

SANITARY SEWER EXTENSION - PHASE 1

TO SERVE ~~LOT 1~~ LOTS 1 & 2, BLK A ; LOTS 3 & 4, BLK B
COTTONWOOD GROVE 3RD ADDITION
PROJECT NO: 897 PPS
INDEX CODE: 607861

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

Sanitary Sewers VRH 4/5/99

Storm Sewers _____

Driveway Approaches _____

Water Mains _____

Paving _____

NOTE TO CONTRACTORS

Inspection and testing for this project are 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 public right-of-way by the Contractor without such inspection, nor shall any work be commenced without written authorization by the City Engineer.

NOTES:

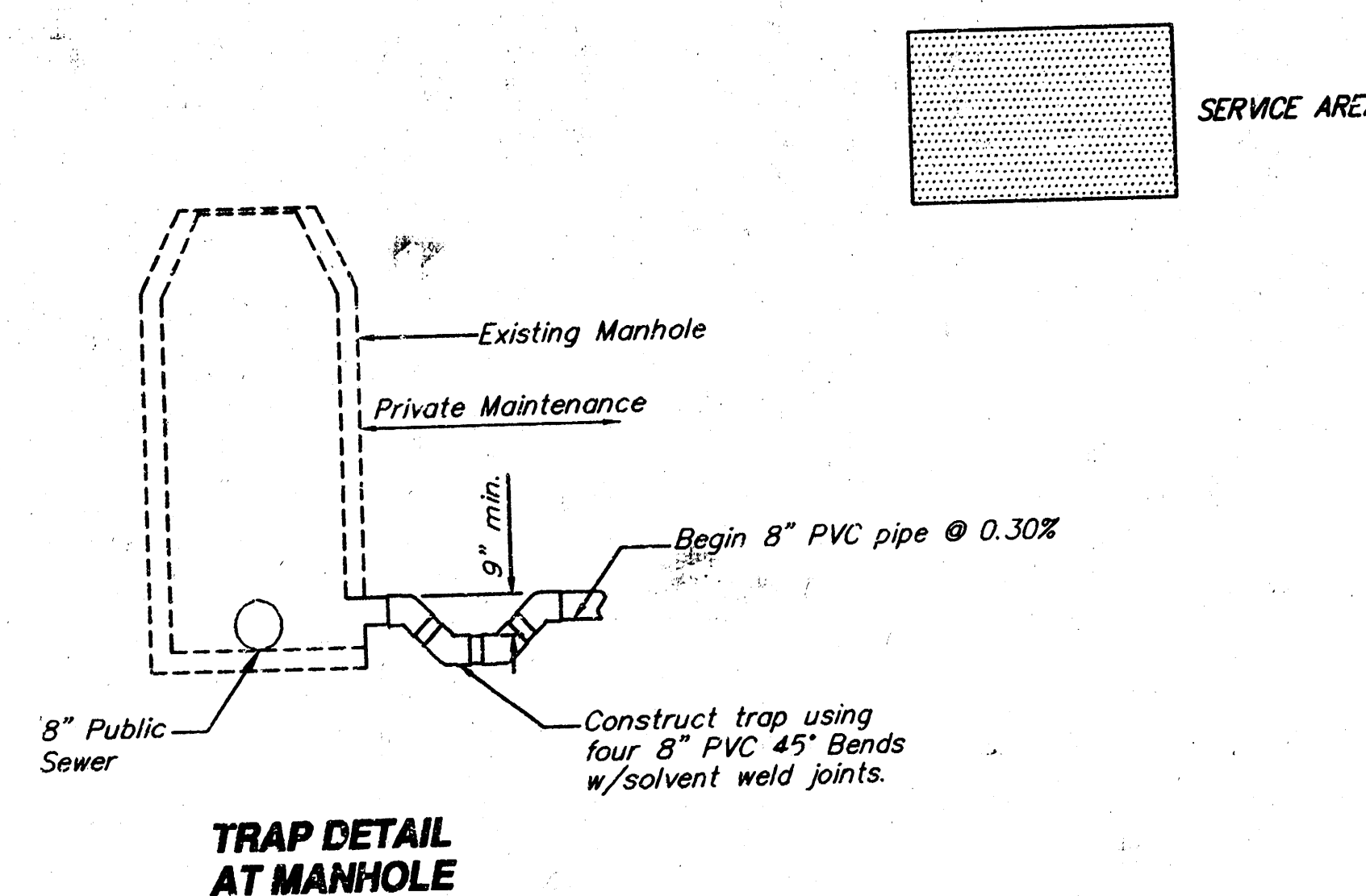
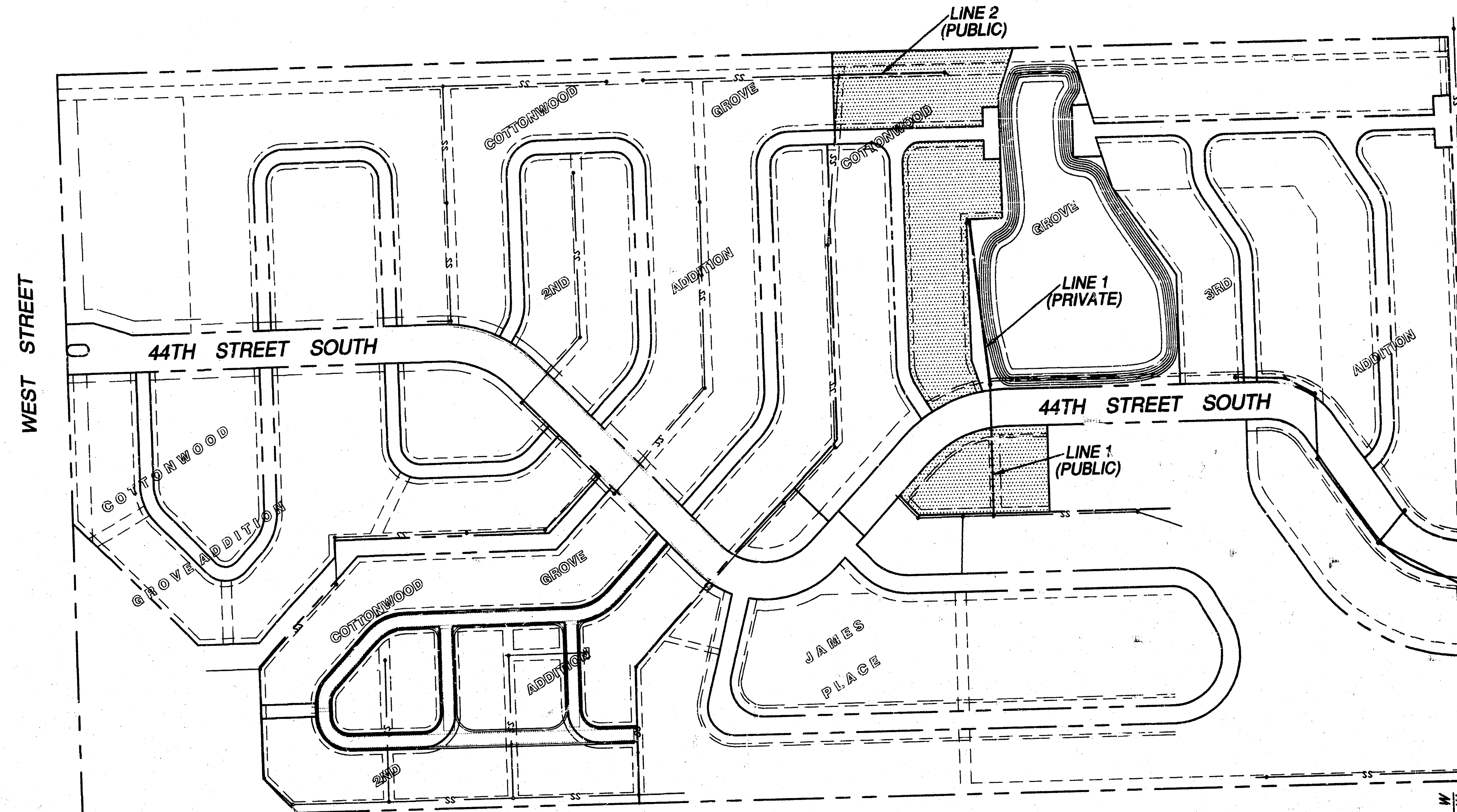
- Contractor will be required to provide a minimum notice of 48 hours to utility companies prior to starting any excavation as follows:

Kansas One-Call 687-2470

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

Multimedia	262-4270 or 263-2061
Kansas Gas Service	383-8850
KGE	383-8800
Peoples Natural Gas Company	942-8350 or 263-8161
Southwestern Bell Telephone Company	1-517-2611
City of Wichita Water Department	268-4908
City of Wichita Sewer Maintenance	268-4071

- Contractor shall not start work on the project until the project inspector is assigned to the project and is present on the site. Any work done without inspection will be required to be uncovered for inspection.
- 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.
- 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.
- 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 other pay items of work.
- All construction involving the 8" sewer system shall be in accordance with City of Wichita Standard Specifications dated March 1998.
- Backfill above a depth of 12" over top of sewer pipe shall be compacted to 95% of standard density.
- Traffic will not be affected by this project.
- All areas disturbed by construction shall be restored in accordance with City of Wichita Administrative Regulation AR-78.



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

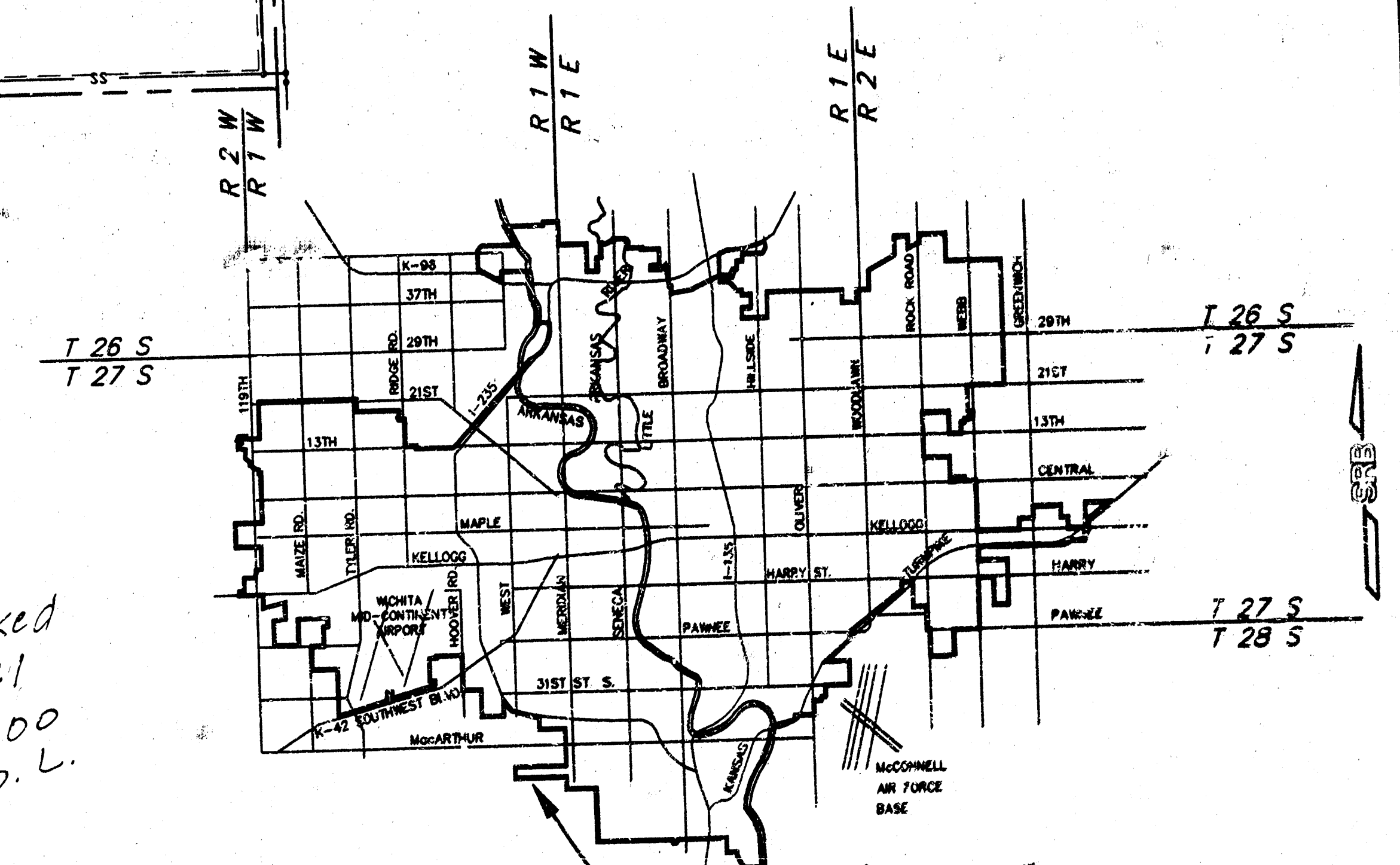
INDEX OF SHEETS

- TITLE SHEET
- PLAN PROFILE SHEET
- SHALLOW MANHOLES TYPE 'P' AND 'C'
- PLAT COPY

BENCH MARKS:

(CITY DATUM)

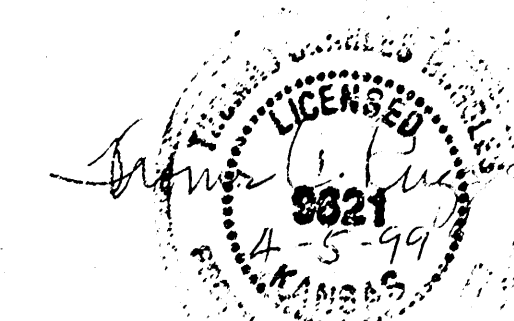
- * CUT ON TOP OF S. CURB 44TH ST. S.
- * E. END OF CURVE ON N. SIDE OF LOT 3, BLOCK 2, COTTONWOOD GROVE ADDITION; ELEV. 95.40
- * CUT ON TOP OF HUBGUARD
- * CENTER OF E. GUARDRAIL OF ROBC ON WEST ST. S. OF 44TH ST.; ELEV. 94.19



VICINITY MAP

Scale 1" = 150'

Booked
P-121
4-7-00
R.D.L.

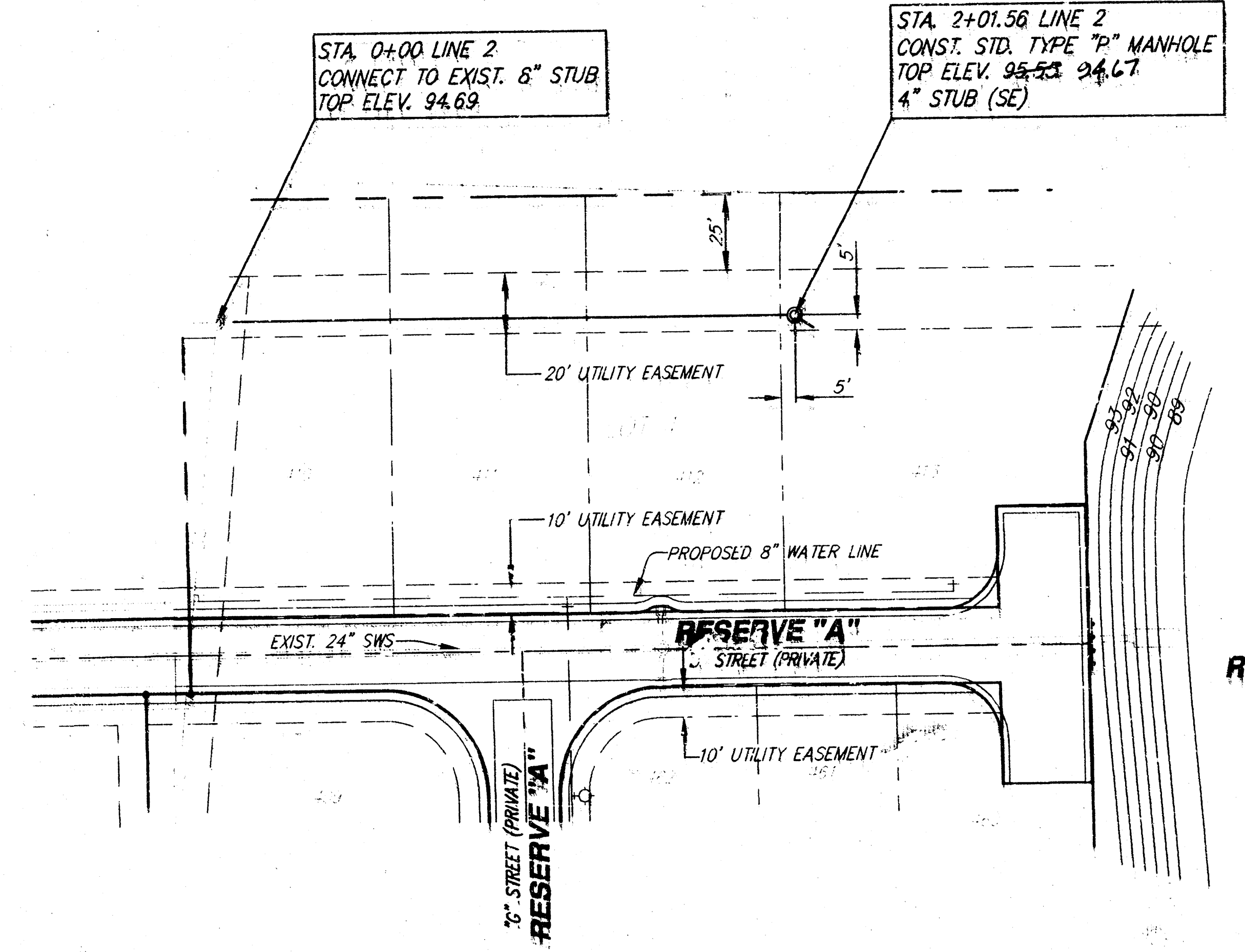
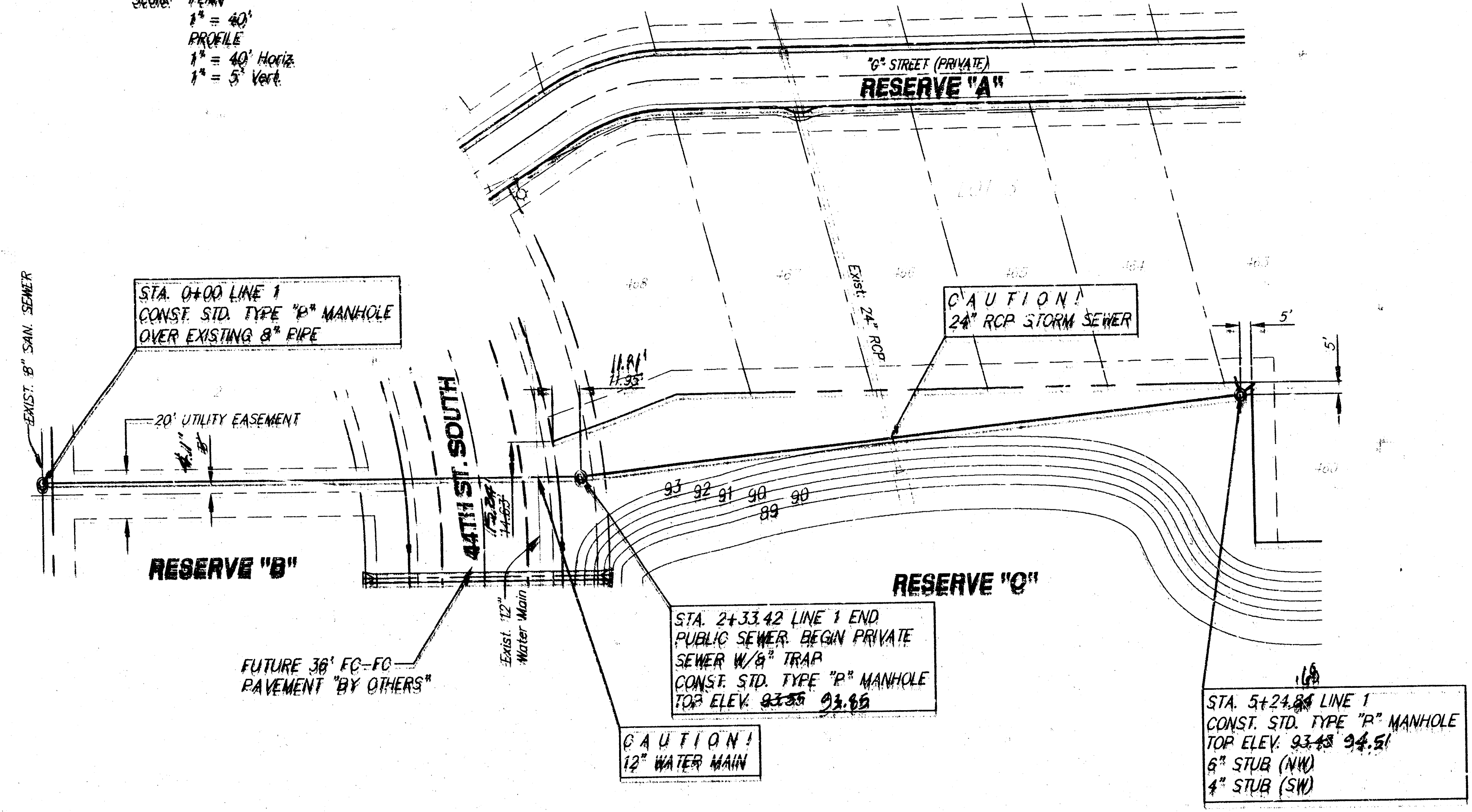


SRB 924 NORTH MAIN WICHITA KANSAS 67203 316-264-8008 FAX 264-4621
SAVOY, RUGGLES & BOHM, P.A.
ENGINEERING & SURVEYING

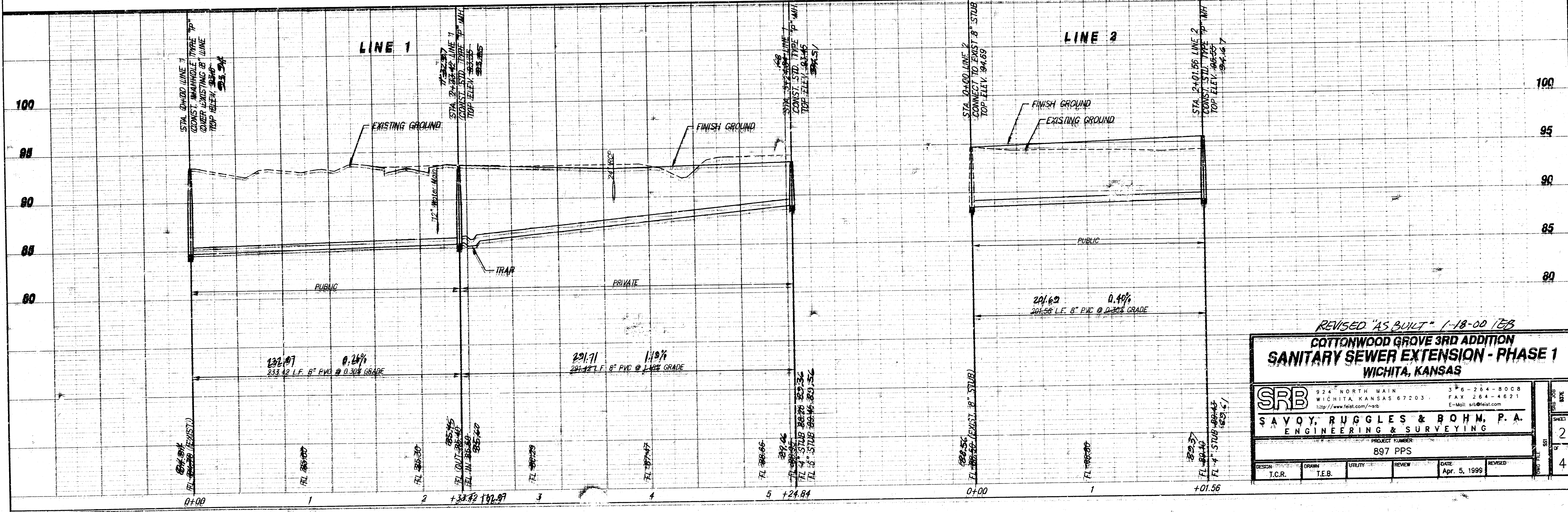
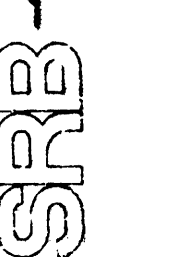
ALAN'S EXCAVATING
REVISED "AS BUILT"
PROJECT LOCATION 1-18-00 TEB



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



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



REVISED 'AS BUILT' 1-18-00 TEB

**COTTONWOOD GROVE 3RD ADDITION
SANITARY SEWER EXTENSION - PHASE 1
WICHITA, KANSAS**

SRB 924 NORTH MAIN WICHITA, KANSAS 67203 316-264-8008 FAX 316-264-4621 E-Mail: srb@earthlink.net

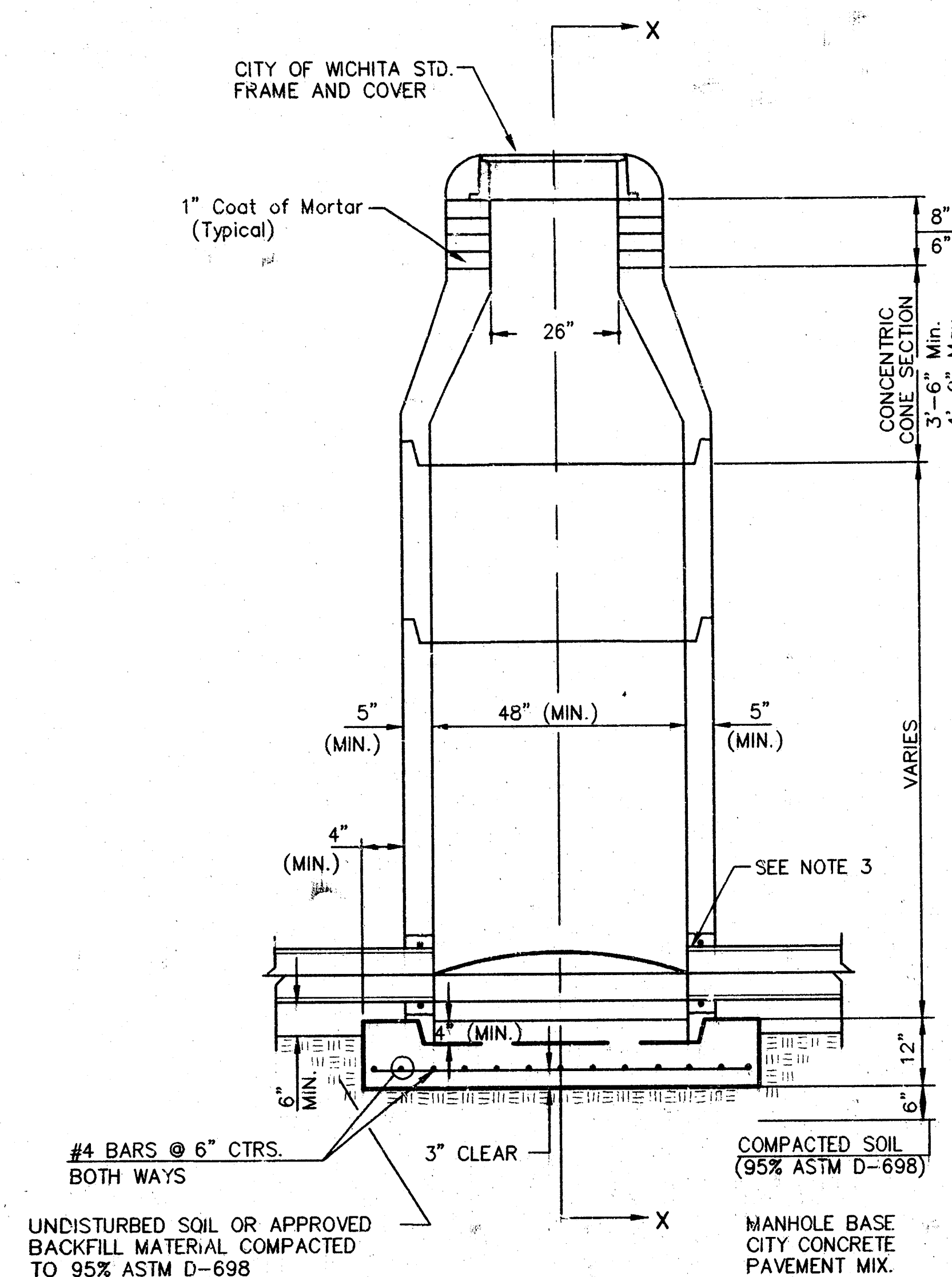
**SAVOY, RUGGLES & BOHM, P. A.
ENGINEERING & SURVEYING**

PROJECT NUMBER: 897 PPS

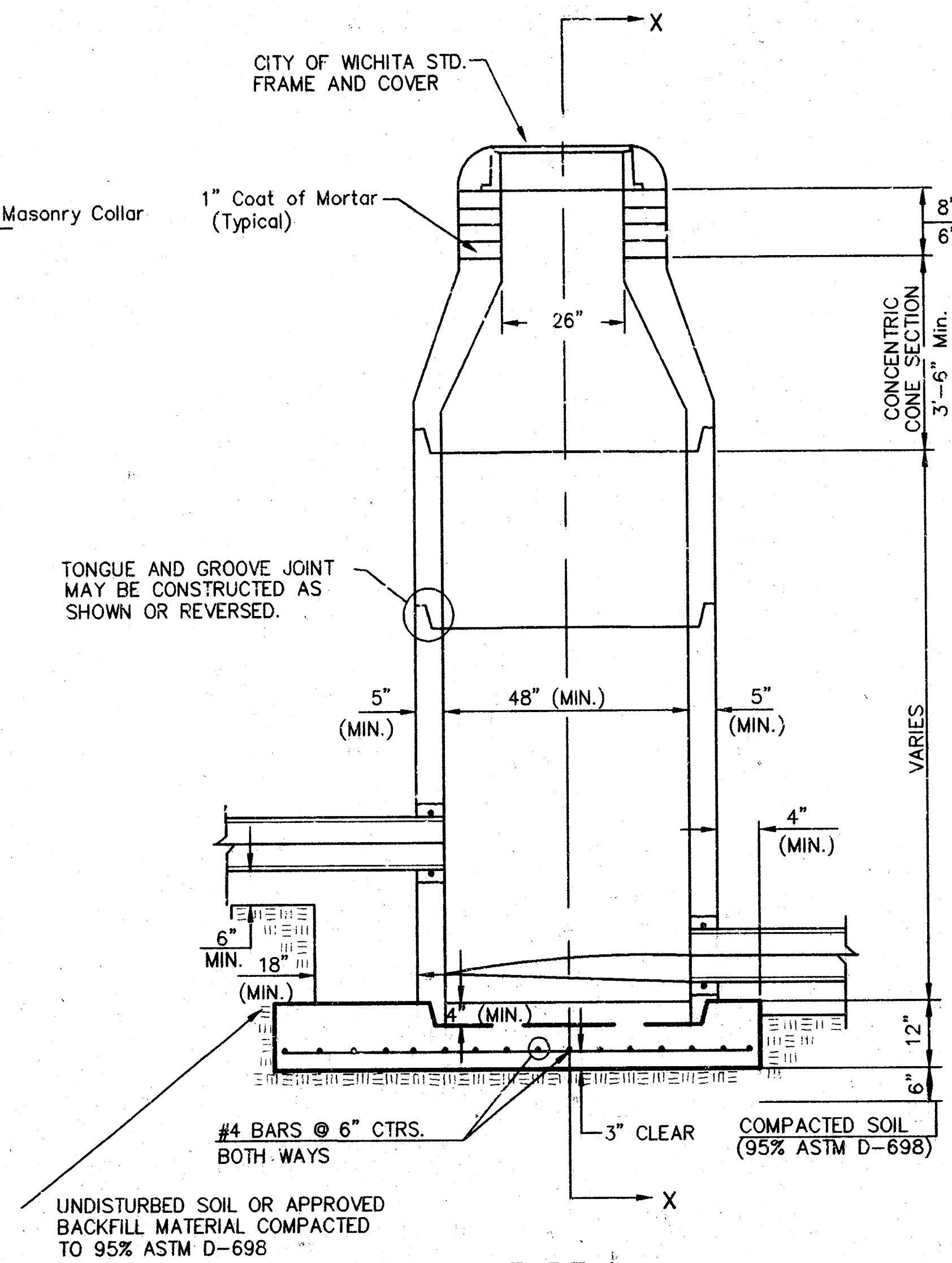
DESIGN	DRAWN	UTILITY	REVIEW	DATE	REVISED
T.C.R.	T.E.B.			Apr. 5, 1999	

4

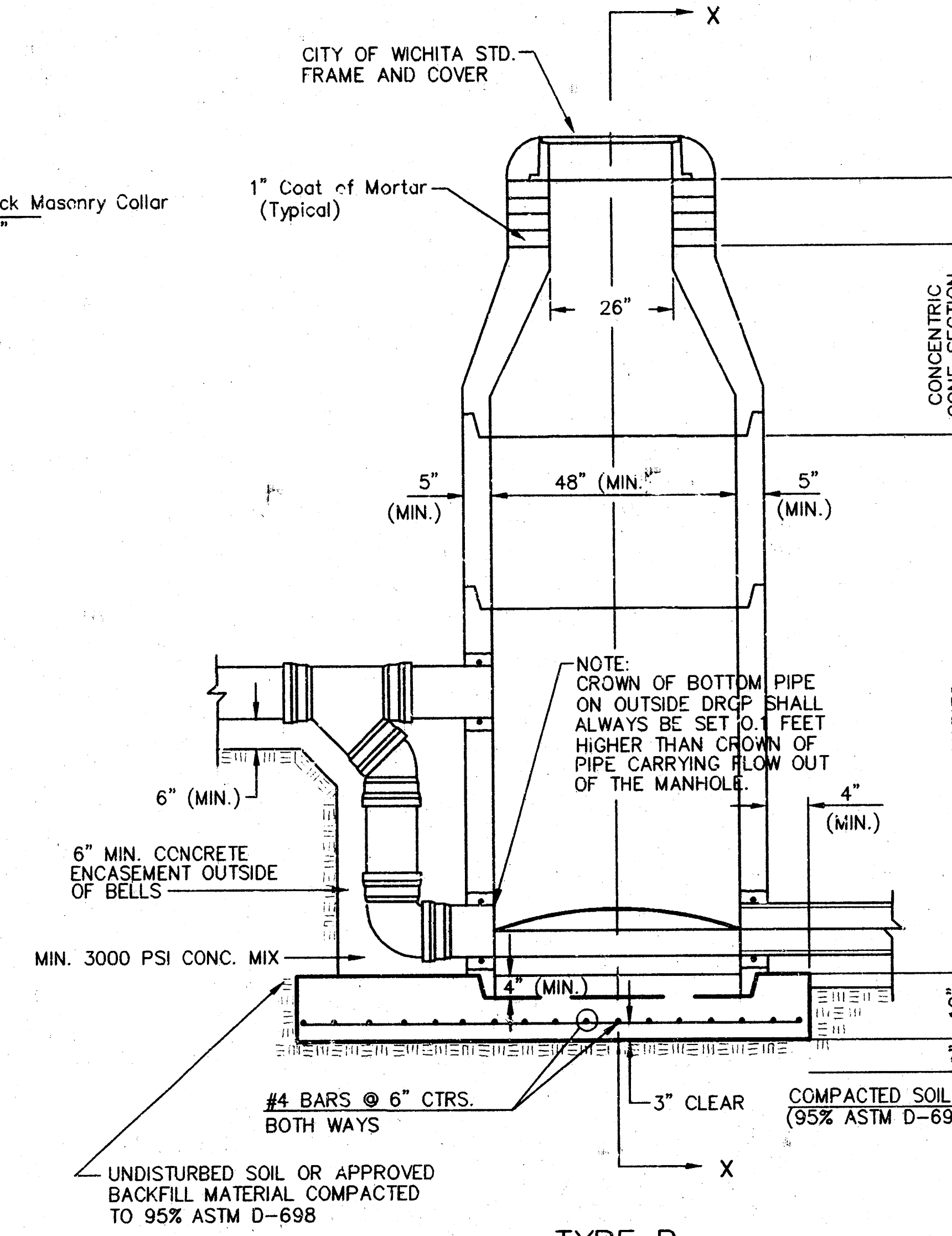
SEWER APPURTENANCES DETAILS



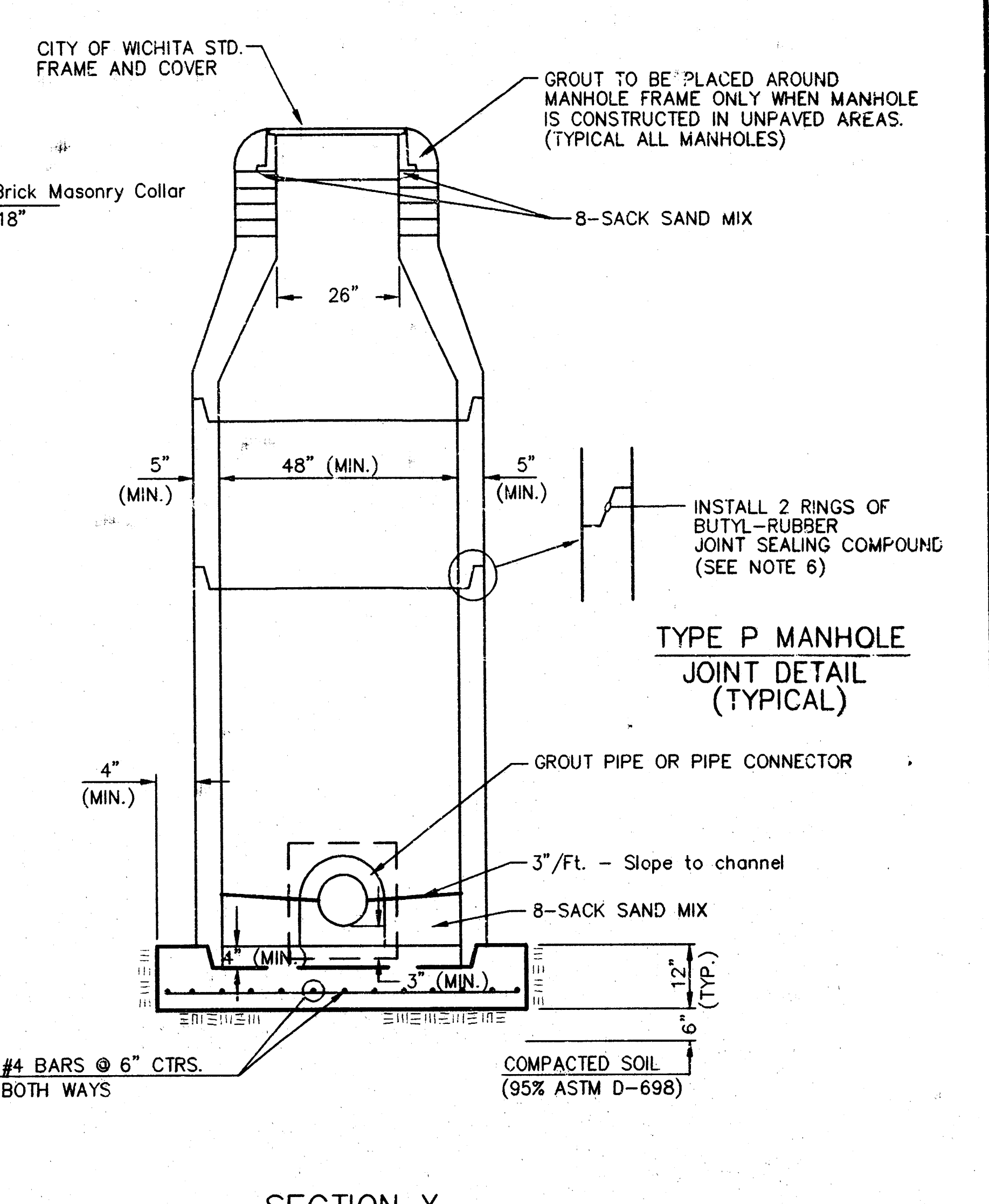
TYPE P
STANDARD MANHOLE



TYPE P
INSIDE DROP MANHOLE



TYPE P
OUTSIDE DROP MANHOLE



SECTION X
(TYPICAL)

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 TNEPEC 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.
- OPENINGS SHALL BE CUT INTO THE MANHOLE WALL WHEN OUTSIDE DROPS ARE CONSTRUCTED ON EXISTING MANHOLES. SUCH OPENINGS OUT 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.
- 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 COMPLETE 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 DROP IN INSIDE DROP MANHOLES SHALL NOT EXCEED 2' FOR INFLOWING PIPES SIZED 12" OR SMALLER AND 2' FOR INFLOWING PIPES LARGER THAN 12". THE CROWNS OF INFLOWING PIPES SHALL NEVER BE SET LOWER THAN THE CROWN OF THE OUTFLOWING PIPE.
- 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.
- 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. THE USE OF PRE-CAST CONCRETE SPACERS FOR MANHOLE TOP ADJUSTMENT IS ALSO ALLOWED.

THE CITY OF WICHITA CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202 (316) 268-4201 (316) 268-6114 FAX	STANDARD TYPE P MANHOLES	
	M. E. LINDEBAK P.E. - CITY ENGINEER	
	PROJECT NUMBER 897 PPS	INDEX CODE 607861
	DATE MAR 96	SHEET 3 OF 4

COTTONWOOD GROVE 3RD ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS

State of Kansas) SS
Sedgwick County)

We, Savoy, Ruggles & Bohm, P.A., Surveyors in aforesaid county and state do hereby certify that, under the supervision of the undersigned, we have surveyed and platted "COTTONWOOD GROVE 3RD ADDITION", Wichita, Sedgwick County, Kansas and that the accompanying plat is a true and correct exhibit of the property surveyed, described as follows:

The N1/2 of the SW1/4 of Sec. 13, Twp. 28-S, R-1-W of the 6th P.M., Sedgwick County, Kansas, except that part platted as Cottonwood Grove Addition, an Addition to Wichita, Sedgwick County, Kansas and except that part platted as Cottonwood Grove Second Addition, an Addition to Wichita, Sedgwick County, Kansas and except that part platted as James Place an Addition to the City of Wichita, Sedgwick County, Kansas.

Existing Public easements and dedications being vacated by virtue of K.S.A. 12-512(b).

Savoy, Ruggles & Bohm, P.A.

Date _____

Mark A. Savoy RLS #788 Surveyor

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, Reserves and a Street to be known as "COTTONWOOD GROVE 3RD ADDITION", Wichita, Sedgwick County, Kansas. The utility easements are hereby granted as indicated for the construction and maintenance of all public utilities. The drainage easements are hereby granted for drainage purposes. Reserve "A" is hereby reserved for the construction and maintenance of all public utilities, drainage purposes and for private drive purposes to Lots 2, 3 and 4, Block B. Reserve "D" is hereby reserved for the construction and maintenance of all public utilities, drainage purposes and for private drive purposes to Lots 5, 6, 7 and 8, Block B. Reserves "B" and "C" are hereby reserved for lakes, drainage and drainage structures, open space, gazebos, picnic areas/tables with covered structures, irrigation, walks, lighting, landscaping and berms. Reserves "E" and "F" are hereby reserved for open space, gazebos, picnic areas/tables with covered structures, irrigation, walks, lighting, landscaping and berms. The Reserves shall be owned and maintained by the owner of Lots 2, 3, 4, 5, 6, 7 and 8, Block B. The Street is hereby dedicated to and for the use of the public. Access Controls are hereby granted to the City of Wichita (as indicated on the face of the plat). Minimum building pad elevations are as shown on the face of the plat.

Alan D. McClure

Marilyn McClure

State of Kansas) SS
Sedgwick County)

The foregoing instrument acknowledged before me, this _____ day of _____, 1998, by Alan D. McClure and Marilyn McClure his wife.

Notary Public

My App't. Exp. _____

This plat of "COTTONWOOD GROVE 3RD ADDITION", Wichita, Sedgwick County, Kansas, has been submitted to and approved by the Wichita-Sedgwick County Metropolitan Area Planning Commission, Wichita, Kansas.

Dated this _____ day of _____, 1998.

Wichita-Sedgwick County Metropolitan Area Planning Commission

Richard E. Lopez Chairman

Marvin S. Krout Secretary

Bob Knight Mayor

Pat Burnett City Clerk

Entered on transfer record this _____ day of _____, 1998.

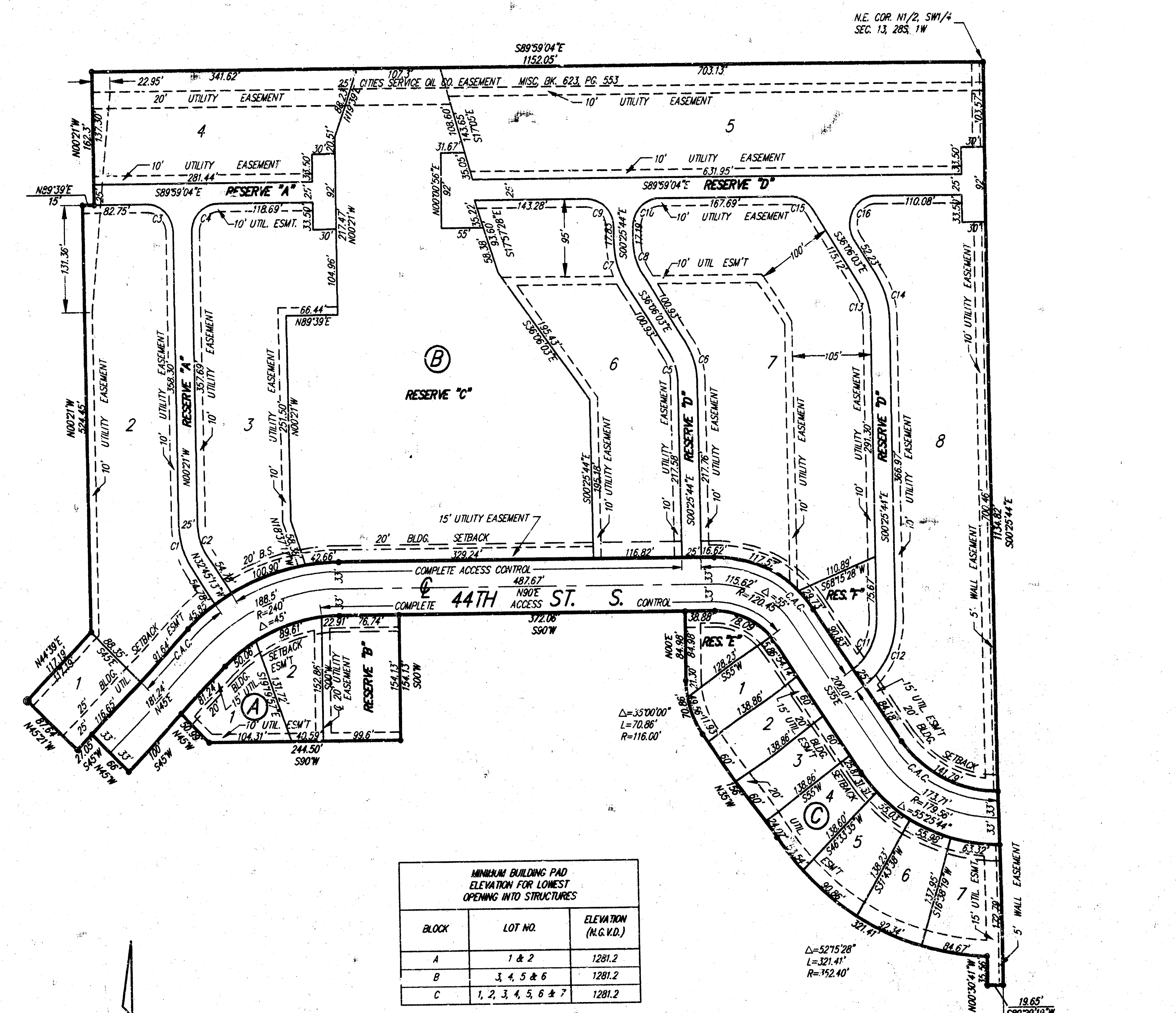
James Alford County Clerk

State of Kansas) SS
Sedgwick County)

This is to certify that this plat has been filed for record in the office of the Register of Deeds, this _____ day of _____, 1998, at _____ o'clock _____ M. and is duly recorded.

Bill Meek Register of Deeds

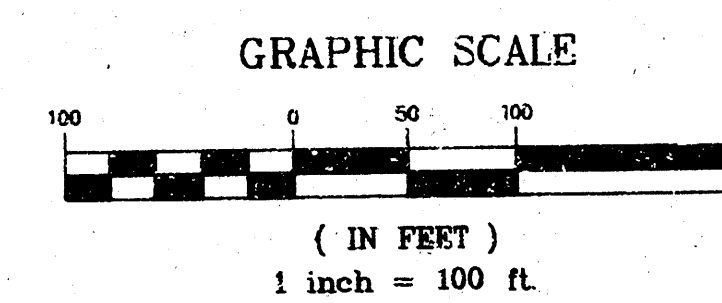
Linda Kizzire Deputy



MINIMUM BUILDING PAD ELEVATION FOR LOWEST OPENING INTO STRUCTURES		
BLOCK	LOT NO.	ELEVATION (M.G.V.A.)
A	1 & 2	1281.2
B	3, 4, 5 & 6	1281.2
C	1, 2, 3, 4, 5, 6 & 7	1281.2

REMARK: "C" CUT ON TOP OF S. CURB 44TH ST. S. @ E. END OF CURVE ON N. SIDE OF LOT 3, BLOCK 2, COTTONWOOD GROVE ADDITION. ELEV.=95.40 (CITY DATUM)

CURVE TABLE				
REF.	LEN	RAD	DELTA	TAN
C1	56.55'	100'	32°24'13"	28.06'
C2	42.42'	75'	32°24'13"	21.79'
C3	54.75'	35'	89°38'04"	34.78'
C4	55.20'	35'	90°21'56"	35.22'
C5	34.62'	60'	33°03'41"	17.61'
C6	49.05'	85'	33°03'41"	25.23'
C7	58.48'	100'	33°30'20"	30.10'
C8	43.86'	75'	33°30'20"	22.58'
C9	54.71'	35'	89°33'21"	34.73'
C10	55.26'	35'	90°26'39"	35.27'
C11	72.99'	75.44'	55°25'44"	39.63'
C12	97.17'	100.44'	55°25'44"	52.77'
C13	43.28'	75'	33°03'41"	22.26'
C14	57.70'	100'	33°03'41"	29.68'
C15	34.51'	35'	56°29'40"	18.80'
C16	75.45'	35'	123°30'20"	65.15'



C.A.C. = COMPLETE ACCESS CONTROL

- = 1/2" REBAR W/SRB CAP (SET)
- = 1/2" IRON PIPE (FOUND)
- ⊙ = 3/4" IRON PIPE (FOUND)
- = 1/2" REBAR W/CAP (FOUND)

DWG FILE: 007549F-R.C.
PROJECT NO. 97000754P

SRB 924 NORTH MAIN
WICHITA, KANSAS 67207
FAX 264-4621
E-mail: srb@rest.com
SAVOY, RUGGLES & BOHM, P.A.
ENGINEERING & SURVEYING

18 03 05 08