PLANS FOR

WATER MAINS & HYDRANTS

IN

GLENN VILLAGE

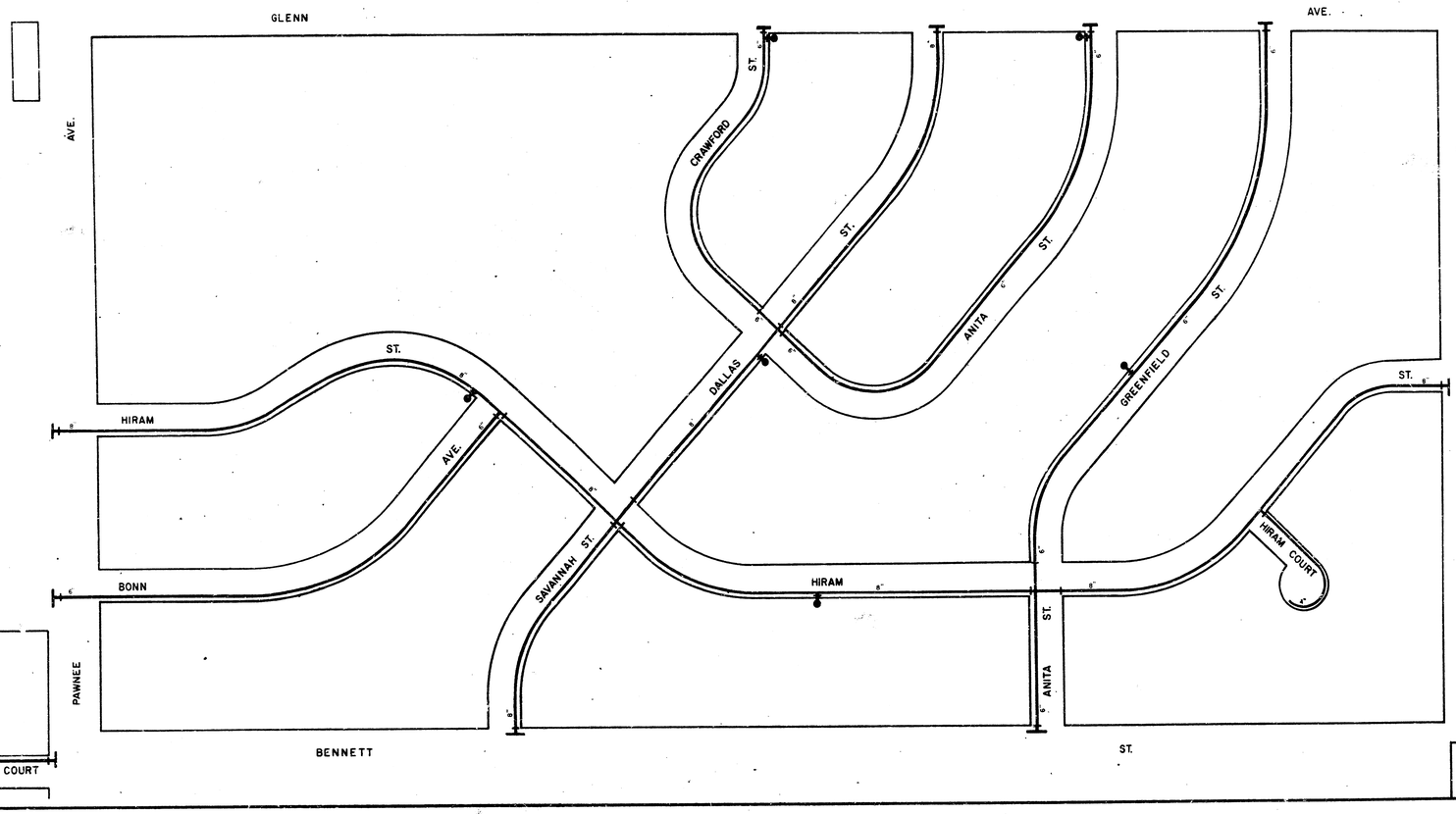
IN CONNECTION WITH

PROJECT NO. KANS. R-10 GLENN VILLAGE

URBAN RENEWAL AGENCY

OF THE

WICHITA, KANSAS METROPOLITIAN AREA



LEGEND:
PROPOSED WATER MAIN
PROPOSED FIRE HYDRANT
PROPOSED VALVE

RECOMENDED FOR APPROVAL

Karl Entz

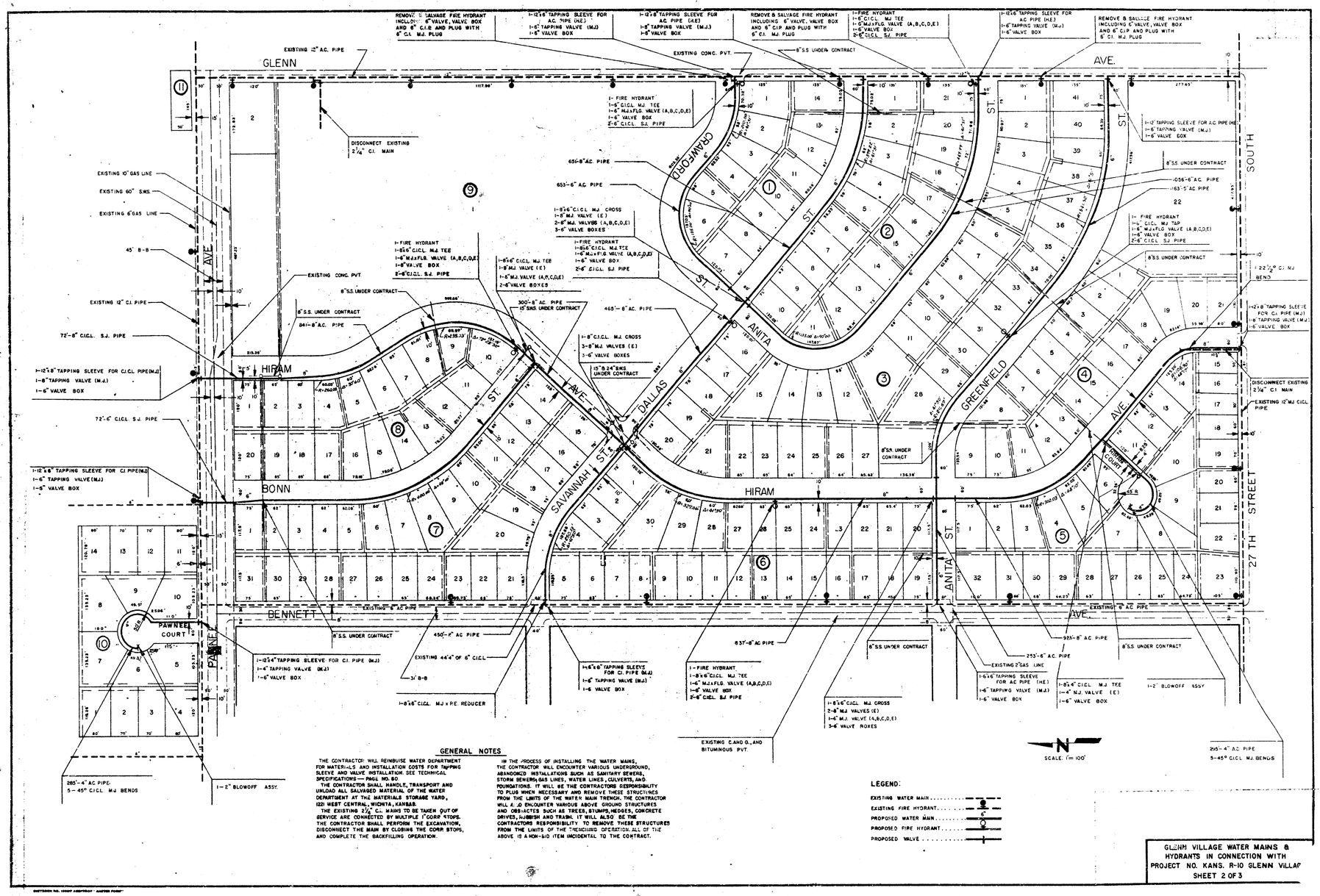
SUPT. OF DESIGN & PLANNING

APPROVAL

OPERATIONS CHIEF ENGINEER

GLENN VILLAGE WATER MAINS & HYDRANTS IN CONNECTION WITH PROJECT NO. KANS. R-10 GLENN VILL

SHEET 1 OF 3



GENERAL NOTES

THE CONTRACTOR WILL REIMBURSE WATER DEPARTMENT FOR MATERIALS AND INSTALLATION COSTS FOR TAPPING SLEEVE AND VALVE INSTALLATION. SEE TECHNICAL SPECIFICATIONS — PAGE NO. 80.

THE CONTRACTOR SHALL HANDLE, TRANSPORT AND UNLOAD ALL SALVAGED MATERIAL OF THE WATER DEPARTMENT AT THE MATERIALS STORAGE YARD, 1221 WEST CENTRAL, WICHITA, KANSAS.

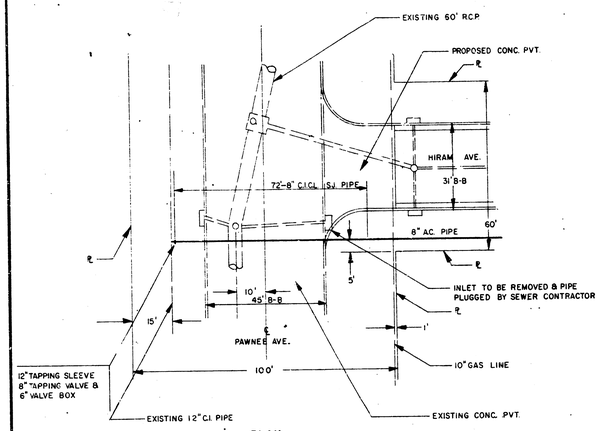
THE EXISTING 2½" C.I. MAINS TO BE TAKEN OUT OF SERVICE ARE CONNECTED BY MULTIPLE 1" CORP STOPS. THE CONTRACTOR SHALL PERFORM THE EXCAVATION, DISCONNECT THE MAIN BY CLOSING THE CORP STOPS, AND COMPLETE THE BACKFILLING OPERATION.

IN THE PROCESS OF INSTALLING THE WATER MAINS, THE CONTRACTOR WILL ENCOUNTER VARIOUS UNDERGROUND, ABANDONED INSTALLATIONS SUCH AS SANITARY SEWERS, STORM SEWERS, GAS LINES, WATER LINES, CULVERTS, AND FOUNDATIONS. IT WILL BE THE CONTRACTORS RESPONSIBILITY TO PLUG WHEN NECESSARY AND REMOVE THESE STRUCTURES FROM THE LIMITS OF THE WATER MAIN TRENCH. THE CONTRACTOR WILL ALSO ENCOUNTER VARIOUS ABOVE GROUND STRUCTURES AND OBSTACLES SUCH AS TREES, STUMPS, HEDGES, CONCRETE DRIVES, RUBBISH AND TRASH. IT WILL ALSO BE THE CONTRACTORS RESPONSIBILITY TO REMOVE THESE STRUCTURES FROM THE LIMITS OF THE TRENCHING OPERATION. ALL OF THE ABOVE IS A NON-BID ITEM INCIDENTAL TO THE CONTRACT.

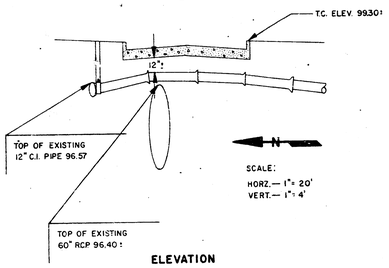
LEGEND:

EXISTING WATER MAIN .....
EXISTING FIRE HYDRANT .....
PROPOSED WATER MAIN .....
PROPOSED FIRE HYDRANT .....
PROPOSED VALVE .....

GLENN VILLAGE WATER MAINS & HYDRANTS IN CONNECTION WITH PROJECT NO. KANS. R-10 GLENN VILLAG
SHEET 2 OF 3

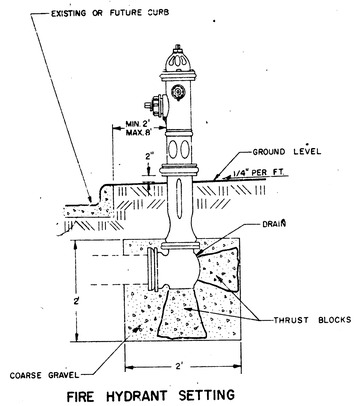


PLAN

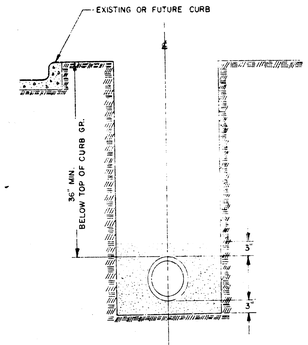


ELEVATION

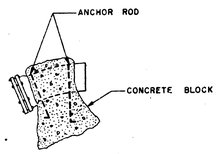
INSTALLATION DETAILS AT PAWNEE AVE. & HIRAM AVE.
(SIMILIAR INSTALLATION AT PAWNEE AVE. & BONN AVE.)



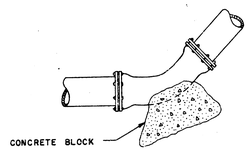
FIRE HYDRANT SETTING



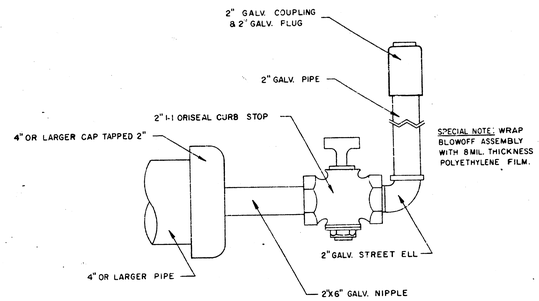
SAND ENCASEMENT
OF
ASBESTOS CEMENT PIPE



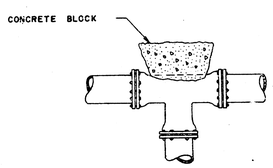
THRUST BLOCK WITH ANCHOR ROD



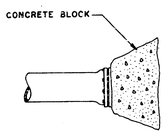
BEND



2" BLOWOFF ASSEMBLY



TEE



PLUG

PIPE SIZE	THRUST AT FITTING IN TONS - AT 150 T/IN^2 P.					
	PLUG	90°	45°	22½°	11¼°	TEE
6"	2.12	2.968	1.613	.827	.416	2.12
8"	3.76	5.33	2.88	1.470	.740	3.76
12"	8.48	11.99	6.49	3.209	1.66	8.48
16"	15.07	21.32	11.54	5.88	2.96	15.07

TYPICAL THRUST BLOCKS

GLENN VILLAGE WATER MAINS & HYDRANTS IN CONNECTION WITH PROJECT NO. KANS. R-10 GLENN VILLAGE
SHEET 3 OF 3

PLANS FOR

SANITARY SEWERS & STORM WATER SEWERS

IN

GLENN VILLAGE

IN CONNECTION WITH

PROJECT NO. KANS. R-10 GLENN VILLAGE

URBAN RENEWAL AGENCY

OF THE

WICHITA, KANSAS METROPOLITIAN AREA

N

SCALE 1" = 100'

Survey by U.S.C. & G.S. Chart Adj. by U.S.C. & G.S. BK. NO. 1156 PG. 76 DATE

BENNETT

SOUTH

STREET

27TH

GLENN

AVE.

ANITA ST.

HIRAM ST.

GREENFIELD ST.

DALLAS ST.

CRAWFORD ST.

SAVANNAH ST.

HIRAM COURT

PAWNEE

BONN AVE.

EVERETT AVE.

PAWNEE COURT

LINE NO. 4 SHEET NO. 5

LINE NO. 4 SHEET NO. 5 — SHEET NO. 6

LINE NO. 6-A SHEET NO. 6

LINE NO. 5 SHEET NO. 5

LINE NO. 5 SHEET NO. 6

LINE NO. 6 SHEET NO. 7

LINE NO. 6 — LINE NO. 6 SHEET NO. 7

LINE NO. 6-A SHEET NO. 8

LINE NO. 7 SHEET NO. 8

LINE NO. 8 SHEET NO. 9

LINE NO. 9 SHEET NO. 10

LINE NO. 10 SHEET NO. 10

LINE NO. 11 SHEET NO. 11

LINE NO. 11 SHEET NO. 11

LINE NO. 2 SHEET NO. 3

LINE NO. 2-A SHEET NO. 3

LINE NO. 1 SHEET NO. 2

LINE NO. 3 SHEET NO. 4

LINE NO. 1 SHEET NO. 4

S.W.S. SHEET NO. 13

S.W.S. SHEET NO. 14

S.W.S. SHEET NO. 15

LINE NO. 13 SHEET NO. 12

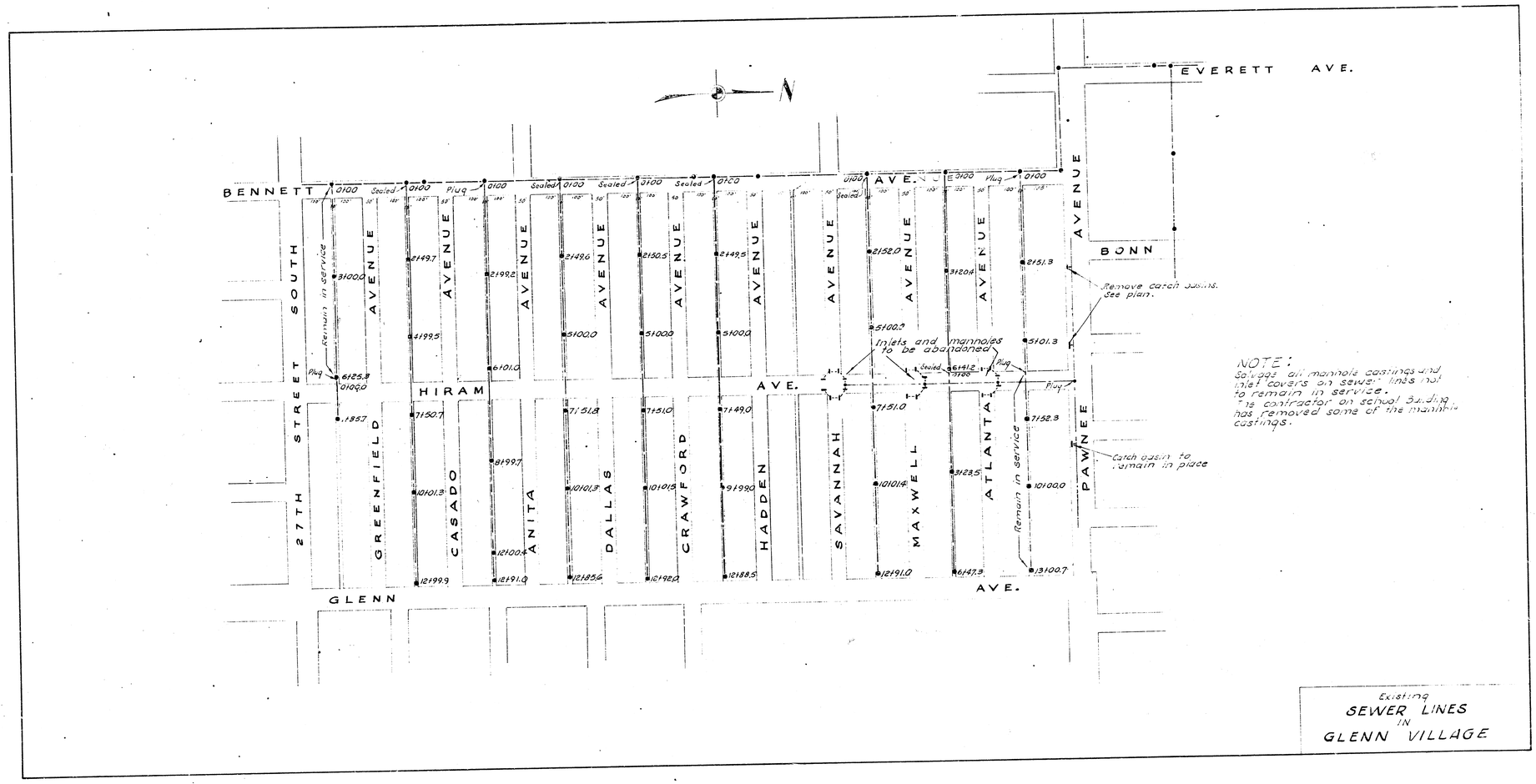
LINE NO. 12 SHEET NO. 12

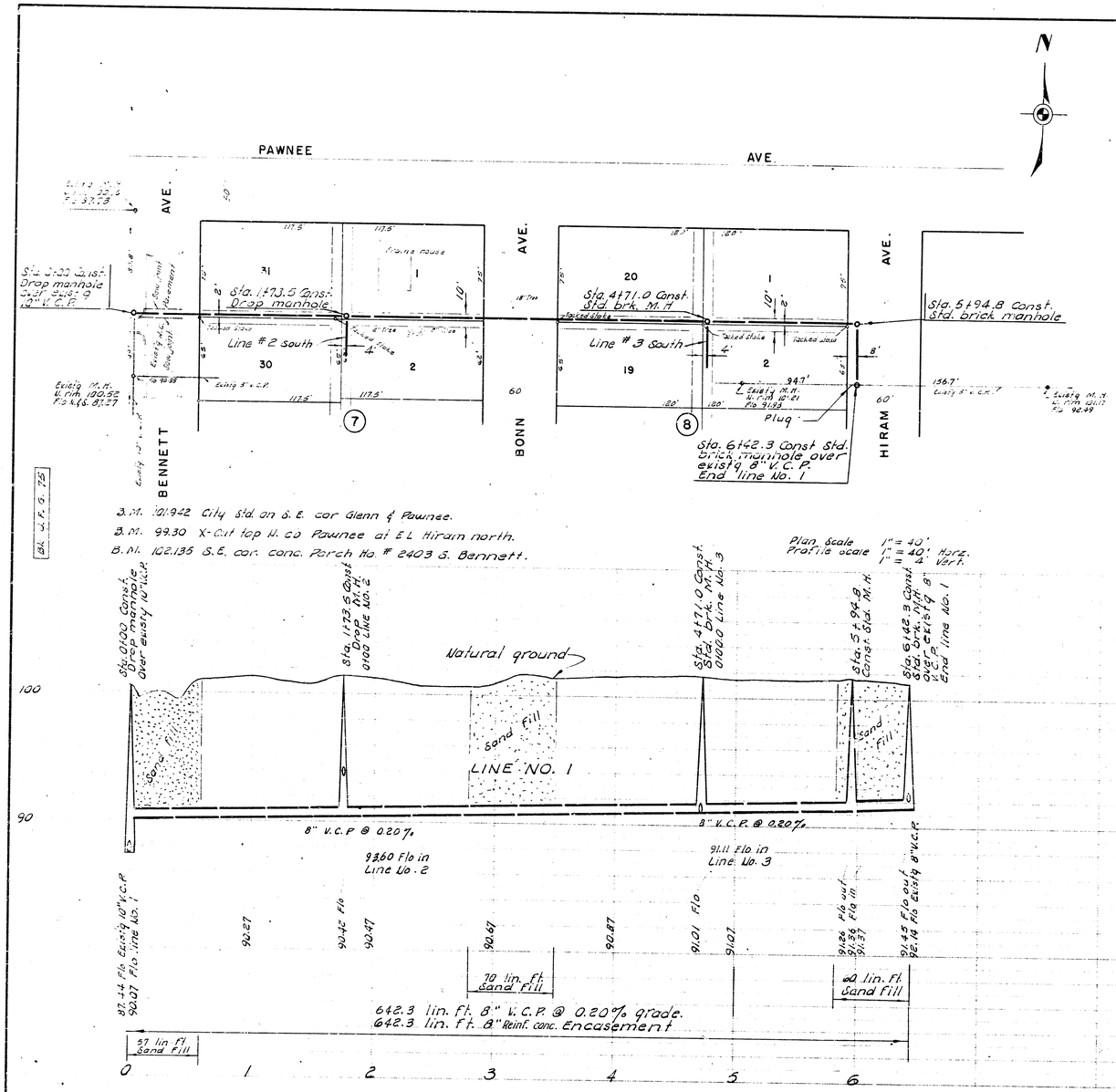
B. E. SMITH
CITY ENGINEER

DATE

DENNIS R. SHIELDS
LICENSED
3583
KANSAS

GLENN VILLAGE SANITARY SEWERS
IN CONNECTION WITH
PROJ. NO. KANS. R-10 GLENN VILLAGE
SHEET 1 OF 15


N
BENNETT
AVE.
EVERETT AVE.
BONN
HIRAM AVE.
GLENN AVE.
27TH STREET
SOUTH
GREENFIELD AVENUE
CASADO AVENUE
ANITA AVENUE
DALLAS AVENUE
CRAWFORD AVENUE
HADDEN AVENUE
SAVANNAH AVENUE
MAXWELL AVENUE
ATLANTA AVENUE
PAWNEE AVENUE
Remain in service
Plug
Sealed
Remove catch basins. See plan.
Inlets and manholes to be abandoned
Catch basin to remain in place
NOTE:
Salvage all manhole castings and inlet covers on sewer lines not to remain in service.
The contractor on school building has removed some of the manhole castings.
Existing
SEWER LINES
IN
GLENN VILLAGE



GENERAL NOTES

The lump sum bid of clearing right of way is to include removal of all appreaches, fences, trees, shrubs, bushes, trash, concrete foundations, buildings, and any other items necessary for the construction of the sewer. Bid of clearing right of way to include replacing fence where called out on the plan.

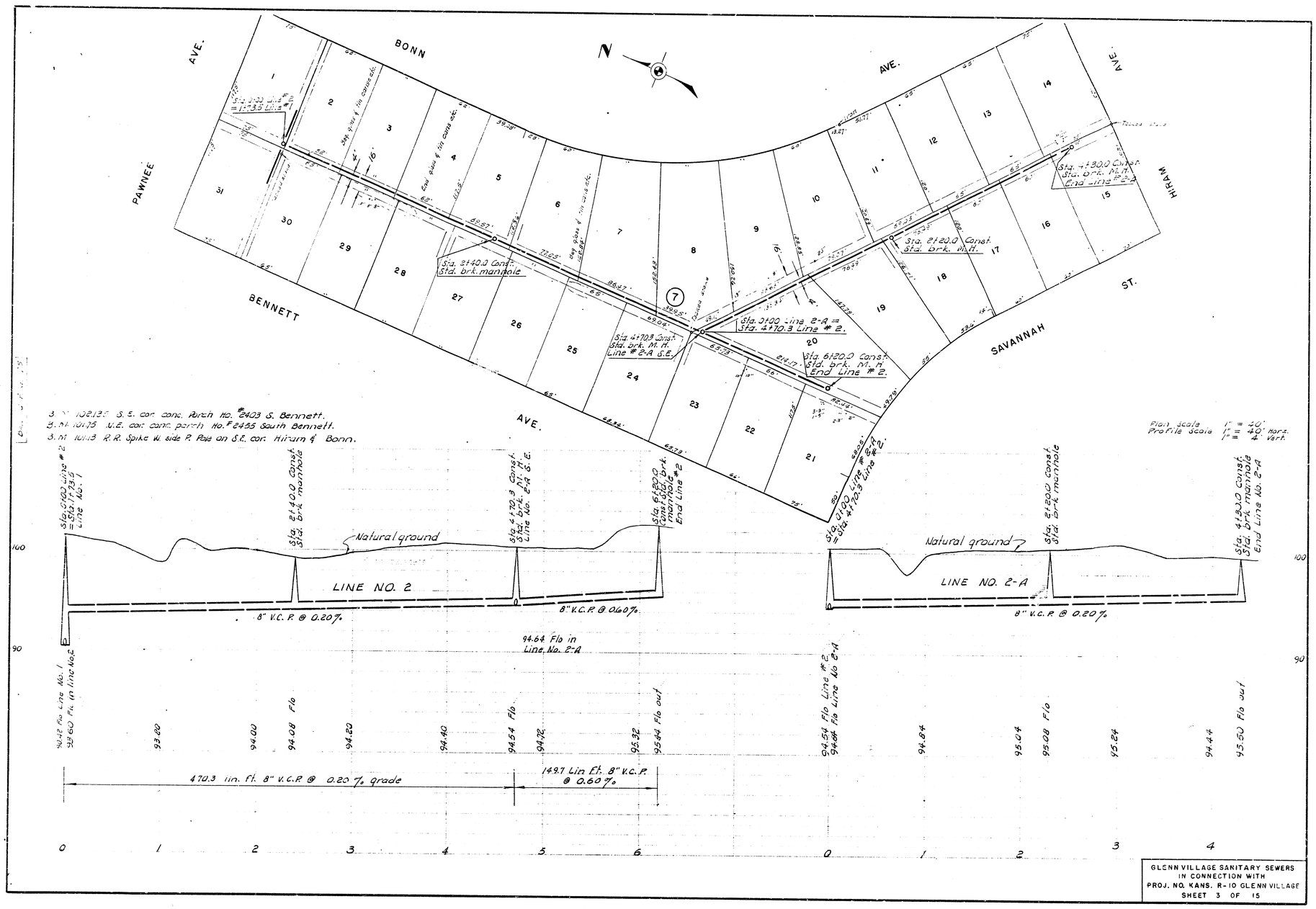
Existing manholes and inlets in the Glenn Village site are to be abandoned as directed by the engineer. Manhole castings and inlet covers in good condition may be used on the new construction. The cost of plugging existing pipes and backfilling the manholes and inlets is a non-bid item incidental to the contract. Approximately 22 inlets and 35 manholes to be abandoned.

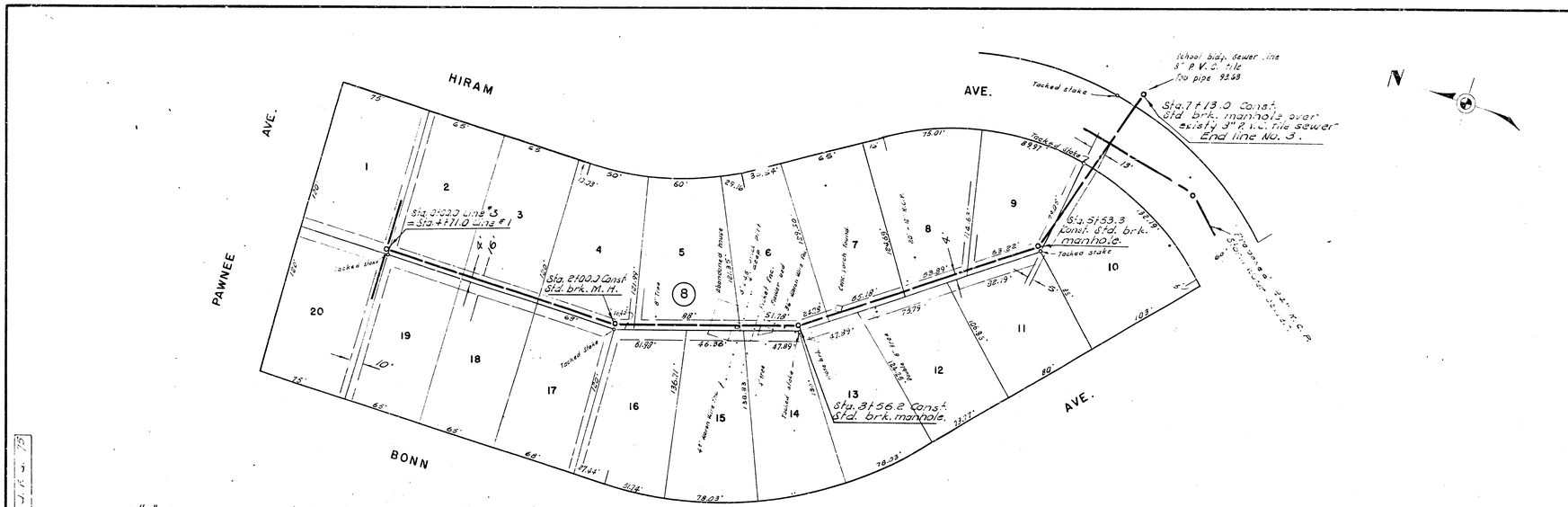
* 8" pipes to be plugged with concrete. Pipes larger than 8" to be plugged with brick and mortar. Manholes and inlets to be filled with dirt.

Install 4" risers as directed by the Engineer. 3/4" encasement concrete up around the casing to 3" above the 1/8 Bend. Cost of extra concrete to be included in the bid of risers.

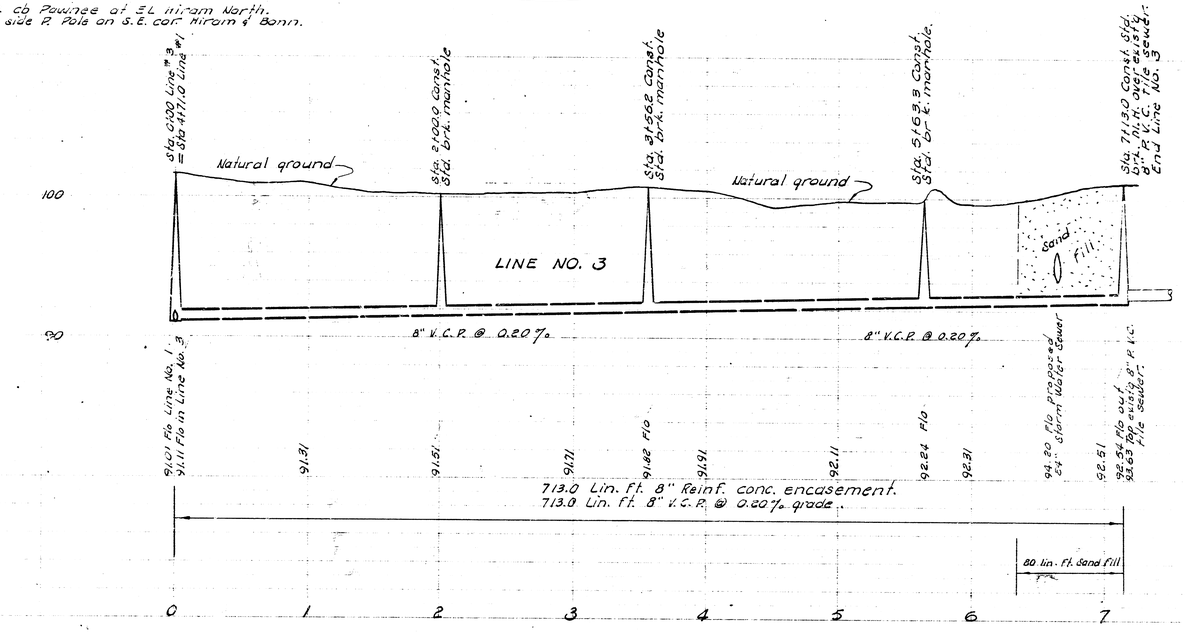
BK. U.F.G. 75

GLENN VILLAGE SANITARY SEWERS
IN CONNECTION WITH
PROJ. NO. KANS. R-10 GLENN VILLAGE
SHEET 2 OF 15


BONN AVE.
PAWNEE AVE.
HIRAM AVE.
BENNETT AVE.
SAVANNAH ST.
N
Sta. 0+00 Line #1 = Sta. 1+73.5 Line #1
Sta. 2+40.0 Const. Std. brk. manhole
Sta. 4+70.3 Const. Std. brk. M. H. Line # 2-A S.E.
Sta. 0+00 Line 2-A = Sta. 4+70.3 Line # 2.
Sta. 6+20.0 Const. Std. brk. M. H. End Line # 2.
Sta. 2+20.0 Const. Std. brk. M.H.
Sta. 1+30.0 Const. Std. brk. M.H. End Line #2-A
3. M. 102.13 S.E. cor. conc. Porch No. #2403 S. Bennett.
3. M. 101.75 N.E. cor. conc. porch No. #2455 South Bennett.
3. M. 101.13 R.R. Spike W. side P. Pole on S.E. cor. Hiram & Bonn.
Sta. 0+00 Line #2 = Sta. 1+73.5 Line No. 1
Sta. 2+40.0 Const. Std. brk. manhole
Sta. 4+70.3 Const. Std. brk. M. H. Line No. 2-A S.E.
Sta. 6+20.0 Const. Std. brk. M. H. End Line #2
Natural ground
LINE NO. 2
8" V.C.P. @ 0.20%
8" V.C.P. @ 0.60%
94.64 Flo in Line No. 2-A
90.42 Flo Line No. 1
92.60 Flo in Line No. 2
93.80
94.00
94.08 Flo
94.20
94.40
94.54 Flo
94.72
95.32
95.84 Flo out
470.3 lin. ft. 8" V.C.R @ 0.20% grade
149.7 Lin Ft. 8" V.C.P. @ 0.60%
Sta. 0+00 Line #2 = Sta. 4+70.3 Line #2-A
Sta. 2+20.0 Const. Std. brk. manhole
Sta. 4+30.0 Const. Std. brk. manhole End Line No. 2-A
Natural ground
LINE NO. 2-A
8" V.C.P. @ 0.20%
94.54 Flo Line #2
94.64 Flo Line No 2-A
94.84
95.04
95.08 Flo
95.24
94.44
95.50 Flo out
Plan Scale 1" = 40'
Profile Scale 1" = 40' Horz.
1" = 4' Vert.
GLENN VILLAGE SANITARY SEWERS
IN CONNECTION WITH
PROJ. NO. KANS. R-10 GLENN VILLAGE
SHEET 3 OF 15

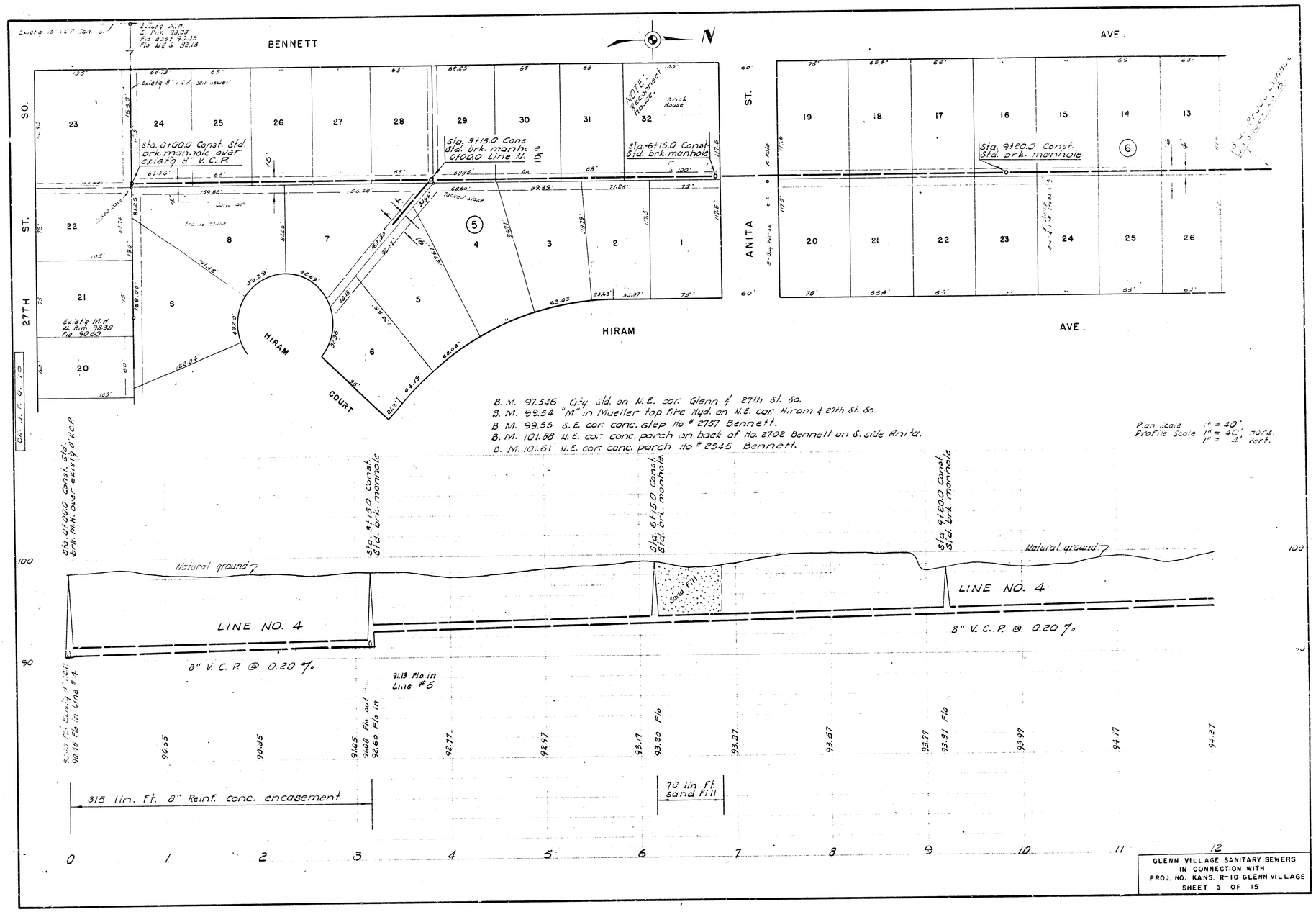


B. M. 99.30 "X" Cut top W. cb Pawnee at E.L Hiram North.
B. M. 101.13 R. R. Spike W. side P. Pole on S.E. cor. Hiram & Bonn.



Plan Scale 1" = 40'
Profile Scale 1" = 40' Horz.
1" = 4' Vert.

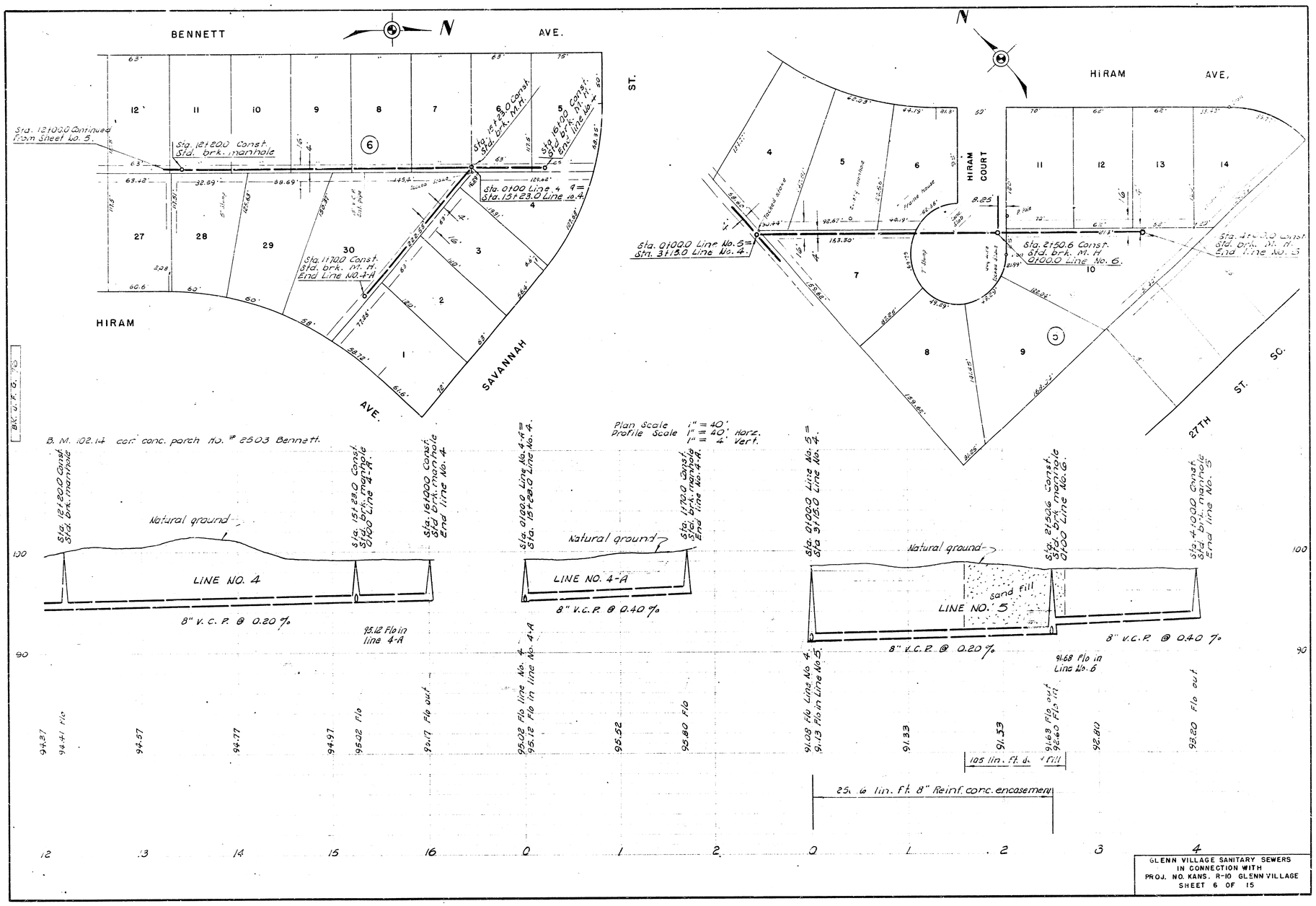
GLENN VILLAGE SANITARY SEWERS
IN CONNECTION WITH
PROJ. NO. KANS. R-10 GLENN VILLAGE
SHEET 4 OF 15



B. M. 97.546 City Std. on N.E. cor. Glenn & 27th St. So.
B. M. 93.54 "M" in Mueller top fire Hyd. on N.E. cor. Hiram & 27th St. So.
B. M. 99.55 S.E. cor. conc. step No # 2757 Bennett.
B. M. 101.88 N.E. cor. conc. porch on back of No. 2702 Bennett on S. side Anita.
B. M. 101.61 N.E. cor. conc. porch No # 2545 Bennett.

Plan Scale 1" = 40'
Profile Scale 1" = 40' Horz.
1" = 4' Vert.

GLENN VILLAGE SANITARY SEWERS
IN CONNECTION WITH
PROJ. NO. KANS. R-10 GLENN VILLAGE
SHEET 5 OF 15



GLENN VILLAGE SANITARY SEWERS
IN CONNECTION WITH
PROJ. NO. KANS. R-10 GLENN VILLAGE
SHEET 6 OF 15

B. M. 101.13 R.R. Spike on S.E. corner of new Bank & Hiram Intersection.

N

HIRAM AVE.

HIRAM COURT

Sta. 0100.0 Line No. 6 = Sta. 21+50.16 Line No. 5.

Sta. 12+90.0 Const. Std. brk. M. H. End line No. 6

Sta. 6+95.0 Const. Std. brk. manhole

Sta. 3+96.0 Const. Std. brk. manhole

Sta. 8+90.0 Const. Std. brk. M. H.

Sta. 11+91.1 Const. Std. brk. M. H. 0100 Line No. 6-A

Sta. 3100.0 Const. Std. brk manhole 0100 Line No. 7

GREENFIELD ST.

ANITA AVE.

DALLAS ST.

Plan Scale 1" = 40'
Profile scale 1" = 40' Horz.
1" = 4' Vert.

B. M. 99.54 R.R. Spike on S.W. side P. Pole Sta. 6+32 approx. 2000' east of baseline. Present St. intersection.

Sta. 0100.0 Line No. 6 = Sta. 21+50.16 Line No. 5

Natural ground

Sand Fill

LINE NO. 6

8" v.c.r. @ 0.20 %

8" v.c.r. @ 0.40%

91.03 Flo line No. 5
91.08 Flo in Line No. 6

92.33 Flo in Line No. 7

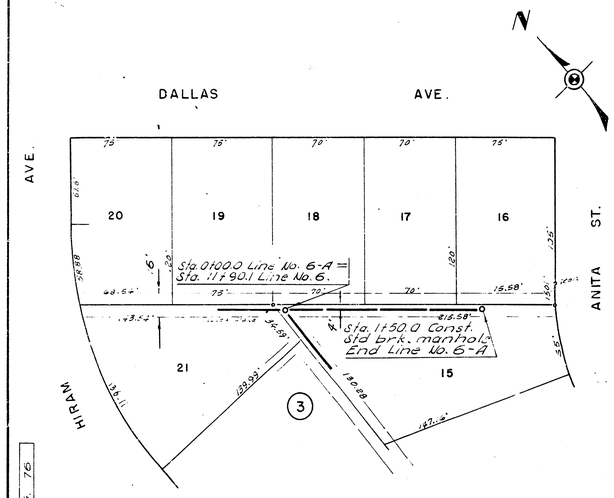
94.71 Flo in Line No. 6-A

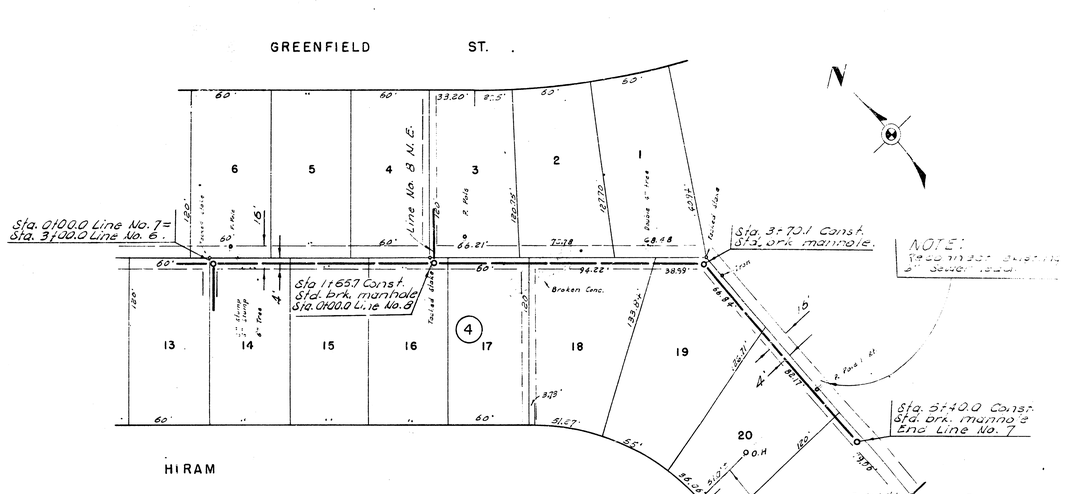
300 lin. Ft. 8" Reinf. conc. encasement

190 lin. Ft. sand Fill

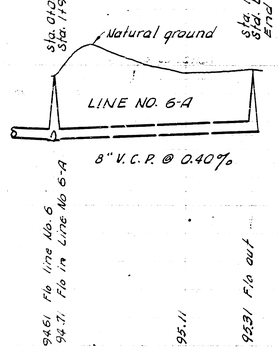
80 lin. ft. Sand Fill

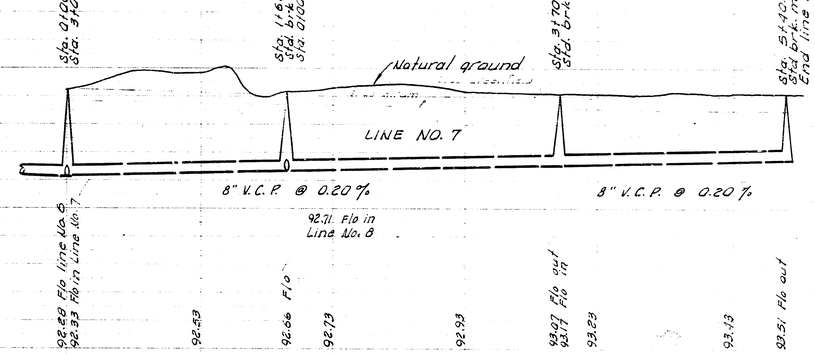
GLENN VILLAGE SANITARY SEWERS
IN CONNECTION WITH
PROJ. NO. KANS R-10 GLENN VILLAGE
SHEET 7 OF 15





Plan Scale 1" = 40'
Profile Scale 1" = 40' Horiz.
1" = 4' Vert.





Sta. U. F. G. 76.

GLENN VILLAGE SANITARY SEWERS
IN CONNECTION WITH
PROJ. NO. KANS. R-10 GLENN VILLAGE
SHEET 8 OF 15

N

GREENFIELD ST.

ANITA ST.

Sta. 6100.0 Const. Std. brk. manhole End line No. 8.

29 | 30 | 31 | 32 | 10 | 9 | 8 | 7

36" - 82.18' C.M.P.

30" - 2.18' C.M.P.

16'

4'

180.22'

Sta. 3100.0 Const. Std. brk. manhole

Line No. 9 Southeast

Sta. 0100.0 Line No. 8 = Sta. 1165.7 Line No. 7

4 | 3 | 33 | 34 | 6

Tacked Stake

Iron Pipe

Guy wire

179.02'

136.36'

125.75'

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

B. M. 99.54 S.W. side P. Pole 5145 25' Rt.

Sta. 01000 Line No. 8 = Sta. 1165.7 Line No. 7

Sta. 2+00.0 Const. Std. brk. manhole 01000 Line No. 9

Sta. 5+00.0 Const. Std. brk. manhole End line No. 8

Sand Fill

LINE NO. 8

8" V.C.P. @ 0.20%

8" V.C.P. @ 0.40%

92.66 F/o line No. 7
92.71 F/o in line No. 8

92.91

93.11

93.31 F/o out
93.41 F/o in

93.81

94.21

94.61 F/o out

93.36 F/o in line No. 9

70 lin. ft. Sand Fill

100

90

0 | 1 | 2 | 3 | 4 | 5 | 6

N

ANITA ST.

GREENFIELD

Sta. 0100.0 Line No. 9 = Sta. 3100.0 Line No. 8

Line No. 10 Sta. 0+27.0

7 | 6 | 5 | 4 | 3 | 2 | 1 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41

Sta. 0176.0 Const. Std. brk. manhole

Sta. 2+72.0 Const. Std. brk. manhole

Sta. 4+00.0 Const. Std. brk. manhole End line No. 10

16'

4'

AVE.

GLENN AVE.

Sta. 3100.0 Line No. 8 = Sta. 5100.0 Line No. 9

Sta. 01+76.0 Const. Std. brk. manhole Sta. 0+27.0 Line No. 10

Sta. 2+72.0 Const. Std. brk. manhole

Sta. 4+00.0 Const. Std. brk. manhole End line No. 10

LINE NO. 9

8" V.C.P. @ 0.20%

93.56 Flo in Line No. 10

93.81 F/o line No. 8
93.96 F/o in line No. 9

93.51

93.56

93.76

93.90 F/o

93.96

94.16 F/o
94.18

0 | 1 | 2 | 3 | 4

GLENN VILLAGE SANITARY SEWERS
IN CONNECTION WITH
PROJ. NO. KANS. R-10 GLENN VILLAGE
SHEET 9 OF 15



Plan Scale 1" = 40'
Profile Scale 1" = 40' Horz.
1" = 4' Vert.

GLENN VILLAGE SANITARY SEWERS
IN CONNECTION WITH
PROJ. NO. KANS. R-10 GLENN VILLAGE
SHEET 10 OF 15

ENG. U. F. G. '76

B. M. 101.13 R. R. spike W. Side P. Pole on S. E. cor. Hiram & Bonn.

N

ANITA ST.

DALLAS ST.

CRAWFORD ST.

Sta. 0100.0 Line #11 = Sta. 3132.1 Line #10

Sta. 1144.1 Const. Std. brk. manhole

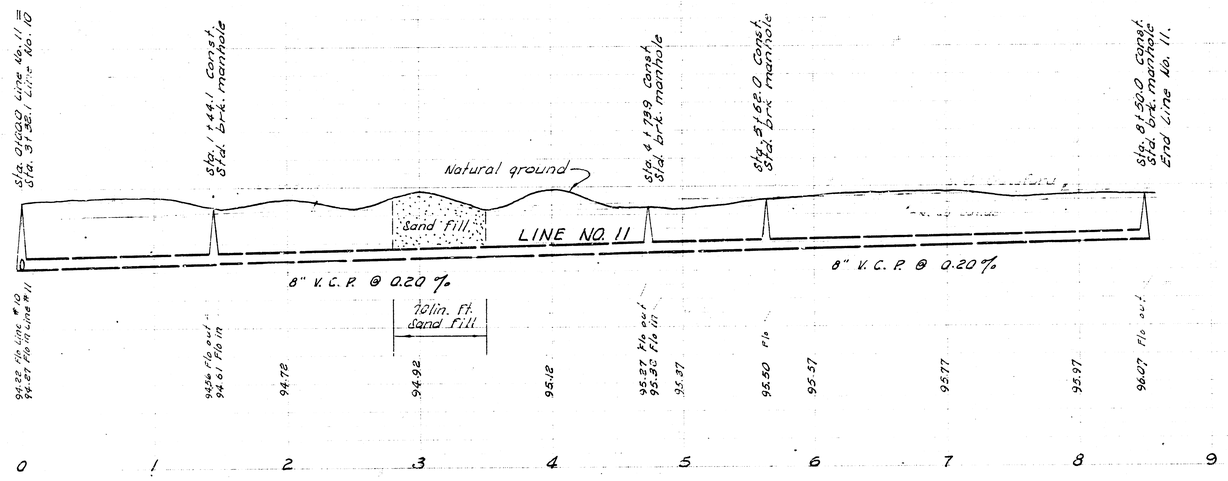
Sta. 1620 Const. Std. brk. M. H.

Sta. 1739 Const. Std. brk. manhole.

Sta. 1750.0 Const. Std. brk. manhole End line No. 11.

GLENN AVE.

Plan Scale 1" = 40'
Profile Sca.e 1" = 40' Horiz.
1" = 4' Vert.



GLENN VILLAGE SANITARY SEWERS
IN CONNECTION WITH
PROJ. NO. KANS. R-10 GLENN VILLAGE
SHEET 11 OF 15

BONN AVE.

PAWNEE AVE.

PAWNEE COURT

Existg M.H. W. Rim 100.08 Flo 90.91

Sta. 0+00.0 Const. Drop M.H. over Existg 8" V.C.P.

Sta. 1+50.0 Const. Std. brk. manhole. End Line No. 12.

Tucked Stake

Chain link Fnc.

Dead Stake

14 13 12 11 8 9 10

70' 70' 70' 80' 100' 113'

120.78' 120.27' 120.39' 120.81' 120.83' 122.50' 122.27' 49.57' 49.57' 25.98'

(10)

Existg M.H. S. Rim 101.15 E. Rim 101.41 Flo E&W 90.41

B. M. 102.135' S. E. cor. conc. Porch No. 2403 Bennett.
B. M. 99.28 "X"-cut top N. cb Pawnee @ E. L. Bonn North.

Sta. 0+00.0 Const. Drop M.H. over Existg 8" V.C.P.

Sta. 1+50.0 Const. Std. brk. manhole End Line No. 12.

Natural ground

LINE NO. 12

8" V.C.P. @ 0.40%

100 90

90.81 Flo Existg 8" V.C.P. 94.80 Flo in Line #12

95.20 95.80 96.40 Flo out

0 1 2

N

(10) PAWNEE COURT

Existg M.H. E. Rim 101.43 Flo E&W 90.43

7 6 5 1 2 3 4

100' 49.57' 25.98' 195.88' 119.46' 119.63' 132.56' 80' 70' 70' 80'

Chain link Fnc.

5" poplar trees

Dead Stake

Sta. 0+00.0 Const. Special drop manhole over Existg 8" V.C.P.

Sta. 1+50.00 Const. Std. brk. manhole End line No. 13.

Existg 5" V.C.P.

Existg M.H. E. Rim 100.34 Flo East 88.95

EVERETT AVE.

Sta. 0+00.0 Const. Special drop manhole over Existg 8" V.C.P.

Sta. 1+50.0 Const. Std. brk. manhole End Line No. 13

Natural ground

LINE NO. 13

8" V.C.P. @ 0.40%

100 90

90.20 Flo Existg 8" V.C.P. 94.60

95.70 96.10 96.30 Flo out

0 1 2

Plan Scale 1" = 40'
Profile Scale 1" = 40' Horz.
1" = 4' Vert.

GLENN VILLAGE SANITARY SEWERS
IN CONNECTION WITH
PROJ. NO. KANS. R-10 GLENN VILLAGE
SHEET 12 OF 15

N

NOTE:
All trenches are to be sand filled and flushed.

Bid price of sand fill is to include cost of flushing.

PAWNEE AVE.

Existg 60" R.C.P.

Sta. 0+00.0 Const. Reinf. Concrete manhole over existg 60" R.C.P. See detail sheet No. 3

Existg conc. pavement

Saw joint

Remove existg drive. Do not damage drive.

NOTE: See Inlet detail on Sheet No. 3

Existg 24" S.W.S.

Existg 24" S.W.S.

Existg 24" S.W.S.

N

proposed 7" V.C.P. Sanitary Sewer

Sta. 7+87.5 Const. Std. brick manhole

Sta. 8+65.5 Const. Std. brick manhole

Sta. 6+19.5 Const. Std. brick manhole
See detail Sheet No. 3

Sta. 6+00.0 Continued from Sheet No. 1.

Plug

Plug

T.C. 99.20
Flo out 93.50

Flo in 95.30

Flo in 95.10

Exist'g 18" S.W.S.

HIRAM

BONN AVE.

Flo out 93.20
T.C. 98.90
Flo in 93.80

Flo out 94.10
T.C. 98.90

NOTE:
See inlet detail on Sheet No. 3

Exist'g 8" Pavement

AVE.

Sta. 11+46.5 Const. Std. brick manhole

Flo in 96.00
T.C. 98.90

T.C. 98.90
Flo in 96.00

Flo out 96.50
T.C. 98.90

Sta. 12+20.0 Const. Std. brick manhole, End project

T.C. 98.90
Flo out 96.50

T.C. 98.90
Flo out 96.50

DALLAS ST.

SAVANNAH ST.

B.M. 101.13 R. R. Spike W. side P. Pole on S.E. cor. Bonn & Hiram.

Scales: Plan 1" = 30' horiz.
Profile 1" = 20' horiz.
1" = 4' Vert.

Sta. 6+19.5 Const. Std. brk. manhole

Sta. 7+87.5 Const. Std. brk. manhole

Sta. 8+65.5 Const. Std. brk. manhole

Sta. 11+46.5 Const. Std. brk. manhole

Sta. 12+20.0 Const. Std. brk. manhole End project

Present ground elev.

El. top M.H. 99.20

El. top M.H. 99.10

El. top M.H. 98.96

El. top M.H. 98.63

24" R.C.P. @ 0.16 %

24" R.C.P. @ 0.16 %

100

90

94.01

94.04 Flo

94.17

92.46 Flo Proposed 8" San. Sewer.

94.31 Flo

94.33

94.43 Flo

94.49

94.65

94.81

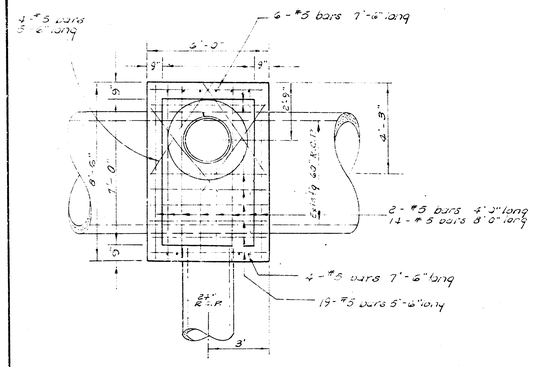
94.88 Flo

94.97

95.00 Flo out

6 7 8 9 10 11 12

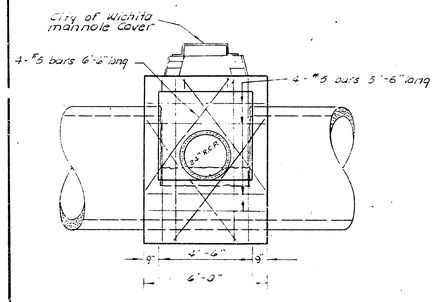
GLENN VILLAGE STORM WATER SEWERS
IN CONNECTION WITH
PROJ. NO. KANS. R-10 GLENN VILLAGE
SHEET 14 OF 15



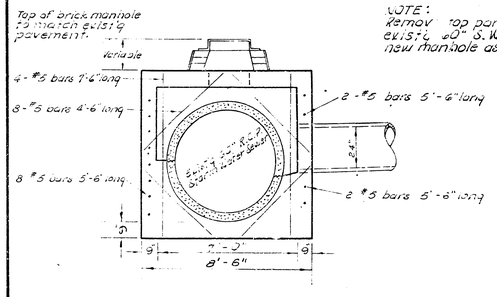
PLAN VIEW

REINF. CONC. MANHOLE
Sta. 0+00.0

Scale 3/8" = 1'-0"

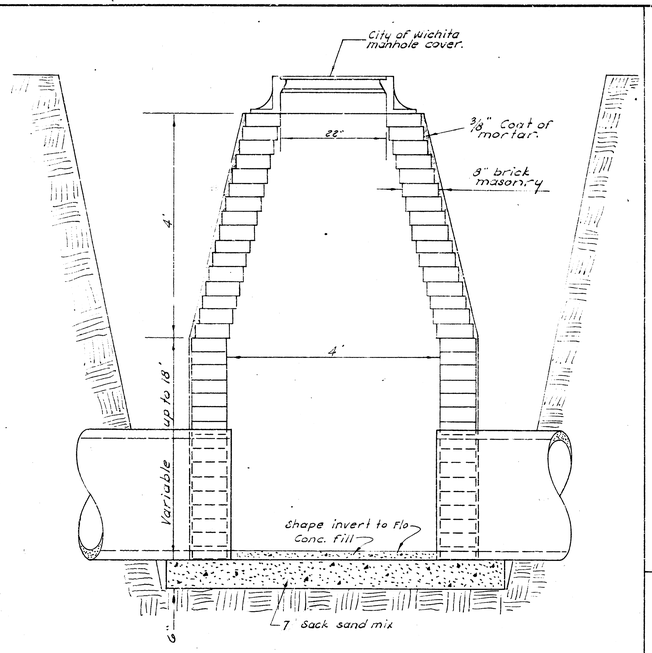


ELEVATION

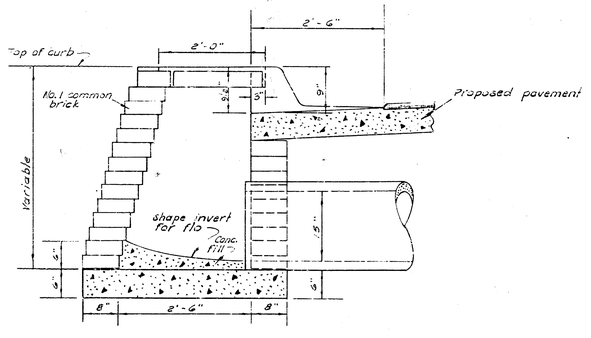


ELEVATION

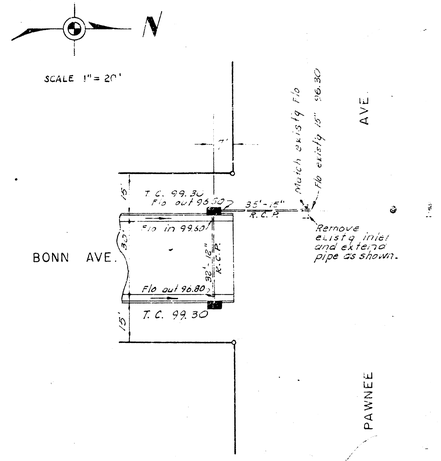
NOTE:
Remov top portion of exist'g 60" S.W.S. thru new manhole as shown.

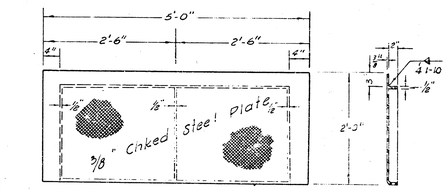


STANDARD BRICK MANHOLE



STANDARD 2'X5' INLET





PLAN SECTION



ELEVATION

CITY OF WICHITA
STEEL INLET COVER
WEIGHT = 206#
SHOP PAINT: BLACK ASPHALT
SCALE 1"=1'-0"

GLENN VILLAGE STORM WATER SEWERS
IN CONNECTION WITH
PROJ. NO. KANS. R-10 GLENN VILLAGE
SHEET 15 OF 13