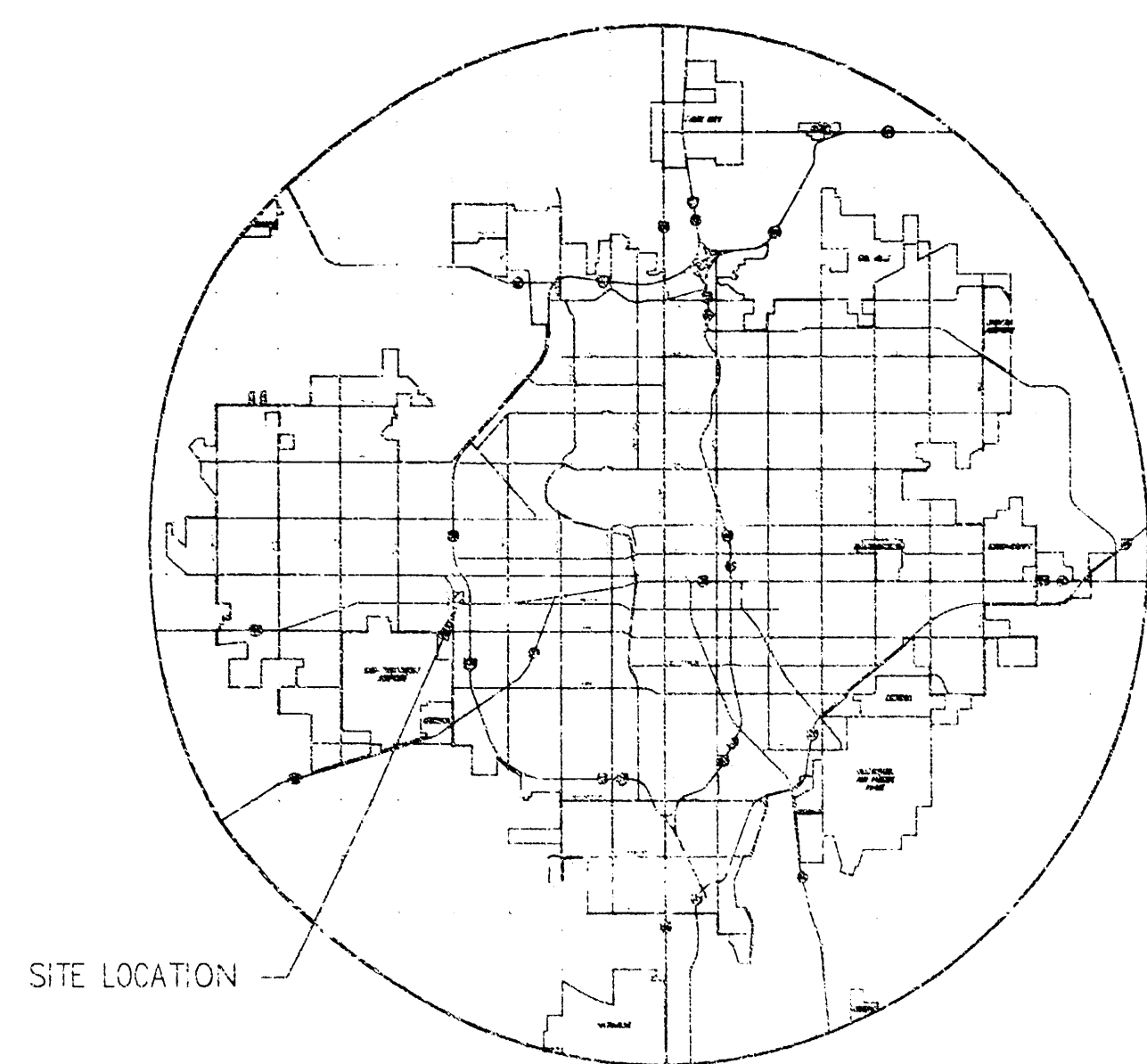




LOCATION MAP

PRIVATE STORM WATER SEWER PLANS  
ROLLINS LEASING CORP  
LOT 2, BLOCK 1  
WEST TOWNE INDUSTRIAL ADDITION  
PROJECT NO. 973PPS

CITY OF WICHITA, KANSAS  
MICHAEL E. LINDEBAK, CITY ENGINEER

OCA #607861

APPROVED AS NOTED  
BY CITY ENGINEER OF WICHITA

SANITARY SEWERS \_\_\_\_\_  
STORM SEWERS VRH 4/5/00  
DRIVEWAY APPROACHED \_\_\_\_\_  
WATER MAINS \_\_\_\_\_  
PAVING \_\_\_\_\_

NOTE TO CONTRACTOR

INSPECTION AND TESTING FOR THIS PROJECT IS TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERING FIRM UNDER CONTRACT WITH THE OWNER/DEVELOPER. SAID INSPECTION TO BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD CONSTRUCTION ENGINEERING PRACTICES AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. NO WORK SHALL BE PERFORMED IN DEDICATED EASEMENTS OR THE PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION, NOR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

GENERAL NOTES

1. THE TOPS OF INLETS AND MANHOLES AS NOTED ON THE PLANS MAY VARY SO AS TO MEET PROPOSED TOP OF CURB ELEVATIONS OR PAVEMENT ELEVATIONS. THE FIELD ENGINEER SHALL LOCATE INLETS AND MANHOLES WITH REFERENCE TO PROPOSED PAVING PLANS OF THE PERTINENT STREETS.
2. ALL CONCRETE SHALL BE STANDARD PAVING MIX UNLESS OTHERWISE NOTED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL 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.
4. TREES TO BE REMOVED ARE MARKED  $\times$ . ALL TREES WHICH IN THE OPINION OF THE FIELD ENGINEER CAN BE SAVED, SHALL BE SAVED.
5. CONTRACTOR SHALL NOTIFY UTILITY COMPANIES OF CONSTRUCTION SCHEDULING.
6. EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS COMPANIES AND IS EITHER FROM COMPANY UTILITY DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.

7. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF FORTY-EIGHT (48) HOURS TO UTILITY COMPANIES TO STARTING ANY EXCAVATION AS FOLLOWS:

KANSAS ONE-CALL 687-2470  
OR 687-2470 (LOCAL WICHITA)

THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF EMERGENCY:

|                                      |                |
|--------------------------------------|----------------|
| CABLEVISION                          | 263-2061       |
| K&E (GAS & ELECTRIC)                 | 383-8600       |
| SOUTHWESTERN BELL TELEPHONE COMPANY  | 1-800-734-7590 |
| CITY OF WICHITA WATER & SEWER MAINT. | 268-4908       |
| ARKLA GAS COMPANY                    | 946-0096       |

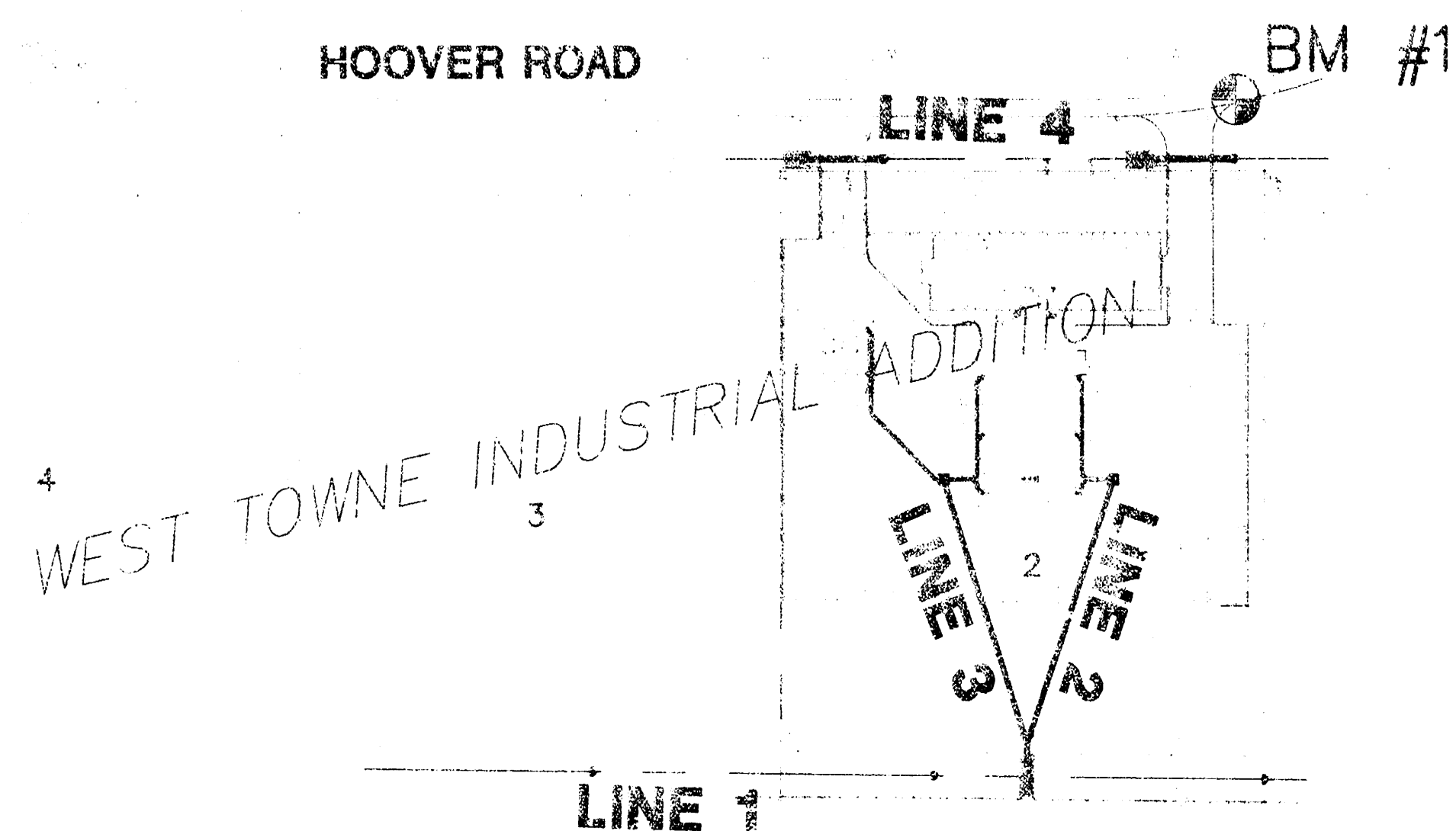
8. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SUITABILITY, APPEARANCE AND SITE LOCATION. LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNGRACEFUL APPEARANCE WILL NOT BE APPROVED. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WOULD REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WOULD REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.

9. CONTRACTOR SHALL RESEED AND MULCH ALL DISTURBED AREAS. COST SHALL BE CONSIDERED SUBSIDIARY TO SITE RESTORATION.

S.W. COR. SW1/4  
SEC 26, T27S, R1W

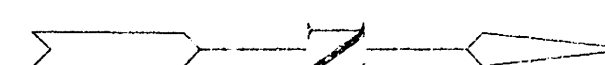
HARRY ST.

HOOVER ROAD



AT & S.F. RAILROAD

WICHITA-VALLEY CENTER  
FLOOD CONTROL RIGHT OF WAY



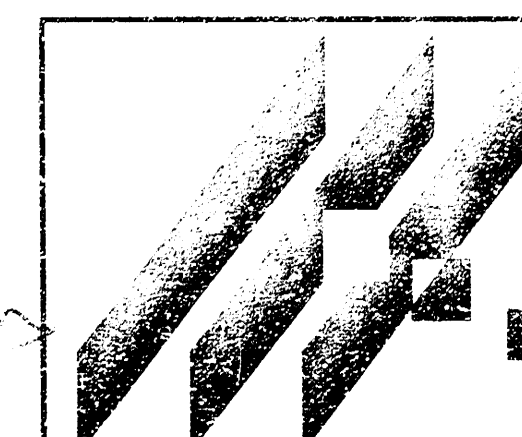
SCALE: 1" = 150'

INDEX TO DRAWINGS

| SHEET NO. | DESCRIPTION                      |
|-----------|----------------------------------|
| 1         | TITLE SHEET                      |
| 2         | LINE 1                           |
| 3         | LINES 2&3                        |
| 4         | LINE 4                           |
| 5         | DROP INLET DETAILS               |
| 6         | CURB INLET DETAILS               |
| 7         | EROSION/SEDIMENT CONTROL DETAILS |
| 8         | FINAL PLAN                       |

BENCHMARKS

BM #1 CHISELED "C" ON EAST TO HOOVER ROAD  
132' SOUTH & 45' WEST OF NW CORNER LOT 2  
ELEV. = 120.47



MID-KANSAS ENGINEERING  
CONSULTANTS, INC.  
411 N. WEBB ROAD  
WICHITA, KS. 67206  
316-684-9600

ROLLINS LEASING CORP.

PROJECT NAME

TITLE SHEET

SHEET TITLE

JTC

DESIGN BY:

RKH/GJR

DRAWN BY:

JTC

CHECKED BY:

JANUARY 2000

DATE

99196-DT

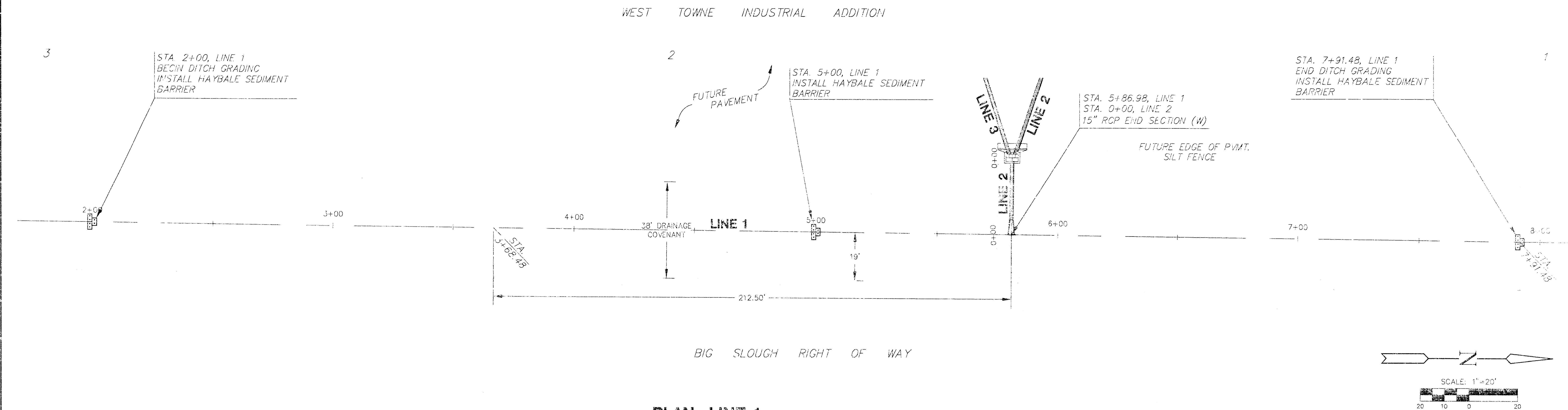
JOB NO.

1

SHEET/OF



ROLLINS LEASING CORP.  
STORM SEWER  
LINE 1

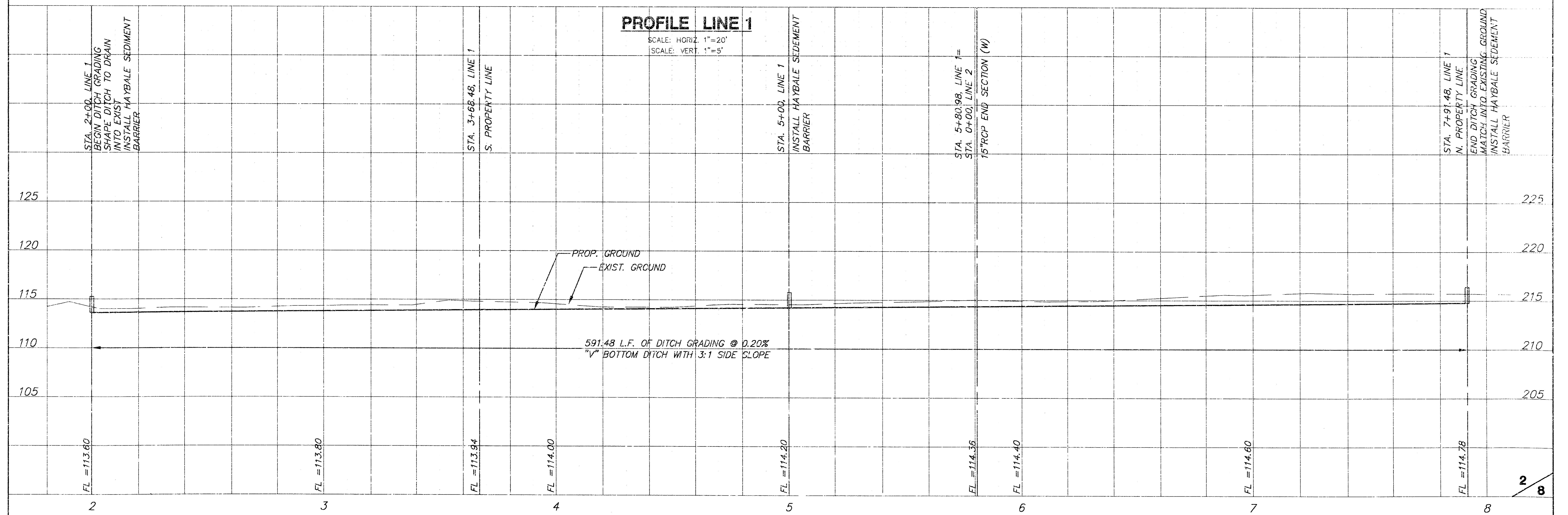


PLAN LINE 1

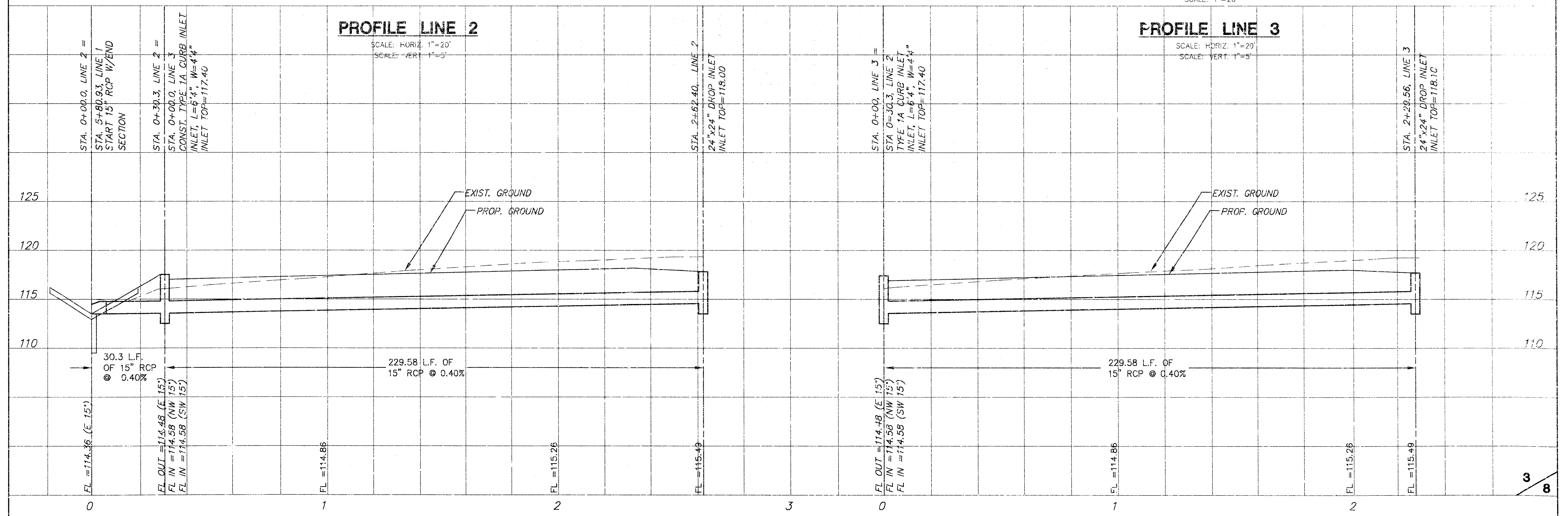
SCALE: 1"=20'

PROFILE LINE 1

SCALE: HORIZ. 1"=20'  
SCALE: VERT. 1"=5'









**ROLLINS LEASING CORP.  
STORM SEWER  
LINE 4**

EXIST. DRIVE & 24" CULVERT TO BE REMOVED AT COMPLETION OF CONSTRUCTION.

INSTALL TEMP. CONST. ENTRANCE/WASH DOWN PAD

STA. 0+69.31, LINE 4  
24" RCP W/END SECTION  
FL=112.04

STA. 1+37.31, LINE 4  
24" RCP W/END SECTION  
FL=112.18

STA. 3+69.19, LINE 4  
24" RCP W/END SECTION  
FL=112.64

STA. 4+45.19, LINE 4  
24" RCP W/END SECTION  
FL=112.80  
INSTALL STRAWBALE SEDIMENT BARRIER

HOOVER ROAD

LINE 4

24" STEEL PIPE

EXIST. 8" SAN. SEW.

20' UTILITY ESMT.

35' BLDG. STBK.

WEST TOWNE INDUSTRIAL PARK

PLAN LINE 4

SCALE: 1"=20'

INSTALL 40 SY OF LIGHTSTONE RIP RAP W/TOEWALL (15'x2'x4')

PROP. CONC. SLOPE DRAIN (BY OTHERS)

SSMH EXIST.  
MH TOP=116.02  
FL OUT=103.97 (8"W)  
FL IN=104.12 (8"N)  
FL IN=104.09 (8"S)

INSTALL 40 SY OF LIGHTSTONE RIP RAP W/TOEWALL (15'x2'x4')

PROP. CONC. SLOPE DRAIN (BY OTHERS)

SSMH EXIST.  
MH TOP=116.33  
FL OUT=103.97 (8"W)  
FL IN=104.12 (8"N)  
FL IN=104.09 (8"S)

SCALE: 1"=20'

**PROFILE LINE 4**

SCALE: HORIZ. 1"=20'  
SCALE: VERT. 1"=5'

STA. 0+69.31, LINE 4  
FL=112.04

STA. 1+37.31, LINE 4  
FL=112.18

STA. 3+69.19, LINE 4  
FL=112.64

STA. 4+45.19, LINE 4  
FL=112.80

STA. 4+73.97, LINE 4  
FL=112.86

PROP. GROUND

EXIST. GROUND

20.34 LF OF DITCH GRADING @ 0.20%  
"V" BOTTOM DITCH W/ 4:1 SIDESLOPE

68.00 LF OF 24" RCP @ 0.21%

231.68 LF OF DITCH GRADING @ 0.20%  
"V" BOTTOM DITCH W/ 4:1 SIDESLOPE

76.00 LF OF 24" RCP @ 0.21%

27.76 LF OF DITCH GRADING @ 0.20%  
"V" BOTTOM DITCH W/ 4:1 SIDESLOPE

0 1 2 3 4 5

105 110 115 120 125

4 8

DOI: 10.1002/jbm.b.10067



Technical drawing of a rectangular plate with two rows of oval holes. The top view shows a width of 23 1/2 inches and a hole spacing of 1 1/2 inches typical. The side view shows a thickness of 2 inches and a total height of 23 1/2 inches. The front view shows a height of 8 3/4 inches and a hole spacing of 2 inches. The holes are 1 3/8 inches wide and 3/8 inch deep.

28 1/2"

29 1/4"

24 3/4"

23 3/4"

2 1/4"

2 1/4"

4"

2"

1/2"

1/2"

1/2"

1/2"

DEETER #2433  
(OR EQUAL)

(REQUIRES ONE GRATE)

OPEN AREA 184 SQ. IN.  
1.28 SQ. FT.

Diagram of a rectangular grate with dimensions and text:

- Overall width: 52"
- Overall height: 29 1/4"
- Inner width: 48"
- Inner height: 27"
- Text inside the grate:
  - DEETER #2434 (OR EQUAL)**
  - (REQUIRES TWO GRATES)
  - OPEN AREA      368 SQ. IN.
  - 2.56 SQ. FT.

IF ASPHALT PAVEMENT,  
CONSTRUCTION LIMITS  
FOR CONCRETE TOP.

24 3/4"

1 1/2"

18" TYP.

2"

NO. 1 COMMON BRICK

FLOOR SHAPING  
(6 SACK SAND MIX)

VARIES

FLOOR SHAPING  
(6 SACK SAND MIX)

STD. CONC. PAVING MIX

3'-6"

NO. 4 BARS @ 12" CTRS.  
BOTH WAYS

IF ASP

STD. CONC. PAVING MIX

3'-6"

NO. 4 BARS @ 12" CTRS.  
BOTH WAYS

IF ASPHALT PAVEMENT,  
CONSTRUCTION LIMITS  
FOR CONCRETE T.C.P.

VARIES (3" - 6" MIN.)

18" TYP.

BRICK MASONRY

FLOOR SHAPING  
(3 SACK SAND MIX)

STD. CONC. PAVING MIX

3'-6"

2" CLR. (TYP.)

VARIES

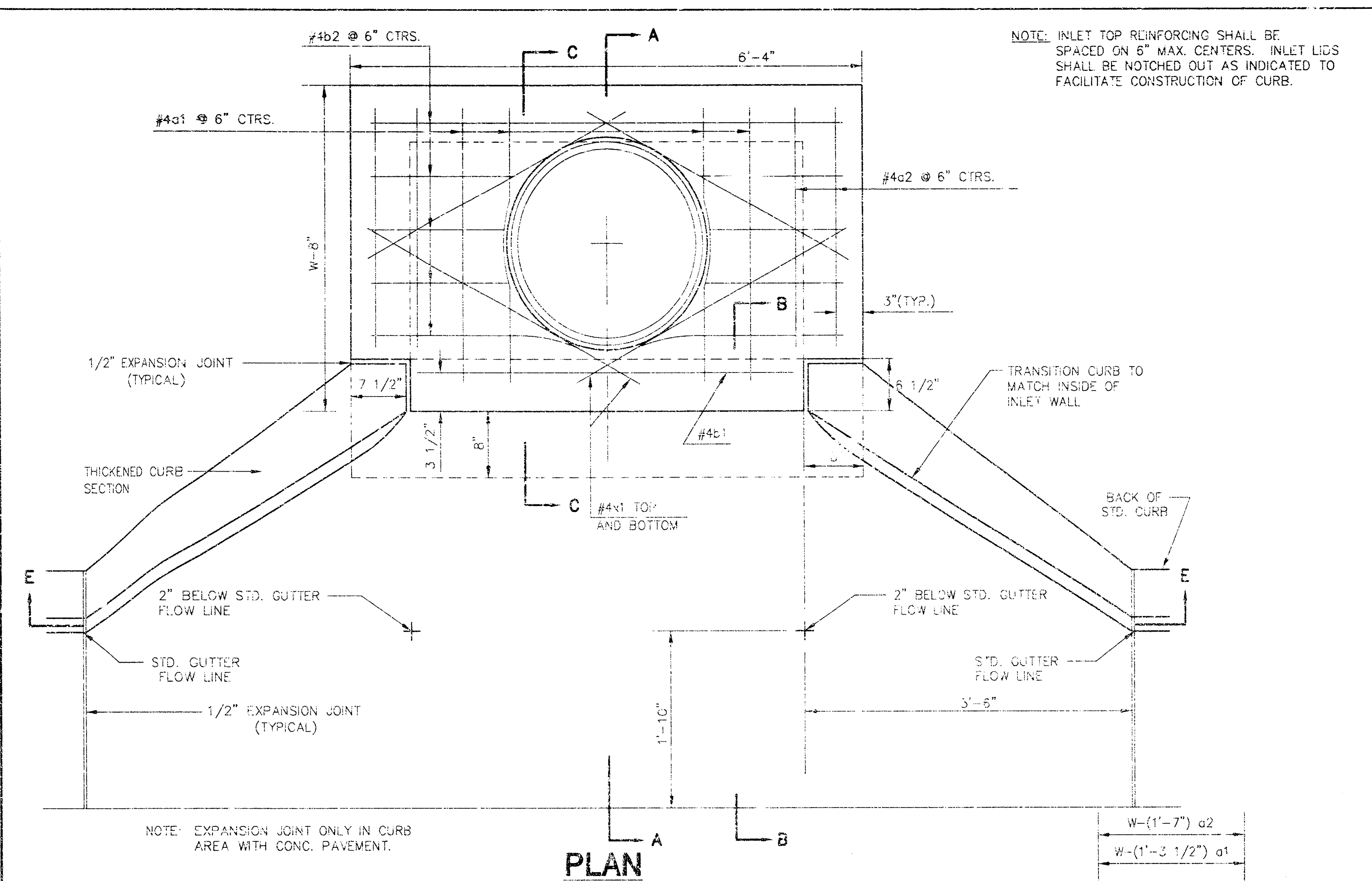
NO. 4 BARS @ 12" O.C.  
BOTH WAYS

.(TYP.)

| h (DEPTH) | #2433<br>(SINGLE) | #2434<br>(DOUBLE) |
|-----------|-------------------|-------------------|
| 0.1       | 1.95 cfs          | 3.89 cfs          |
| 0.2       | 2.75 cfs          | 5.50 cfs          |
| 0.3       | 3.37 cfs          | 6.74 cfs          |
| 0.4       | 3.89 cfs          | 7.78 cfs          |
| 0.5       | 4.35 cfs          | 8.70 cfs          |
| 0.6       | 4.77 cfs          | 9.53 cfs          |
| 0.7       | 5.15 cfs          | 10.30 cfs         |
| 0.8       | 5.50 cfs          | 11.01 cfs         |
| 0.9       | 5.84 cfs          | 11.67 cfs         |
| 1.0       | 6.15 cfs          | 12.30 cfs         |

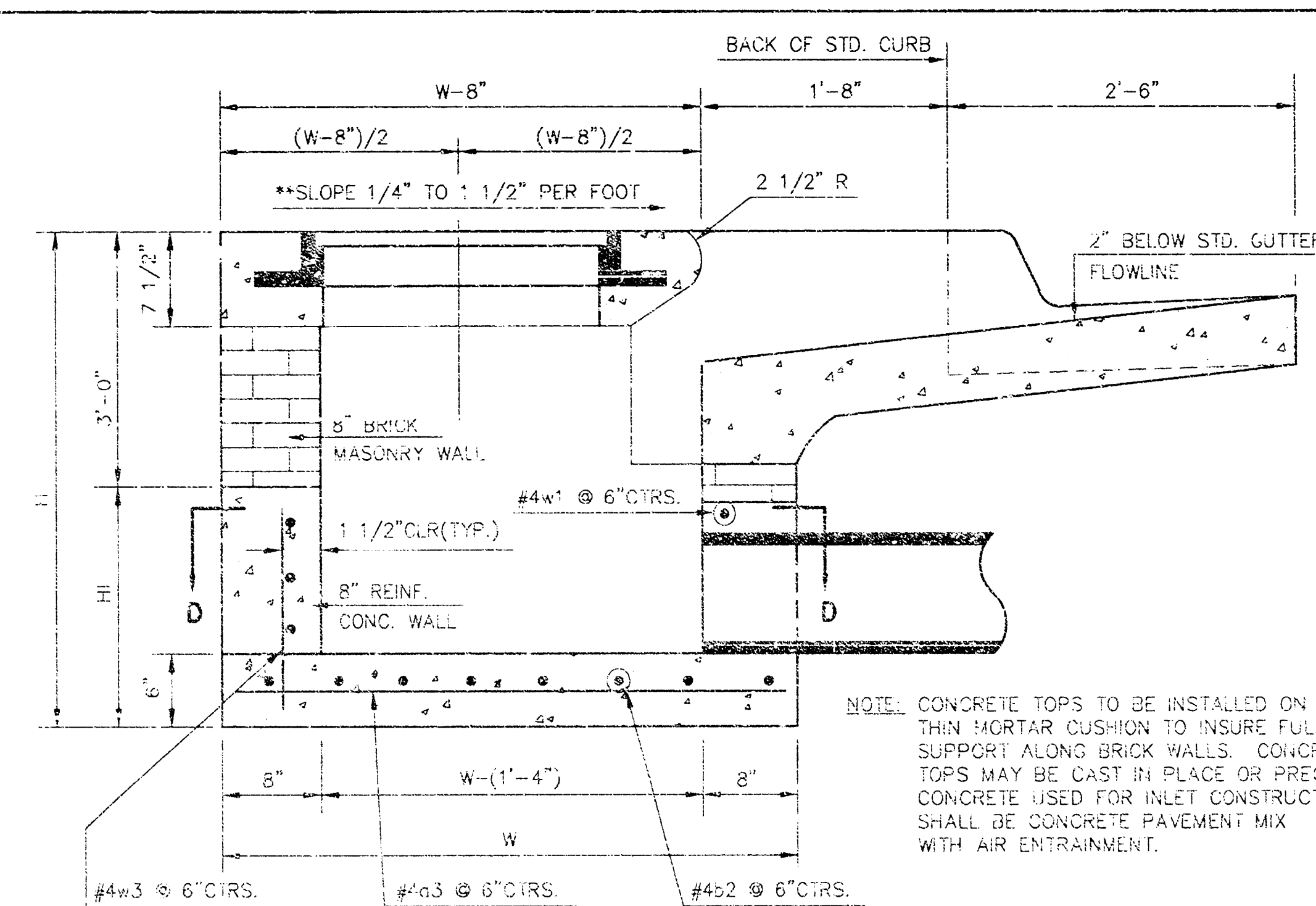
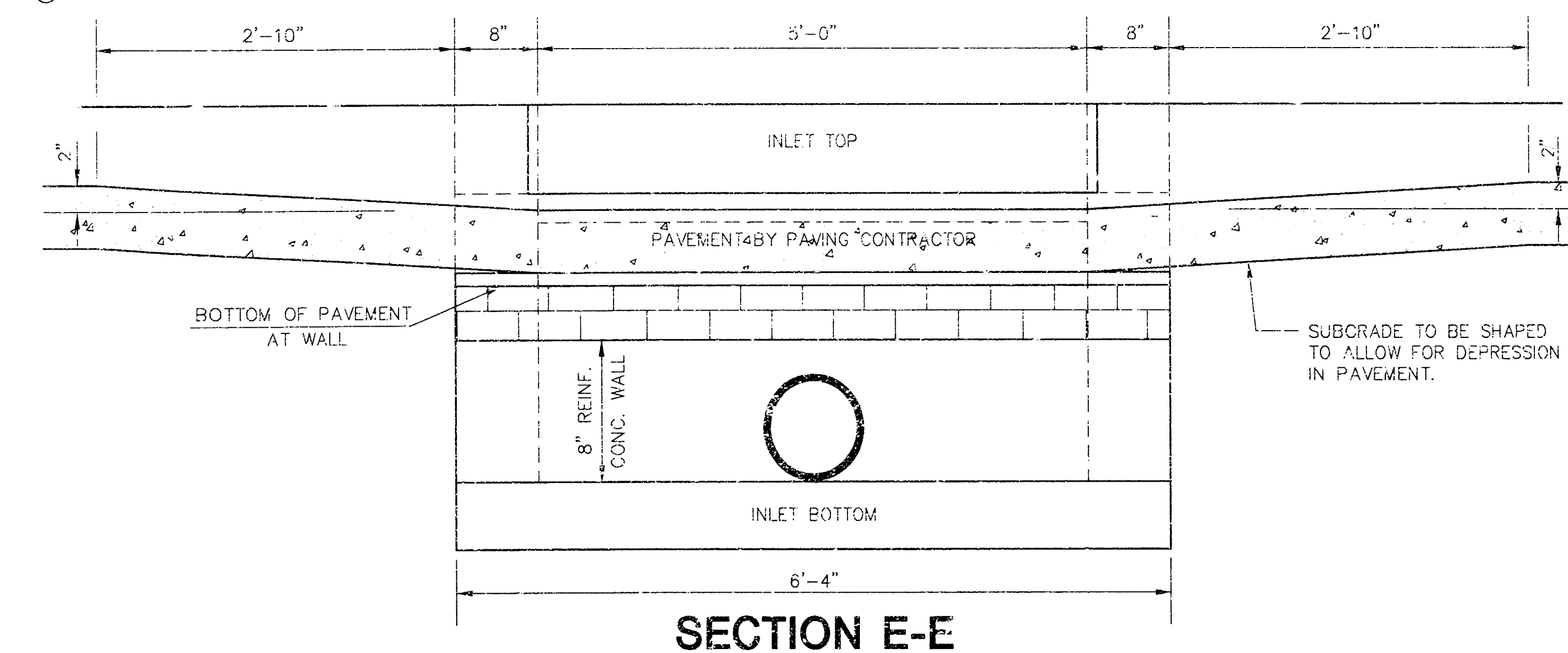
|                  |            |                |                 |
|------------------|------------|----------------|-----------------|
| Design<br>C.O.W. | Checked by | Checked by     | 5 / 8           |
| Drawn by         | Date       | Date JAN. 2000 | Job No 99195DD2 |





| PRECAST SLAB AND FLOOR REINFORCING |      |         |        |         |        |         |        |         |        |         |        |
|------------------------------------|------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|
|                                    |      | W=4'-4" |        | W=5'-4" |        | W=6'-4" |        | W=7'-4" |        | W=8'-4" |        |
| MARK                               | SIZE | NO.     | LENGTH | NO.     | LENGTH | NO.     | LENGTH | NO.     | LENGTH | NO.     | LENGTH |
| *c1                                | #4   | 6       | 6'-7"  | 6       | 8'-7"  | 6       | 10'-7" | 6       | 12'-7" | 6       | 14'-7" |
| a2                                 | #4   | 4       | 6'-0"  | 4       | 8'-0"  | 4       | 10'-0" | 4       | 12'-0" | 4       | 14'-0" |
| a3                                 | #4   | 13      | 4'-1"  | 13      | 5'-1"  | 13      | 6'-1"  | 13      | 7'-1"  | 13      | 8'-1"  |
| b1                                 | #4   | 1       | 4'-9"  | 1       | 4'-9"  | 1       | 4'-9"  | 1       | 4'-9"  | 1       | 4'-9"  |
| *b2                                | #4   | 23      | 6'-1"  | 29      | 6'-1"  | 35      | 6'-1"  | 41      | 6'-1"  | 47      | 6'-1"  |
| x1                                 | #4   | 8       | 3'-10" | 8       | 4'-2"  | 8       | 4'-6"  | 8       | 4'-10" | 8       | 5'-2"  |
| WALL REINFORCING                   |      |         |        |         |        |         |        |         |        |         |        |
|                                    |      | W=4'-4" |        | W=5'-4" |        | W=6'-4" |        | W=7'-4" |        | W=8'-4" |        |
| MARK                               | SIZE | NO.     | LENGTH | NO.     | LENGTH | NO.     | LENGTH | NO.     | LENGTH | NO.     | LENGTH |
| w1                                 | #4   | ①       | 6'-1"  | ①       | 6'-1"  | ①       | 6'-1"  | ①       | 6'-1"  | ①       | 6'-1"  |
| w2                                 | #4   | ①       | 4'-1"  | ①       | 5'-1"  | ①       | 6'-1"  | ①       | 7'-1"  | ①       | 8'-1"  |
| w3                                 | #4   | 32      | ②      | 36      | ②      | 40      | ②      | 44      | ②      | 48      | ②      |

\* FIELD BEND OR CUT REINFORCING AS REQUIRED FOR CLEARANCE  
 ① 4(HI-12"); (HI-12") ROUND DOWN TO NEAREST 0.5"  
 ② HI-3"



NOTE: CONTRACTOR SHALL HAVE THE OPTION OF CONSTRUCTING 8" BRICK MASONRY WALLS BETWEEN THE CONCRETE INLET BASE AND TOP ON THIS INLET WHEN W=6'-4" AND H=7'-0" OR LESS.

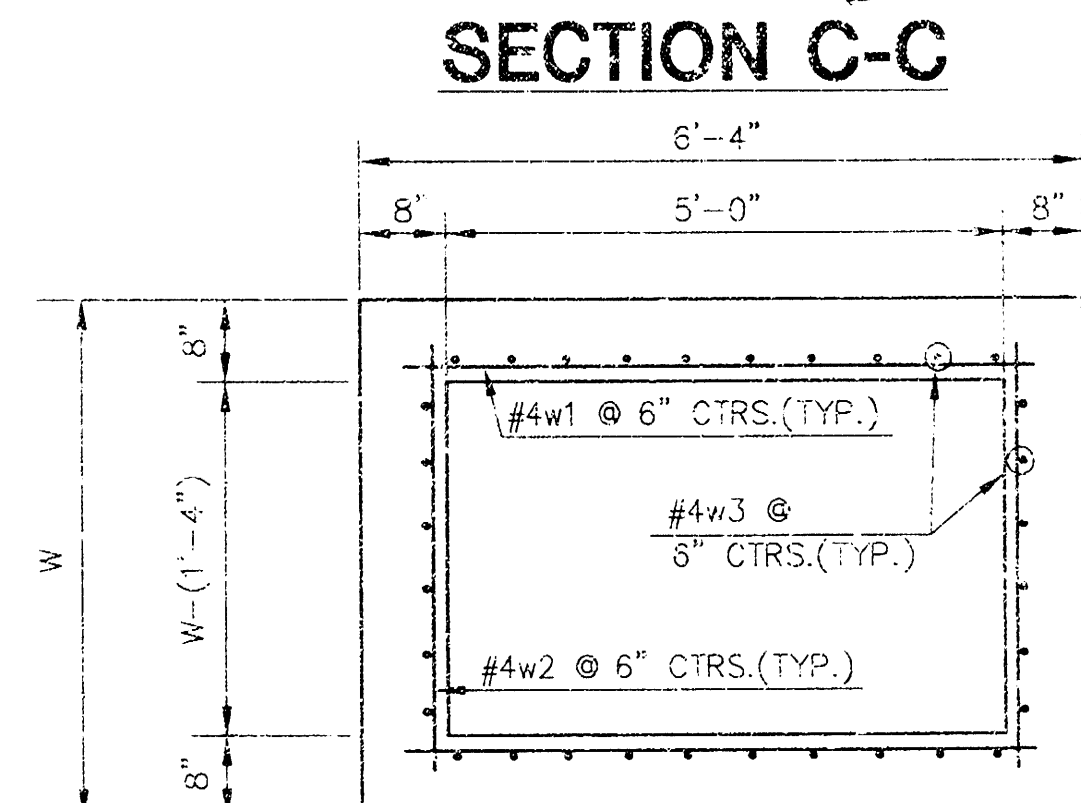
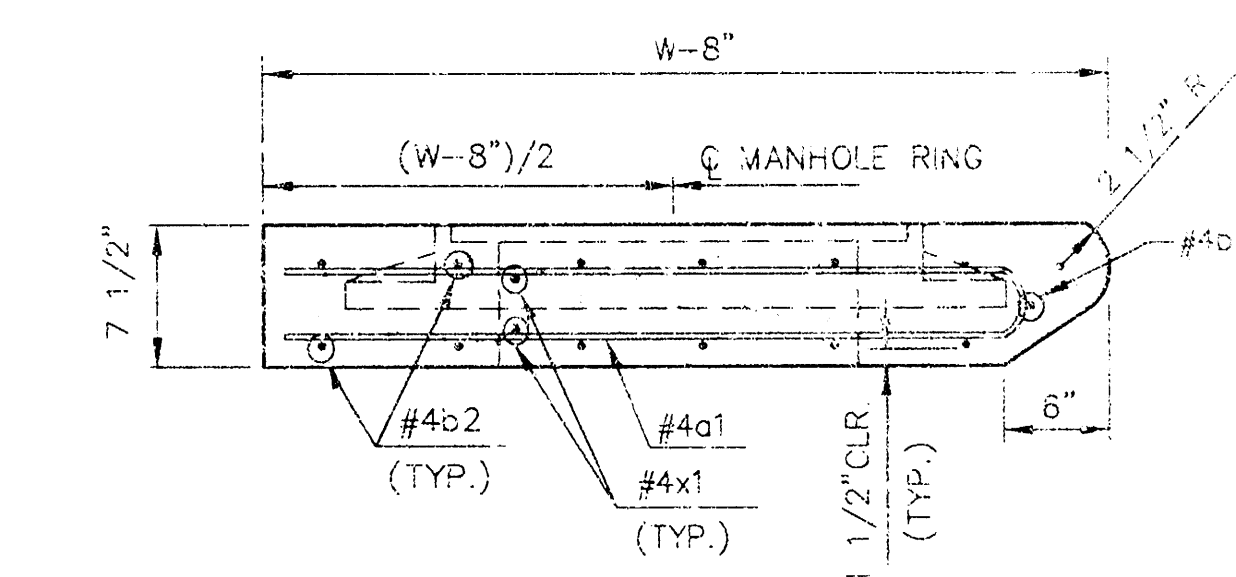
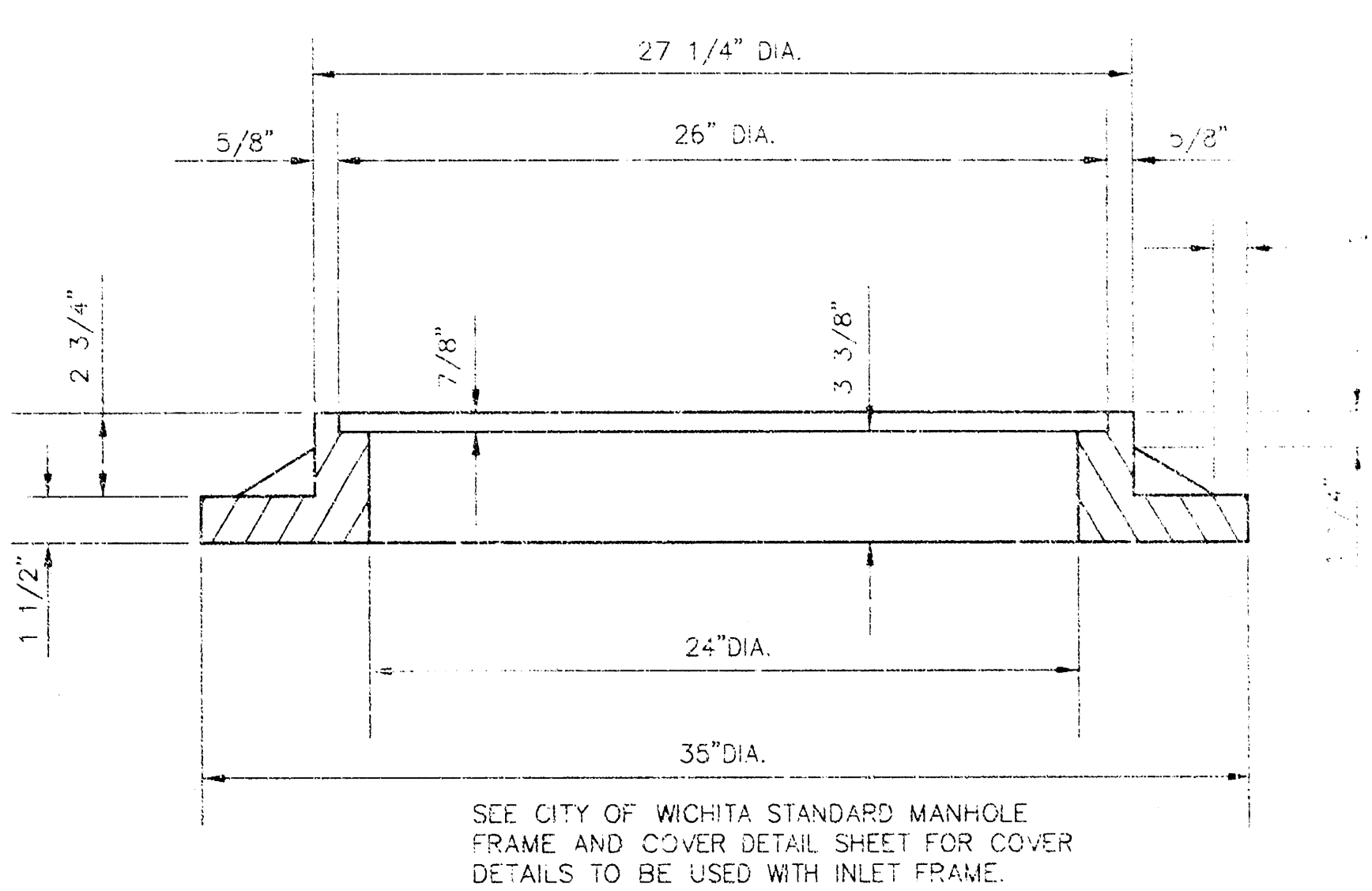
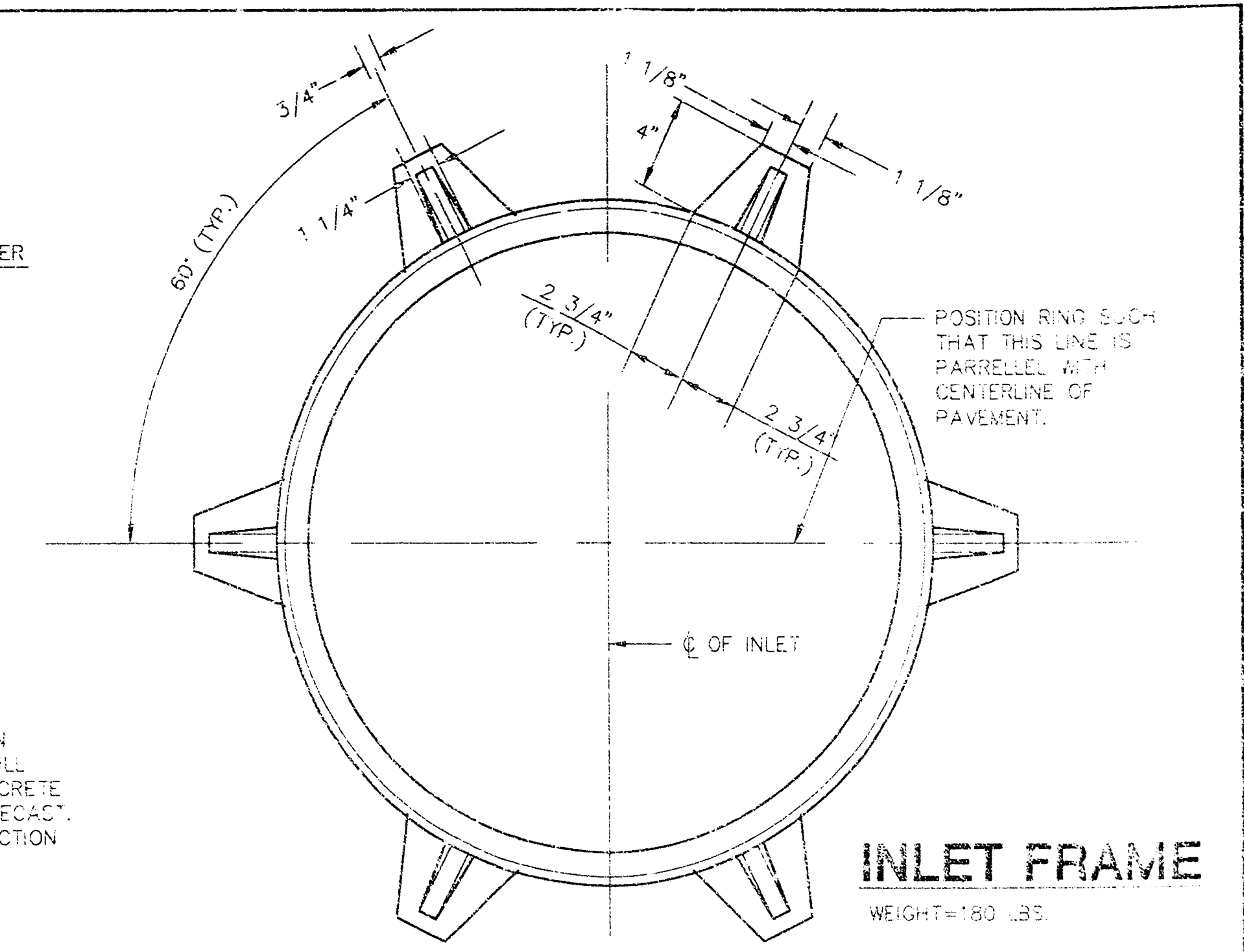
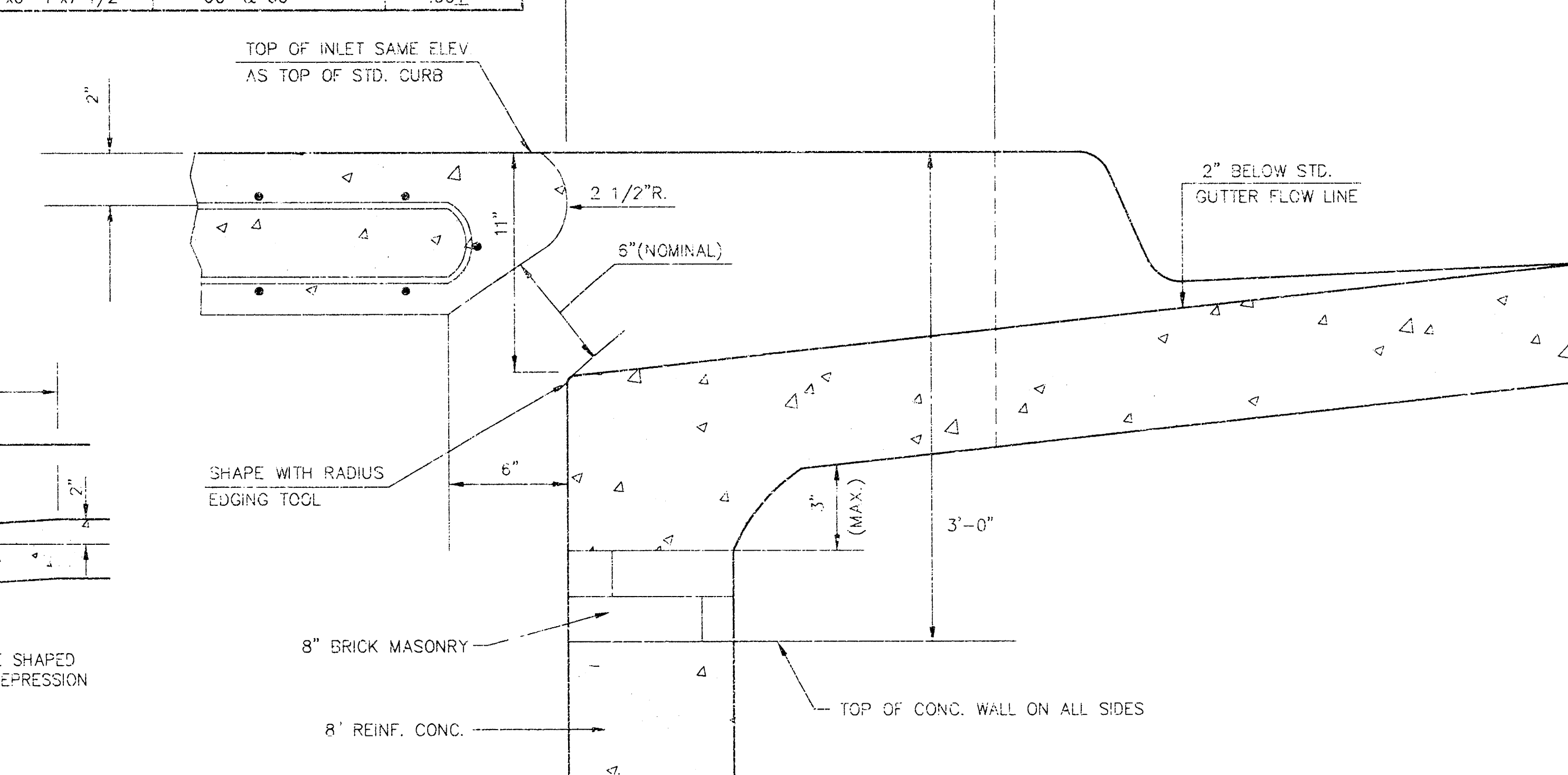
ADDITIONAL CURB AND GUTTER CONSTRUCTION NECESSARY TO CONNECT SET-BACK INLET TO PAVEMENT WILL BE PAID FOR AT THE UNIT PRICE BID FOR EACH INLET HOOKUP.

INLET INVERT SHALL BE SHAPED WITH 8 SACK SAND MIX CONCRETE TO CREATE FLOW CHANNELS AND TO INCREASE HYDRAULIC EFFICIENCY SUCH THAT THE INLET WILL BE SELF-CLEANING BETWEEN ALL INLET AND/OR OUTLET PIPES.

THE ENDS OF ALL PIPES INSTALLED IN INLETS SHALL BE CUT OFF FLUSH WITH THE INSIDE FACE OF THE INLET WALL.

NOTE: TYPE OF INLET TOPS TO MATCH SIDEWALK OR PARKING SLOPES WITHIN LIMITS INDICATED.

| W     | PRE-CAST TOP SIZE  | PIPE SIZE     | CU. YD. CONC. |
|-------|--------------------|---------------|---------------|
| 4'-4" | 3'-8"x5'-4"x7 1/2" | 21" & SMALLER | 0.3R±         |
| 5'-4" | 4'-8"x5'-4"x7 1/2" | 24" & 30"     | .51±          |
| 6'-4" | 5'-8"x6'-4"x7 1/2" | 36" & 42"     | .54±          |
| 7'-4" | 6'-8"x6'-4"x7 1/2" | 48" & 54"     | .77±          |
| 8'-4" | 7'-8"x6'-4"x7 1/2" | 60" & 66"     | .90±          |



REVISED: 2-16-89 C.O.W.

**STANDARD TYPE 1A CURB INLET**  
 INLET OPENING=6"x5'-0"

JUNE 1984

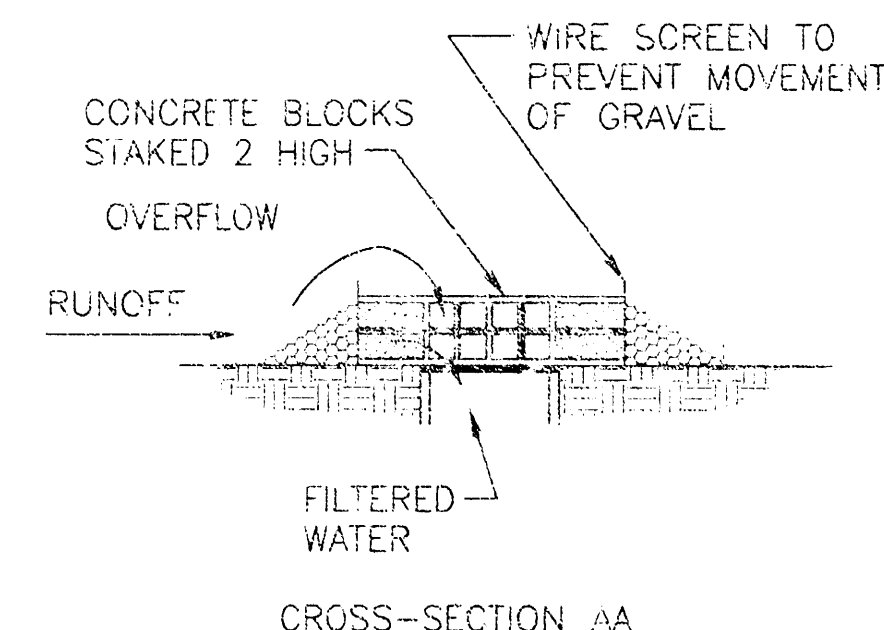
CITY OF WICHITA, KANSAS

6 8

Design: C.O.W. Checked by: \_\_\_\_\_  
 Drawn by: \_\_\_\_\_ Date: \_\_\_\_\_ Date JAN. 2000 Job No. 99196DDT



|                         |                                    |
|-------------------------|------------------------------------|
| GRAB TENSILE STRENGTH   | 100 LBS. MIN. (ASTM D4632)         |
| MULLEN BURST STRENGTH   | 300 PSI MIN (ASTM D3786)           |
| TRAPEZOID TEAR STRENGTH | 60 LBS. MIN. (ASTM D4533)          |
| WATER FLOW RATE         | 20 GAL/MIN/SQ.FT MIN. (ASTM D4491) |
| UV STABILITY            | 70% MIN. (ASTM D4355)              |



CONCRETE BLOCK FILTER



GRAVEL FILTER FOR AREA INLET

GRAVEL FILTER FOR AREA INLET

DETAIL 2



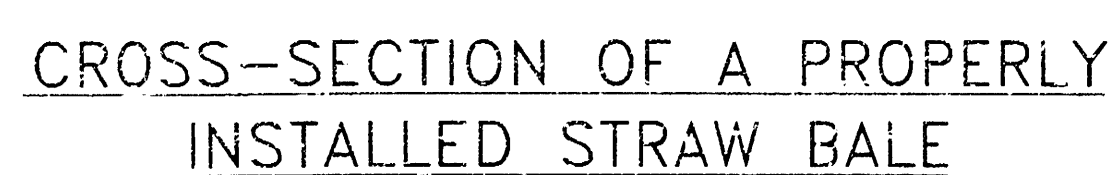
## GRAVEL FILTER BAGS

NOTE: GRAVEL FILTERS MAY BE USED ON PAVEMENT OR BARE GROUND

NOTE: GRAVEL FILTERS MAY BE USED ON PAVEMENT OR BARE GROUND

## CURB INLET GRAVEL FILTER

DETAIL 3



## STRAW BALE DIKES FOR DRAINAGE CHANNELS

DETAIL 5



NARROW CHANNELS

## STRAW BALE DIKES FOR DRAINAGE CHANNELS

DETAIL 6

END POINTS "A" MUST BE HIGHER

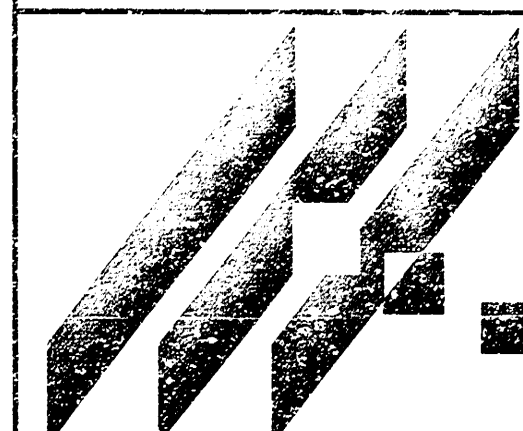
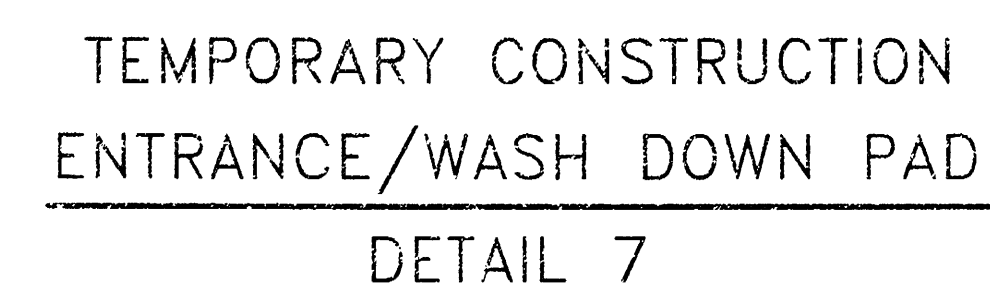
STRAW BALES ARE TO BE PLACED 4 INCHES -  
IN THE SOIL. TIGHTLY ABUTTING WITH NO  
GAPS. STAKED AND BACKFILLED AROUND THE  
ENTIRE OUTSIDE PERIMETER.



NOTE: STRAW BALE FILTERS ARE NOT TO BE USED IF ADJACENT AREA TO INLET IS PAVED. SEE DETAIL 2 FOR FILTERS ON PAVED AREA

## STRAW BALE FILTER FOR AREA INLET

DETAIL 7



ROLLINS LEASING CORP.

PROJECT NAME

### EROSION CONTROL DETAILS

**SHEET TITLE**

MID-KANSAS ENGINEERING  
CONSULTANTS, INC.  
411 N. WEBB ROAD  
WICHITA, KS. 67206  
316-684-600

JTC

DESIGN BY:

RKH/GJR

DRAWN BY:

WTC

CHECKED BY:

JANUARY 2000

99196773

7

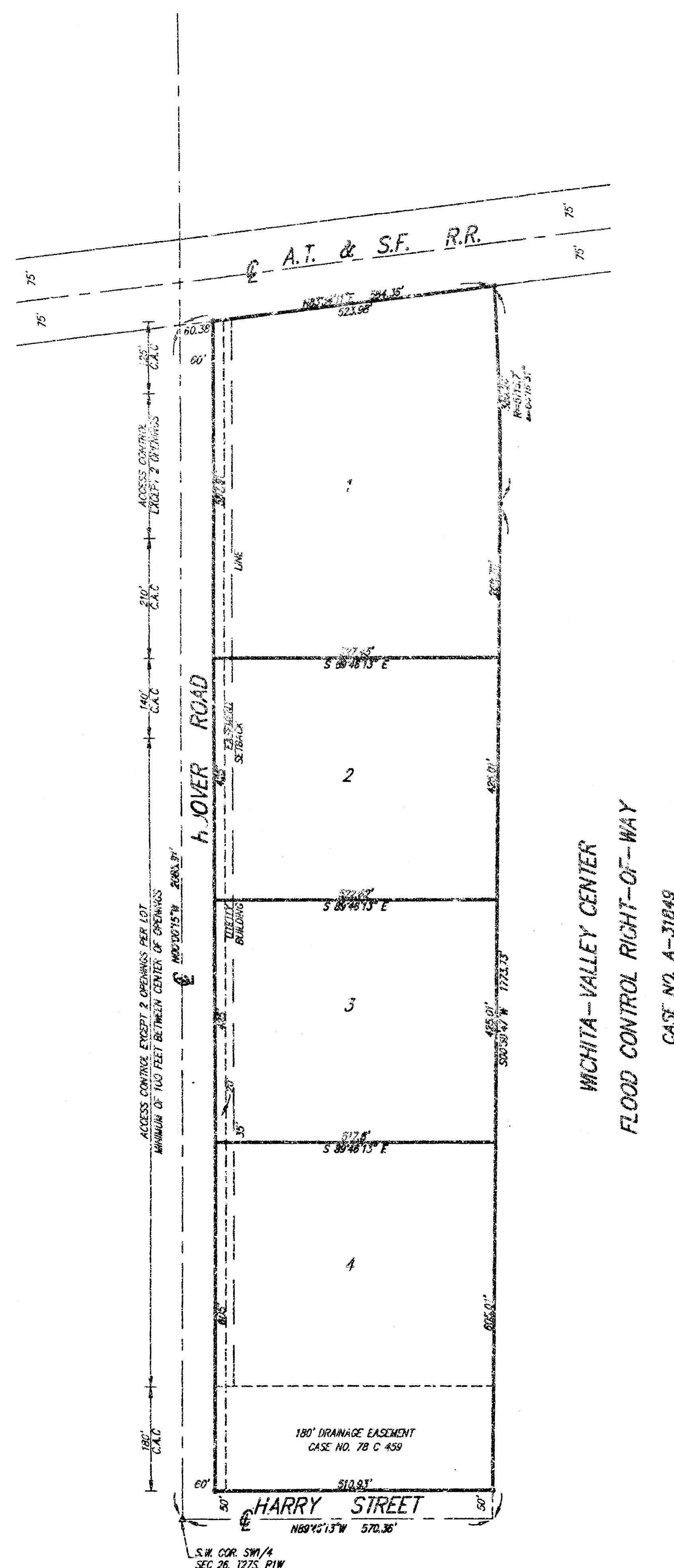
DATE \_\_\_\_\_

JOB NO.

SHEET / OF



WICHITA, SEDGWICK COUNTY, KANSAS



Randall J. Voith Managing Partner  
Randall J. Voith

CHERYL A. HIGGINS  
JUNIOR PUBLIC  
STATE OF KANSAS  
By *[Signature]* App. Exp. *4/5/20*

*intrust Bank*

Greg L. Lesh, Community Board



*John C. Fry* Chairman  
John C. Fry  
*Marvin S. Kraft* Secretary  
Marvin S. Kraft



Bob Knight Mayor  
Pat Burnett City Clerk

*James Alfred* County Clerk  
James Alfred

Harry Consover Register of Deeds

Michael D. Hurtt Deputy  
Michael D. Hurtt

# 1659772

The foregoing instrument acknowledged before me, this 19<sup>th</sup> day of December 1997, by Gregg A. Bush, President of Intrust Bank on behalf of the Bank.

Charles A. Higgins Notary Public  
Charles A. Higgins

CHERYL A. HIGGINS  
NOTARY PUBLIC  
STATE OF KANSAS  
27 Apr. Exp. 215/20

**SRB** 924 NORTH MAIN 316-264-8008  
WICHITA, KANSAS 67203 FAX 264-4621  
<http://www.srb.com/~srb> E-mail: [srb@srb.com](mailto:srb@srb.com)

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DWG FILE: 00794P-CX.  
PROJECT NO. 9700794P

**SAVOY, RUGGLES & BOHM, P.A.**  
**ENGINEERING & SURVEYING**



1. 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.
2. EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS UTILITY COMPANIES IS EITHER FROM COMPANY RECORD DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.
3. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF FORTY-EIGHT (48) HOURS TO UTILITY COMPANIES PRIOR TO STARTING ANY EXCAVATION AS FOLLOWS:

THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF AN EMERGENCY:

4. RUBBLE FROM THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXCESS EXCAVATION WHICH IS TO BE WASTED SHALL BE DISPOSED OF ON SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE KANSAS STATE HIGHWAY DEPARTMENT AND THE SITE LOCATION, LOCATIONS THAT, IN THE OPINION OF THE ENGINEER, WILL LEAVE AN UNSIGHTLY APPEARANCE WILL NOT BE APPROVED. ALL RUBBLE SHALL BE STOCKPILED OR BURNED IN AN APPROPRIATE MANNER TO PROTECT THE HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WOULD REQUIRE A KANSAS STATE DEPARTMENT OF AGRICULTURE, DIVISION OF WATER RESOURCES PERMIT AND A FLOOD PLAIN EASEMENT. MATERIAL STOCKPILED ON RIVERS AND OR WETLANDS IS SUBJECT TO U.S. ARMY CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WILL REQUIRE AN ADDITIONAL ARCHITECTURAL SIGNAGE UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.

6. TREES AND SHRUBS IN PUBLIC RIGHT-OF-WAY WHICH ARE IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE REMOVED BY THE CONTRACTOR WITH THE ENGINEER'S APPROVAL. TREES AND SHRUBS WHICH ARE NOT IN DIRECT CONFLICT WITH PROPOSED NEW CONSTRUCTION SHALL BE SAVED AND PROTECTED FROM DAMAGE.
7. ALL DISTURBED AREAS TO BE RESTORED PER CITY POLICY AR-78.

NOTE TO CONTRACTOR

INSPECTION AND TESTING FOR THE PROJECT IS TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERING FIRM UNDER CONTRACT WITH THE OWNER/DEVELOPER. SAID INSPECTION IS TO BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD CONSTRUCTION ENGINEERING PRACTICES AND CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. NO WORK SHALL BE PERFORMED IN DEDICATED EASEMENTS OR THE PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION NOR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

LINE 16 C.O.W. BENCHMARK - 1/2 MILE EAST OF  
MERIDIAN ON 55TH STREET SOUTH; ON 1/2 SECTION LINE  
AND 37.23 FEET NORTH OF IRON AT 1/4 CORNER IN  
55TH STREET SOUTH.

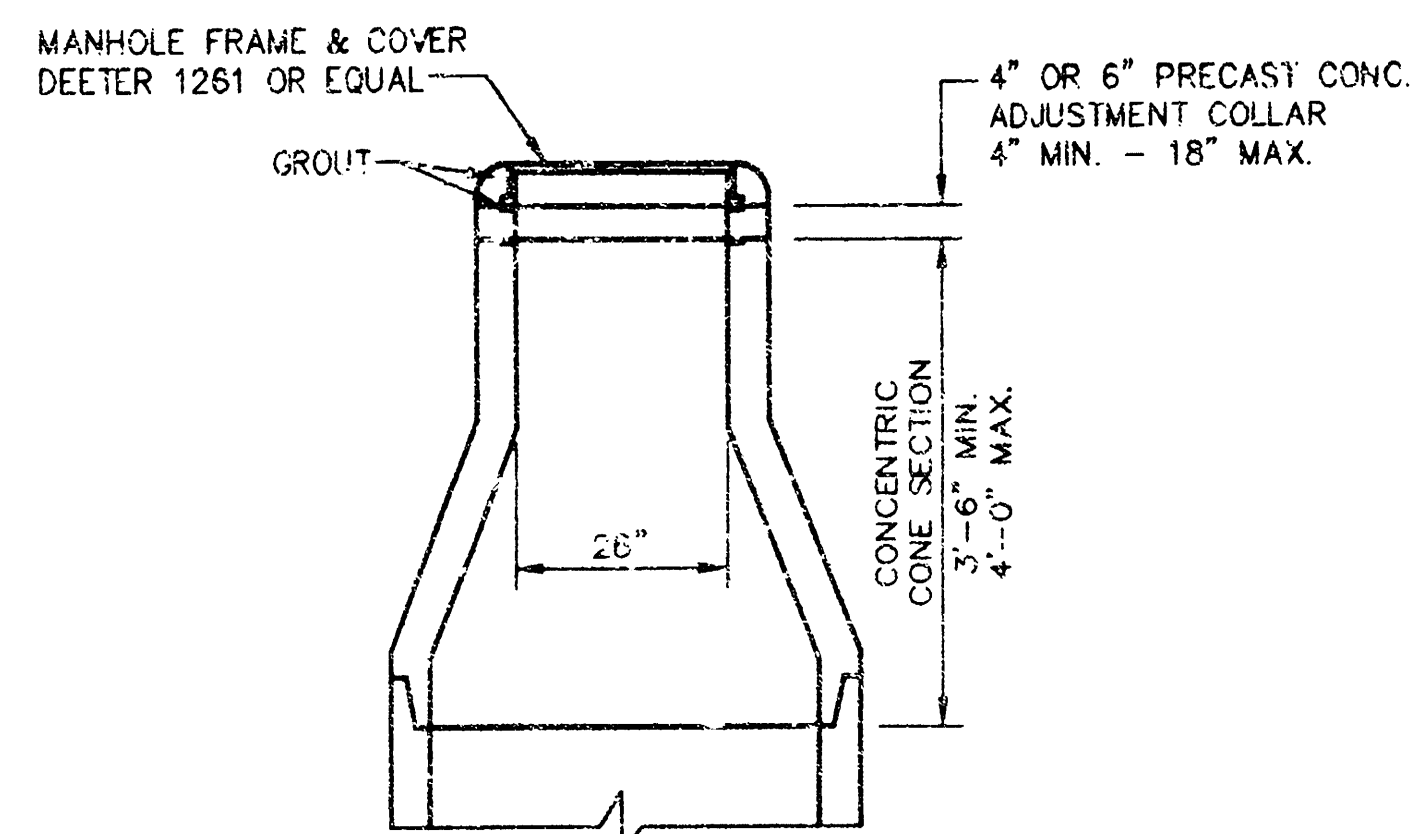
ELEV. = 83.62 FT. (WICHITA DATUM)

LINE 15 C.O.W. BENCHMARK - NE QUADRANT OF  
INTERSECTION OF MERIDIAN AND 55TH STREET SOUTH;  
42.8 FEET NORTH AND 35 FEET EAST OF CENTER LINES  
OF STREETS; 15.0 FEET NORTHEAST OF CENTER  
TELEPHONE POLE; 12.7 FEET NORTHEAST OF 2-RAIL  
FENCE CORNER; 58.5 FEET NORTHEAST OF SECTION  
CORNER.

ELEV. = 85.77 FT. (WICHITA DATUM)

USGS DISC - 39.2 FEET SOUTH AND 34 FEET EAST OF  
SECTION CORNER AT MERIDIAN AND 55TH STREET SOUTH  
(1274).

ELEV. = 86.26 FT. (WICHITA DATUM)



55TH STREET SOUTH

PROPOSED 12" WATER MAIN

PROPOSED 12" SEWER MAIN

EXIST. SAN. SEWER M.H.

M-71 STA. 171+93.4

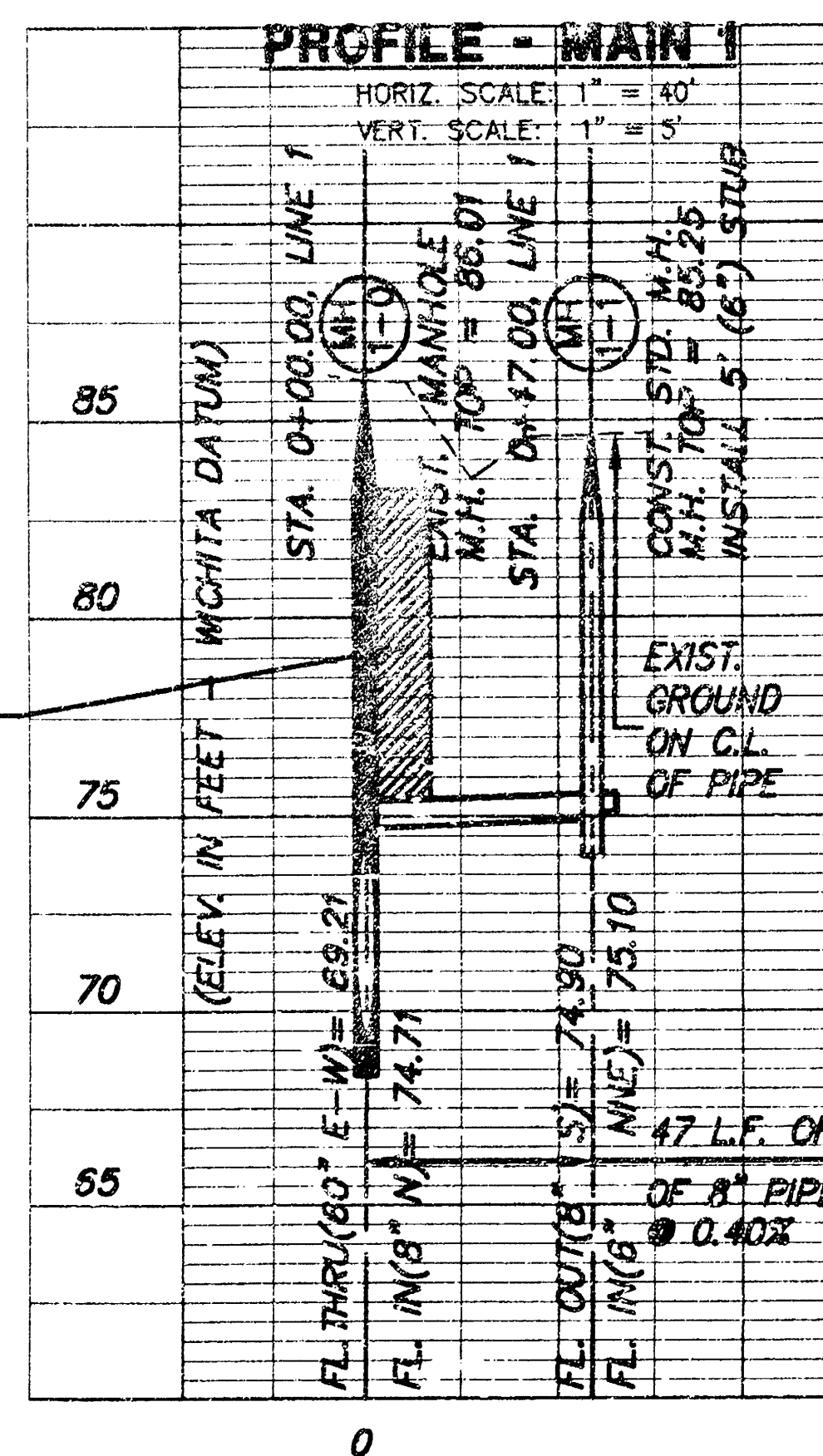
EXIST. SAN. SEWER M.H.

PROPOSED PARKING

PLUMB. WILL C. THIS P. (SEE M)

CONST.

PLAN - MAIN 1



FLOWABLE  
FILL TO  
ELEV. 83.25  
& 5 FT.  
NORTH OF  
EDGE OF  
ASPHALT  
PAVEMENT.

CONST. TYPE 'P' M.H.  
(DIA. = 4')  
M.H. TOP = 85.25  
N 39492.11  
E 39320.17

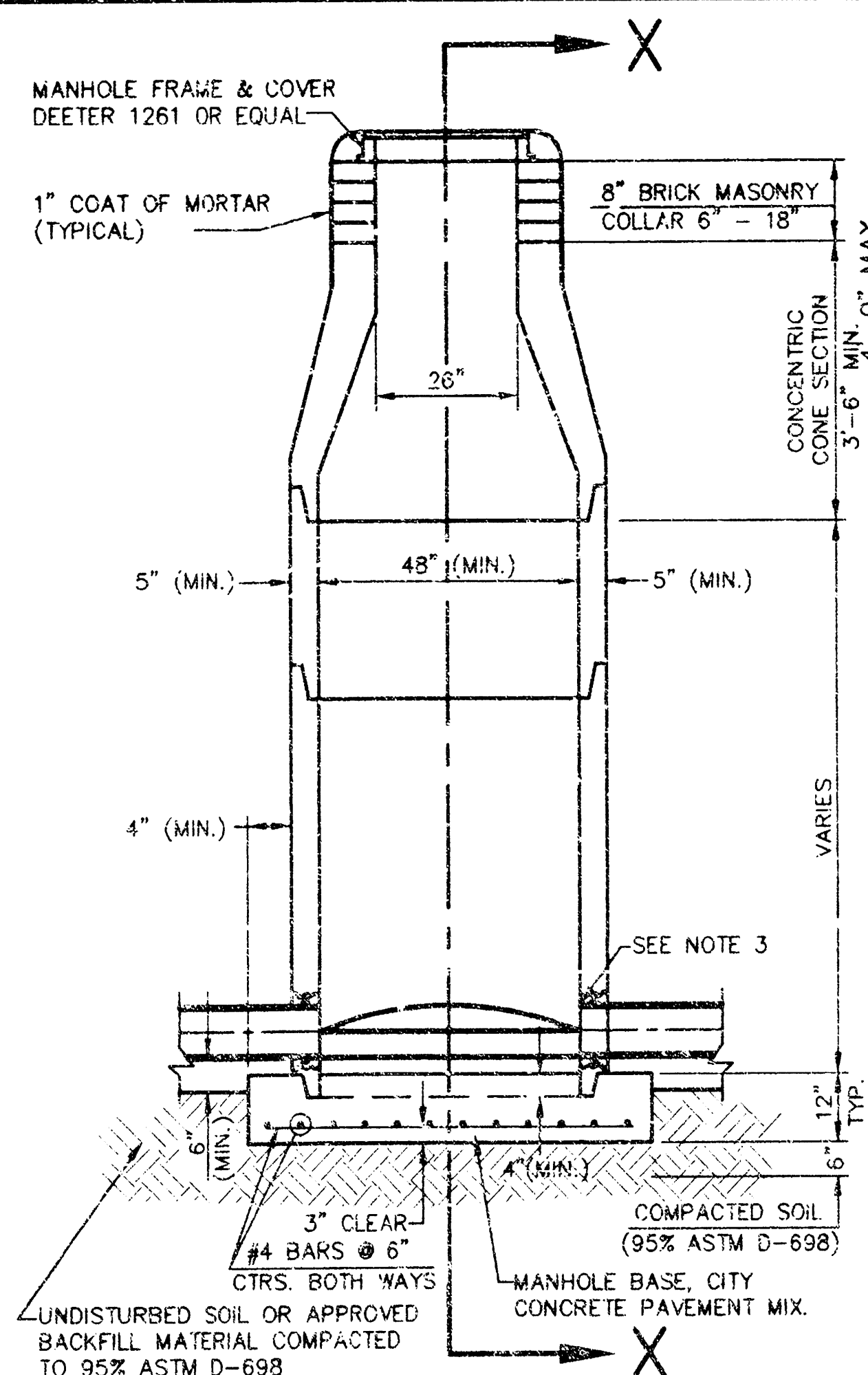
COORDINATE SYSTEM USED BY M.K.E.C AND P.E.C.

SW CORNER, SEC. 19, T28S, R1E      N 39386.331  
E 37349.104

1/16 CORNER IN 55TH STREET      N 39420.220

S 1/4 CORNER, SEC 19, T28S. N 39454.109  
R1E E 39980.871

CENTER OF NEW MANHOLE      N 39492.11  
E 39320.17



MANHOLE FRAME & COVER  
DEETER 1261 OR EQUAL

GROUT TO BE PLACED AROUND  
MANHOLE FRAME ONLY WHEN  
MANHOLE IS CONSTRUCTED IN  
UNPAVED AREAS.  
(TYPICAL ALL MANHOLES)

1" COAT OF MORTAR  
(TYPICAL)

8-SACK SAND MIX

26"

INSTALL 2 RINGS OF  
BUTYL-RUBBER JOINT  
SEALING COMPOUND  
(SEE NOTE 6)

**TYPICAL P MANHOLE**  
**JOINT DETAIL**  
**(TYPICAL)**

5" (MIN.)

48" (MIN.)

5" (MIN.)

4" (MIN.)

GROUT PIPE OR PIPE CONNECTOR  
IN PLACE WITH NON-SHRINK GROUT

3"/FT. - SLOPE TO CHANNEL

8-SACK SAND MIX

4" (MIN.)

3" CLEAR -  
#4 BARS @ 6"

UNDISTURBED SOIL OR APPROVED  
BACKFILL MATERIAL COMPACTED  
TO 95% ASTM D-698

COMPACTED SOIL  
(95% ASTM D-698)

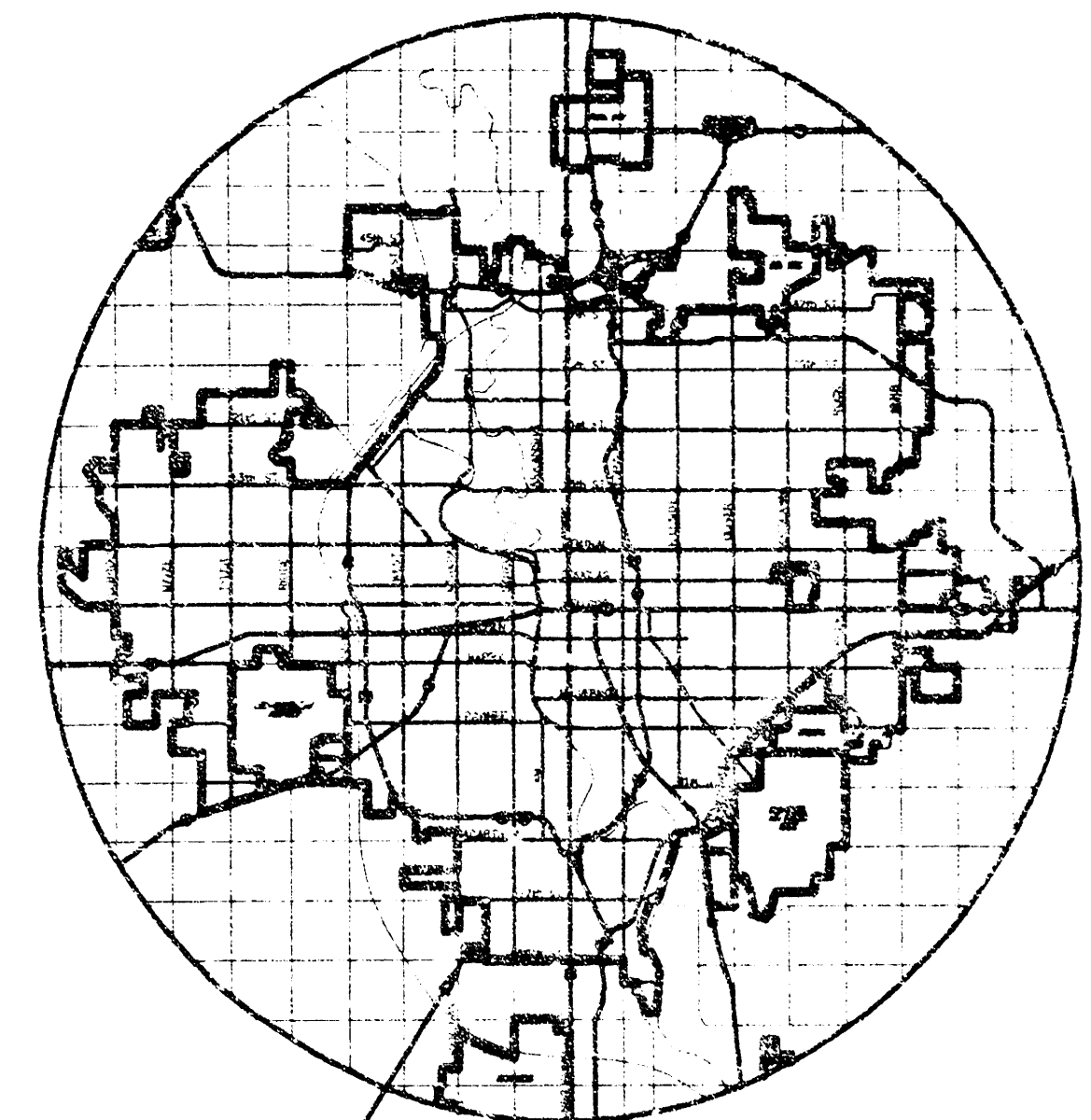
12" b

6" b

INDIAN

**PRECAST MANHOLE NOTES:**

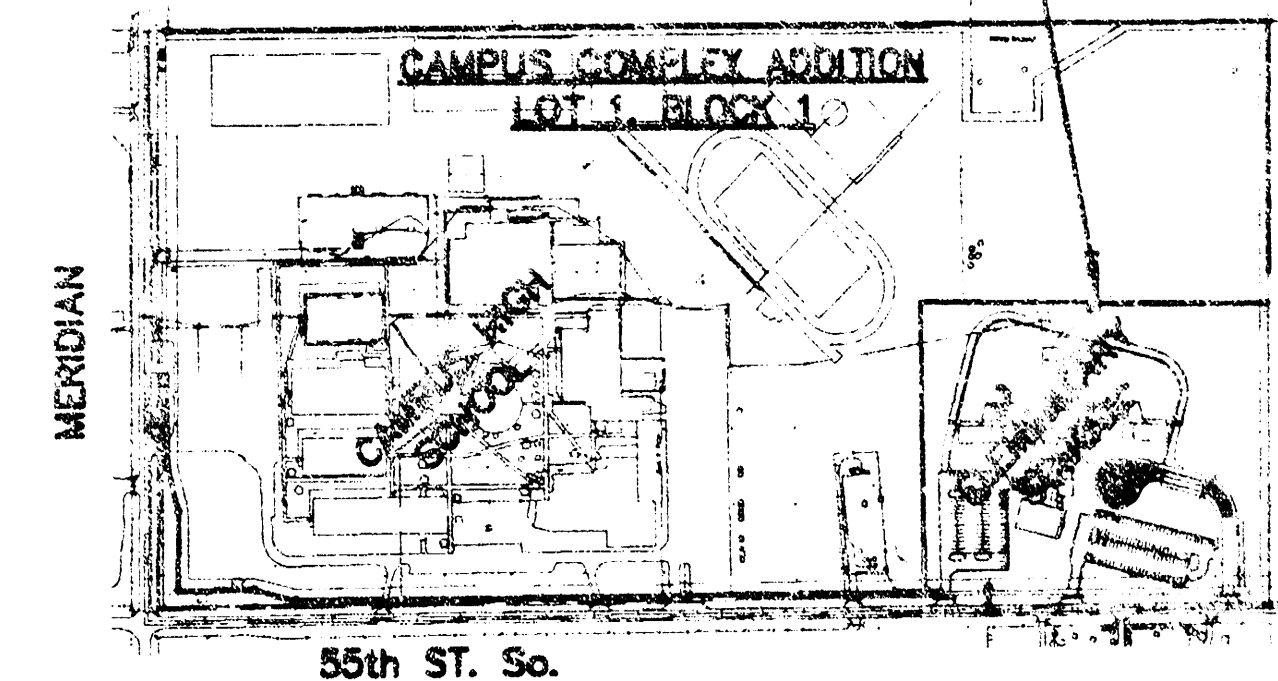
1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478. C478 AS MODIFIED BY THE SPECIFICATIONS.
  2. NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
  3. APPROVED FLEXIBLE WATERSTOP GASKETS SHALL BE INSTALLED TO JOIN THE SEWER TO THE MANHOLE WALL WHEN P.V.C. PIPE IS USED. FOR OTHER TYPES OF PIPE THE SEWER SHALL BE GROUTED IN PLACE WITH NON-SHRINK GROUT. THE SEWER PIPE SHALL BE SUPPORTED WITH CONCRETE ENCASEMENT A MINIMUM OF 3 FEET FROM THE MANHOLE WALL AND TO THE FIRST JOINT FOR V.C.P. SUCH THAT THE JOINT REMAINS FLEXIBLE.
  4. ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS TNEVEC SERIES 66 HI-BUILD EPOXOLINE, DRY THICKNESS OF 8 MILS (MIN.)
  5. EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINUS COATING.
  6. JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
  7. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE RASE.
  8. TOP OF MANHOLE FLOOR SLAB SHALL BE AT LEAST 3 INCHES BELOW THE FLOW LINE OF THE OUTLET PIPE TO INSURE SUFFICIENT MINIMUM THICKNESS OF SHAPED INVERT.
  9. LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
  10. MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE SPECIFICATIONS USING CITY CONCRETE PAVEMENT MIX WITHOUT AIR ENTRAINING ADMIXTURE. MORTAR SHALL BE PLACED AROUND THE MANHOLE RING AS SHOWN ON THE DRAWINGS WHEN MANHOLES ARE CONSTRUCTED IN UNPAVED AREAS. MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE SMALLER THAN 24" SHALL HAVE AN INSIDE DIAMETER OF 4". MANHOLES CONSTRUCTED WHERE PIPE SIZES ARE 24" OR LARGER SHALL HAVE AN INSIDE DIAMETER OF 5". COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
  11. REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 3" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
  12. OPENINGS SHALL BE CUT INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS CUT INTO EXISTING MANHOLES SHALL BE AS SMALL AS PRACTICAL TO FACILITATE INSTALLING AND GROUTING THE NEW PIPE IN PLACE. WATERSTOP GASKETS SHALL BE USED WITH P.V.C. PIPE. THE NEW PIPE SHALL BE GROUTED INTO THE OPENING USING AN APPROVED NONSHRINK GROUT FOR THE FULL MANHOLE WALL THICKNESS. THE EXTERIOR OF THE COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT. FLOOR OF MANHOLE SHALL BE MODIFIED TO FORM NEW FLOW CHANNEL FOR THE NEW CONNECTION AS INDICATED BY THE DRAWINGS. THE WORK INCLUDING MODIFICATION OF MANHOLE FLOOR SHALL BE PAID FOR AT THE UNIT PRICE BID FOR OUTSIDE DROP STACK CONSTRUCTED ON EXISTING MANHOLE.
  13. THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SHALL BE SHAPED AS THE FLOORS WILL BE SELF CLEANING AND FREE OF AREAS WHERE SOLIDS COULD BE DEPOSITED AS SEWAGE FLOWS THROUGH THE MANHOLE FROM ALL INLET PIPES TO THE OUTLET PIPE. FLOW CHANNELS SHALL BE FORMED TO MATCH THE BOTTOM HALVES OF THE INFLOWING PIPES AND THE OUTFLOWING PIPE AS SHOWN BY THE DRAWINGS EXCEPT FOR INSIDE DROP MANHOLES. FLOW CHANNELS FOR INSIDE DROP MANHOLES SHALL BE CONSTRUCTED AS INDICATED BY THE DRAWING. MANHOLE FLOORS SHALL HAVE SLOPES OF 3 INCHES PER FOOT IN THE AREAS OUTSIDE OF THE FLOW CHANNELS SLOPED TOWARD THE FLOW CHANNELS. PIPES LAID THROUGH MANHOLES SHALL HAVE THE TOP HALF REMOVED TO NEAT LINES FOR THE FULL INSIDE DIAMETER OF THE MANHOLE. MANHOLE FLOORS SHALL THEN BE SHAPED AROUND THE BOTTOM HALF OF THE PIPE WHICH FORMS THE FLOW CHANNEL.
  14. PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. WHEN CLAY PIPE IS USED, THE CRADLE SHALL EXTEND TO THE FIRST JOINT OUTSIDE THE MANHOLE. THE CRADLE SHALL BE TERMINATED AT THE CLAY PIPE JOINT IN A MANNER WHICH WILL MAINTAIN THE FLEXIBILITY OF THE JOINT. COST OF CRADLE WITHIN MANHOLE EXCAVATION OR TO CLAY PIPE JOINTS ADJACENT TO MANHOLE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
  15. MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN ON THIS SHEET.
  16. STANDARD MANHOLES SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.
  17. A BRICK MASONRY COLLAR SHALL BE INSTALLED BETWEEN THE CAST IRON FRAME AND THE CONCENTRIC CONE. THE COLLAR WILL HAVE 8" WALLS AND A VERTICAL HEIGHT OF 8" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR.



### SITE LOCATION

LOCATION MAP

IMPROVEMENT  
DISTRICT



**55th ST. So.**

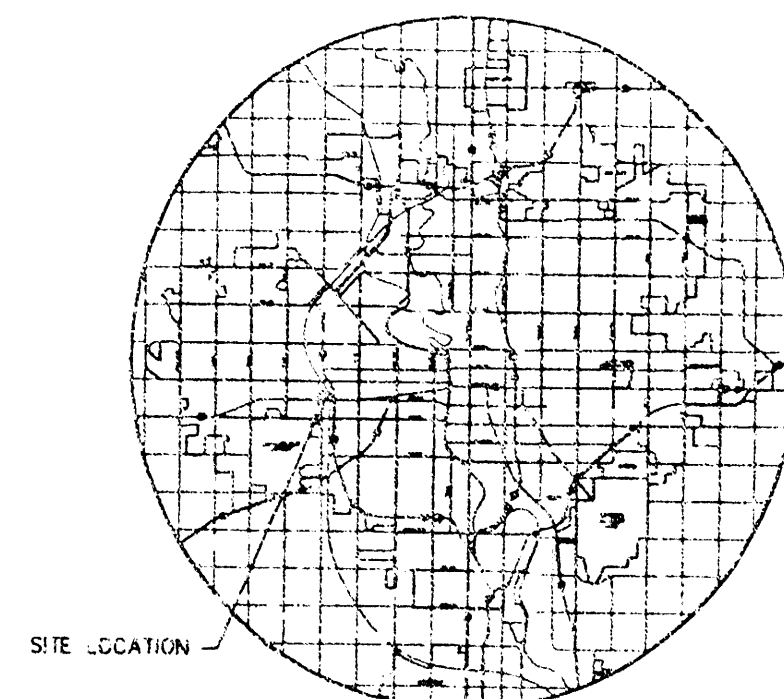
REVISÉ: MARCH 18, 1999 JNJ

NEW ELEMENTARY SCHOOL AT  
CAMPUS SITE, USD 281  
HAYSVILLE, KS.

PROJECT NAME  
**PRIVATE SANITARY SEWER PLANS 1**  
**G.O.W. PROJECT NO. 894 PPS (607862)**  
SHEET TITLE

|            |           |             |
|------------|-----------|-------------|
| ANJ        | MLW       | ANJ         |
| DESIGN BY: | DRAWN BY: | CHECKED BY: |
| MARCH 1999 | 98016     | 1 / 1       |
| DATE       | JOB NO    | SHEET OF    |





LOCATION MAP

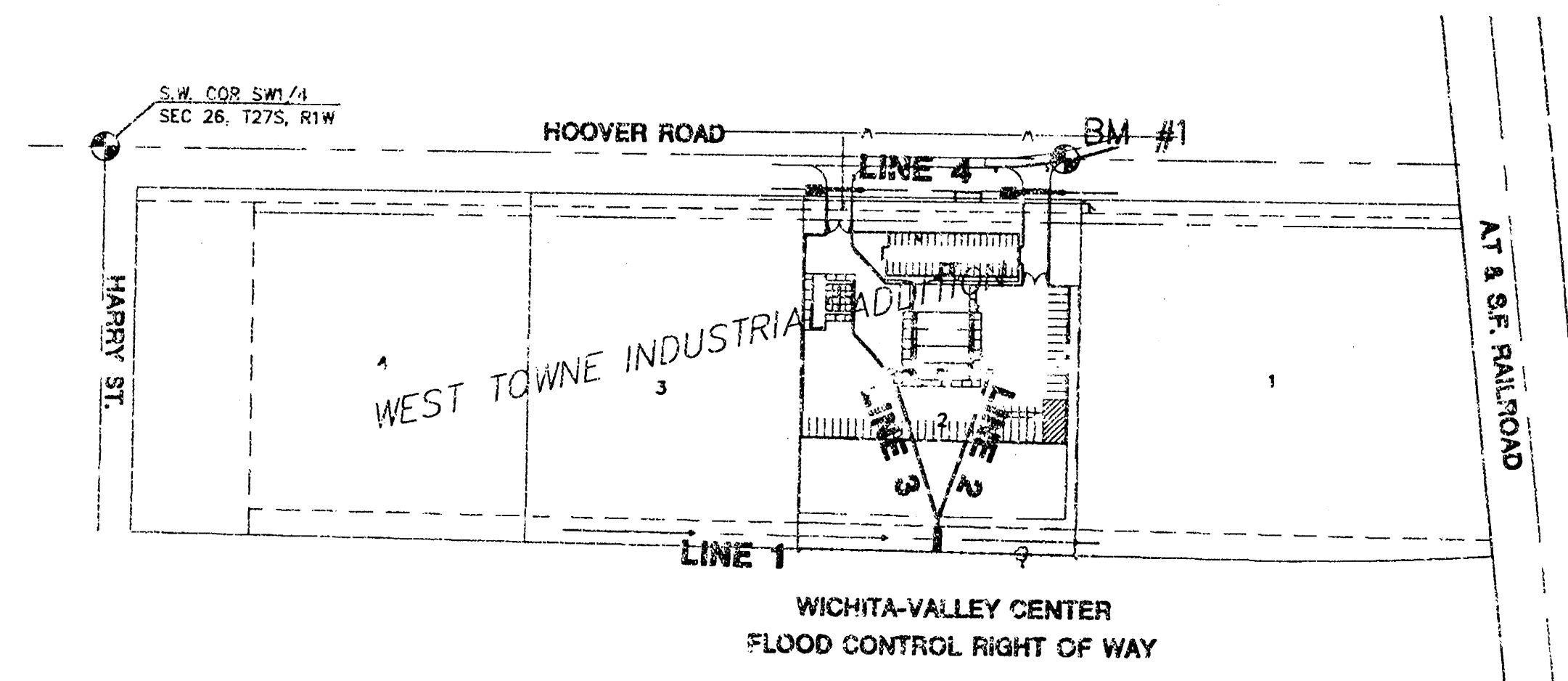
### GENERAL NOTES

1. THE TYPES OF INLETS AND MANHOLES AS NOTED ON THE PLANS MAY VARY SO AS TO MEET THROTTLED TOP OF CURB ELEVATIONS OR PAVEMENT ELEVATIONS. THE FIELD ENGINEER SHALL LOCATE INLETS AND MANHOLES WITH REFERENCE TO PROPOSED PAVING PLANS OF THE EXISTING STREETS.
  2. ALL CONCRETE SHALL BE STANDARD PAVING MIX UNLESS OTHERWISE NOTED.
  3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE TO RE-ESTABLISH ANY PROPERTY SIGNS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SIGN SIGNS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
  4. TREES TO BE REMOVED AND MARKED ALL TREES WHICH IN THE OPINION OF THE FIELD ENGINEER CAN BE SAVED, SHALL BE SAVED.
  5. CONTRACTOR SHALL NOTIFY UTILITY COMPANIES OF CONSTRUCTION SCHEDULING.
  6. EXISTING UTILITIES AND THEIR LOCATIONS AS SHOWN ON THE PLANS REPRESENT THE BEST INFORMATION OBTAINABLE FOR RECORD. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE UTILITY COMPANIES AND IS EITHER FROM COMPANY UTILITY DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLANS LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.
  7. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF FORTY-EIGHT (48) HOURS TO UTILITY COMPANIES TO STARTING ANY EXCAVATION AS FOLLOWS:  
KANSAS ONE-CALL 887-4470  
OR 887-2770 (LOCAL MONITOR)
- THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF EMERGENCY:
- | COMPANY                             | PHONE          |
|-------------------------------------|----------------|
| CHURCHSON                           | 263-1061       |
| WICHITA GAS & ELECTRIC              | 333-8600       |
| SOUTHERN BELL TELEPHONE COMPANY     | 1-800-334-7700 |
| CITY OF WICHITA WATER & SEWER DEPT. | 288-4500       |
| WICHA GAS COMPANY                   | 845-0096       |
8. DURING THE REMOVAL OF MISCELLANEOUS STRUCTURES AND EXISTING EXCAVATION WHICH IS TO BE INSTALLED SHALL BE EXPOSED OF THE SITES TO BE PROVIDED BY THE CONTRACTOR. THESE SITES SHALL BE APPROVED BY THE ENGINEER AS TO SAFETY, APPEARANCE AND SITE LOCATION. LOCATIONS MUST BE IN THE OPINION OF THE ENGINEER. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF REVENUE AND TRANSFER. MATERIAL OTHER THAN CEMENT OR DISPOSED OF IN A FLOOD PLAIN WOULD REQUIRE A KANSAS STATE DEPT. OF REVENUE AND TRANSFER. ANY MATERIAL DISPOSED IN A FLOOD PLAIN OF THE UNITED STATES OR NEIGHBORING IS SUBJECT TO U.S. CORPS OF ENGINEERS. EXISTING UTILITIES SHALL BE MAINTAINED OR RELOCATED WITHIN APPROVED CONSTRUCTION LIMITS. WOULD REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS SITES IN A PREVIOUSLY APPROVED BORROW LOCATION.
  9. CONTRACTOR SHALL RESEED AND MULCH ALL DISTURBED AREAS. COST SHALL BE CONSIDERED SUBSIDIARY TO SITE RESTORATION.

## PRIVATE STORM WATER SEWER PLANS ROLLINS LEASING CORP LOT 2, BLOCK 1 WEST TOWNE INDUSTRIAL ADDITION PROJECT NO. 973PPS

CITY OF WICHITA, KANSAS  
MICHAEL E. LINDBERGH, CITY ENGINEER

OCA #607861



SCALE: 1" = 150'

APPROVED AS NOTED  
BY CITY ENGINEER OF WICHITA

SANITARY SEWERS \_\_\_\_\_  
STORM SEWERS \_\_\_\_\_  
UNIVERSITY APPROVED \_\_\_\_\_  
WATER MAINS \_\_\_\_\_  
PAVING \_\_\_\_\_

### NOTE TO CONTRACTOR

INSPECTION AND TESTING FOR THIS PROJECT IS TO BE PROVIDED BY A LICENSED CONSULTING ENGINEERING FIRM UNDER CONTRACT WITH THE CITY OF WICHITA. THE INSPECTION TO BE IN ACCORDANCE WITH THE CITY OF WICHITA STANDARD CONSTRUCTION ENGINEERING PRACTICES AND REVIEWED BY A LICENSED PROFESSIONAL ENGINEER. NO WORK SHALL BE PERFORMED IN DESIGNATED EASEMENTS OR THE PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION. WORK SHALL NOT BE COMMENCED IN DESIGNATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

### INDEX TO DRAWINGS

| SHEET NO. | DESCRIPTION                      |
|-----------|----------------------------------|
| 1         | TITLE SHEET                      |
| 2         | LINE 1                           |
| 3         | LINE 2&3                         |
| 4         | LINE 4                           |
| 5         | DROP INLET DETAILS               |
| 6         | CURB INLET DETAILS               |
| 7         | EROSION/SEDIMENT CONTROL DETAILS |
| 8         | FINAL PLAN                       |

### BENCHMARKS

BM #1 CHISELED 12" ON EAST TO HOOPER ROAD  
132' SOUTH & 45' WEST OF NW CORNER LOT 2  
ELEV. = 120.47

AS BUILT: 8/11/00

|                              |  |
|------------------------------|--|
| <b>ROLLINS LEASING CORP.</b> |  |
| PROJECT DATA                 |  |
| TITLE SHEET                  |  |
| SHEET TITLE                  |  |
| DESIGNED BY: JLC             |  |
| CHECKED BY: JLC              |  |
| DATE: JANUARY 2000           |  |
| SCALE: 1" = 150'             |  |



