CITY OF WICHITA

SEDGWICK COUNTY, KANSAS

PART I
GRADING
DRAINAGE
PAVING

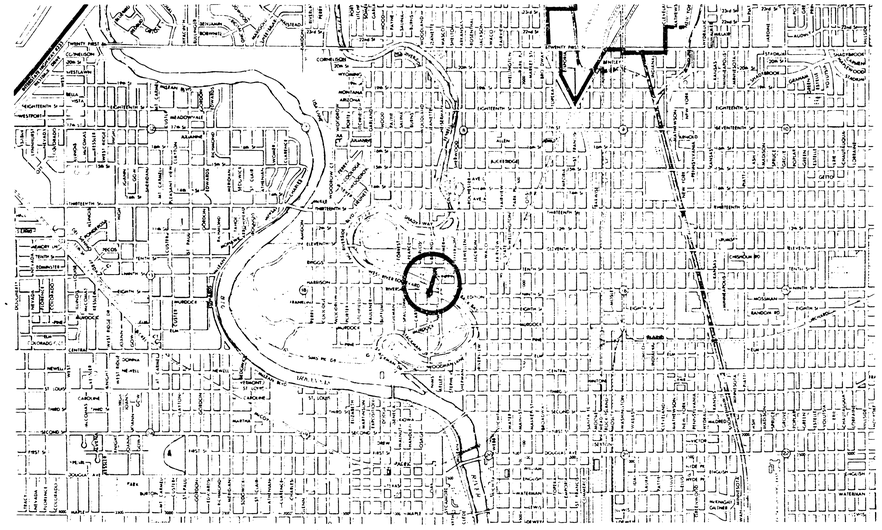
PART II
BRIDGE

GREIFFENSTEIN BRIDGE

INDEX OF SHEETS

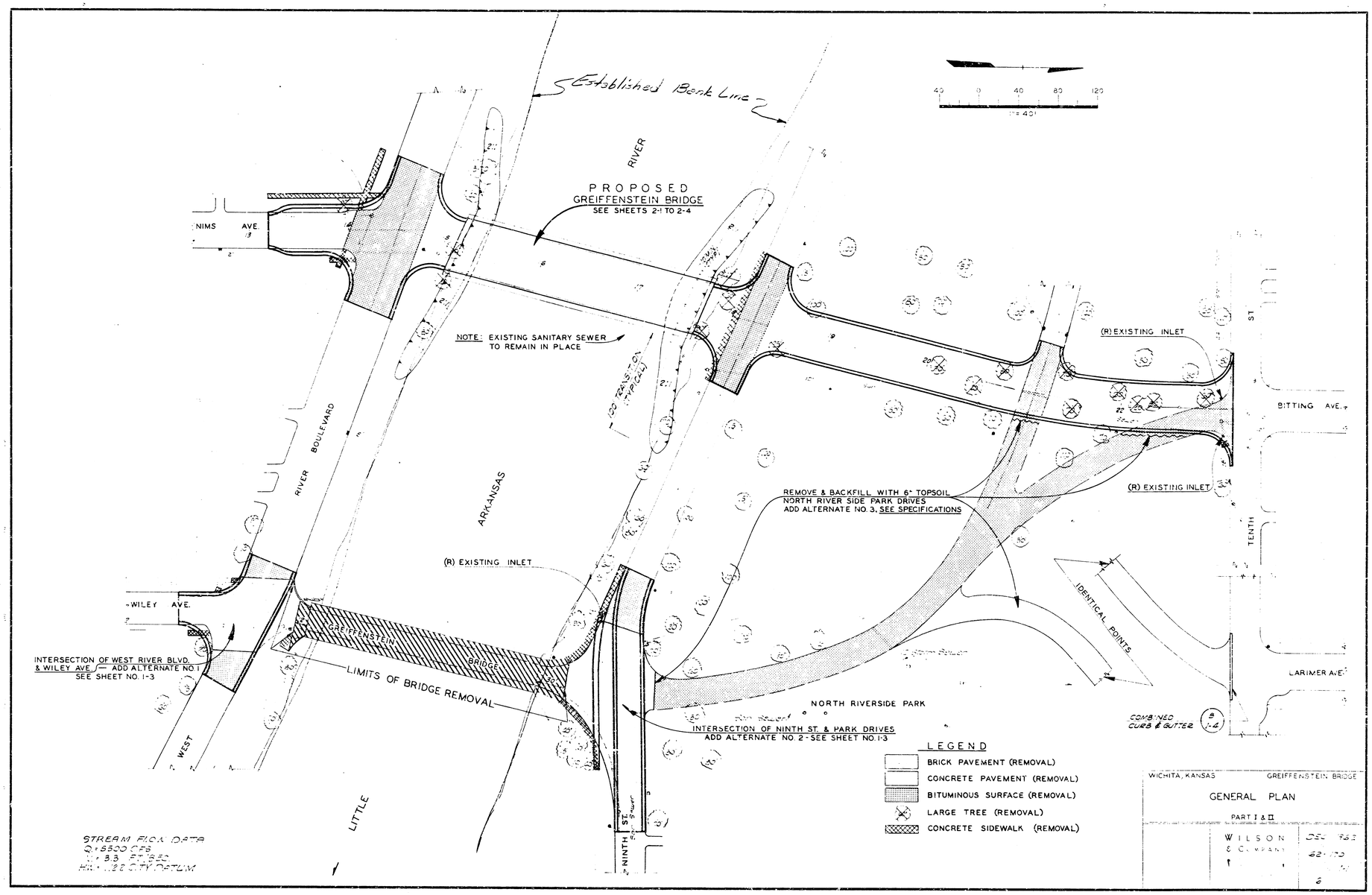
PART I
- TITLE SHEET
- 1-1 GENERAL LAYOUT
- 1-2 GRADING & DRAINAGE - PLAN & PROFILE
- 1-3 GRADING PLAN - ALTERNATES 1 & 2.
- 1-4 TYPICAL SECTIONS
- 1-5 HEADWALL & MANHOLE DETAILS
- 1-6 DRAINAGE DETAILS

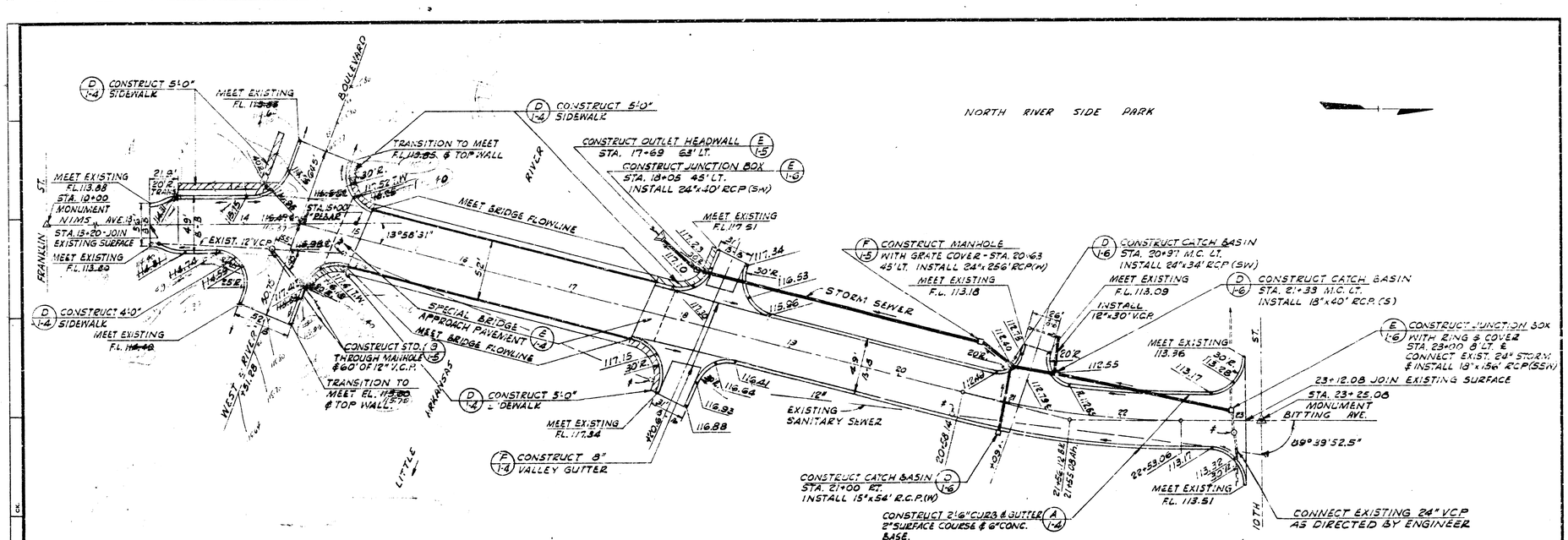
PART II
- 2-1 BRIDGE CONSTRUCTION LAYOUT
- 2-2 ABUTMENT & MISC. DETAILS
- 2-3 PIER & MISC. DETAILS
- 2-4 DECK REINFORCING



LITTLE ARKANSAS RIVER CROSSING

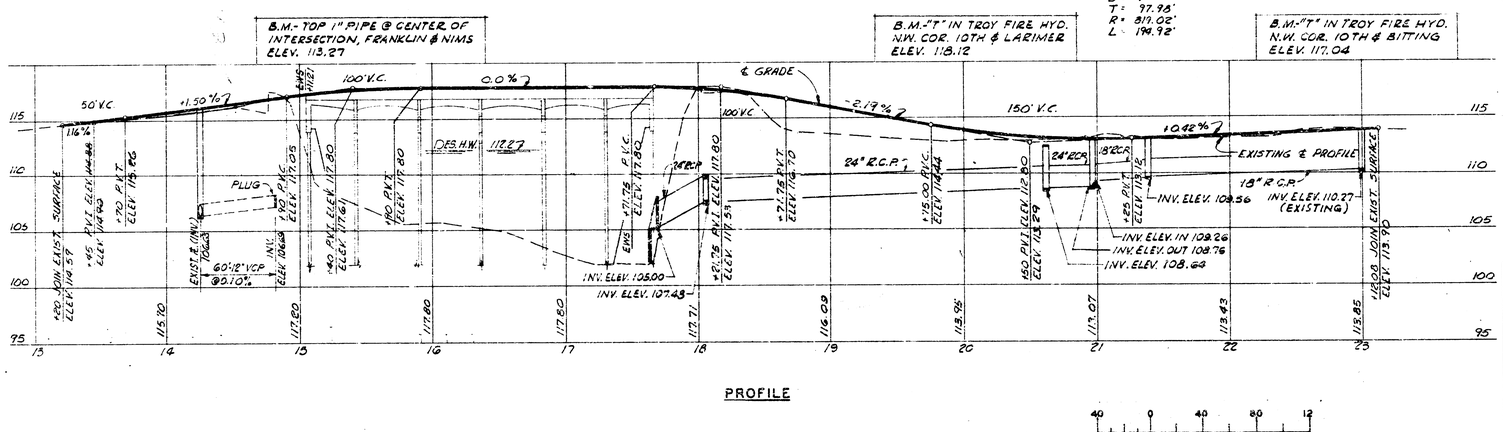
1962


Established Bank Line
RIVER
PROPOSED
GREIFFENSTEIN BRIDGE
SEE SHEETS 2-1 TO 2-4
NIMS AVE.
NOTE: EXISTING SANITARY SEWER TO REMAIN IN PLACE
100' TRANSITION (TYPICAL)
RIVER BOULEVARD
ARKANSAS
(R) EXISTING INLET
REMOVE & BACKFILL WITH 6" TOPSOIL NORTH RIVER SIDE PARK DRIVES ADD ALTERNATE NO. 3, SEE SPECIFICATIONS
(R) EXISTING INLET
BITTING AVE.
TENTH ST
WILEY AVE.
GREIFFENSTEIN BRIDGE
INTERSECTION OF WEST RIVER BLVD. & WILEY AVE. — ADD ALTERNATE NO. 1 SEE SHEET NO. 1-3
LIMITS OF BRIDGE REMOVAL
IDENTICAL POINTS
NORTH RIVERSIDE PARK
INTERSECTION OF NINTH ST. & PARK DRIVES ADD ALTERNATE NO. 2 - SEE SHEET NO. 1-3
LARIMER AVE.
COMBINED CURB & GUTTER
WEST
LITTLE
NINTH ST
STREAM FLOW DATA
Q = 5500 CFS
V = 3.3 FT/SEC
EL. = 1.22 CITY DATUM
40 0 40 80 120
1"= 40'
LEGEND
BRICK PAVEMENT (REMOVAL)
CONCRETE PAVEMENT (REMOVAL)
BITUMINOUS SURFACE (REMOVAL)
LARGE TREE (REMOVAL)
CONCRETE SIDEWALK (REMOVAL)
WICHITA, KANSAS
GREIFFENSTEIN BRIDGE
GENERAL PLAN
PART I & II
WILSON & COMPANY
DES. 962
62-170
6



PLAN

CURVE DATA
Δ = 13° 38' 37"
D = 7°
T = 97.98'
R = 819.02'
L = 194.92'



PROFILE

NOTE:
1. ALL ELEVATIONS SHOWN ARE TO FLOWLINE OF COMBINED CURB & GUTTER, UNLESS OTHERWISE NOTED.
2. REGRADE MANHOLES MARKED - #
3. TITLE (A / 1-6) — A: DETAIL DESIGNATION; 1-6: SHEET ON WHICH DETAIL APPEARS
4. PRESERVE ALL EXISTING MONUMENTS AS DIRECTED BY ENGINEER.

1" = 40'

REVISION	DATE	BY

WICHITA, KANSAS — GREIFFENSTEIN BRIDGE

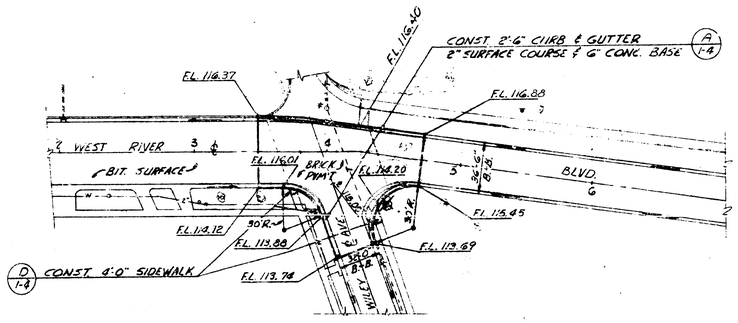
GRADING & DRAINAGE PLAN - PROFILE

PART I

WILSON & COMPANY ENGINEERS ARCHITECTS SALINA — KANSAS

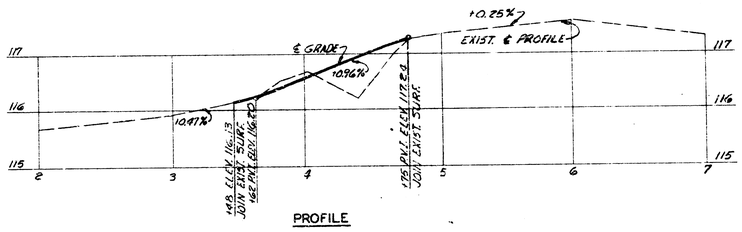
DATE: DEC. 1962
FILE NO. 62-170
SHEET NO. 1-2
OF 6

SCALE 1"=40'



PLAN

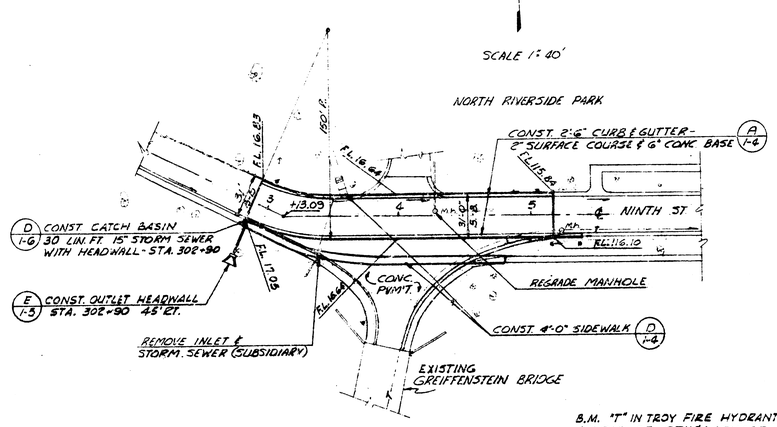
B.M. TOP 1" PIPE - SW COR. OF WILEY AVE. & WEST RIVER DRIVE ELEV. 114.77



PROFILE

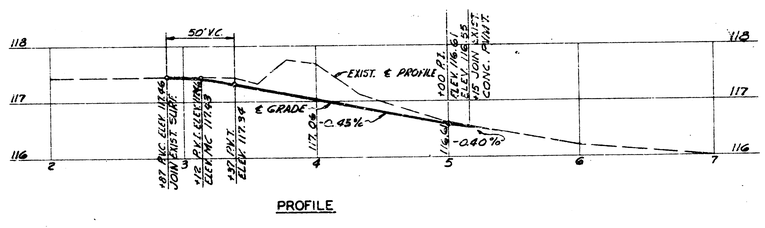
INTERSECTION OF WEST RIVER BLVD. & WILEY AVE.
ADD ALTERNATE NO. 1

SCALE 1" 40'



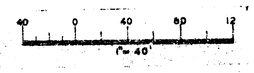
B.M. "T" IN TROY FIRE HYDRANT NW COR. OF 10TH & LARIMER ELEV. 118.12

PLAN



PROFILE

INTERSECTION OF NINTH ST. & PARK DRIVES
ADD ALTERNATE NO. 2



REVISION:	DATE:	BY:

WICHITA, KANSAS — GREIFFENSTEIN BRIDGE

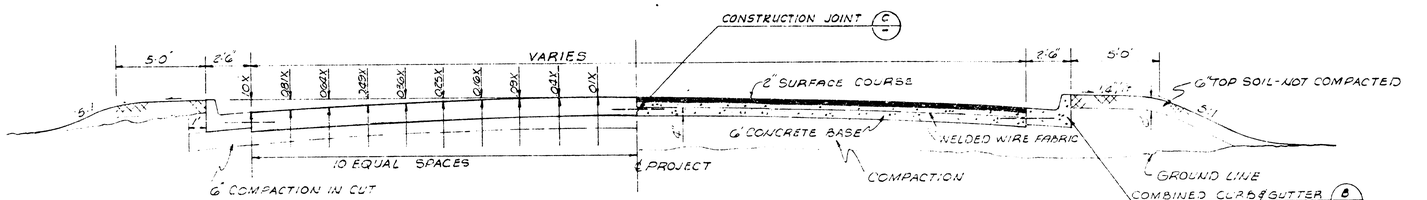
GRADING PLAN ALTERNATES 1 & 2

PART I

WILSON & COMPANY
ENGINEERS & ARCHITECTS
SALINA — KANSAS

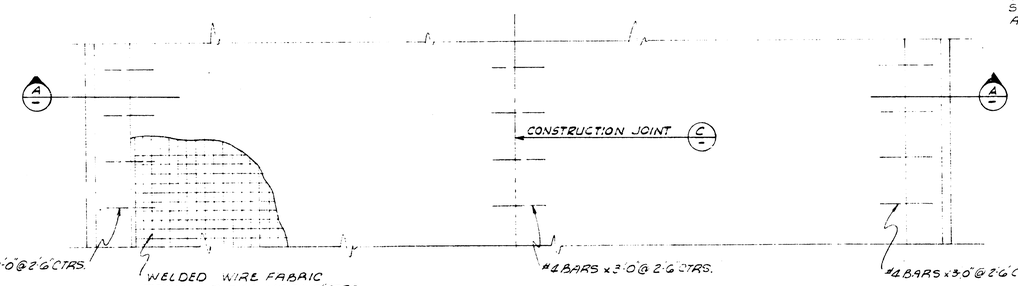
DATE: DEC. 1968
FILE NO. 68-170
SHEET NO. 1-3
OF 6

WIDTH-FEET BACK TO BACK	CROWN "X"
49 FOOT	.49 FOOT
33 FOOT	.33 FOOT
31 FOOT	.31 FOOT

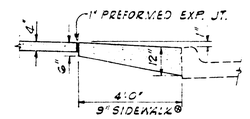


SECTION A

INTERSECTION OF ALL SLOPE LINES SHALL BE SOFTENED AND ROUNDED FOR PLEASING APPEARANCE.

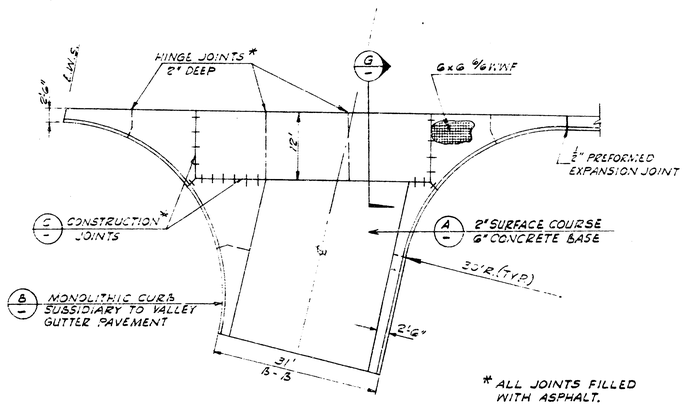


PLAN



SIDEWALK D

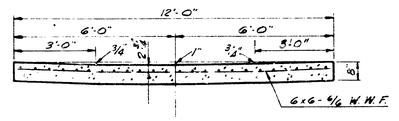
* AT END OF SIDEWALK IN INTERSECTIONS O.R. AT BRIDGE ABUTMENT.



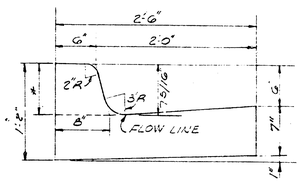
* ALL JOINTS FILLED WITH ASPHALT.

TYPICAL PLAN

8" VALLEY GUTTER F
SCALE 1"=10'

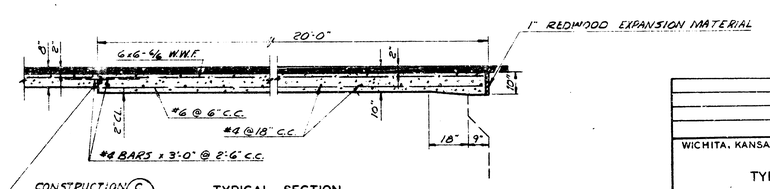


SECTION G
SCALE ½"=1'-0"



COMBINED CURB & GUTTER B

* VARY TO MEET EXISTING CURB WHERE REQUIRED. LENGTH OF TRANSITION = 3 FOOT MIN.



TYPICAL SECTION

SPECIAL BRIDGE APPROACH PAVEMENT E
PAID FOR AS 2" SURF COURSE & 6" CONC BASE
SCALE ½"=1'-0"

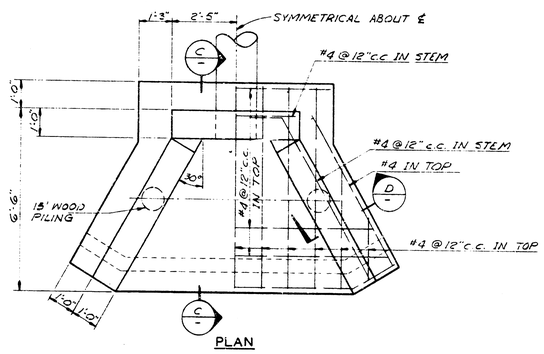
REVISION	DATE	BY

WICHITA, KANSAS — GREIFFENSTEIN BRIDGE

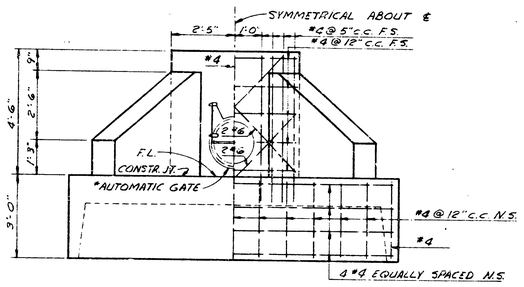
TYPICAL SECTIONS
PART I

WILSON & COMPANY ENGINEERS & ARCHITECTS
SALINA — KANSAS

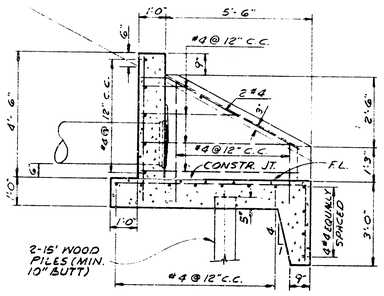
DATE DEC. 1962
FILE NO. 62-170
SHEET NO. 14
OF 6



PLAN



ELEVATION

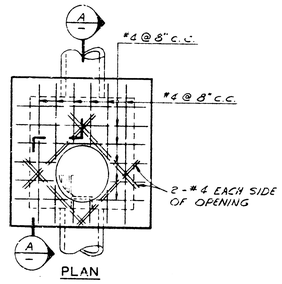


SECTION C

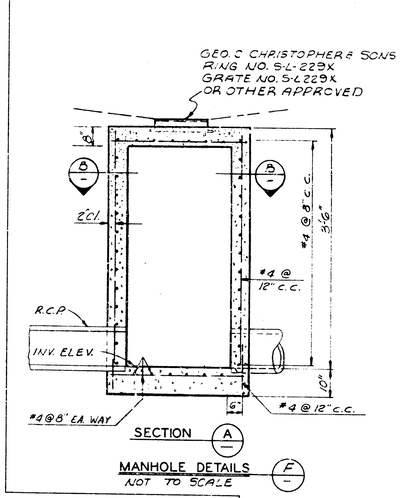
OUTLET HEADWALL FOR *

SCALE: 1/2" = 1'-0"

* 24" RCP & 15" R.C.P.



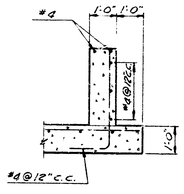
PLAN



SECTION A

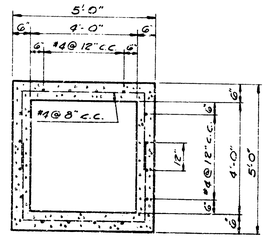
MANHOLE DETAILS

NOT TO SCALE

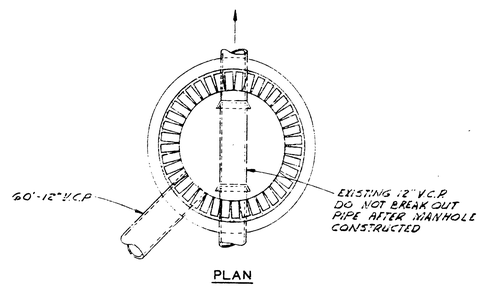


SECTION D

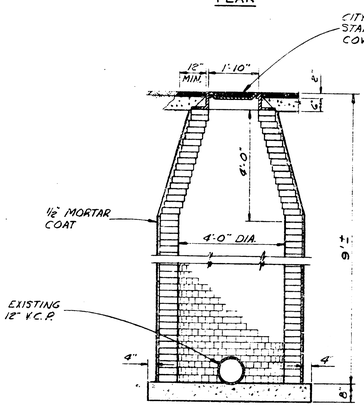
*NOTE: AUTOMATIC GATE TO BE USED ONLY WHEN SPECIFIED ON PLAN SHEET.



SECTION B



PLAN



SECTION

STANDARD THROUGH MANHOLE G

SCALE: 1/2" = 1'-0"

REVISION	DATE	BY

WICHITA, KANSAS — GREIFFENSTEIN BRIDGE

HEADWALL & MANHOLE DETAILS

PART I

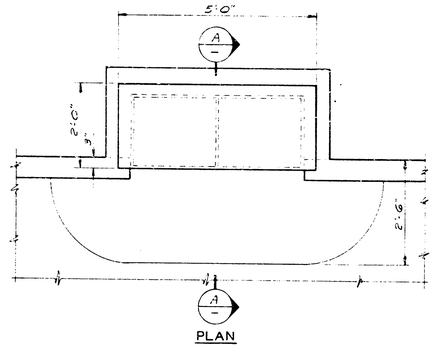
WILSON & COMPANY ENGINEERS & ARCHITECTS — SALINA — KANSAS

DATE: DEC. 1962

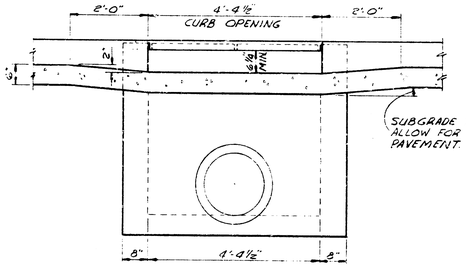
FILE NO. 62-170

SHEET NO. 1-5

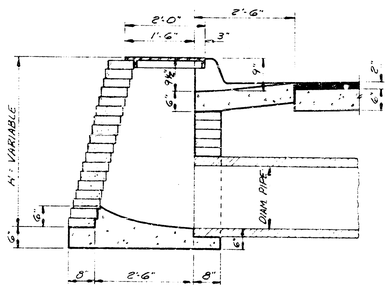
OF 6



PLAN

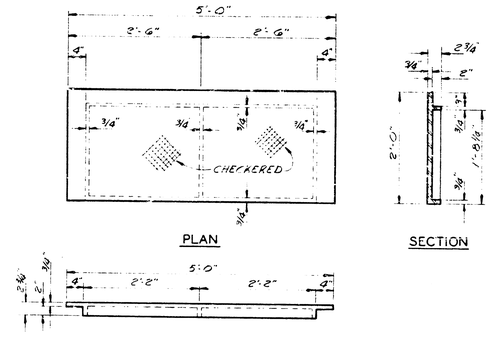


ELEVATION

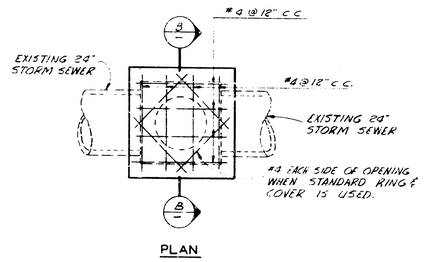


SECTION (A)

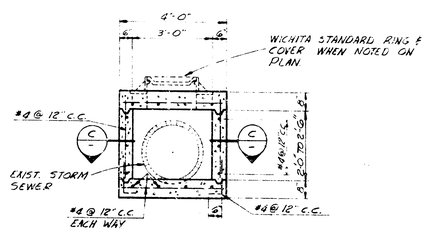
STANDARD CATCH BASIN (D)
SCALE: 3/16" = 1'-0"



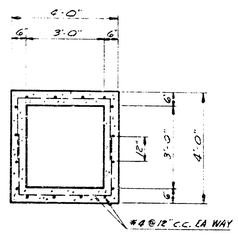
CITY OF WICHITA CAST IRON INLET COVER
SCALE: 1" = 1'-0"
WEIGHT OF CASTING = 325 LBS.



PLAN



SECTION (B)



SECTION (C)

JUNCTION BOX DETAILS (E)
SCALE: 1/2" = 1'-0"

SCHEDULE OF STRUCTURES

STATION	SIDE	TYPE	TOP EL.	INV. EL.	H
17+69	LT.	HW	–	105.00	–
18+05	LT.	JB	–	107.48	–
20+63	LT.	MH	112.89	109.64	3.50
20+97	LT.	CB	113.01	108.76	4.25
21+00	RT.	CB	113.07	109.57	2.50
21+58	LT.	CB	113.16	109.56	3.60
23+00	LT.	JB	113.83	110.27	3.56
23+03	RT.	JB	–	110.53	3.00
*2+30	RT.	CB	117.66	113.66	4.00
*2+30	RT.	HW	–	105.00	–

* INTERSECTION OF NINTH ST. & PARK DRIVES (ADD ALTERNATE NO. 2)

REVISION	DATE	BY

WICHITA, KANSAS — GREIFFENSTEIN BRIDGE

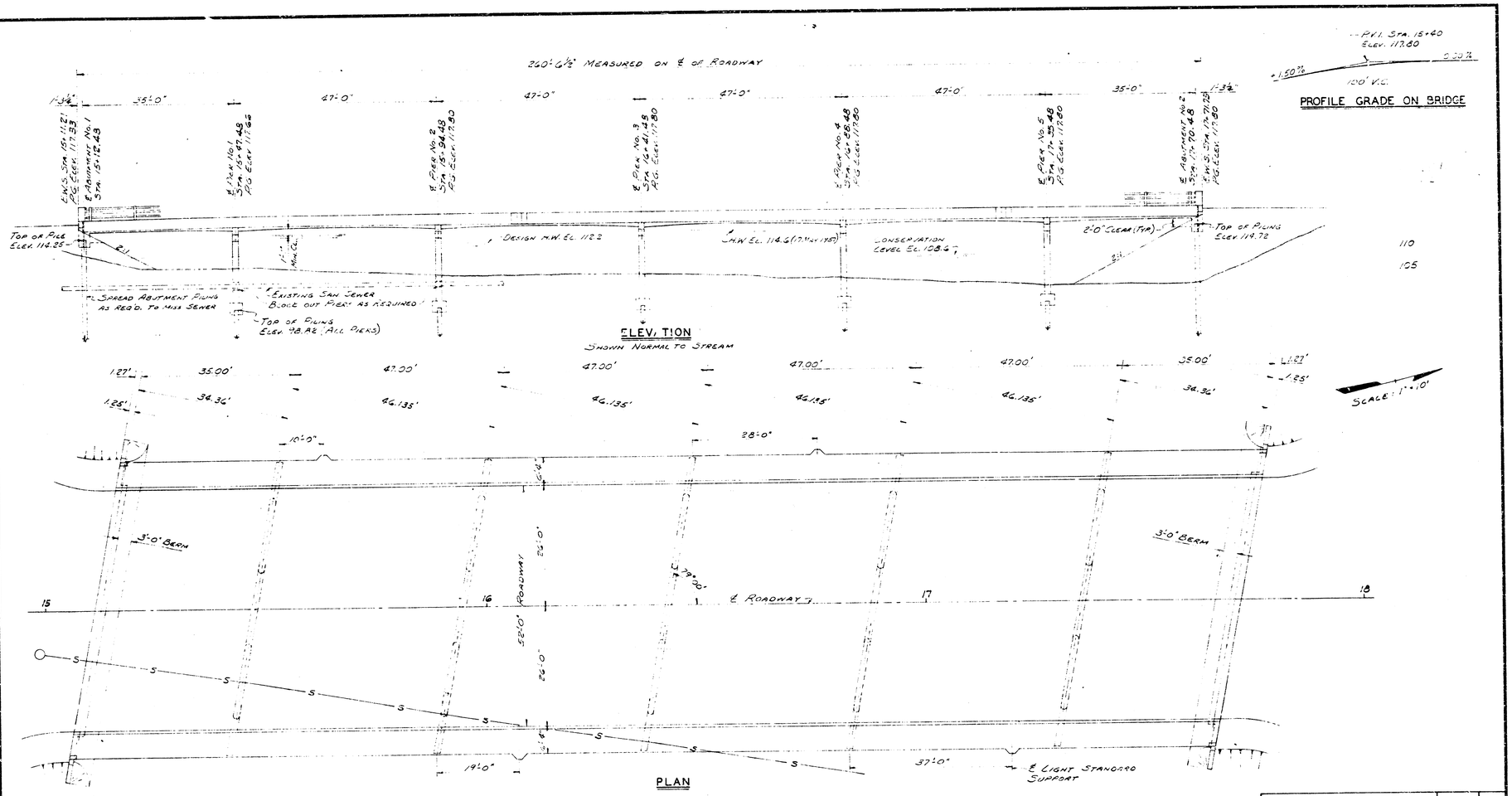
DRAINAGE DETAILS

PART I

WILSON & COMPANY
ENGINEERS ARCHITECTS
SALINA — KANSAS

DATE: DEC. 1962
FILE NO.: 62-170
SHEET NO.: 16
OF 6

DES. DR. CK. SUR. TR. K-1(102)



GENERAL NOTES:
DESIGN LOADING: H20-S16-44 A.A.S.H.O SPECIFICATIONS 1961 ED.
UNIT STRESSES: f'c = 4000 P.S.I., fc = 1600 P.S.I., fs = 20,000 P.S.I.
EXCAVATION AND EMBANKMENT: COMPLETE EXCAVATION AND EMBANKMENT IN THE VICINITY OF THE BRIDGE PRIOR TO CONSTRUCTING ABUTMENTS.
EPOXY RESIN SEAL: SEE SPECIFICATIONS.
PILING: ABUTMENT PILING 10BP42 DRIVEN TO A COMPUTED BEARING VALUE OF 33 TONS PER PILE. PIER PILING 12BP53 OR 12" SQUARE PREST-I-ESSCO CONCRETE DRIVEN TO A COMPUTED BEARING VALUE OF 47 TONS PER PILE. SEE SPECIFICATIONS.
GEOLOGY: SEE SPECIFICATIONS FOR LOG OF BORINGS.

EXISTING SANITARY SEWER: KEEP SEWER IN SERVICE DURING CONSTRUCTION. BLOCK OUT PIERS TO ACCOMODATE SEWER, LEAVING 2" MIN. CLEARANCE ALL AROUND. BEND OR CUT REINFORCING AT BLOCKOUTS AT THE DIRECTION OF THE ENGINEER.
EXISTING PILING: SEE SPECIFICATIONS.

REVISION	DATE	BY:

WICHITA, KANSAS — GREIFFENSTEIN BRIDGE

BRIDGE CONSTRUCTION LAYOUT

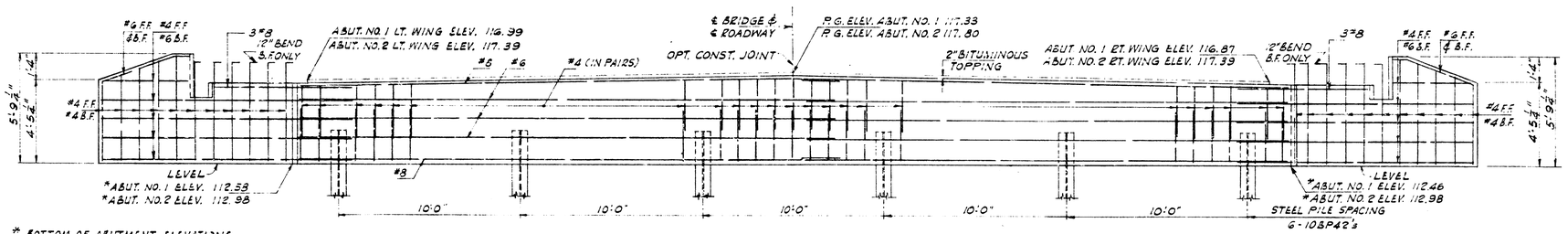
PART II

WILSON & COMPANY ENGINEERS & ARCHITECTS, SALINA — KANSAS

DATE: DEC. 1962
FILE NO. 62-170
SHEET NO. 2-1 OF 4

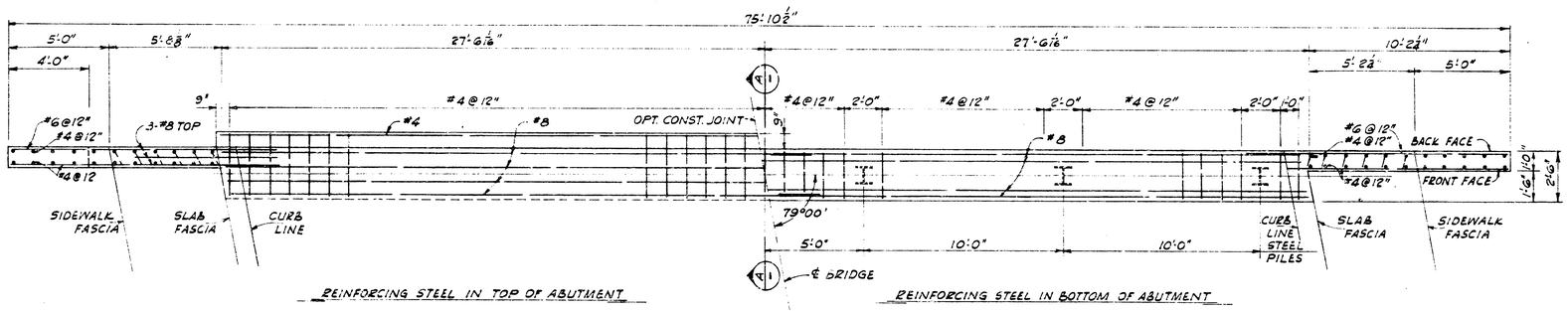
DR. C.C.C.
CK. A.S.H.
DES. A.S.H.
SURV.
PR.

NOTE:
ALL ROADWAY ELEVATIONS GIVEN ARE TO TOP OF FINISHED ROADWAY AT E.W.S.



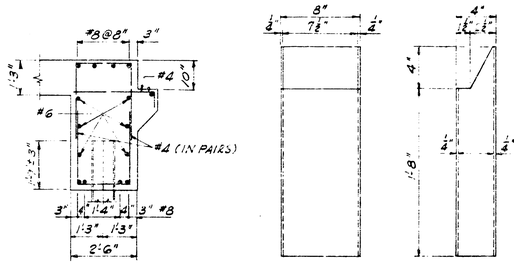
* BOTTOM OF ABUTMENT ELEVATIONS.

ELEVATION OF ABUTMENT
LOOKING UP STATION



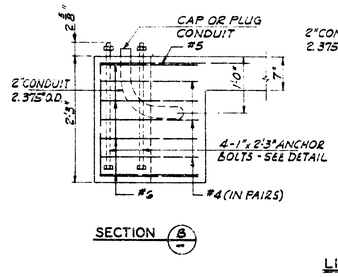
REINFORCING STEEL IN TOP OF ABUTMENT

REINFORCING STEEL IN BOTTOM OF ABUTMENT



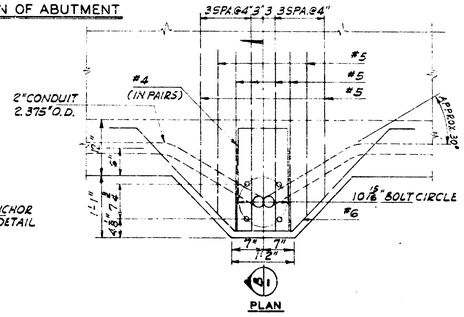
SECTION A

CAST IRON DRAIN DETAIL



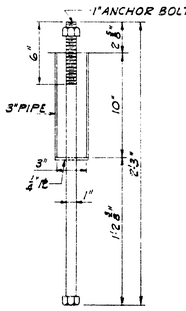
SECTION B

PLAN OF ABUTMENT



PLAN

LIGHT STANDARD SUPPORT DETAIL



ANCHOR BOLT DETAIL

REVISION	DATE:	BY:

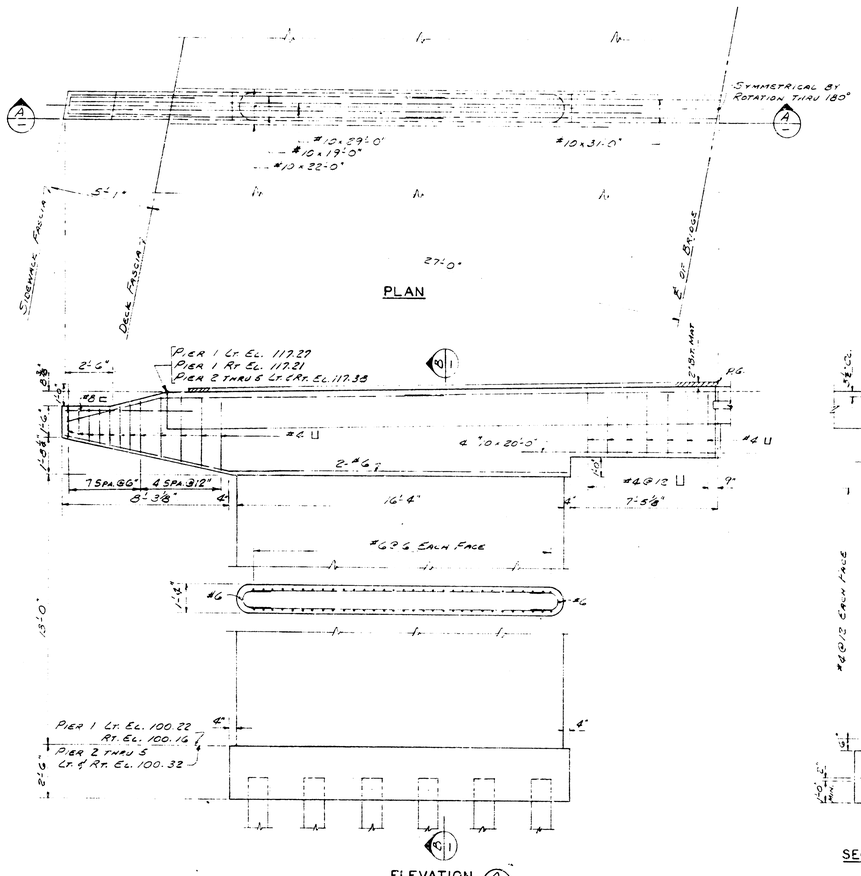
WICHITA, KANSAS — GREIFFENSTEIN BRIDGE

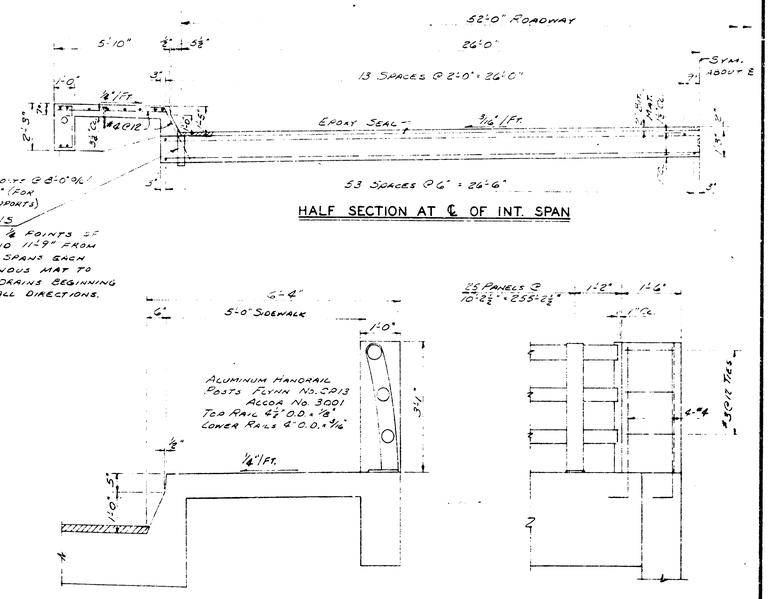
ABUTMENT & MISCELLANEOUS DETAILS
PART II

WILSON & COMPANY ENGINEERS ARCHITECTS
SALINA — KANSAS

DATE: DEC. 1962
FILE NO. 62-170
SHEET NO. 22 OF 4

DES. R.E.H. DRN. R.E.H. CK. TR. R.E.H.





CAST IRON DRAINS

Locate drains at ⅛ points of interior spans and 11'-9" from ℄ of piers in end spans each curb. Shape bituminous mat to drain 2" down to drains beginning 12" from drain in all directions.

HANDRAIL DETAILS

REVISION	DATE	BY:

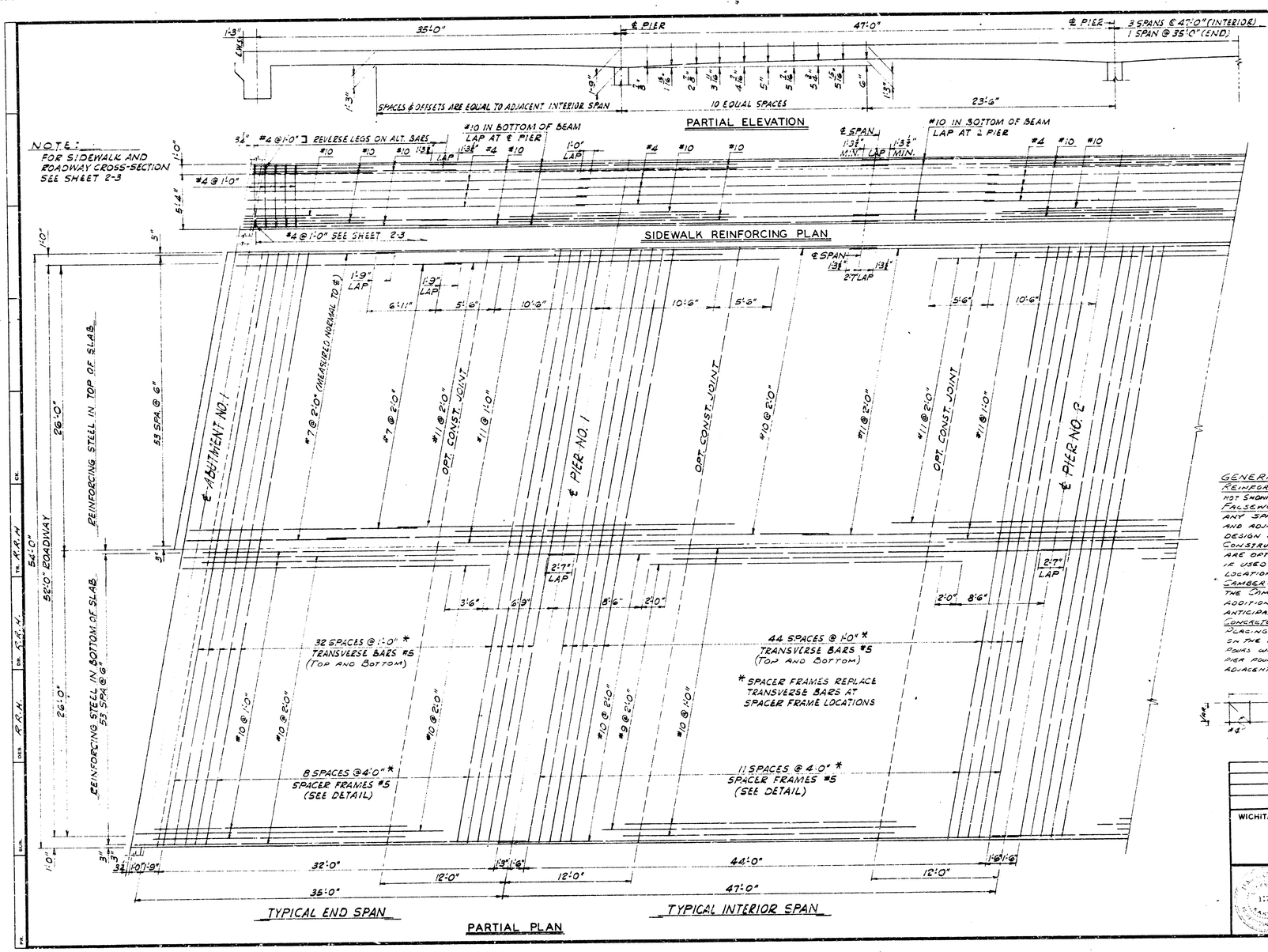
WICHITA, KANSAS — GREIFFENSTEIN BRIDGE

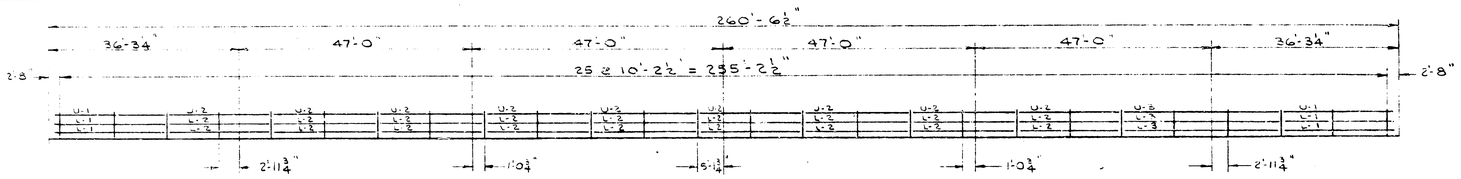
PIER AND MISCELLANEOUS DETAILS

PART II

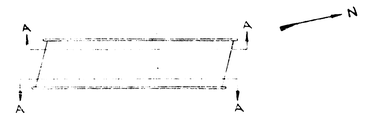
WILSON & COMPANY ENGINEERS ARCHITECTS
SALINA — KANSAS

DATE: DEC. 1962
FILE NO.: 62-170
SHEET NO. 2-3 OF 4

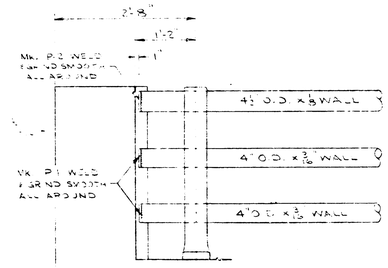

1'-3"
35'-0"
℄ PIER
47'-0"
℄ PIER
3 SPANS @ 47'-0" (INTERIOR)
1 SPAN @ 35'-0" (END)
SPACES & OFFSETS ARE EQUAL TO ADJACENT INTERIOR SPAN
10 EQUAL SPACES
23'-6"
PARTIAL ELEVATION
NOTE:
FOR SIDEWALK AND ROADWAY CROSS-SECTION SEE SHEET 2-3
#4 @ 1'-0" REVERSE LEGS ON ALT. BARS
#10 IN BOTTOM OF BEAM LAP AT ℄ PIER
#10 IN BOTTOM OF BEAM LAP AT ℄ PIER
#4 @ 1'-0"
#4 @ 1'-0" SEE SHEET 2-3
SIDEWALK REINFORCING PLAN
℄ ABUTMENT NO. 1
℄ PIER NO. 1
℄ PIER NO. 2
OPT. CONST. JOINT
REINFORCING STEEL IN TOP OF SLAB
REINFORCING STEEL IN BOTTOM OF SLAB
53 SPA. @ 6"
54'-0" ROADWAY
52'-0" ROADWAY
32 SPACES @ 1'-0" * TRANSVERSE BARS #5 (TOP AND BOTTOM)
44 SPACES @ 1'-0" * TRANSVERSE BARS #5 (TOP AND BOTTOM)
* SPACER FRAMES REPLACE TRANSVERSE BARS AT SPACER FRAME LOCATIONS
8 SPACES @ 4'-0" * SPACER FRAMES #5 (SEE DETAIL)
11 SPACES @ 4'-0" * SPACER FRAMES #5 (SEE DETAIL)
32'-0"
44'-0"
35'-0"
47'-0"
12'-0"
12'-0"
12'-0"
TYPICAL END SPAN
TYPICAL INTERIOR SPAN
PARTIAL PLAN
TO PIER
TO ℄ SPAN
TRANSVERSE SLAB CONSTRUCTION JOINT
GENERAL NOTES:
REINFORCING: BAR LENGTHS AND SPACINGS NOT SHOWN TO BE SCALED FROM PLANS.
FALSEWORK: LEAVE FORMS IN PLACE IN ANY SPAN UNTIL CONCRETE IN THAT SPAN AND ADJACENT SPANS HAS ATTAINED ITS DESIGN STRENGTH.
CONSTRUCTION JOINTS: CONSTRUCTION JOINTS ARE OPTIONAL WITH THE CONTRACTOR, BUT IF USED SHALL BE MADE ONLY AT THE LOCATIONS SHOWN.
CAMBER: PROVIDE CAMBER AS SHOWN ON THE CAMBER DIAGRAM ALONG WITH ADDITIONAL CAMBER TO ACCOMODATE ANY ANTICIPATED DEFLECTION OR FALSEWORK.
CONCRETE PACING SEQUENCE: CONCRETE PACING SEQUENCE SHALL BE AS INDICATED ON THE DIAGRAM, EXCEPT THAT CONTINUOUS POURS WILL BE ALLOWED PROVIDED THAT NO PIER POUR IS MADE WITHOUT INCLUDING ADJACENT MID-SPAN POURS IN THE SAME POUR.
#4 VERT @ 2'-0" c/c
#5
#4
WELDED SPACER FRAME
REVISION
DATE
BY
WICHITA, KANSAS
GREIFFENSTEIN BRIDGE
DECK REINFORCING
PART II
WILSON & COMPANY ENGINEERS ARCHITECTS
SALINA — KANSAS
DATE: DEC. 1962
FILE NO. 62-170
SHEET NO. 2-4
OF 4



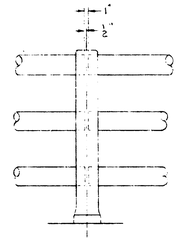
ELEVATION "A-A"
L-REQ'D.



PLAN VIEW



END DETAIL



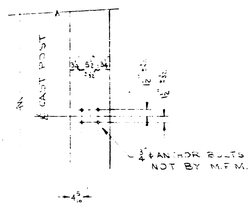
SPLICE DETAIL

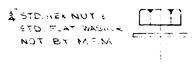
BILL OF MATERIAL				
MARK	QTY.	ITEM	LENGTH	ALLOY A.S.T.M.
* U-1	4	4½ O.D. x ⅝ WALL	21'-5½"	6061T6 B-235
U-2	18	DO.	20'-4"	DO.
U-3	2	DO.	30'-6½"	DO.
* L-1	8	4" O.D. x ⅜ WALL	21'-5½"	DO.
L-2	36	DO	20'-4"	DO.
L-3	4	DO.	30'-6½"	DO.
P-1	8	3½ x ⅜ PL		6061T6 B-209
P-2	4	4½ x ⅜ PL		DO.
	208	¾ ø BOLTS		GALV. STEEL
	208	¾ HEX NUTS	STD.	DO.
	208	¾ FLAT WASH.	STD.	DO
CP-13	52	CAST POST		A356T6 B-108

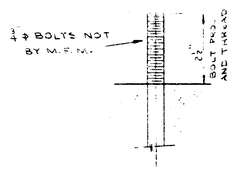
NOT BY M.F.M.

APPROVED
[illegible]
CITY ENGINEER
APR 9

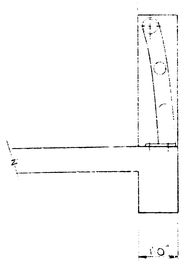
NOTE: * WELD ℄ TO ONE END OF TUBE.
SEE DWG. 2 OF 2 FOR CAST POST.







℄ OF BRIDGE



BOLT LAYOUT

NO.	DATE	BY	REVISIONS
4			
3			
2			
1			

CITY OF WICHITA
SEDGWICK COUNTY, KANSAS
GREIFFENSTEIN BRIDGE
TUCKER CONST. CO.

MICHAEL FLYNN MANUFACTURING COMPANY
PHILADELPHIA 24, PENNSYLVANIA

DRAWN BY [illegible] CHECKED BY ——— ISSUE NO.
DATE 4-24-68 DATE ———

ORDER NO. XA-3434 | DRAWING NO. 1 OF 2 | D

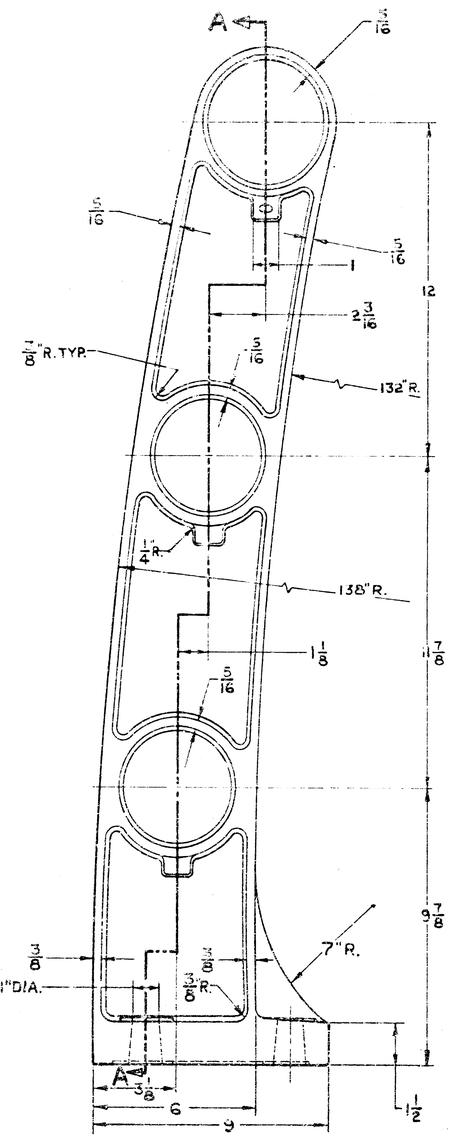
FORM NO. 1011—REV. 1-1-1970

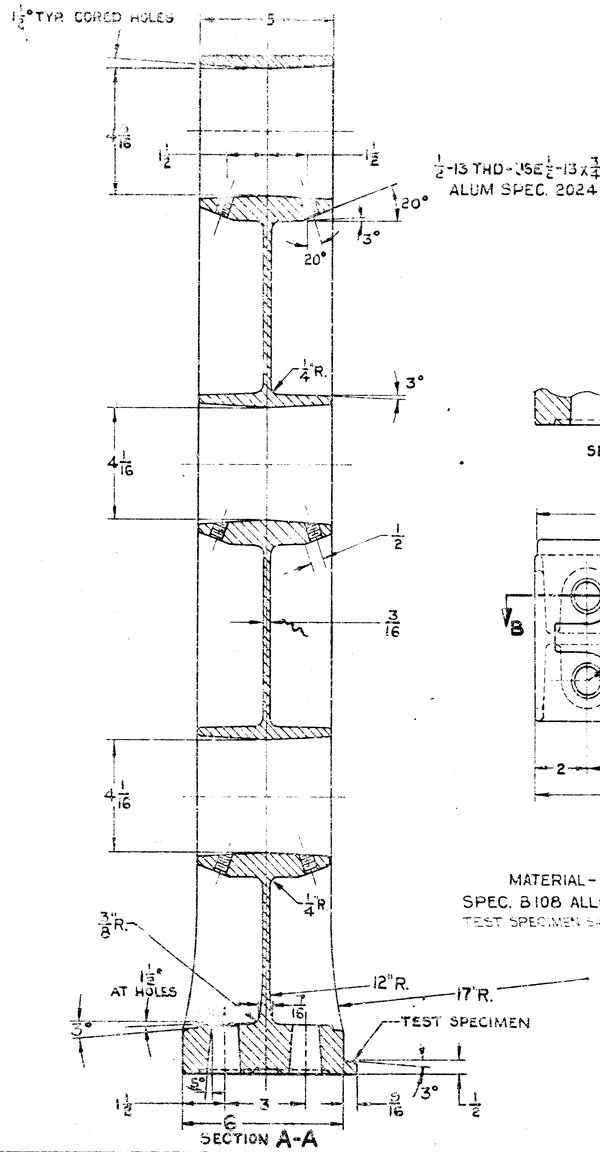
[illegible]
CITY OF WICHITA
CITY HALL
WICHITA, KANSAS

SECT. 15 RIZALS
CONSTRUCTION TUCKER CONST. CO.
LOCATION WICHITA, KANSAS

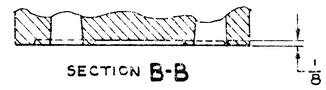
[illegible]

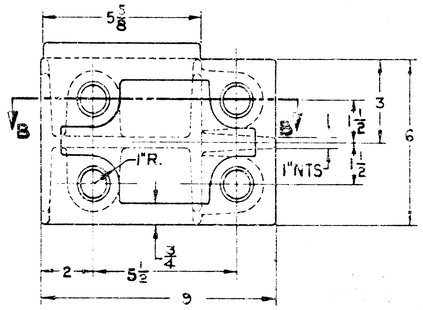
ONE - BRONZE PLAQUE 15x24
PLX PLANS 1 PERSE





1/2-13 THD-USE 1/2-13 x 3/4 ALUM SOCKET SET SCREW
ALUM SPEC. 2024-T4 — WITH 205 ALUMILITE FINISH.





HOWE # 302

MATERIAL - ALUM. CONFORMING ASTM
SPEC. B108 ALLOY SG 70 B CONDITION T6 (A 356-T6)
TEST SPECIMEN SHIPPED ATTACHED AS SHOWN.

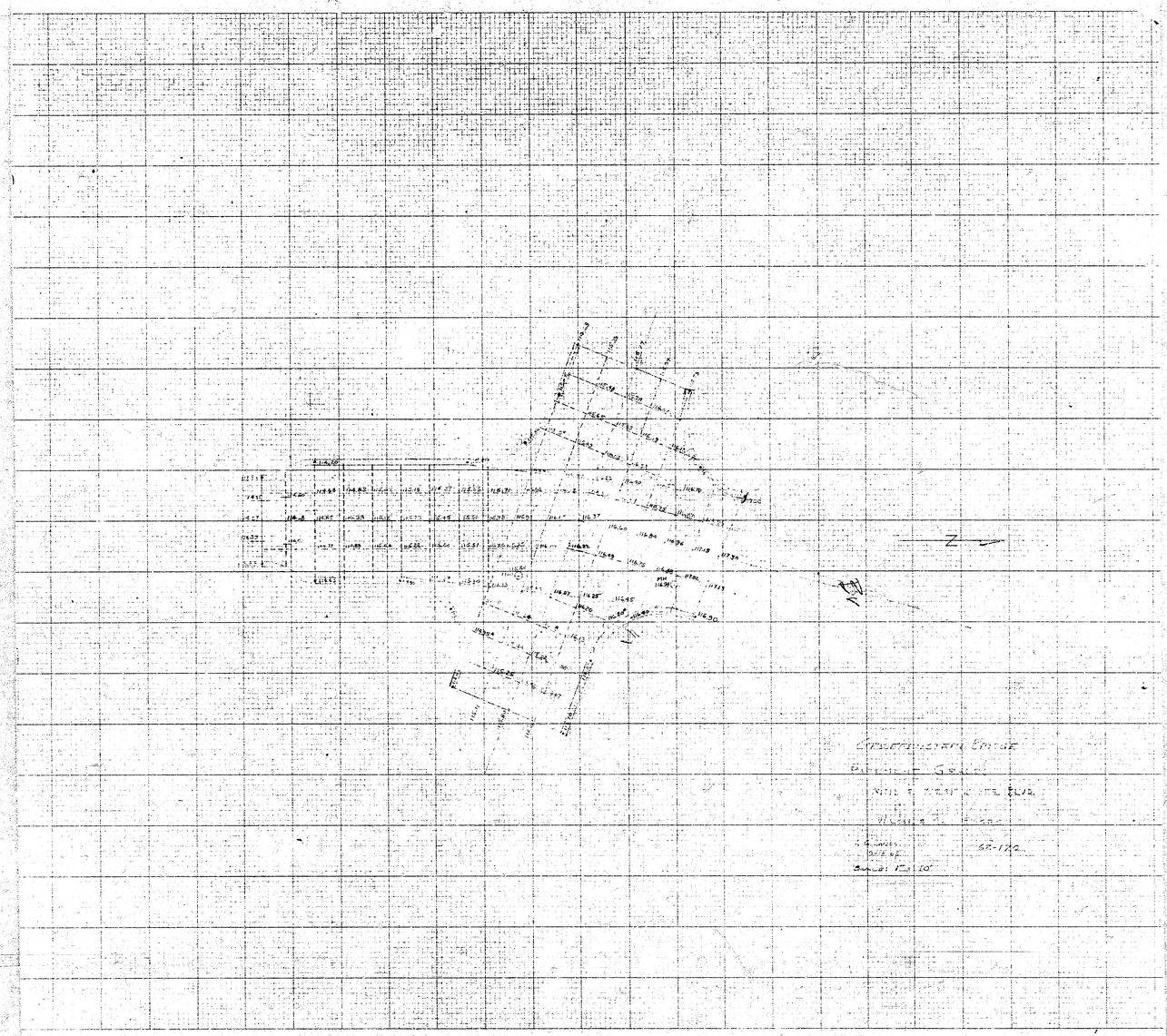
NO	DATE	BY	REVISIONS
3			
2			
1			

CITY OF WICHITA
SEDGWICK COUNTY, KANSAS
GREENTEN BR D.P.S
TUCKER CONST. CO.

MICHAEL FLYNN MANUFACTURING COMPANY
PHILADELPHIA PENNSYLVANIA

DRAWN BY	CHECKED	ISSUE
DATE 4-23-58	DATE	NO

ORDER NO XA-3434 DRAWING NO 2 OF 2 D



KS STANDARD ® cross section
KEUFFEL & ESSER CO
MADE IN U.S.A.
KS STANDARD ®