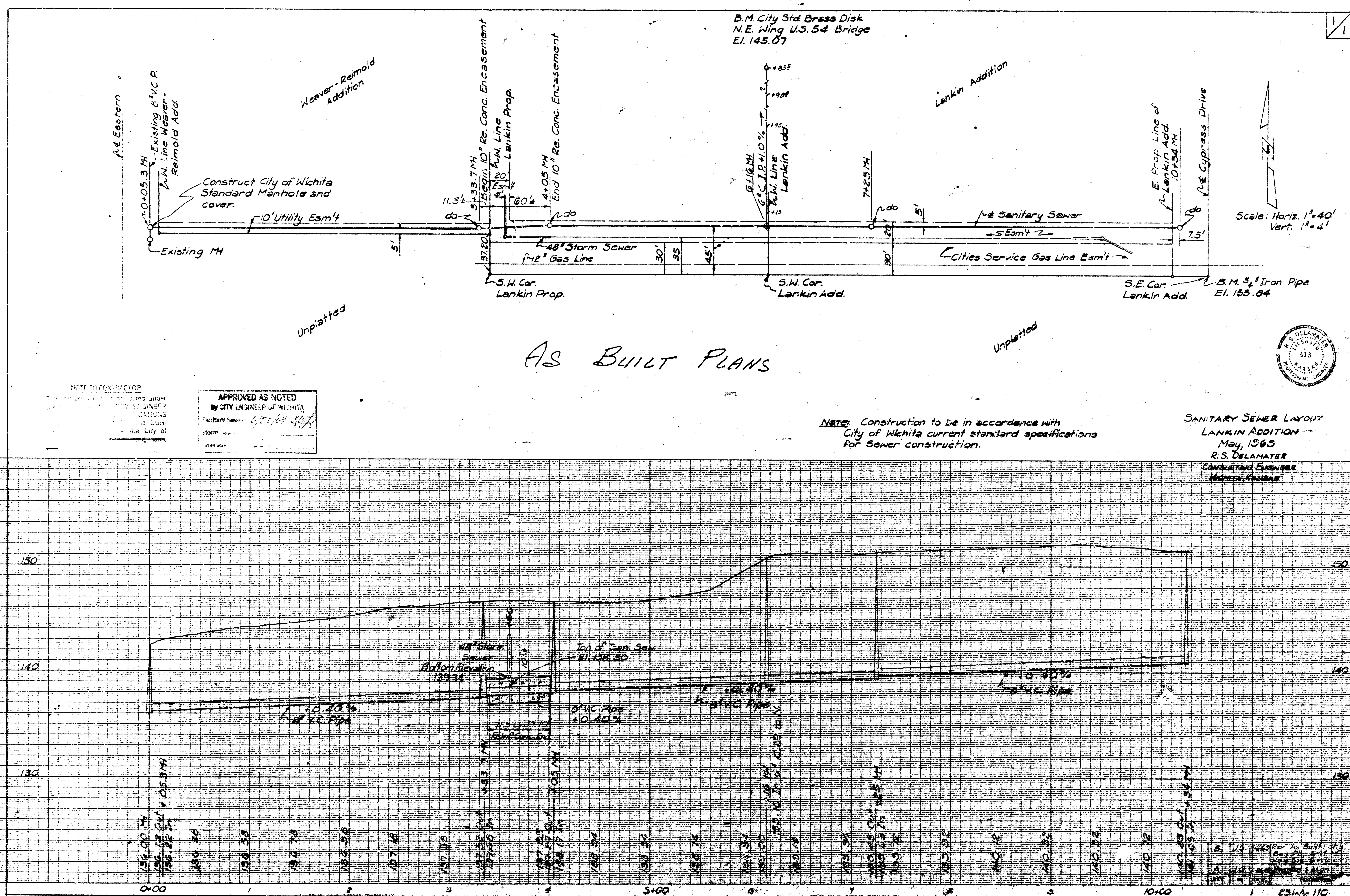
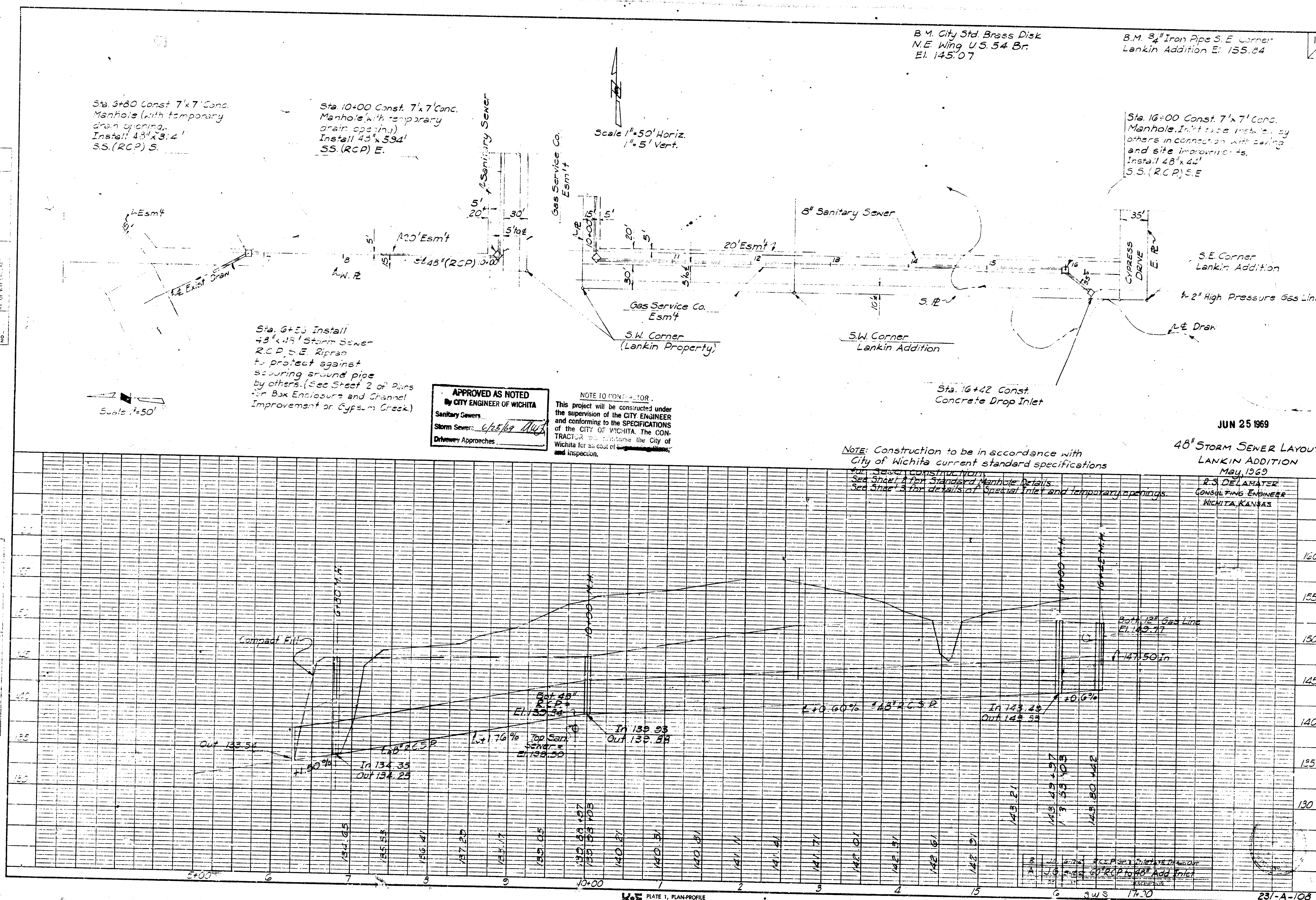
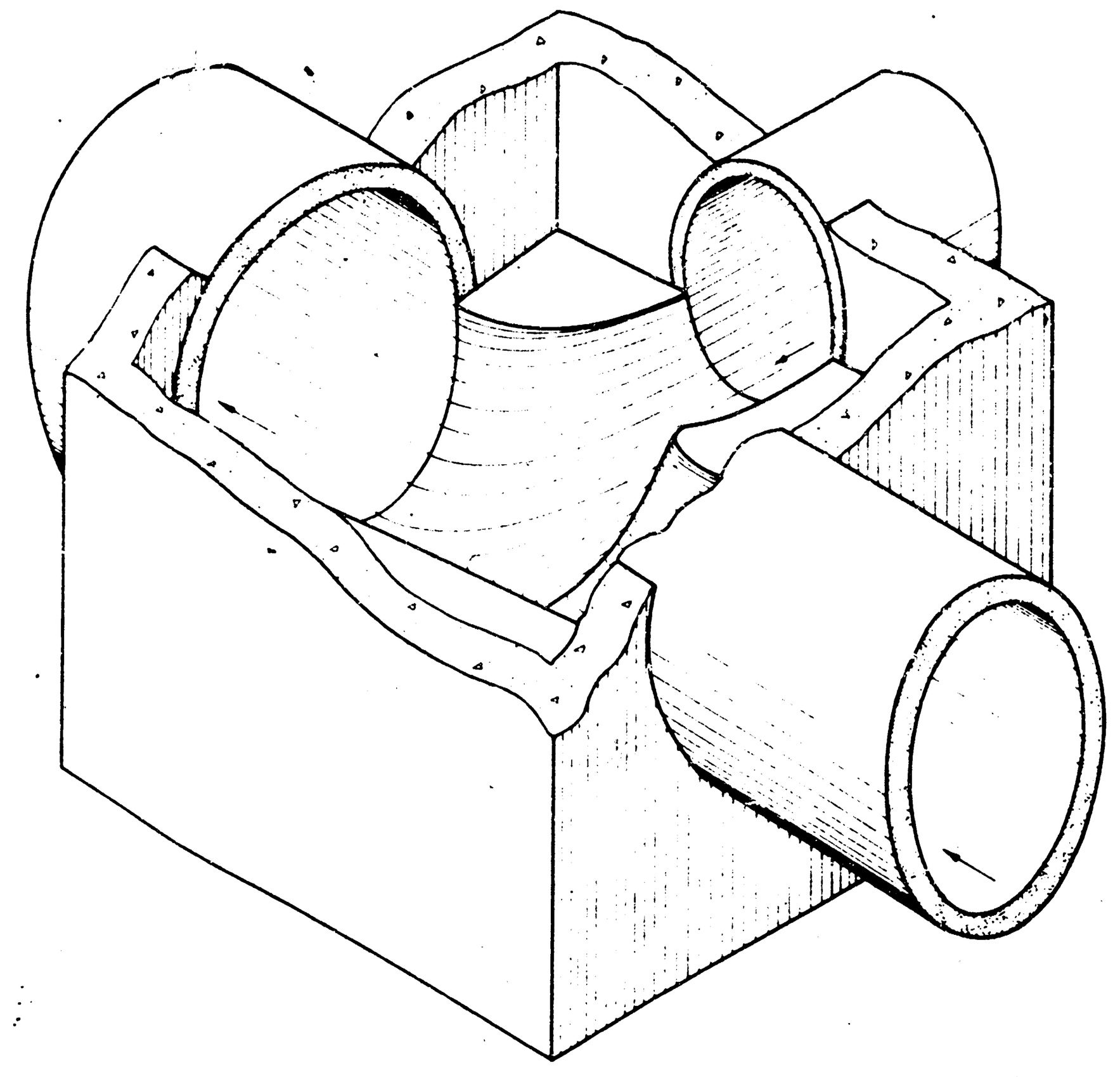


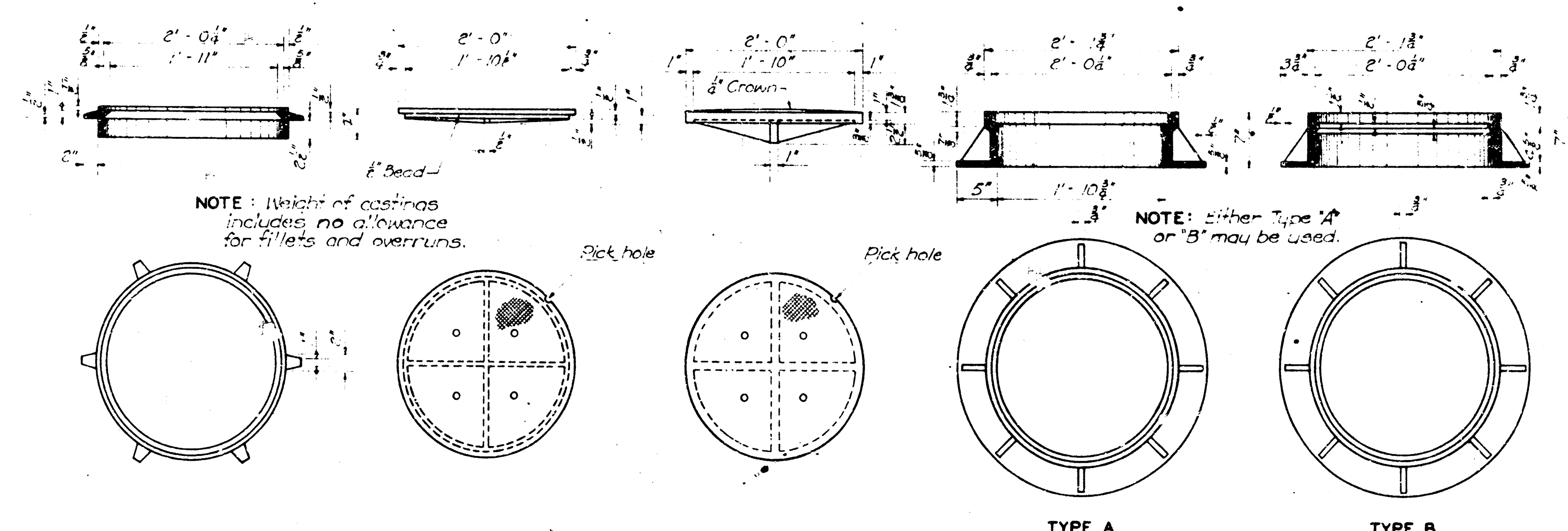
B.M. City Std. Brass Disk
N.E. Wing U.S. 54 Bridge
El. 145.07
Weaver-Reimold Addition
Lankin Addition
℄ Eastern
Existing 8" V.C.P.
N.W. Line Weaver-Reimold Add.
0+05.3 MH
Construct City of Wichita Standard Manhole and cover.
10' Utility Esm't
Existing MH
Begin 10" Re. Conc. Encasement
N.W. Line Lankin Prop.
End 10" Re. Conc. Encasement
48" Storm Sewer
42" Gas Line
S.W. Cor. Lankin Prop.
S.W. Cor. Lankin Add.
℄ Sanitary Sewer
Cities Service Gas Line Esm't
E. Prop. Line of Lankin Add.
℄ Cypress Drive
S.E. Cor. Lankin Add.
B.M. 3/4" Iron Pipe
El. 155.84
Scale: Horiz. 1"=40'
Vert. 1"=4'
Unplatted
Unplatted
As Built Plans
APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA
Note: Construction to be in accordance with City of Wichita current standard specifications for Sewer construction.
Sanitary Sewer Layout
Lankin Addition
May, 1965
R. S. Delamater
Consulting Engineer
Wichita, Kansas
48" Storm Sewer
Bottom Elevation 139.34
Top of San. Sew. El. 138.50
0.40%
8" V.C. Pipe
8" V.C. Pipe
0.40%
0.40%
8" V.C. Pipe
0.40%
8" V.C. Pipe
150
140
130
0+00
1
2
3
4
5+00
6
7
8
9
10+00
1
231-A-110



B.M. City Std. Brass Disk N.E. Wing U.S. 54 Br. El. 145.07
B.M. 3/4" Iron Pipe S.E. Corner Lankin Addition El. 155.84
1/3
Sta. 3+80 Const. 7'x 7' Conc. Manhole (with temporary drain opening) Install 48"x 3.4' S.S. (RCP) S.
Sta. 10+00 Const. 7'x 7' Conc. Manhole (with temporary drain opening) Install 48"x 594' S.S. (RCP) E.
Scale 1"=50' Horiz. 1"=5' Vert.
Sanitary Sewer
Gas Service Co. Esm't
Sta. 16+00 Const. 7'x 7' Conc. Manhole. Inlet pipe installed by others in connection with paving and site improvements. Install 48"x 42' S.S. (RCP) S.E.
8" Sanitary Sewer
20' Esm't
Cypress Drive
S.E. Corner Lankin Addition
2" High Pressure Gas Line
Gas Service Co. Esm't
S.W. Corner (Lankin Property)
S.W. Corner Lankin Addition
℄ Draw
Sta. 6+55 Install 48"x 45' Storm Sewer R.C.P. S.E. Riprap to protect against scouring around pipe by others. (See Sheet 2 of Plans for Box Enclosure and Channel Improvement of Gypsum Creek.)
Scale 1"=50'
Sta. 16+42 Const. Concrete Drop Inlet
APPROVED AS NOTED
By CITY ENGINEER OF WICHITA
Sanitary Sewers
Storm Sewers 6/25/69
Driveway Approaches
NOTE TO CONTRACTOR.
This project will be constructed under the supervision of the CITY ENGINEER and conforming to the SPECIFICATIONS of the CITY OF WICHITA. The CONTRACTOR will reimburse the City of Wichita for all cost of Engineering Plans, and inspection.
JUN 25 1969
Note: Construction to be in accordance with City of Wichita current standard specifications for Sewer construction.
See Sheet 2 for Standard Manhole Details.
See Sheet 3 for details of Special Inlet and temporary openings.
48" Storm Sewer Layout
Lankin Addition
May, 1969
R.S. DeLamater
Consulting Engineer
Wichita, Kansas
PLAN
PROFILE
Compact Fill
Out 133.54
+1.50%
In 134.35
Out 134.25
48" R.C.S.P.
+1.76%
Top San. Sewer El. 138.50
Out 48" R.C.P. El. 138.54
In 138.93
Out 138.88
+0.60% 48" R.C.S.P.
In 143.49
Out 143.59
+0.6%
Both 12" Gas Line El. 150.17
147.50 In
6+50 M.H.
10+00 M.H.
16+00 M.H.
16+42 M.H.
160
155
150
145
140
135
130
5+00
6
7
8
9
10+00
1
2
3
4
15
6
SWS 1430
231-A-108
K+E PLATE 1, PLAN-PROFILE KEUFFEL & ESSER CO.



SECTIONAL VIEW (EXAMPLE IV)
Showing Floor Shaping



CAST IRON MANHOLE RING
Weight = 53 Lbs.

CAST IRON MANHOLE COVER
Weight = 64 Lbs.

LIGHT TYPE MANHOLE COVER & RING

CAST IRON MANHOLE COVER
Weight = 134 Lbs.

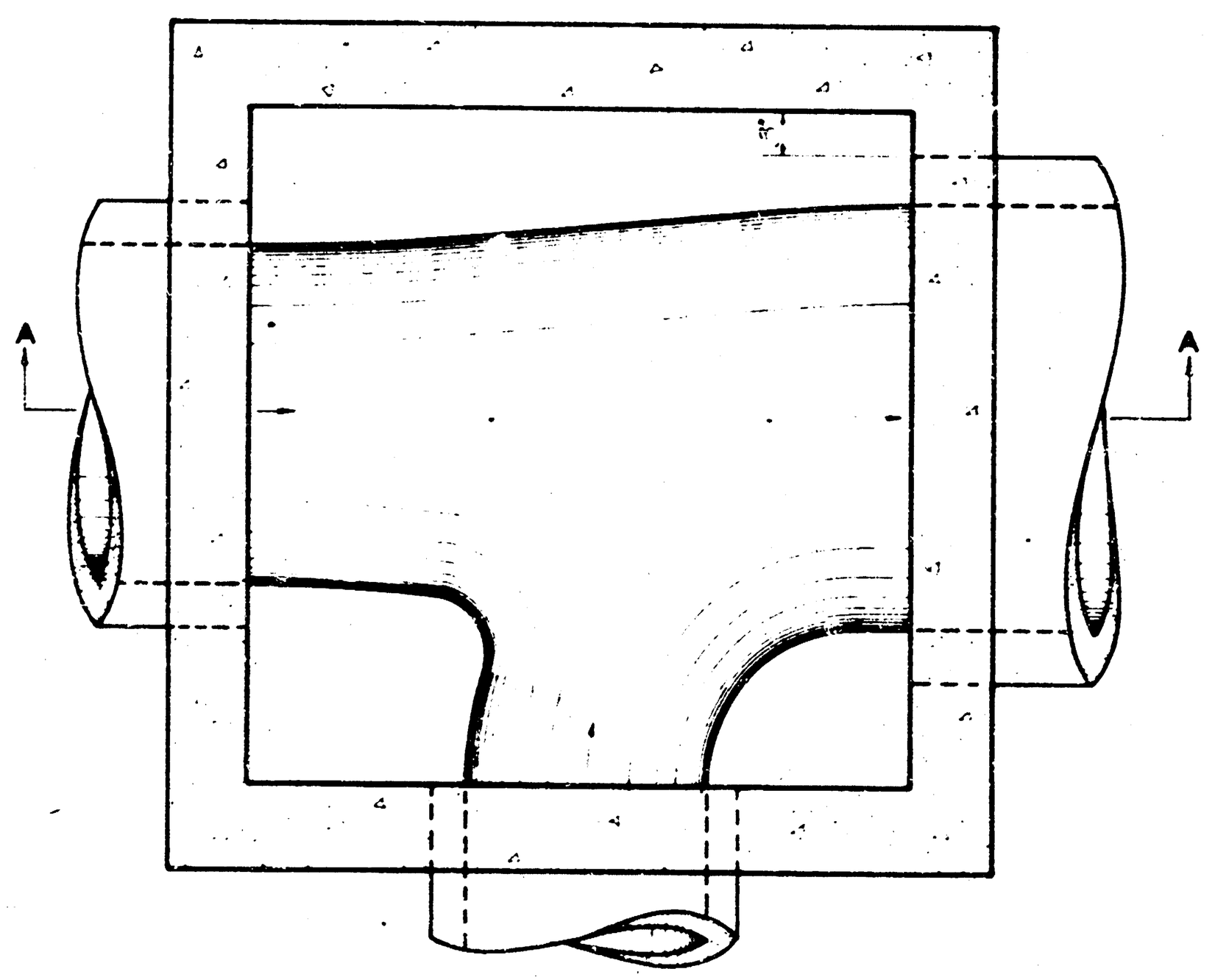
TYPE A
CAST IRON MANHOLE RING
Weight = 192 Lbs.

TYPE B
CAST IRON MANHOLE RING
Weight = 198 Lbs.

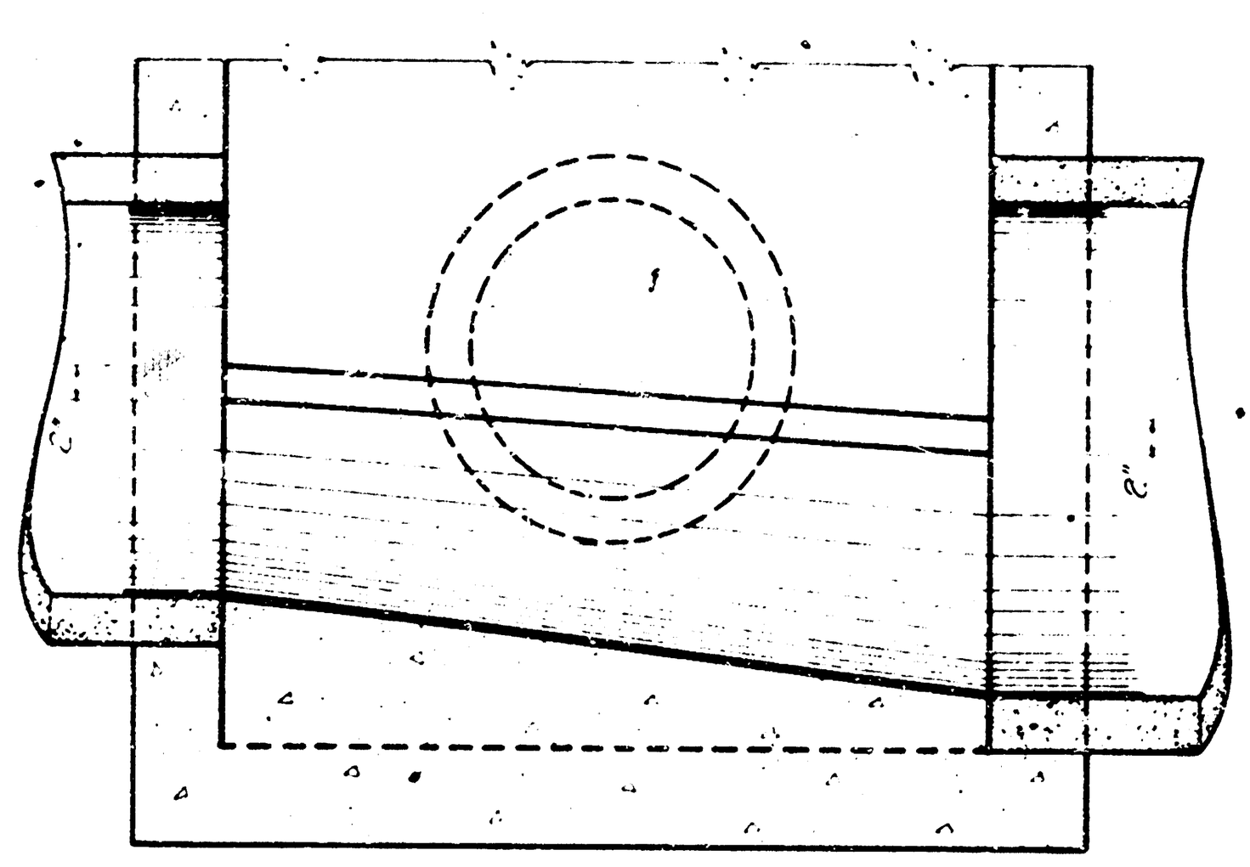
HEAVY TYPE MANHOLE COVER & RING

TYPICAL EXAMPLES OF VARIOUS PIPE COMBINATIONS

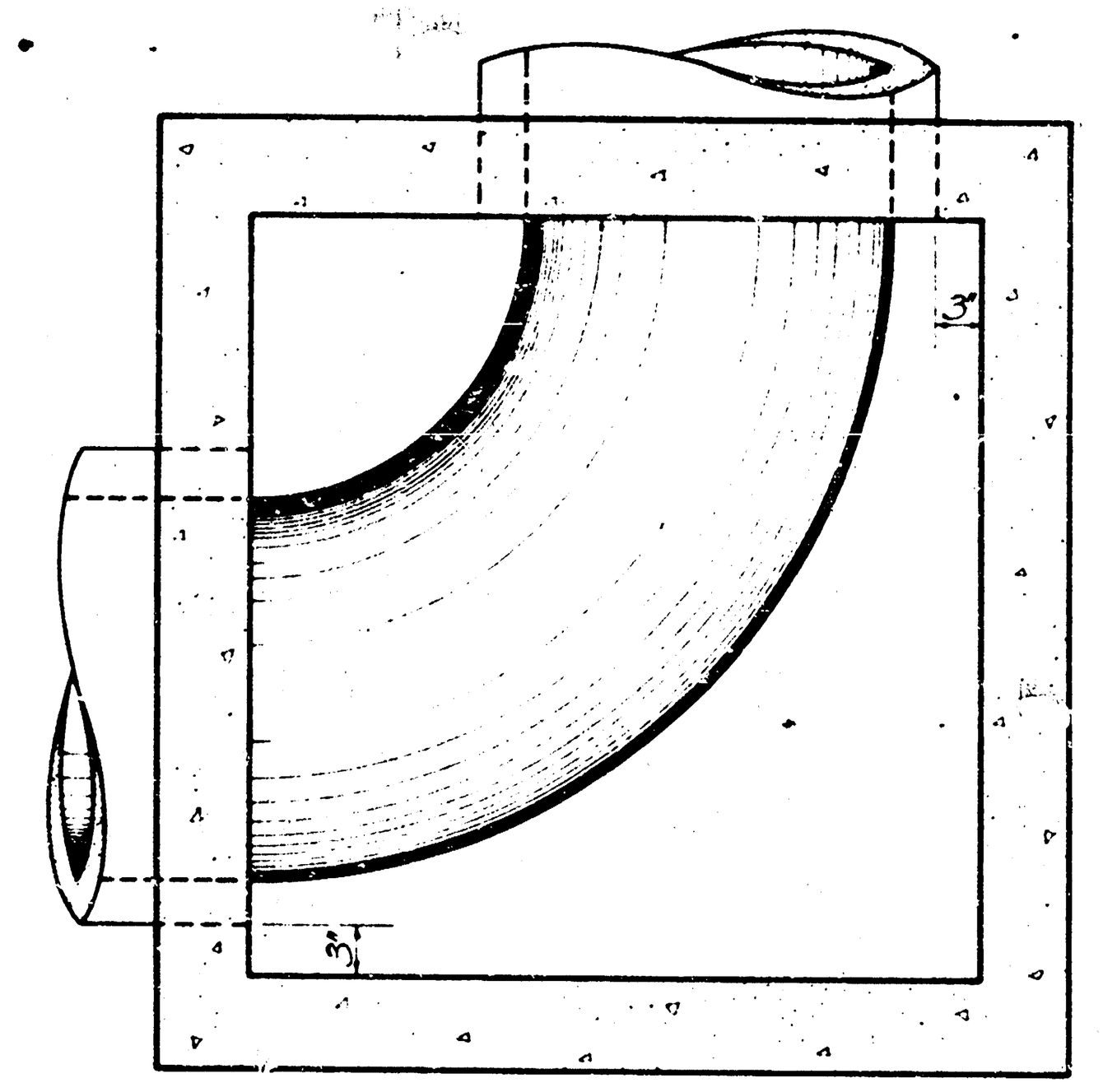
Showing method of shaping floor of manholes to provide increased hydraulic efficiency.
For reinforcing & other features see "PLAN" and "SECTION".



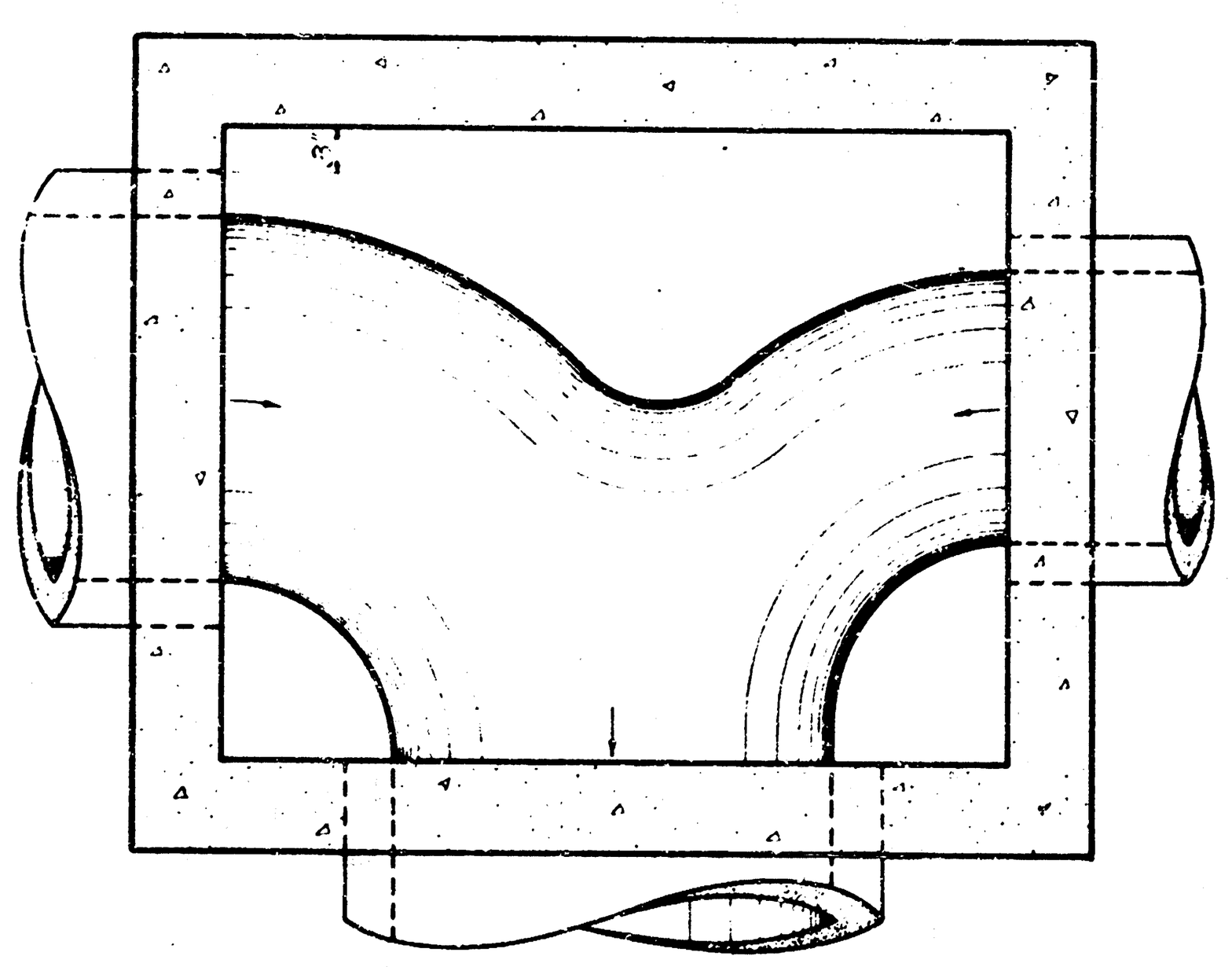
FLOOR PLAN (EXAMPLE IV)



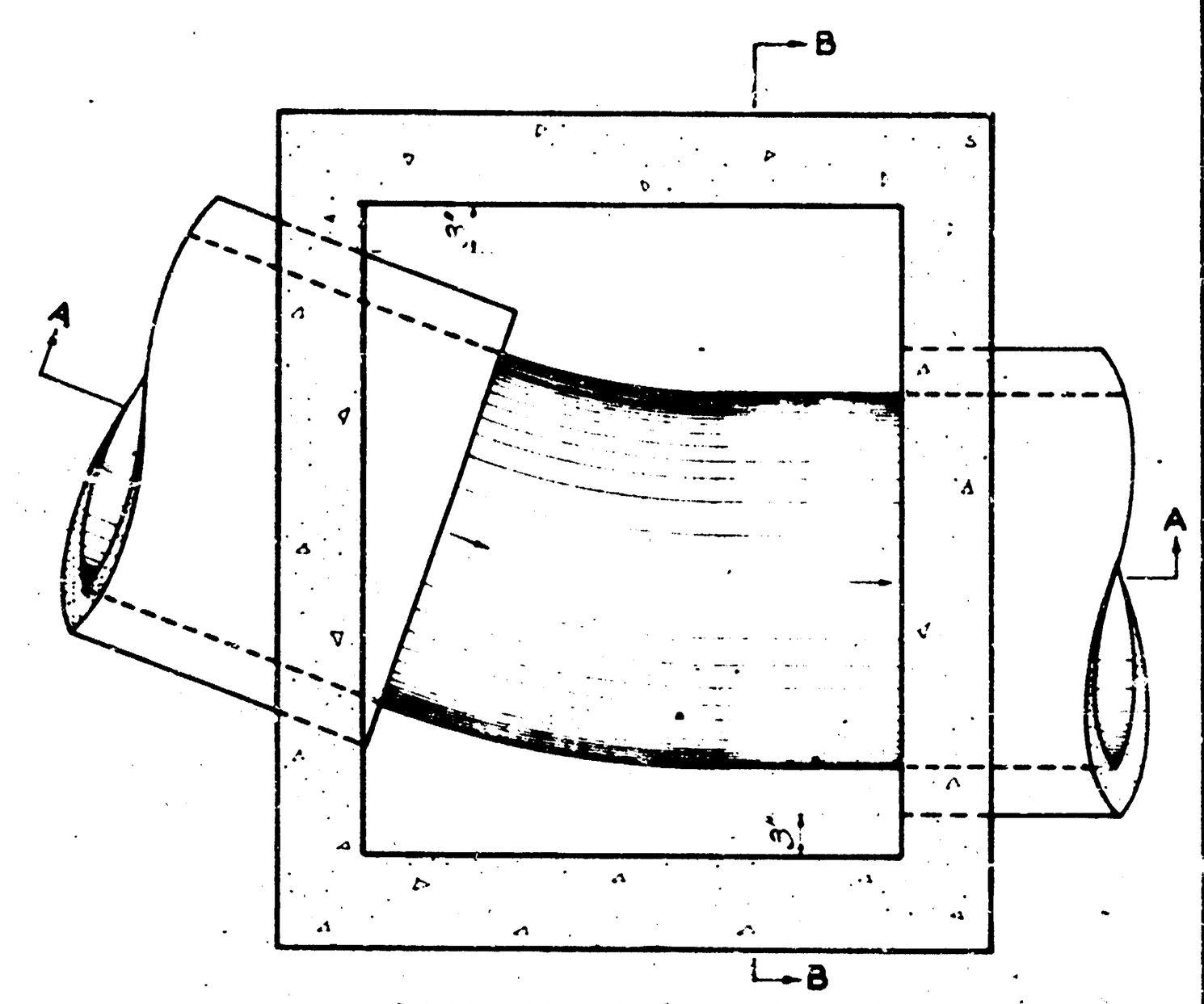
SECTION A-A (EXAMPLE IV)



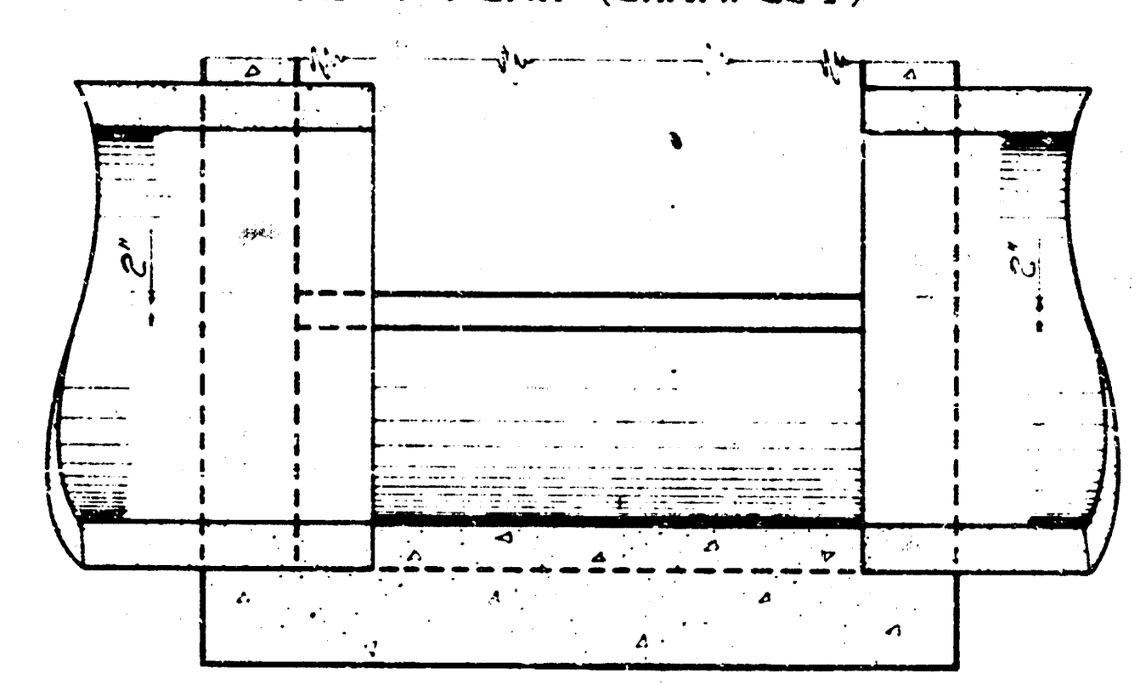
FLOOR PLAN (EXAMPLE II)



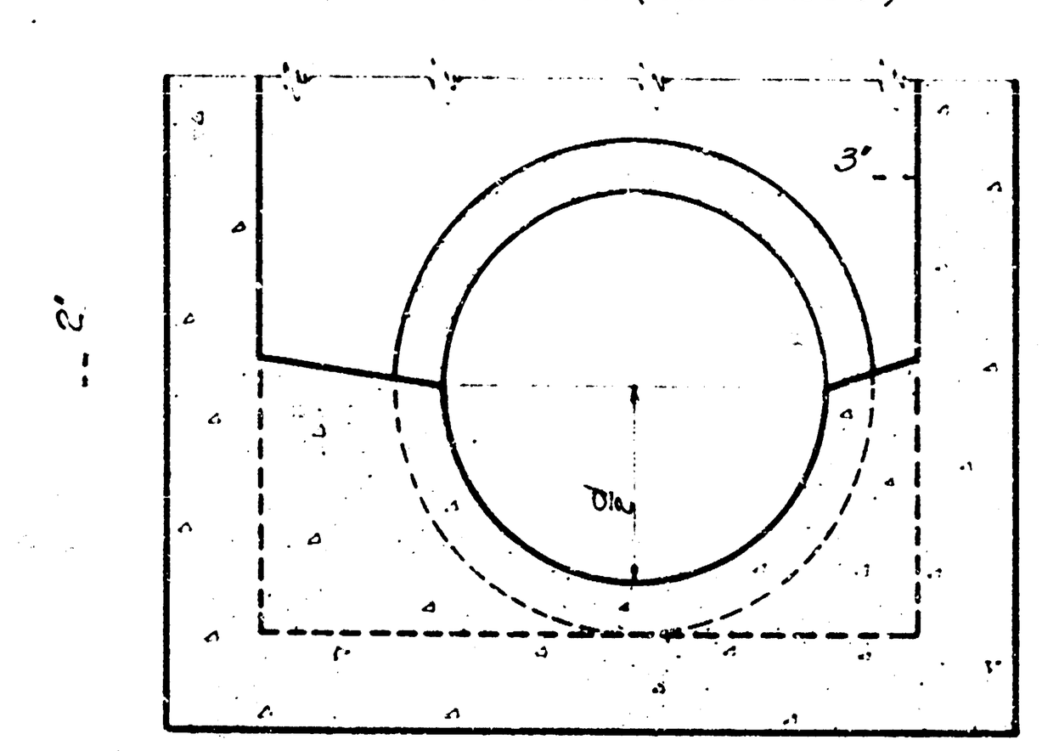
FLOOR PLAN (EXAMPLE III)



FLOOR PLAN (EXAMPLE I)



SECTION A-A (EXAMPLE I)



SECTION B-B (EXAMPLE I)

NOTE: Class "A" concrete to be used thruout. Bevel all exposed edges with a $\frac{3}{4}$" triangular moulding.

At the contractor's option Class "A" concrete (AE) may be used thruout, but payment shall be made as Cu. Yds of Class "A" concrete.

In general, pipes will enter and leave the manhole at various positions. Where possible bend bars around pipes.

Floor of manhole to be shaped as shown in various "EXAMPLES" with unreinforced Class "A" concrete.

Manhole opening and steps, where used, shall be placed to afford easy access to top of shaped invert. Top reinforcing bars to be adjusted accordingly.

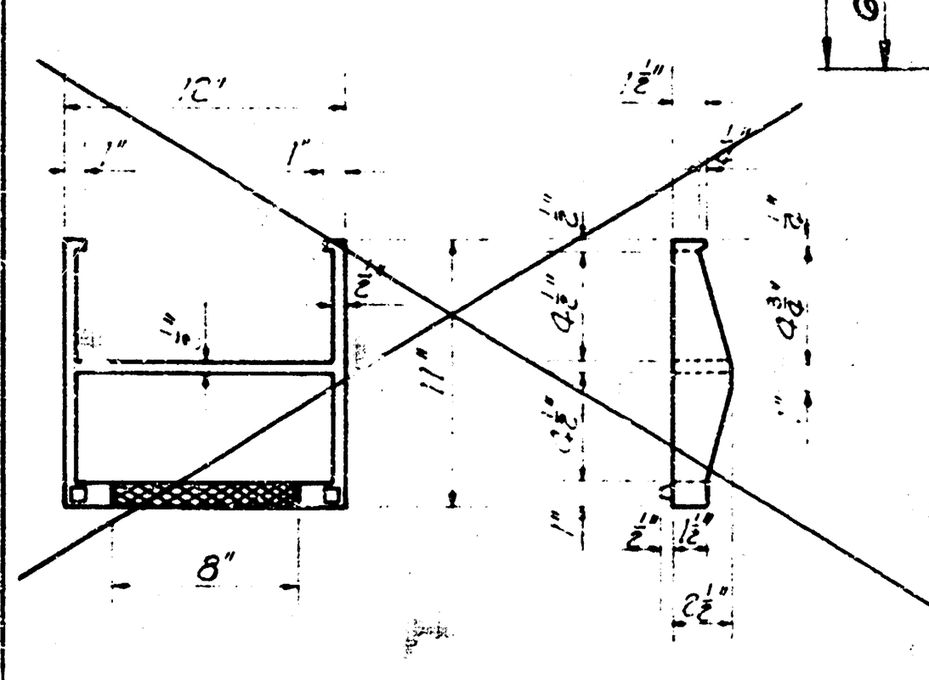
All castings shall be gray iron and shall comply with ASTM A-48, Class 25S.

All exposed cast iron surfaces (rings & covers) not subjected to traffic, shall be painted either in the shop or in the field with one coat of a zinc dust paint, followed by two field coats of aluminum paint.

No deductions in concrete quantities shall be made for pipe openings.

No additions in concrete quantities shall be made for shaping floor of Manholes.

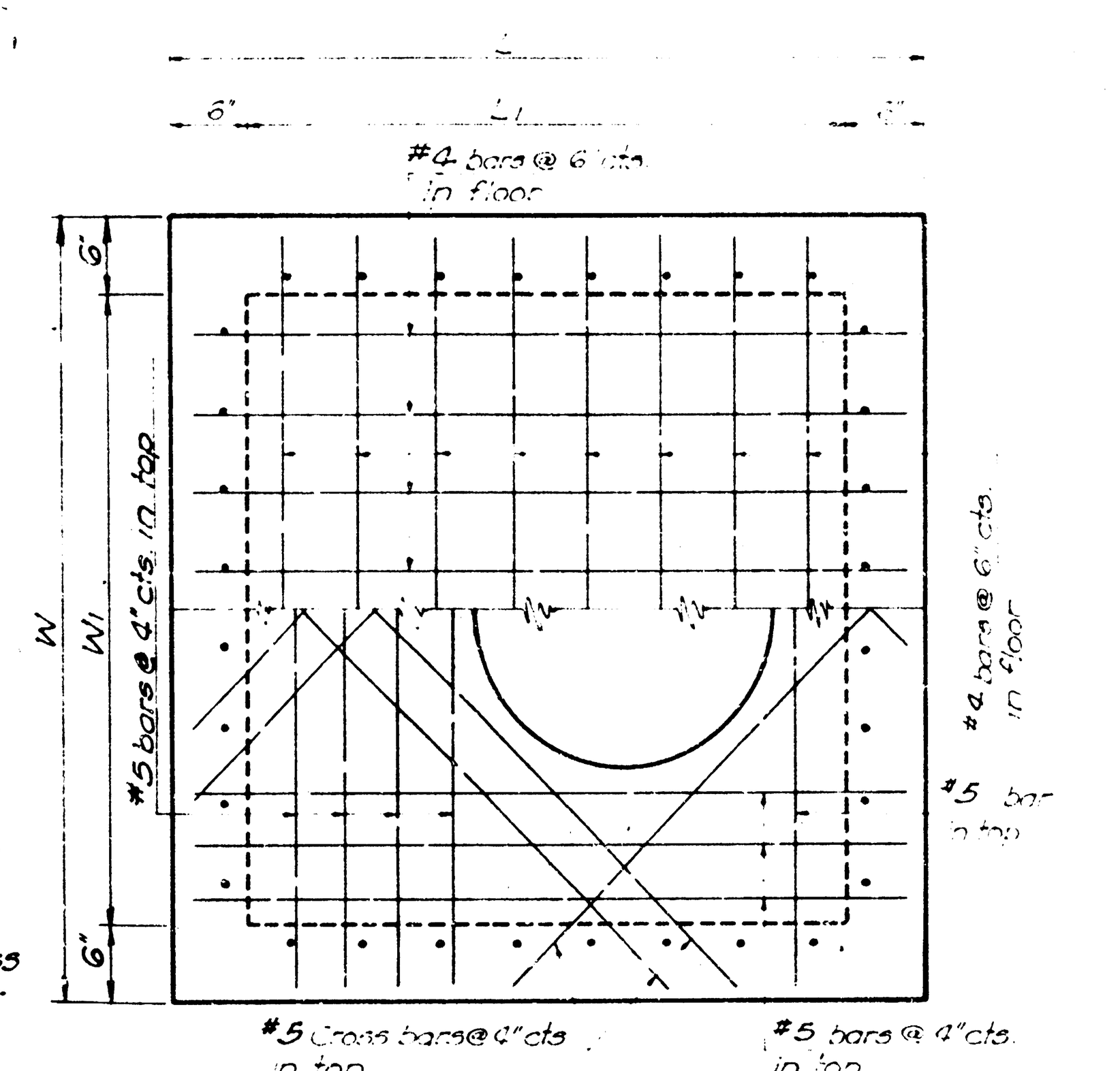
When so ordered by the Engineer, the top of the manhole shall be sloped slightly to approximately fit the ground line or other conditions.



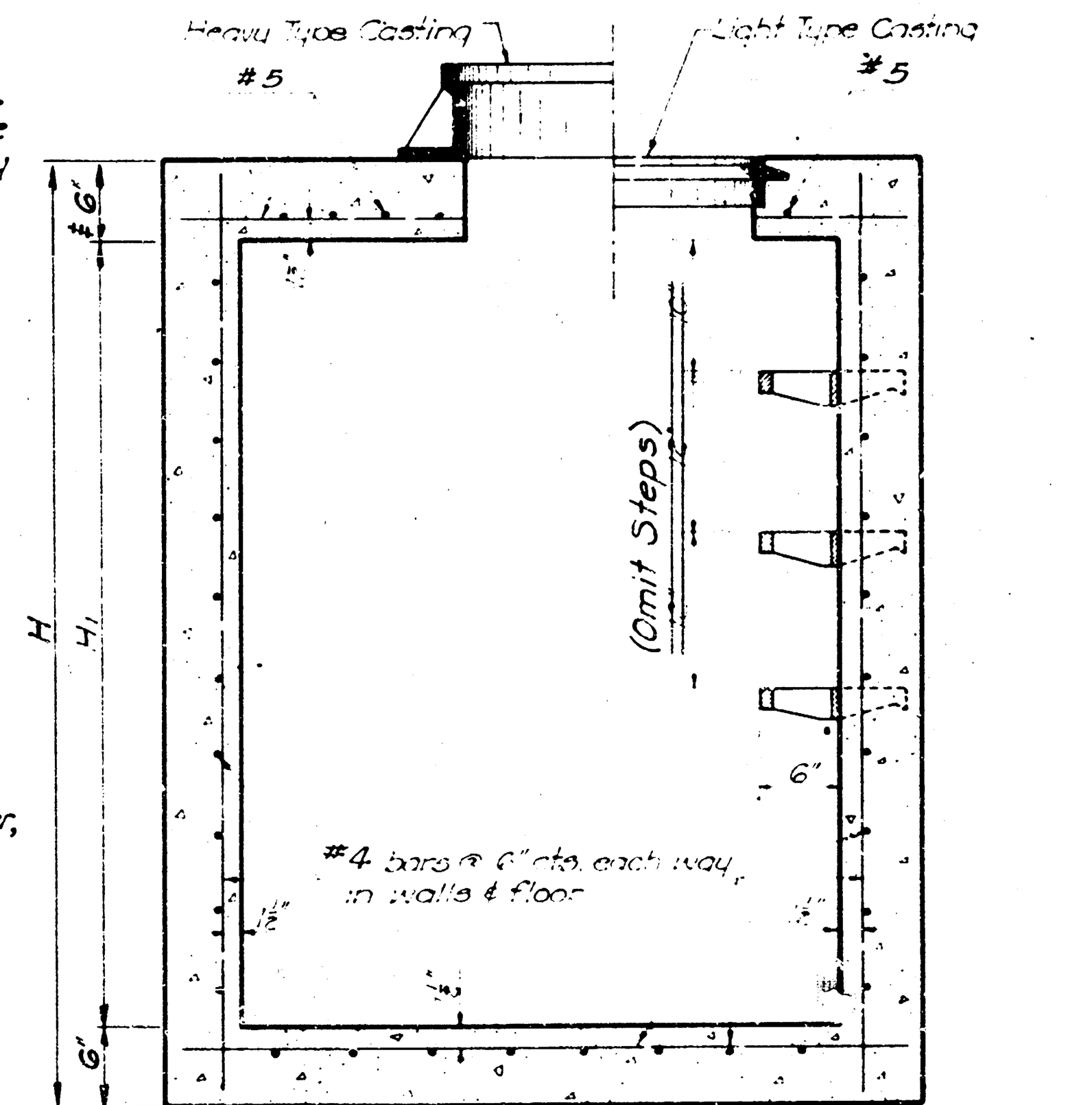
CAST IRON STEP (Omit Steps)
Weight = 14 Lbs.
Scale $1\frac{1}{2}$" = 1'
NOTE: Steps not to be used where "H" is less than 6 feet.

Fed. Road Div. No.	State	Proj. No.	Fiscal Year	Sheet No.	Total Sheets
5	Kansas	—	1969	2	3

\# Where dimension "L" or "W" is greater than 6', use 8" slab thickness.



PLAN
(Showing top & floor Reinforcing)



SECTION (Exclusive of floor shaping)

JUN 25 1969

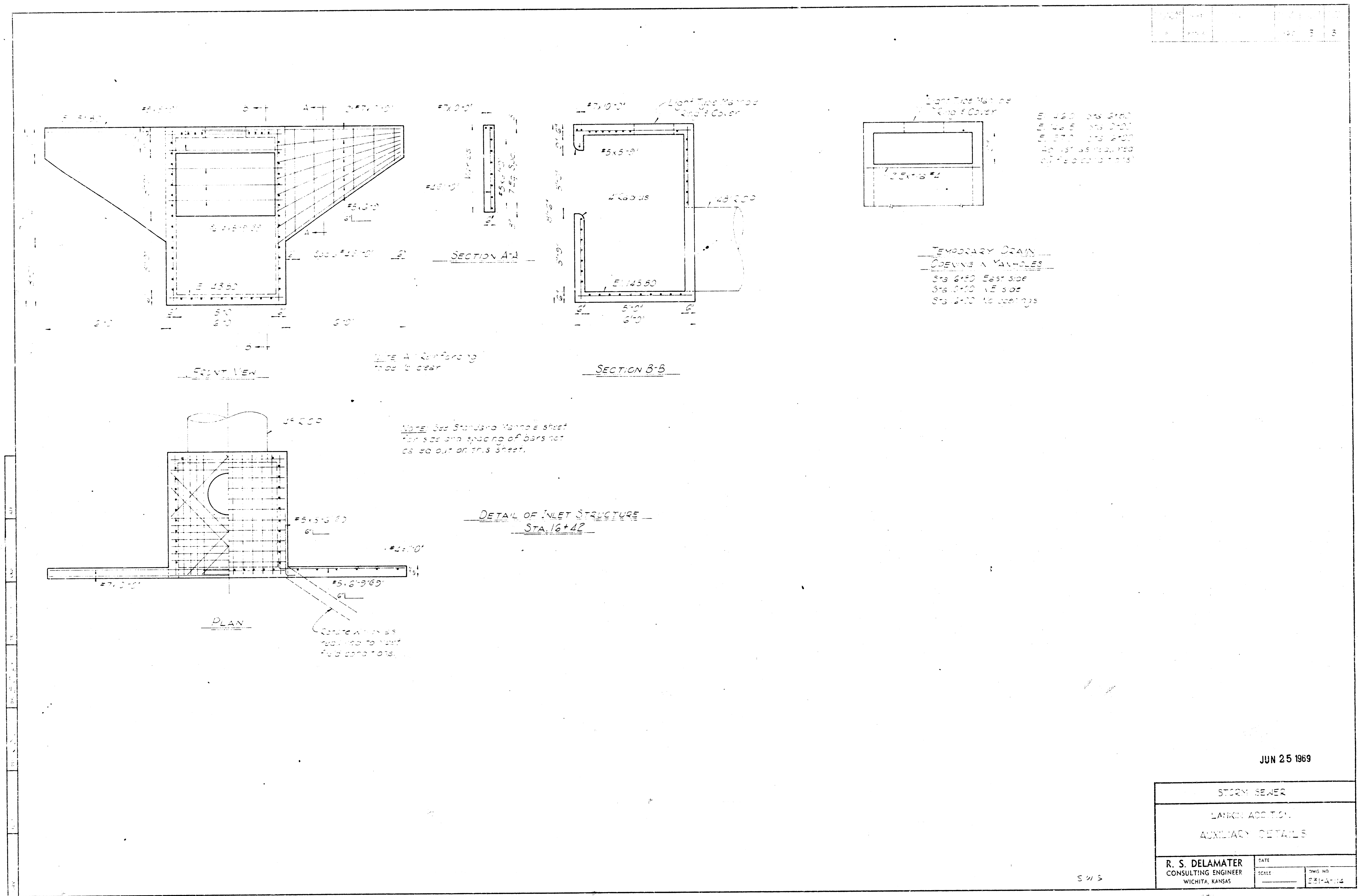
NO.	DATE	REVISIONS	BY	APP'D
11	5-67	Slope top of manhole note	ALR	KGL
10	10-66	Removed Conc. Block & Brick option	ALR	KGL
9	8-66	To conform to 1966 Specs.	ALR	EAR

STATE HIGHWAY COMMISSION OF KANSAS

REINFORCED CONCRETE MANHOLE

STD. NO. 633 SCALE {1 inch = 1 foot (Fr - 22" x 36" sheet), Except as noted
DESIGNED BY E.A.R. DATE 5-43 DETAILED BY W.A.B. TRACED BY W.A.B.
CHECKED BY A.L.B. APPROVED BY [signature] DATE 4-5-44

SWS



FRONT VIEW
SECTION A-A
SECTION B-B
PLAN
TEMPORARY DRAIN OPENINGS IN MANHOLES
Note: See Standard Manhole sheet for size and spacing of bars not called out on this sheet.
DETAIL OF INLET STRUCTURE
STA. 16+42
JUN 25 1969
STORM SEWER
LANKIN ADDITION
AUXILIARY DETAILS
R. S. DELAMATER
CONSULTING ENGINEER
WICHITA, KANSAS
DATE
SCALE
DWG NO
231-A-114

APPROVED AS NOTED
By CITY ENGINEER OF WICHITA
Sanitary Sewers 6/26/69
Storm [illegible]
[illegible] ________

NOTE TO CONTRACTOR
This project will be constructed under the supervision of the CITY ENGINEER and [illegible] to the SPECIFICATIONS of the CITY OF WICHITA. The CONTR[illegible] reimburse the City of W[illegible] cost of ~~Engineering, Plans,~~ [illegible]

JUN 25 1969

NOTE: Construction to be in accordance with City of Wichita current standard specifications for Sewer construction.

SANITARY SEWER LAYOUT
LANKIN ADDITION
May, 1963
R. S. DELAMATER
CONSULTING ENGINEER
WICHITA, KANSAS