

Time Is: 14:58:32
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 Drawing File: C:\DCA\1998\15-COVER
 R11 62

CONSTRUCTION PLANS
 SANITARY SEWER EXTENSIONS
LEXINGTON ADDITION
 TO
THE CITY OF WICHITA, KANSAS
LATERAL 12, MAIN 1, COWSKIN INTERCEPTOR SEWER

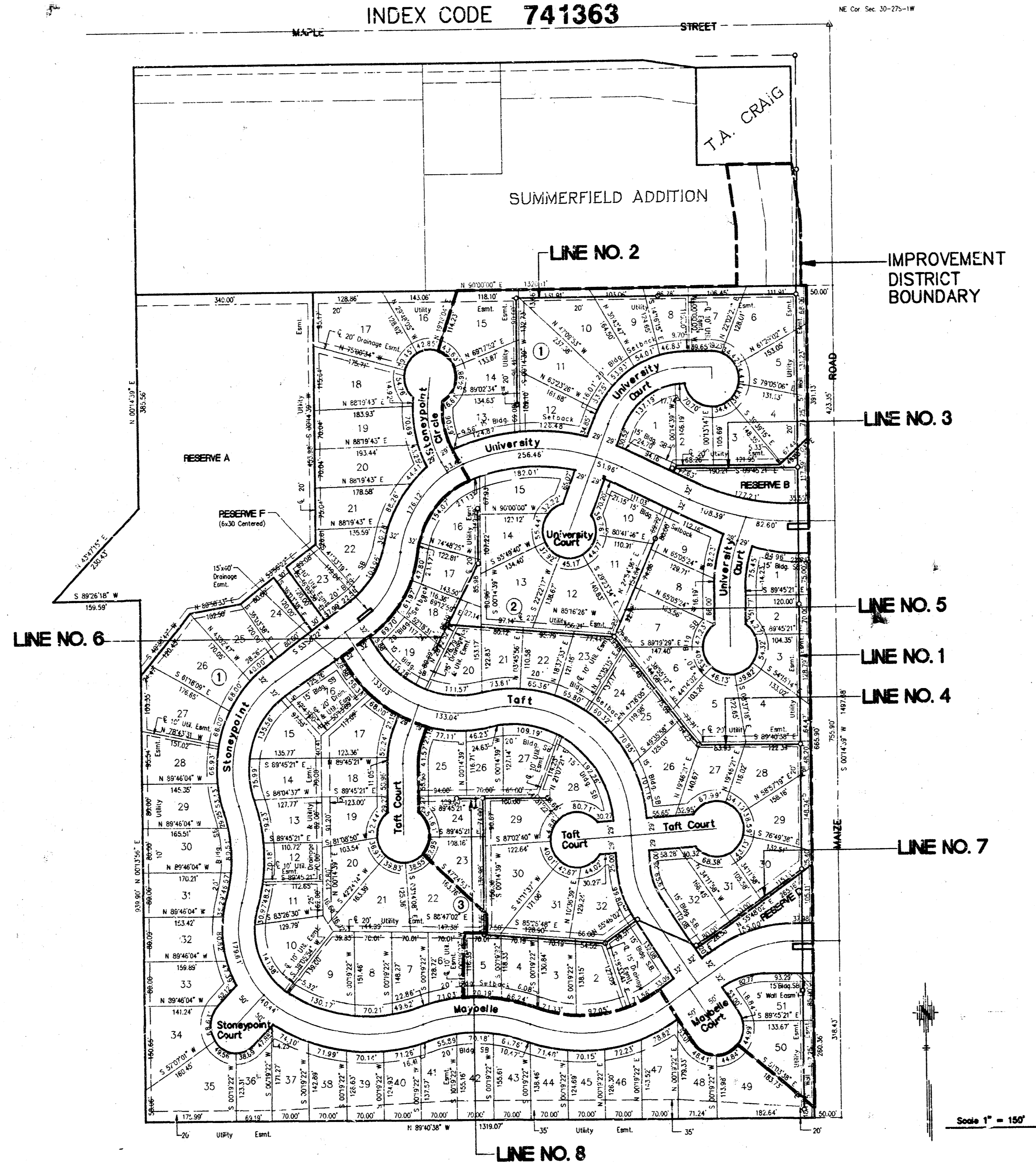
MICHAEL E. LINDEBAK, P.E. - CITY ENGINEER
 PROJECT NO. 468-82259
 INDEX CODE 741363

GENERAL NOTES:

- Existing utility lines and their location, as shown on the plans, represent the best information obtainable for design. The contractor will be required to work around existing utilities within the right-of-way which do not conflict with proposed construction.
- 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 unsightly 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.

- The Contractor shall be responsible for maintaining continuous flow of sewage through construction. Contractor's proposed method for maintaining sewage flow shall be approved by the Engineer. Cost of maintaining flow of sewage through construction will not be paid for directly and this cost shall be considered as subsidiary to the other pay items of the work.
- 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 or a licensed professional engineer in accordance with state laws.
- 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 the proposed new construction shall be saved and protected from damage.
- Contractor shall vacuum test all manholes according to the City of Wichita standard specifications.
- The tops of all Manholes to be set 0.3 feet above existing ground unless otherwise noted.



INDEX

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LINE NO. 1	SHEET 2-3
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RISER DETAILS	SHEET 9
TYPE "P" MANHOLE	SHEET 10
TYPE "C" MANHOLE	SHEET 11
LEXINGTON ADDITION PLAT	SHEET 12

BENCH MARKS

(City of Wichita Datum)

BM #1 Railroad spike in Power Pole 1430.79' West and 48.00' North of the NE Cor. Sec. 30-275-1W Elev. 138.71

BM #2 "X" cut in NNW curb return at Maize Rd. and University intersection Elev. 137.75

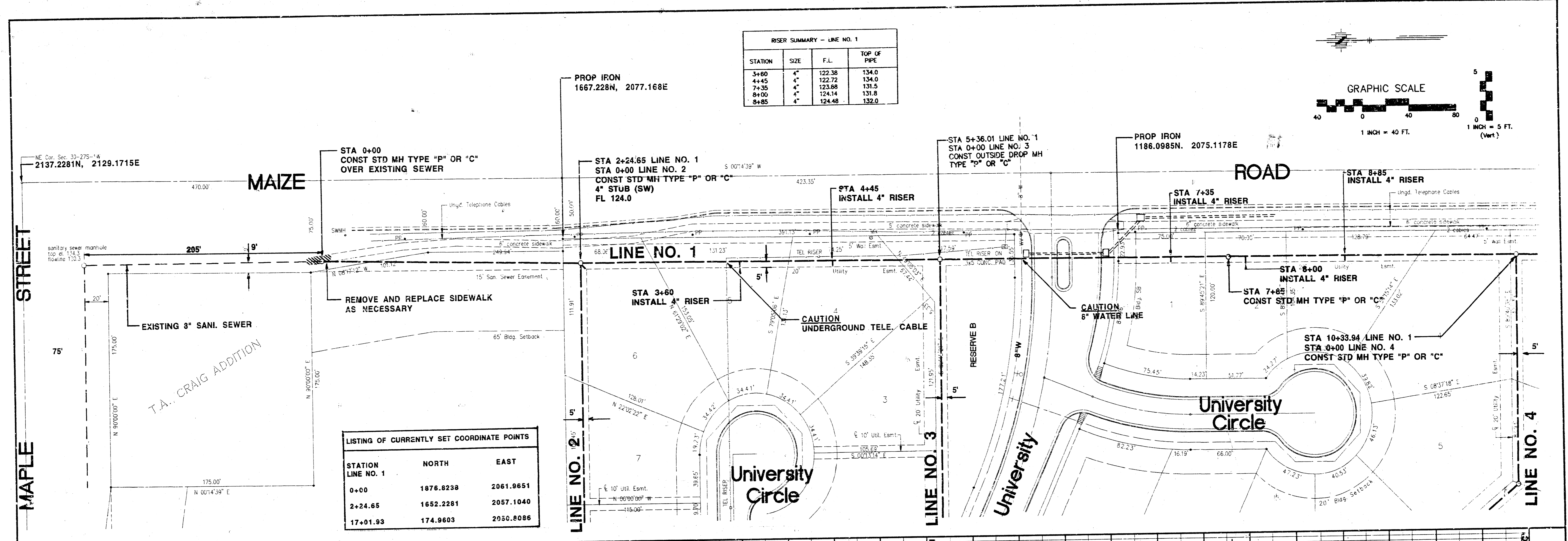
*Booked 10-20-93
 As per Plan
 CKB*



DECEMBER 1992

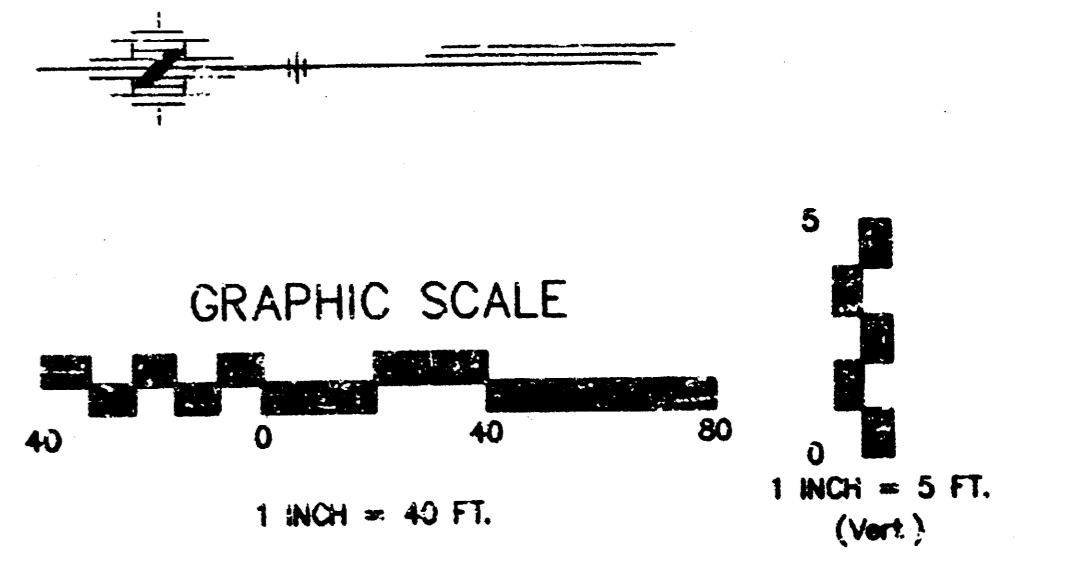
PLANS PREPARED BY
POE & ASSOCIATES OF KANSAS, INC.
 Consulting Engineers
 434 N. Oliver Suite 110 Wichita KS 67208 316/885-4114

Time for 15.38.24
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 Drawing File: C:\DCA\PA508\SS1
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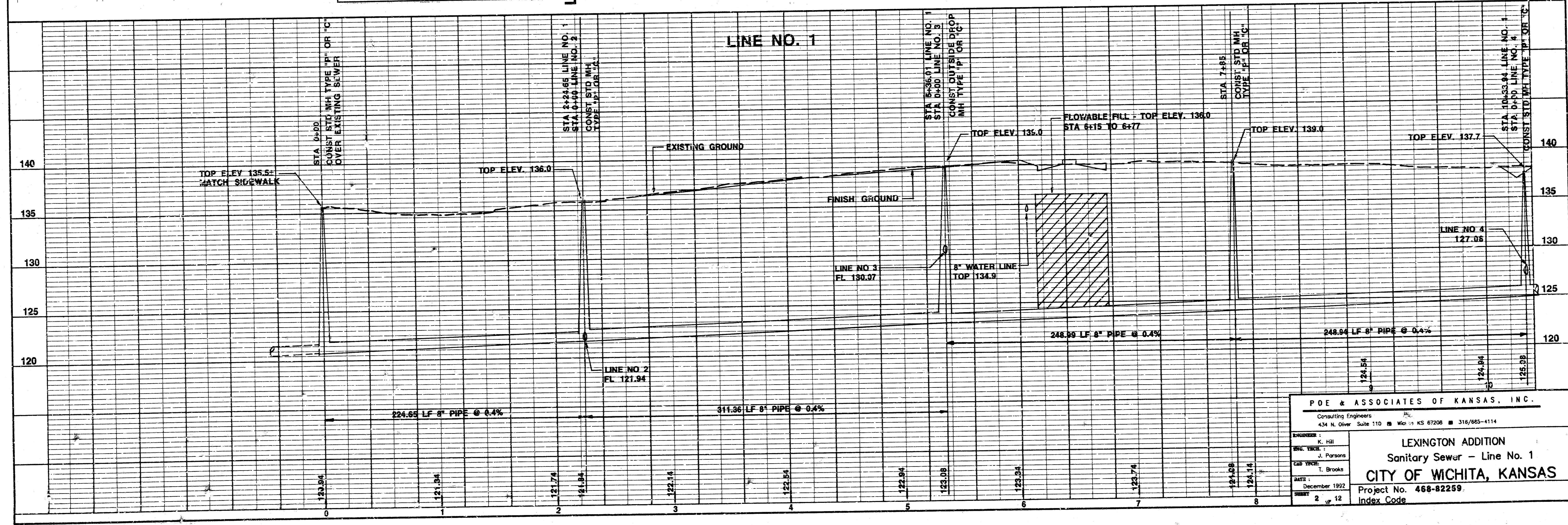
RISER SUMMARY - LINE NO. 1

STATION	SIZE	F.L.	TOP OF PIPE
3+60	4"	122.38	134.0
4+45	4"	122.72	134.0
7+35	4"	123.58	131.5
8+00	4"	124.14	131.8
8+85	4"	124.48	132.0



LISTING OF CURRENTLY SET COORDINATE POINTS

STATION	NORTH	EAST
LINE NO. 1 0+00	1876.8238	2061.9651
2+24.65	1652.2281	2057.1040
17+01.93	174.9603	2050.8086

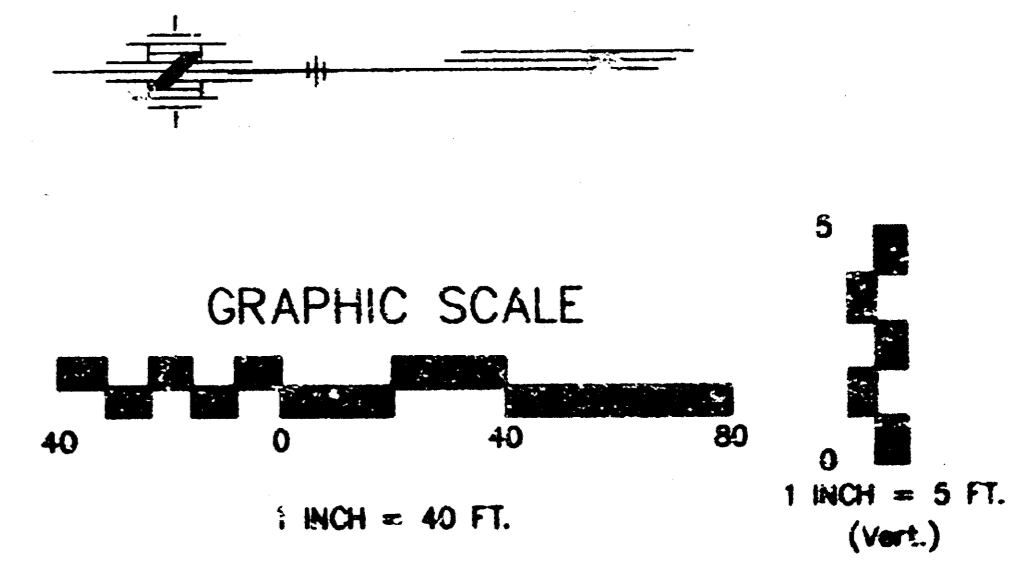
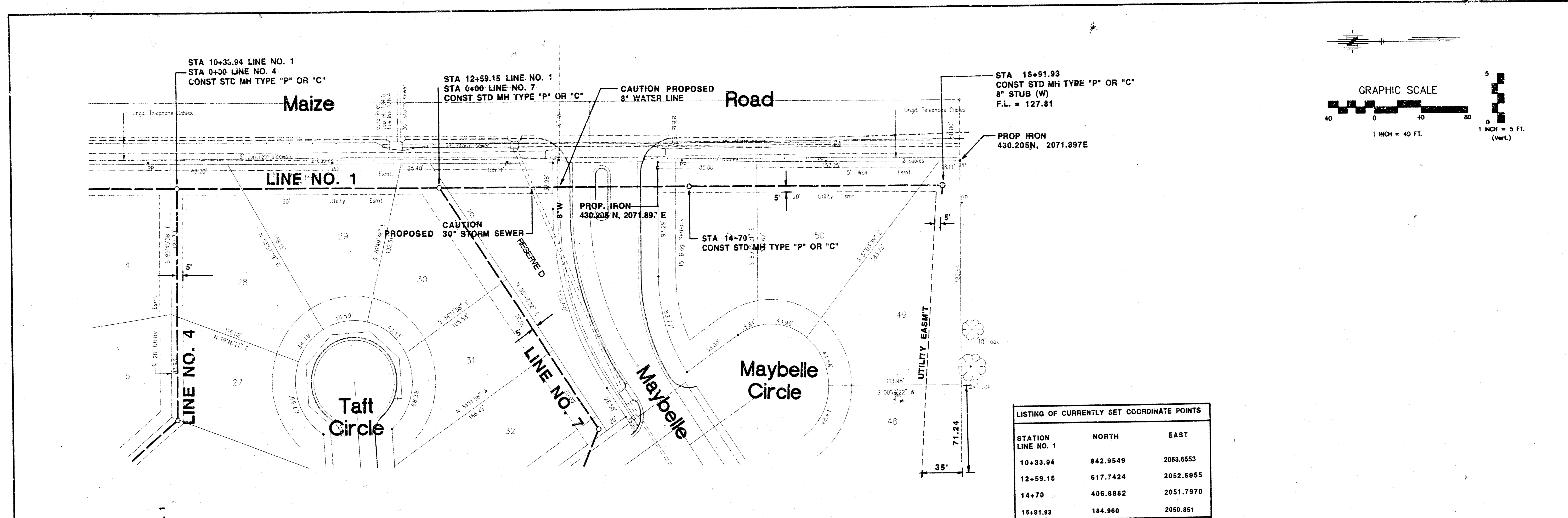


P.O.E. & ASSOCIATES OF KANSAS, INC.
 Consulting Engineers
 434 N. Oliver Suite 110 Win. KS 67208 316/855-4114

ENGINEER: K. Hill
DRG. TRICK: J. Parsons
CAD TRICK: T. Brooks
DATE: December 1992
SHEET: 2 of 12

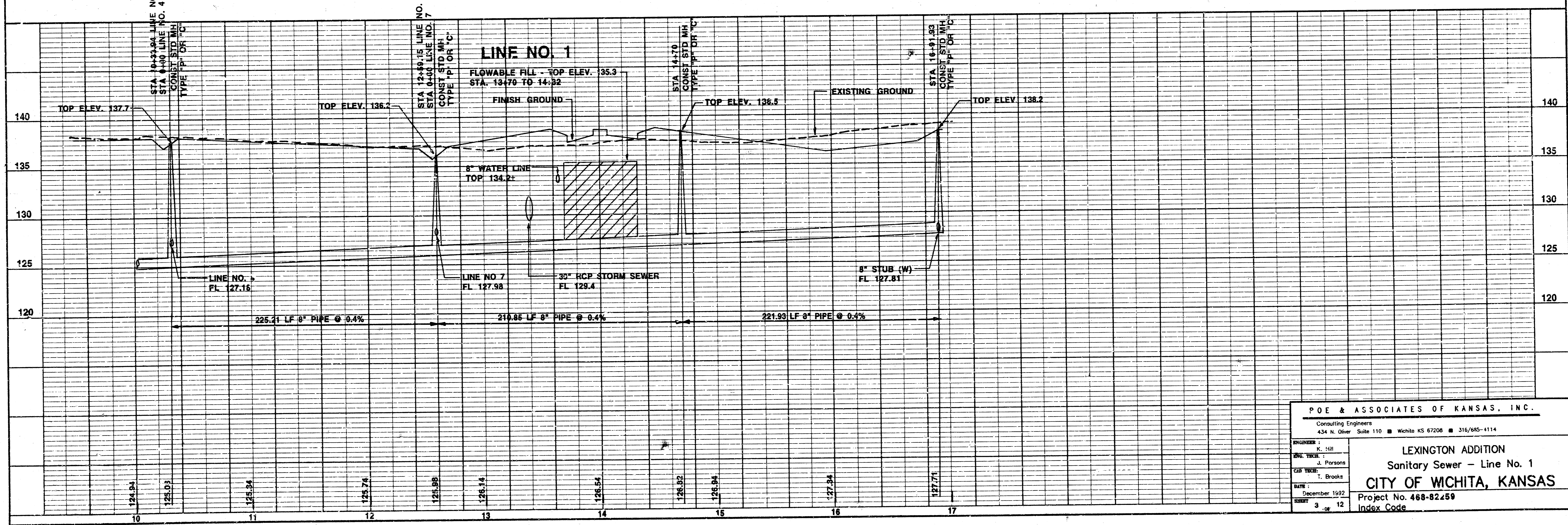
**LEXINGTON ADDITION
 Sanitary Sewer - Line No. 1
 CITY OF WICHITA, KANSAS**
 Project No. 468-82259
 Index Code

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LISTING OF CURRENTLY SET COORDINATE POINTS

STATION LINE NO. 1	NORTH	EAST
10+35.94	842.9549	2053.6553
12+59.15	617.7424	2052.6955
14+70	406.8862	2051.7970
16+91.93	184.960	2050.851

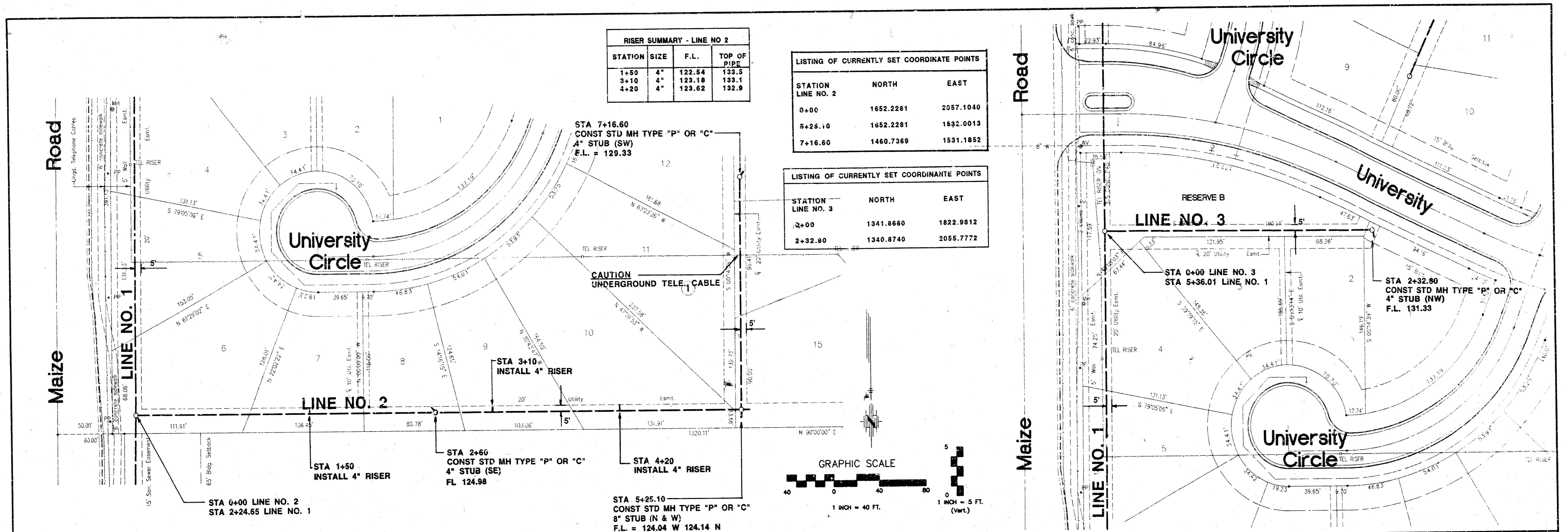


P.O.E. & ASSOCIATES OF KANSAS, INC.
 Consulting Engineers
 434 N. Oliver Suite 110 Wichita KS 67206 316/685-1114

ENGINEER: K. Hill
 ENG. CHECK: J. Parsons
 CIV. CHECK: T. Brooks
 DATE: December 1992
 SHEET: 3 of 12

LEXINGTON ADDITION
 Sanitary Sewer - Line No. 1
CITY OF WICHITA, KANSAS
 Project No. 468-82259
 Index Code

Time is: 9:36:51 AM
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 R11.dwg



RISER SUMMARY - LINE NO. 2

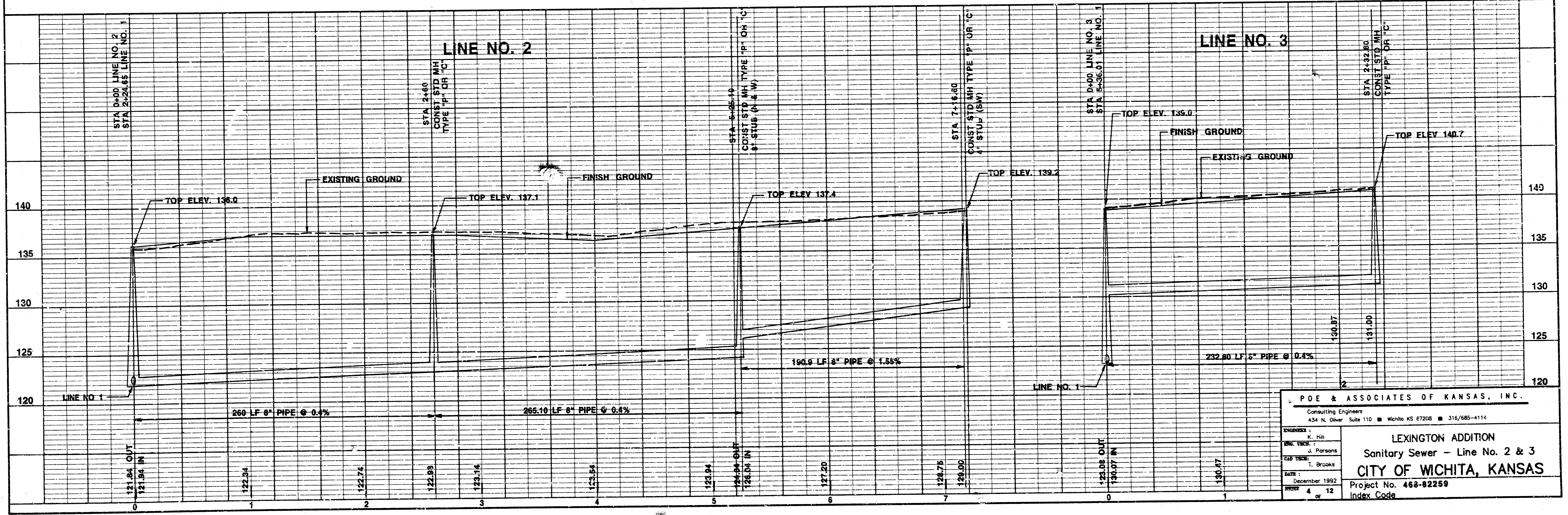
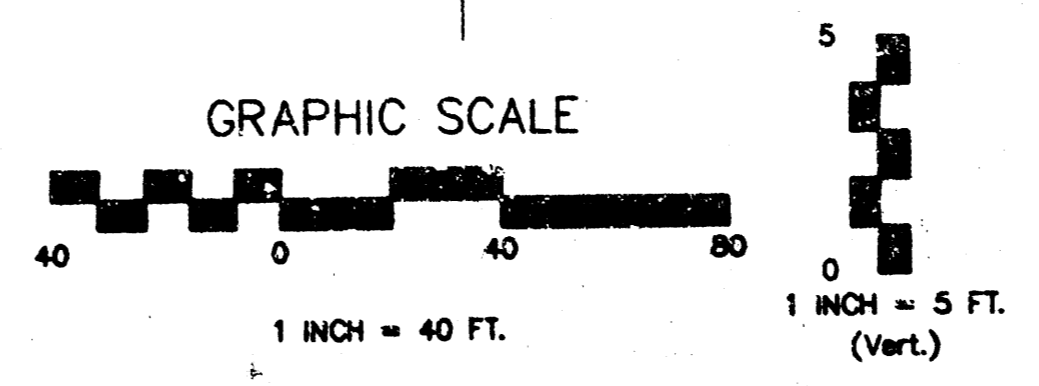
STATION	SIZE	F.L.	TOP OF PIPE
1+50	4"	122.54	133.5
3+10	4"	123.18	133.1
4+20	4"	123.62	132.9

LISTING OF CURRENTLY SET COORDINATE POINTS

STATION	NORTH	EAST
0+00	1652.2281	2057.1040
5+25.10	1652.2281	1632.0013
7+16.60	1460.7369	1531.1852

LISTING OF CURRENTLY SET COORDINATE POINTS

STATION	NORTH	EAST
0+00	1341.8660	1822.9812
2+32.80	1340.8740	2055.7772

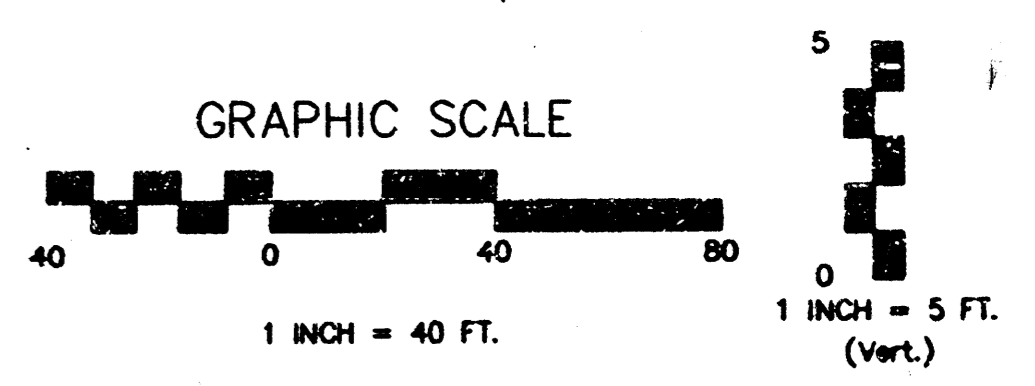
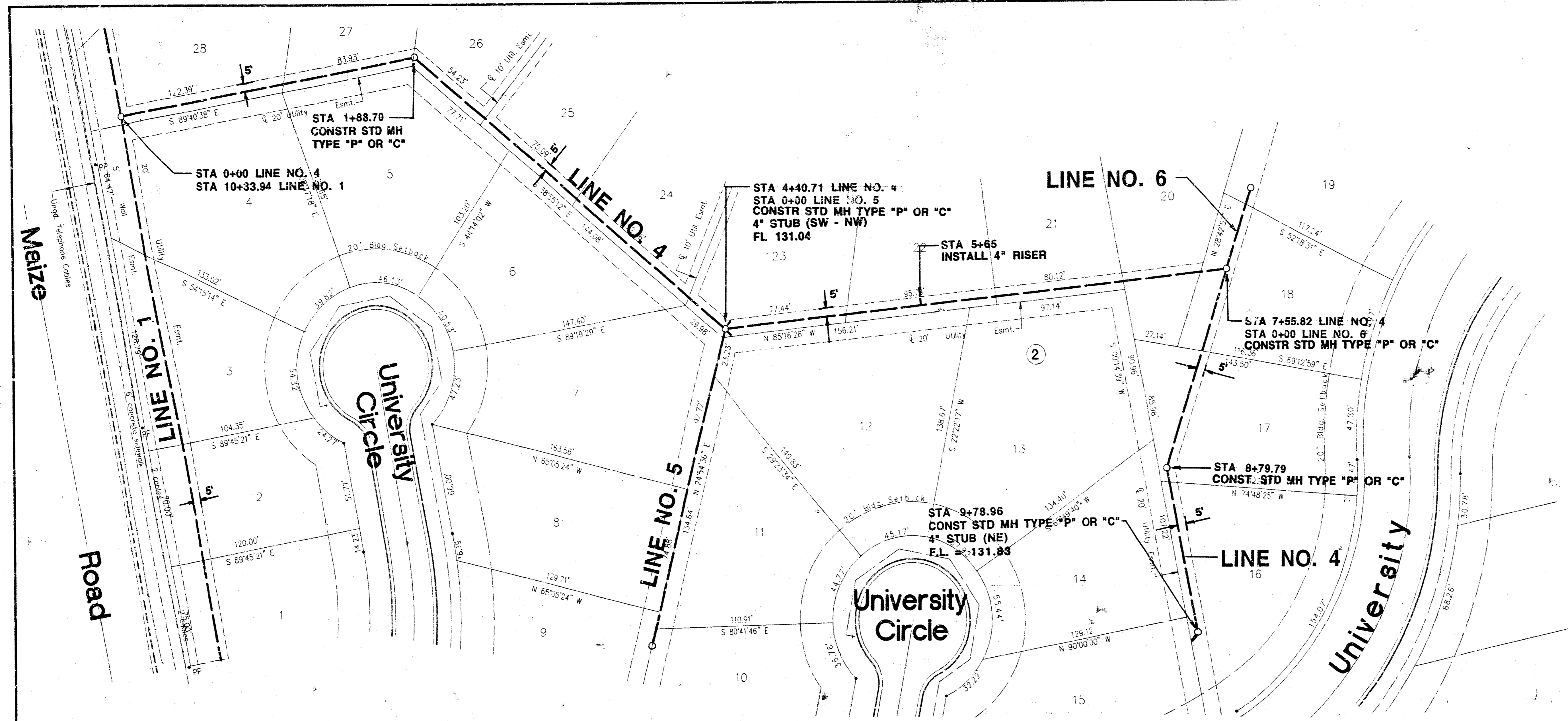


P.O.E. & ASSOCIATES OF KANSAS, INC.
 Consulting Engineers
 434 N. Oliver Suite 110 Wichita KS 67208 316/685-4114

LEXINGTON ADDITION
 Sanitary Sewer - Line No. 2 & 3
CITY OF WICHITA, KANSAS
 Project No. 468-92259
 Index Code

ENGINEER: K. Hill
 DATE PLOTTED: J. Parsons
 CAP. CHECKED: T. Brooks
 DATE: December 1992
 SHEET: 4 of 12

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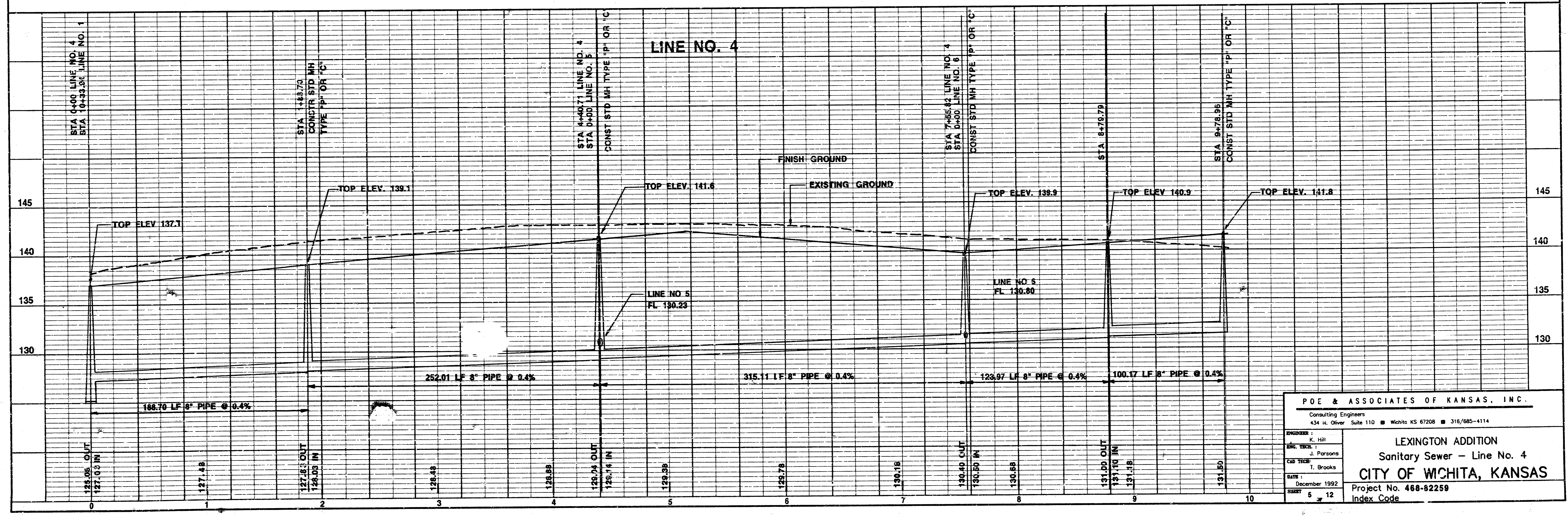


RISER SUMMARY - LINE NO. 4

STATION	SIZE	F.L.	TOP OF PIPE
5+65	4"	129.64	133.2

LISTING OF CURRENTLY SET COORDINATE POINTS

STATION LINE NO. 4	NORTH	EAST
0+00	842.9549	2053.6553
1+88.70	844.0179	1864.9545
4+40.71	1940.0812	1706.6386
7+55.82	1066.0447	1392.5936
8+73.79	1174.7666	1452.1526
9+78.96	1273.9392	1452.5753

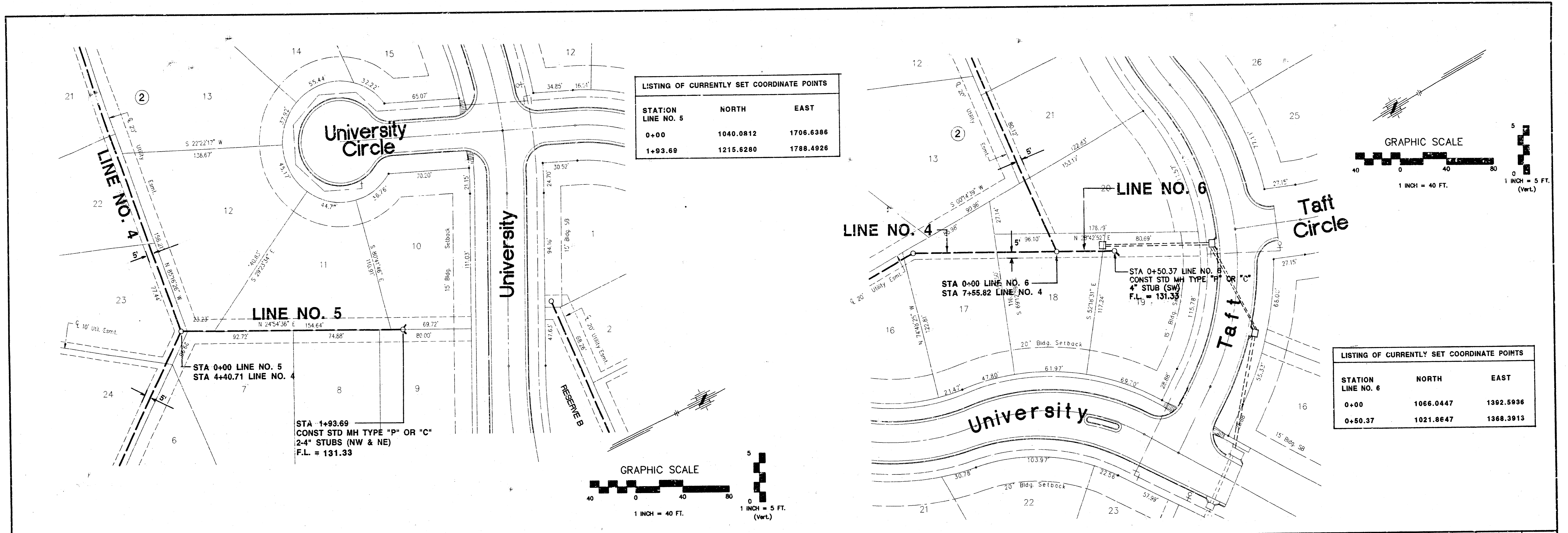


P.O.E. & ASSOCIATES OF KANSAS, INC.
 Consulting Engineers
 434 N. Oliver, Suite 110 ■ Wichita, KS 67208 ■ 316/685-4114

ENGINEER: K. Hill
REV. CHECK: J. Parsons
CAD CHECK: T. Brooks
DATE: December 1992
SHEET: 5 of 12

LEXINGTON ADDITION
Sanitary Sewer - Line No. 4
CITY OF WICHITA, KANSAS
 Project No. 468-82259
 Index Code

Time Is: 11:25:17
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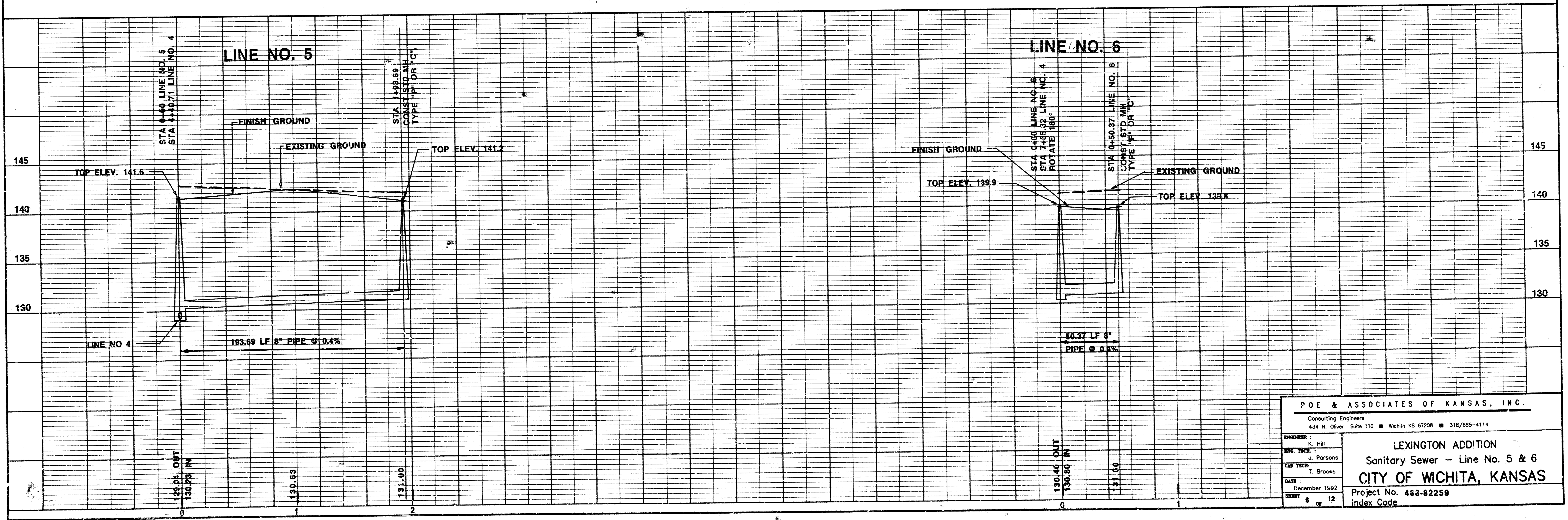


LISTING OF CURRENTLY SET COORDINATE POINTS

STATION LINE NO. 5	NORTH	EAST
0+00	1040.0812	1706.6386
1+93.69	1215.6280	1788.4926

LISTING OF CURRENTLY SET COORDINATE POINTS

STATION LINE NO. 6	NORTH	EAST
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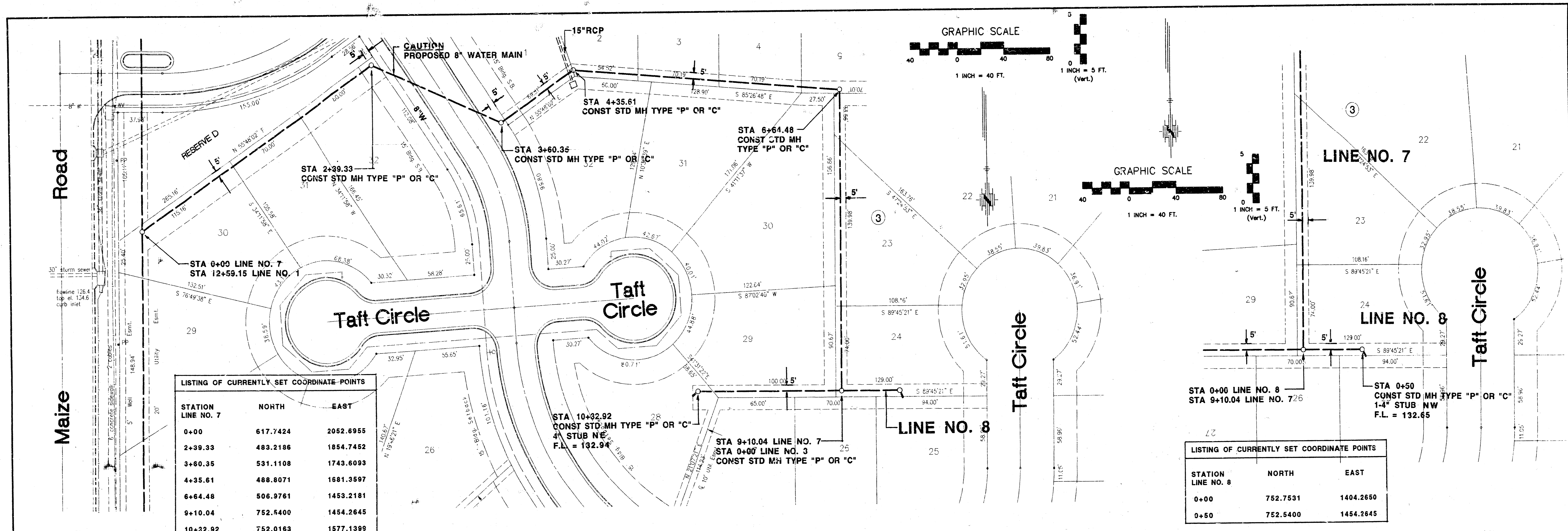


POE & ASSOCIATES OF KANSAS, INC.
 Consulting Engineers
 434 N. Oliver, Suite 110 ■ Wichita, KS 67208 ■ 316/885-4114

ENGINEER: K. Hill
 INC. CHECK: J. Parsons
 CAP. CHECK: T. Brooker
 DATE: December 1992
 SHEET: 6 of 12

LEXINGTON ADDITION
 Sanitary Sewer - Line No. 5 & 6
 CITY OF WICHITA, KANSAS
 Project No. 463-82259
 Index Code

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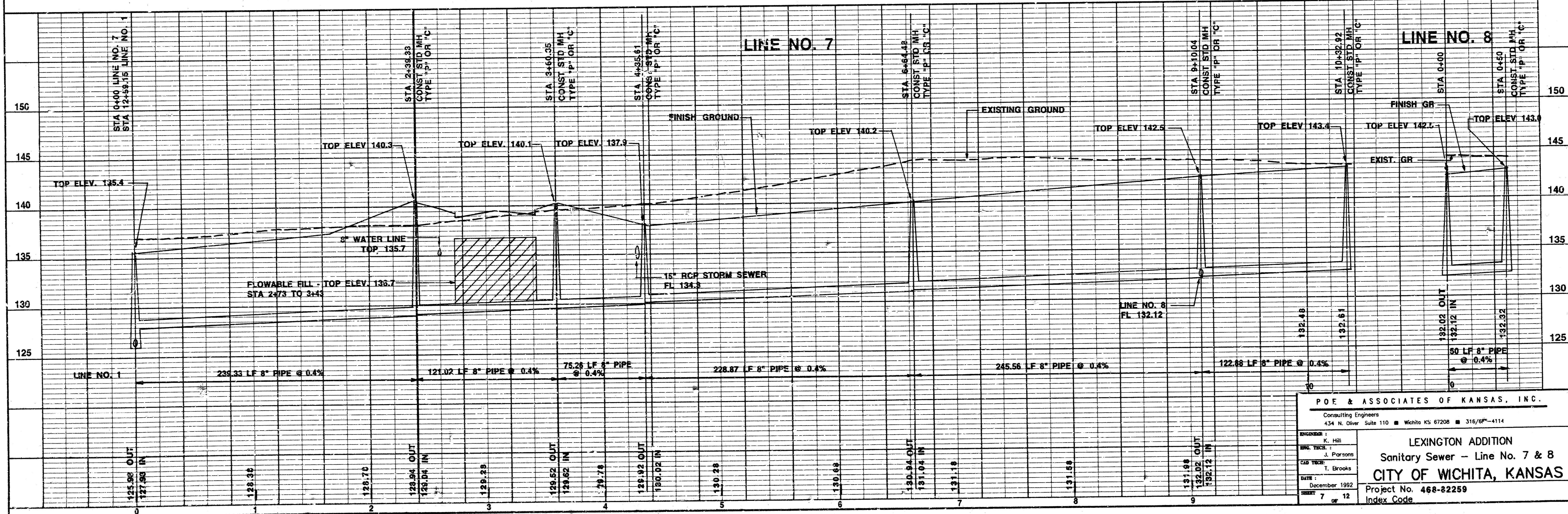


LISTING OF CURRENTLY SET COORDINATE POINTS

STATION LINE NO. 7	NORTH	EAST
0+00	617.7424	2052.6955
2+39.33	483.2186	1854.7452
3+60.35	531.1108	1743.6093
4+35.61	488.8071	1681.3597
6+64.48	506.9761	1453.2181
9+10.04	752.5400	1454.2645
10+32.92	752.0163	1577.1399

LISTING OF CURRENTLY SET COORDINATE POINTS

STATION LINE NO. 8	NORTH	EAST
0+00	752.7531	1404.2650
0+50	752.5400	1454.2645



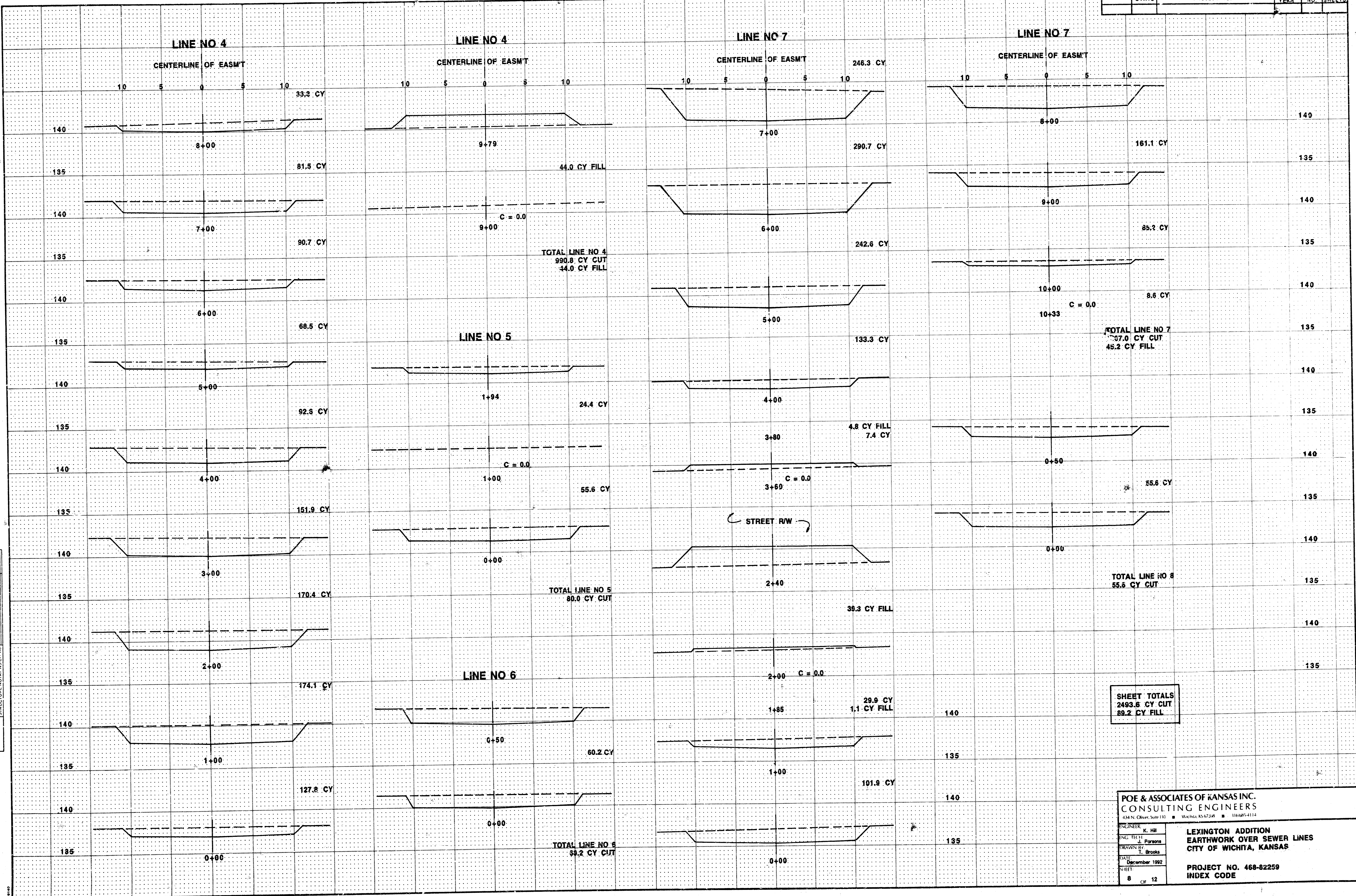
P O E & ASSOCIATES OF KANSAS, INC.
 Consulting Engineers
 434 N. Oliver Suite 110 Wichita KS 67208 316/684-4114

ENGINEER: K. Hill
 DATE: December 1992
 SHEET: 7 of 12

LEXINGTON ADDITION
 Sanitary Sewer - Line No. 7 & 8
 CITY OF WICHITA, KANSAS
 Project No. 468-82259
 Index Code

PLAN
 SURVEYED _____
 NOTE BOOK _____
 ALIGNMENT CHECKED _____
 RT. OF WAY CHECKED _____

PROFILE
 CONSTRUCTION _____
 PLOTTED _____
 GRADES NOTED _____
 STRUCTURE NOTATIONS (N, S, CH, NO.) _____



POE & ASSOCIATES OF KANSAS INC.
 CONSULTING ENGINEERS
 1401 N. Oliver, Suite 110 • Wichita, KS 67208 • 316-845-4114

ENGINEER: K. Hill
 ENG. TECH.: J. Parsons
 DRAWN BY: T. Brooks
 DATE: December 1992
 SHEET: 8 OF 12

**LEXINGTON ADDITION
 EARTHWORK OVER SEWER LINES
 CITY OF WICHITA, KANSAS**

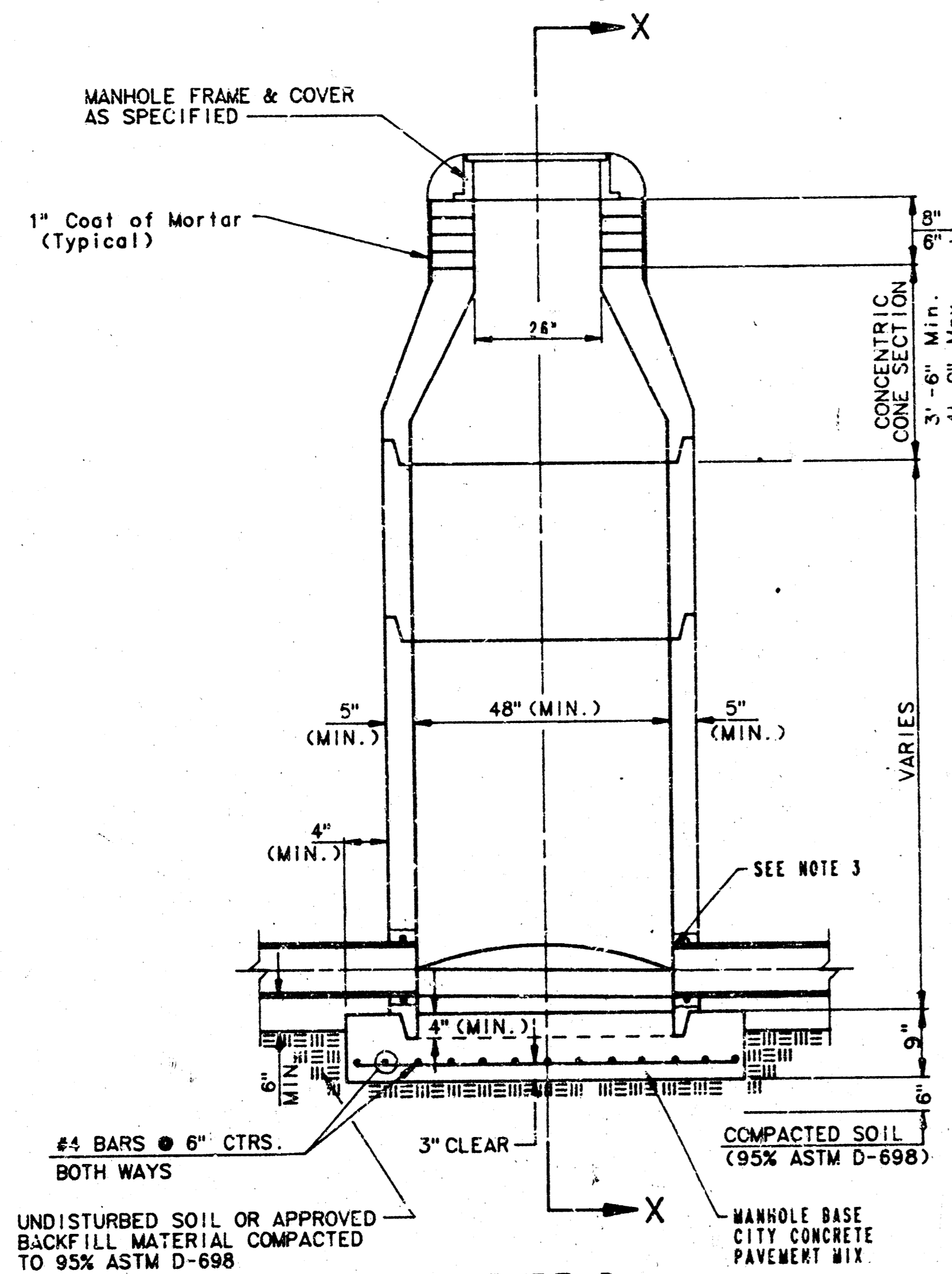
**PROJECT NO. 468-82259
 INDEX CODE**

SEWER APPURTENANCES DETAILS

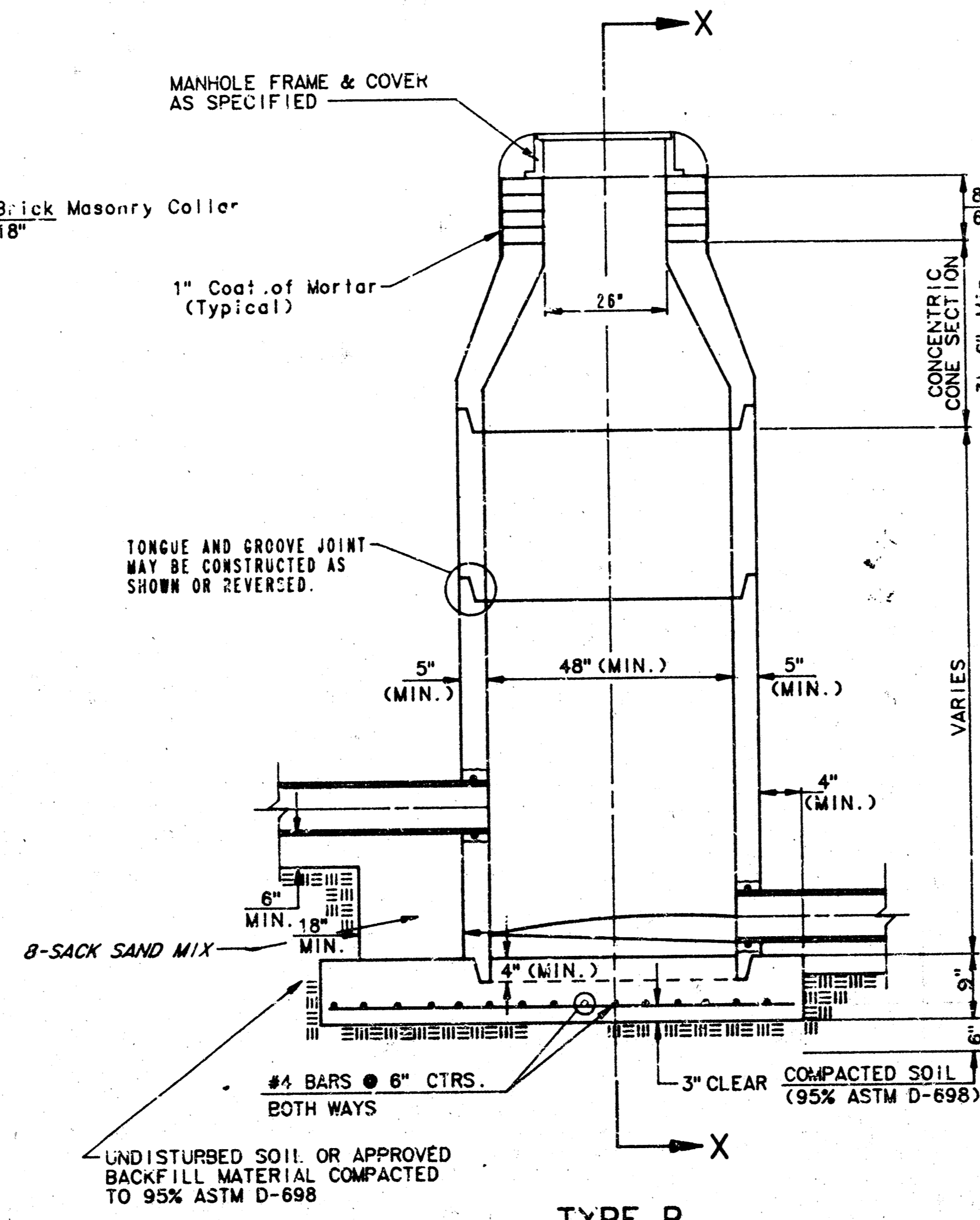
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BY

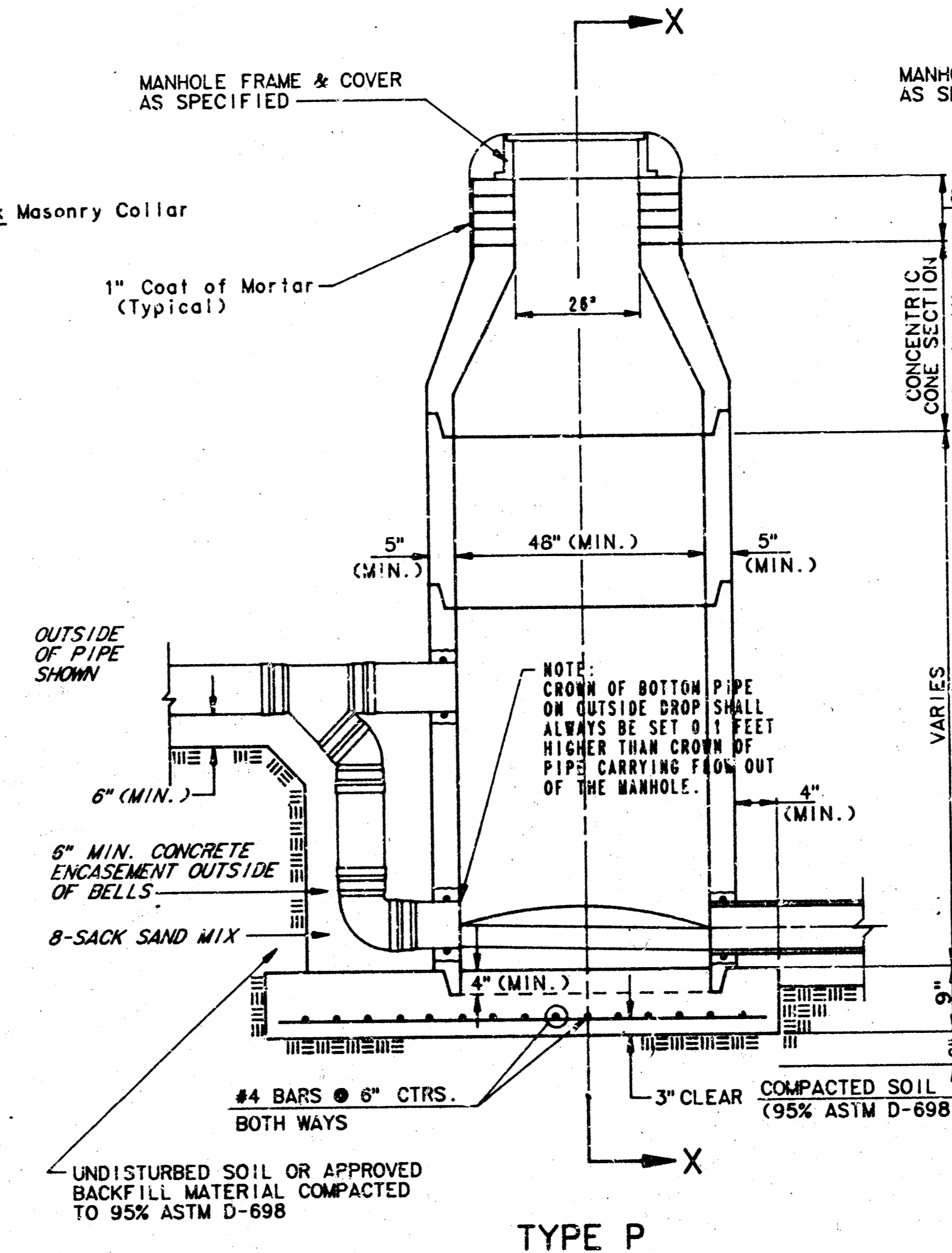
CITY OF WICHITA



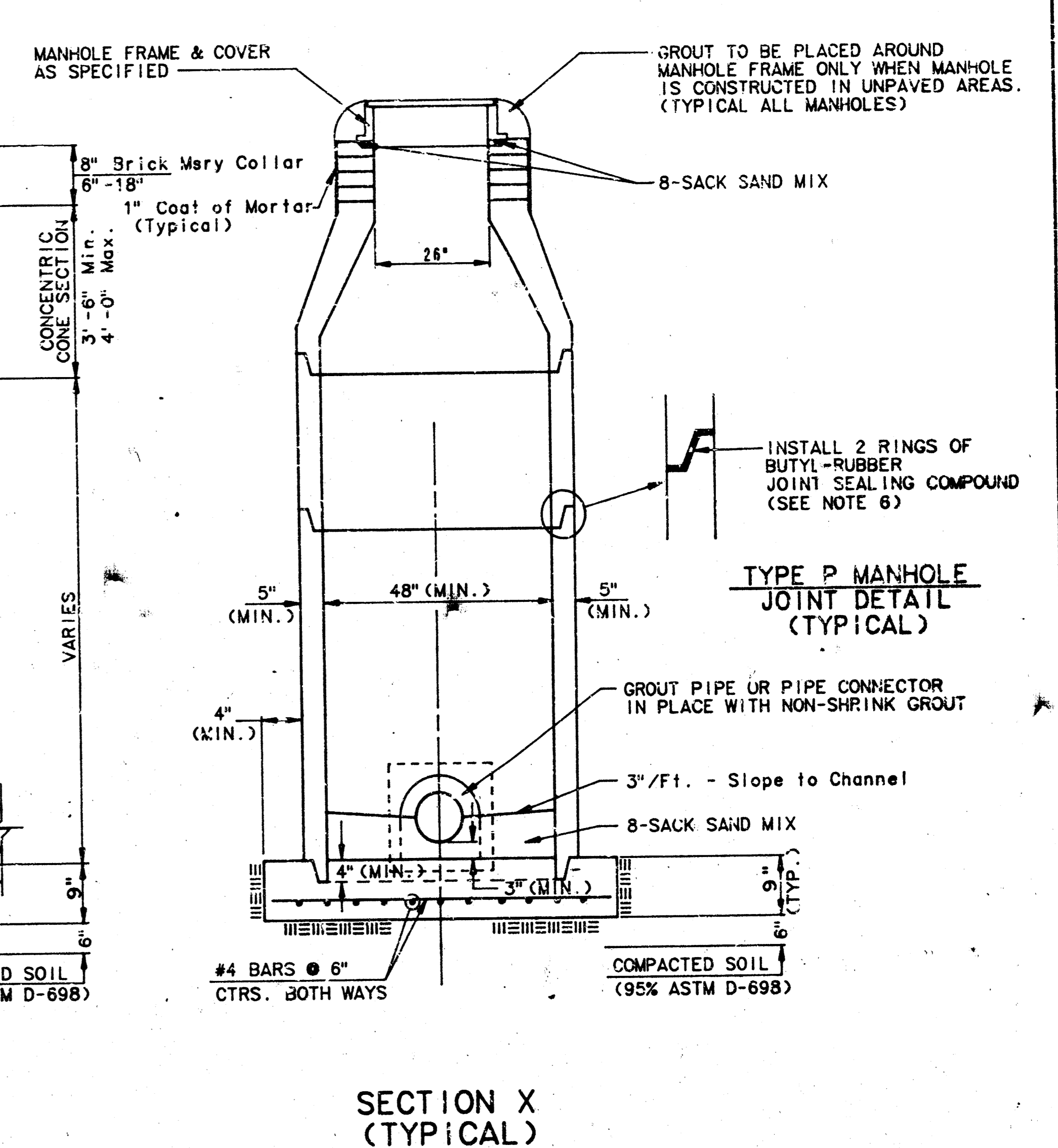
**TYPE P
STANDARD MANHOLE**



**TYPE P
INSIDE DROP MANHOLE**



**TYPE P
OUTSIDE DROP MANHOLE**



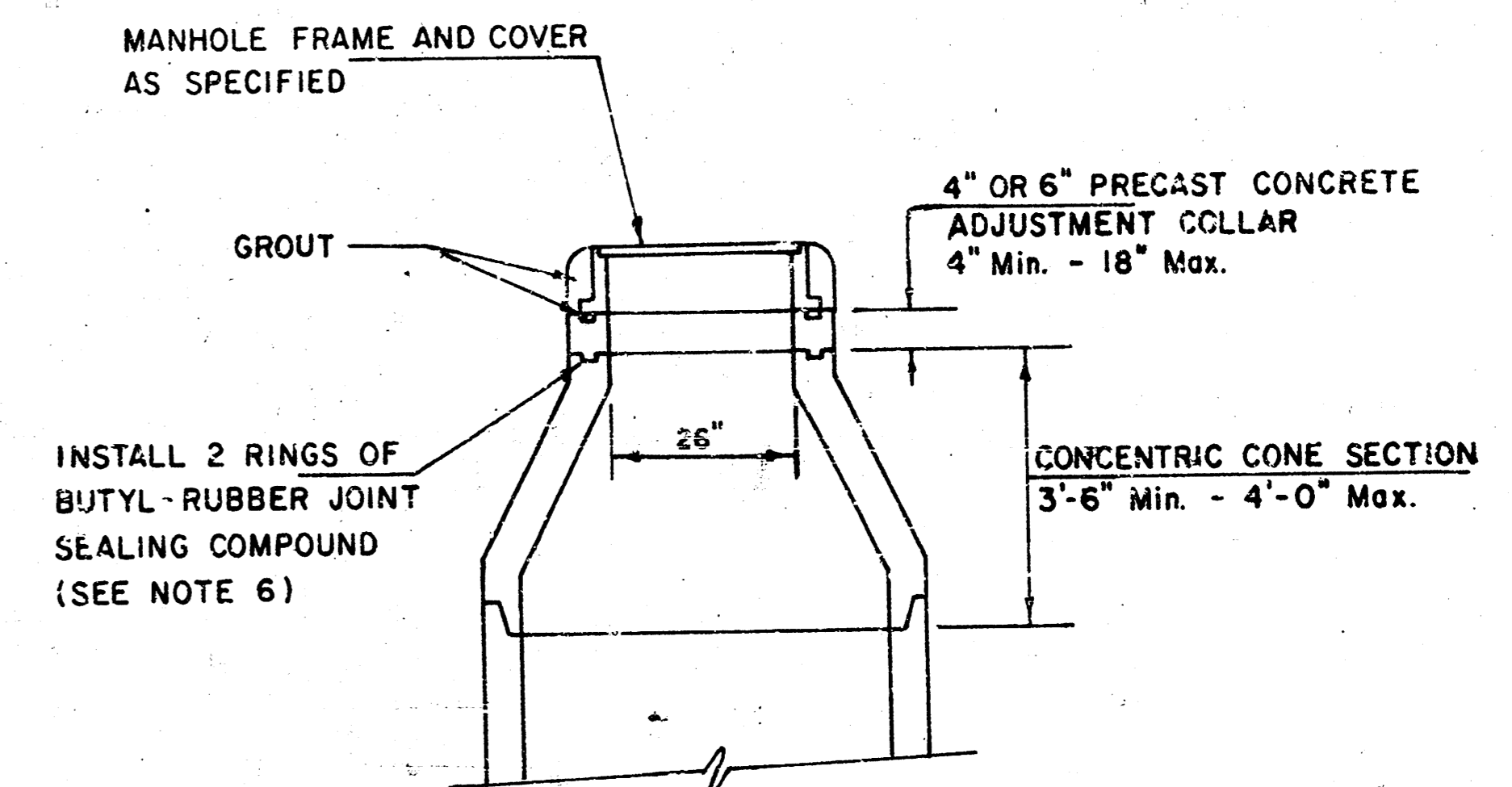
**SECTION X
(TYPICAL)**

**GENERAL NOTES
PRECAST MANHOLE NOTES**

1. ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISION OF A.S.T.M. 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 A.B.S. COMPOSITE PIPE OR 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 TRAMEC SERIES 88 HI-BUILD EPOXYLINE, 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 KERT SEAL NO. 2 OR APPROVED EQUAL.
7. PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
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 FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING 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. AND A.B.S. COMPOSITE 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 DRAWING. THIS 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 SUCH THAT THE MANHOLES 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 IN THE STANDARD DETAIL DRAWING.
16. THE VERTICAL FREE FALL DROP INSIDE MANHOLES SHALL NOT EXCEED 2'. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
17. STANDARD MANHOLES AND STANDARD INSIDE DROP MANHOLES SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.
18. 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 6" MINIMUM AND 18" MAXIMUM. A 1" COAT OF MORTAR WILL BE PLASTERED ON THE OUTSIDE OF THE COLLAR.



**ALTERNATE CONSTRUCTION
IN UNPAVED AREAS**

POE & ASSOCIATES OF KANSAS, INC.	
<small>Consulting Engineers 404 N. Oliver Suite 110 Wichita, KS 67208 315/485-4111</small>	
<small>ENGINEER: K. Hill</small>	LEXINGTON ADDITION
<small>DR. TITLE: J. Parsons</small>	Sanitary Sewer
<small>CAD TITLE: T. Brooks</small>	CITY OF WICHITA, KANSAS
<small>DATE: December 1992</small>	Project No. 468-82259
<small>SHEET 9 OF 12</small>	Index Code

NOTE NO. 16 REVISED JAN. 1991
Revised 3-21-89
Revised 8-10-88
Revised: June 12, 1995

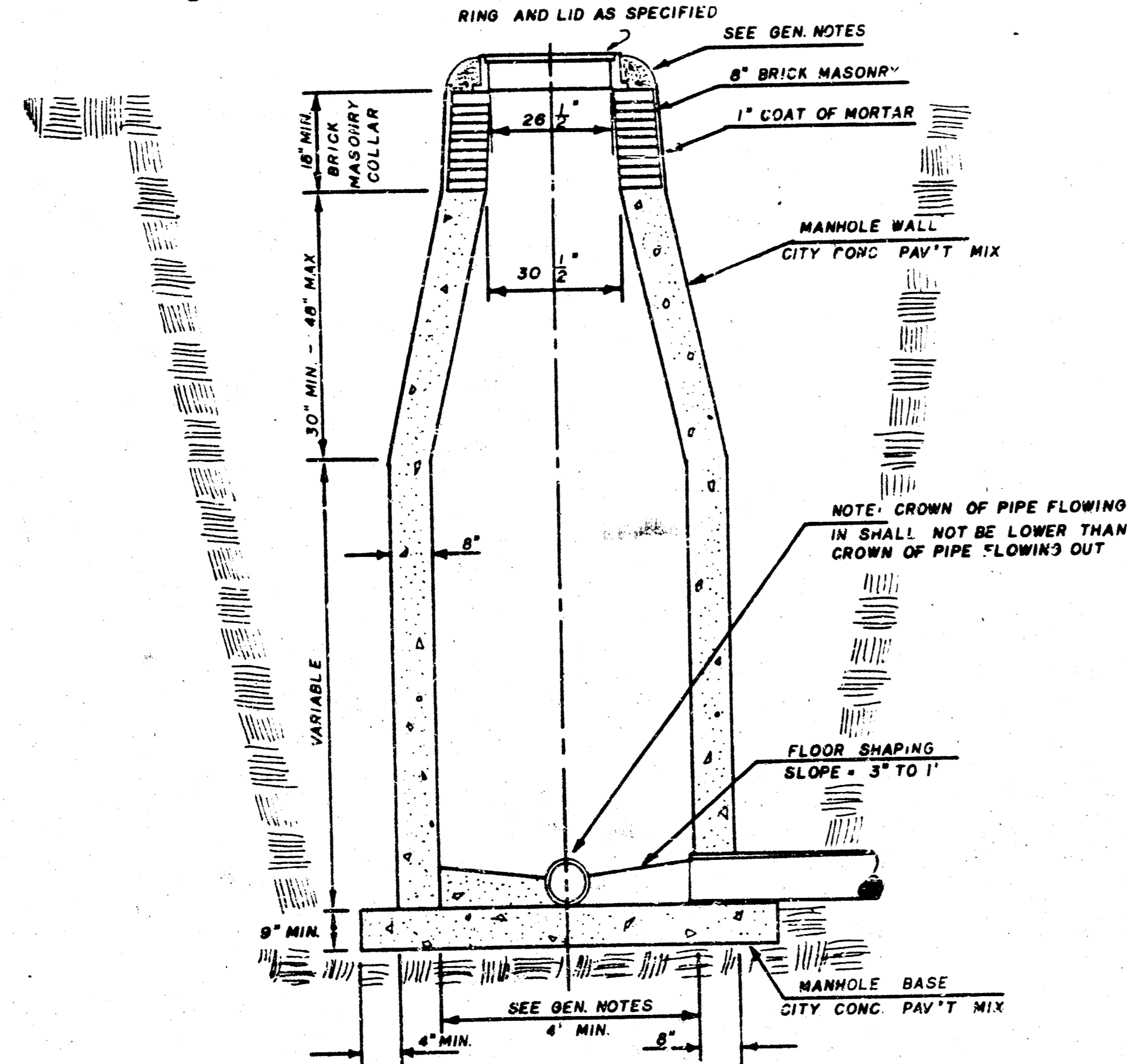
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ADOPTED AS STANDARD DESIGN

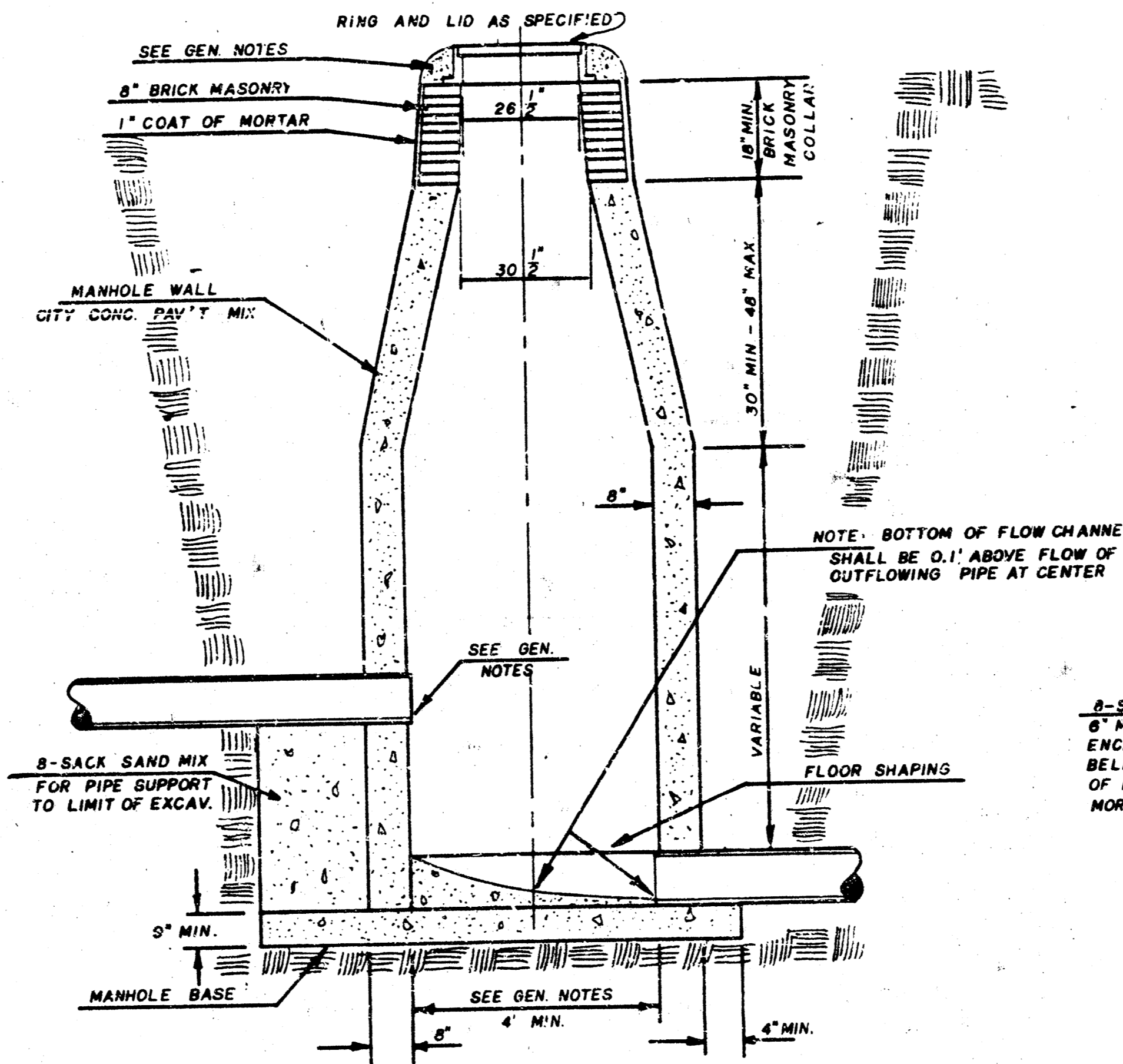
BY

City of Wichita, Kansas

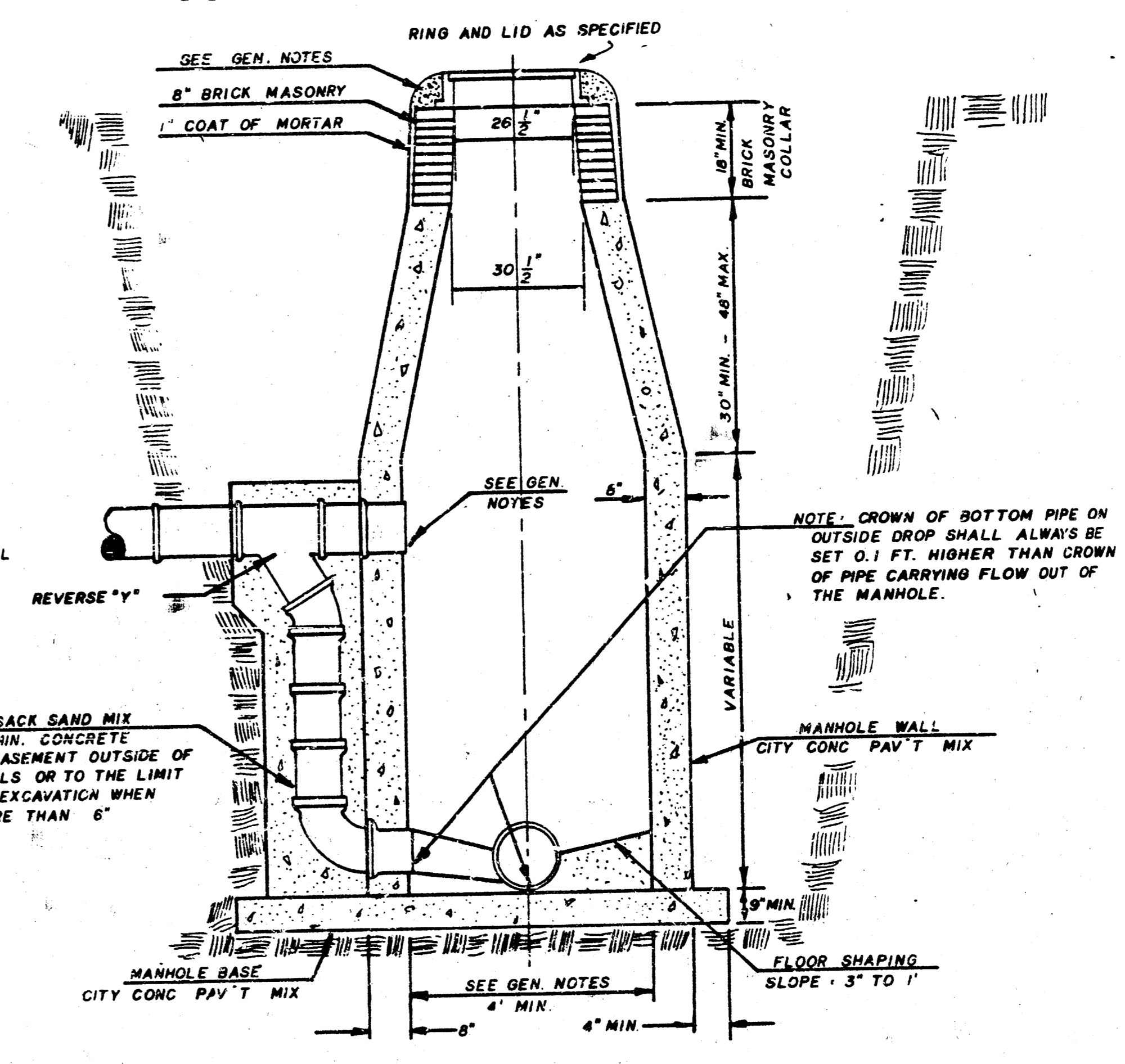
STANDARD MANHOLE TYPE "C"



INSIDE DROP MANHOLE TYPE "C"



OUTSIDE DROP MANHOLE TYPE "C"



GENERAL NOTES

- MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD. CONCRETE USED IN MANHOLE WALLS AND BASES SHALL CONFORM TO THE REQUIREMENTS OF CONCRETE FOR CONCRETE PAVEMENT CONSTRUCTION AS SPECIFIED IN THE CITY STANDARD PAVING 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. TYPE "C" MANHOLES CAN BE CONSTRUCTED ONLY WHERE PIPE SIZES ARE 8" OR SMALLER. THE INSIDE DIAMETER OF TYPE "C" MANHOLES SHALL BE 4". COMPLETED MANHOLE SHALL BE WITHOUT LEAKS AND WATER TIGHT.
- REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASE. REINFORCING STEEL SHALL CONSIST OF 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. REINFORCING STEEL SHALL BE PLACED 6" ABOVE THE BOTTOM OF THE MANHOLE BASE. COST OF FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE MANHOLE.
- AN OPENING SHALL BE CUT IN THE MANHOLE WALL FOR THE UPPER INLET PIPE FOR INSIDE AND OUTSIDE DROP MANHOLES. THE UPPER INLET PIPE SHALL BE GROUTED INTO THIS OPENING WITH NON-SHRINK GROUT. THE EXTERIOR OF THIS COMPLETED CONNECTION SHALL BE SEALED WITH AN APPROVED BITUMINOUS COATING SUCH THAT THE CONNECTION WILL BE WATER TIGHT.
- THE FLOORS OF ALL MANHOLES SHALL BE SHAPED WITH FLOW CHANNELS SUCH THAT THE MANHOLES 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 HEAT 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.
- PIPES INSTALLED WITHIN THE EXCAVATION MADE FOR THE MANHOLE SHALL BE GRADED 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.
- MANHOLE COVER CASTINGS AND MANHOLE FRAME CASTINGS SHALL CONFORM TO THE REQUIREMENTS AS INDICATED IN THE STANDARD SPECIFICATIONS AND AS SHOWN IN THE STANDARD DETAIL DRAWING.
- THE VERTICAL FREE FALL DROP INSIDE MANHOLES SHALL NOT EXCEED 2'. THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
- STANDARD MANHOLES TYPE "C" AND STANDARD INSIDE DROP MANHOLES TYPE "C" SHALL BE BID AS STANDARD MANHOLES FOR THE TYPE AND DIAMETER INDICATED. OUTSIDE DROP MANHOLES TYPE "C" SHALL BE BID AS STANDARD OUTSIDE DROP MANHOLES FOR THE TYPE AND DIAMETER INDICATED. ALL MANHOLE DIAMETERS WILL BE 4' UNLESS INDICATED OTHERWISE.

POE & ASSOCIATES OF KANSAS, INC.	
Consulting Engineers 424 N. Oliver Suite 110 Wichita KS 67208 316/685-9114	
ENGINEER: K. Hill	LEXINGTON ADDITION
SR. CHECK: J. Parsons	Sanitary Sewer
CDR CHECK: T. Brooks	CITY OF WICHITA, KANSAS
DATE: December 1992	Project No. 488-62259
10 of 12	Index Code

NOTE NO. 7 REVISED JAN. 1991

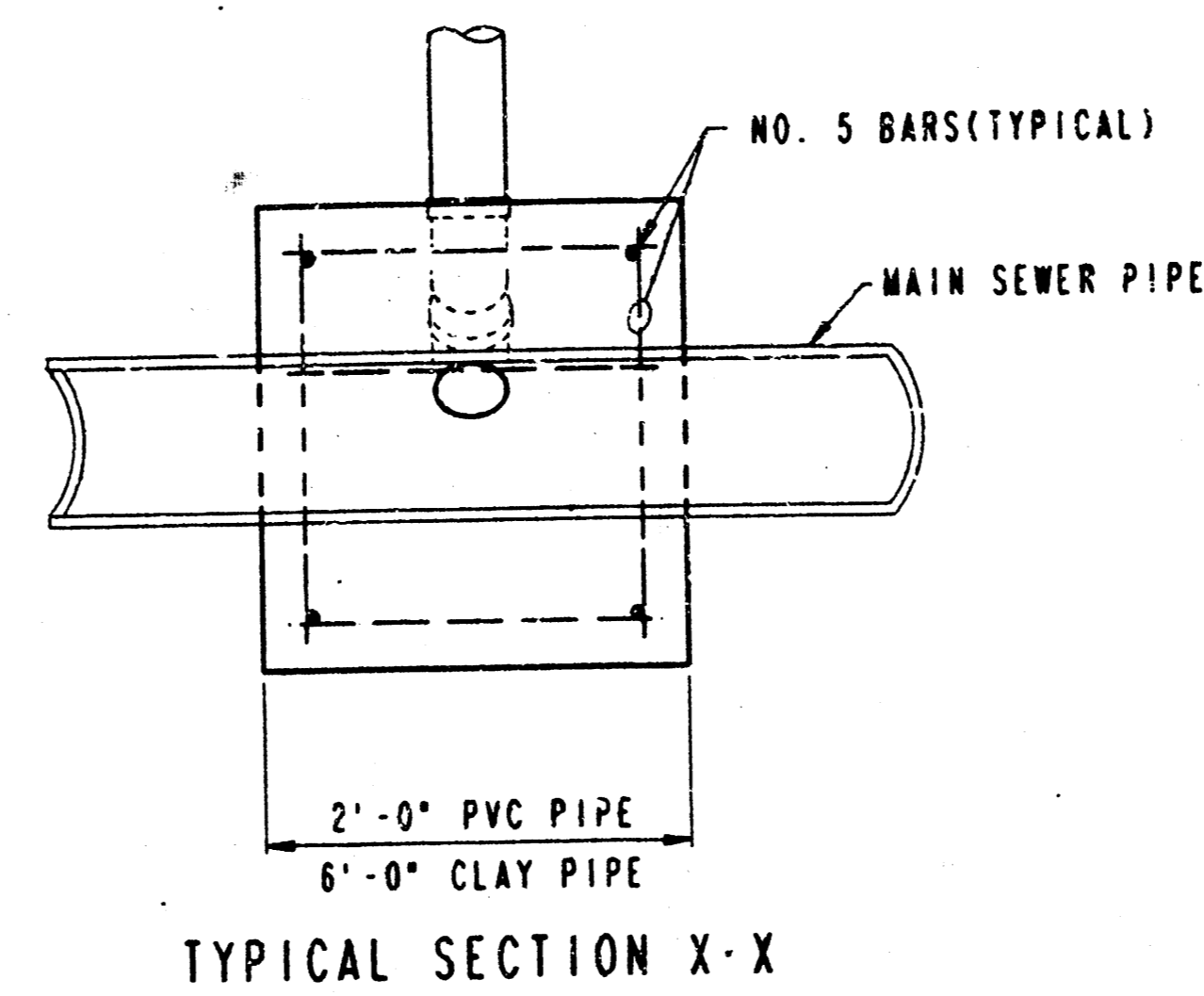
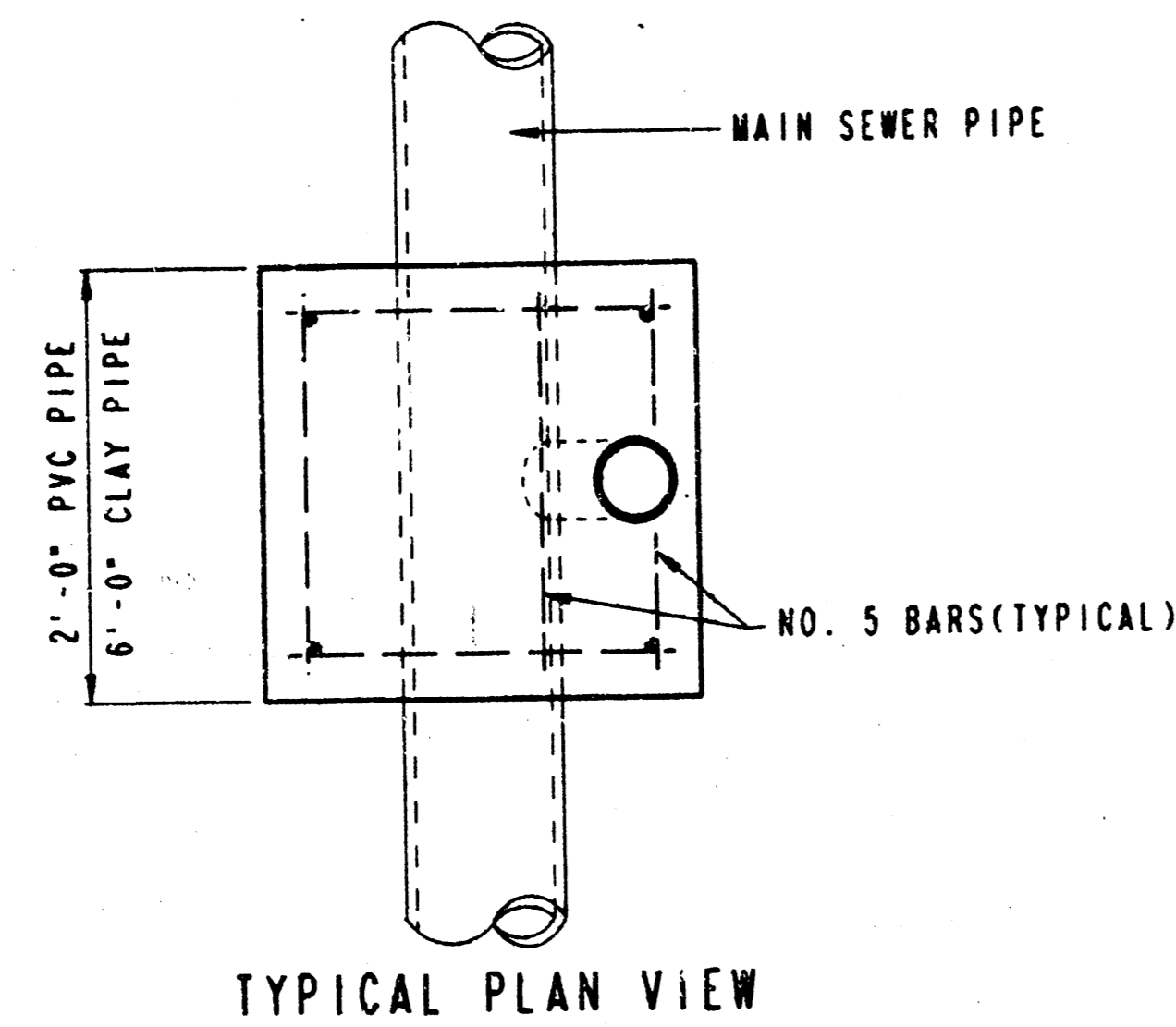
VERTICAL RISER DETAILS

ADOPTED AS STANDARD DESIGN

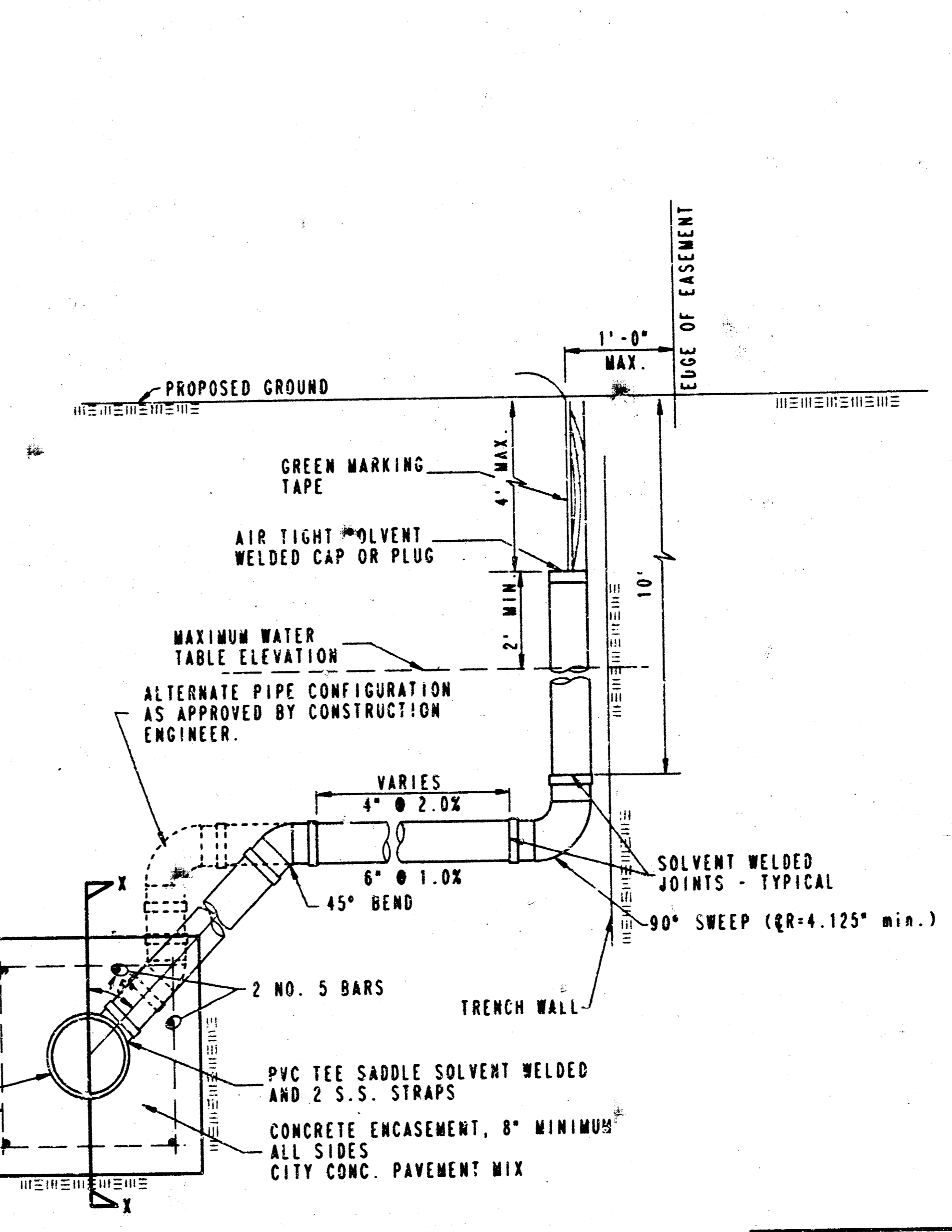
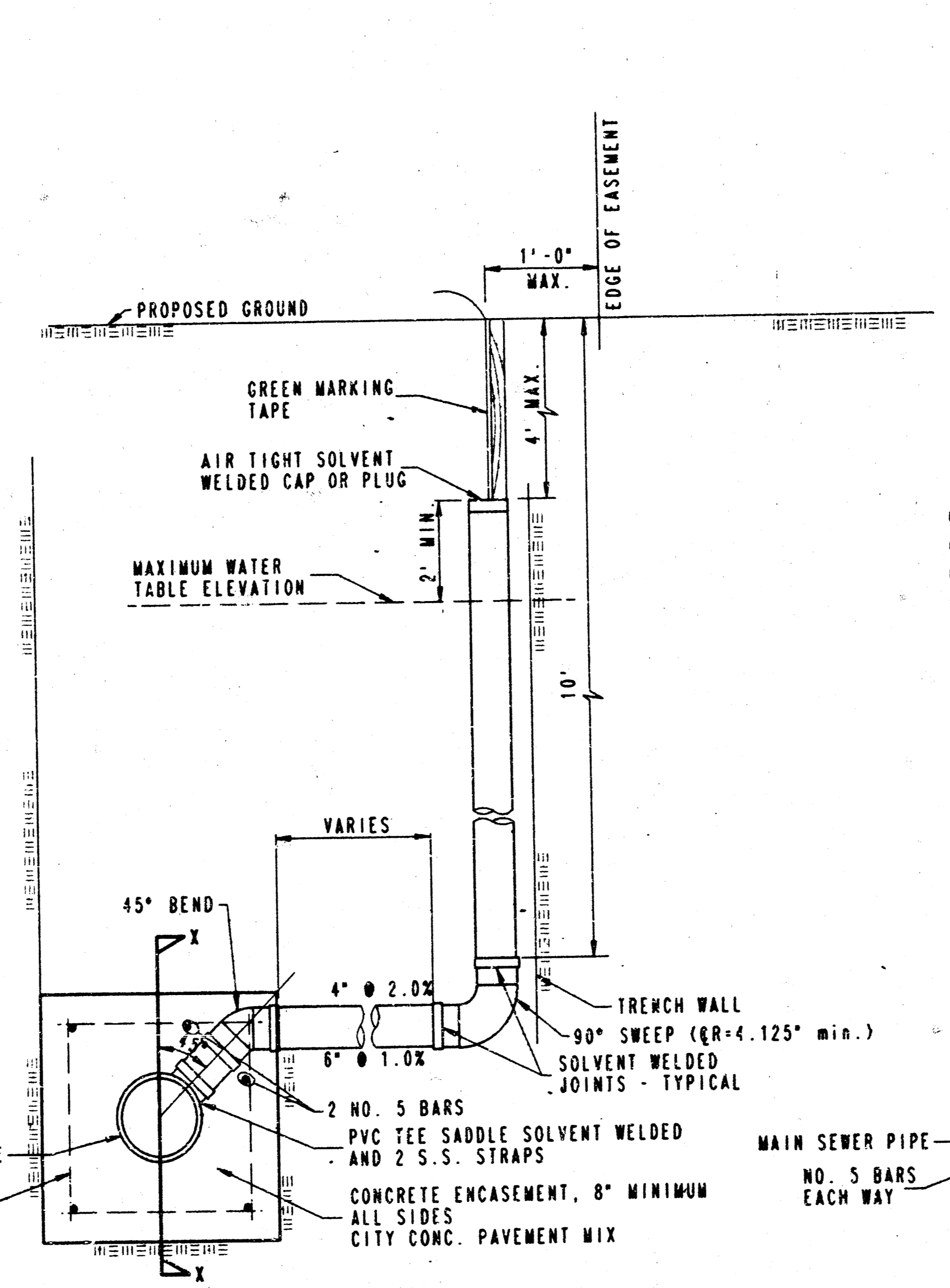
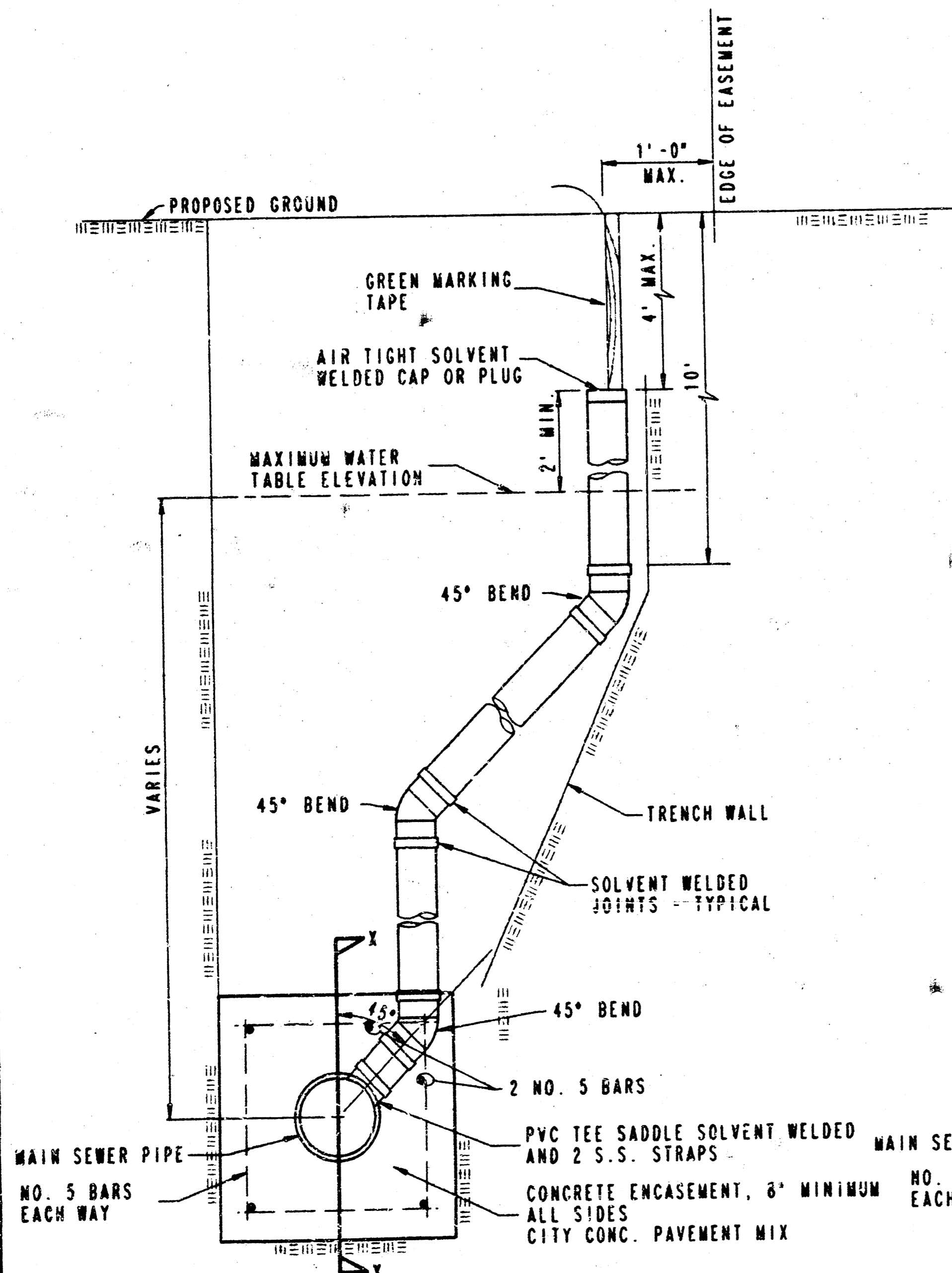
BY

CITY OF WICHITA, KANSAS

OCTOBER 1992



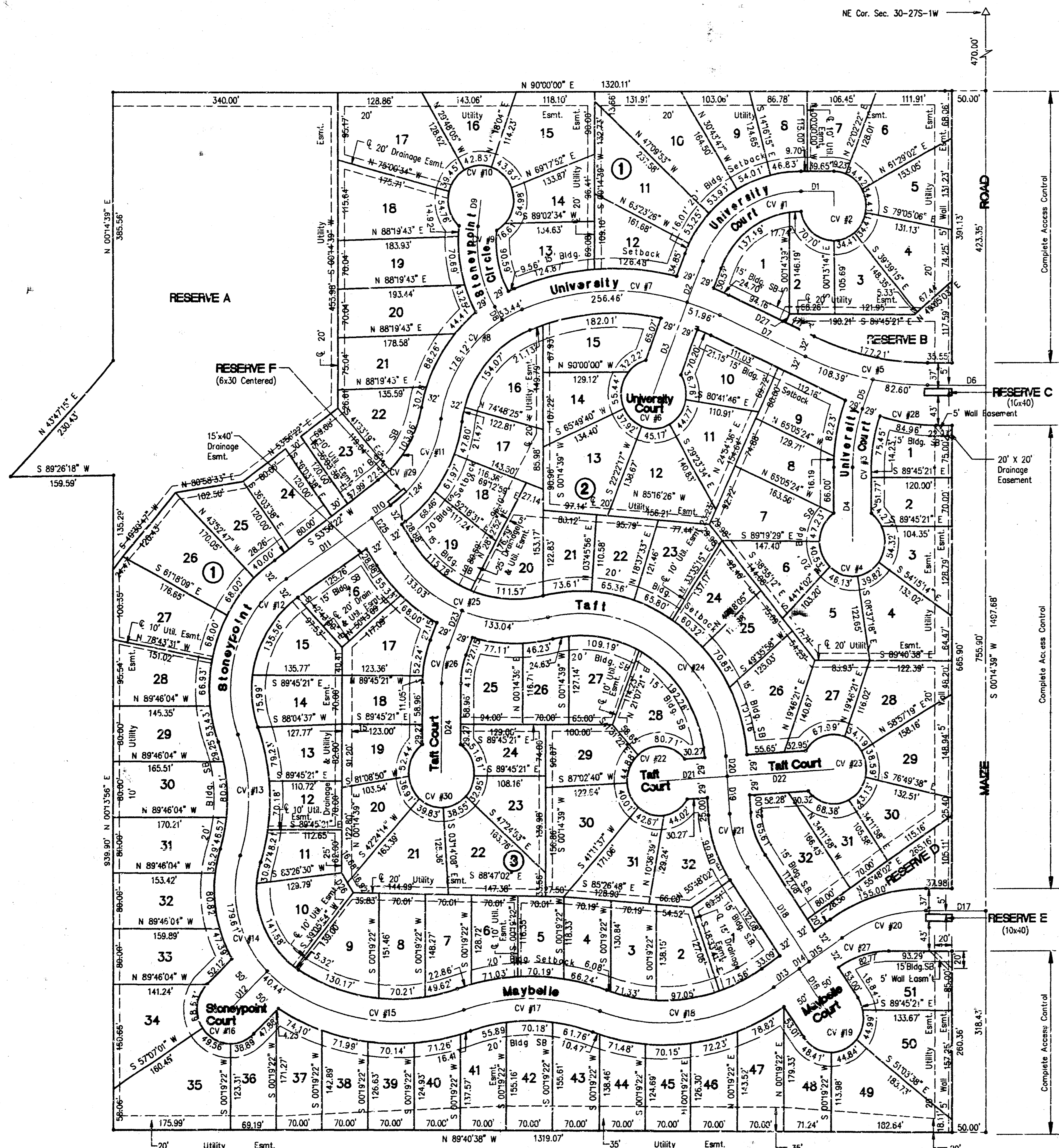
- GENERAL NOTES**
- RISERS.** Risers shall be installed to serve all lots or tracts where the sanitary sewer main is below the water table. Risers shall also be installed to serve all lots and tracts where the sanitary sewer main depth is greater than 10 feet below the proposed ground elevation. Installation of risers because of field conditions shall be as approved by the Construction Engineer. The location of the risers to serve developed property shall be approved by the property owner and the Construction Engineer.
 - PIPE STUBS.** Pipe stubs shall be installed in manholes where locations of manholes will provide satisfactory service connection as determined by the Construction Engineer. The vertical distance between the flowline of the manhole pipe stub and the flowline of the sanitary sewer main out of the manhole shall not exceed 2 feet. Risers shall be utilized at manhole pipe stubs as indicated in Note 1. Manhole pipe stubs shall be set such that the top of the stub is not lower than the top of the sanitary sewer main.
 - SIZING.** Pipe stubs and risers shall be sized according to the plans and riser table where risers are indicated by the plans. Where risers or pipe stubs are required because of field conditions, the risers and stubs shall be six-inch diameter for commercial or industrial properties and 4" or 6" diameter for residential properties, based on lot size and sanitary sewer main depth. Sizing of risers and stubs shall be approved by the Construction Engineer prior to installation.
 - RISER OR STUB MATERIAL.** Risers and stubs shall be constructed of SDR 35 PVC Pipe or Schedule 40 PVC Pipe, meeting the requirements of the latest revision of A.S.T.M. All pipe joints shall be solvent welded.
 - REINFORCED CONCRETE ENCASUREMENT.** Riser connections to clay pipe sanitary sewers shall be reinforced concrete encased both ways from the riser centerline. The reinforced concrete encasement shall extend three feet from the riser centerline or stop at the first sanitary sewer pipe joint within three feet of the riser centerline. Riser connections to PVC Sanitary Sewer mains shall be reinforced concrete encased one foot each way from the riser centerline. The concrete encasement shall be reinforced using reinforcing steel as shown in the appropriate drawing. The concrete shall conform to the City Standard Specifications for concrete pavement.
 - BEDDING.** Bedding around the sanitary sewer riser shall be compacted Pipe Bedding Type 1 or 2. The bedding shall be placed and compacted from the depth of the sanitary sewer main to the top of the sanitary sewer riser pipe. Compacted Pipe Bedding Type 1 or 2 shall be required for all risers whether constructed in vertical wall or sloped wall trenches. Bedding material and construction practices shall be approved by the Construction Engineer prior to installation.
 - SUPPORT OF RISERS.** Sanitary sewer riser pipe shall be supported during trench backfill. The riser pipe shall be held in a vertical position of all times until trench backfill and compaction has been completed. Contractor's methods for supporting and backfilling the riser pipe shall be approved by the Construction Engineer.
 - PLUGGING.** The ends of the riser pipes and manhole stubs shall be plugged using an airtight solvent welded cap or plug. Cap or plug fittings shall be approved by the Construction Engineer prior to installation. Caps or plugs which do not provide an airtight seal will not be accepted.
 - TOP OF THE RISER PIPE.** The top elevation of the sanitary sewer riser pipe shall be built to riser plan elevations, unless otherwise directed by the Construction Engineer. Where riser elevations are not shown on the plans, the top of the risers shall be set at an elevation four feet below the proposed ground surface. If ground water is encountered, the top of the riser pipe shall be set at an elevation two feet (min.) above the maximum water table elevation, regardless of the riser elevation shown on the plans.
 - MARKING.** Locations of the ends of the sanitary sewer riser pipe shall be marked by fastening green colored plastic tape to the end of the riser. The tape shall be supported by a length of wooden 2 x 4, extending from the top of the riser pipe to the proposed ground surface. The green tape shall be visible and extend one foot above the proposed ground surface. The green tape shall be a mil Polyethylene film with a minimum width of three inches, specifically manufactured for the purpose of identification of underground sewers.
 - LOCATION MEASURES.** The project inspector shall record and document the location of all risers constructed as measured from the nearest manhole, indicating the direction from the manhole, the direction and distance from the manhole, riser size, and elevation of the top of the riser.
 - RISER LOCATION.** The riser shall be located per plan if shown. If not shown on the plan, the riser shall be located at the center of the lot, within one foot of the property side of the easement for the lot being served. All riser locations shall be approved by the Construction Engineer prior to installation.
 - PAYMENT.** "Sanitary sewer risers" shall be paid for at the contract unit price per each, which price shall be full compensation for all pipe, fittings, marking tape, length of wooden 2 x 4, reinforced concrete encasement, support during backfill, backfill, labor, site restoration, and any other items necessary to complete the work.
"Manhole stubs" shall be paid for at the contract unit price per each, which shall be full compensation for all labor, material, and incidentals necessary to complete the work, including all pipe, fittings, reinforced concrete encasement, and all other items of required and listed for "Sanitary Sewer Risers".



DATE	
BY	
DESIGNED	
CHECKED	
PLAN	

NOTE: RISER PIPE REQUIREMENTS AT MANHOLE STUBS SHALL BE SIMILAR TO THOSE SHOWN ABOVE.

P&E & ASSOCIATES OF KANSAS, INC.	
Consulting Engineers 434 N. Oliver, Suite 110 • Wichita, KS 67208 • 316/685-4114	
ENGINEER: K. H. H. D.R. TUCKER J. Parsons T. Brooks DATE: December 1992 11 of 12	LEXINGTON ADDITION Sanitary Sewer CITY OF WICHITA, KANSAS Project No. 468-82259 Index Code
Sheet of	



CURVE NO.	CURVE NO. 2	CURVE NO. 3
Δ = 4878.03	Δ = 28947.35	Δ = 20478.33
R = 159.03	R = 50.00	R = 238.08
L = 189.29	L = 277.68	L = 85.91
CURVE NO. 4	CURVE NO. 5	CURVE NO. 6
Δ = 28905.56	Δ = 2439.57	Δ = 28905.56
R = 50.00	R = 443.64	R = 50.00
L = 252.28	L = 190.99	L = 252.29
CURVE NO. 7	CURVE NO. 8	CURVE NO. 9
Δ = 4875.07	Δ = 6054.58	Δ = 3752.35
R = 182.04	R = 193.10	R = 182.85
L = 308.47	L = 209.56	L = 120.74
CURVE NO. 10	CURVE NO. 11	CURVE NO. 12
Δ = 28905.56	Δ = 4873.33	Δ = 7555.56
R = 50.00	R = 176.00	R = 191.62
L = 252.28	L = 151.07	L = 253.95
CURVE NO. 13	CURVE NO. 14	CURVE NO. 15
Δ = 3658.16	Δ = 7531.29	Δ = 5020.50
R = 274.27	R = 166.94	R = 316.51
L = 176.98	L = 220.05	L = 278.12
CURVE NO. 16	CURVE NO. 17	CURVE NO. 18
Δ = 18030.00	Δ = 3891.44	Δ = 3453.23
R = 50.00	R = 319.00	R = 294.17
L = 157.08	L = 706.07	L = 276.04
CURVE NO. 19	CURVE NO. 20	CURVE NO. 21
Δ = 18030.00	Δ = 3428.37	Δ = 3032.33
R = 50.00	R = 235.83	R = 154.81
L = 157.08	L = 135.76	L = 82.70
CURVE NO. 22	CURVE NO. 23	CURVE NO. 24
Δ = 28905.56	Δ = 28905.56	Δ = 3972.49
R = 50.00	R = 50.00	R = 220.00
L = 252.28	L = 252.28	L = 361.59
CURVE NO. 25	CURVE NO. 26	CURVE NO. 27
Δ = 18030.00	Δ = 2127.00	Δ = 3428.33
R = 215.98	R = 145.00	R = 137.69
L = 266.07	L = 52.43	L = 82.77
CURVE NO. 28	CURVE NO. 29	CURVE NO. 30
Δ = 17441.77	Δ = 4358.31	Δ = 28905.56
R = 274.43	R = 168.15	R = 50.00
L = 84.36	L = 126.51	L = 292.28

LINE	DIRECTION	DISTANCE
D1	S 90°00'00" E	49.35
D2	N 21°43'55" E	63.76
D3	N 7°43'55" E	141.70
D4	N 0°01'49" E	106.73
D5	S 20°50'09" W	106.73
D6	N 89°45'21" E	85.55
D7	N 65°02'24" E	141.79
D8	N 31°53'37" W	21.87
D9	S 08°45'06" W	38.07
D10	N 56°27'08" E	33.24
D11	N 56°27'08" E	157.76
D12	S 42°45'47" W	71.73
D13	N 55°45'02" E	47.09
D14	N 55°45'02" E	18.00
D15	N 55°45'02" E	60.58
D16	S 34°11'38" E	85.00
D17	S 89°45'21" E	87.88
D18	S 34°11'38" E	164.09
D19	S 03°35'25" E	54.00
D20	S 03°35'25" E	29.00
D21	N 86°24'35" E	103.00
D22	N 86°24'35" E	151.33
D23	S 21°41'50" W	51.48
D24	S 00°14'39" W	126.96
D25	S 33°37'52" E	60.88
D26	S 33°37'52" E	31.53
D27	S 21°54'36" W	13.48

STATE OF KANSAS, COUNTY OF SEDGWICK: ss.

I, Kenny E. Hill, being a duly licensed Land Surveyor in said County and State, do hereby certify that I have been in responsible charge of surveying and plotting "LEXINGTON" an addition to Wichita, Kansas, being described as follows:

A replat of part of Summerfield III Commercial Addition and part of Cambridge Estates located in the Northeast Quarter of Section 30, Township 27 South, Range 1 West of the 6th P.M. Sedgwick County, Kansas, more particularly described as follows:

Commencing at the Northeast corner of said Section 30; thence S00° 14' 39"W for a distance of 470.00 feet to the point of beginning; thence S00° 14' 39"W for a distance of 1497.68 feet; thence N89° 40' 38"W for a distance of 1319.07 feet on the south line of said Cambridge Estates; thence N00° 13' 56"E for a distance of 939.90 feet; thence S89° 26' 18"W for a distance of 159.59 feet; thence N43° 47' 15"E for a distance of 230.43 feet; thence N00° 14' 39"E for a distance of 385.56 feet; thence N90° 00' 00"E for a distance of 1320.11 feet to the point of beginning.

The accompanying plat is a true and correct exhibit of property surveyed.

Dated this ____ day of _____, 1992.

Kenny E. Hill, L.S.

KNOW ALL MEN BY THESE PRESENTS:

That we, the undersigned, have caused the land described in the Surveyor's Certificate to be platted into lots, blocks, streets and reserves. The streets are hereby dedicated to and for the use of the public. Easements are hereby granted as indicated for the construction and maintenance of drainage and utilities. A 5 foot wall easement as shown is platted for the construction and maintenance of a private wall. Utilities may cross the 5 foot wall easement. Reserves A, B, C, D, E, and F are for entry monuments, landscaping, irrigation systems and utilities confined to easements. Future utility risers will not be permitted in Reserves B and D. Reserves A and D are also for drainage improvements. The west 10 feet of the east 25 feet of reserves C and E is hereby granted for a utility easement. All reserves are to be owned and maintained by a property owners association its successors and assigns. All abutters' rights of access to or from Maize Road over and across the East line of Block 1, Block 2 or Reserves B, C, D, and E are hereby dedicated to the City of Wichita. The minimum low opening elevation for the homes built on lots 17 through 27, Block 1 shall be 139.2 (City of Wichita Datum). Easements and other public reservations are hereby vacated to conform to those shown on this plat by virtue of KSA 12-512(b) as amended.

LEXINGTON CORP.

Barry R. Wessel, Secretary/Treasurer

STATE OF KANSAS, COUNTY OF SEDGWICK: ss.

This instrument was acknowledged before me on this ____ day of _____, 1992, for Lexington Corporation by Barry R. Wessel, Secretary/Treasurer.

Notary Public

My Appointment Expires: _____

This plat of LEXINGTON an addition to Wichita, Kansas has been submitted to and approved by this WICHITA-SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION, Wichita, Kansas.

Dated this ____ day of _____, 1992.

WICHITA SEDGWICK COUNTY METROPOLITAN AREA PLANNING COMMISSION

L.O. Breckenridge Jr., Chairman

Marvin S. Krout, Secretary

Minimum low openings, into the homes built on lots 17 through 27, Block 1 shall be 139.2 (City of Wichita Datum).

BENCH MARKS:
(City of Wichita Datum)

BM #1 Railroad spike in Power Pole 1430.79' West and 48.00' North of the NE Cor. Sec. 30-27S-1W; Elev. 138.71

BM #2 "X" cut in MNW curb return at Maize Rd. and University intersection; Elev. 137.75

Scale 1" = 100'

LEXINGTON

AN ADDITION TO WICHITA, KANSAS

POE & ASSOCIATES OF KANSAS, INC.	
Consulting Engineers 434 N. Oliver, Suite 110 ■ Wichita, KS 67208 ■ 316/683-4114	
ENGINEER:	K. Hill
DRAWN BY:	J. Parsons
CHECKED BY:	T. Brooks
DATE:	December 1992
PROJECT:	12 of 12
LEXINGTON ADDITION Sanitary Sewer CITY OF WICHITA, KANSAS	
Project No. 462-82259	
Index Code	

10-10-01-81