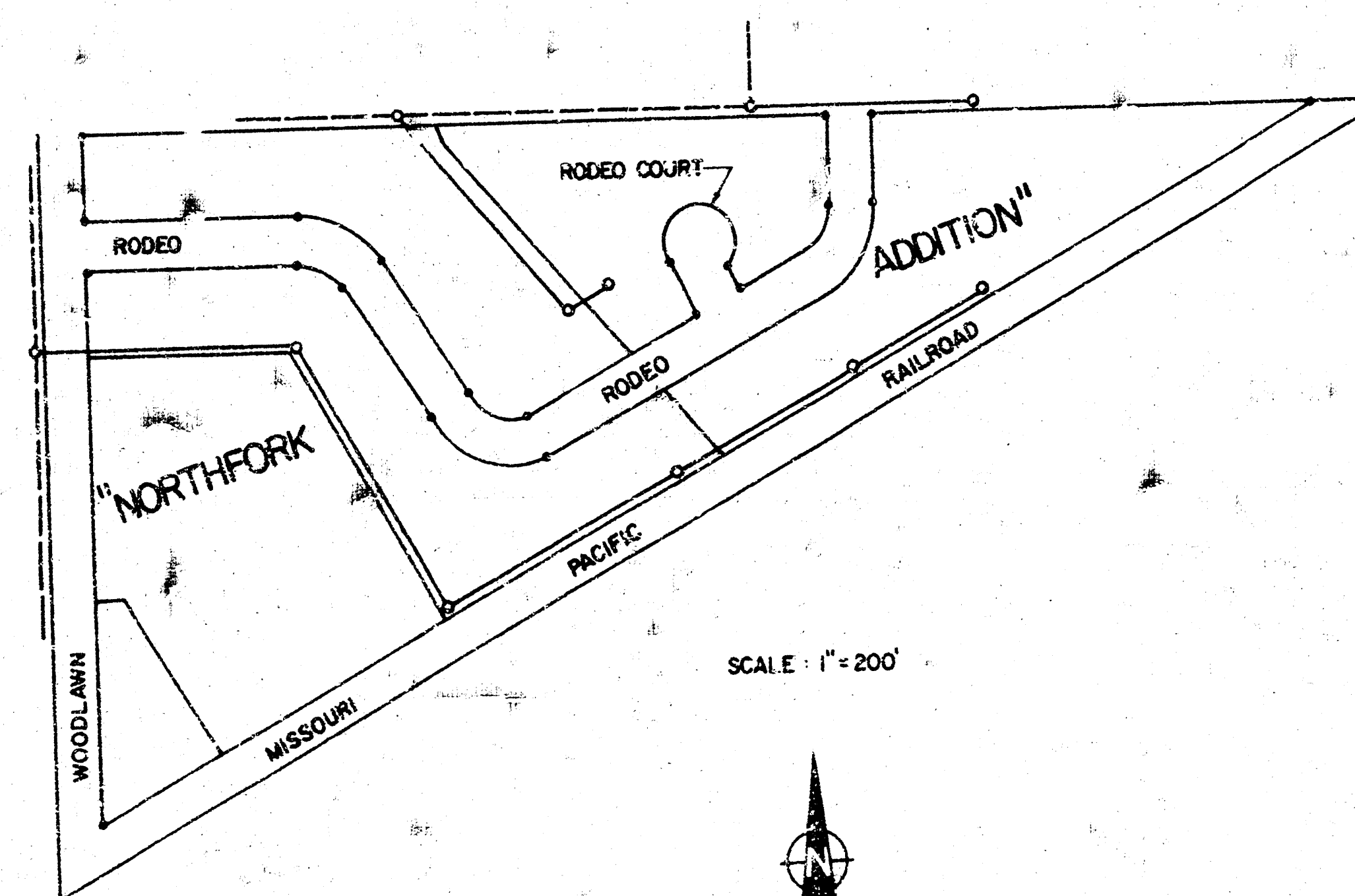


PLANS
FOR
SANITARY SEWER EXTENSIONS
NORTHFORK ADDITION
CITY OF BEL AIRE

1982
MS 282



NOTE TO CONTRACTOR

This project will be constructed under the supervision of the CITY ENGINEER and conforming to the SPECIFICATIONS of the CITY OF WICHITA. The CONTRACTOR will prepay the City of Wichita for all costs of inspection.

6-25-82

APPROVED AS NOTED
By CITY ENGINEER OF WICHITA
Sanitary Sewers *P.C.D.*
Storm Sewers _____
Driveway Approaches _____



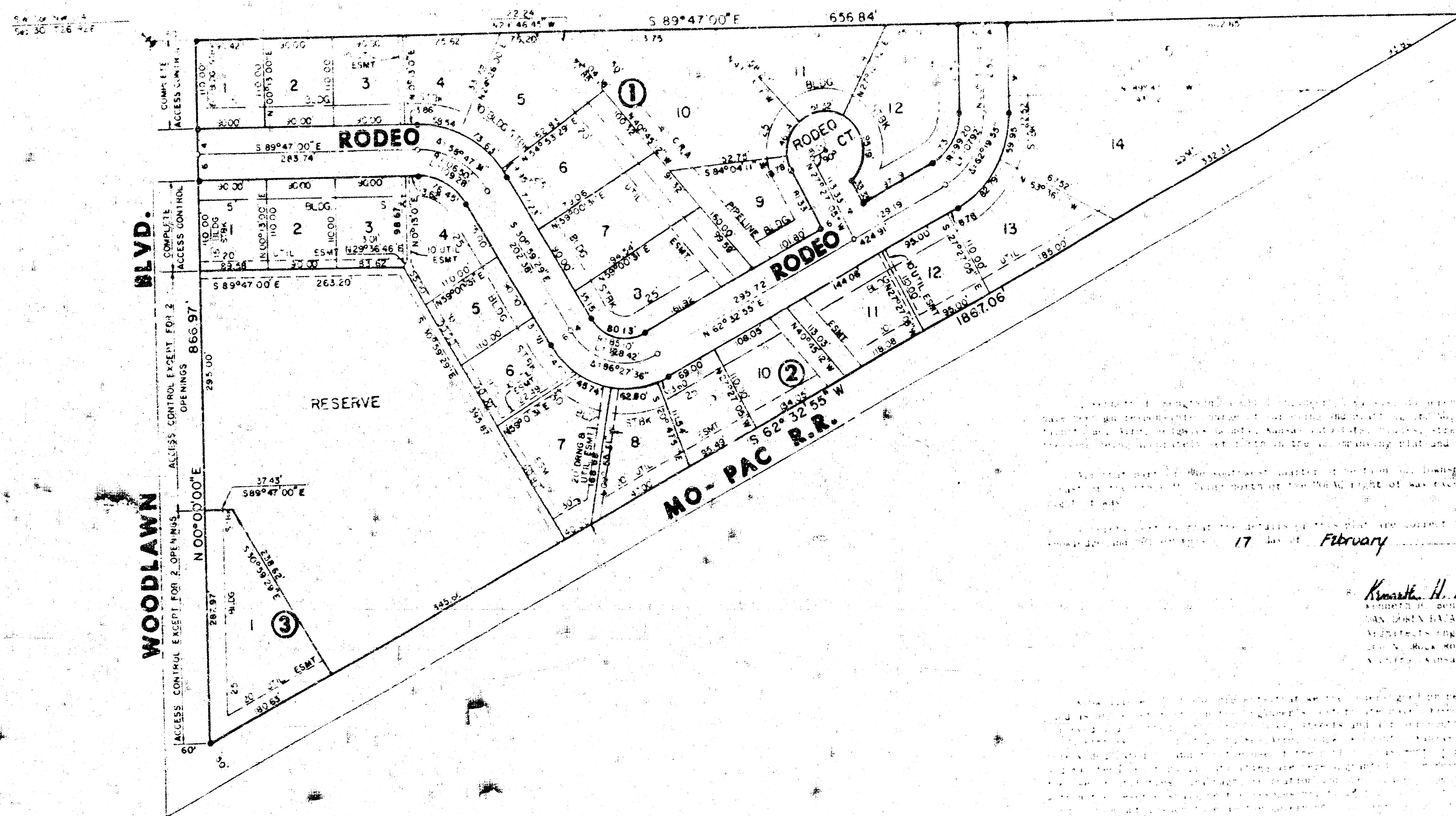
REISS & GOODNESS ENGINEERS
2100 WEST 21ST STREET
WICHITA, KANSAS 67204
(316) 242-0213

SCALE: NOTED
DATE: 4-5-82
PROJECT NO.:
SHEET 1 OF 5

REV. NO. DRAWN BY CHECKED BY DESIGNED BY PROJECT CUSTOMER

AN ADDITION TO BEL AIRE, SEDGWICK COUNTY KANSAS

SCALE: 1"=100'
IRON •
MIN. S&D = 1376 U.S.G.S

[illegible]

Kenneth H. Bengtson
KENNETH H. BENGTSON, PARTNER
DAN LORIN FARM, STALLING
AGRICULTURAL ENGINEERS-Planners
and V. Rock Road, Suite 200
Arlington, Virginia 22209

William L. Chiver, Jr.

#576283

100-443888-100

KATHERYN S. BAUMAN
KATHERYN S. BAUMAN

DAVID H. BRASTED

18th February
DAVID H. BRASER
EXECUTIVE VICE PRESIDENT

Correct Price

12/15/81

Dated this 17 day of February 1962

501-Acre Farming Co. Inc. _____
Charles Peters _____
 Charles S. Peters _____

Pat Norman, Secretary

This part approved and all dedications shown hereon, if any, accepted by the City Commission of the City of Bel Air, Kansas this 17 day of FEBRUARY 192

Bill Good House

This plat approved and all indications shown thereon, if any accepted by the Board of Equal Commissioners of said county, Kansas this 20th day of March 1922.

[illegible]

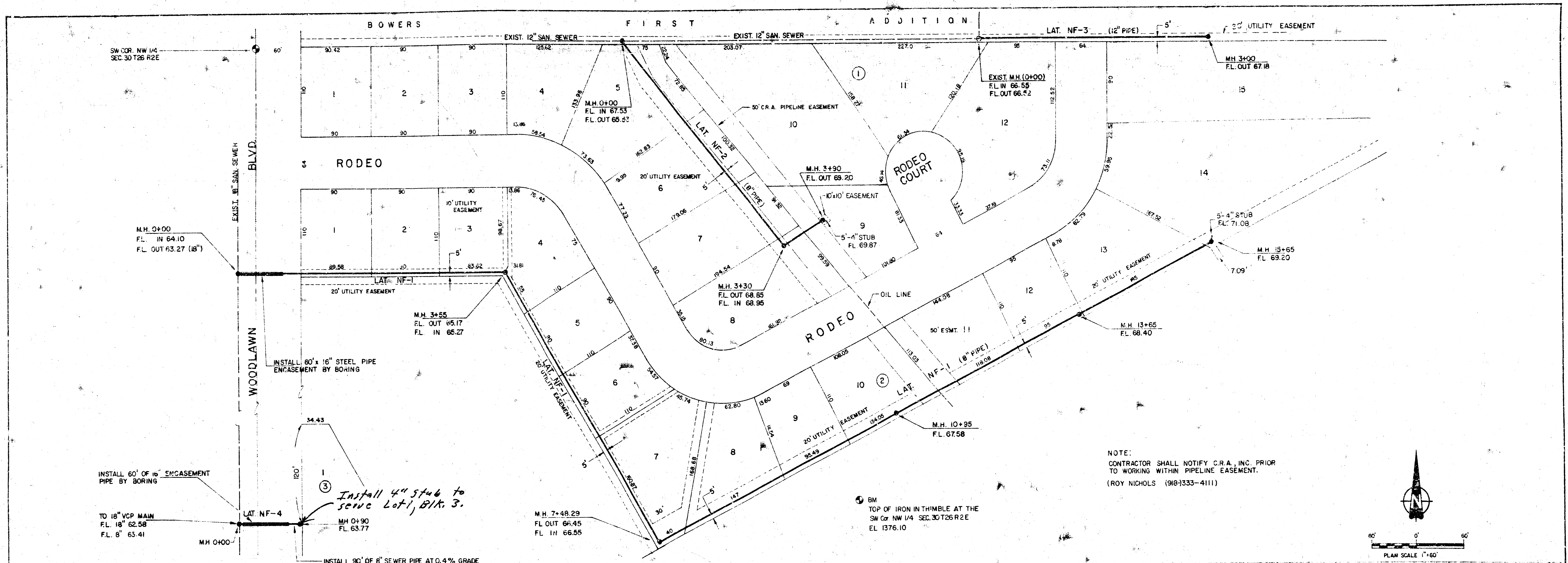
COUNTY CLERK
 DEPUTY
 MICHAEL T. SAWYER, DEPUTY
 23rd day of March

Dorothy K. White
County Clerk
By *Michael T. Sawyer*
MICHAEL T. SAWYER, Deputy

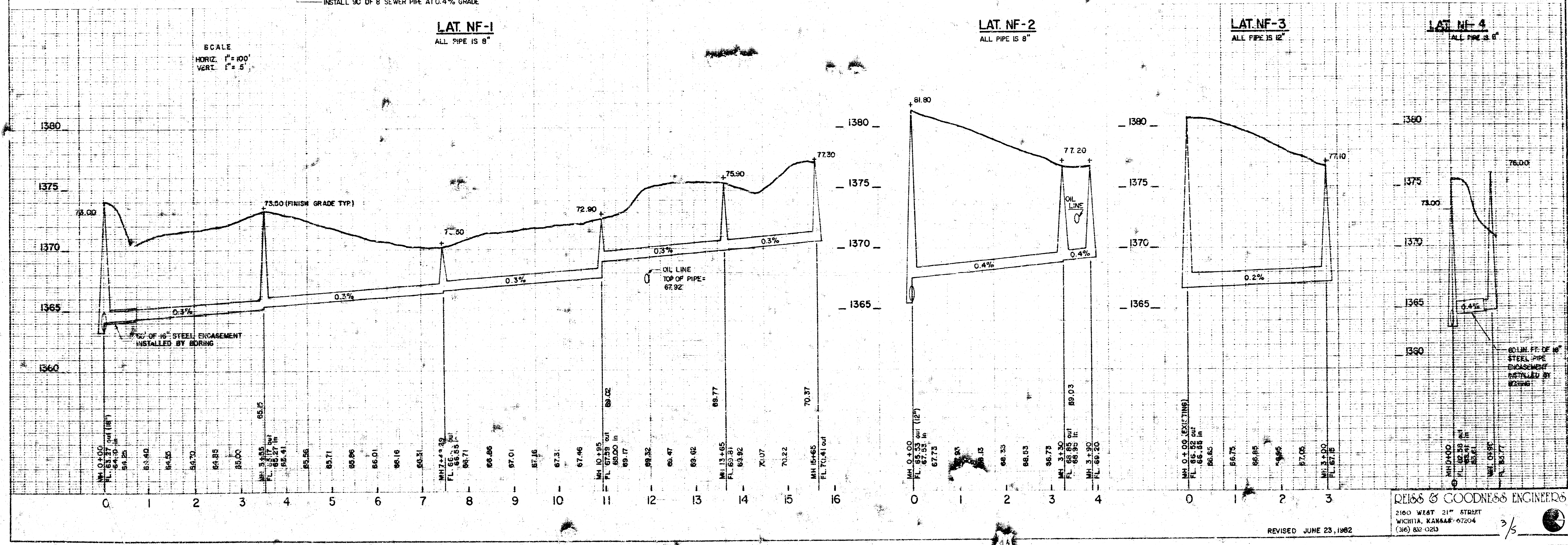
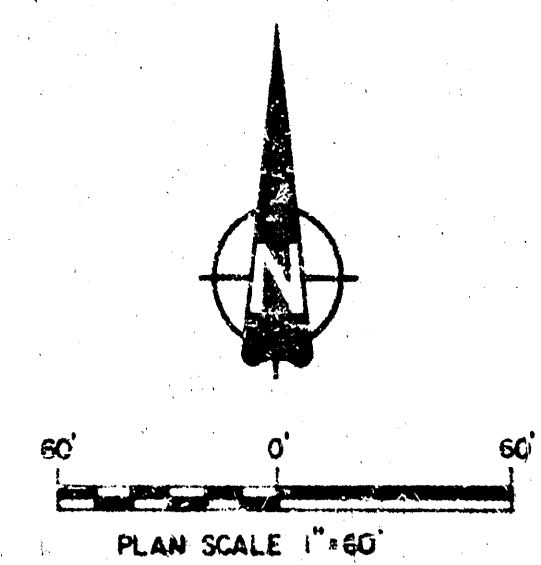
2:00 PM 220000 MARCH

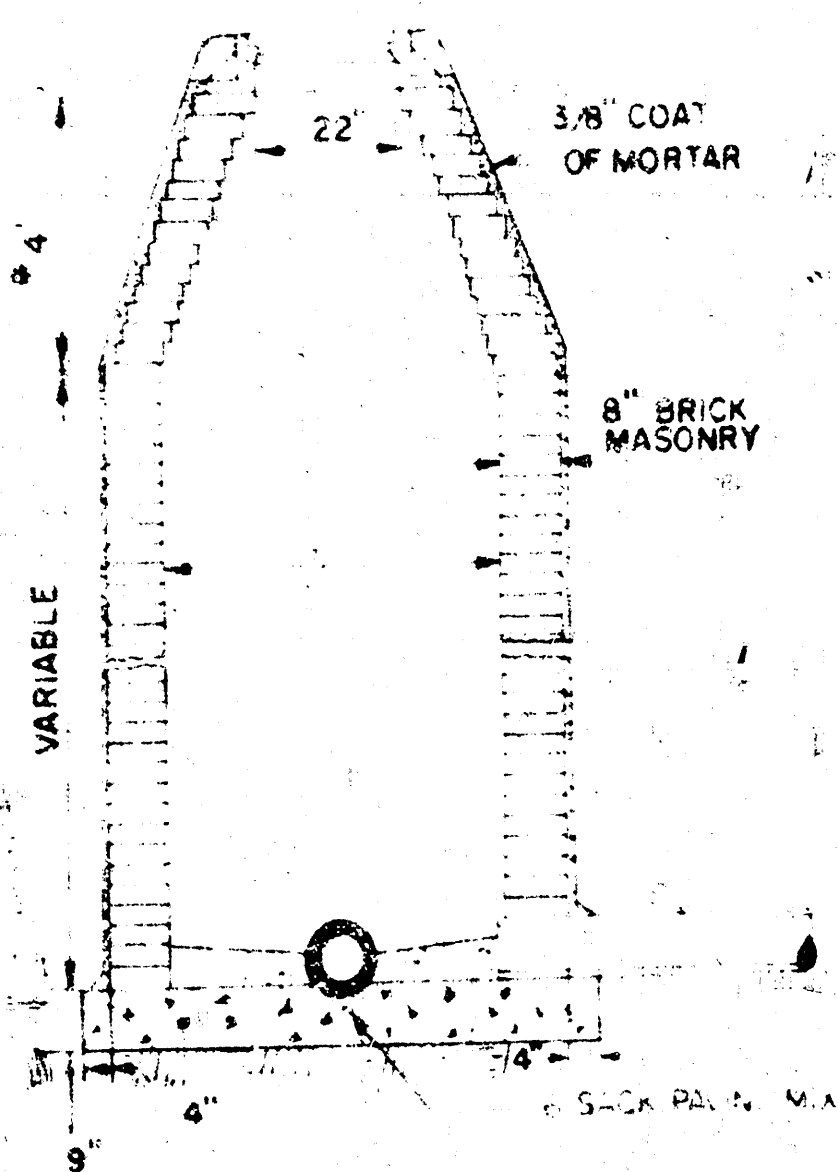
Butte F. m. Can

Pat Kewles



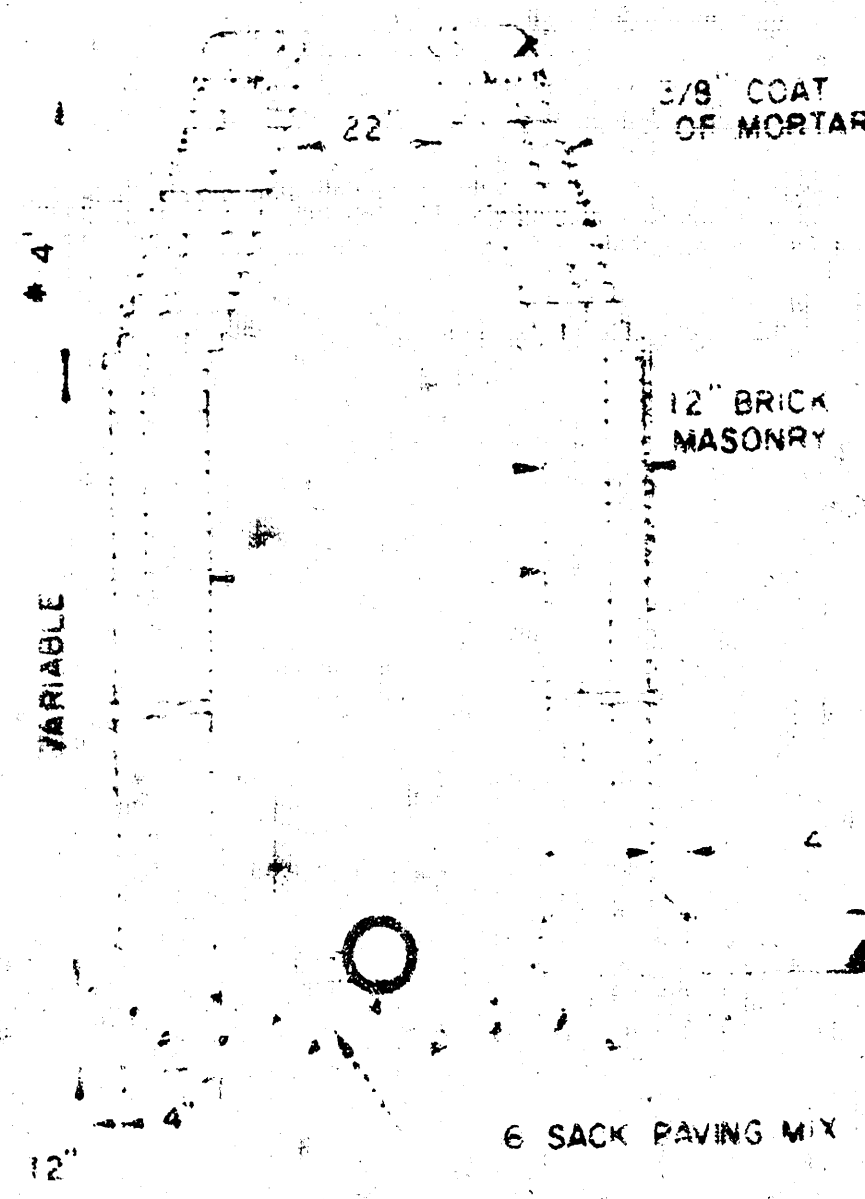
NOTE:
CONTRACTOR SHALL NOTIFY C.R.A. INC. PRIOR
TO WORKING WITHIN PIPELINE EASEMENT.
(ROY NICHOLS (918)333-4111)



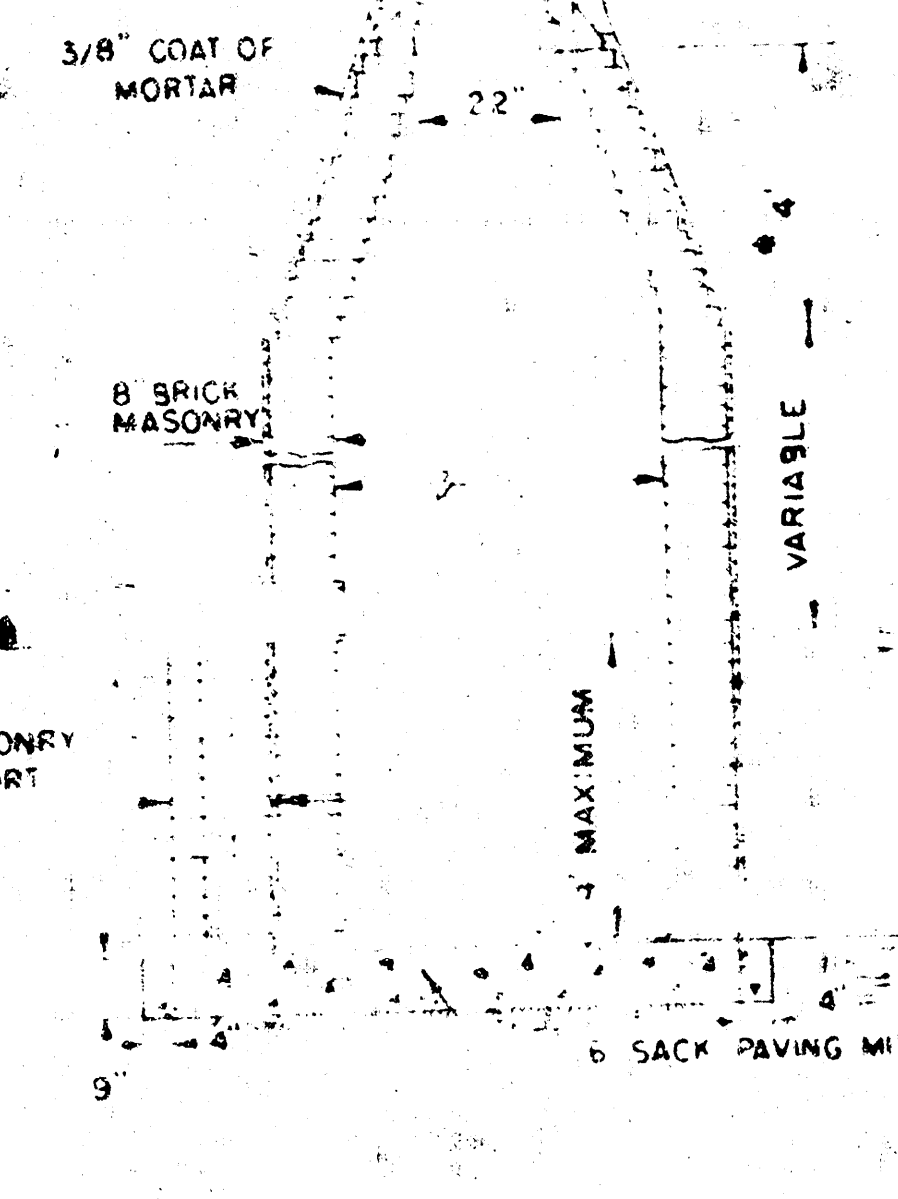


STANDARD MANHOLE
TYPE "A"

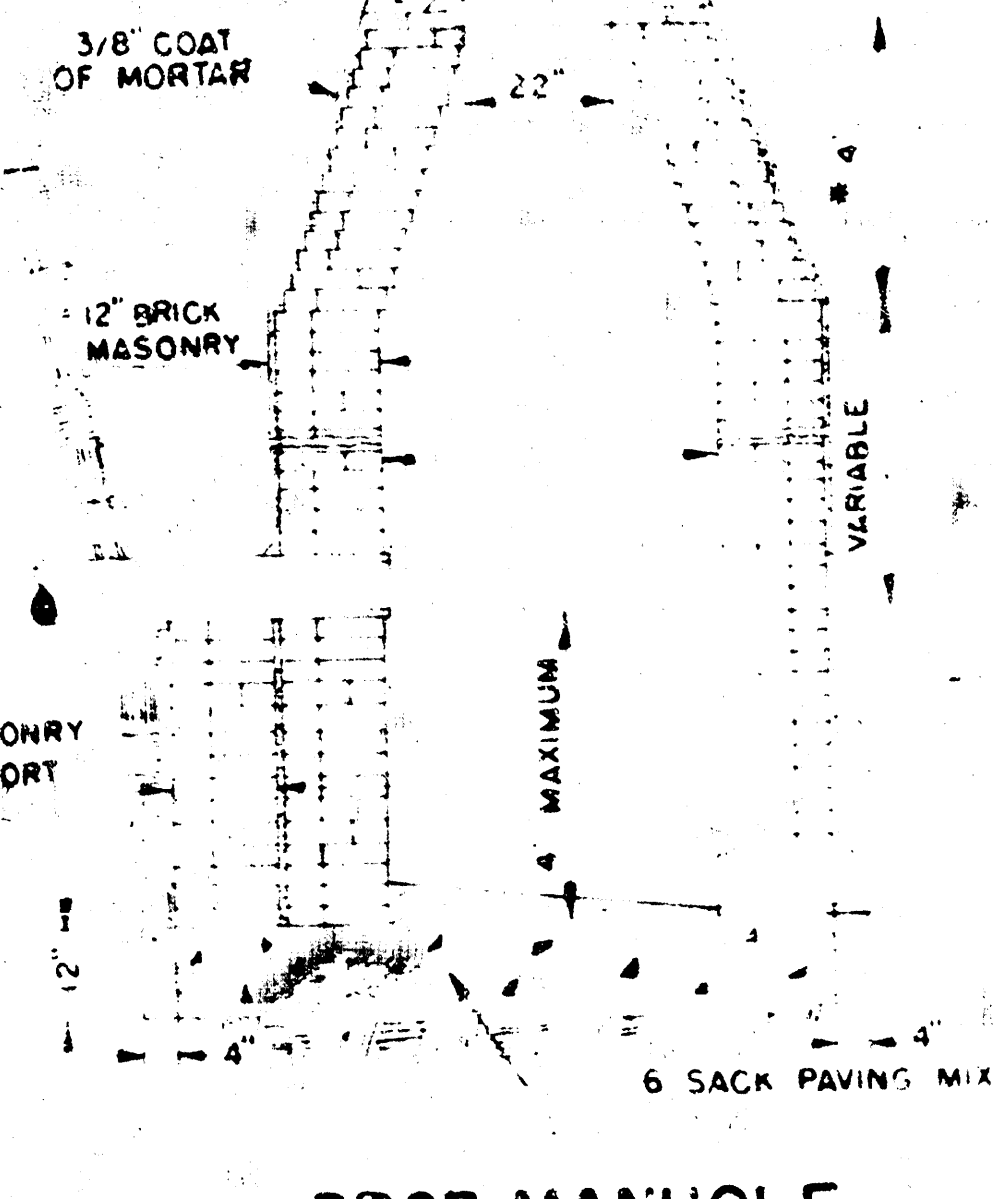
* DRAW = 6' ON 5' DIA. M.H.



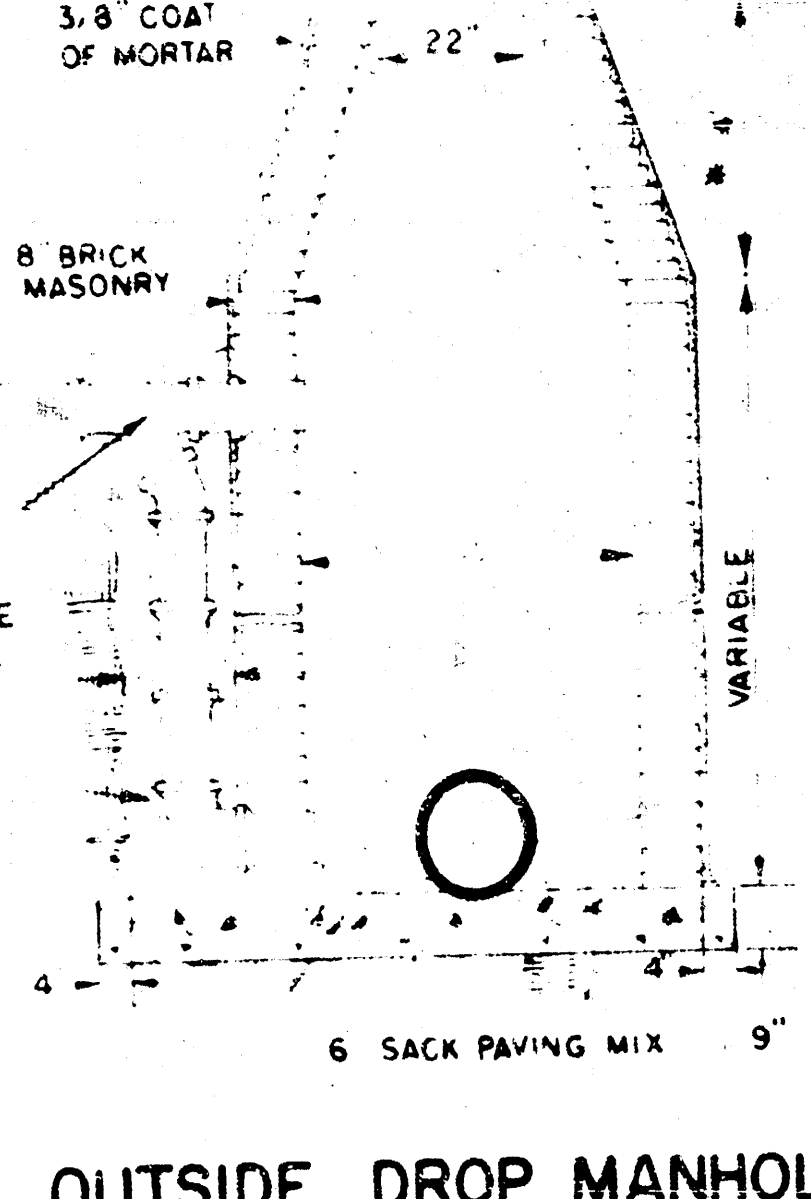
STANDARD MANHOLE
TYPE "B"



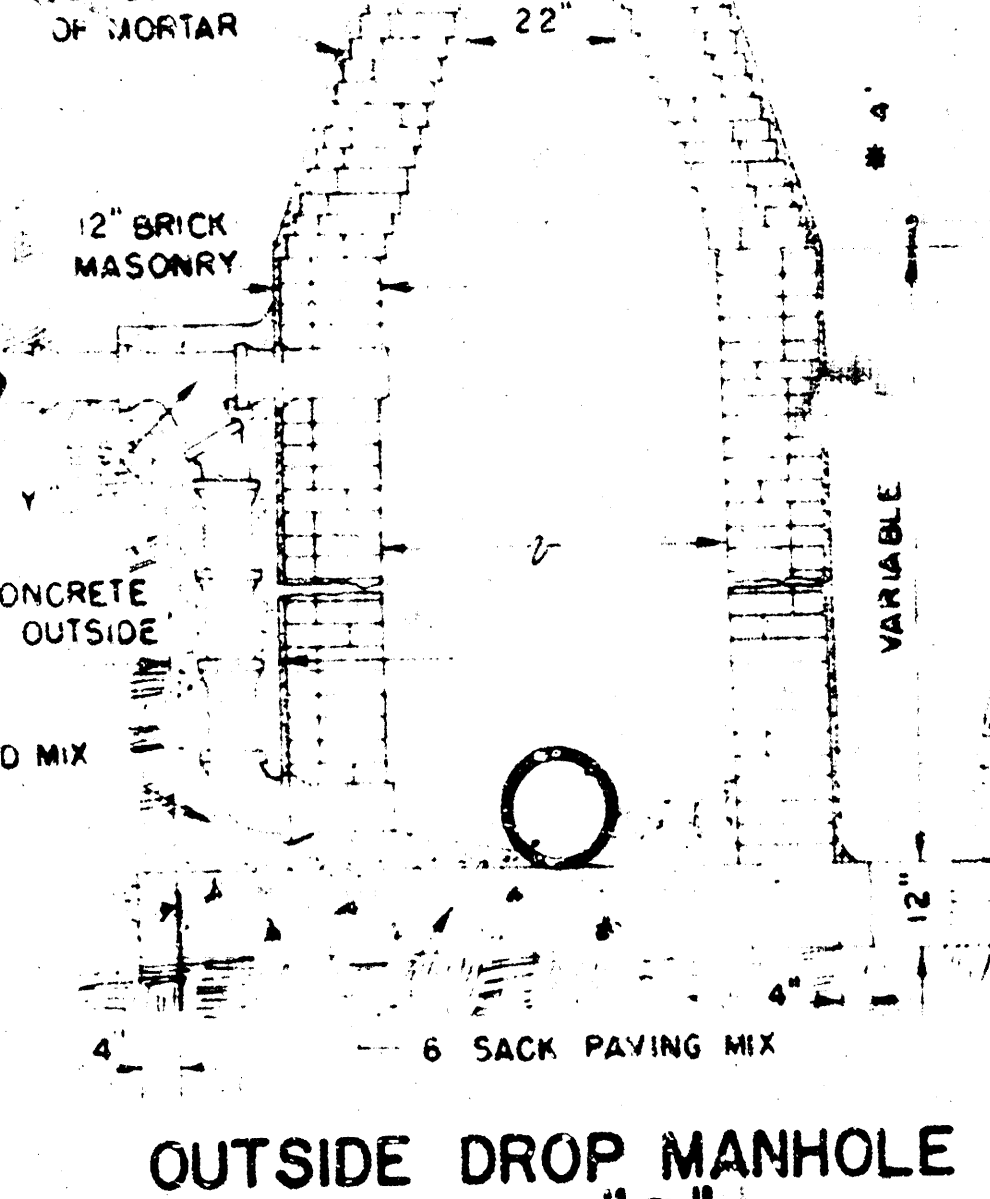
DROP MANHOLE
TYPE "A"



DROP MANHOLE
TYPE "B"

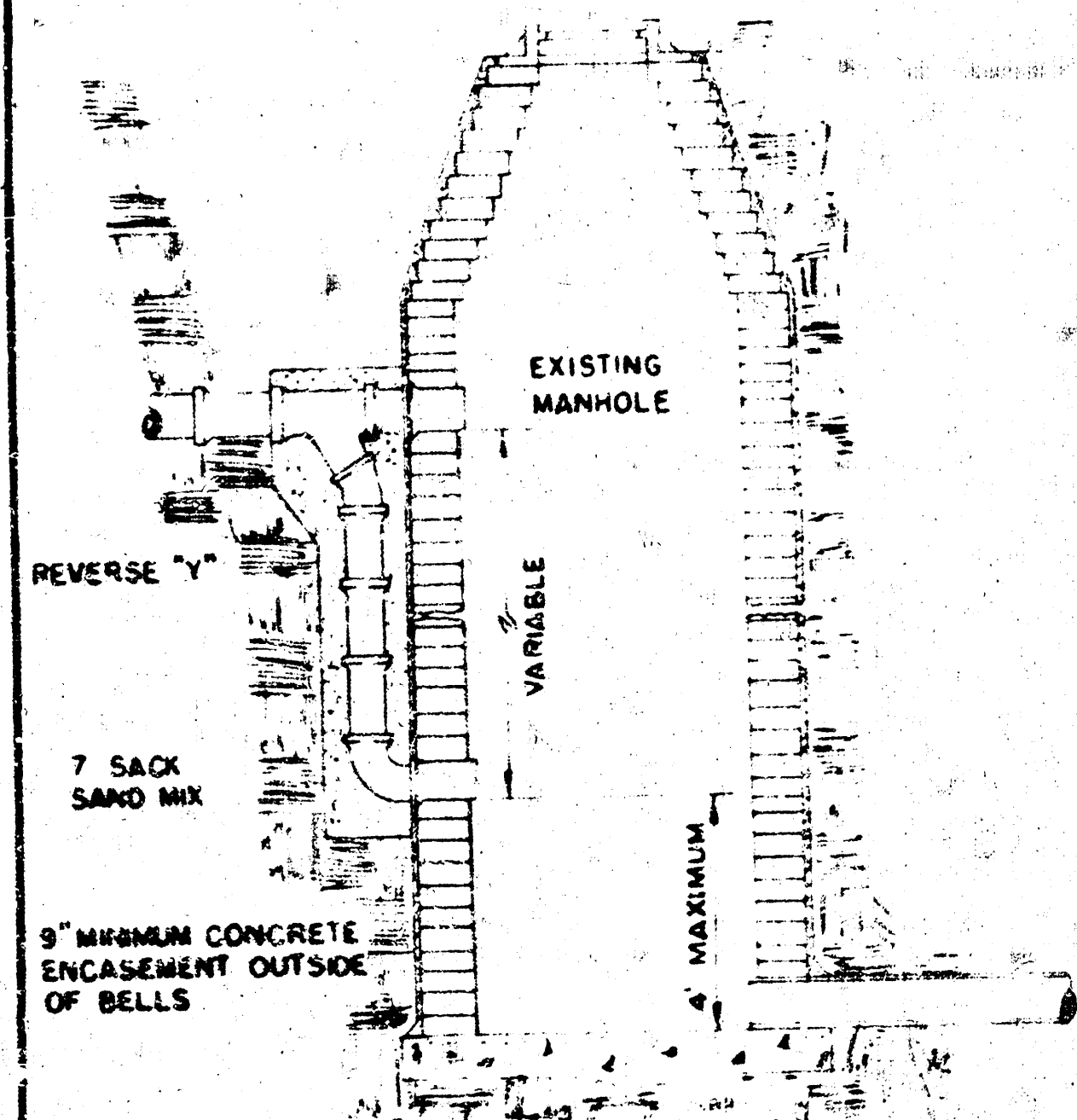


OUTSIDE DROP MANHOLE
TYPE "A"



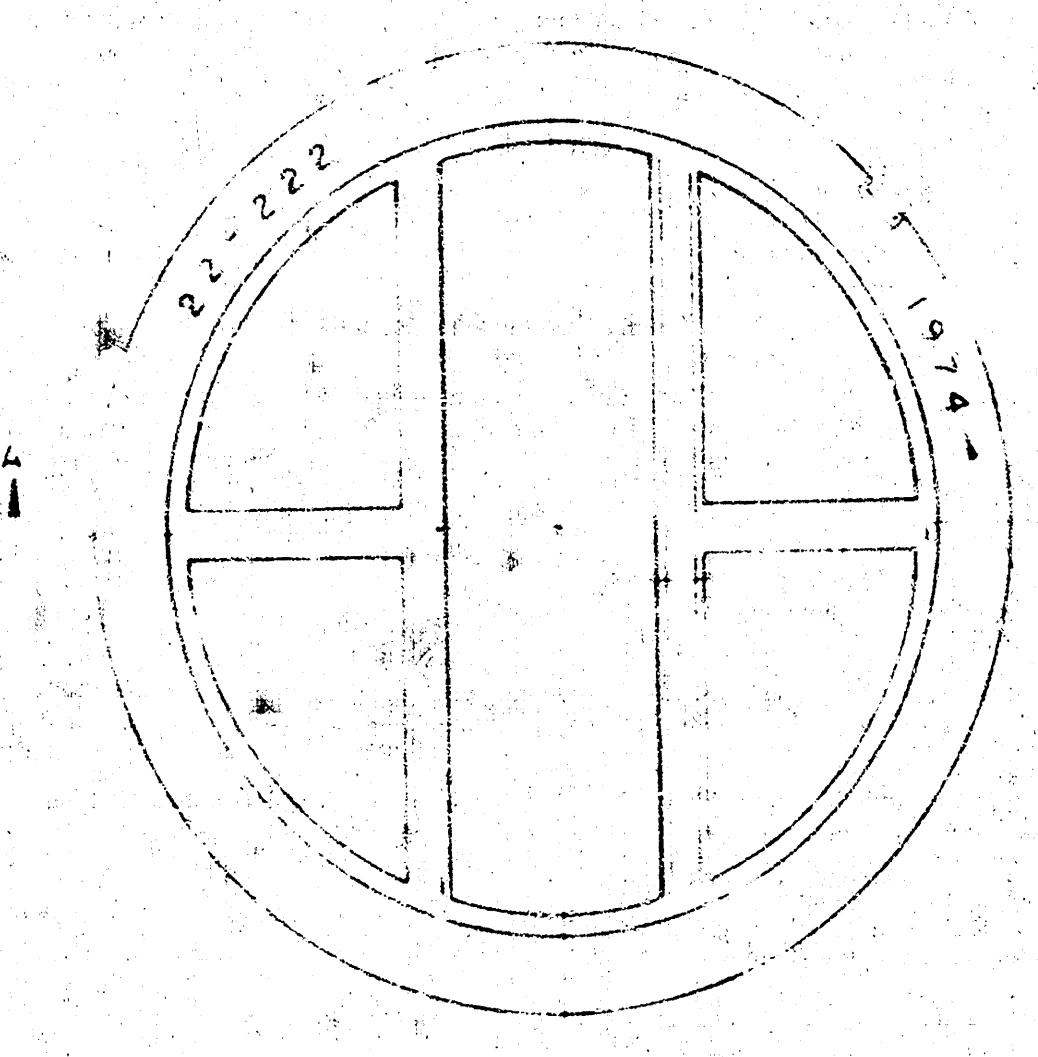
OUTSIDE DROP MANHOLE
TYPE "B"

NOTE: REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES 6" ABOVE THE BOTTOM. REINFORCING STEEL SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE COST OF REINFORCING STEEL IS TO BE INCLUDED IN THE PRICE BID FOR THE MANHOLE.

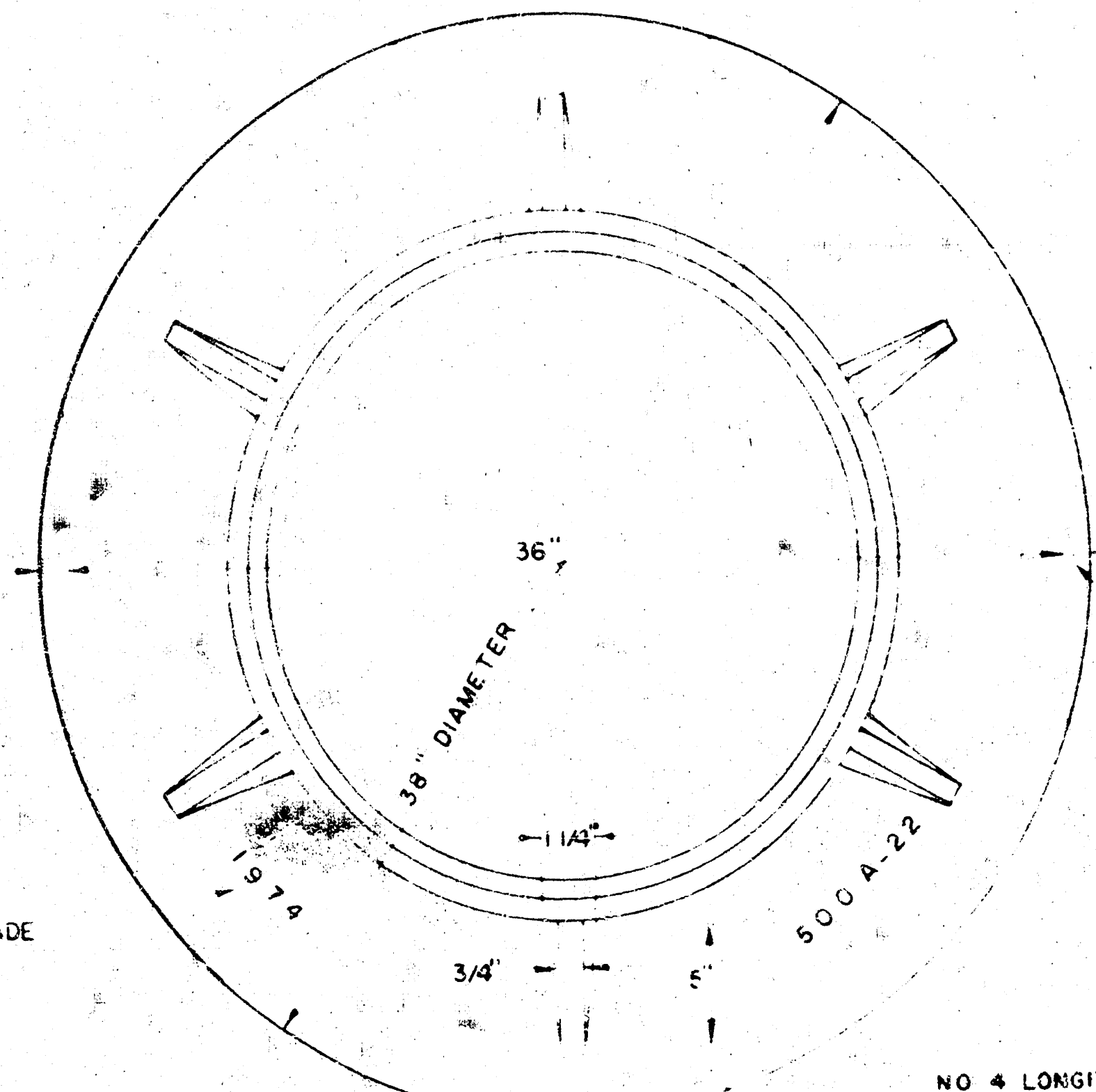


DETAIL OF DROP STACK

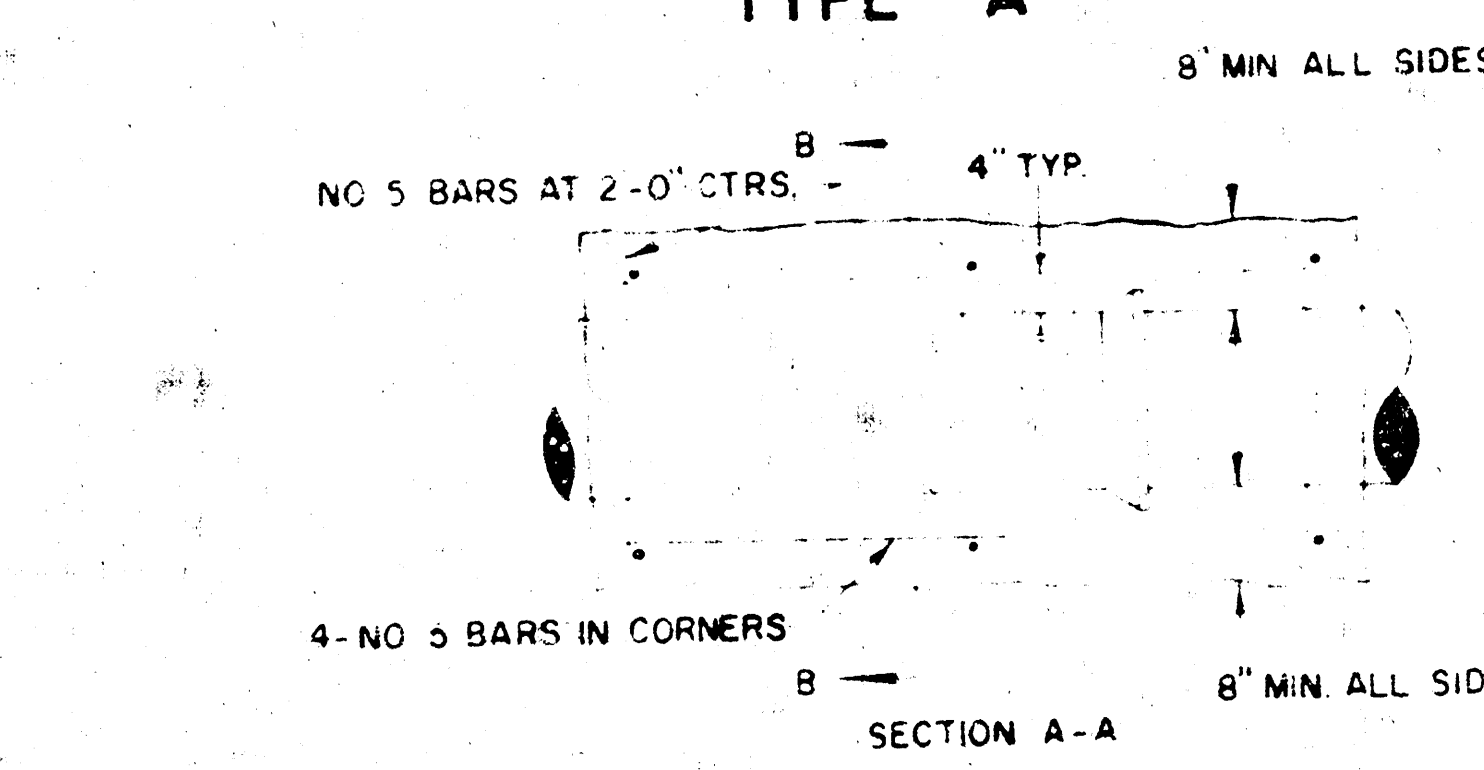
FOR EXISTING MANHOLES IN GROUND WATER



MANHOLE COVER
WEIGHT 10 LBS

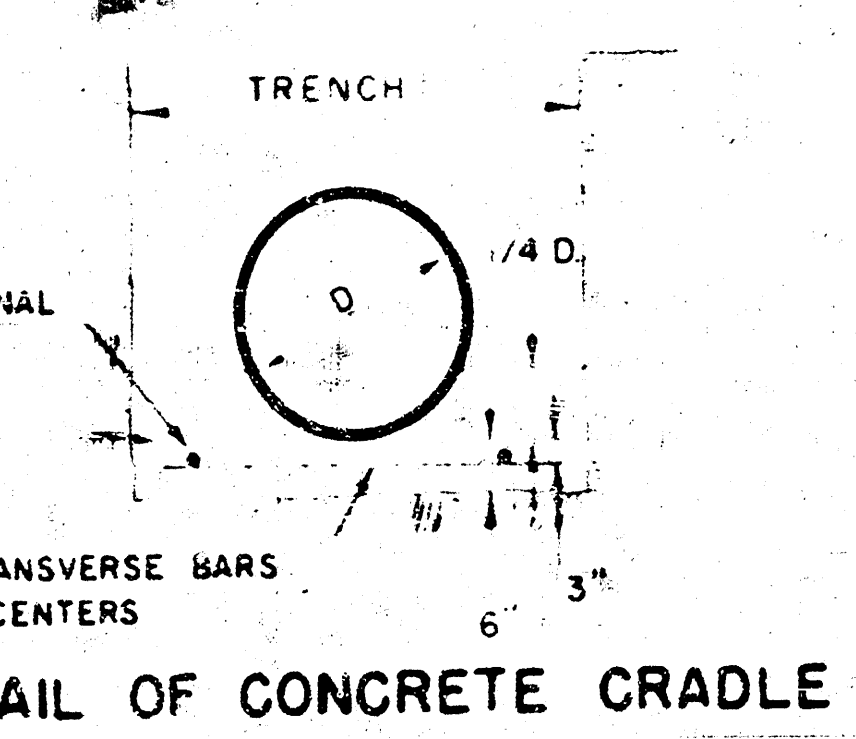


MANHOLE RING
WEIGHT 325 LBS RING NO 500A
WEIGHT 800 LBS RING NO 500AS



REINFORCED CONCRETE ENCASEMENT

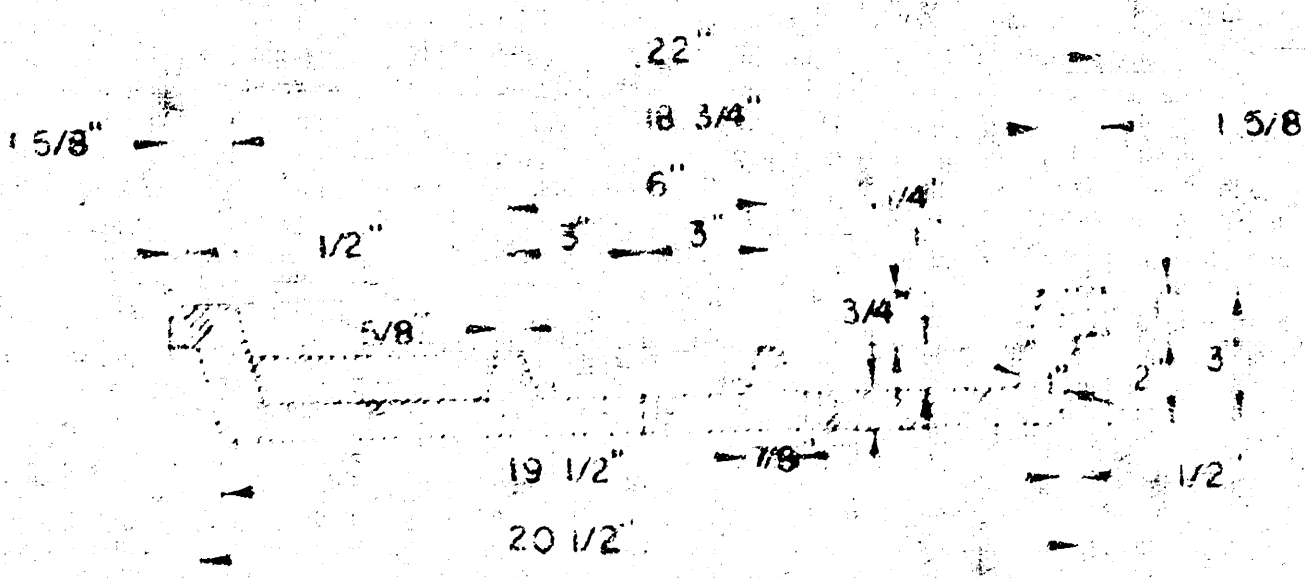
NOTE: CONCRETE ENCASEMENT AND CONCRETE CRADLE SHALL BEGIN AND END AT A JOINT WHEN CLAY PIPE IS USED.



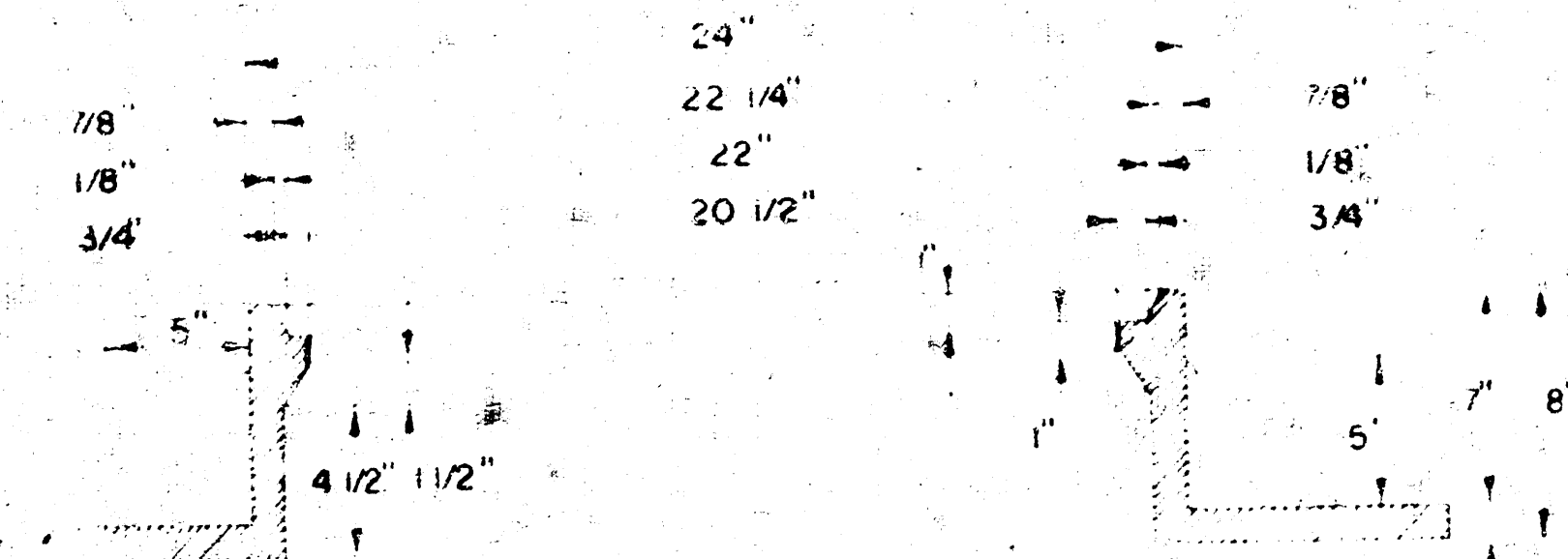
DETAIL OF CONCRETE CRADLE

GENERAL NOTES

- MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD.
- STANDARD MANHOLES TYPE "A" OR TYPE "B" AND STANDARD DROP MANHOLES TYPE "A" OR TYPE "B" 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. MANHOLES WITH PIPE SIZES LARGER THAN 24" SHALL BE 5' DIAMETER.
- THE FLOORS OF ALL MANHOLES SHALL BE SHAPED TO INCREASE HYDRAULIC EFFICIENCY USING 8 SACK SAND CONCRETE.
- PIPES INSTALLED WITHIN THE MANHOLE EXCAVATION SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. COST OF CRADLE WITHIN MANHOLE EXCAVATION SHALL BE INCLUDED IN THE PRICE BID FOR THE MANHOLE. CRADLE SHALL EXTEND TO FIRST JOINT OUTSIDE OF MANHOLE WHEN CLAY PIPE IS USED.



MANHOLE COVER



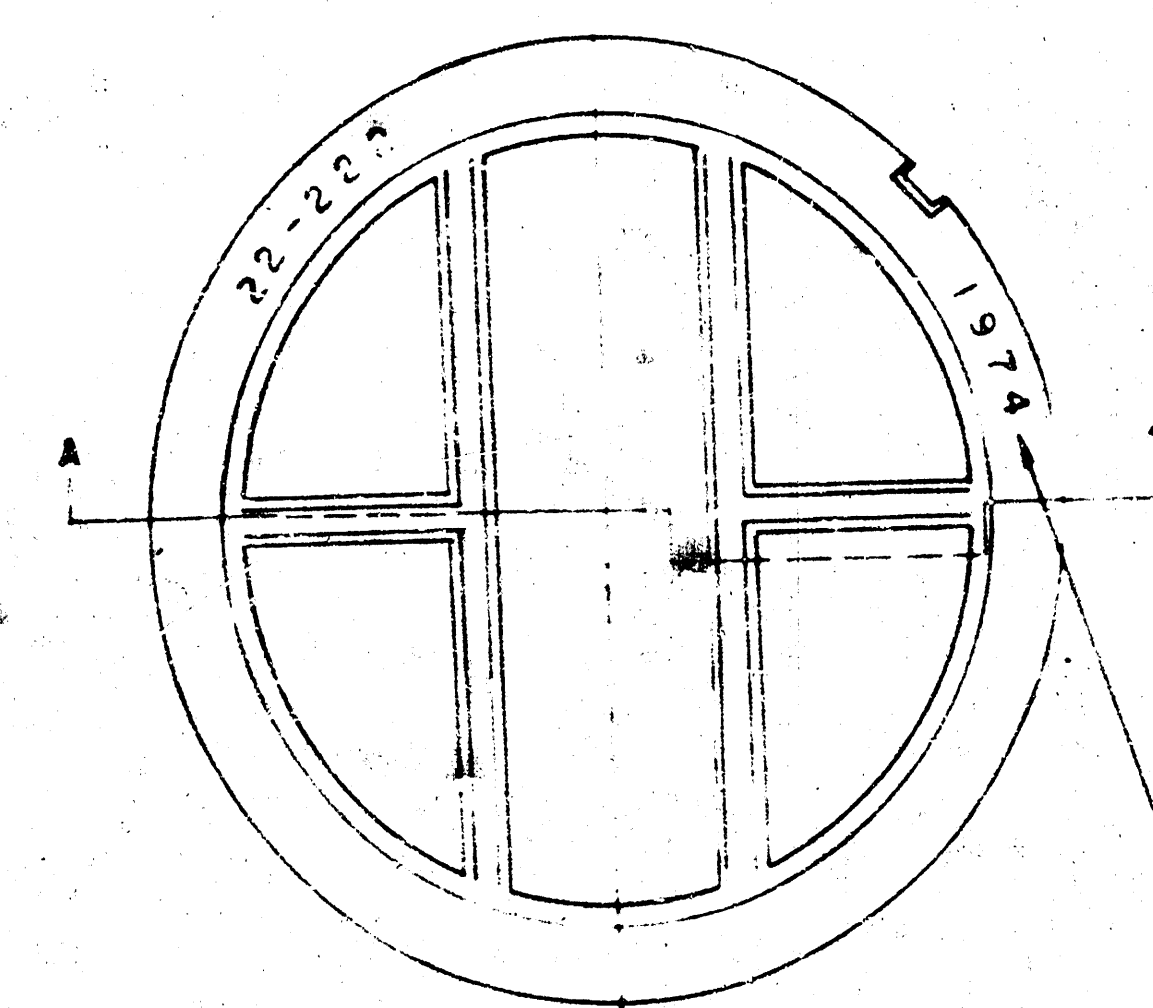
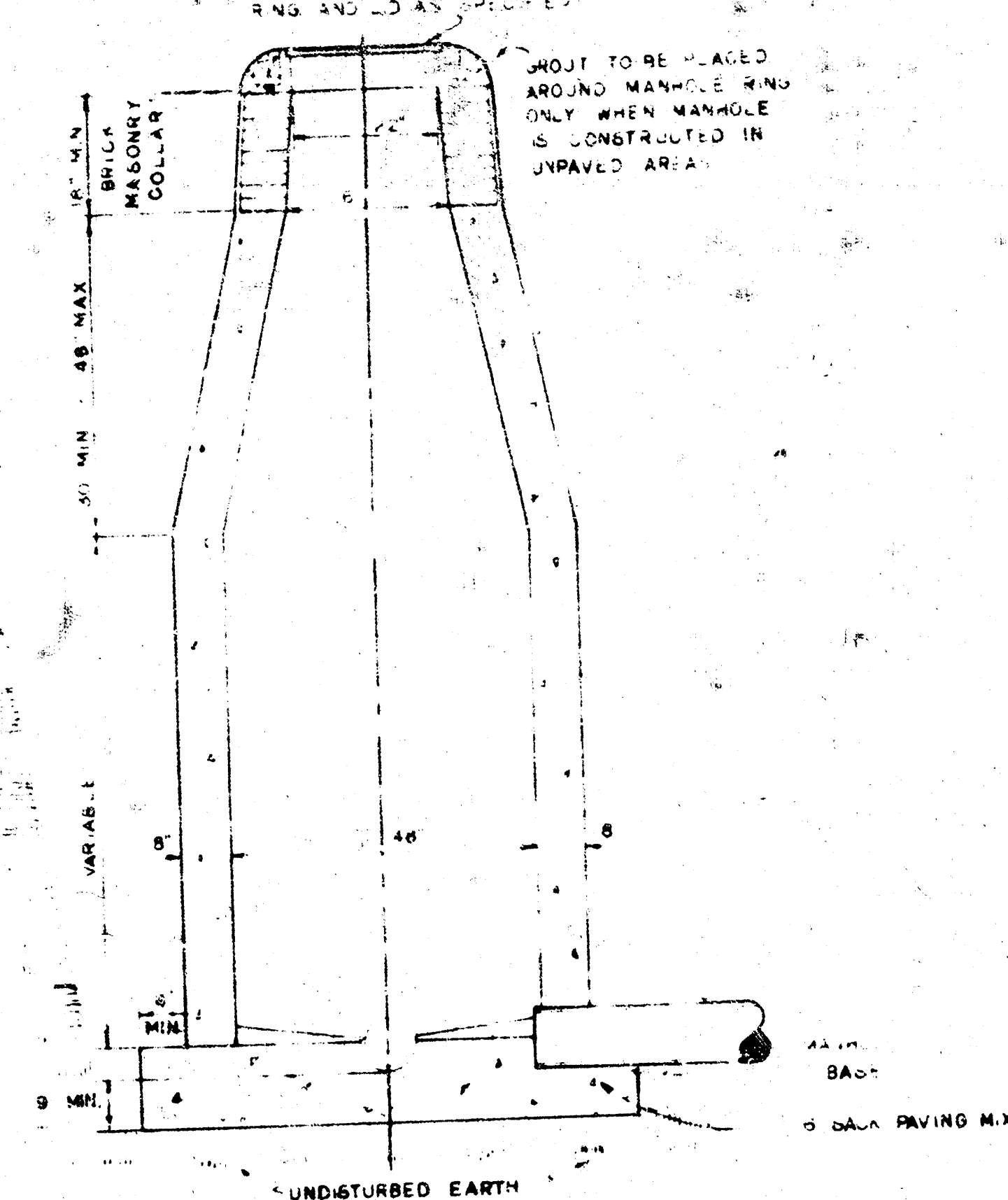
MANHOLE RING

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

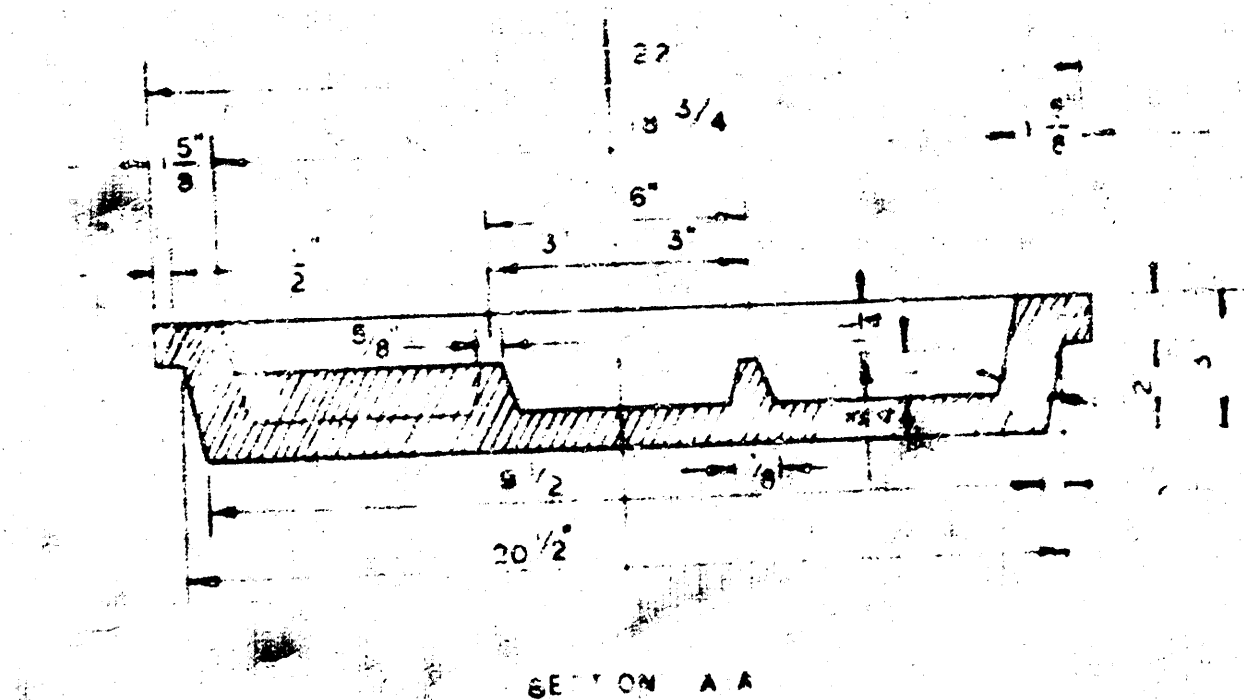
ORDINARY BEDDING METHOD
STORM SEWER PIPE

REVISED 4-13-77
DETAILS OF
SEWER APPURTENANCES
ADOPTED AS STANDARD DESIGN
BY
ENGINEERING DIVISION
CITY OF WICHITA, KANSAS
R. W. LINN CITY ENGINEER
1974

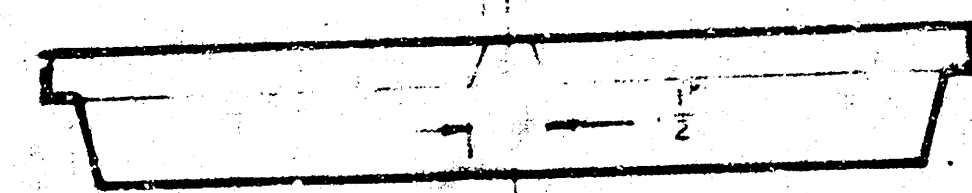
STANDARD MANHOLE, TYPE "C"



MANHOLE COVER

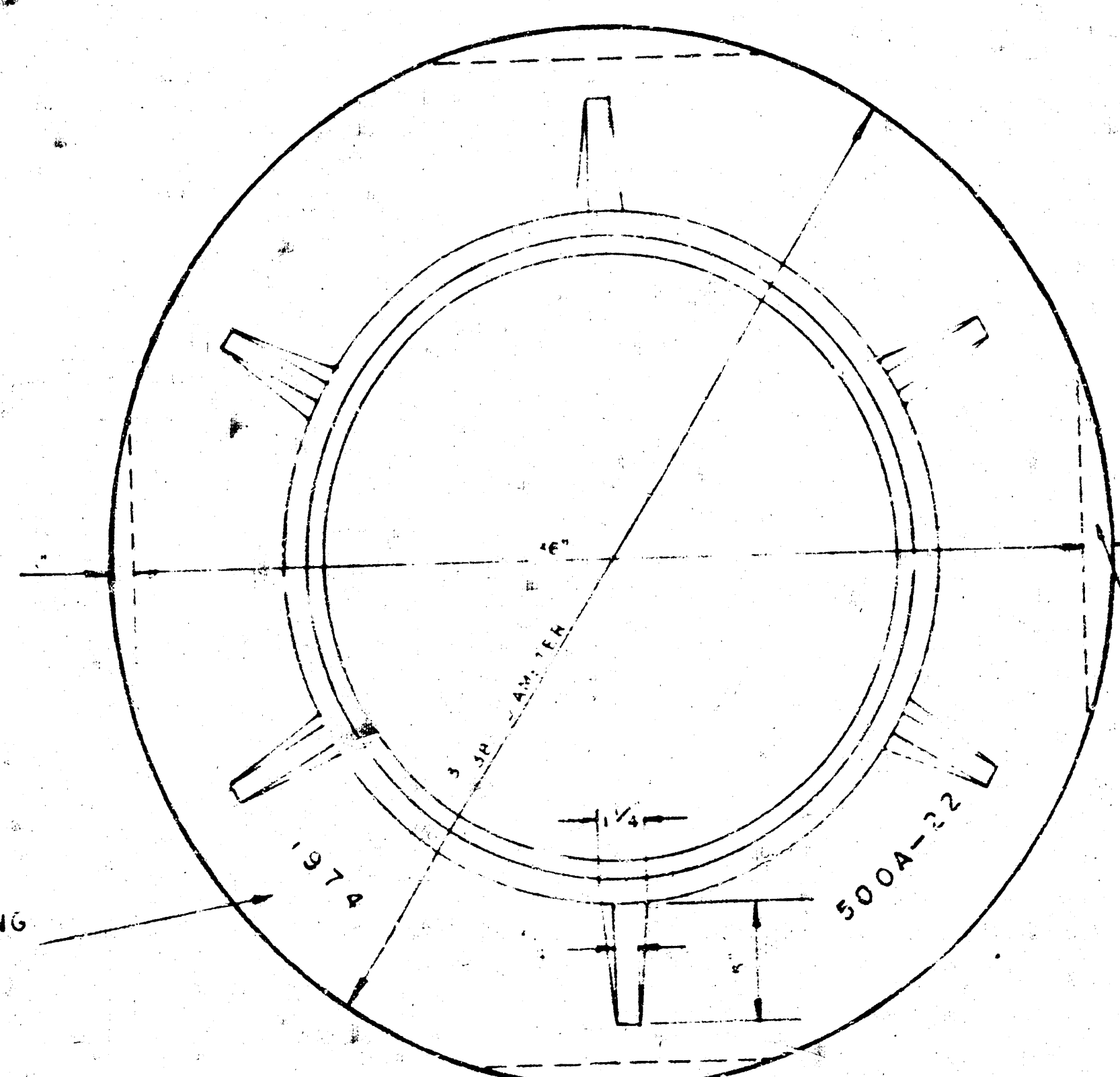
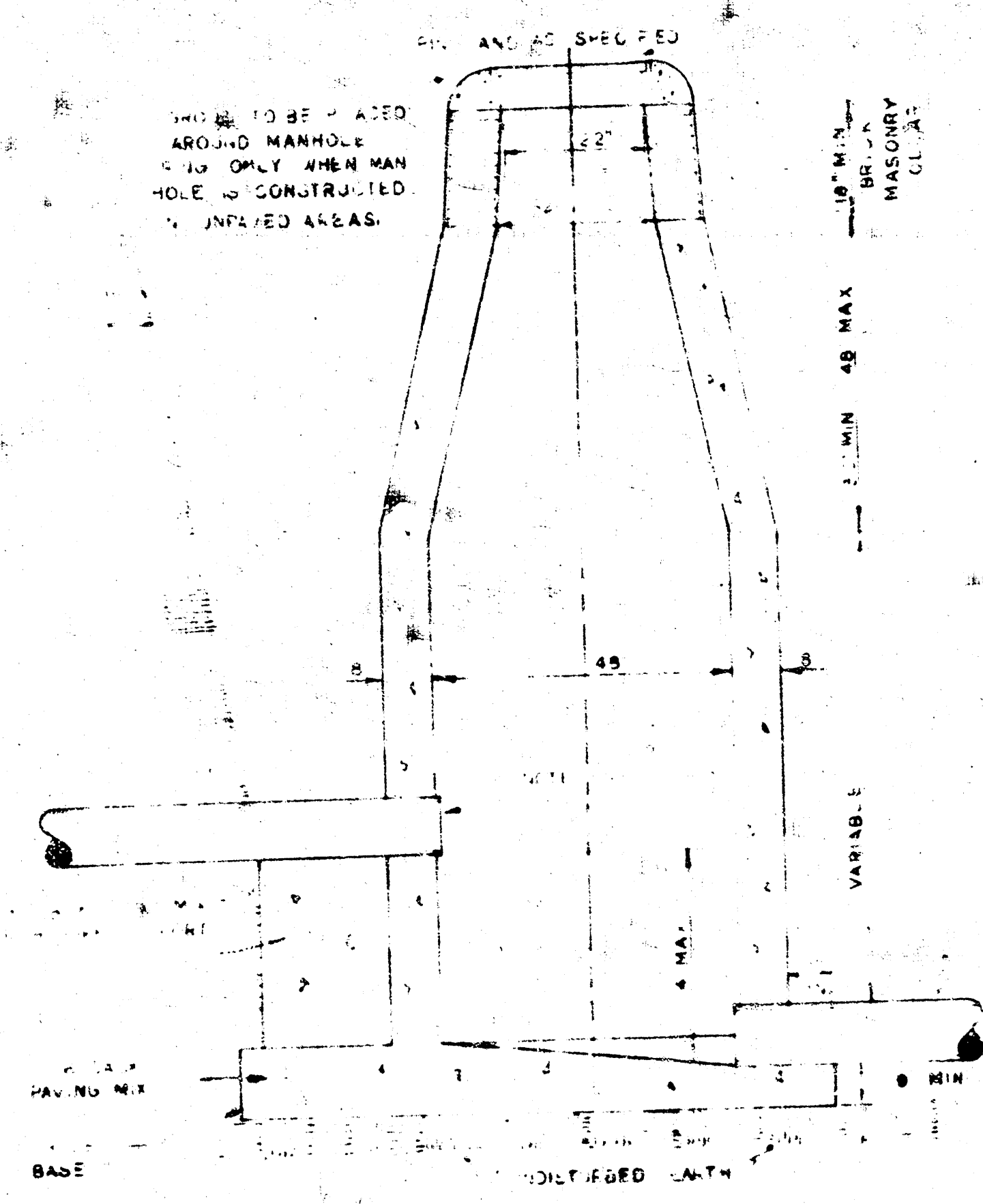


MANHOLE COVER

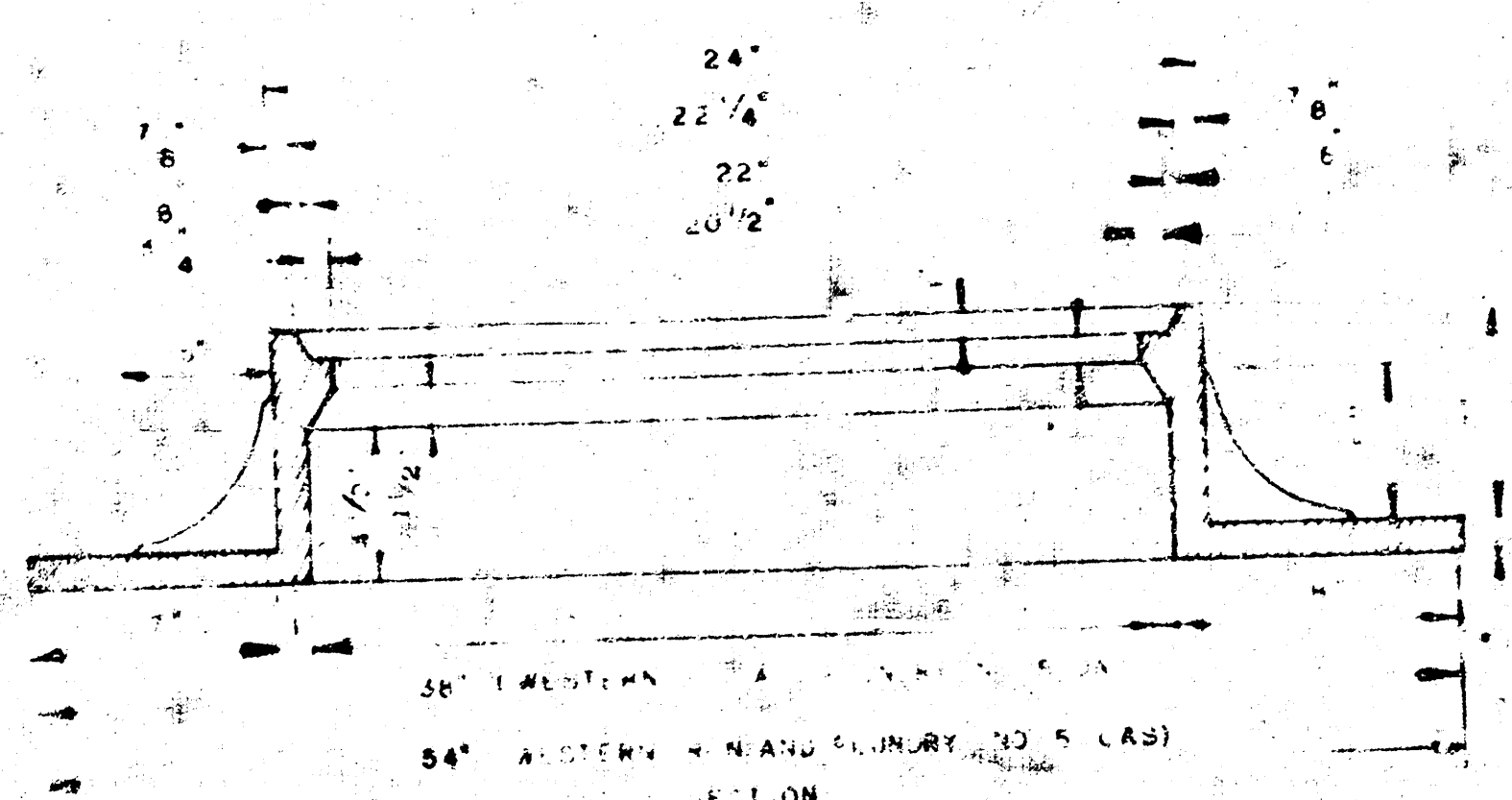


MANHOLE COVER

DROP MANHOLE, TYPE "C"

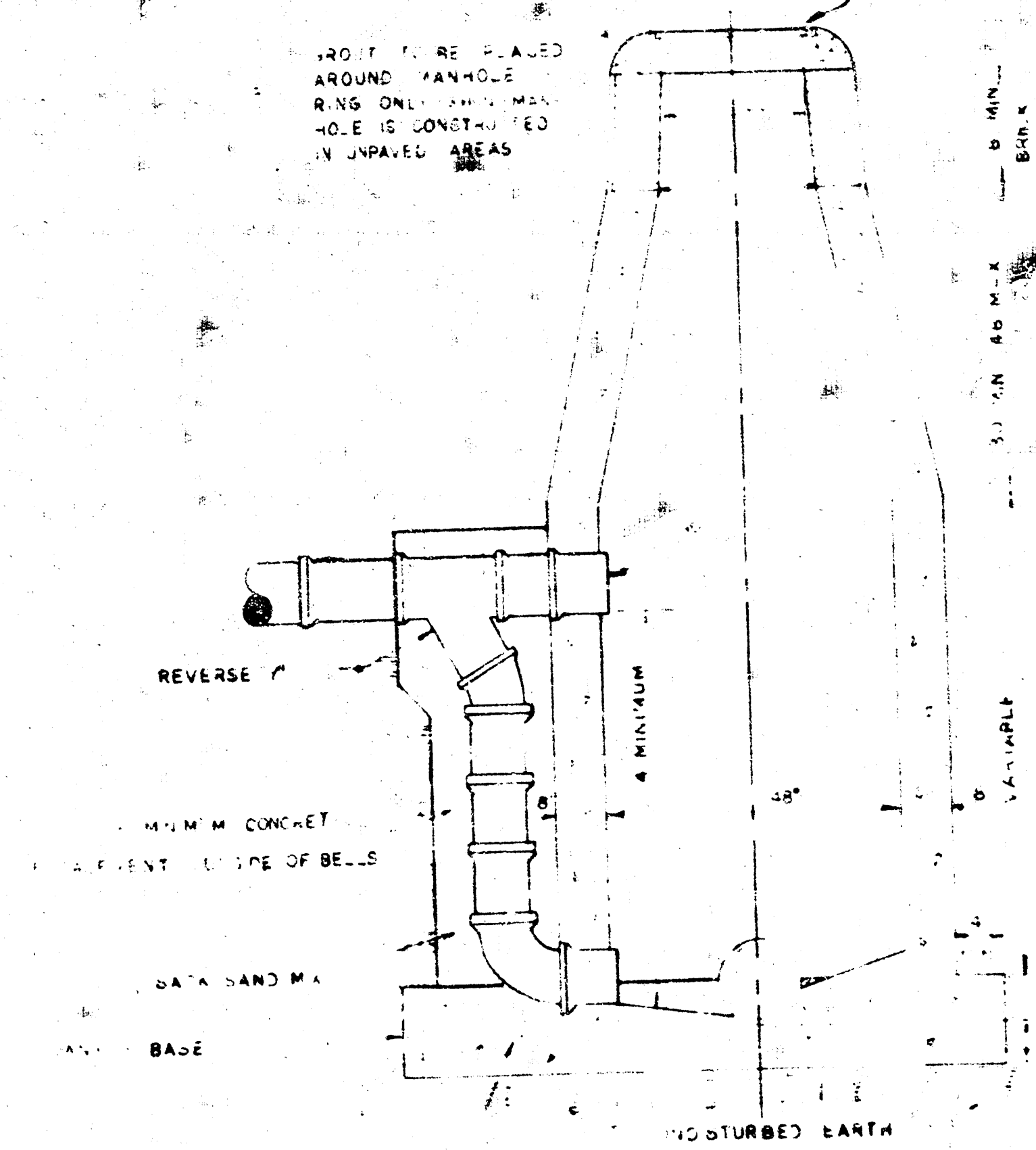


MANHOLE RING

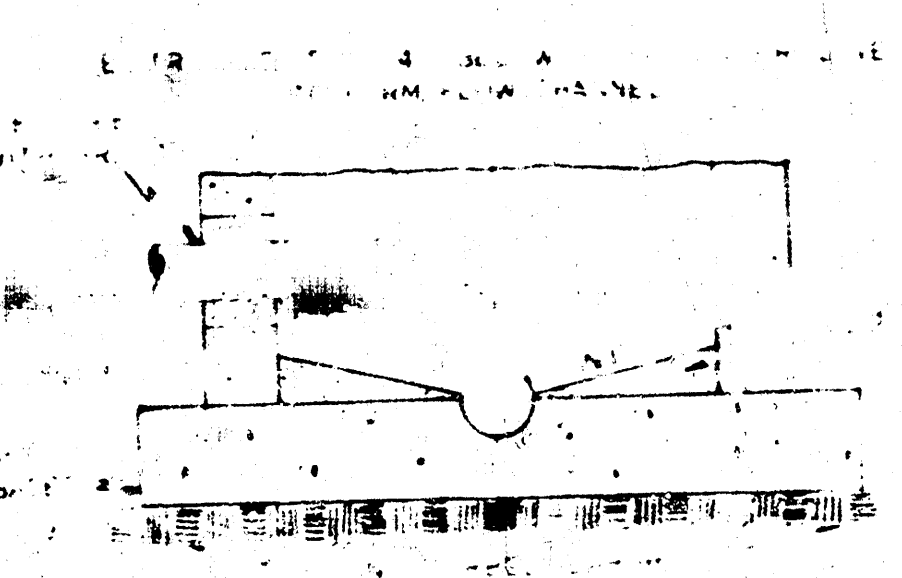


MANHOLE RING

OUTSIDE DROP MANHOLE, TYPE "C"



NOTE: REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES 6" ABOVE THE BOTTOM. REINFORCING STEEL SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE COST OF REINFORCING STEEL IS TO BE INCLUDED IN THE PRICE BID FOR THE MANHOLE.



SECTIONAL ELEVATION-INVERT

NOTE: OPENING FOR INLET PIPE CUT IN MANHOLE WALL AND PIPE GROUTED IN PLACE WITH NON-SHRINKING GROUT. EXTERIOR OF COMPLETED CONNECTION TO BE SEALED WITH APPROVED COATING.

GENERAL NOTES

- MORTAR USED IN MASONRY CONSTRUCTION SHALL CONTAIN 8 SACKS OF CEMENT PER CUBIC YARD.
- STANDARD MANHOLES TYPE "C" AND STANDARD 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 FT UNLESS INDICATED OTHERWISE. MANHOLES WITH PIPE SIZES LARGER THAN 24" SHALL BE 5 FT DIAMETER.
- THE FLOORS OF ALL MANHOLES SHALL BE SHAPED TO INCREASE HYDRAULIC EFFICIENCY USING 8 SACK SAND MIX CONCRETE.
- CAST IN PLACE CIRCULAR CONCRETE MANHOLES ARE TO BE CONSTRUCTED ONLY ON SEWERS NOT SUBJECT TO DETERIORATION OF CONCRETE DUE TO FORMATION OF HYDROGEN SULFIDE GAS AND IN LOCATIONS WHERE IT IS OBVIOUS THAT AN ADJUSTMENT OF THE MANHOLE TOP ELEVATION WHICH MAY BE NECESSARY WILL NOT REQUIRE MODIFICATION OF THE CONCRETE BARREL.
- PIPES INSTALLED WITHIN THE MANHOLE EXCAVATION SHALL BE CRADLED WITH CONCRETE TO THE LIMITS OF THE MANHOLE EXCAVATION. COST OF CRADLE WITHIN MANHOLE EXCAVATION SHALL BE INCLUDED IN THE PRICE BID FOR THE MANHOLE.

REVISED 4-13-77

DETAILS OF
SEWER APPURTENANCES
ADOPTED AS STANDARD DESIGN
BY
ENGINEERING DIVISION
CITY OF WICHITA, KANSAS
R. W. LINN CITY ENGINEER
1974