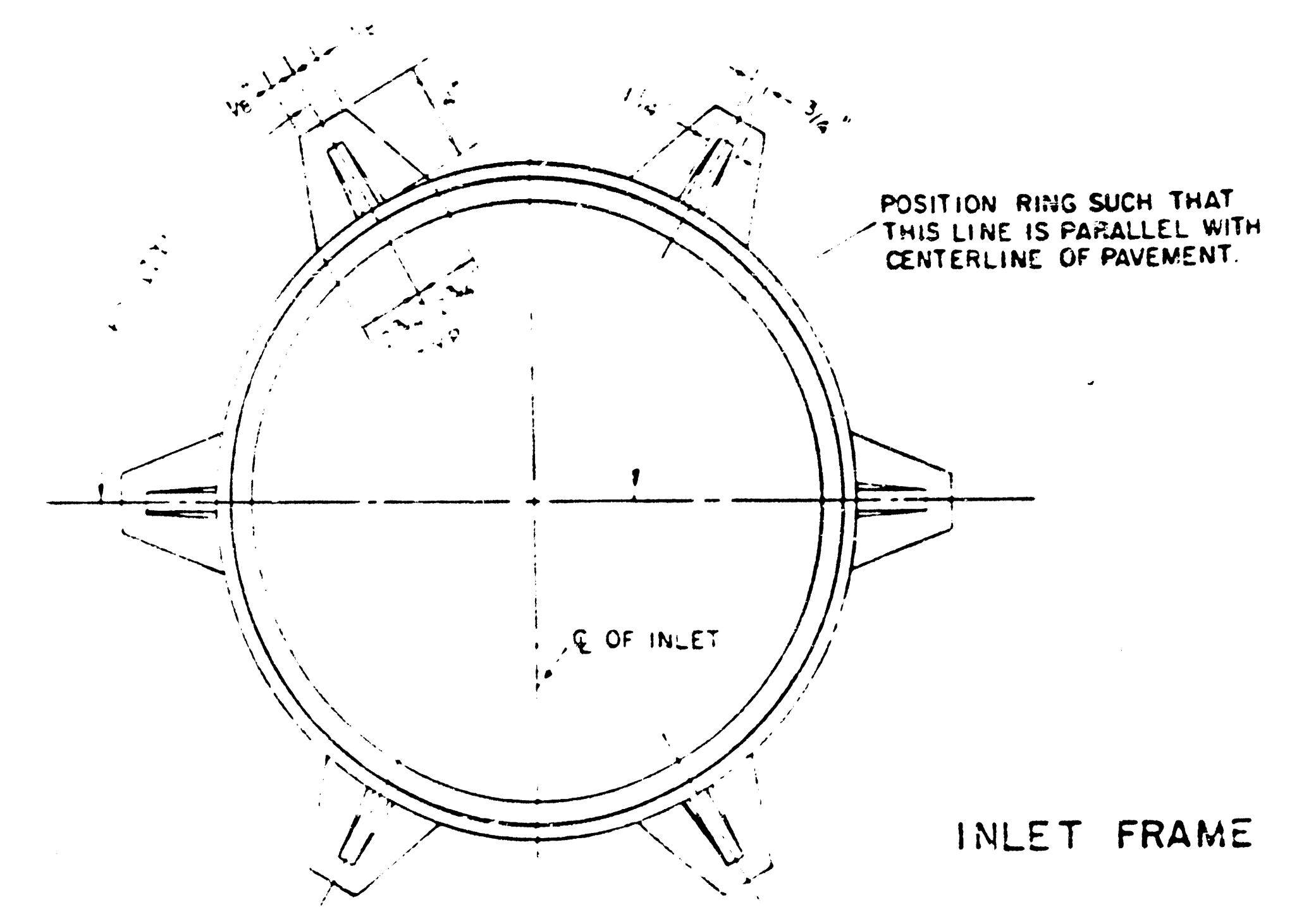


NOTE: INLET TOP REINFORCING SHALL BE SPACED ON 6" MAX. CENTERS

NOTE: b3 bar to be field bent to clear manhole frame



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.



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

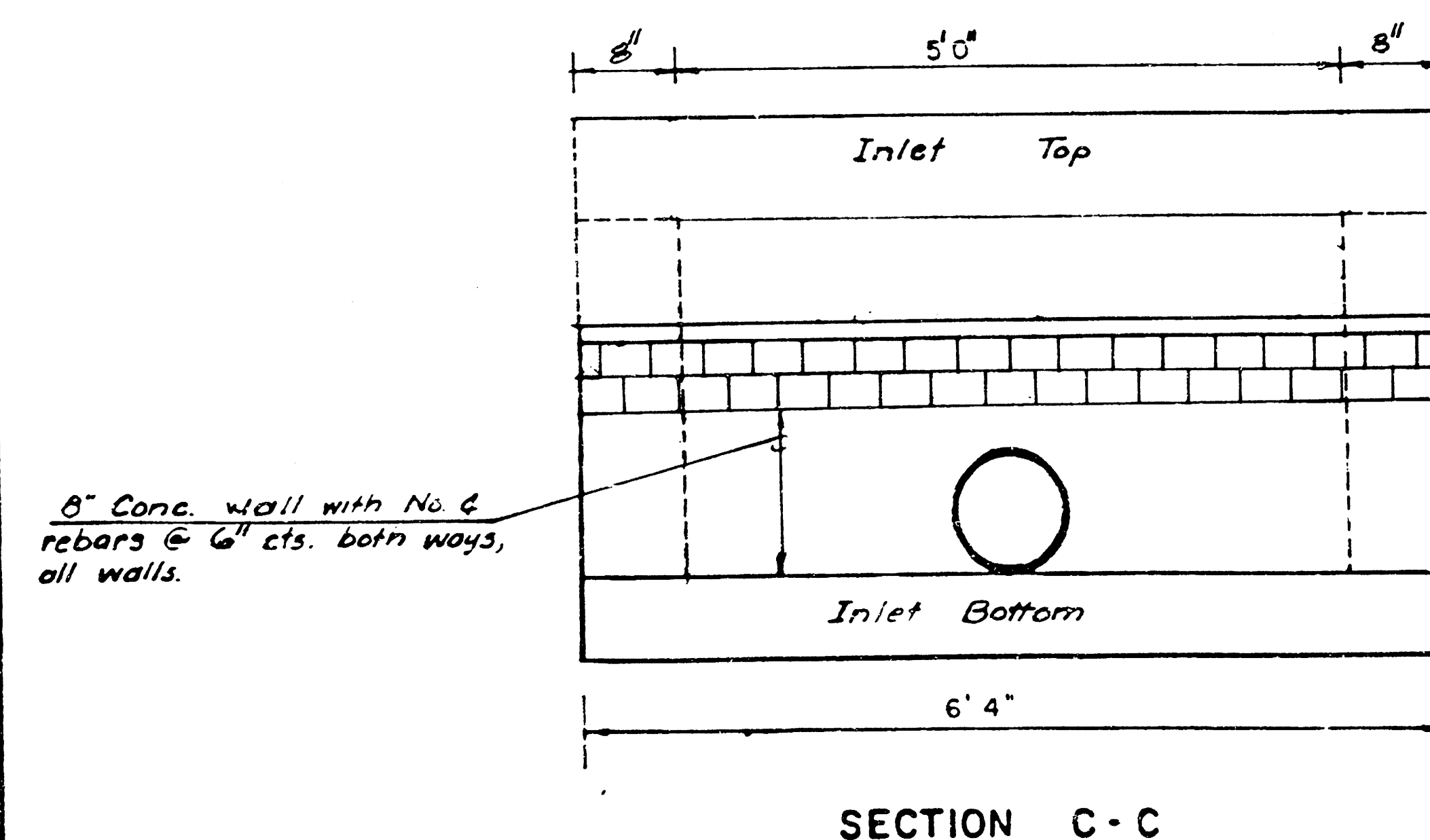
STEEL SCHEDULE

BAR	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	WT
NUMBER	4	4	2	1	3	5	7	9	5	1	1
SIZE	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4
INLET	14'4" 15'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"
WALL	14'4" 15'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"
INLET	14'4" 15'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"
WALL	14'4" 15'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"
INLET	14'4" 15'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"
WALL	14'4" 15'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"
INLET	14'4" 15'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"
WALL	14'4" 15'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"	6'7" 14'7"

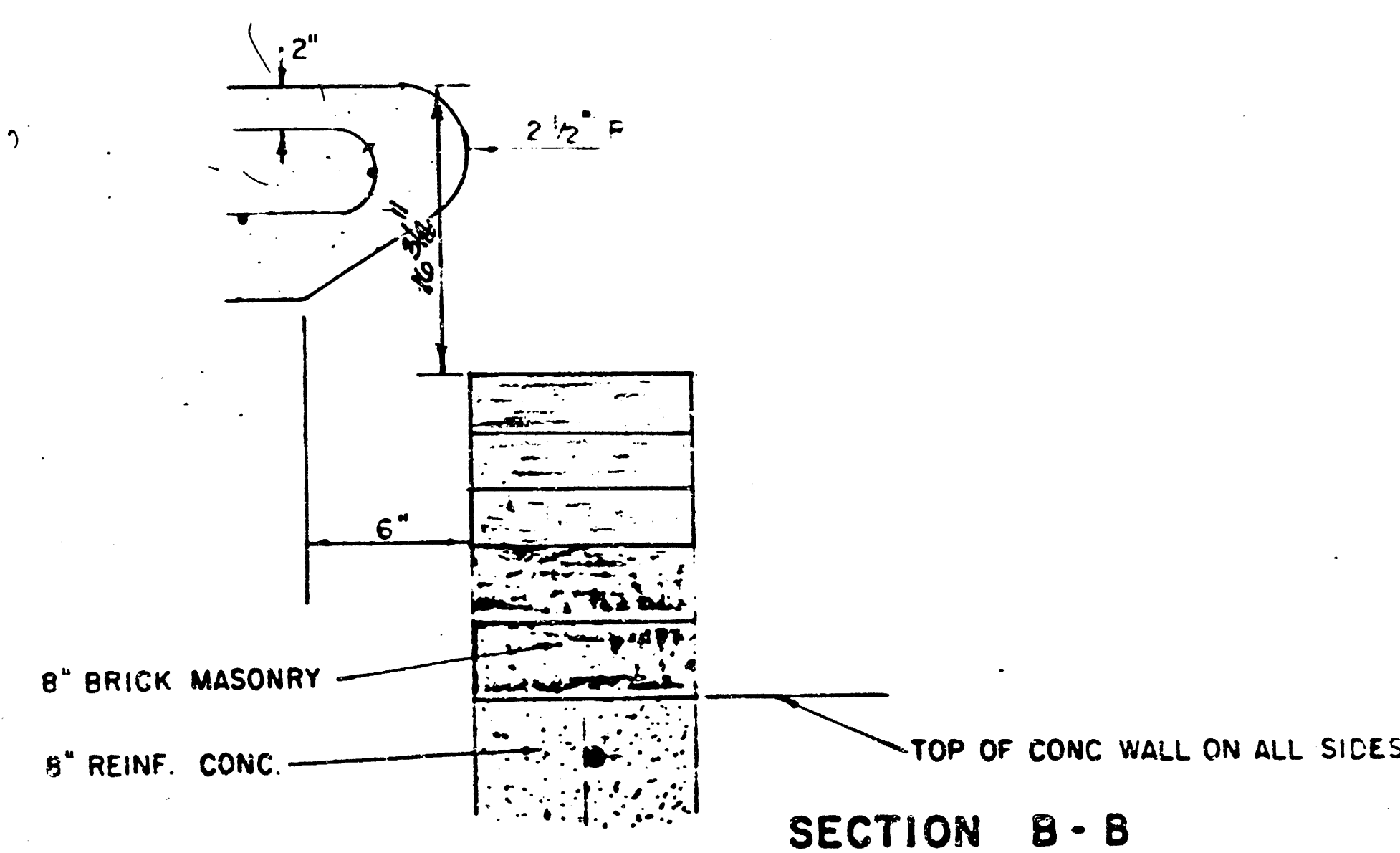
NOTE: Q3 BARS TO BE PLACED APPROX. 2" BELOW TOP OF INLET COVER

BENDING DIAGRAM

W	PRECAST TOP SIZE	PIPE SIZE	CU TO CONC.
4'4"	38" 6'4" 17 1/2" 21" 8 SMALLER	36"	0.36
5'4"	48" 6'4" 17 1/2" 24" 8 30"	36"	0.51
6'4"	58" 6'4" 17 1/2" 36" 8 42"	36"	0.64
7'4"	68" 6'4" 17 1/2" 48" 9 54"	36"	0.77
8'4"	78" 6'4" 17 1/2" 60" 9 66"	36"	0.90



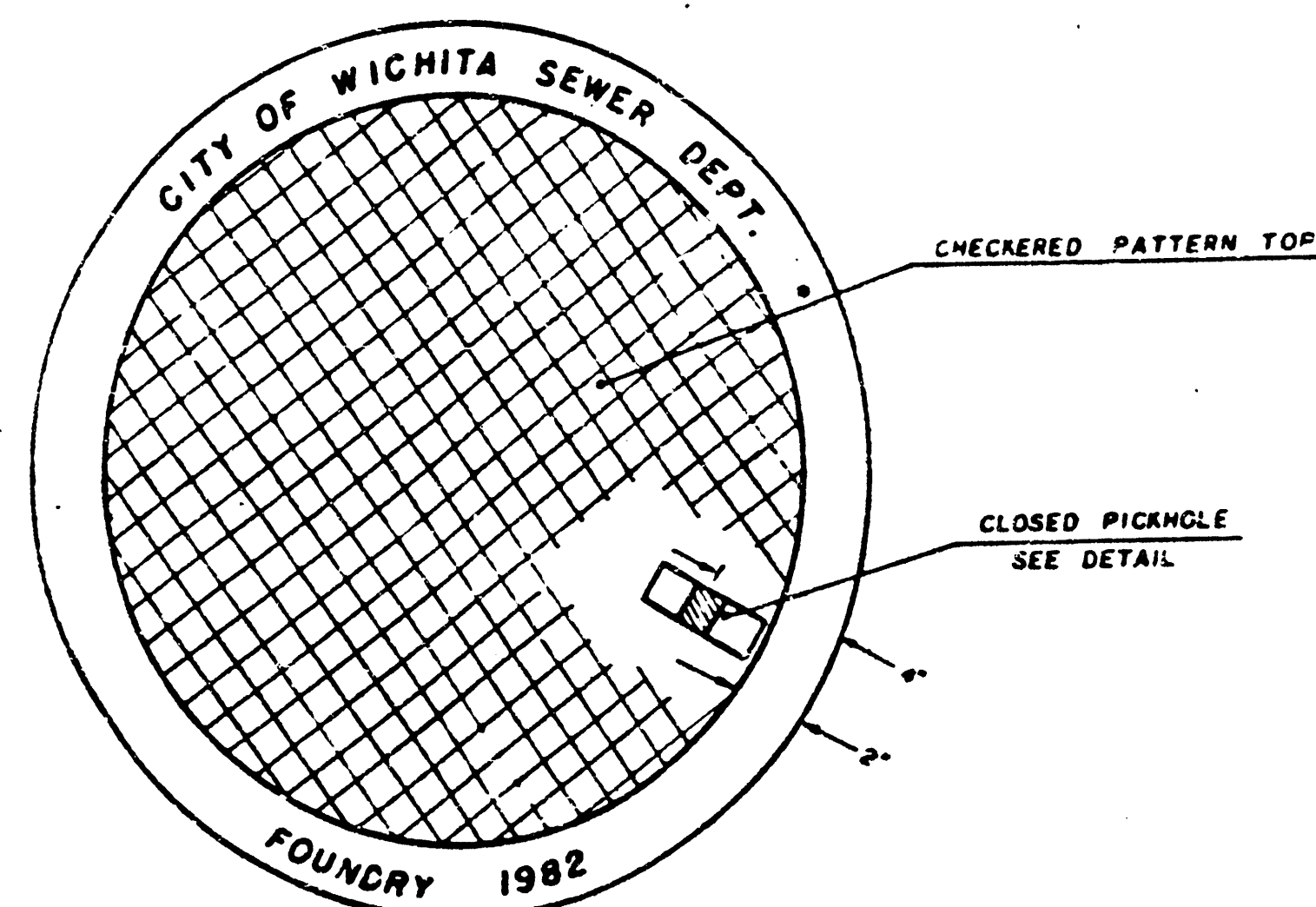
8" Conc. wall with No. 6 rebar @ 6" cts. both ways, all walls.



NON-STANDARD DITCH INLET
CITY OF WICHITA, KANSAS

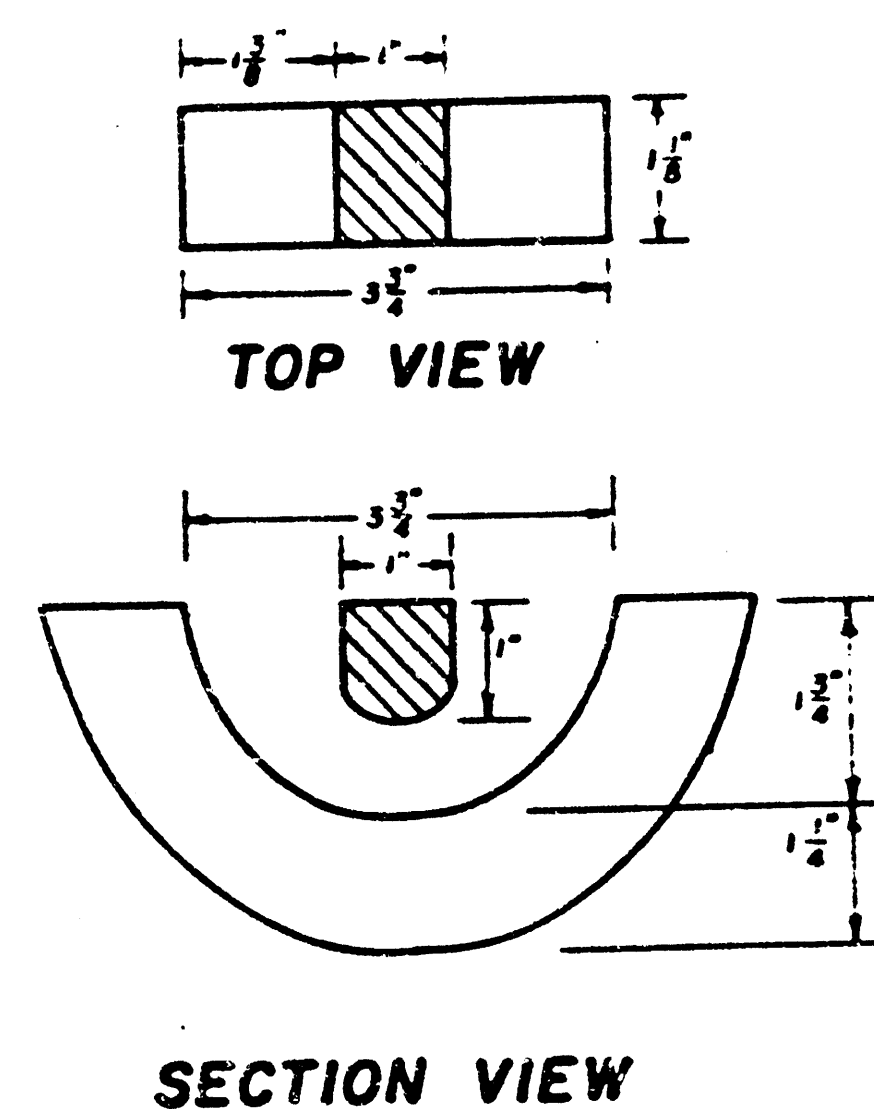
MANHOLE COVER

Weight: 180 Lbs.

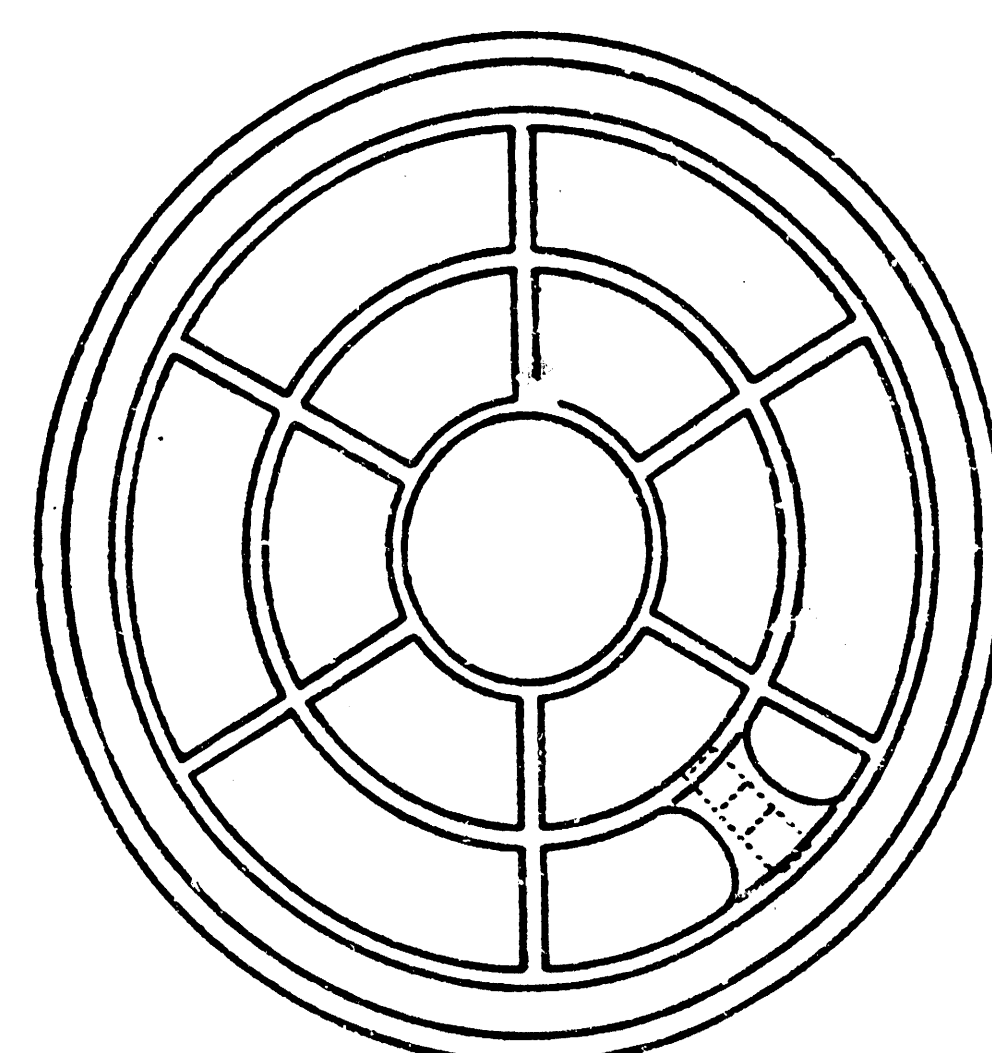


TOP VIEW

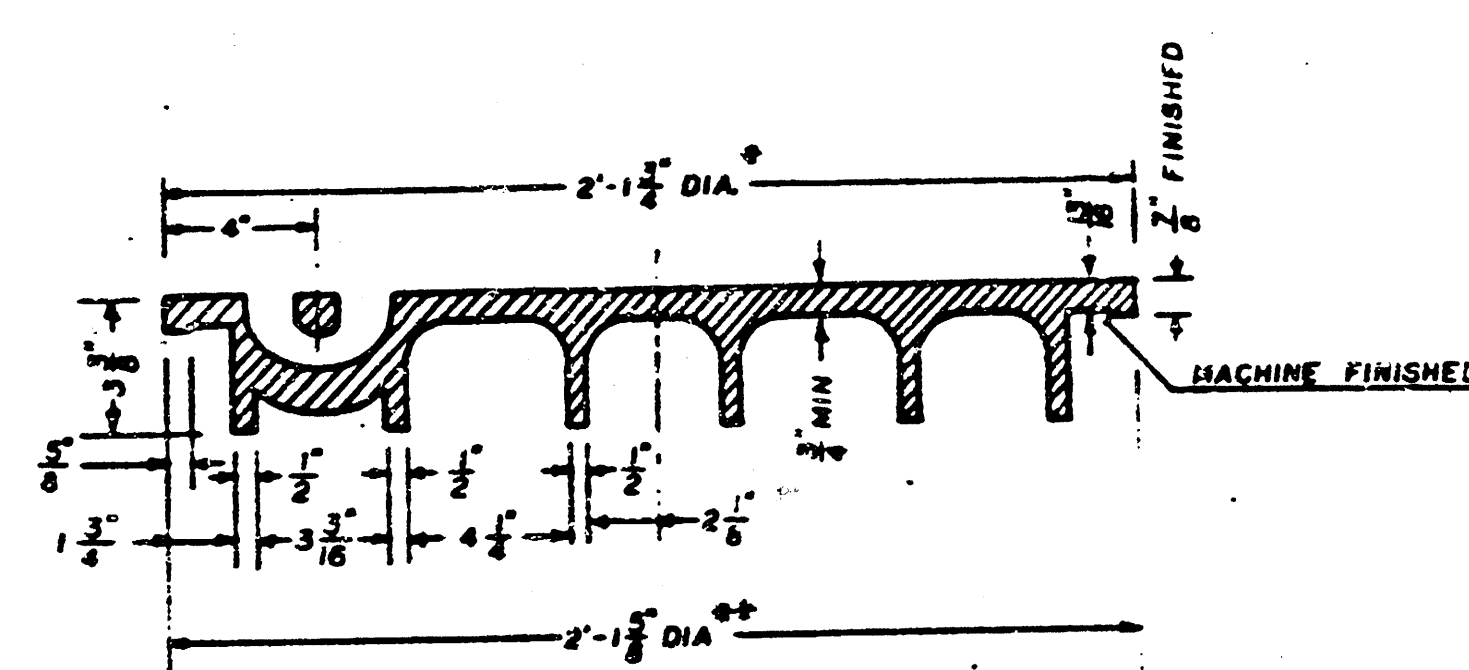
PICKHOLE DETAIL



SECTION VIEW



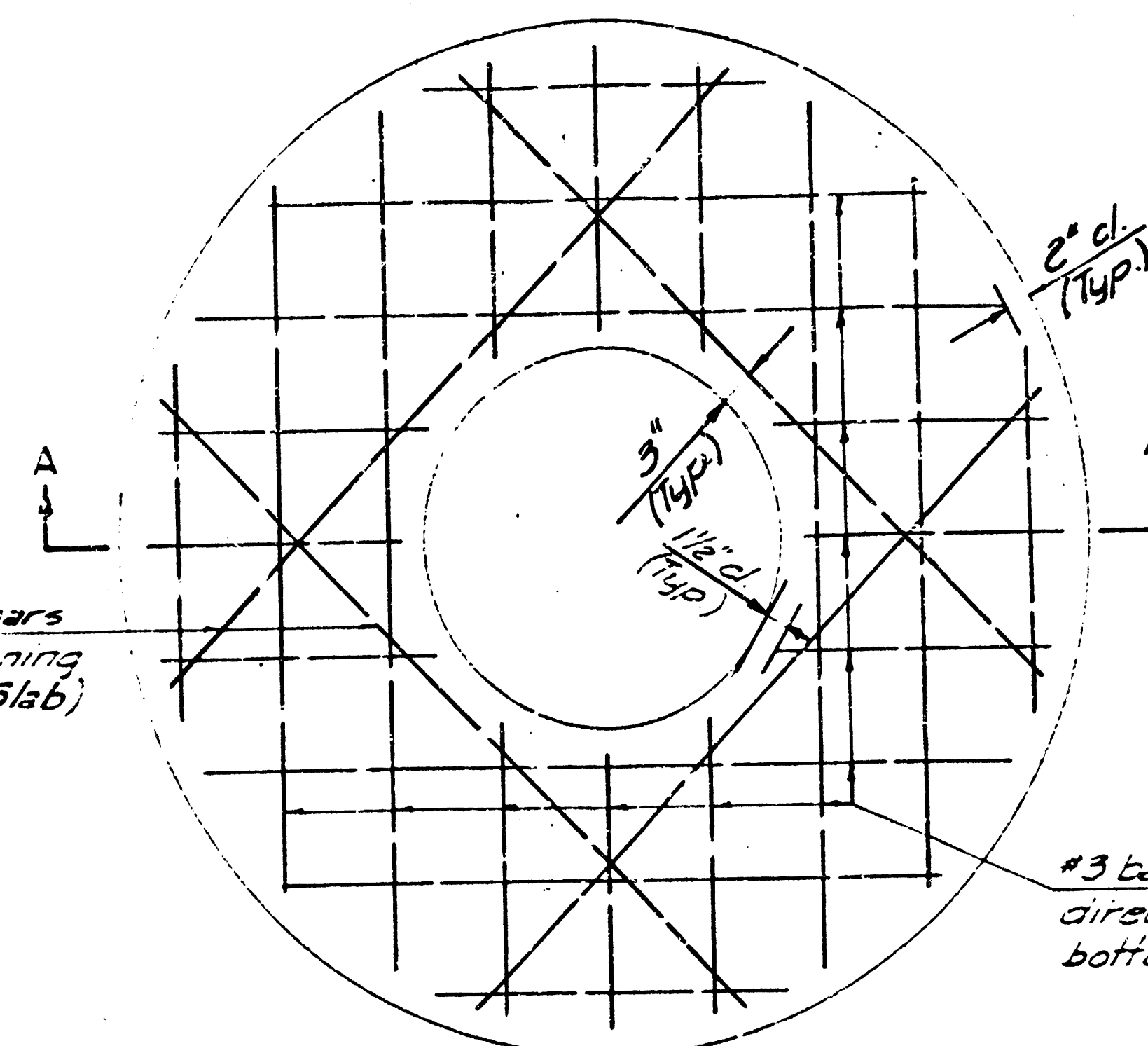
BOTTOM VIEW



SECTION VIEW

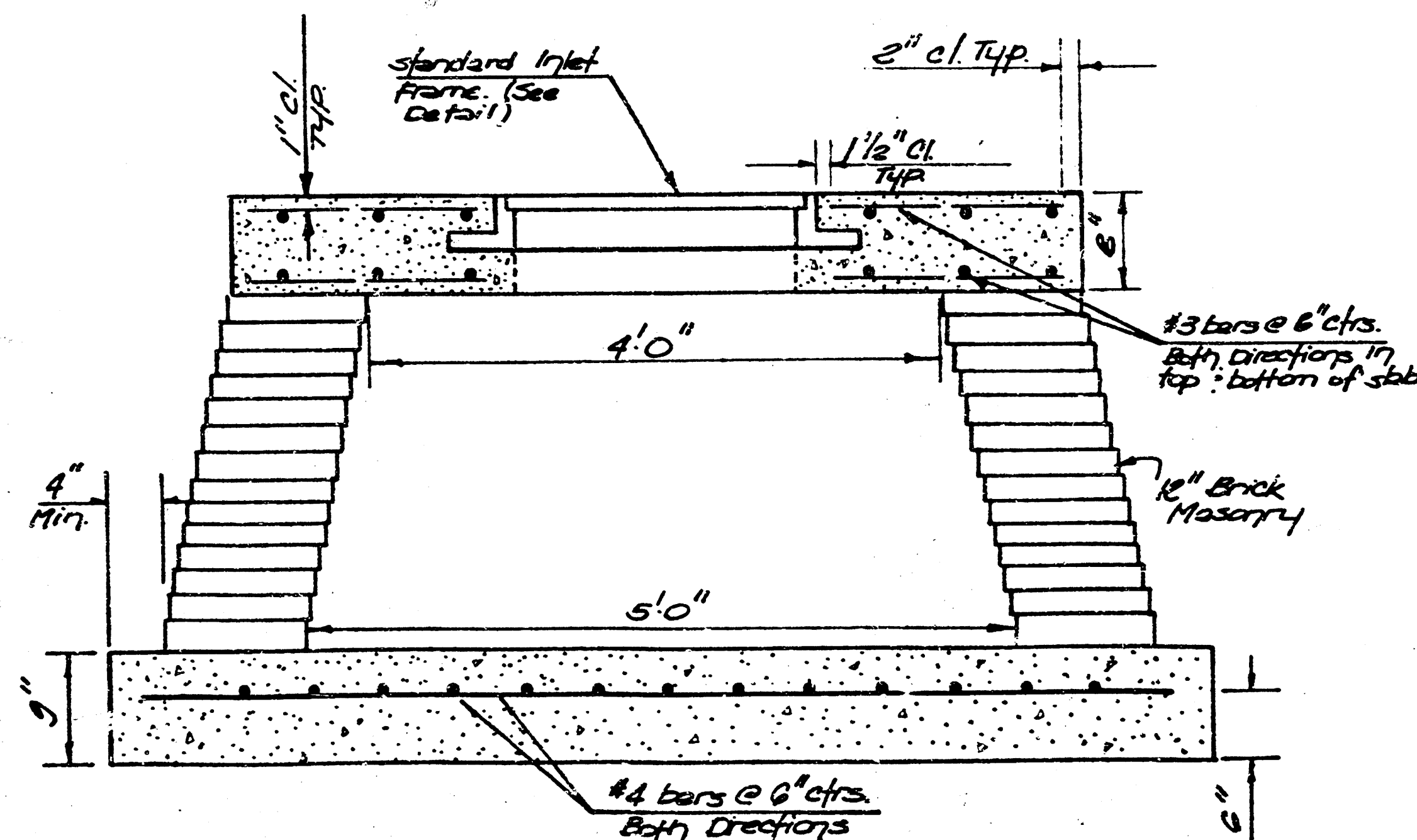
* OUTSIDE DIA. TOP OF COVER
** OUTSIDE DIA. BOTTOM OF COVER

3-#4 diagonal bars
to reinforce opening
(Top & Bottom of Slab)



PLAN

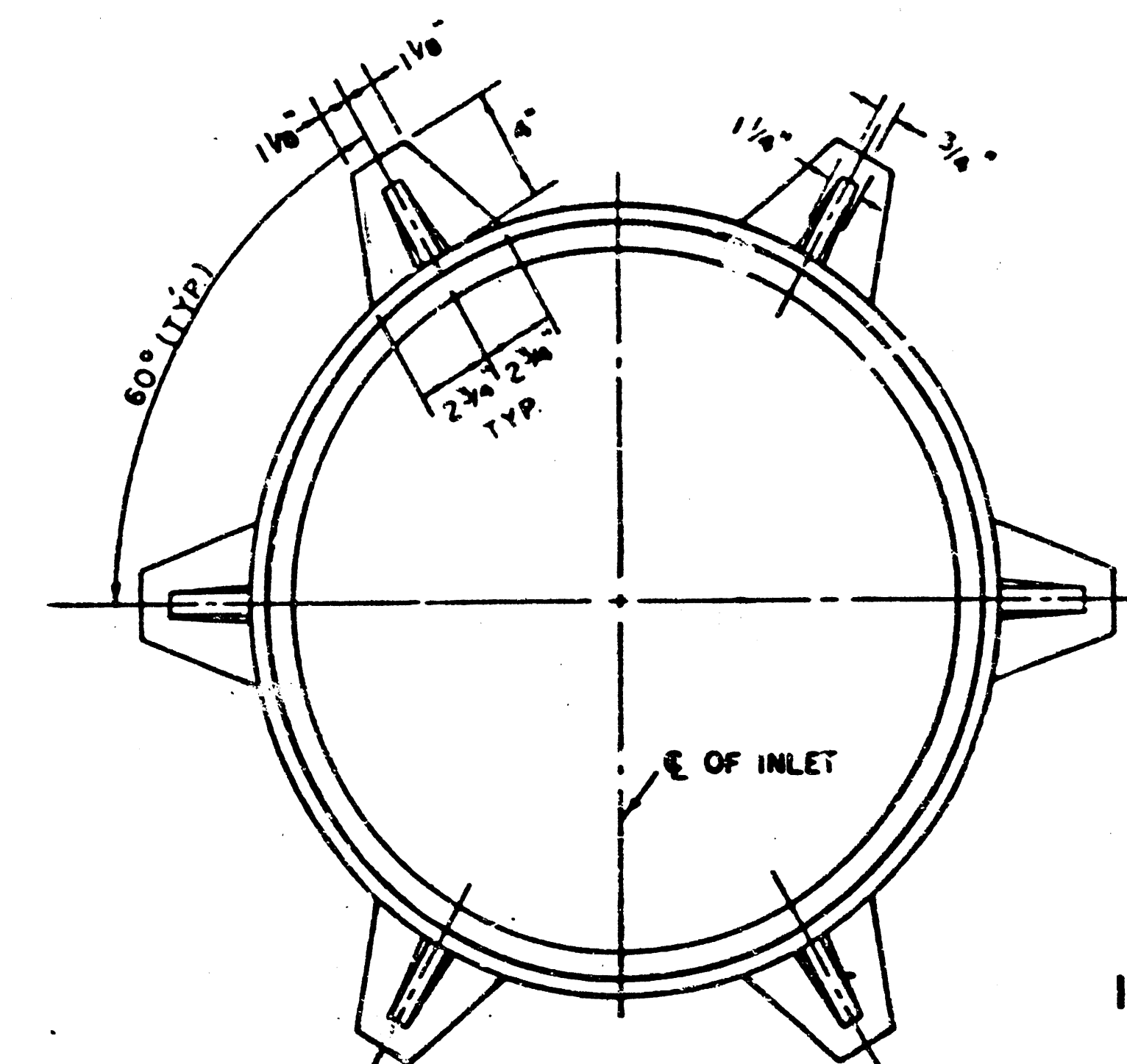
#3 bars @ 8\"/>



SECTION A-A

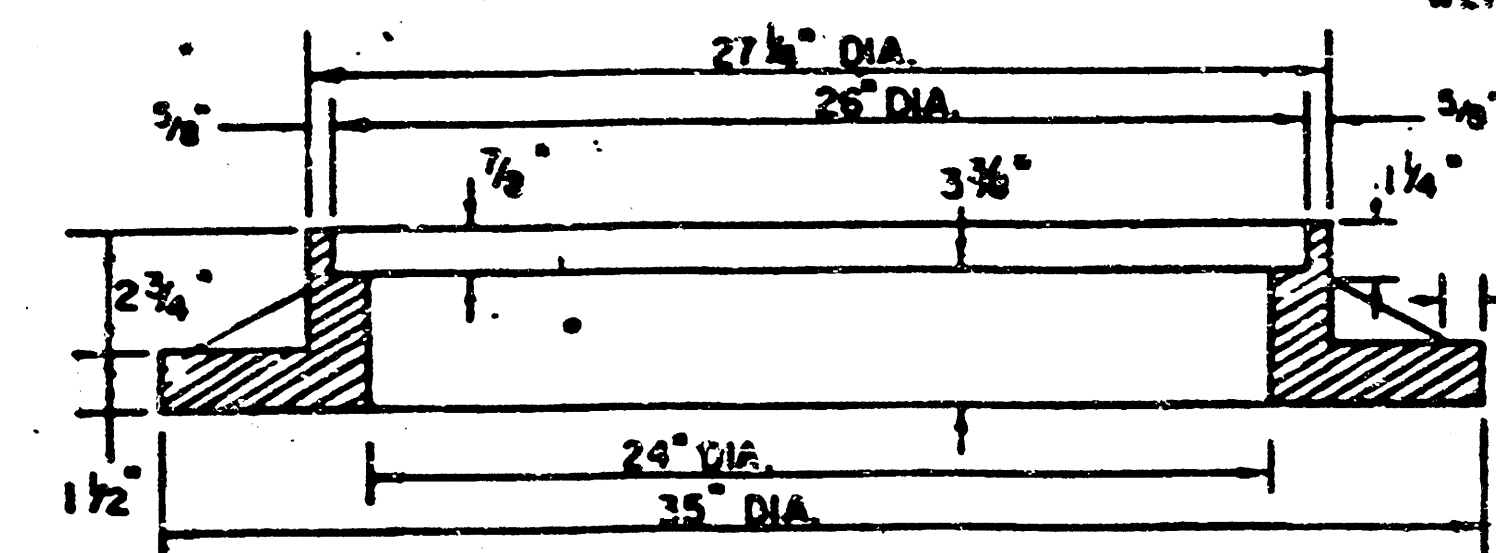
GENERAL NOTES

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 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 ITS 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.



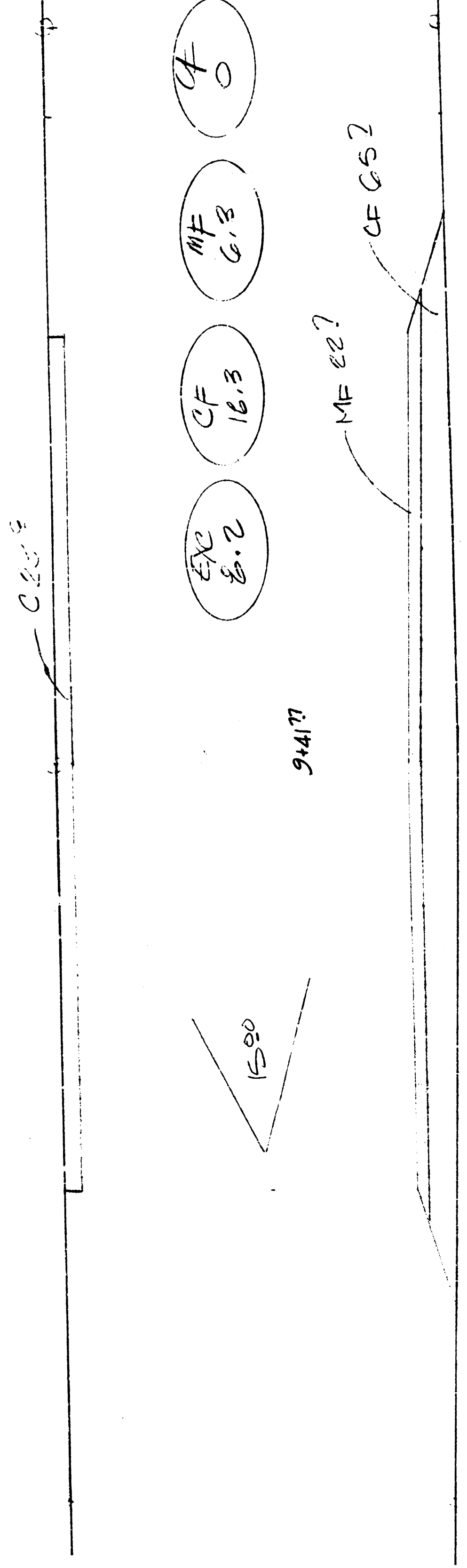
INLET FRAME

WEIGHT = 180 LBS.

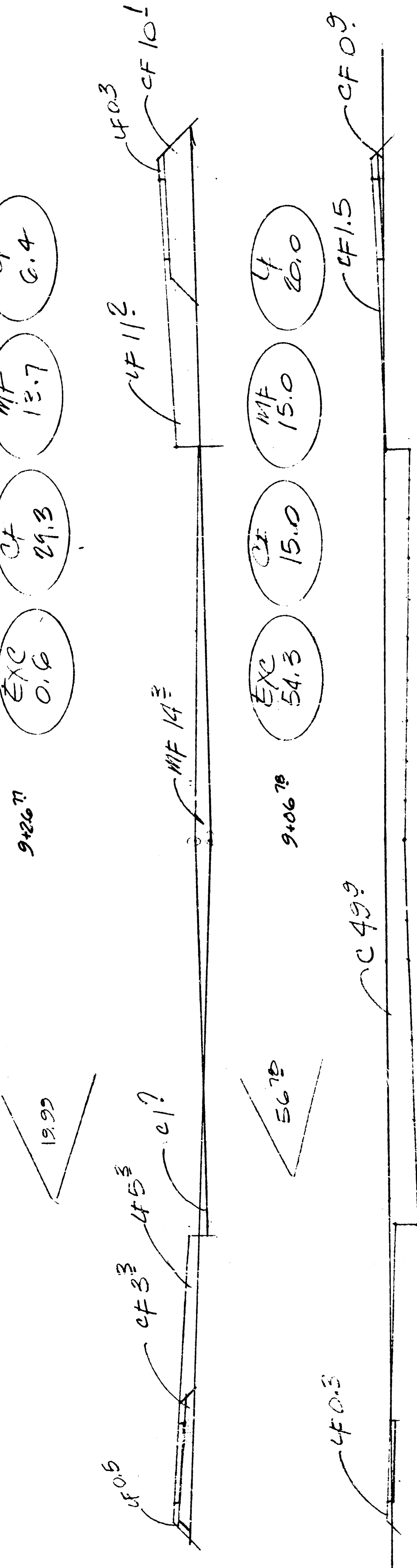


SEE CITY OF WICHITA STANDARD MANHOLE FRAME AND COVER DETAIL SHEET FOR COVER DETAILS TO BE USED WITH INLET FRAME.

180



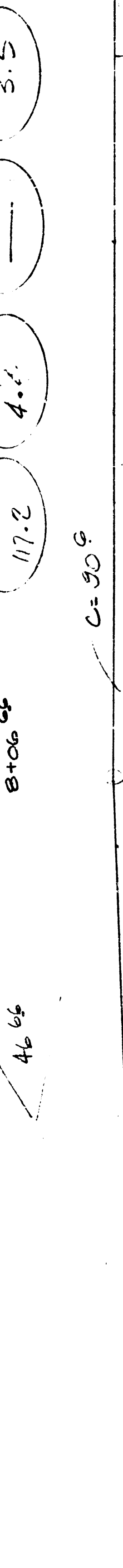
180



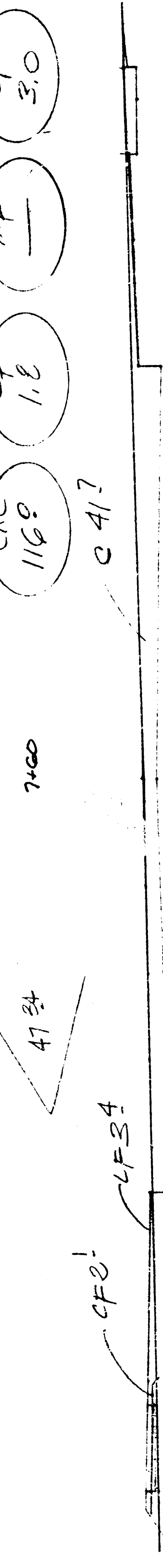
180



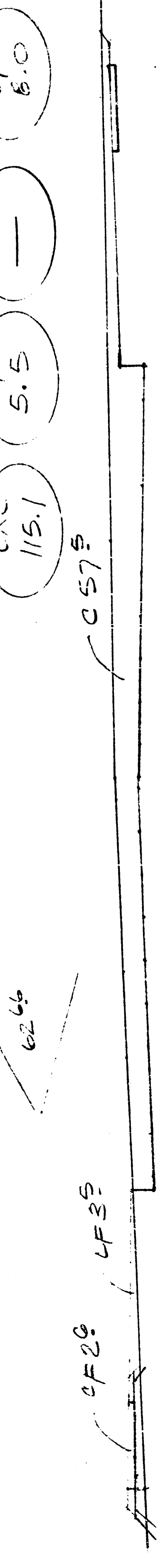
180



180



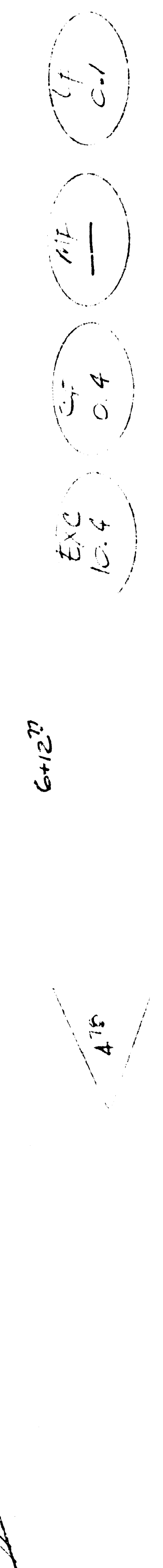
180



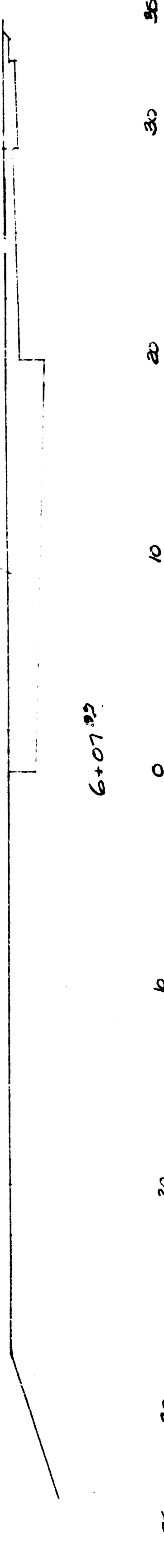
180



180



180



180

Final Totals

Exc	590.9	cy
CF	84.0	cy
MF	5.0	cy
LF	4.0	cy

MT. VERNON

EARTHWORK SECTIONS
MT. VERNON

PROJECT NO. 472-76-245-81351-000-000-001

Sheet:
9
10

