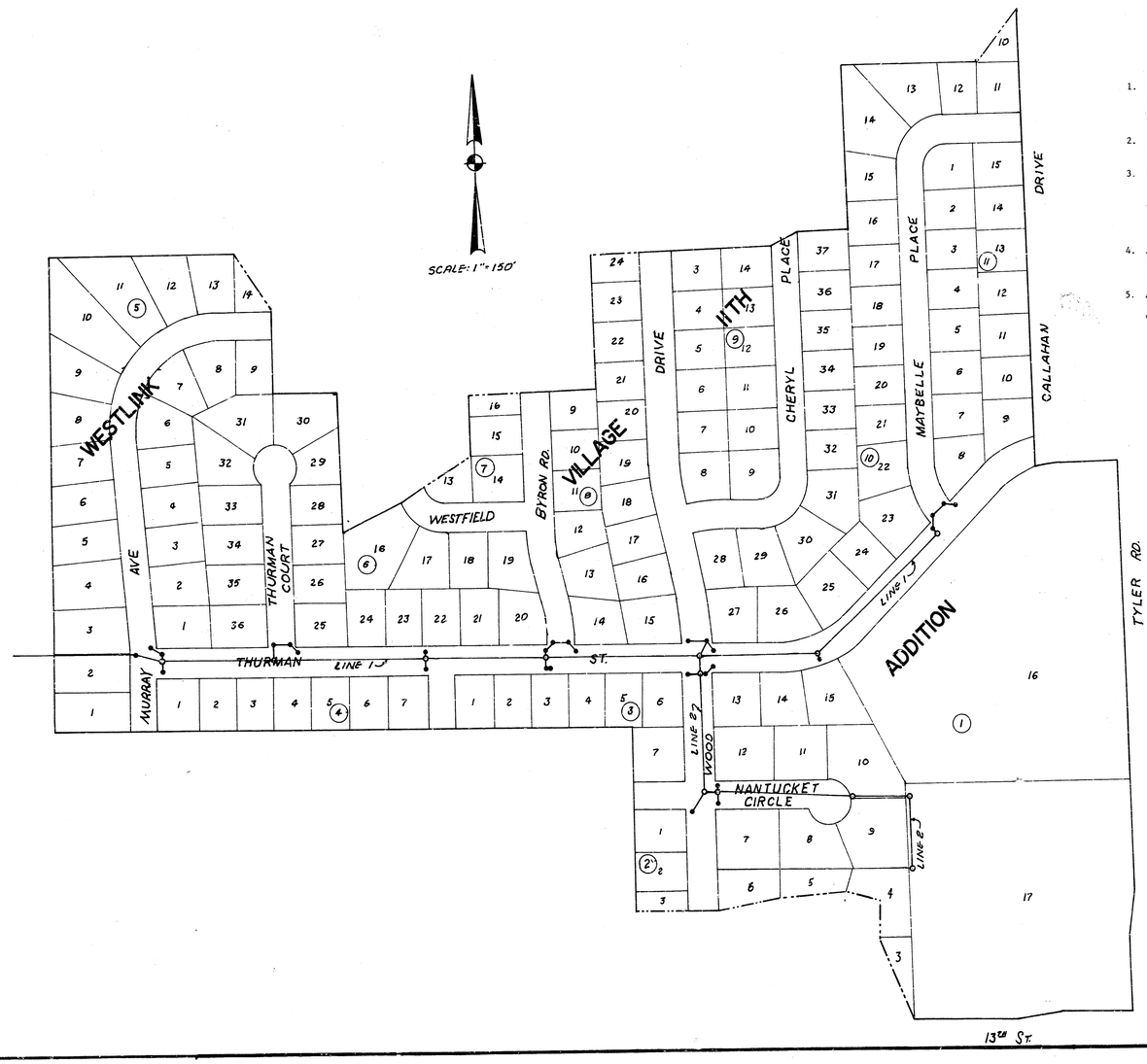
STORM WATER SEWER NO. 111

CITY OF WICHITA, KANSAS
R. W. LINN, CITY ENGINEER



GENERAL NOTES

1. The price bid for "clearing right-of-way" shall include all removal and replacement work necessary for construction of Storm Water Sewer No. 111 and shall include tree removal. Site inspection is required by Contractor to verify extent of required work. Trees shall be removed only when approved by the Engineer.

2. The Contractor shall coordinate his work with the channel Contractor of the channel at the outfall end of Storm Water Sewer No. 111.

3. Pipe furnished for this project shall be either all reinforced concrete pipe or all corrugated metal pipe. Corrugated metal pipe shall conform to the applicated sections of Section 1009.05 and 1009.07 of the 1973 Kansas State Highway Specifications. Corrugated metal pipe furnished for this project is not required to be coated. The outfall pipes from curb inlets shall be same size corrugated metal pipe as shown for reinforced concrete pipe.

4. All curb inlets are to be constructed at the "set-back" location. Construction notes for each inlet gives the size and length of the outflow pipe together with its upstream flow elevation (U.S.F.L.) and its downstream flow elevation (D.S.F.L.).

5. All brick manholes are to be constructed in accordance with Wichita Standard Drawing entitled "Sewer Appurtenances." Manhole rings having a base diameter of 54" shall be used with all brick manholes.

DONALD E. SCHNEIDER LICENSED 6311 KANSAS PROFESSIONAL ENGINEER

DATE: _____

PROJ. NO. DBKA574054

As Built 6-27-75

STORM WATER SEWER NO. 111
SHEET 1 OF 7

1/7

DCO-108, DCO-114

BM 158.58 NW Cor Conc. Porch WS No. 1508 Murray

Sta. 1+25
Constr. MH with beehive grate

Start Pipe Sta. 0+35
End-Section, Paid for as L.F. of Pipe

18" Sanitary Sewer (Proposed)

6" Conc. Slab Channel Lining

℄ OF PROPOSED 50' BOTTOM DITCH

Lot Line ℄ & of 20' Drainage Easement

Combined Inlet Manhole
Sta. ~~2+97.8~~, Top 153.10
2+97.7

2'×5' Inlet, Top 156.20
18"×31' RCP, USFL 152.00, DSFL 149.40

2'×5' Inlet, Top 153.30
15"×26' RCP, USFL 149.90, DSFL 149.60

2'×5' Inlet, Top 153.00
15"×13' RCP, USFL 149.50, DSFL 148.80

2'×5' Inlet, Top 153.00
15"×25' RCP, USFL 149.50, DSFL 148.80

Constr. Manhole
Sta. ~~3+55.0~~
3+56

Constr. Manhole
Sta. ~~6+28.5~~
6+29

2'×5' Inlet, Top 156.20
15"×39' RCP, USFL 152.40, DSFL 152.20

2'×5' Inlet, Top 156.40
15"×26' RCP, USFL 153.00 DSFL 152.70

2'×5' Inlet, Top 154.52
15"×13' RCP, USFL 153.00, DSFL 150.70

Constr. Manhole
Sta. ~~9+88.4~~
9+86.9

2'×5' Inlet, Top 154.40
15"×25' RCP, USFL 152.90, DSFL 150.70

Line No. 1

SCALE 1"=40'

AVENUE — MURRAY — THURMAN CT. — WESTFIELD

THURMAN ST.

DRAINAGE EASEMENT — UTILITY EASEMENT

31' B/B, 60' R/W — 64' R/W, 35' B/B — 55' B/B, 64' R/W

185' — 270' — 596.76' — 650.1' — 545' — 125' — 100' — 65'

Note: Storm Sewer between Sta. 0+35 and 2+97.8 is not to be constructed until new channel is constructed. A temporary channel shall be constructed from the existing channel between Sta. 0+70 and Sta. 2+97.8 to temporarily drain storm sewer system. The Engineer shall designate the order of construction to facilitate paving of Byron Road from Thurman Street to N.L. Lot 9, Block 8; Wood Drive from 13th Street to Thurman Street; and Thurman Street from E.L. Lot 25, Block 6 to E.L. Wood Drive. Construction of temporary channel will not be paid for directly and the cost for this work shall be considered as subsidiary to the other items of work.

Plan Scale 1"=40'

Profile Scale Horz. 1"=40'
Vert. 1"=5'

Ditch by Others

Start Pipe Sta. 0+35
End Section, Paid for as L.F. of Pipe

Sta. 1+25 Constr. 2' dia. manhole with beehive grate, Top 152.00

Sta. 2+97.8 Combined Inlet Manhole
Top 153.10, See Sheet 5

Sta. 3+55.7 Reinf. Conc. Manhole
Top 152.70 See Sheet 6

Sta 6+28.5 Reinf. Conc. Manhole
Top 155.36 See Sheet 6

Sta. 9+88.4 Reinf. Conc. Manhole
Top 156.16 See Sheet 6

EXISTING GROUND PROFILE @ ℄ OF THURMAN ST.

PROPOSED TOP OF PAVEMENT @ ℄ PROFILE

18" Sanitary Sewer

℄ DITCH EL 144.40

144.93 — 145.72 / 145.82 — 146.00 / 146.10 — 144.92 — 148.00

Line No. 1

262.8' of 48" RCP @ +0.30%
262.8' of 54" CMP @ +0.30% (FL 0.50' below as shown)

57.9' of 48" RCP @ +0.30%
57.9' of 54" CMP @ +0.30% (FL 0.50' below as shown)

272.8' of 48" RCP @ +0.30%
272.8' of 54" CMP @ +0.30% (FL 0.50' below as shown)

359.9' of 48" RCP @ +0.30%
359.9' of 54" CMP @ +0.30% (FL 0.50' below as shown)

211.6' of 48" RCP @ +0.30%
211.6' of 54" CMP @ +0.30% (FL 0.50' below as shown)

145.13 — 145.43 — 145.83 — 146.23 — 146.53 — 146.83 — 147.13 — 147.43 — 147.73 — 148.03 — 148.33 — 148.63

0+00 — 1+00 — 2+00 — 3+00 — 4+00 — 5+00 — 6+00 — 7+00 — 8+00 — 9+00 — 10+00 — 11+00 — 12+00

160 — 155 — 150 — 145 — 140

Rev. 7-8-76 Add MH @ Sta. 1+25

S.W.S. # 111 Proj. No. 08KA574059
Sht. # 2 of 7

DCD-108

2'x5' Inlet, Top 155.60
18"x24' RCP, USFL 151.40, DSFL 151.30

2'x5' Inlet, Top 155.20
18"x13' RCP, USFL 151.20
DSFL 151.00

BYRON RD.

64' R/W

35'-8"

2'x5' Inlet, Top 157.50
15"x44' RCP, USFL ~~154.00~~, DSFL ~~153.60~~

2'x5' Inlet, Top 155.40
15"x39' RCP, USFL 152.10, DSFL 151.80

2'x5' Inlet, Top 155.40
15"x24' RCP, USFL 152.50, DSFL 152.20

Prop. Water

10'

2'x5' Inlet, Top 155.22
15"x4' RCP, USFL 151.90, DSFL 151.80

2'x5' Inlet, Top 155.20
15"x25' RCP, USFL 151.70, DSFL 151.40

Construct Manhole
Sta. ~~12+68.1~~
12+72

THURMAN

2'x5' Inlet, Top 157.50
18"x39' RCP, USFL ~~153.50~~ DSFL ~~152.40~~

2'x5' Inlet, Top 157.10
15"x28' RCP, USFL ~~153.90~~, DSFL ~~153.60~~

DR.

70' R/W

41'-8"

Prop. Water

Curve Data @ Thurman St.
Δ = 45°00'
R = 232.00'

16+44

Construct Manhole Sta. ~~16+42.8~~ Line 1
Sta. 0+00 Line 2

2'x5' Inlet, Top 157.50
15"x29' RCP, USFL 154.00, DSFL 152.90

Line 2

WOOD

Line 2

2'x5' Inlet, Top 157.10
15"x28' RCP, USFL 154.40, DSFL 154.10

2'x5' Inlet, Top 157.30
15"x17' RCP, USFL 154.00, DSFL 152.90

Constr. Manhole
See Sheet 4

STREET

Line No. 1

1/2 Δ

19+29.6

Construct Manhole Sta. ~~19+28.5~~

2'x5' Inlet, Top 159.80
15"x13' RCP, USFL 144.30, DSFL 155.90

MAYBELLE

2'x5' Inlet, Top 164.90
15"x39' RCP, USFL 161.40
DSFL 161.00

2'x5' Inlet, Top 164.90
18"x28" RCP USFL 140.80, DSFL 140.50

2'x5' Inlet, Top 164.50
18"x13' RCP, USFL 160.40, DSFL 159.90

64' R/W

35'-8"

2'x5' Inlet, Top 164.90
15"x28' RCP, USFL 161.80, DSFL 161.50

23+24

Construct Manhole Sta. ~~23+18.5~~

Plan Scale 1"=40'
Profile Scale Horz. 1"=40'
Vert. 1"=5'

Sta. 12+68.1 Reinf. Conc. Manhole
Top 154.50
See Sheet 6

Sta. 16+42.8 Reinf. Conc. Manhole
Top 157.18
See Sheet 6

Sta. 19+28.5 Type B 4'dia. Manhole
Top 159.50

Sta. 23+16.6
Type B 4'dia. Manhole
Top 164.20

Exist. Ground

Prop. Top of Pavement

Line No. 1

160
155
150
145

67.1 L.F. of 48" R.C.P. @ +.3%

67.1 L.F. of 54" C.M.P. @ +0.30% (Ft. 0.50' below as shown)

373.7 L.F. of 42" R.C.P. @ +0.30%

373.7 L.F. of 48" C.M.P. @ +0.30% (Ft. 0.50' below as shown)

673.8 L.F. 24" R.C.P. @ +1.10%

673.8 L.F. 30" C.M.P. @ +1.10% (Ft. 0.50' below as shown)

148.63	Out = 148.84	149.43	149.73	150.03	150.33	Out = 150.46	151.96	152.59	153.69	154.79	Out = 155.10	155.20	155.99	157.09	158.19	159.29	157.47					
12	167.1	In = 147.34	13	14	15	16	142.8	In = 151.96	17	18	19	128.5	In = 155.20	20	21	22	23	176.6				

LINE 1, SWS# 111, Project No. DBKA 574054

DCD 1M, 1CD 108

BM 158.75 SE Cor. Conc. Porch @ 9116 Nantucket

Line 1 — Line 1

64' ROW — 32' B/B

THURMAN DRIVE

6'

Construct Manhole Sta 0+00 Line 2
Sta. 16+62.8 Line 1

See Sheet 3 — See Sheet 3

Construct Manhole Sta ~~0+46.7~~ 0+46.6

8" Water

WOOD DRIVE

8" Sanitary Sewer

2'x5' Inlet, Top 158.30
15"x32" RCP, USFL 154.80 DSFL 154.20

Constr. Manhole Sta ~~3+37.2~~ 3+31.2

3+31.2 Std. 2'x5' Inlet

SCALE: Hor. 1"=40'
Ver. 1"=5'

70' ROW — 41' B/B — 8.7' — 6'

2'x5' ~~Inlet~~ Top 158.10 — Inlet Removed
15"x13" RCP, USFL 154.60, DSFL 154.30

Construct Manhole Sta. ~~3+50~~ 3+50

2'x5' ~~Inlet~~ Top 158.10 — Inlet Removed
15"x25" RCP, USFL 154.60, DSFL 154.30

Plug

60' ROW — 31' B/B — NANTUCKET

6'

64' ROW — 35' B/B — NANTUCKET CIRCLE

Plug

8.7'

8.7'

R=50'

5' — Lot 9 — 5' — 132.53'

Construct Manhole
Sta. ~~3+06.6~~ 6+67.3
Lot Line & ℄ of 20' Drainage Easement

10' — 20' Drainage Easement

SCALE: Hor. 1"=40'
Ver. 1"=5'

9+69.5

Construct Manhole Sta. ~~9+66.9~~
Top 160.50, Install Beehive Cover at no additional cost.

Lot 17

10' — 20' Drainage Easement

157.84' — 10' — ℄ Lot Line

℄ 8" Sanitary Sewer

Lot 9 — Lot 4

8" Sanitary Sewer — ℄ Lot Line

Construct Manhole
Sta. ~~8+09.5~~ 8+05.2

Lot 16

Lot 17

Sta. 0+00 Manhole
See Sheet 3

Sta. 0+42.7
Type B 5' dia. Manhole
T.O.P. 157.23

Sta. 3+18
Type B 5' dia. Manhole
Top 158.20

Sta. 3+49.7
Type B 5' dia. MH
Top 157.80

Sta. 6+46
Type A 4' dia. MH
Top 160.00

Sta. ~~8+09.5~~ 8+05.2
Type A 4' dia. MH
Top 161.90

Sta. 9+66.3
Type A 4' dia. MH
Top 160.50

Existing Ground

Proposed surface

Line No. 2

℄ 8" Sanitary Sewer

Install conc. arch over sanitary sewer full width of storm sewer trench. Cost incidental to project

8" Sanitary Sewer

151.46	151.65	152.71	152.81	152.96	153.46	154.22	155.22	155.37	156.02	
151.46	151.86	152.26	152.66	153.66	154.06	154.46	154.86	155.26	155.76	
0	1	2	3	4	5	6	7	8	9	

37.5' of 30" RCP @ +0.40%
37.5' of 36" CMP @ +0.40% (℄ 0.50' below as shown)

112' of 30" RCP @ +0.40%
312' of 36" RCP @ +0.40% (℄ 0.50' below as shown)

453.8' of 24" RCP @ +0.40%
453.8' of 30" CMP @ +0.40% (℄ 0.50' below as shown)

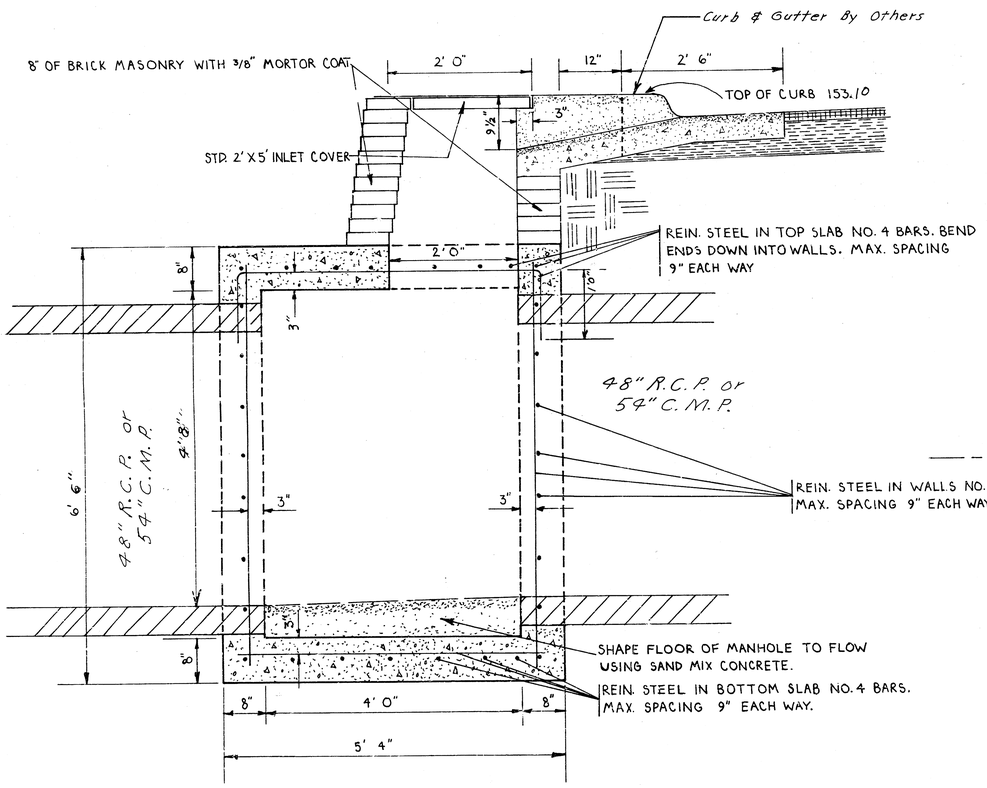
162.8' of 24" RCP @ +0.40%
162.8' of 30" CMP @ +0.40% (℄ 0.50' below as shown)

LINE-2, SWS # 111, Project No. DBKA 574054 Sheet 4 of 7

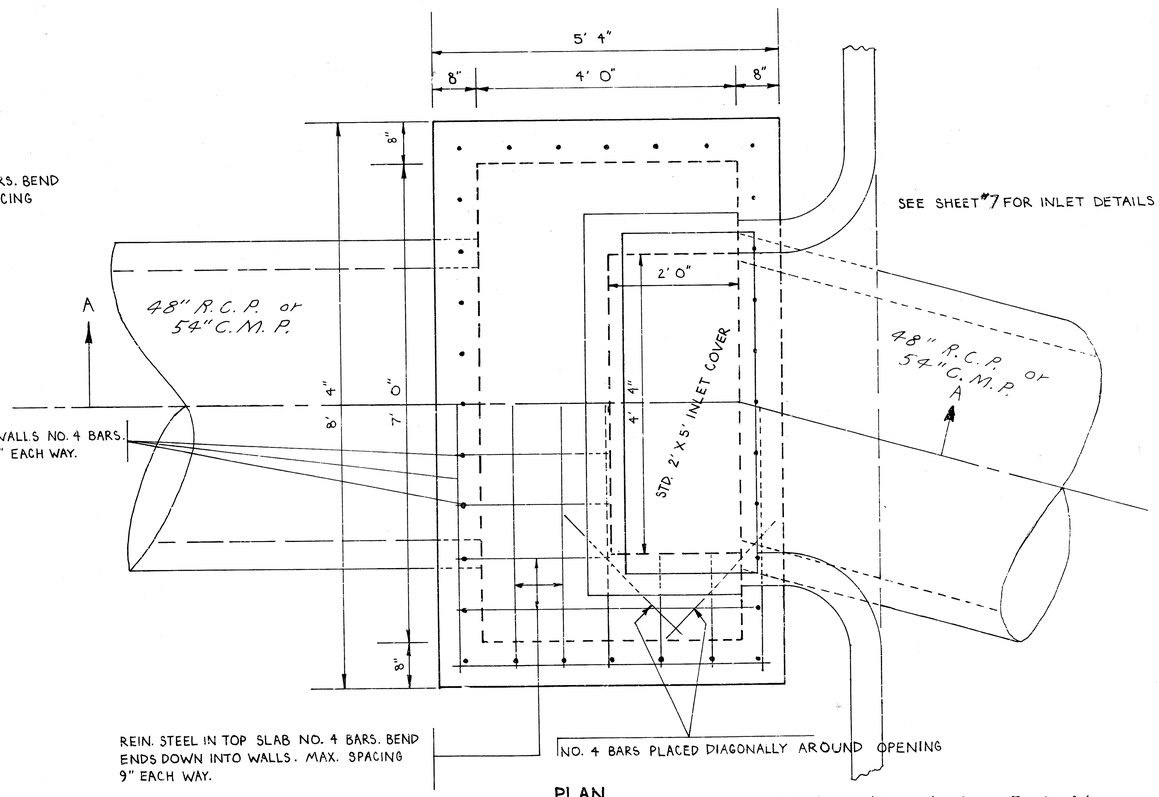
COMBINED INLET MANHOLE

@ STATION 2+97.8

CONCRETE FOR INLET MANHOLE SHALL BE SIX SACK PAVING MIX. THE BID PRICE FOR THIS COMBINED INLET MANHOLE SHALL INCLUDE THE COST OF EXCAVATION, FURNISHING AND PLACING CONCRETE, BRICKS, COVER PLATE, AND REINFORCING STEEL.

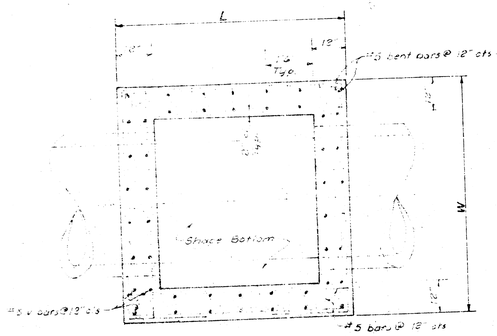


SECTION A-A



PLAN

Combined Inlet Manhole Detail
S. W. S. #111
Proj. No. DBKA574054
Sheet #5 of 7

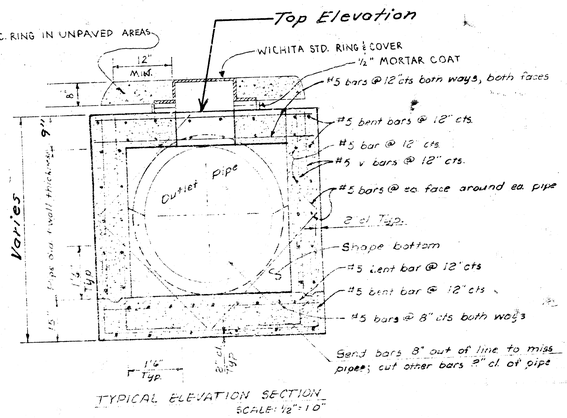


PLAN SECTION THRU WALLS
SCALE: 1/2" = 1'-0"

MANHOLE SCHEDULE

STATION	"L"	"W"	Top Elev.
3+55.7	6'0"	7'0"	150.65
6+28.5	6'0"	7'0"	151.59
9+88.4	6'0"	7'0"	152.67
12+69.1	6'0"	7'0"	153.51
16+42.8	6'0"	7'0"	154.63

PLACE 2' M.N. WIDTH CONC. RING IN UNPAVED AREAS



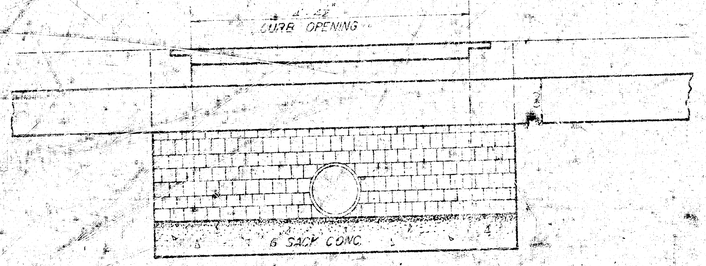
TYPICAL ELEVATION SECTION
SCALE: 1/2" = 1'-0"

STD. REINF. CONC. MANHOLE DETAILS

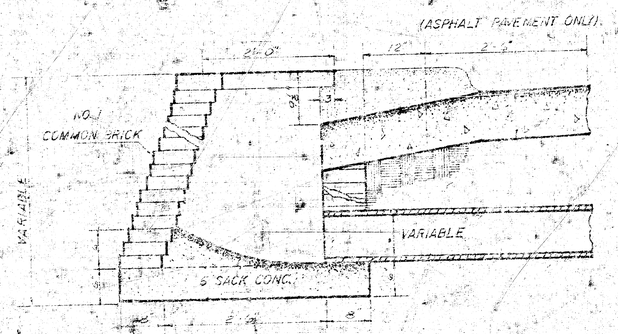
NOTE: THE CONTRACTOR SHALL INCLUDE IN THE BID PRICE FOR ALL SIZE MANHOLES WITHIN THE PROJECT.

Reinforced Concrete Manhole Details
S.W.S. # 111
Proj. No. DBKA574054
Sheet #6 of 7

THIS TYPE INLET TO BE USED WHEN PAVEMENT IS ASPHALT PAVEMENT WITH ASPHALT BASE COURSE AND/OR WHEN PAVEMENTS HAVE ROLL CURB.



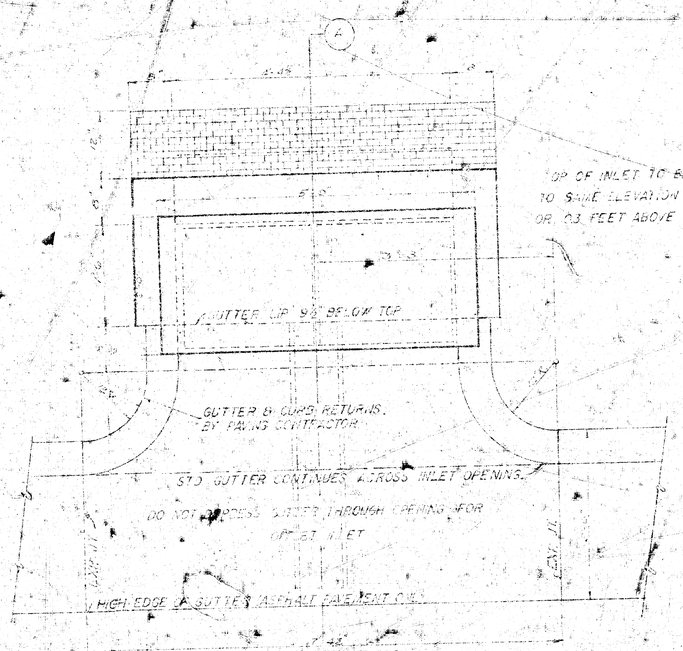
ELEVATION



(A) SECTION THRU INLET
2'5' INLET DETAIL
SCALE 1"=1'0"

NOTE: BRICK FOR INLET CONSTRUCTION SHALL CONFORM WITH THE LATEST REVISION OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS DESIGNATION C32 FOR MANHOLE BRICK GRADE MS.

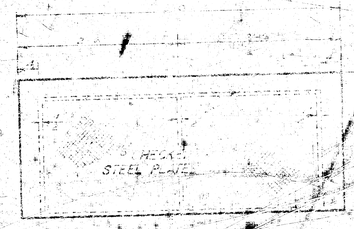
(*) CURB & GUTTER OR PAVEMENT THICKNESS



(A) PLAN
STANDARD 2'x5' INLET AT SET BACK LOCATION
SCALE 1"=1'0"

TOP OF INLET TO BE CONSTRUCTED TO SAME ELEVATION AS STANDARD CURB OR .03 FEET ABOVE ROLL CURB

NOTE: STRUCTURAL STEEL FOR INLET COVER SHALL CONFORM WITH THE LATEST REVISION OF THE AMERICAN SOCIETY FOR TESTING AND MATERIALS DESIGNATION A36.



PLAN

SECTION

ELEVATION

CITY OF WICHITA
STEEL INLET COVER
WEIGHT=206 LBS.
SHOP PAINT=BLACK ASPH
SCALE 1"=1'0"

DETAIL STANDARD 2'x5' INLET (SET BACK LOCATION)

CITY OF WICHITA, KANSAS

W. LINN CITY ENGINEER

JUNE 1974

Project No. DBKA 574054

(50)