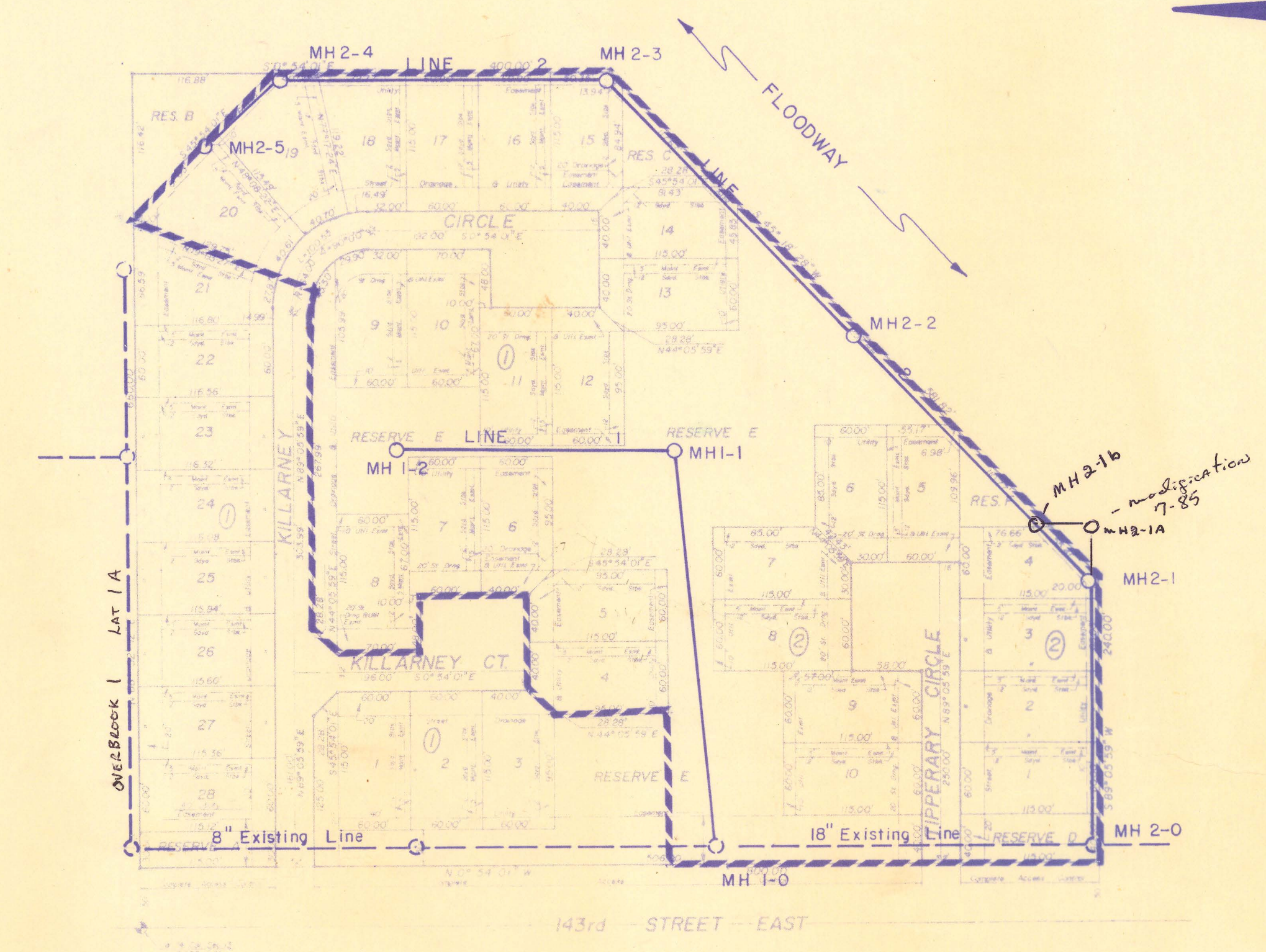
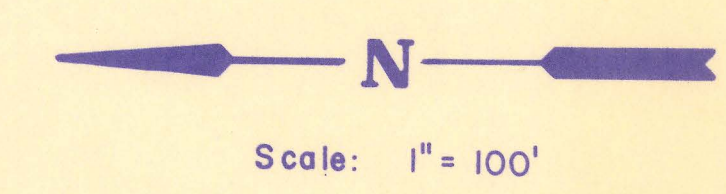


4MC-085

AS BUILT PLANS FOR
SANITARY SEWER EXTENSION
CRESTVIEW COUNTRY CLUB ESTATES
OVERBROOK FOURTH ADDITION

SEDGWICK COUNTY, KANSAS
 DECEMBER, 1983

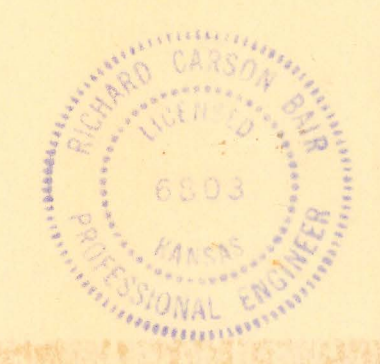
- LEGEND**
- = Benefit District
 - = Proposed Sanitary Sewer Line & Manhole
 - = Existing Sanitary Sewer Line & Manhole



INDEX TO DRAWINGS

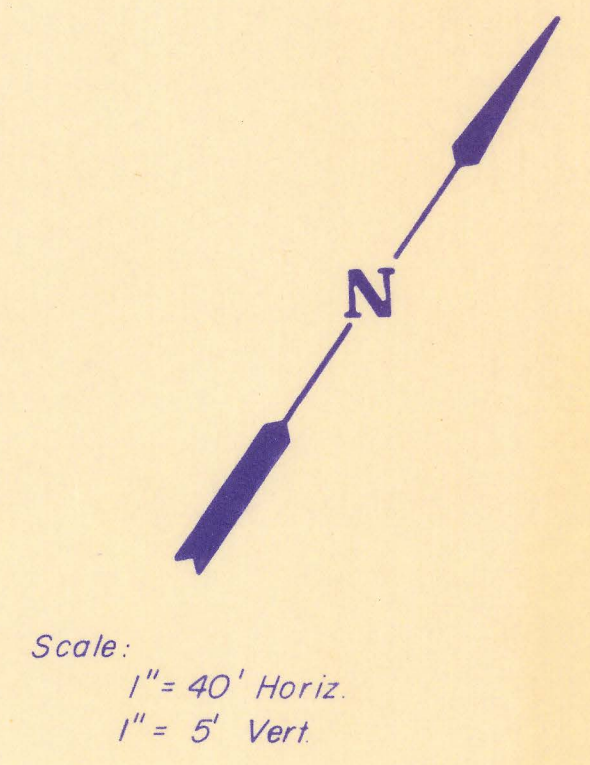
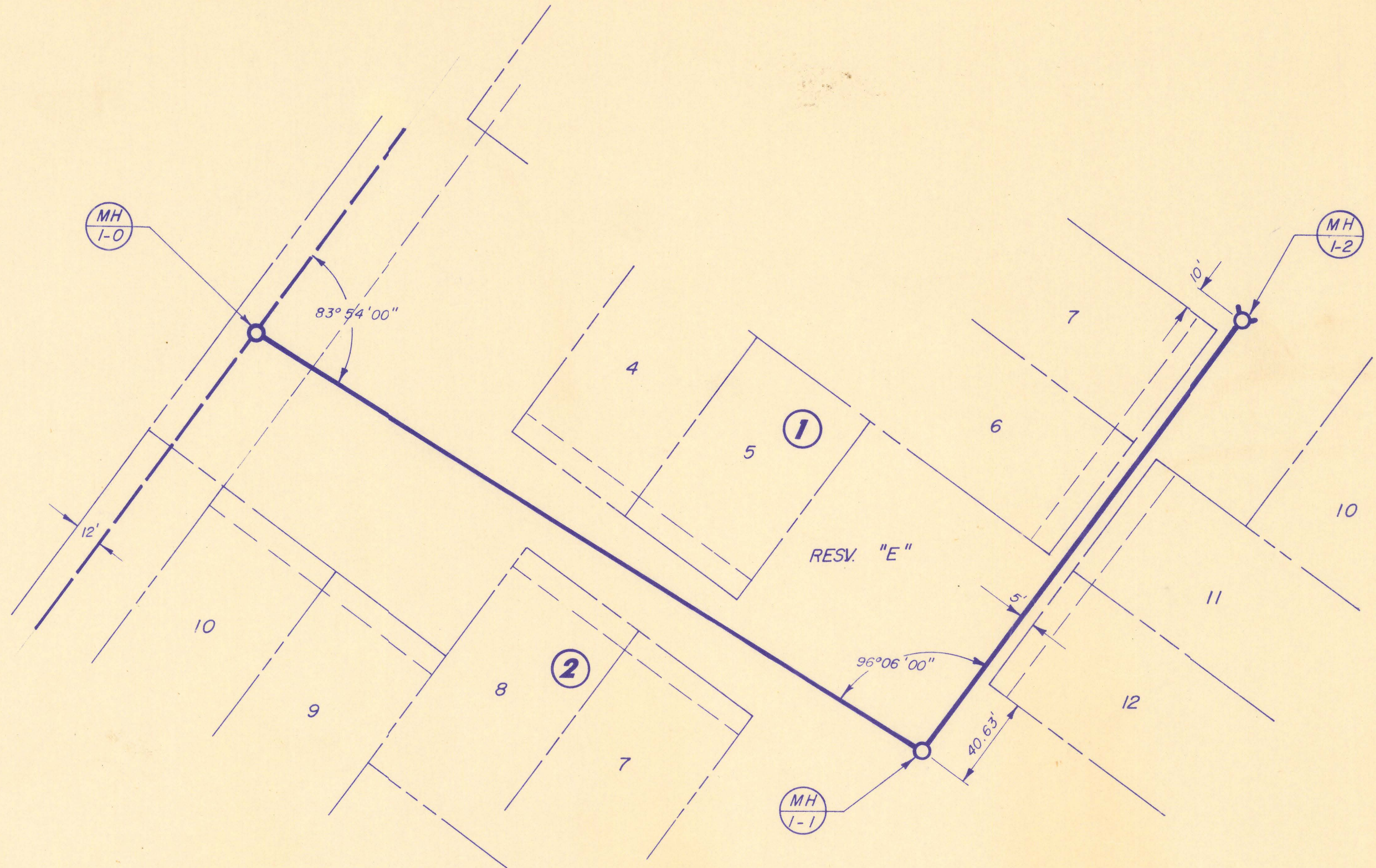
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	LINE 1
3	LINE 2
4 & 5	MANHOLE DETAILS
6	FINAL PLAT
7	Vertical Rise

BM-BENCH MARK
 Top Of Manhole 1-0
 Elevation = 1328.60

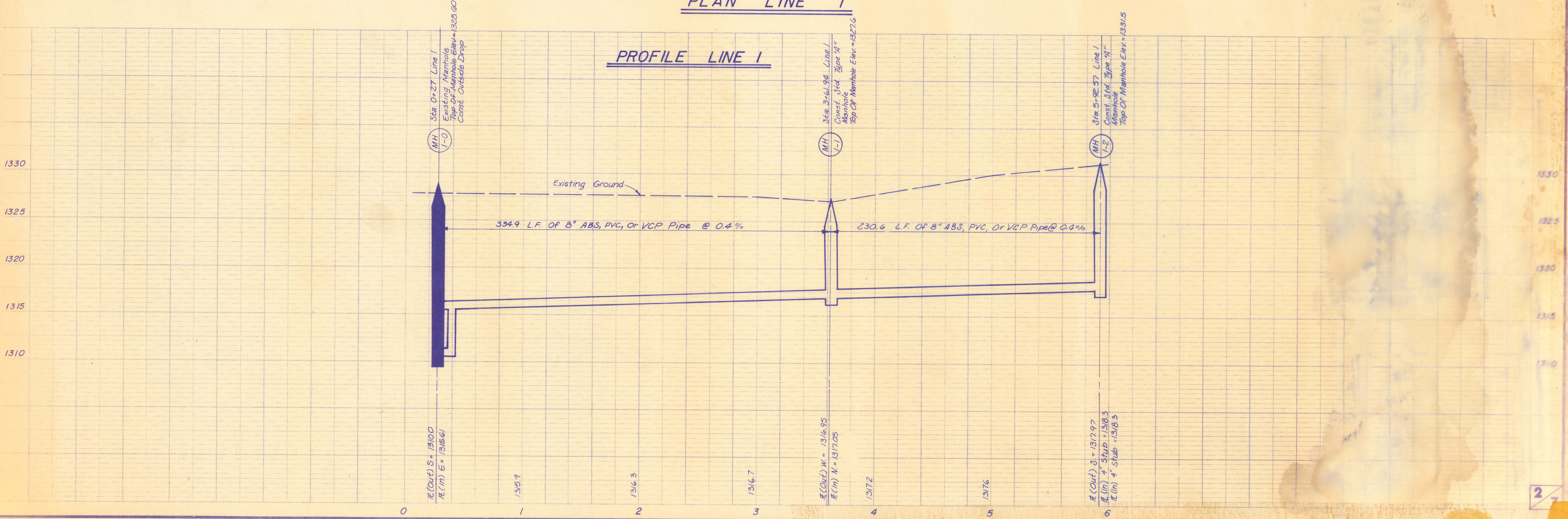


	OVERBROOK FOURTH SANITARY SEWER EXTENSION	RCB WEK KCB TCB
	MID-KANSAS ENGINEERING CONSULTANTS PA 240 N. W. 13th St. SUITE 100 WICHITA, KANSAS 67206	682-6561

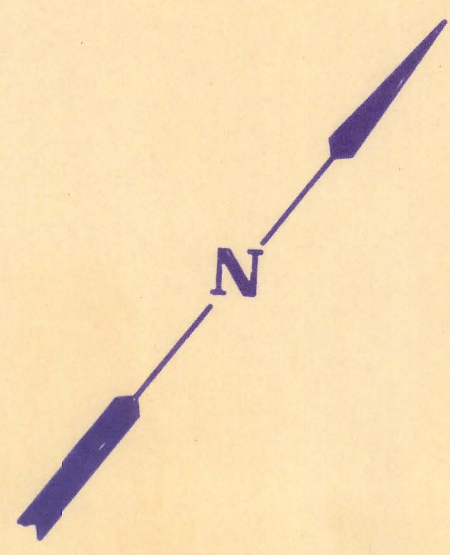
4mc-085



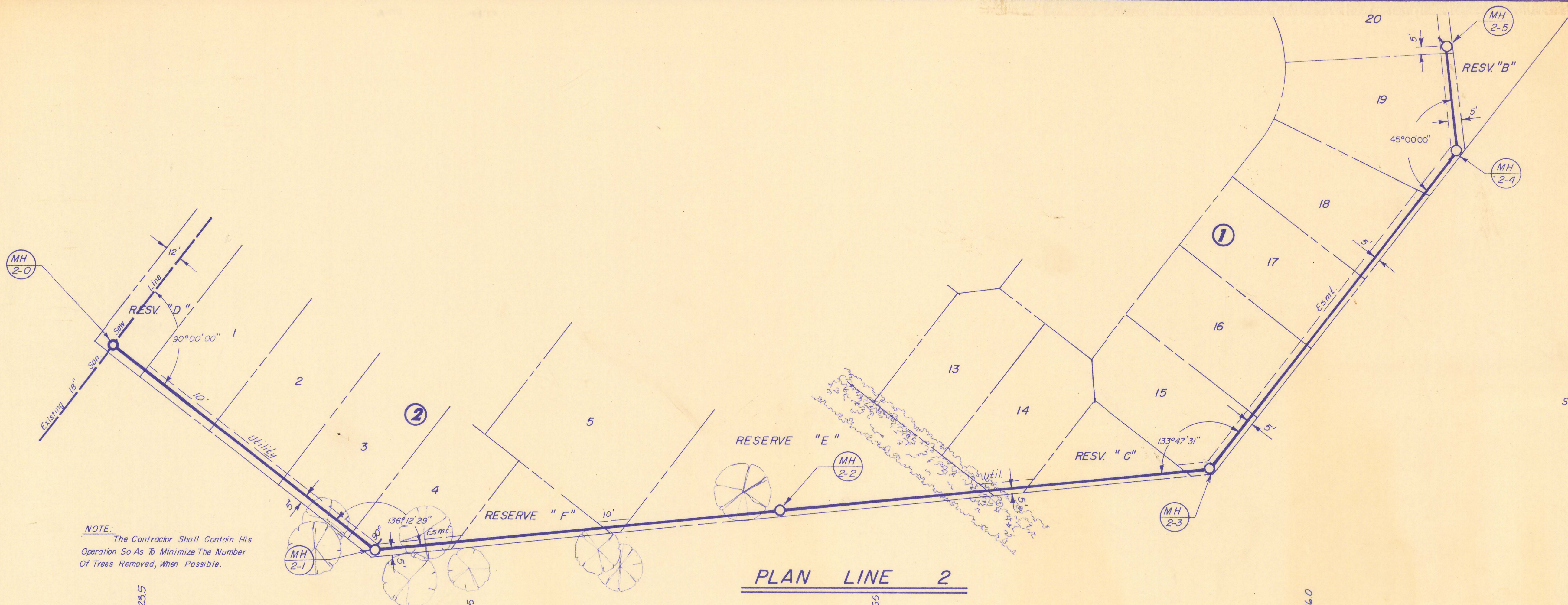
PLAN LINE 1



PROFILE LINE 1



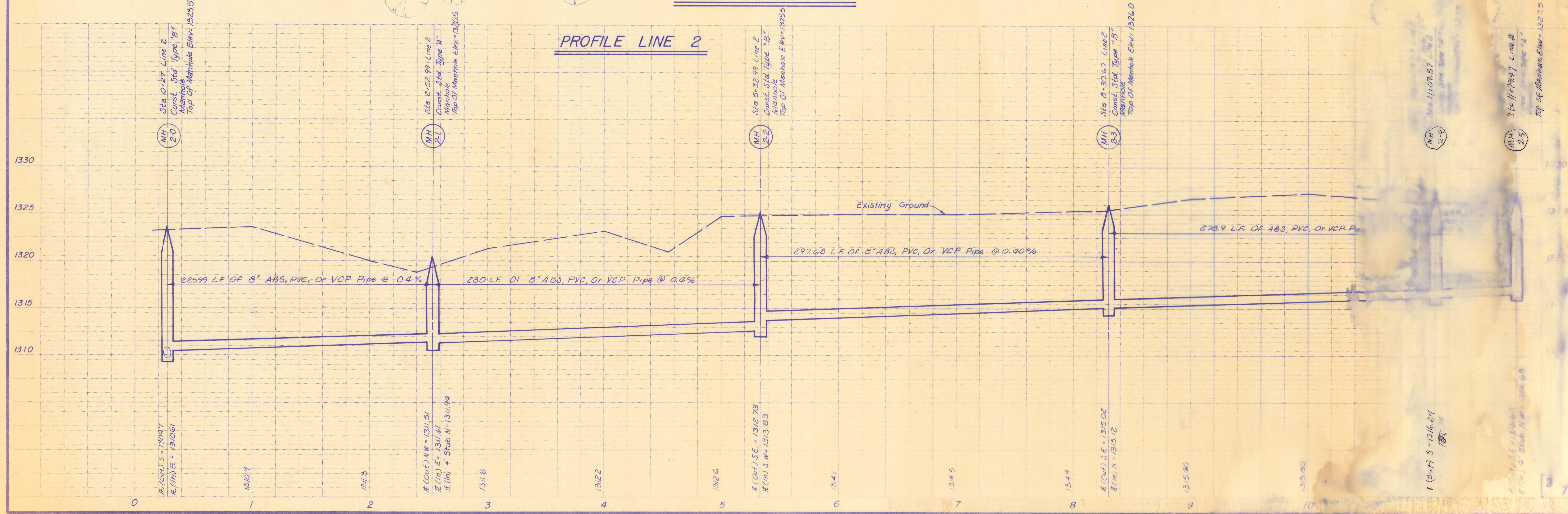
Scale:
1" = 40' Horiz
1" = 5' Vert



NOTE:
The Contractor Shall Contain His
Operation So As To Minimize The Number
Of Trees Removed, When Possible.

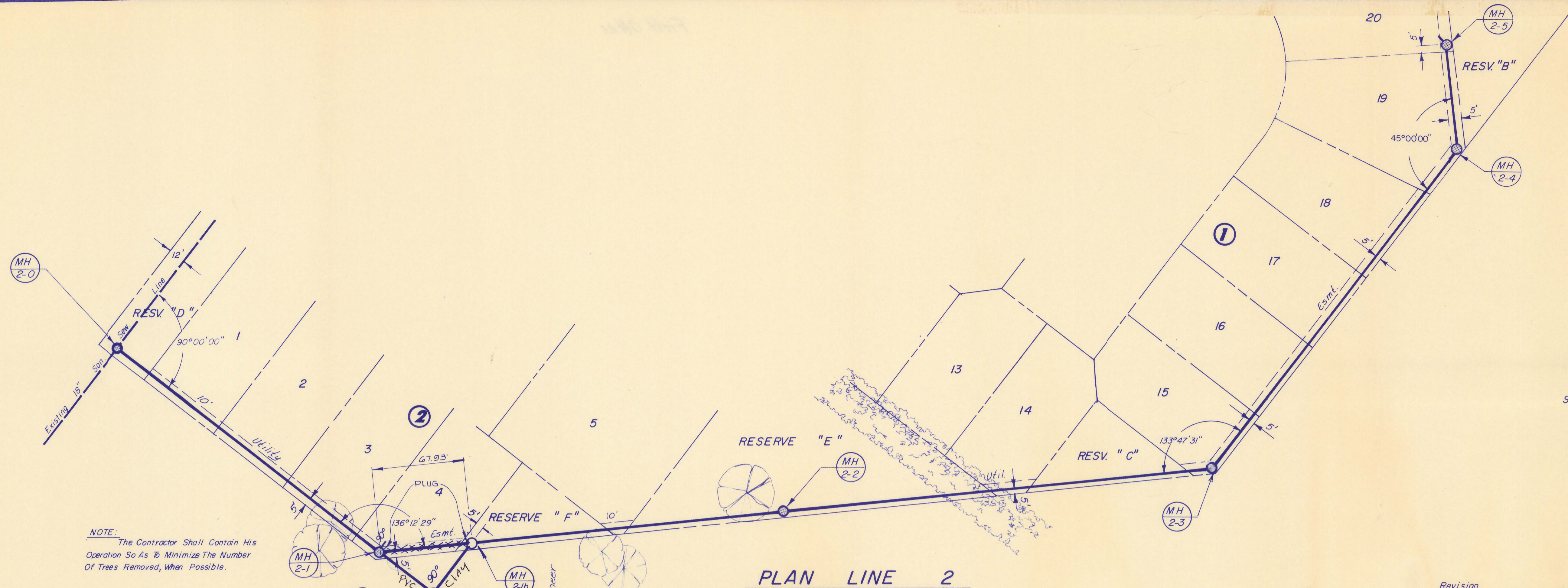
PLAN LINE 2

PROFILE LINE 2

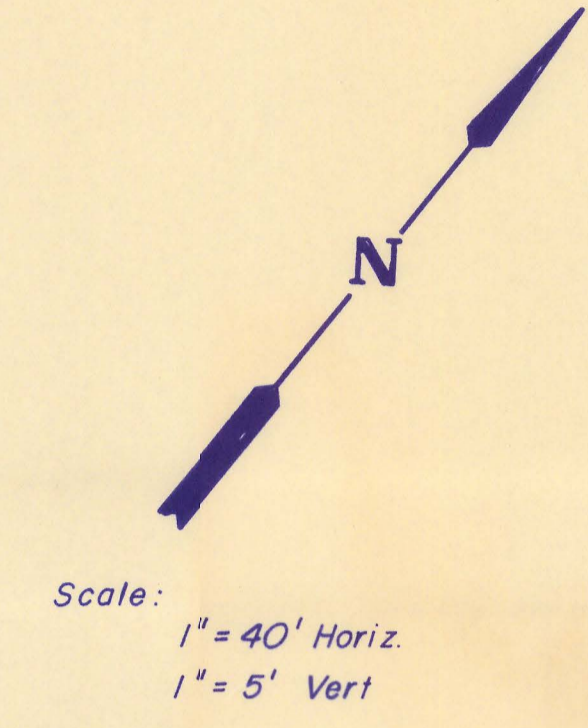


**SANITARY SEWER EXTENSION
OVERBROOK FOURTH ADDITION**

Addition of MH 2-1b & 2-1a to Line 2
7-16-85 - Peterson Constr.
inspected by S. Kin-hall
Riser to be added on PVC pipe to
Lot 4



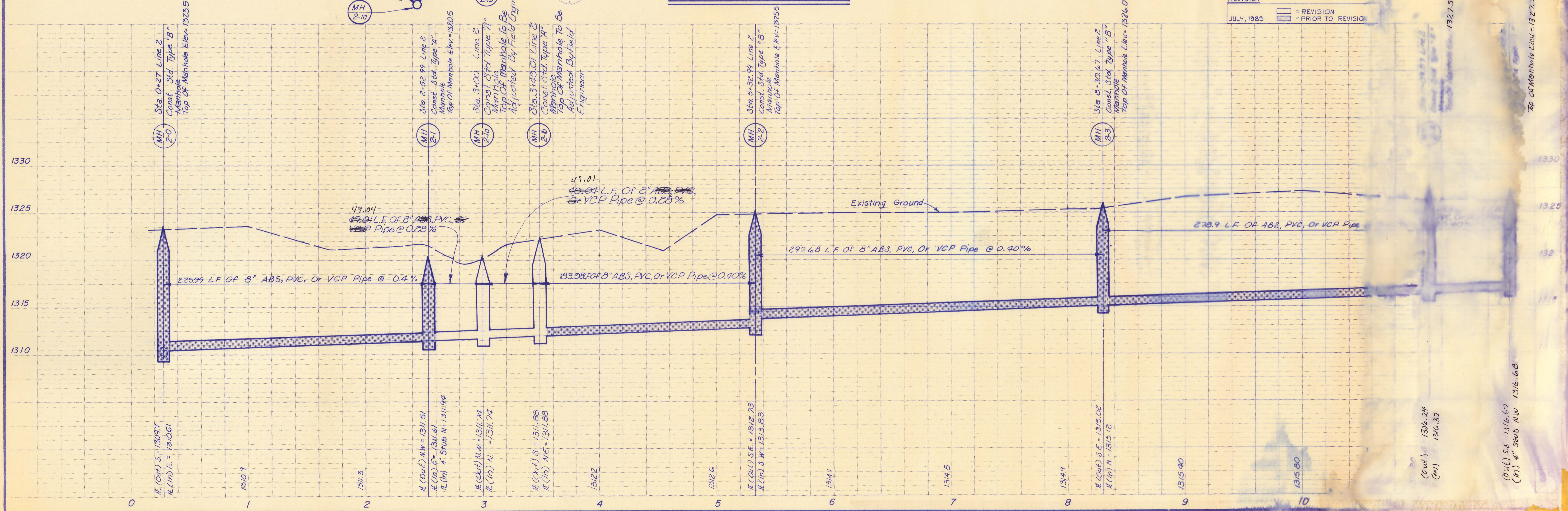
NOTE:
The Contractor Shall Contain His
Operation So As To Minimize The Number
Of Trees Removed, When Possible.



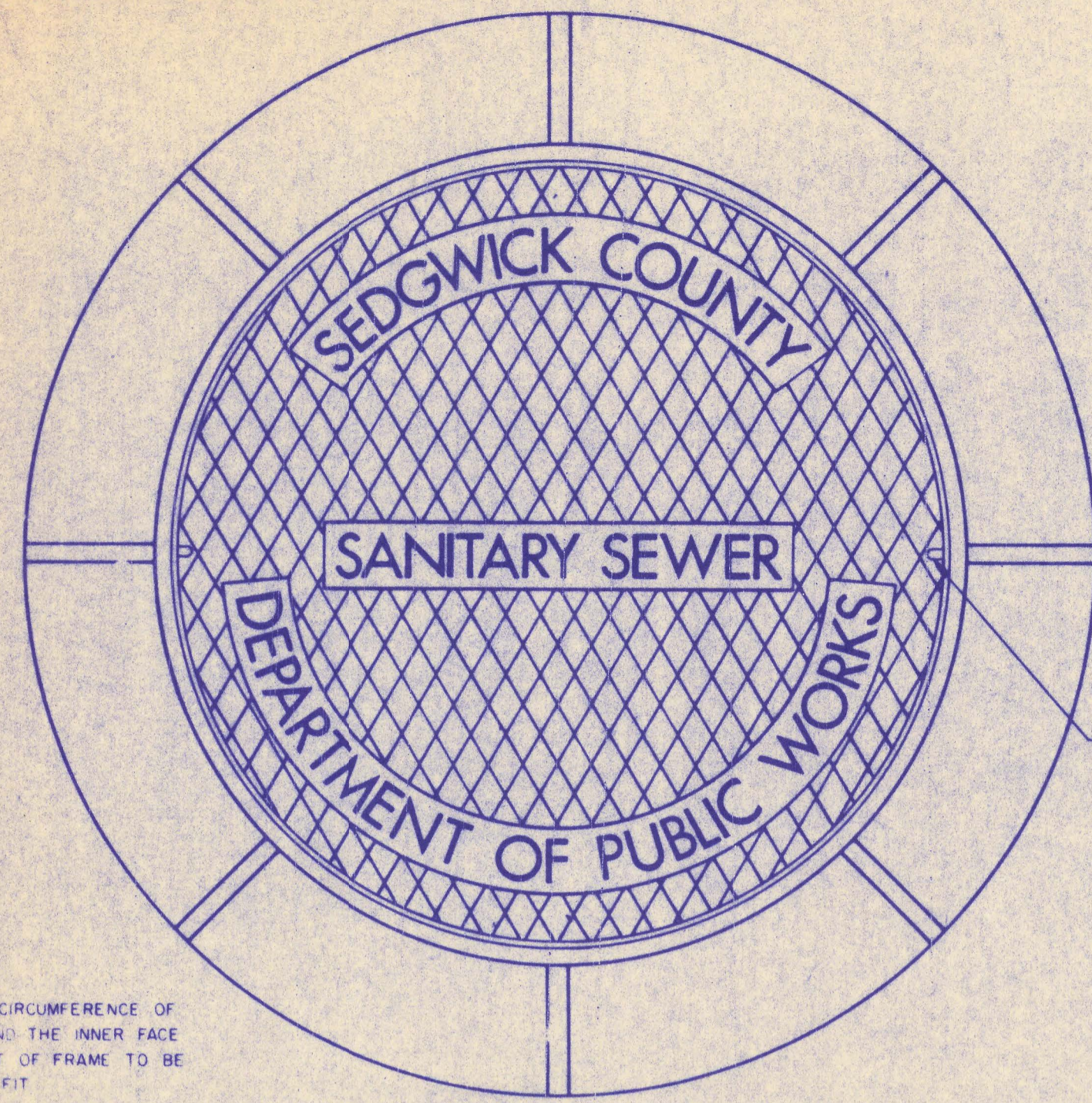
PLAN LINE 2

Revision

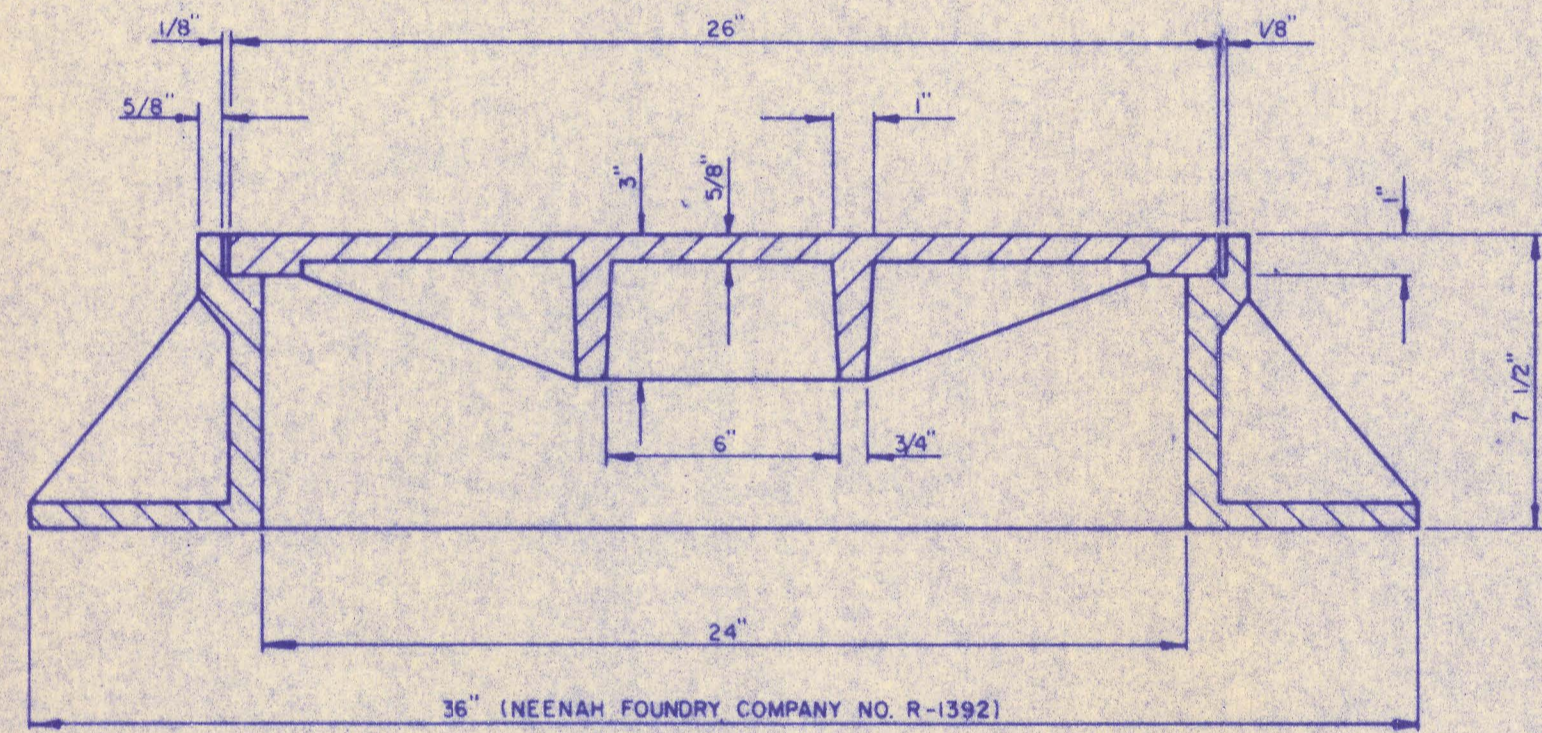
JULY, 1985	= REVISION
	= PRIOR TO REVISION



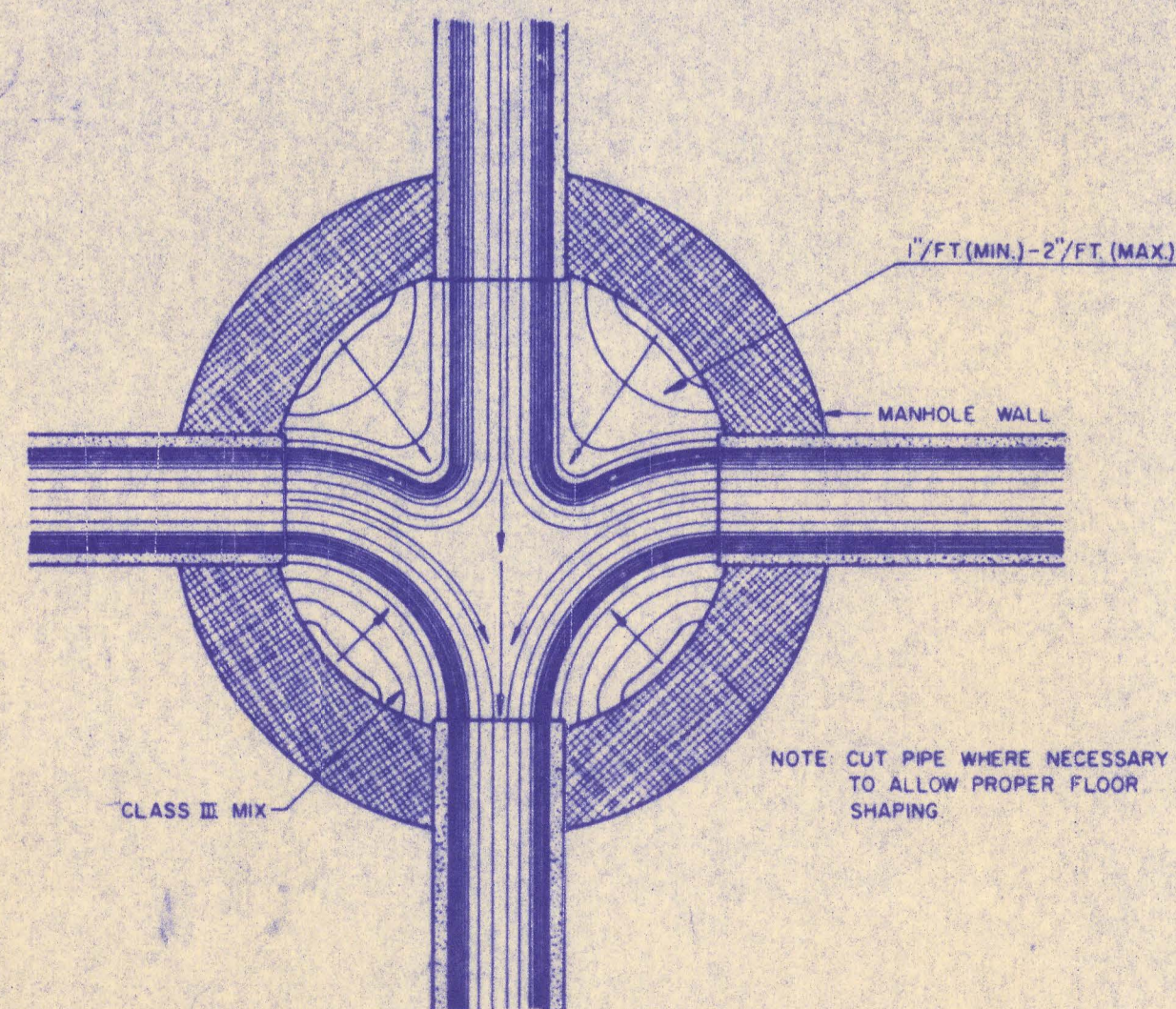
1327.5
1327.5
1326.24
1326.32
1316.68
1316.68
Top of Manhole Elev. = 1327.5
Top of Manhole Elev. = 1327.5
Top of Manhole Elev. = 1316.68
Top of Manhole Elev. = 1316.68



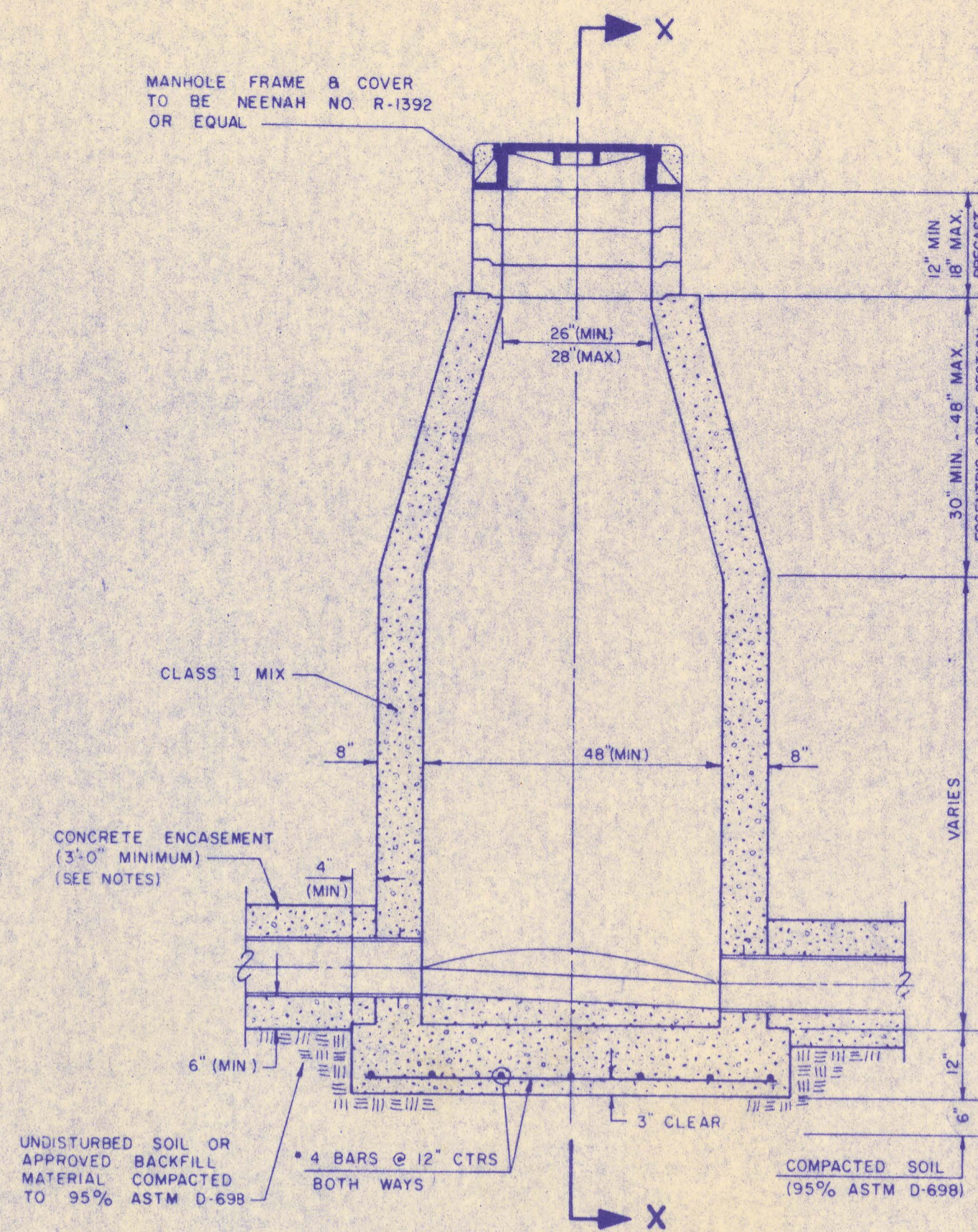
OUTSIDE CIRCUMFERENCE OF COVER AND THE INNER FACE AND SEAT OF FRAME TO BE MACHINE FIT



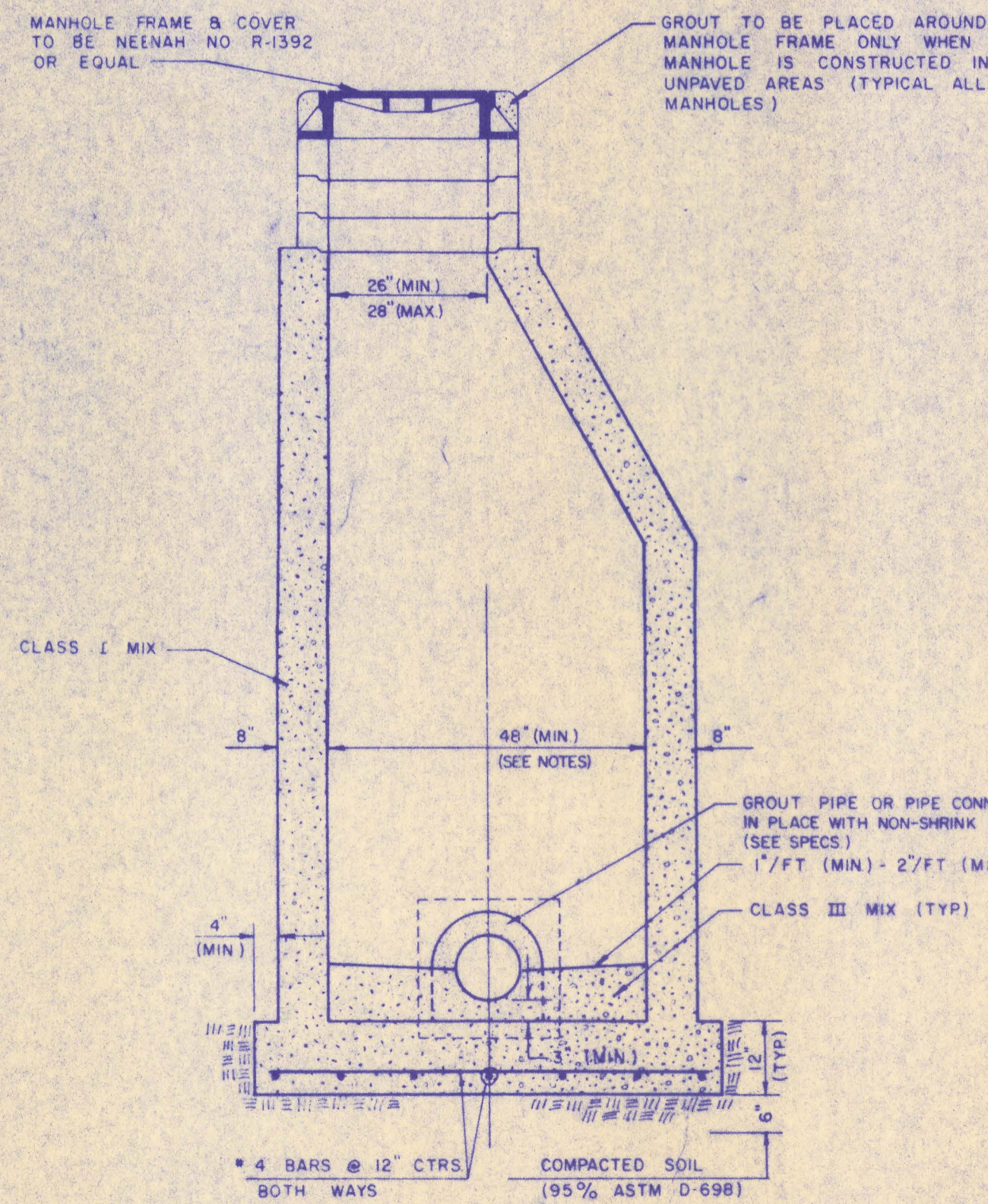
MANHOLE FRAME AND COVER
(TOTAL WEIGHT = 410 LBS)



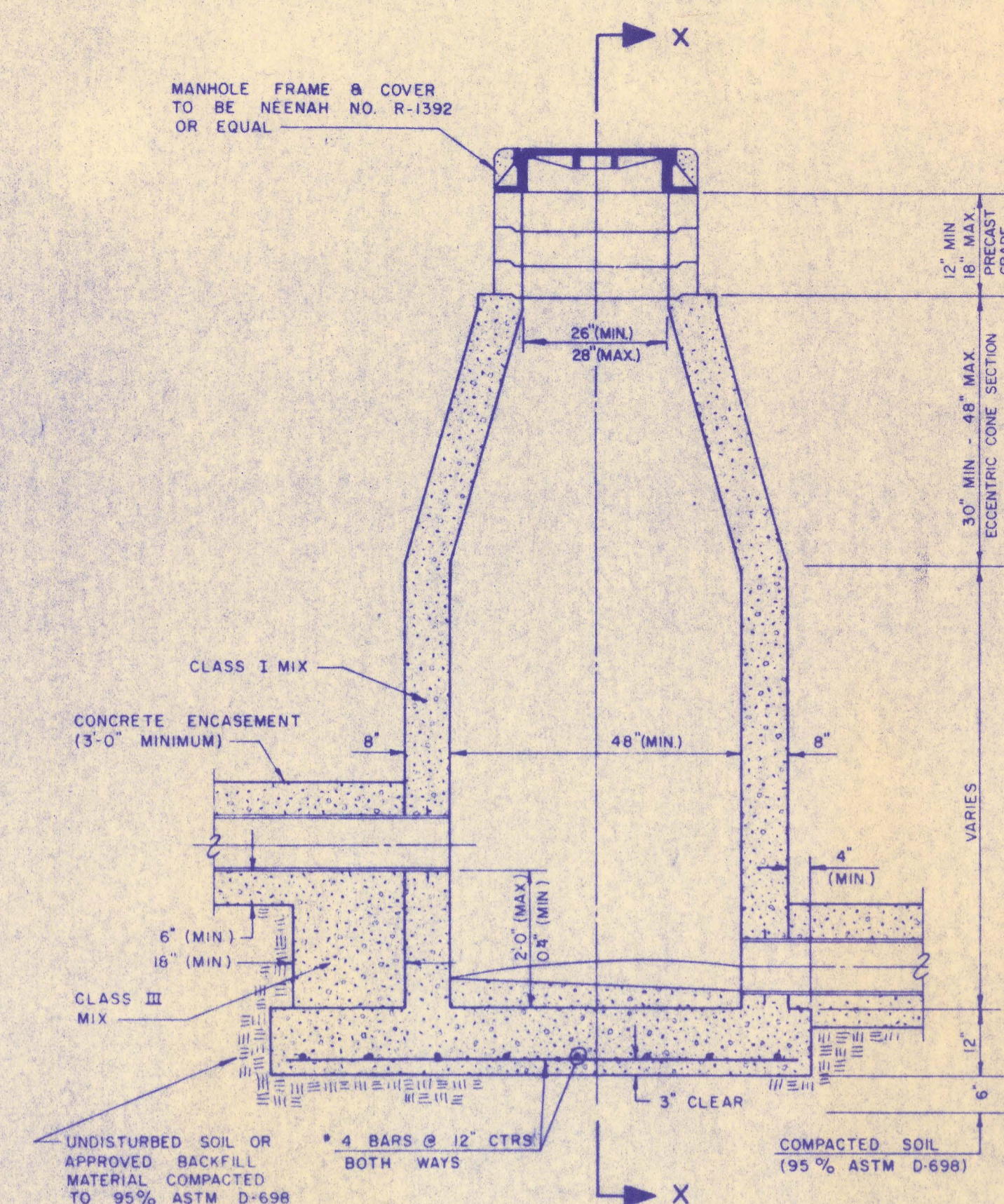
TYPICAL MANHOLE FLOOR SHAPING



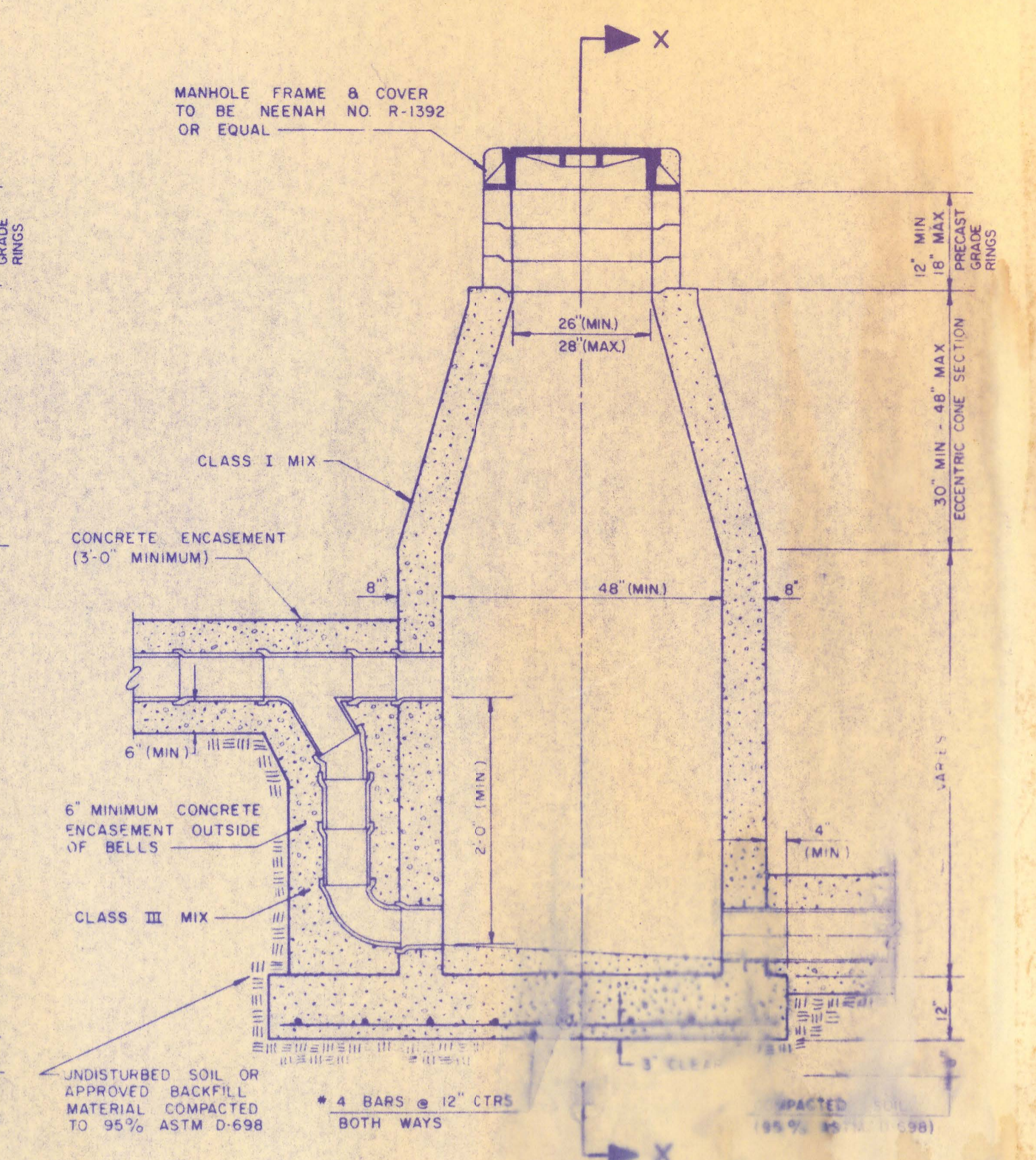
CAST IN PLACE STANDARD MANHOLE TYPE "A"



SECTION X (TYPICAL)



CAST IN PLACE DROP MANHOLE TYPE "B"



CAST IN PLACE OUTSIDE DROP MANHOLE TYPE "C"

MANHOLE NOTES

- If, in the opinion of the Engineer, the manhole subgrade appears unstable, the contractor will have the option to compact subgrade as shown or increase the thickness of the manhole base as directed by the Engineer.
- Steel reinforcing will be required in all manhole bases.
- When openings are cut in manhole walls for pipe, the pipe or pipe connector shall be grouted in place with non-shrinking grout. Exterior of completed connection shall be sealed with approved coatings.
- Cast-In-Place concrete manholes are to be constructed only in locations where it is obvious that the adjustment of the manhole top elevations which may be necessary will not require modification of the concrete barrel.
- Approved flexible waterstop gaskets which meet or exceed the test requirements of ASTM C-923 shall be installed to join the sewer to the manhole wall when ABS composite pipe or PVC pipe is used. For other types of pipe the sewer extending from manholes shall be supported with concrete encasement a minimum of 3 feet from the manhole wall.
- Pipe plugs shall be provided by pipe supplier when available.
- Concrete for manhole bases shall be Class I as described in the specifications.
- Manholes with pipe sizes larger than 15" shall have 5' inside diameter.

MANHOLE FRAME AND COVER NOTES

- Cast iron manhole frame and cover shall conform to ASTM A-48, Class 30.
- The frames and covers shall be of the locking type or with machined bearing surfaces so that parts will not rattle or rock under traffic.
- Manhole castings shall be SEDGWICK NO. R-1392 or equal unless otherwise specified in the contract conditions. (Minimum wt. - 410 lbs.) All castings shall be finished, regardless of type, shall be free of any defects and shall be at the prices bid for the work.
- Grind all burrs smooth and apply a shop coat of asphalt.
- Manhole covers shall be finished with the pattern blocked out and shall conform to the detail drawing.
- The manufacturer shall submit a certificate to the engineer for approval of the manhole frame and cover. The manufacturer shall retain the right to make any changes not conforming to the specifications and drawings.
- Wherever self-sealing lids are indicated on the plans, the contractor shall supply a NEENAH No. R-1392, or approved equal, self-sealing lid and concealed pickhole. The contractor shall supply to the owner one self-sealing gasket for each self-sealing lid.

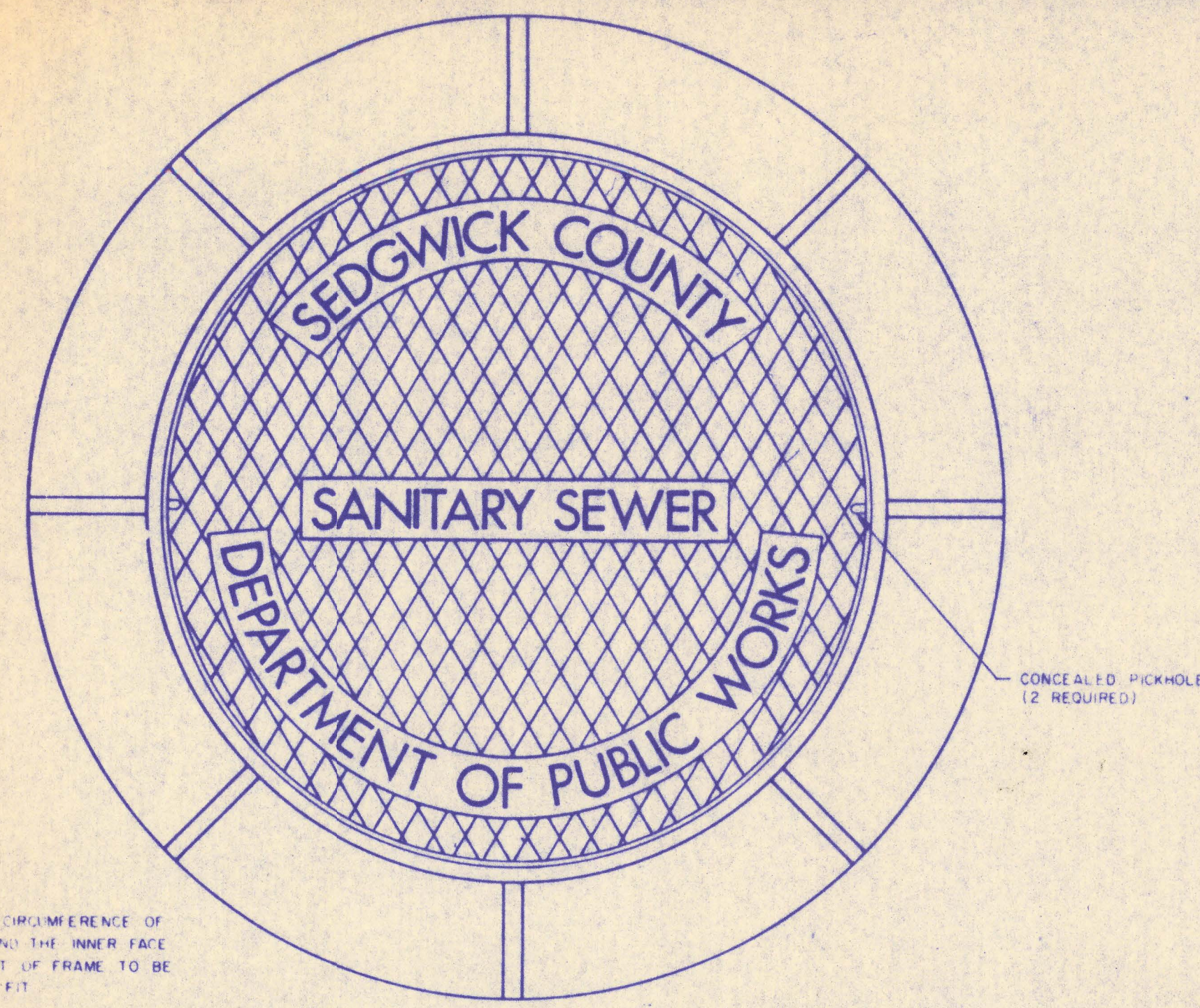
MANHOLE COORDINATES

Manhole Number	North Coordinate	East Coordinate
1-0	1314.6054	4980.0544
1-1	1357.7464	5339.4156
1-2	1588.3449	5335.7920
2-0	1004.7637	4984.9233
2-1	1008.7387	5237.8834
2-2	1205.6622	5436.9340
2-3	1415.0207	5648.5538
2-4	1693.9024	5644.1714
2-5	1742.5664	5593.9555

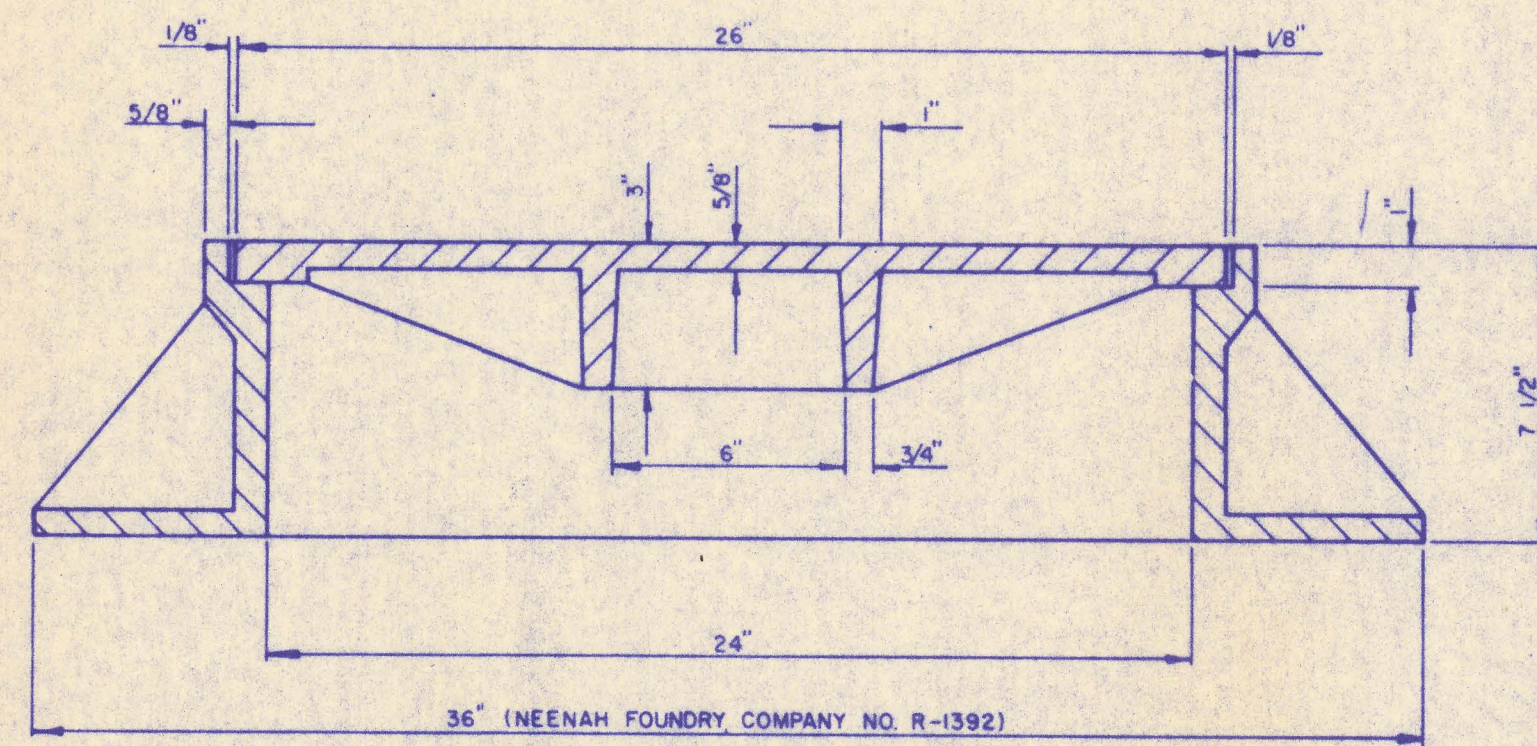


240 N. ROCK BLVD. SUITE 130
WORTH, KANSAS

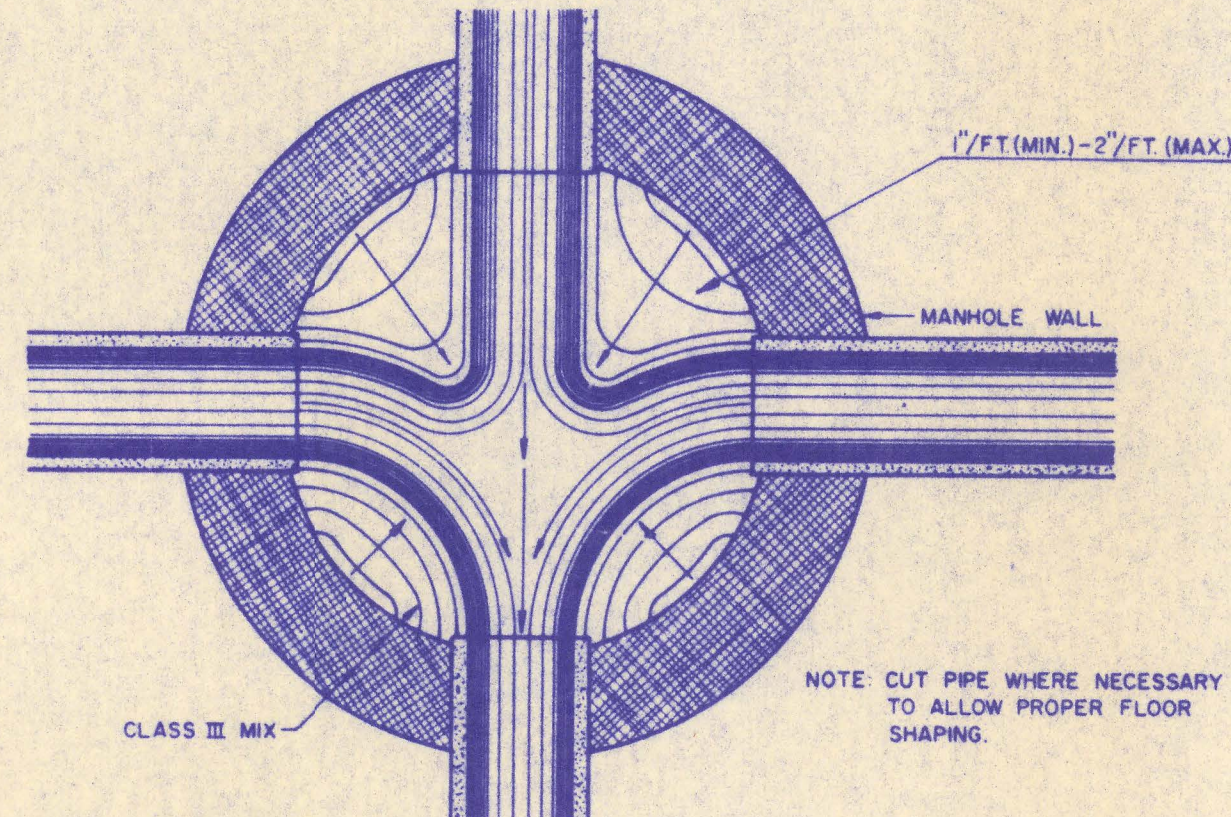
Design	
Drawn By	MDK
Checked By	KHB
Date	JULY 83
Job No.	
Sheet	4
	7



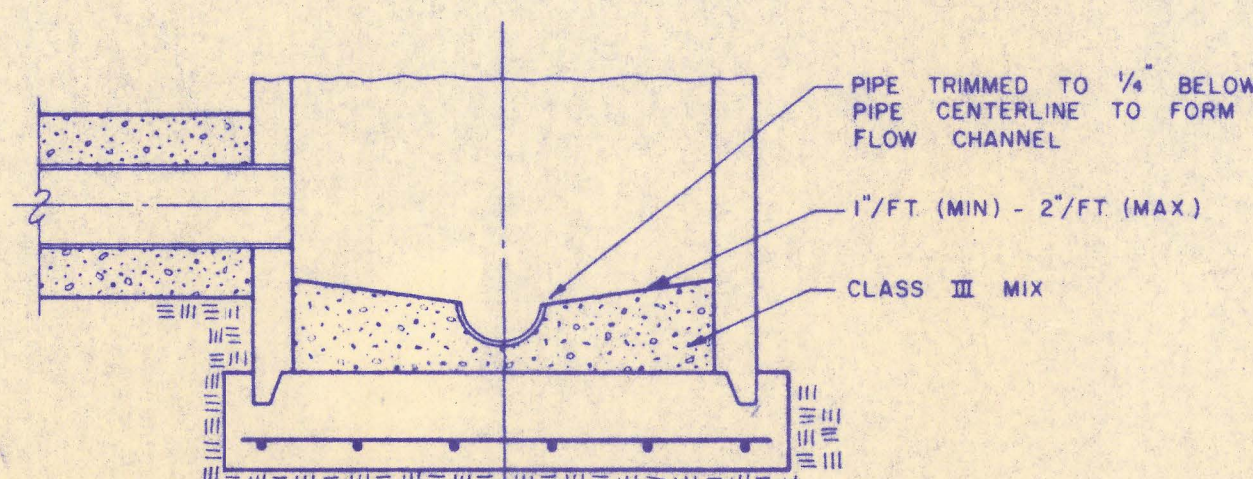
OUTSIDE DIMENSION OF COVER AND THE INNER FACE AND SEAT OF FRAME TO BE MACHINE FIT



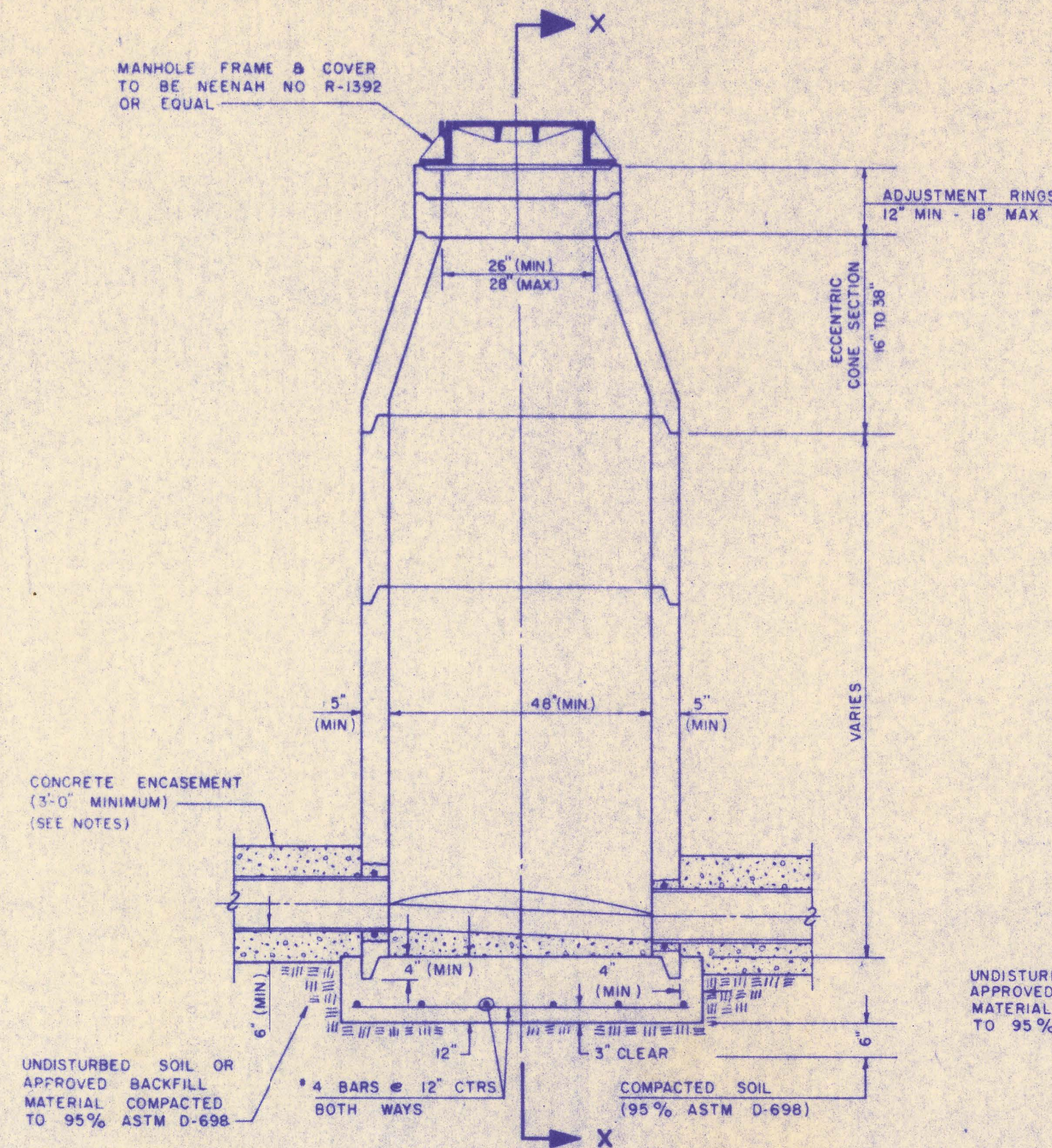
MANHOLE FRAME AND COVER
(TOTAL WEIGHT - 410 LBS.)



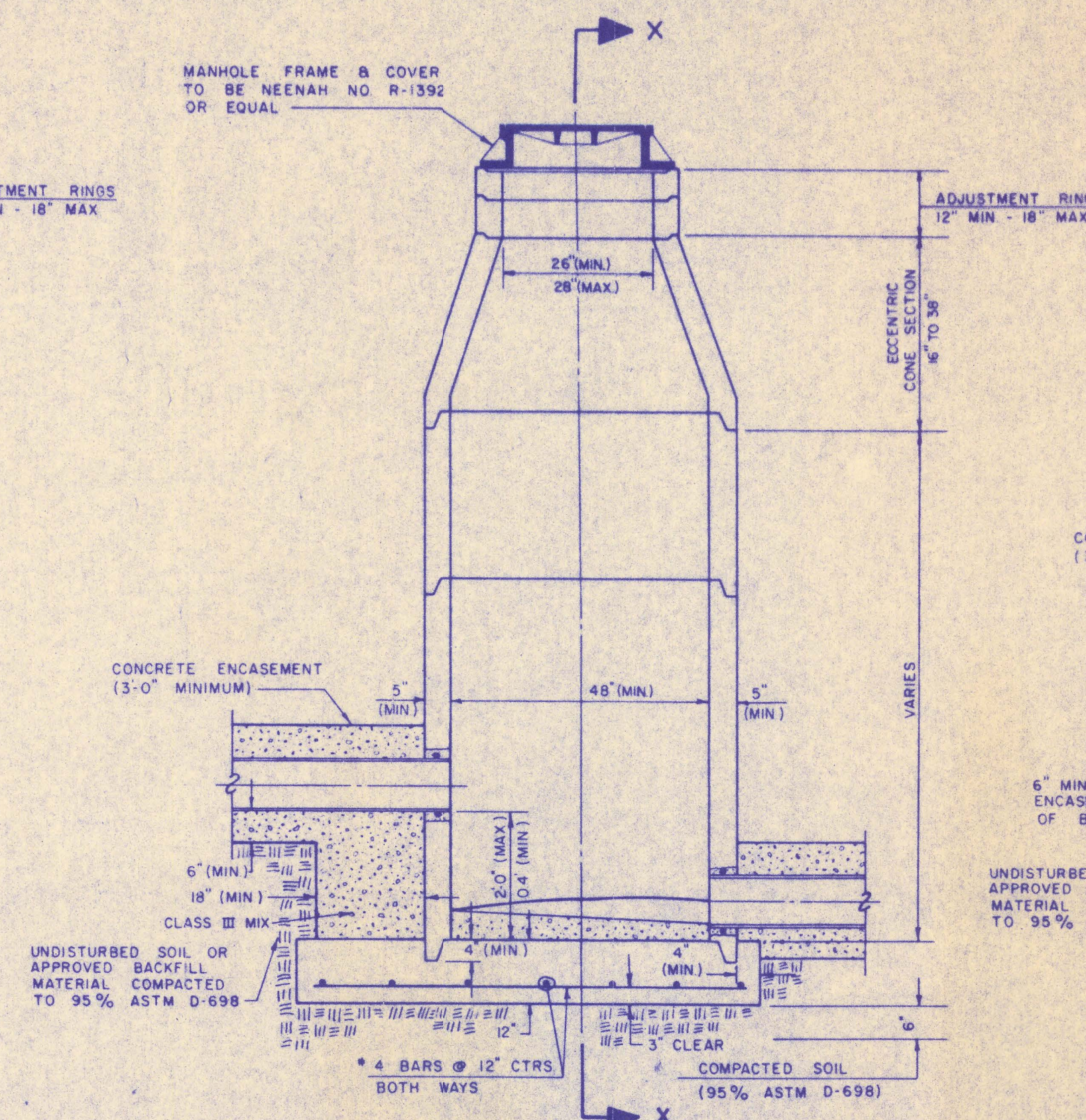
TYPICAL MANHOLE FLOOR SHAPING



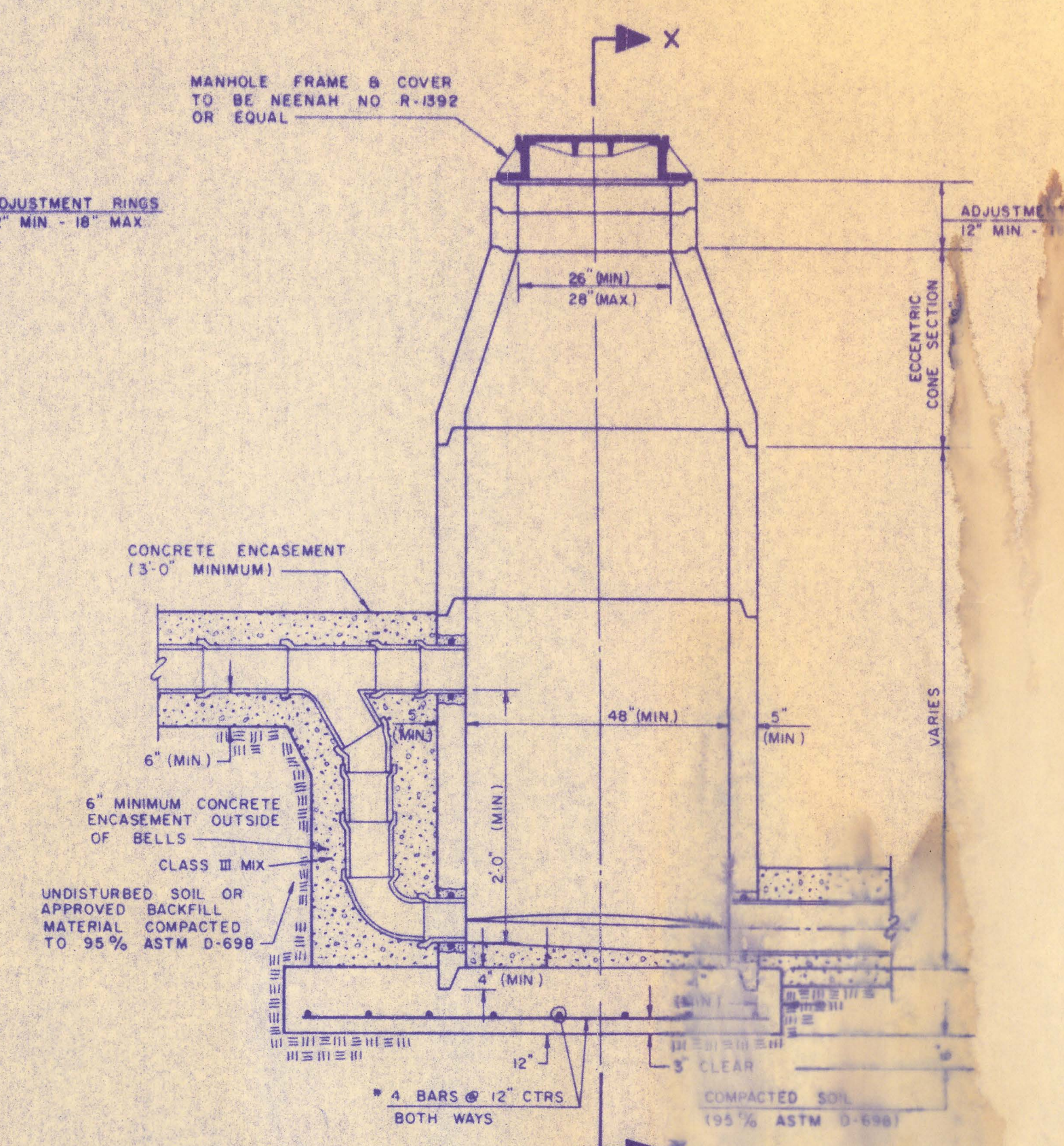
SECTIONAL ELEVATION - INVERT



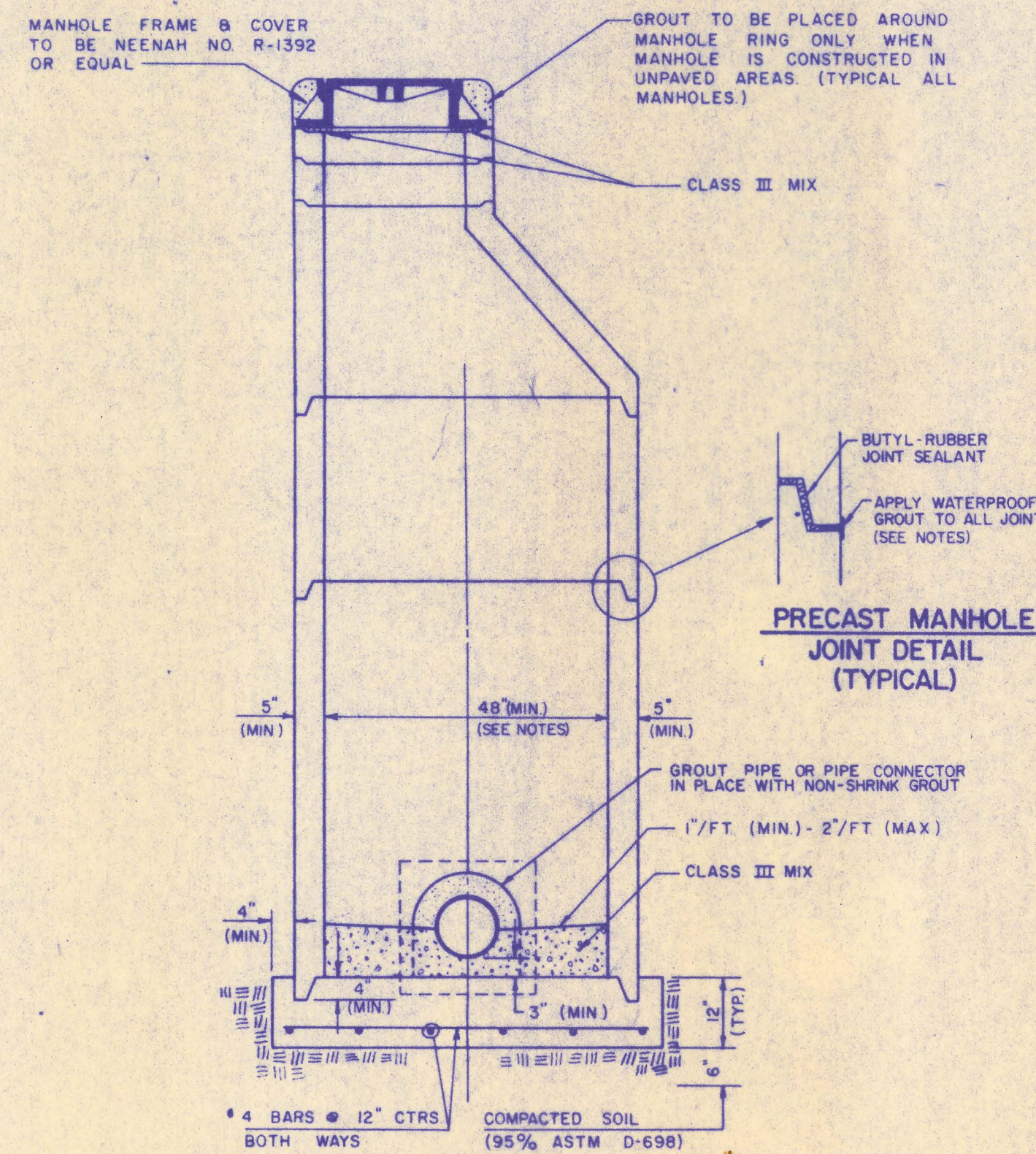
PRECAST STANDARD MANHOLE TYPE "A"



PRECAST DROP MANHOLE TYPE "B"



PRECAST OUTSIDE DROP MANHOLE TYPE "C"



SECTION X (TYPICAL)

PRECAST MANHOLE NOTES

1. If, in the opinion of the Engineer, the manhole subgrade appears unstable, the contractor will have the option to compact subgrade as shown or increase the thickness of the manhole base as directed by the Engineer.
2. Steel reinforcing is required in all manhole bases.
3. Approved flexible waterstop gaskets which meet or exceed the test requirements of ASTM C-923 shall be installed to join the sewer to the manhole wall when ABS composite pipe or PVC pipe is used. For other types of pipe the sewer extending from manholes shall be supported with concrete encasement a minimum of 3 feet from the manhole wall.
4. Pipe plugs shall be provided by pipe supplier when available.
5. All manhole construction shall be water tight.
6. 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.
7. All precast concrete sections shall conform to the latest revision of ASTM C478 as modified by the specifications.
8. Concrete for manhole bases shall be Class I as described in the specifications.
9. Precast manholes shall be set at least 4 inches into the manhole base.
10. Manholes with pipe sizes larger than 15" shall have 5' inside diameter (minimum).
11. Waterproof grout for precast joints shall be prepared with the proportions listed below, or according to polymer manufacturer's recommendations if approved by the Engineer.

MATERIAL	PARTS BY WEIGHT
Acrylic Polymer *	27
Portland Cement	100
Water	18
Sand	150

* Acryl-60 by Thoro-Seal, Acrylic ADMIX-101 by Larsen Products Corp., or approved equal.

MANHOLE FRAME AND COVER NOTES

1. Cast iron manhole frame and cover shall conform to ASTM A-48, Class 30.
2. The frames and covers shall be of a nonlocking type with machined bearing surfaces so fitting parts will not rattle or rock under traffic.
3. Manhole casting shall be NEENAH Foundry R-1392 or equal unless otherwise specified in the special conditions. (Minimum wt. - 410 lbs.) All manhole castings, regardless of type, shall be considered subsidiary to the unit and prices bid for the various manhole types.
4. Grind all burrs smooth, clean thoroughly, then apply shop coat of asphalt base paint.
5. Manhole covers shall have a checkered design with the pattern blocked out for raised lettering as shown in the detail drawing.
6. The manufacturer shall submit shop drawings to the Engineer for approval prior to manufacture. The Engineer shall retain the right to reject castings not conforming to the specifications or the approved shop drawings.
7. Where self-sealing manhole lids are indicated on the plans the contractor shall supply and install a NEENAH, No. R-1392, or approved equal, grom frame with self-sealing lid and concealed pickholes. The contractor shall supply to the owner one (1) replacement gasket for each self-sealing lid.

PRECAST MANHOLE

DETAIL

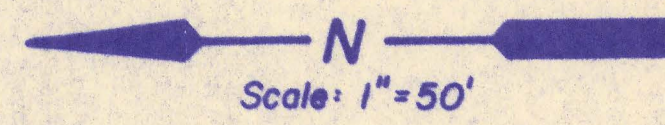
Design Drawn By Checked By Date Job No.	JULY 83 5 7
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280 N. ROCK ROAD SUITE 150
 WICHITA, KANSAS

Final Plat of
Crestview Country Club Estates

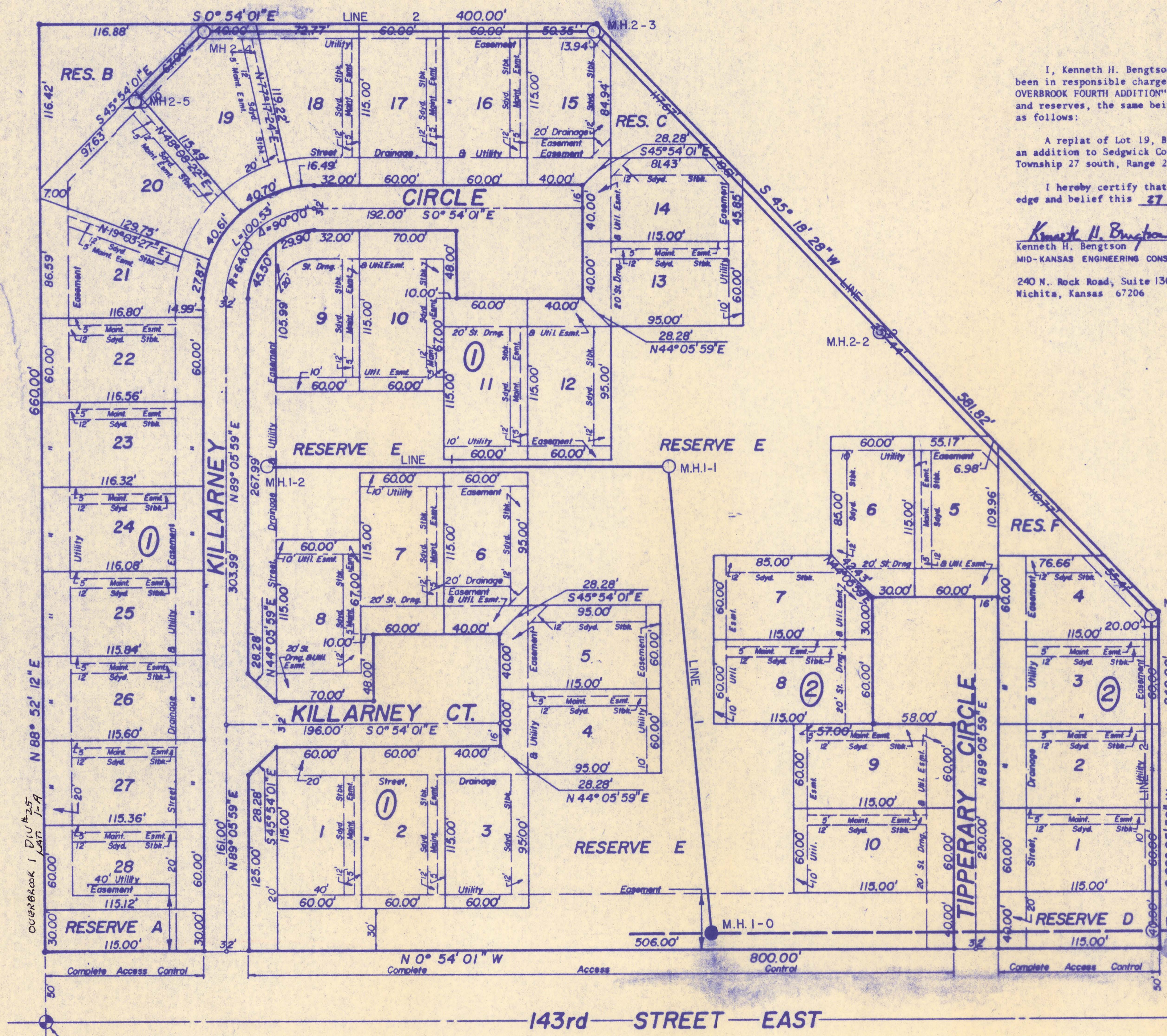
OVERBROOK FOURTH ADDITION

an Addition to Sedgwick County, Kansas



Scale: 1" = 50'

• = iron
Note: All front yard setbacks are 20 feet
Soyl. Stak. = Sidelord Setback
St. Drng. & Util. Exmt. = Street Drainage & Utility Easement



I, Kenneth H. Bengtson, a Civil Engineer in Kansas do hereby certify that I have been in responsible charge of surveying and platting "Crestview Country Club Estates, OVERBROOK FOURTH ADDITION", an addition to Sedgwick County, Kansas into lots, blocks and reserves, the same being accurately set forth in the accompanying plat and described as follows:

A replat of Lot 19, Block 3, Crestview Country Club Estates, OVERBROOK ADDITION, an addition to Sedgwick County, Kansas located in the southwest quarter of Section 13, Township 27 south, Range 2 east of the 6th P.M.

I hereby certify that the details on this plat are correct to the best of my knowledge and belief this 27 day of April, 1983.

Kenneth H. Bengtson
Kenneth H. Bengtson
MID-KANSAS ENGINEERING CONSULTANTS P.A.
240 N. Rock Road, Suite 130
Wichita, Kansas 67206



Know all men by these presents that we the undersigned property owners of the land as above set forth in the Civil Engineer's Certificate have caused the same to be surveyed and platted into lots, blocks and reserves, the same to be known as "Crestview Country Club Estates, OVERBROOK FOURTH ADDITION", an addition to Sedgwick County, Kansas. The streets are hereby dedicated to and for the use of the public. Reserves "A", "B", "C", "D", "E" and "F" are platted for open space, public utility easements, drainage and buffer zones and shall be owned and maintained by the Homeowner's Association. Easements for the streets, drainage and construction and maintenance of public utilities are hereby granted. All abutter's rights of access to or from Reserves "A", "D", or "F" over and across the east right of way line of 143rd Street East are hereby granted to Sedgwick County, Kansas. Maintenance easements granted over for and by the adjoining property owner for maintenance of their structures and for a 2.0 foot roof overhang.

Louis W. Cates
National Reserve Life Insurance Company,
a corporation
By: The Fourth National Bank and Trust
Company, Wichita

Louis W. Cates
Tomlinson Oil Co. Inc.
By: Louis W. Cates, Vice President

This plat approved and all dedications shown hereon, if any, accepted by the Board of City Commissioners of the City of Wichita, Kansas this 14th day of JUNE, 1983.

Margalee Wright Mayor
Donald C. Gisick City Clerk

This plat approved and all dedications shown hereon, if any, by the Board of County Commissioners of Sedgwick County, Kansas this day of JUNE, 1983.

Jack Specht Chairman
Donald B. Dragg Commissioner
Tom Scott Commissioner

Attest: *Dorothy K. White* County Clerk

STATE OF KANSAS
COUNTY OF SEDGWICK

This is to certify that this instrument was filed for record in the Register of Deeds Office at 3:00 P.M. o'clock on this 24th day of JUNE, 1983.

Bette F. McCart Register of Deeds
Pat Kettler Deputy

Entered on transfer record this 22 day of JUNE, 1983.

Dorothy K. White County Clerk

STATE OF KANSAS
COUNTY OF SEDGWICK

Be it remembered that on this 27th day of April, 1983, before me a notary public in and for said state and county, came National Reserve Life Insurance Company, a corporation by the Fourth National Bank and Trust Company by J.D. Newman, Vice President and attorney-in-fact for the said National Bank and Trust Company to me personally known to be the said person who executed the foregoing instrument of writing and duly acknowledged the execution of the same. In testimony whereof I have hereunto set my hand and affixed my notarial seal the day and year above written.

Nancy Hill Notary Public
NANCY HILL
STATE NOTARY PUBLIC
Sedgwick County, Kansas
My Comm. Exp. 3-12-87

STATE OF KANSAS
COUNTY OF SEDGWICK

Be it remembered that on this 29th day of April, 1983, before me a notary public in and for said state and county, came Tomlinson Oil Co., Inc. by Louis W. Cates, Vice President to me personally known to be the said person who executed the foregoing instrument of writing and duly acknowledged the execution of the same. In testimony whereof I have hereunto set my hand and affixed my notarial seal the day and year above written.

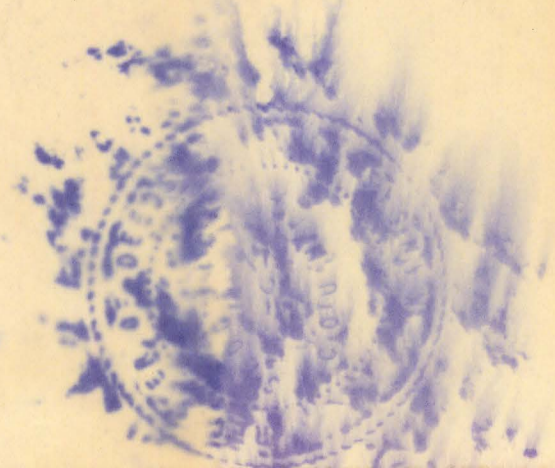
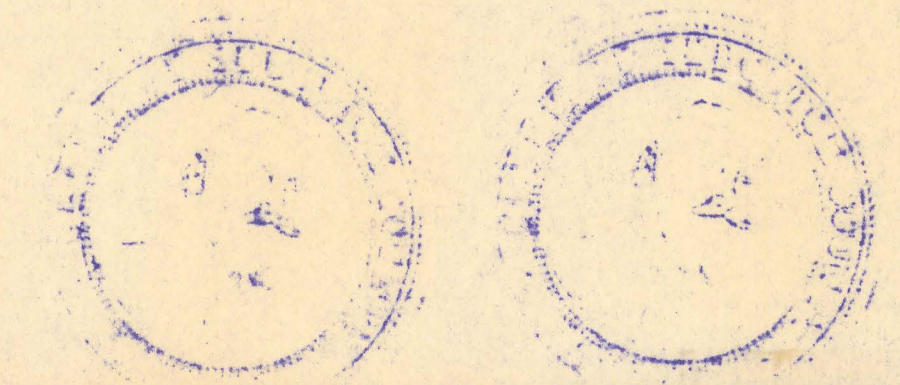
Louis W. Cates Notary Public
LOUIS W. CATES
STATE NOTARY PUBLIC
Sedgwick County, Kansas
My Comm. Exp. 3-12-87

STATE OF KANSAS
COUNTY OF SEDGWICK

This plat of "Crestview Country Club Estates, OVERBROOK FOURTH ADDITION" has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this 11th day of February, 1983.

Wichita-Sedgwick County Metropolitan Area Planning Commission
James L. Gaudreau Chairman
Robert A. Lakin Secretary



20.00

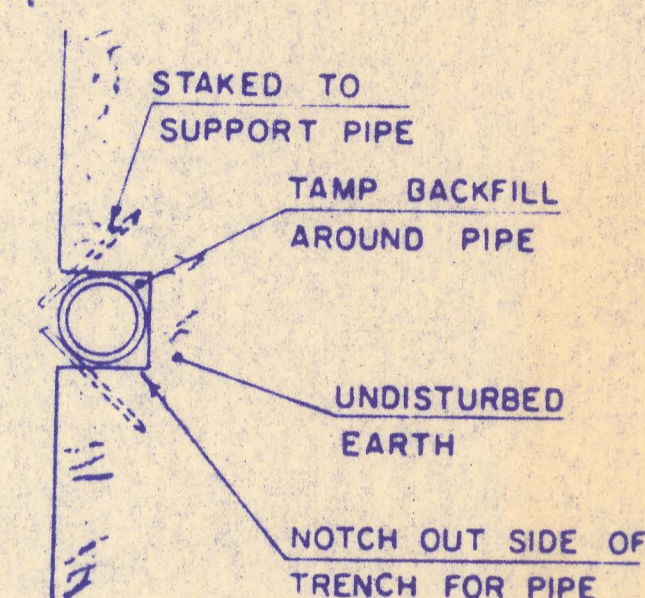
S-7 2-32

VERTICAL RISER DETAIL

ADOPTED AS STANDARD DESIGN

BY

CITY OF WICHITA, KANSAS

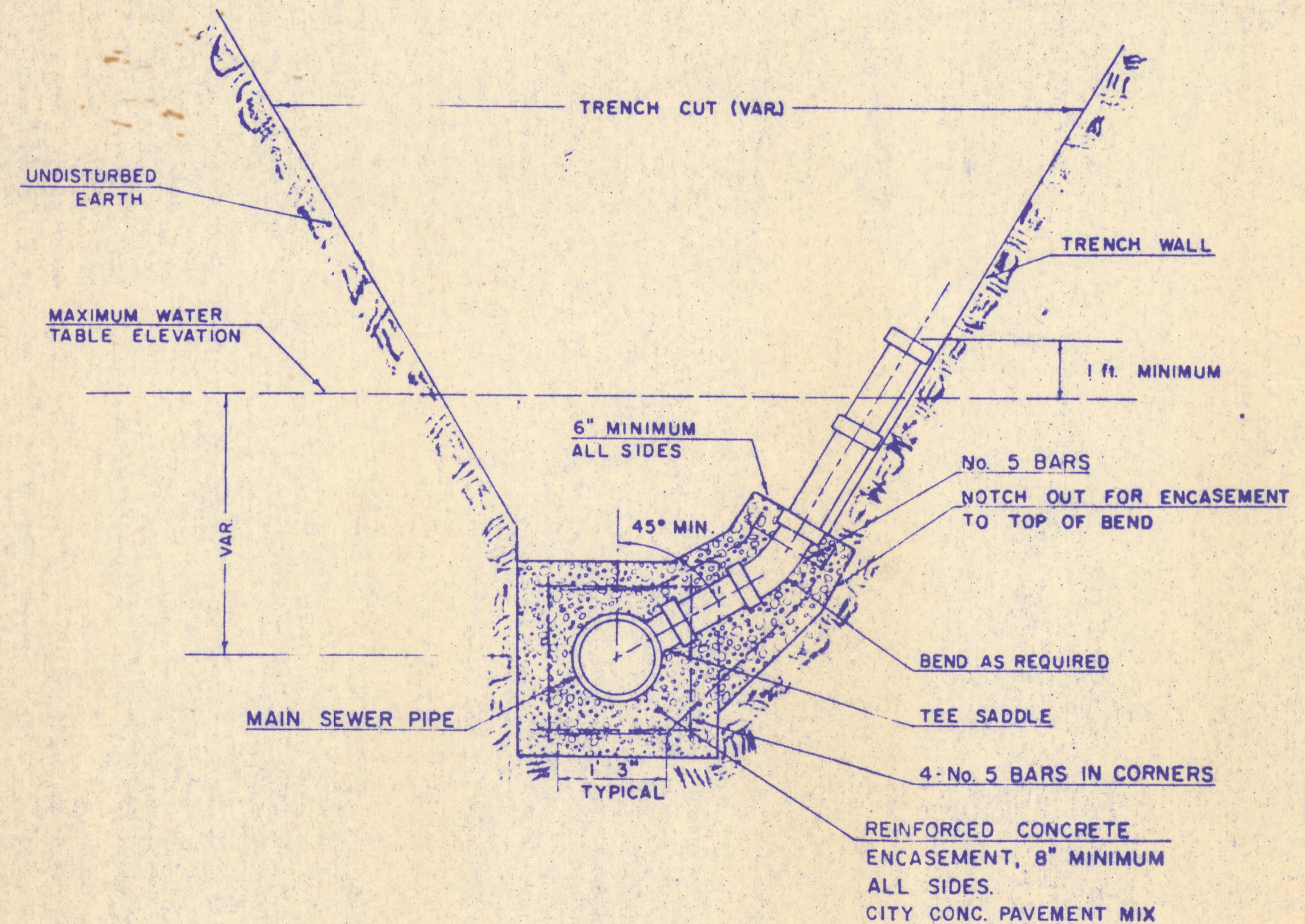


GENERAL NOTE

RISERS SHALL BE INSTALLED TO SERVE ALL LOTS OR TRACTS WHEN THE MAIN SEWER LINE IS BELOW THE WATER TABLE. RISERS SHALL ALSO BE INSTALLED TO SERVE ALL LOTS AND TRACTS WHEN THE MAIN SEWER LINE DEPTH IS SUCH THAT WOULD MAKE THE BUILDING SEWER LINE CONNECTION DIFFICULT. INSTALLATION OF RISERS BECAUSE OF MAIN LINE SEWER DEPTH SHALL BE AS APPROVED BY THE ENGINEER. THE LOCATION OF RISERS TO SERVE DEVELOPED PROPERTY SHALL BE APPROVED BY THE PROPERTY OWNER. PIPE STUBS SHALL BE INSTALLED IN MANHOLES WHERE LOCATIONS OF MANHOLES WILL PROVIDE SATISFACTORY SERVICE CONNECTIONS AS DETERMINED BY THE FIELD ENGINEER. THE VERTICAL DISTANCE BETWEEN THE FLOW LINE OF THE MANHOLE PIPE STUB AND THE FLOW LINE OF THE MAIN SEWER LINE SHALL NOT EXCEED 4 FT. MANHOLE PIPE STUBS SHALL NOT BE SET BELOW AN ELEVATION WHICH WILL PERMIT THE TOP OF THE INSIDE OF THE STUB TO BE AT OR ABOVE THE TOP OF THE INSIDE OF THE MAIN SEWER PIPE. PIPE STUBS AND RISERS INSTALLED TO SERVE COMMERCIAL OR INDUSTRIAL PROPERTY SHALL BE 8 INCH. PIPE STUBS AND RISERS INSTALLED TO SERVE RESIDENTIAL PROPERTY MAY BE EITHER 6 INCH OR 8 INCH DEPENDING UPON THE AVAILABLE GRADY AND THE SIZE OF THE LOT AS DETERMINED BY THE FIELD ENGINEER. ENCASEMENT OF VITRIFIED CLAY MAIN SEWER PIPE SHALL EXTEND TO THE FIRST JOINT IN THE MAIN SEWER CLAY PIPE ON EACH SIDE OF THE RISER INSTALLATION. ENCASEMENT OF A.B.S. COMPOSITE OR P.V.C. MAIN SEWER PIPE SHALL EXTEND A MINIMUM OF 3 FT. ON BOTH SIDES OF THE CENTERLINE OF THE RISER. FOUR INCH AND SIX INCH RISER PIPE SHALL BE ENCASED WITH CONCRETE TO THE TOP OF THE BEND AS INDICATED IN THE DRAWINGS. FOUR INCH AND SIX INCH CLAY PIPE USED FOR RISERS SHALL BE EXTRA STRENGTH PIPE CONFORMING TO THE REQUIREMENTS OF THE LATEST REVISION OF A.S.T.M. DESIGNATION C700 WITH COMPRESSION JOINTS AS SPECIFIED FOR CLAY PIPE IN THE STANDARD SPECIFICATIONS. FOUR INCH AND SIX INCH A.B.S. OR P.V.C. PIPE SHALL BE PIPE APPROVED FOR USE IN THE CITY BY THE CHIEF PLUMBING AND MECHANICAL INSPECTOR FOR THE CENTRAL INSPECTION DIVISION OF THE DEPARTMENT OF HOUSING AND ECONOMIC DEVELOPMENT. LOCATIONS OF THE ENDS OF THE RISERS SHALL BE MARKED BY FASTENING GREEN COLORED PLASTIC TAPE TO THE END OF THE RISER WHICH SHALL BE EXTENDED TO THE GROUND SURFACE AS THE EXCAVATION IS BACKFILLED SUCH THAT THE COLORED TAPE WILL BE VISIBLE WHEN THE PROJECT IS COMPLETED. THE ENDS OF THE RISER PIPE AND MANHOLE STUBS SHALL BE CRIPPED OR PLUGGED USING FITTINGS FURNISHED BY THE MANUFACTURER OF THE PIPE. CONTRACTOR'S METHODS FOR TESTING AND BACKFILLING RISER PIPE SHALL BE APPROVED BY THE ENGINEER.

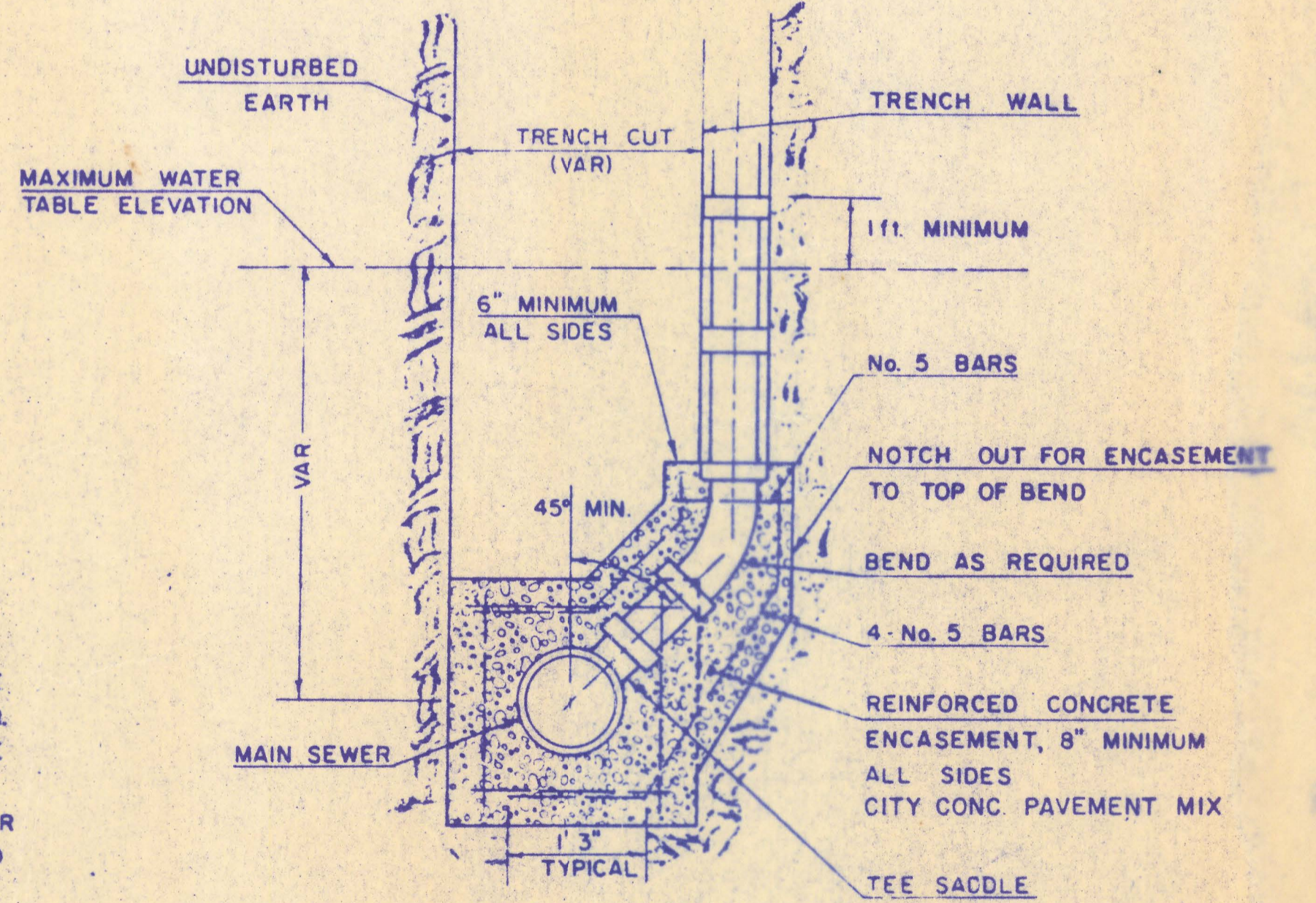
FOR ORDERING AND INSTALLING RISERS SHALL BE PAID FOR AT THE UNIT PRICES BID FOR 4" PIPE, 6" PIPE AND REINFORCED CONCRETE ENCASEMENT FOR THE VARIOUS MAIN SEWER PIPE SIZES INDICATED WHICH PRICES SHALL INCLUDE ALL COSTS FOR COMPLETION OF THIS ITEM INCLUDING SADDLES, BENDS, CONCRETE, REINFORCING STEEL, CAPS OR PLUGS, AND ALL OTHER NECESSARY MATERIALS OR WORK. CONCRETE ENCASEMENT IN THE RISER PIPE TO THE TOP OF THE BEND AS SHOWN BY THE DRAWINGS WILL NOT BE PAID FOR DIRECTLY AND THE COST FOR THIS WORK SHALL BE CONSIDERED AS SUBSTANTIAL TO THE OTHER ITEMS OF WORK.

THE PROJECT INSPECTOR SHALL REPORT ON INSPECTOR CARDS THE LOCATION OF ALL RISERS CONSTRUCTED AS MEASURED FROM THE NEAREST MANHOLE, THE DIRECTION OF SERVICE, THE ELEVATION OF THE TOP OF THE RISER, AND THE PAY QUANTITIES INVOLVED. THE PROJECT INSPECTOR SHALL ALSO REPORT ON INSPECTOR CARDS THE LOCATION, DIRECTION OF SERVICE, AND SIZE OF ALL STUBS INSTALLED IN MANHOLES.



TYPICAL RISER FOR SLOPING TRENCH WALLS

NOTE:
TOP OF 4" OR 6" RISER PIPE TO BE EXTENDED TO AN ELEVATION OF 1 FT. MINIMUM ABOVE THE WATER TABLE ELEVATION, WHEN WATER EXISTS, OR TO AN ELEVATION SUITABLE FOR PROVIDING SERVICE TO THE LOT TO BE SERVED AND THEN PLUGGED.



TYPICAL RISER FOR VERTICAL TRENCH WALLS