

SANITARY SEWER EXTENSION LATERAL 49, MAIN 2, SANITARY SEWER #22

TO SERVE W.H.H. ADDITION PROJECT NO. 468-83266 OCA# 743875

BENCH MARKS

ON SITE B.M.: "□" CUT ON TOP OF CURB
N. CURB RETURN @ N.E. COR. INTERSECTION
OF MILLWOOD & REGAL ST.
ELEV.=1284.73 N.G.V.D.

INDEX OF SHEETS

1. COVER SHEET
2. PLAN/PROFILE
3. SHALLOW TYPE P MANHOLE
4. DRAINAGE PLAN

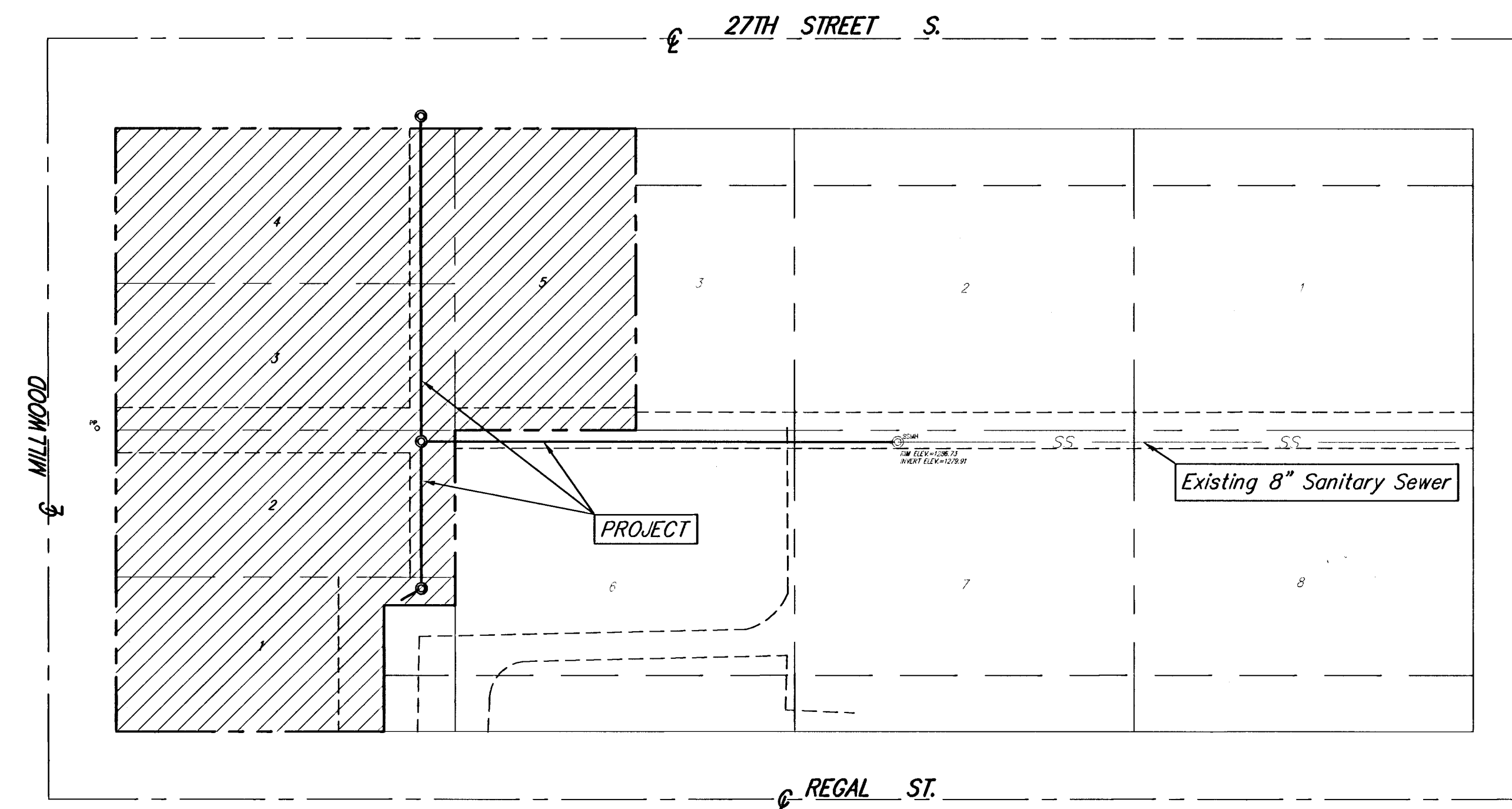
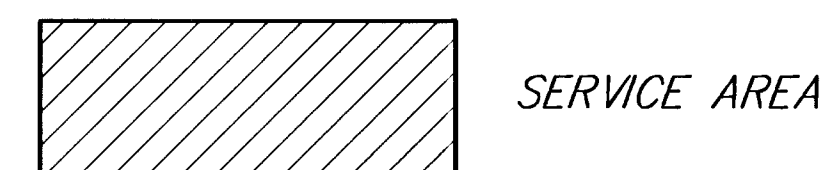
GENERAL NOTES

1. Contractor will be required to notify Kansas One-Call (687-2470), a minimum of 48 hours in advance of beginning any excavation.

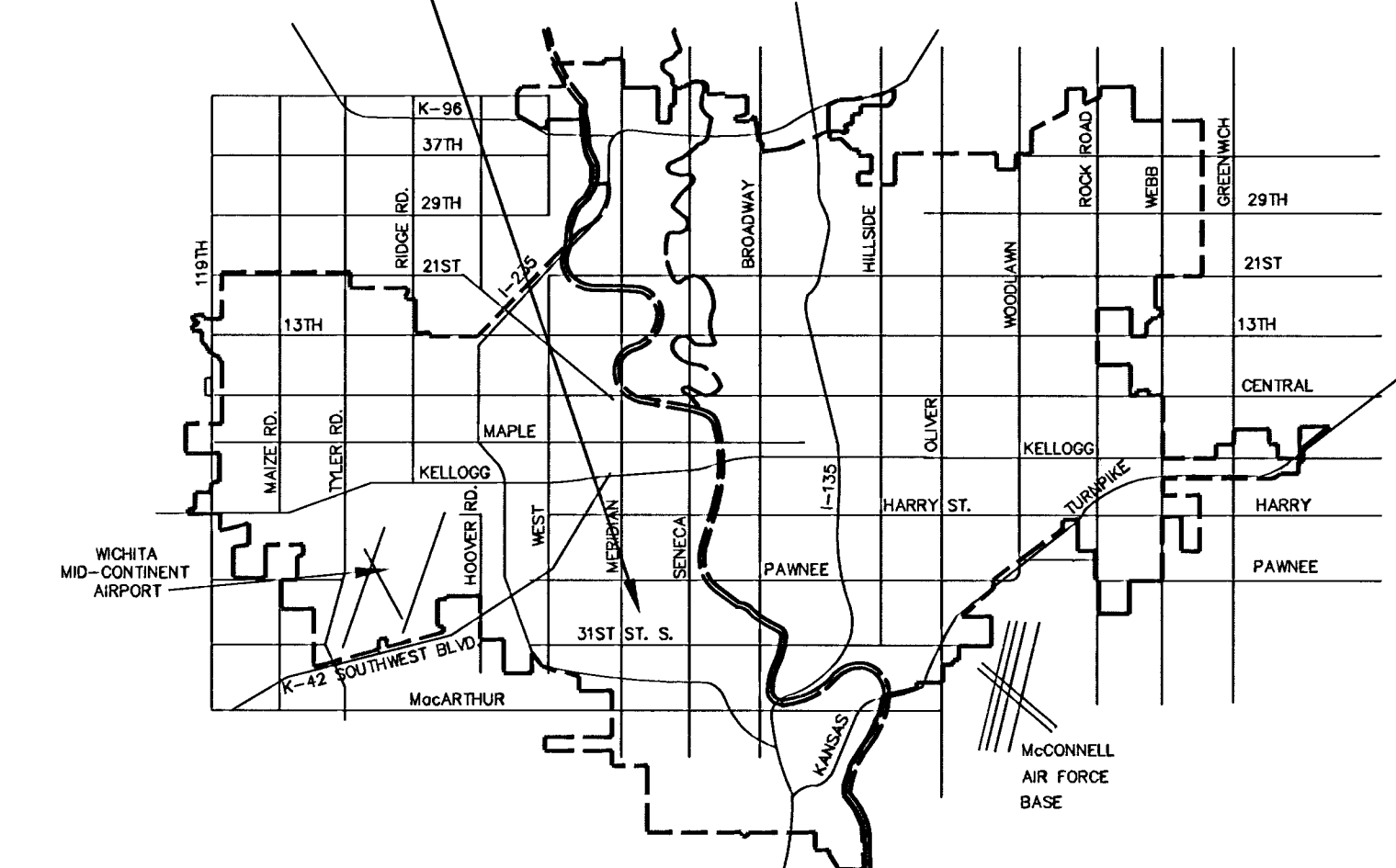
The Contractor must notify the following utility companies in case of an emergency:

Cox Communications	262-0661
Kansas Gas Service	383-8600
KGE Electric	383-8600
Peoples Natural Gas Company	1-800-303-0357
Southwestern Bell Telephone Company	1-800-286-8313
City of Wichita Water Department	262-6000
City of Wichita Sewer Maintenance	262-6000

2. The Contractor shall give all property owners and/or tenants of developed property directly abutting the construction of this project a minimum of ten (10) days advance notice prior to start of construction.
3. 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.
4. It shall be the responsibility of the Contractor to maintain sewage flow during construction of this project. The Contractor's plan for maintaining sewage flow shall be approved by the Engineer prior to construction.
5. The Contractor shall seed and fertilize all disturbed turf areas upon completion of construction (incidental to bid item for site clearing and restoration).
6. Easement areas are to be final graded as shown on sheet 4.



PROJECT LOCATION



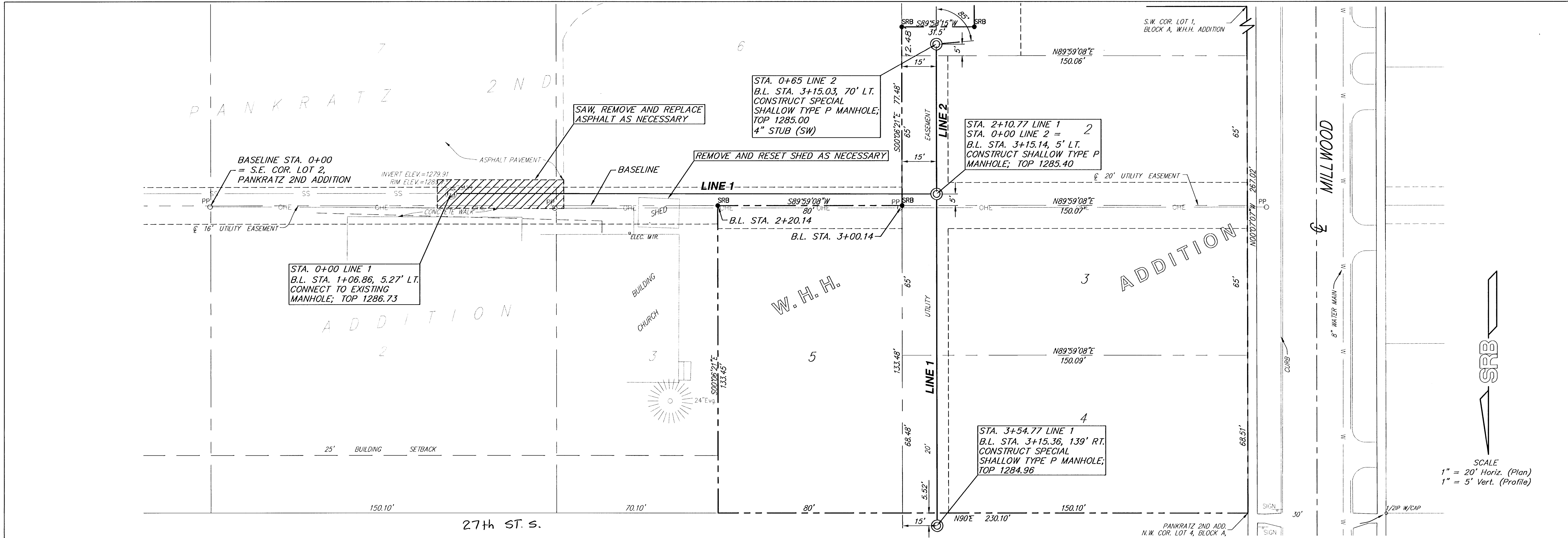
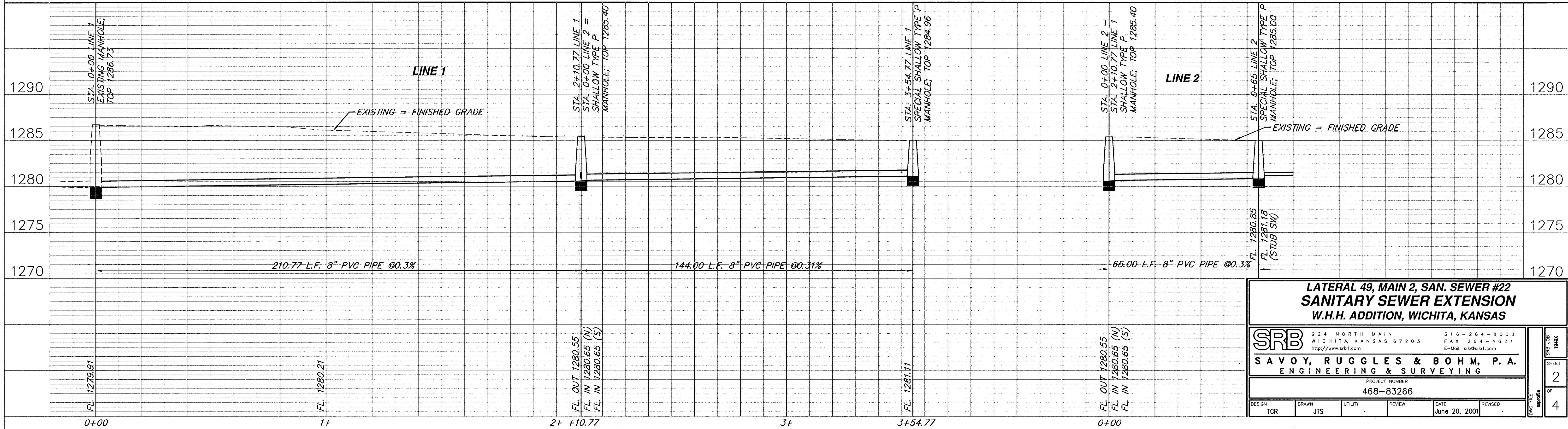
VICINITY MAP

Scale: 1" = 50'

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

SRB 924 NORTH MAIN 316-264-8008
WICHITA, KANSAS 67203 FAX 264-4621
SAVOY, RUGGLES & BOHM, P. A.
ENGINEERING & SURVEYING

1949X



**LATERAL 49, MAIN 2, SAN. SEWER #22
SANITARY SEWER EXTENSION
W.H.H. ADDITION, WICHITA, KANSAS**

SRB

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

924 NORTH MAIN
WICHITA, KANSAS 67203
http://www.srb1.com

316-264-8008
FAX 264-4621
E-Mail: srb@srb1.com

PROJECT NUMBER
468-83266

DESIGN TCR	DRAWN JTS	UTILITY	REVIEW	DATE June 20, 2001	REVISED
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DATE
JUN 20 2001

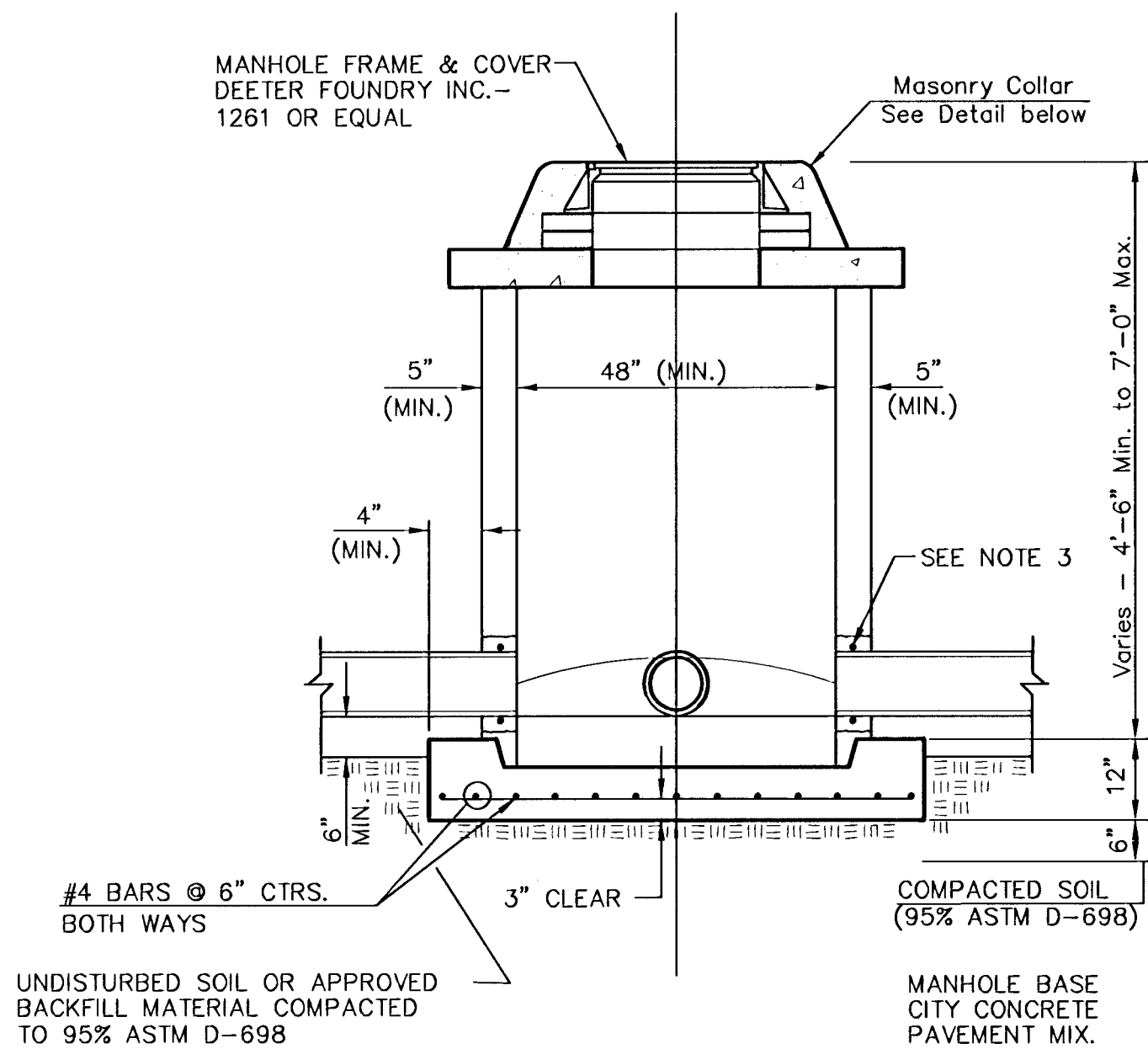
TIME
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BY
JTS

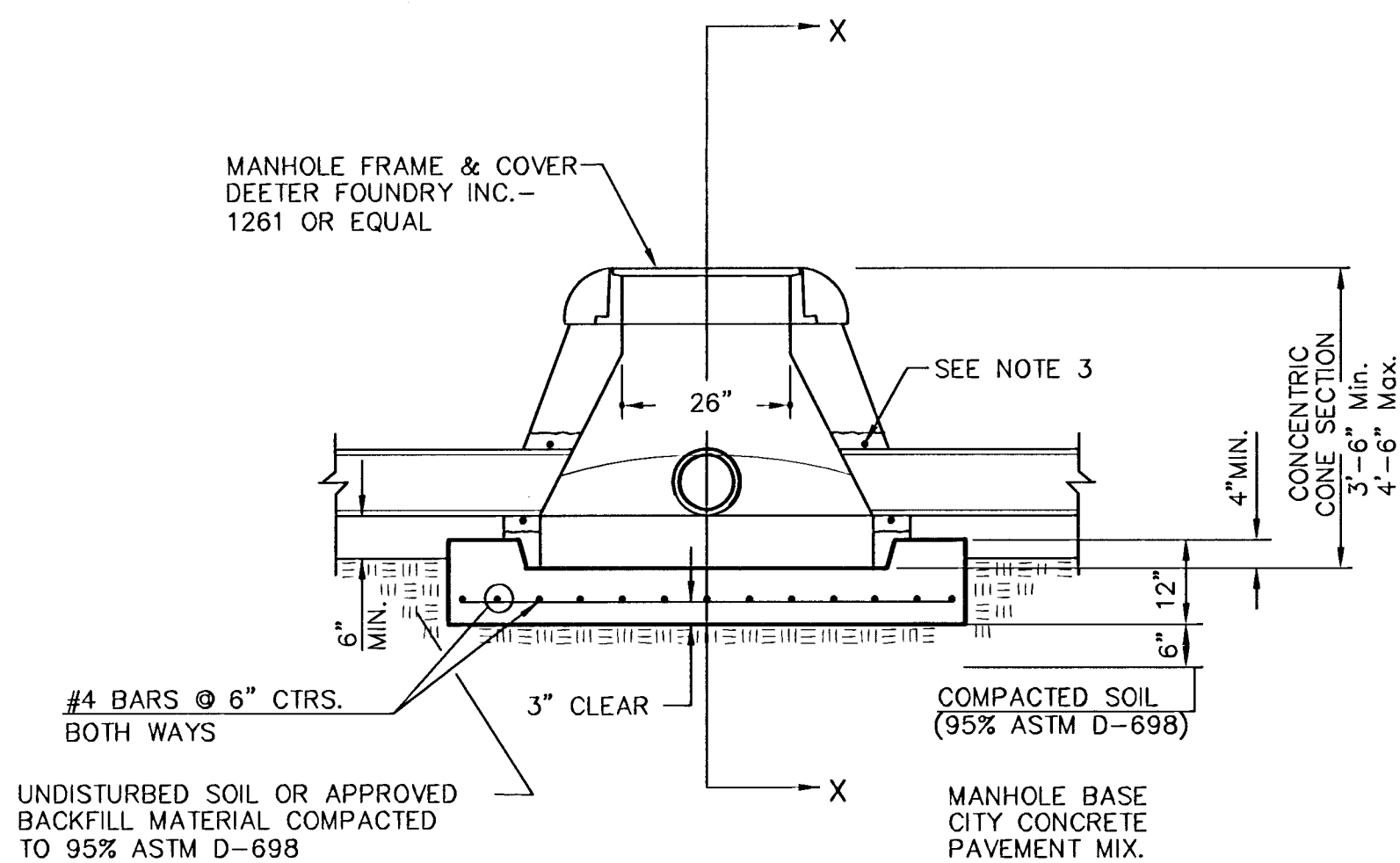
REVISION
1

SHEET
2

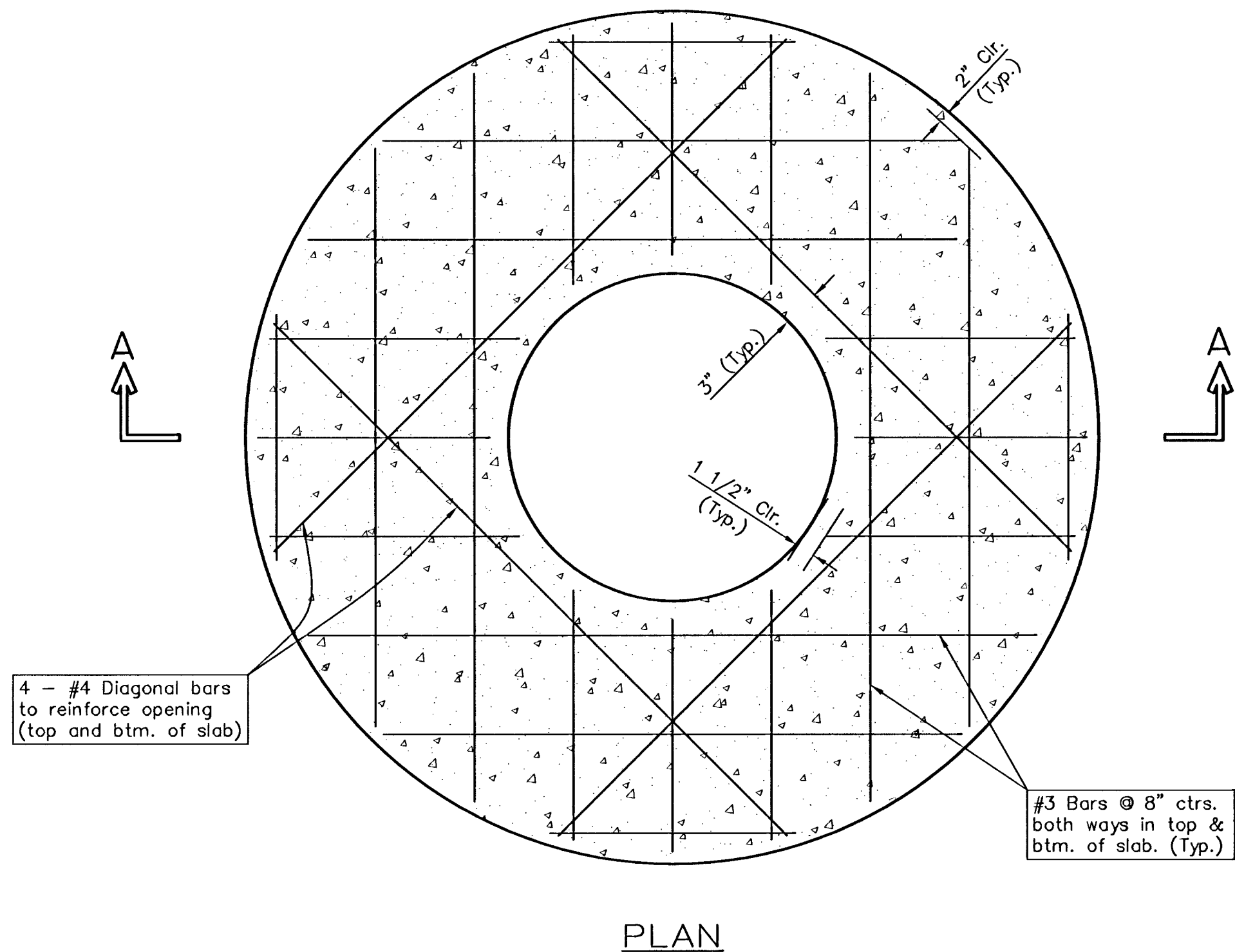
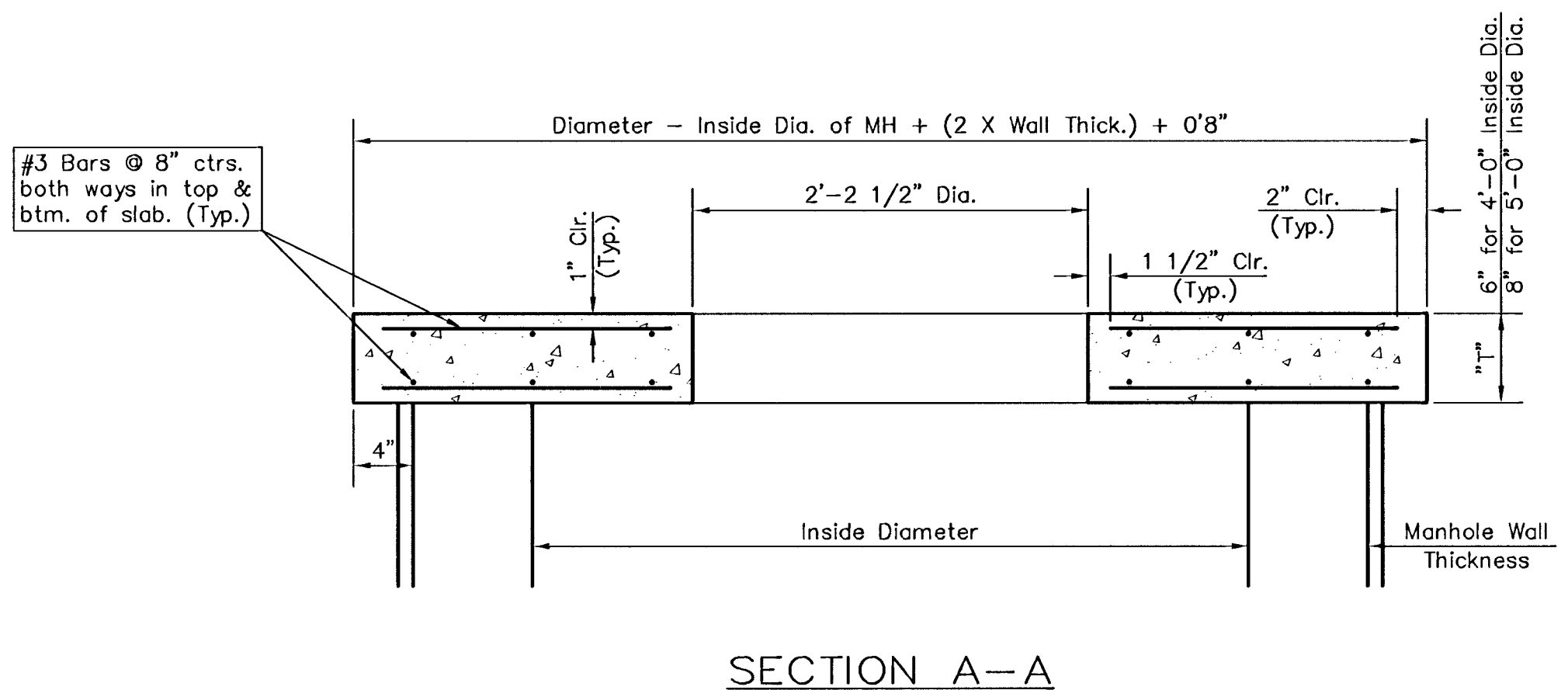
OF
4



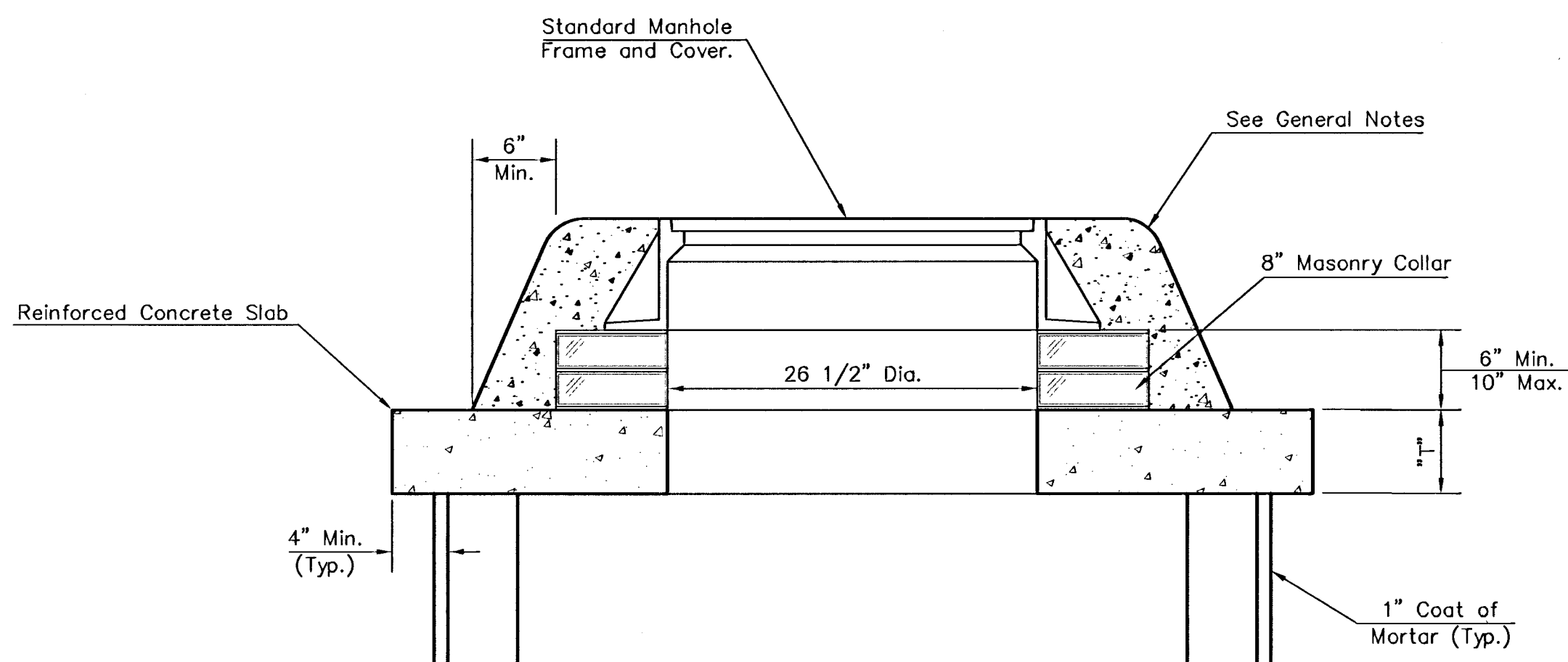
SHALLOW TYPE "P" MANHOLE



SPECIAL SHALLOW TYPE "P" MANHOLE



CONCRETE SLAB DETAILS



MASONRY COLLAR DETAIL

GENERAL NOTES

- ALL PRECAST CONCRETE MANHOLE SECTIONS SHALL CONFORM TO THE LATEST REVISIONS OF A.S.T.M. C478 AS MODIFIED BY THE SPECIFICATIONS.
- NON-SHRINK GROUT SHALL BE NON-METALLIC TYPE.
- 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.
- ALL INSIDE SURFACES OF THE CONCRETE MANHOLE WHICH WOULD BE EXPOSED TO SEWER GAS SHALL BE COATED WITH 2 COATS TNEDEC SERIES 66 HI-BUILD EPOXOLINE, DRY THICKNESS OF 8 MILS (MIN.)
- EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 633 BITUMINOUS COATING.
- JOINT SEALING COMPOUND SHALL BE KENT SEAL NO. 2 OR APPROVED EQUAL.
- PRECAST MANHOLES SHALL BE SET AT LEAST 4 INCHES INTO THE MANHOLE BASE.
- 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.
- LIFTING HOLES SHALL BE FILLED WITH NON-SHRINK GROUT AND THE INTERIOR SURFACE COATED AS SPECIFIED.
- 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.
- 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.
- 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.
- 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 MAHOLE. 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.
- ALL BRICK USED IN MANHOLE CONSTRUCTION SHALL MEET GRADE SW OF ASTM C652 OR C62-87.

**SHALLOW TYPE 'P' MANHOLE DETAILS
WICHITA, KANSAS**

SRB

924 NORTH MAIN
WICHITA, KANSAS 67203
www.srb1.com

316-264-8008
FAX 264-4821
E-mail: srb@srb1.com

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

PROJECT NUMBER
468-83266

DESIGN DRAWN UTILITY REVIEW DATE REVISED

SRB JOB
1940X
SHEET
3
OF
4

DRAINAGE AND GRADING PLAN W. H. H. ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS

DESCRIPTION:

The west 80 feet of Lot 3, all of Lot 4, and Lot 5 except the east 31.5 feet of the south 56 feet thereof, Block A, Pankratz 2nd Addition, Sedgwick County, Kansas.

OWNER:

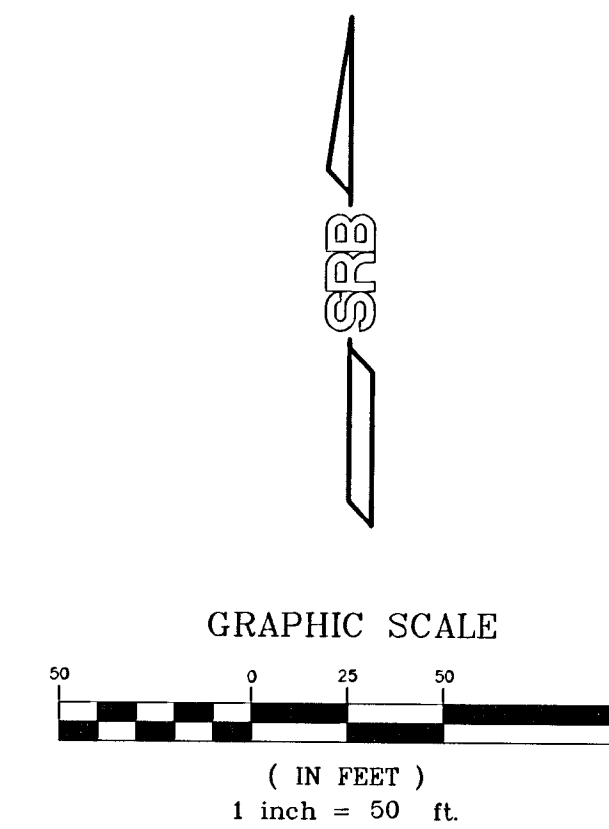
Southwest Presbyterian Church
1511 W. 27TH ST. S.
Wichita, Kansas 67217
Ph. 522-6072

GROSS SIZE:

48,981.13 Sq. Ft.±
1.12 Acres±

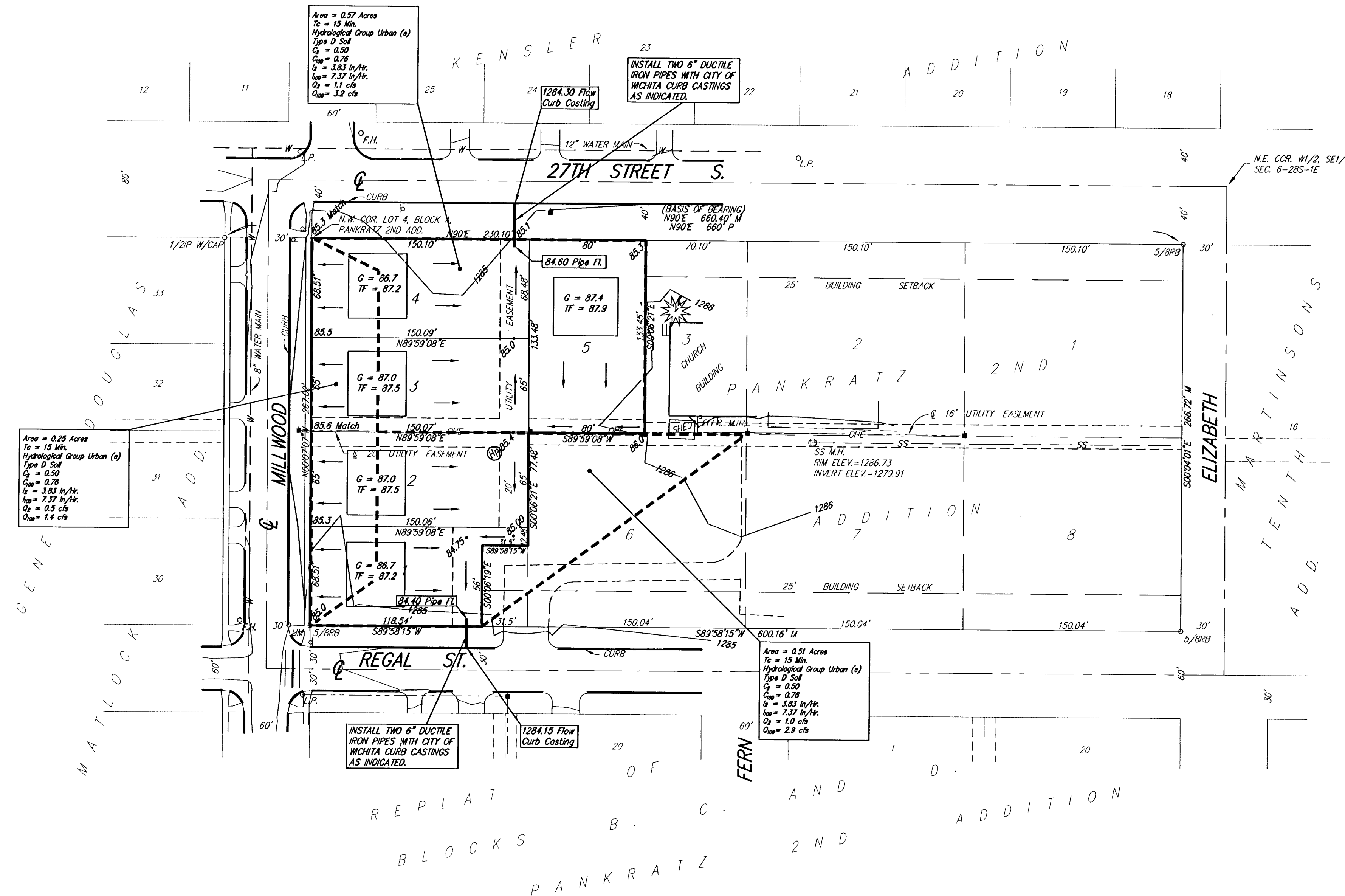
MINIMUM LOT SIZE:

8,513.58 Sq. Ft.±
0.20 Acres±



BENCH MARK: CITY OF WICHITA STD. DISC
S.W. COR. TRAFFIC SIGNAL BASE @ N.E. COR.
INTERSECTION 31ST ST. S & SENECA
ELEV.=1283.22 N.G.V.D.

ON SITE B.M.: "D" CUT ON TOP OF CURB
N. CURB RETURN @ N.E. COR. INTERSECTION
OF MILLWOOD & REGAL ST.
ELEV.=1284.73 N.G.V.D.



DRAINAGE AND GRADING PLAN W. H. H. ADDITION					
DESIGN C. Bohm		DRAWN C. Bohm		UTILITY	REVIEW
DATE 02-27-2001		REVISED		PROJECT NUMBER	
SHEET 4		OF 4		SHEET 4	

18-08-05-10