

GENERAL NOTES:

- Contractor will be required to provide notice to utility companies a minimum of twenty-four (24) hours prior to any excavation, as follows:

Kansas One-Call 687-2470

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

Cablevision 262-4270
or 263-2061
K.P.L. Gas Service Company 263-7511
Kansas Gas & Electric Company 264-1141
Arkla Gas Company 642-8350
or 263-8161
Southwestern Bell Telephone Company 1-571-2611
City of Wichita Water Department 268-4908
City of Wichita Sewer Maintenance 268-4071

- Underground utility service lines and overhead utility pole lines are to be adjusted as necessary by others prior to construction unless the plans specifically call for their adjustment by the Contractor or unless the plans specifically identify a utility to be adjusted by its owner during construction. Existing utilities 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.

- 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.

- All areas disturbed by construction operations shall be seeded with rye grass at a rate of 300 lbs./acre immediately following construction in that area. Ground shall be prepared per City of Wichita specifications prior to seeding.

- The Contractor shall notify pipeline companies at least 24 hours in advance of any work being performed across and/or adjacent to pipelines.

- 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 proposed new construction shall be saved and protected from damage.

- The Contractor shall give all property owners and/or tenants of developed property abutting the construction of this project a minimum of ten (10) days advance notice prior to start of 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.

- 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 work.

- Prior to bid preparation, it will be the Contractor's responsibility to field check the project area to determine the extent of Site Clearing and Restoration to be performed.

- 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.

SANITARY SEWER RELOCATION & STORM WATER SEWER IMPROVEMENTS

TO SERVE

BG PRODUCTS

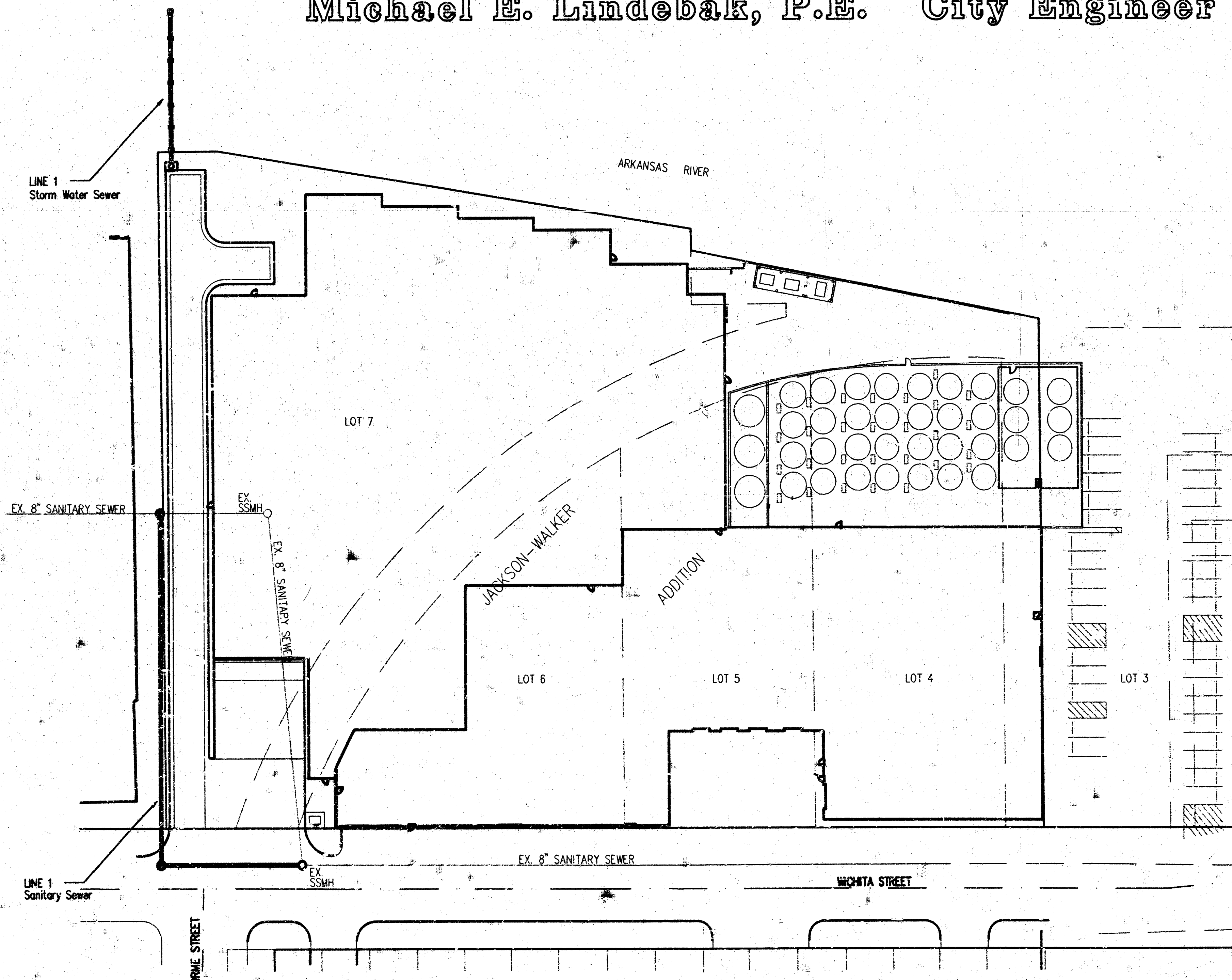
LOT 7, JACKSON-WALKER ADDITION

Private Project Number

705PPS(607861)

CITY OF WICHITA, KANSAS

Michael E. Lindebak, P.E. City Engineer



BENCHMARK:

BM #1 Top of Iron in Thimble Located
25' North of the North R/W
Line of Orms Street.
Elevation = 109.56 City Datum

INDEX:

- Title Sheet
- Line 1 Sanitary Sewer
- Standard Manhole Detail
- Line 1 Storm Water Sewer
- Standard Inlet Detail
- Copy of Jackson-Walker Addition Plat

APPROVED AS NOTED
BY CITY ENGINEER OF WICHITA

Sanitary Sewers V.R.H. 7/31/97

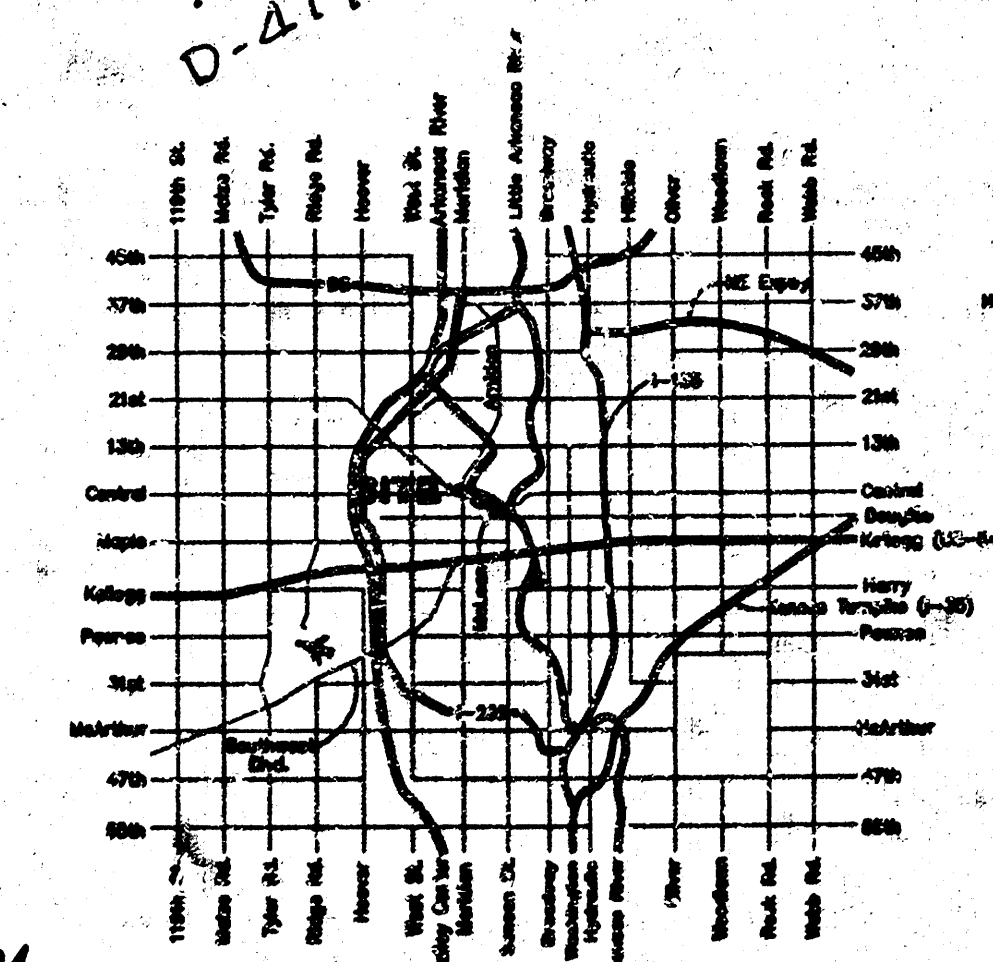
Storm Sewers V.R.H. 7/31/97

NOTE TO CONTRACTORS

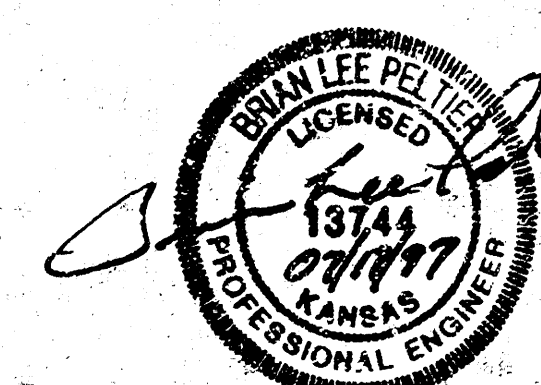
Inspection and testing for this project is to be provided by a Licensed Consulting Engineering Firm under contract with the Owner/Developer. Said inspection is to be in accordance with the City of Wichita standard construction engineering practices and certified by a Licensed Professional Engineer. No 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. All Construction and Materials shall comply with the City of Wichita Specifications and Standards (on file and available in the City Engineer's Office).

DRAINAGE
BOOKED
3-31-99
MCS
D-419

Pondliger & Sons

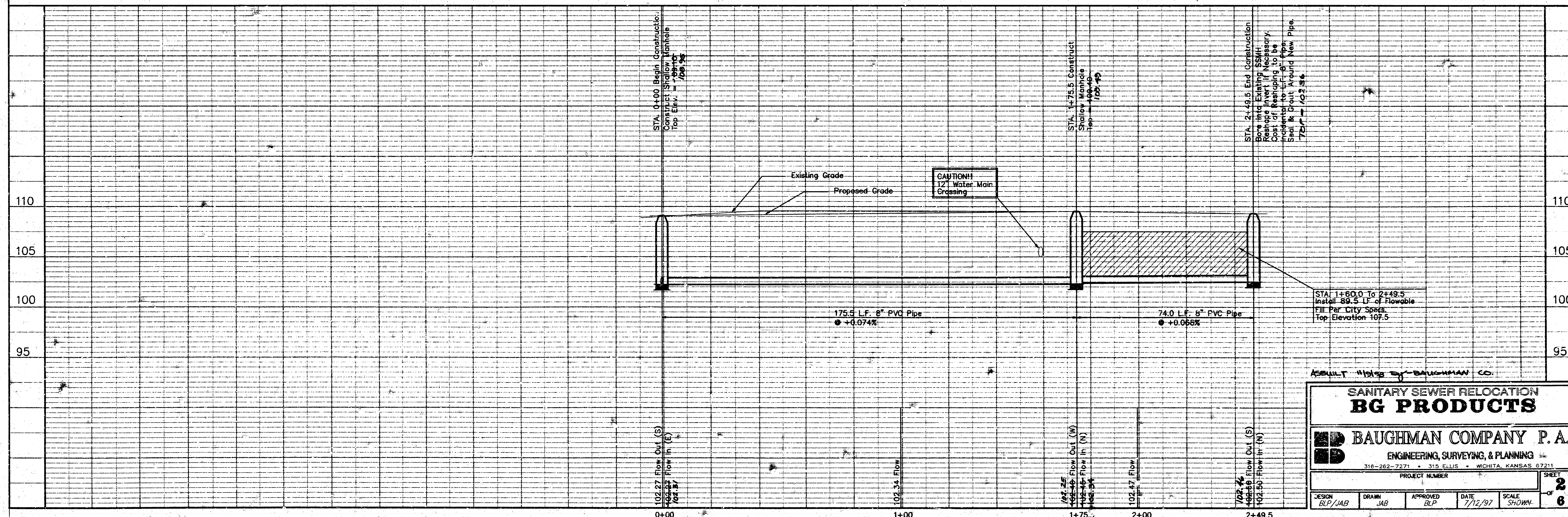
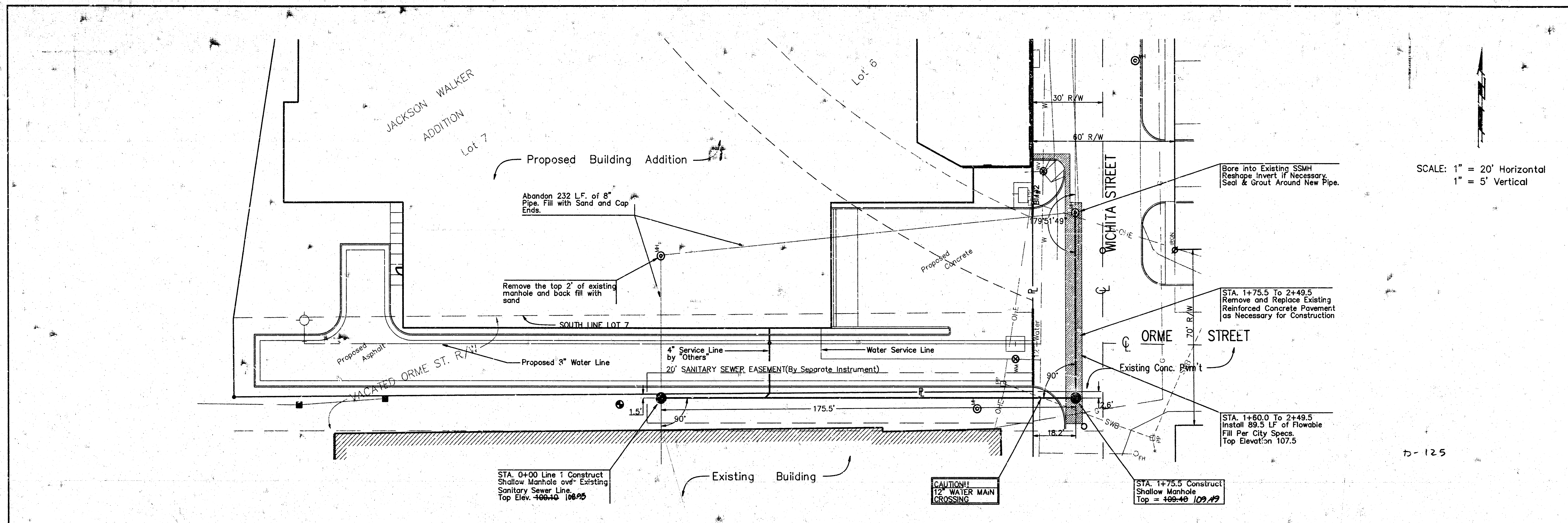


S.S. Booked
P-55
12-23-98
R.D.L.

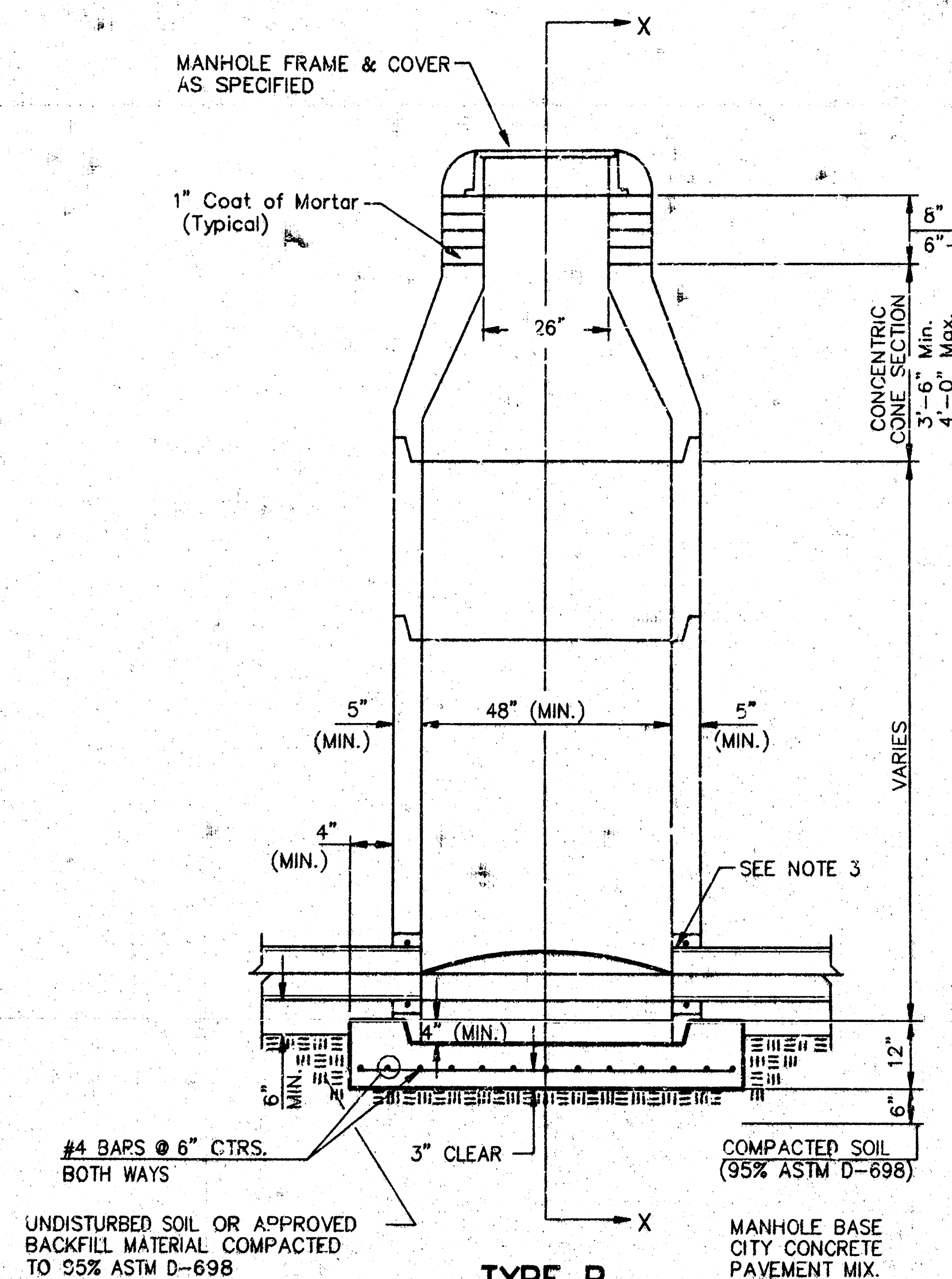


PROJECT INSPECTED BY BAUGHMAN CO., P.A.
ASBUILT 11/2/98 - E

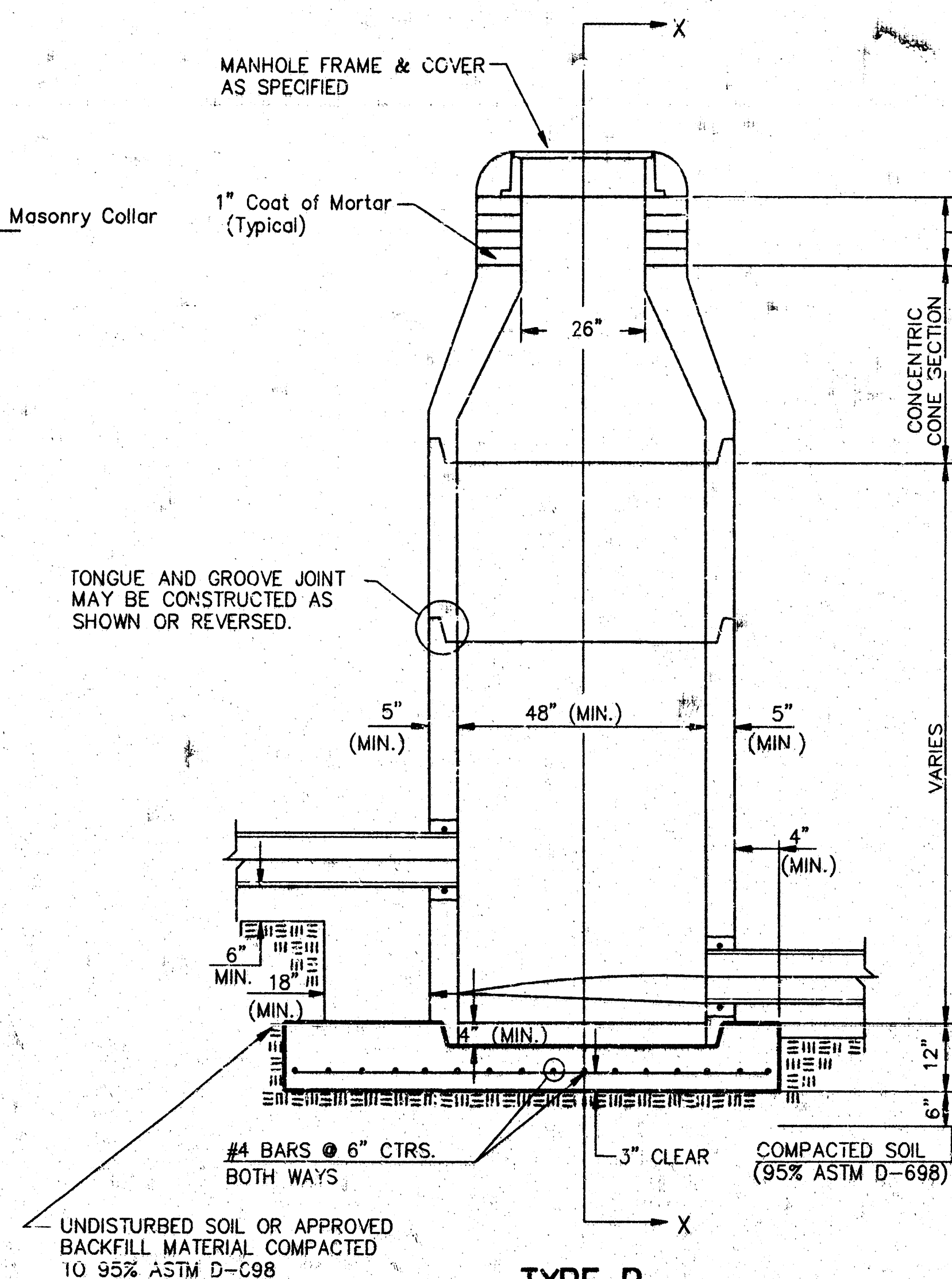
BAUGHMAN COMPANY P.A.
ENGINEERING, SURVEYING, & PLANNING
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211



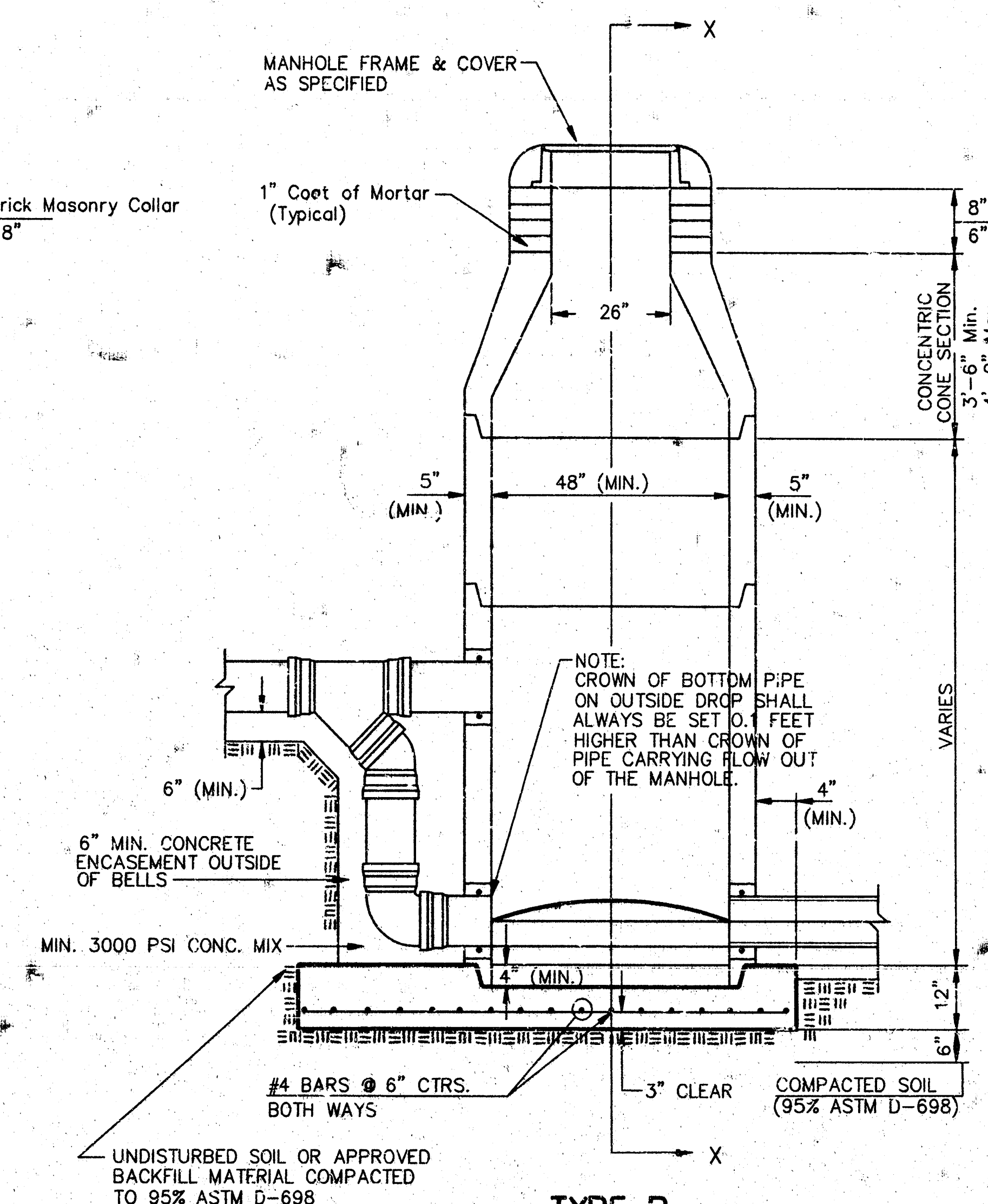
SEWER APPURTENANCES DETAILS



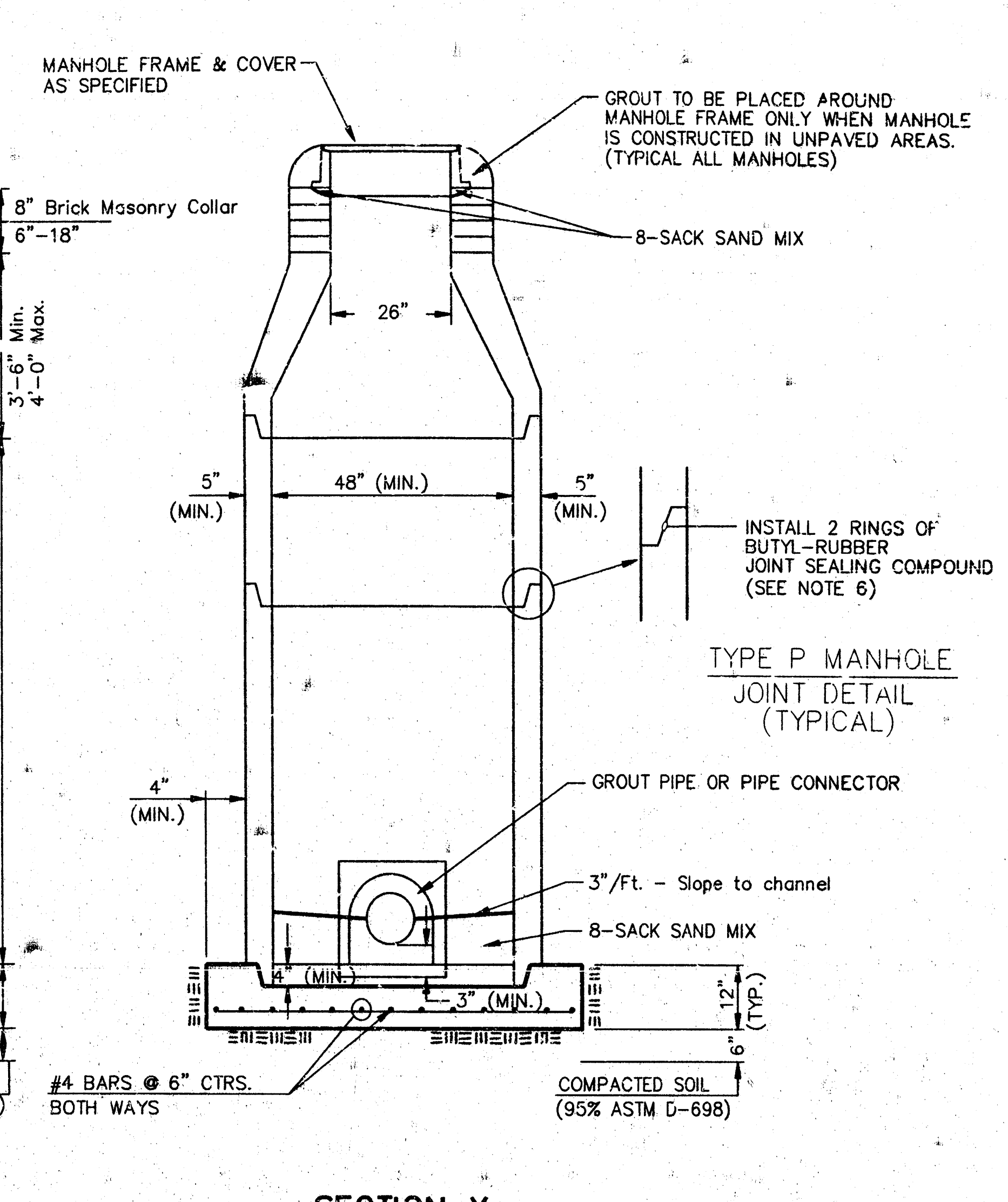
**TYPE P
STANDARD MANHOLE**



**TYPE P
INSIDE DROP MANHOLE**



**TYPE P
OUTSIDE DROP MANHOLE**



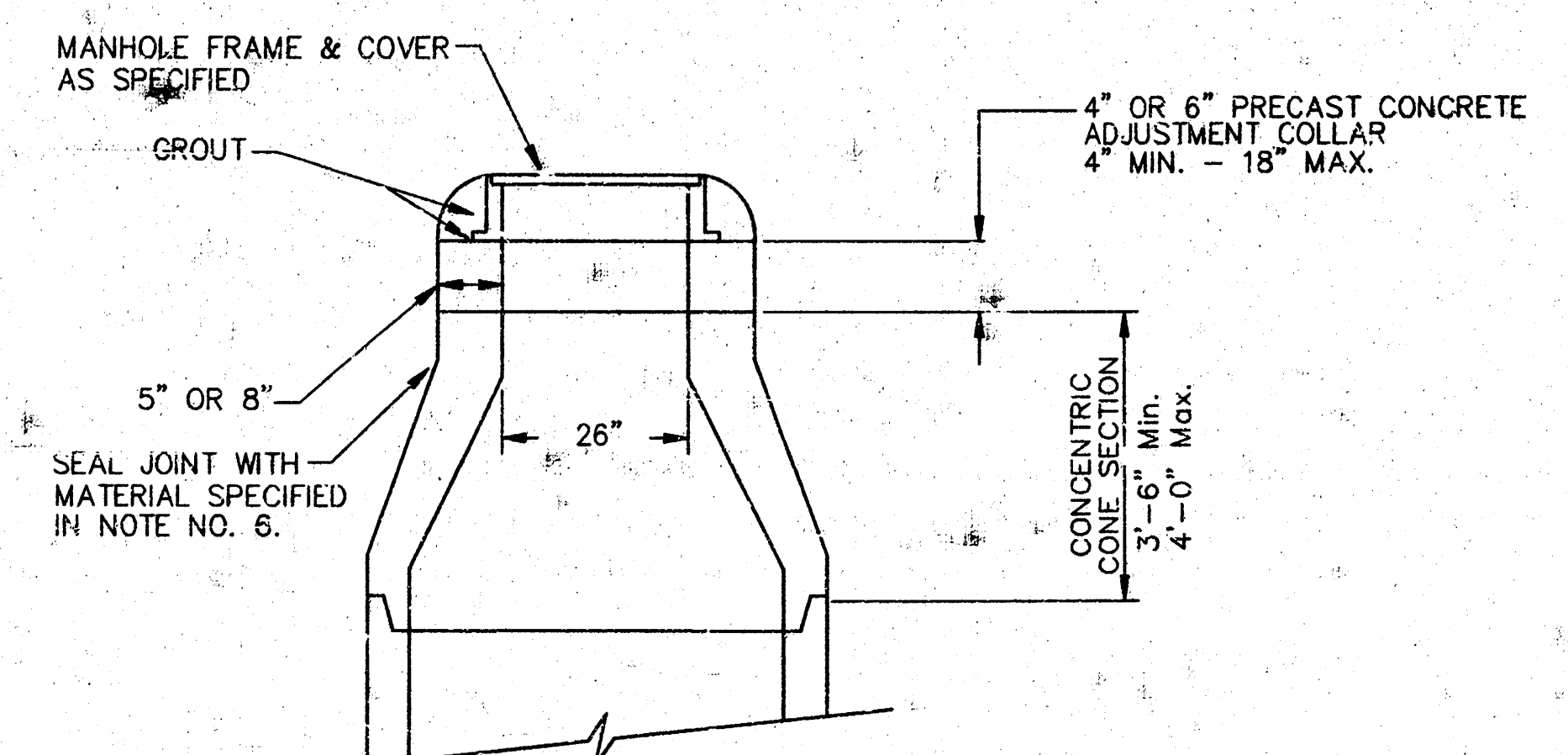
**SECTION X
(TYPICAL)**

GENERAL NOTES PRECAST MANHOLE 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 TNECM SERIES 66 HI-BUILD EPOXYLINE, DRY THICKNESS OF 8 MILS (MIN.).
- EXTERIOR MANHOLE WALLS SHALL BE COATED WITH 1 COAT MOBILARMA 833 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.

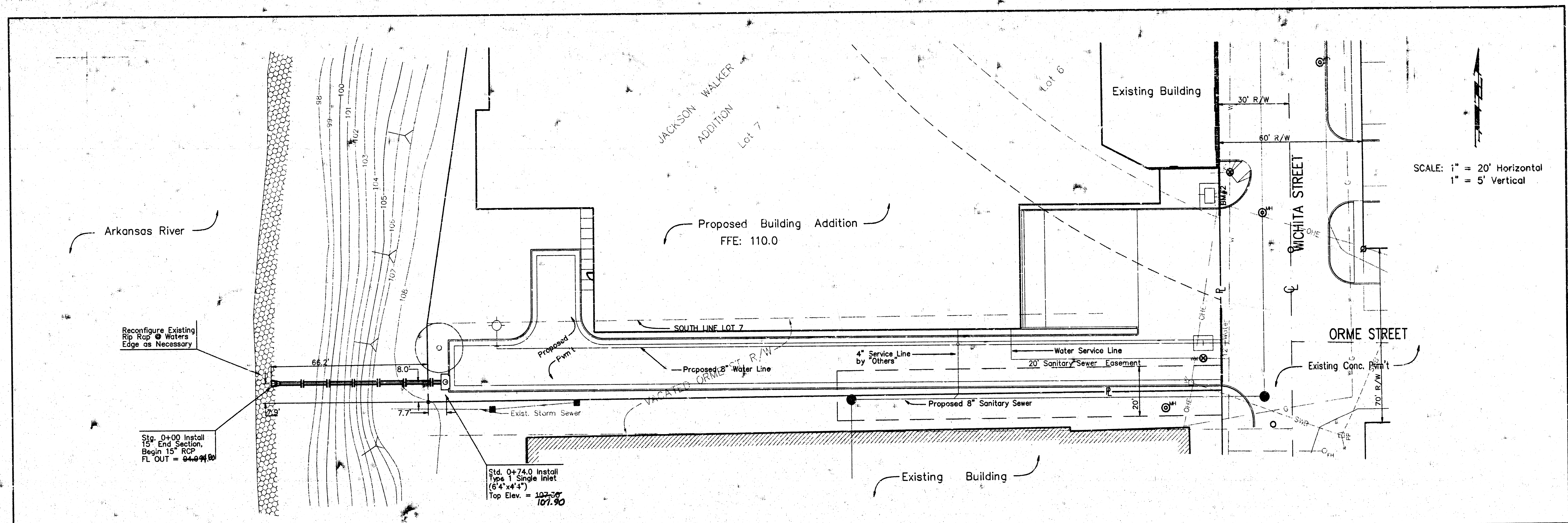
- REINFORCING STEEL SHALL BE INSTALLED IN THE MANHOLE BASES AND SHALL CONSIST OF NO. 4 BARS PLACED ON 6" CENTERS IN BOTH DIRECTIONS. THE MANHOLE BASE REINFORCEMENT SHALL BE PLACED AT LEAST 3" ABOVE THE BOTTOM OF THE MANHOLE BASE. ALL COSTS FOR FURNISHING AND INSTALLING REINFORCING STEEL SHALL BE INCLUDED 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 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.
- 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 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.

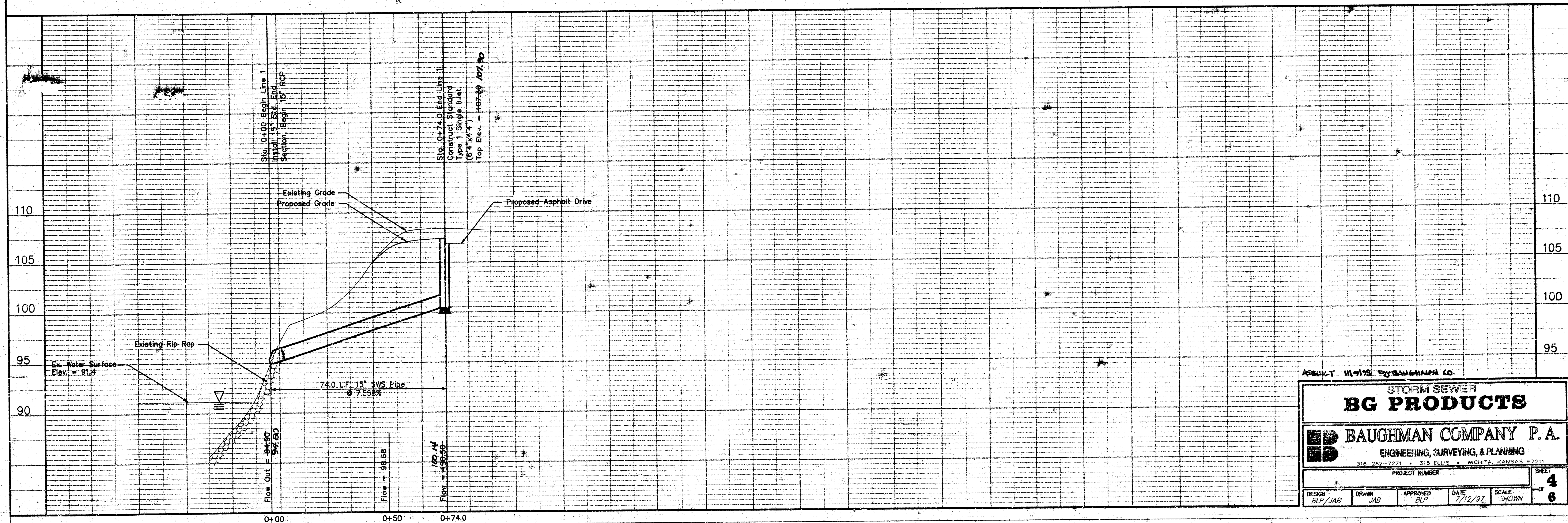


**ALTERNATE CONSTRUCTION
IN UNPAVED AREAS**

CITY OF WICHITA			
STD. MANHOLE DETAILS			
BAUGHMAN COMPANY P.A.			
ENGINEERING, SURVEYING, & PLANNING			
316-262-7271 • 315 ELLIS • WICHITA, KANSAS 67211			
PROJECT NUMBER			
705 PPS (607881)			
DESIGN	DRAWN	APPROVED	SCALE
	NOV 93		
SHEET			3
OF			6



SCALE: 1" = 20' Horizontal
1" = 5' Vertical



ASBUILT 11/9/98 BY BAUGHMAN CO.

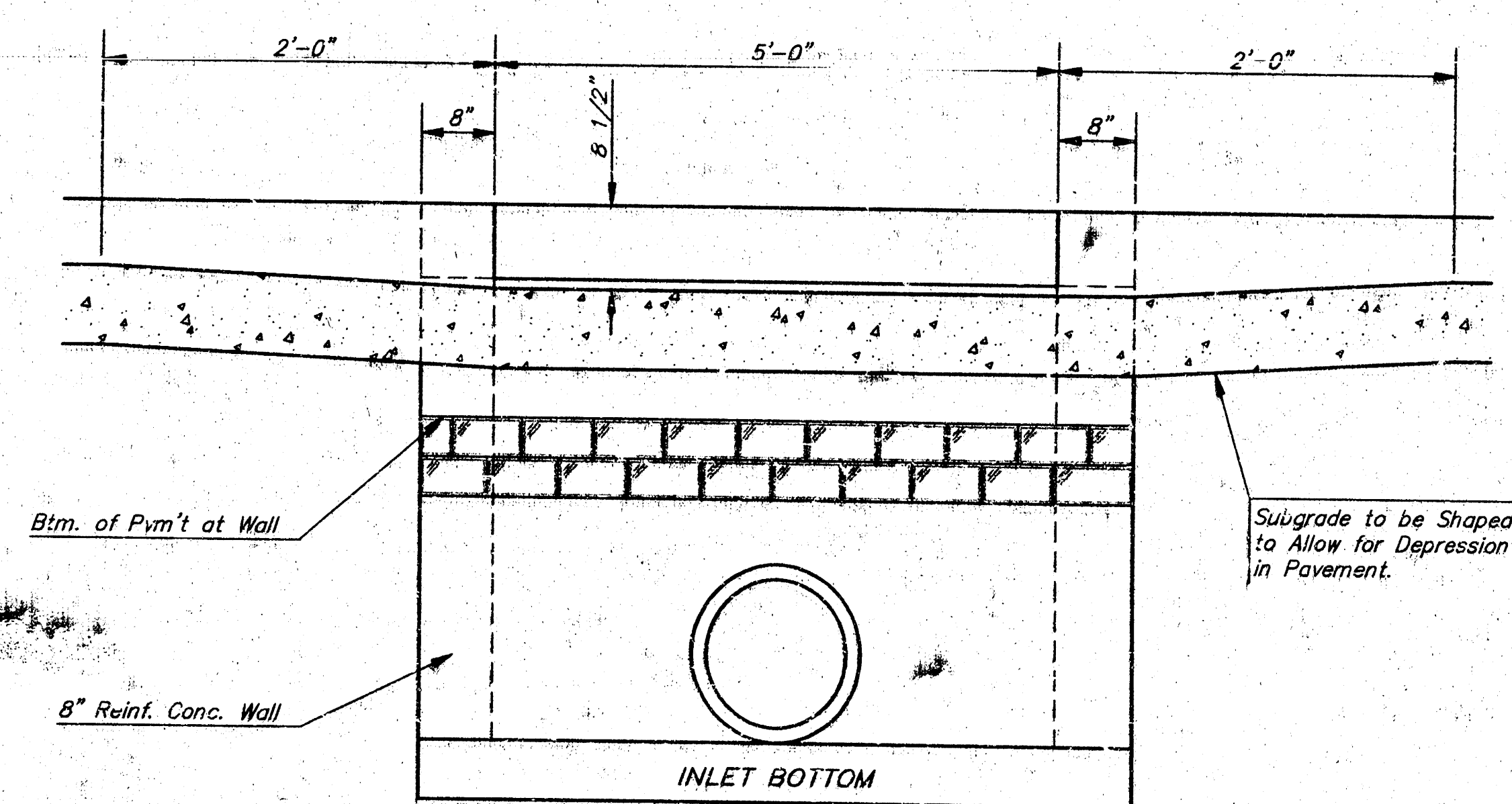
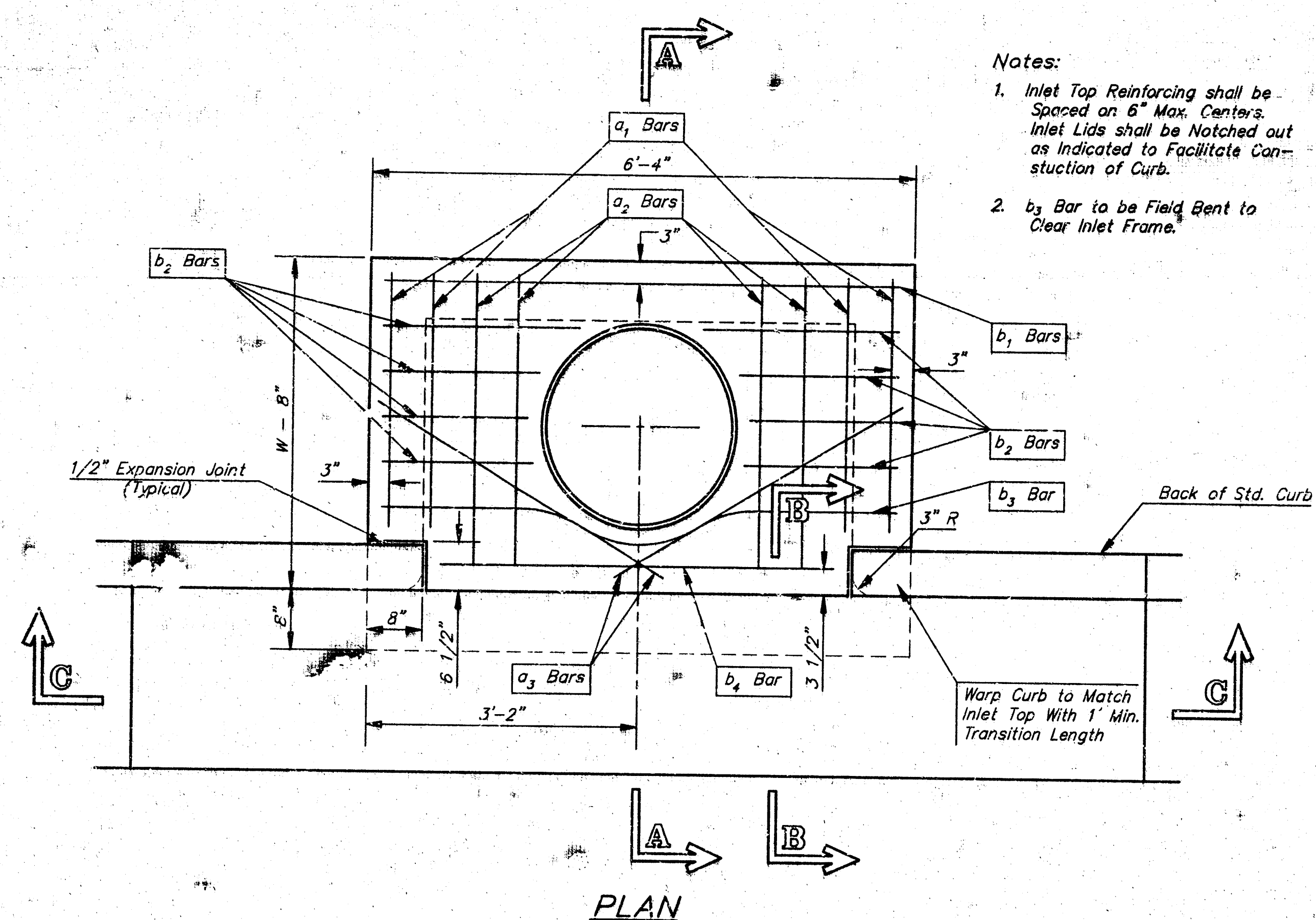
STORM SEWER

BG PRODUCTS

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PROJECT NUMBER: _____ SHEET: **4** OF **6**

DESIGN BLP/JAB	DRAWN JAB	APPROVED BLP	DATE 7/12/97	SCALE SHOWN
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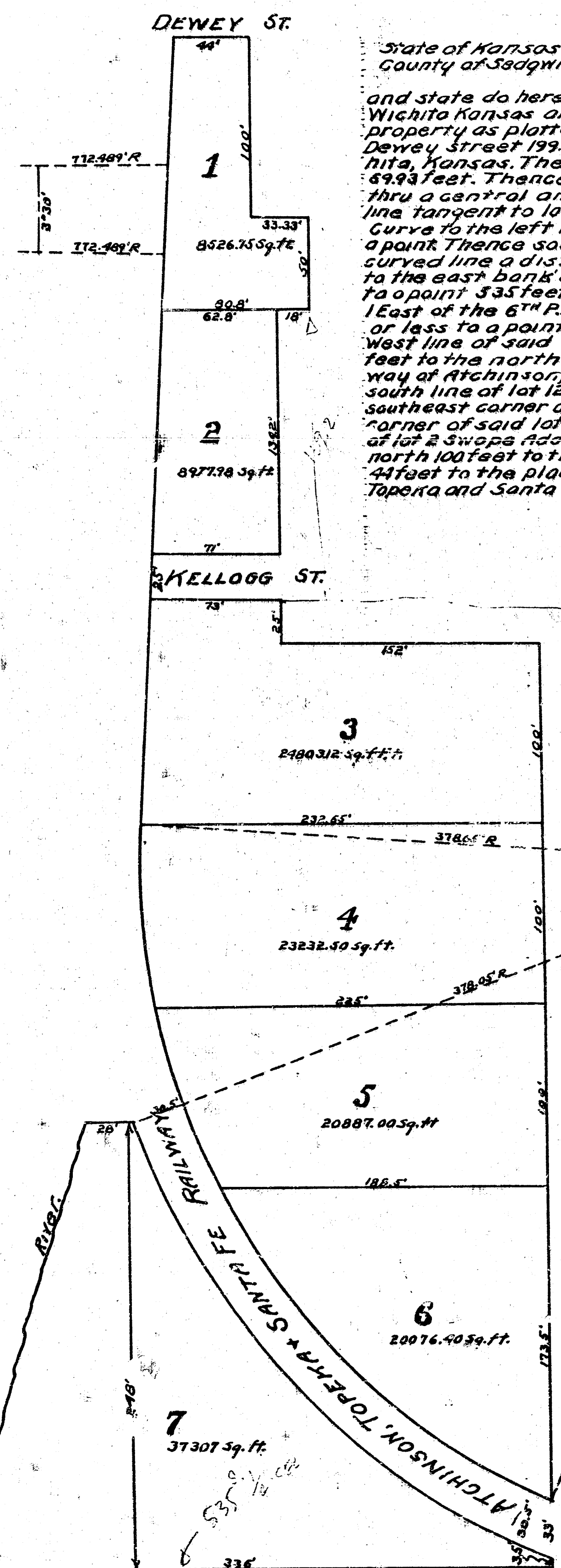
STEEL SCHEDULE

STEEL COUPLER															
BAR	a ₁	a ₂	a ₃	b ₁								b ₂	b ₃	b ₄	WT. LBS.
NUMBER	4	4	2	1	3	5	7	9	6	8	10	12	14	16	
SIZE	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#4	#6	
LENGTH	W=4'-4"	5'-7"	6'-7"	4'-0"	6'-1"	-	-	-	-	1'-9"	6'-2"	4'-8"	60±		
	W=5'-4"	7'-7"	8'-7"	5'-0"	-	6'-1"	-	-	-	1'-9"	6'-2"	4'-8"	81±		
	W=6'-4"	9'-7"	10'-7"	6'-0"	-	-	6'-1"	-	-	1'-9"	6'-2"	4'-8"	101±		
	W=7'-4"	11'-7"	12'-7"	7'-0"	-	-	-	6'-1"	-	1'-9"	6'-2"	4'-8"	121±		
	W=8'-4"	13'-7"	14'-7"	8'-0"	-	-	-	-	6'-1"	1'-9"	6'-2"	4'-8"	141±		

JACKSON-WALKER ADDITION

TO
WICHITA KANSAS

Scale 1"=60'



State of Kansas } ss.
County of Sedgwick } ss.
I, Ransom H. Brown, County Surveyor, in and for said County and State do hereby certify that I have plotted Jackson-Walker Addition to Wichita Kansas and that the accompanying plat is a correct exhibit of the property as platted, described as follows: Beg. at a point on the south side of Dewey Street 199.33 feet west of the west line of Wichita Street in the City of Wichita, Kansas. Thence south parallel with the said west line of Wichita Street 69.93 feet. Thence to the right on a curved line having a radius of 172.48 feet thru a central angle of 31° 30' to a point of tangency. Thence southerly along a line tangent to last above described curved line 316 feet to a point of curve. Curve to the left having a radius of 378.05 feet thru a central angle of 23° 4' to a point Thence southwesterly along a line normal to last above described curved line a distance of 335 feet to a point Thence west 20 feet more or less to the east bank of the Arkansas River. Thence southwesterly along said east bank to a point 335 feet south of the north line of Section 29, Township 22 South Range 1 East of the 6th R.M. Thence east parallel with said section line 335 feet more or less to a point on the west line of Wichita Street Thence north along the west line of said Wichita Street 510 feet. Thence west 152 feet Thence north 25 feet to the north line of said section 29. Thence west 10 feet to the right of way of Hutchinson, Topeka and Santa Fe Ry. Co. Thence northerly 55 feet to the south line of lot 12 Swope Addition to Wichita Kansas. Thence east 71 feet to the southeast corner of lot 11 Swope Addition. Thence north 1342 feet to the northeast corner of said lot 11 Swope Addition. Thence east 18 feet to the southeast corner of lot 2 Swope Addition. Thence north 50 feet. Thence west 33.33 feet. Thence north 41 feet to the northeast corner of said lot 2 Swope Addition. Thence west 41 feet to the place of beginning. Except right of way 30.5 feet wide of Archeson Topeka and Santa Fe Ry.

Ransom H. Brown County Surveyor
Know all men by these presents that Jackson-Walker Cool and Mining Co. have caused the land described in the surveyor's certificate to be platted into lots and known as Jackson-Walker Addition to Wichita Kansas.
Jackson-Walker Cool and Mining Co.
By E.T. Walker President.
J.A. Parkinson Secretary.

State of Missouri } ss.
County of Jackson } ss.
Be it remembered that on this 24th day of January 1917 before me a Notary Public and for said county and state came G.T. Walker Pres. and J.A. Parkinson Sec. of said company and said persons duly acknowledged the execution of same as act and deed of said company.
My commission expires Sept 28, 1919.
Frank H. Huntman
Notary Public.

State of Kansas } ss.
County of Sedgwick } ss.
This is to certify that this instrument was filed for record on this 25th day of July A.D. 1917 at Jackson (Mo.) and duly recorded in book on page
Paul Deam Register
A.E. Franz Deputy.

Entered on transfer record Jan. 25, 1917
Wm. Barratt County Clerk.
Approved by Board of Commissioners
July 17, 1917
H.D. Lester City Clerk.
O.K. P.L. Brockway

I, Joseph Bowman Register of Deeds of Sedgwick County Kansas do hereby certify that the accompanying plat is a true and correct copy of the plat of Jackson-Walker Addition to Wichita Kansas, that the original of which above is a copy is on file in my office and I have the legal custody thereof. Witness my hand and the seal of my office this 17th day of July 1924
Joseph Bowman Register of Deeds

J-16