

SANITARY SEWER PLANS COMOTARA POWER CENTER

GENERAL NOTES

1. CONTRACTOR WILL BE REQUIRED TO PROVIDE A MINIMUM ADVANCE NOTICE OF TWENTY-FOUR (24) HOURS TO UTILITY COMPANIES TO STARTING ANY EXCAVATION AS FOLLOWS.

KANSAS ONE-CALL 1-800-344-7233

THE CONTRACTOR MUST NOTIFY THE FOLLOWING IN CASE OF EMERGENCY

KANSAS GAS & ELECTRIC Gas: 1-316-832-3121
Electric: 1-316-261-6734
SOUTHWEST BELL TELEPHONE COMPANY 1-316-268-2912
CITY OF WICHITA WATER DEPARTMENT 1-316-265-1300
CITY OF CITY SEWER MAINTENANCE 1-316-268-4071

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR SHALL 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.

3. EXISTING UTILITIES AND THEIR LOCATIONS, AS SHOWN ON THE PLANS REPRESENT THE BEST INFORMATION OBTAINABLE FOR DESIGN. LOCATION INFORMATION HAS BEEN OBTAINED FROM THE VARIOUS COMPANIES AND IS EITHER FROM COMPANY UTILITY DRAWINGS OR COMPANY PROVIDED FIELD LOCATIONS. THE PLAN LOCATIONS SHOWN ARE NOT GUARANTEED. ADDITIONAL EXISTING UTILITIES MAY ALSO BE ENCOUNTERED.

4. 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. ALL DISPOSAL SITES MUST BE APPROVED BY THE KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT. MATERIAL EITHER STOCKPILED OR DISPOSED OF IN A FLOOD PLAIN WOULD REQUIRE A KANSAS STATE BOARD OF AGRICULTURE PERMIT. ANY MATERIAL DUMPED IN WATERS OF THE UNITED STATES OR WETLANDS IS SUBJECT TO U.S. CORPS OF ENGINEERS PERMITTING REGULATIONS. ANY MATERIAL BURIED OR STOCKPILED BEYOND APPROVED CONSTRUCTION LIMITS WOULD REQUIRE ADDITIONAL ARCHAEOLOGICAL INVESTIGATIONS UNLESS BURIED IN A PREVIOUSLY APPROVED BORROW LOCATION.

5. COST OF EXCAVATION, HAULING, AND DUMPING OF EXCESS EXCAVATION SHALL BE SUBSIDIARY TO THE PROJECT.

6. A PORTION OF EXCESS EXCAVATED MATERIAL SHALL BE MOUNDED AROUND MANHOLES WHICH EXTEND MORE THAN ONE (1) FOOT ABOVE THE EXISTING GROUND. SUCH MOUNDS SHALL BE CONSTRUCTED WITH A SIX (6) FOOT DIAMETER FLAT TOP WITH 4 TO 1 SIDE SLOPES DOWN TO THE ORIGINAL GROUND. THE ELEVATION OF THE FLAT TOP OF THE MOUND SHALL BE 0.4 FOOT BELOW THE TOP OF THE MANHOLE.

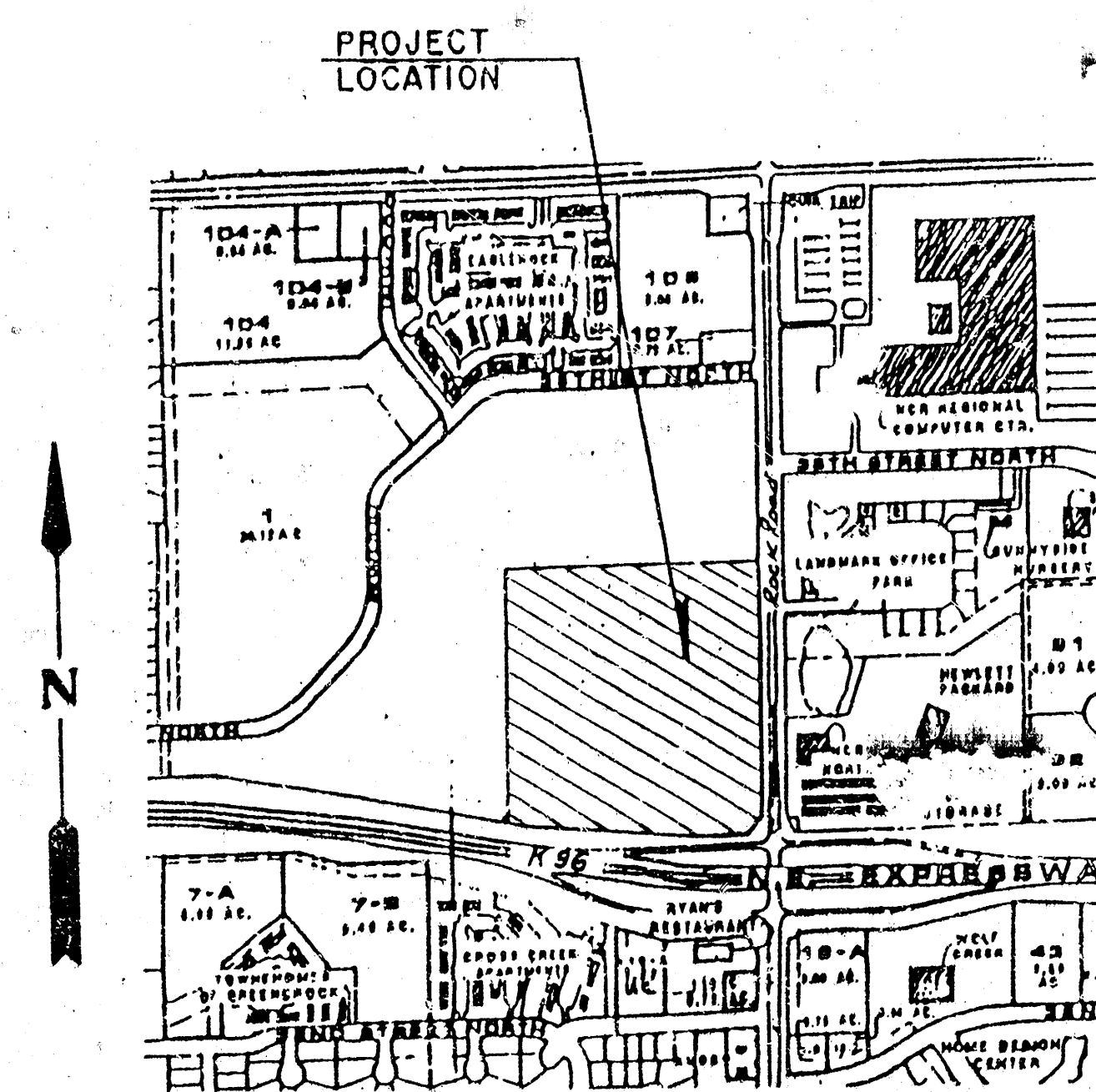
7. ALL STUBS AND PLUGGED PIPES SHALL BE LOCATED WITH GREEN PLASTIC TAPE IN THE SAME MANNER AS RISERS.

8. PRIOR TO LAYING SEWER LINES USING EXISTING MAINS OR MANHOLES, THE CONTRACTOR SHALL EXPOSE AND VERIFY THE ELEVATION, GRADE AND ALIGNMENT OF EXISTING AND NOTIFY THE ENGINEER OF ANY DEVIATION FROM THE PLAN. WHERE CONNECTION TO AN EXISTING MANHOLE THAT DOES NOT HAVE AN EXISTING STUB OR THE STUB IS UNUSABLE DUE TO ELEVATION GRADE OR ALIGNMENT, THE CONTRACTOR SHALL RESHAPE THE EXISTING MANHOLE INVERT TO PROVIDE SMOOTH FLOW. THE COST OF RESHAPING EXISTING MANHOLE INVERTS IS INCIDENTAL TO THE PROJECT.

9. 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.

INDEX NO. 607861
USER CODE 356 PPS

CITY OF WICHITA
SEDGWICK COUNTY, KANSAS
AUGUST 17, 1992



LOCATION MAP

NO SCALE

NOTE:

CONTACT PERSONS

BRUCE V. COLLINS, P.E., KAW VALLEY ENGINEERING, INC. 313-762-5040

LAURA BEVLACQUA, CONST. MANAGER - WALMART STORES, INC. 501-273-4287

LEGEND

- SS 8" Sanitary Sewer Line
- SS 12" Sanitary Sewer Line
- W 8" Water Line
- Sanitary Manhole
- Sanitary Sewer Clean-Out
- Construction Note Reference
- Construction Detail Reference

APPROVED AS NOTED

BY CITY ENGINEER OF WICHITA

SANITARY SEWERS VRH 9/8/92

STORM SEWERS _____

WATER MAINS _____

PAVING _____

NOTE TO CONTRACTOR

INSPECTION AND TESTING FOR THIS PROJECT IS 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 THE PUBLIC RIGHT-OF-WAY BY THE CONTRACTOR WITHOUT SUCH INSPECTION NOR SHALL ANY WORK BE COMMENCED IN DEDICATED EASEMENTS OR PUBLIC RIGHT-OF-WAY WITHOUT WRITTEN AUTHORIZATION BY THE CITY ENGINEER.

INDEX TO SHEETS:

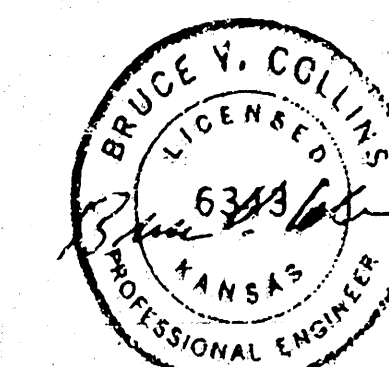
1. TITLE SHEET
2. MANHOLE DETAILS
3. UTILITY PLAN
4. UTILITY PLAN
5. SANITARY SEWER PROFILE SHEET
6. SANITARY SEWER PROFILE SHEET

BENCHMARKS:

BENCHMARK #1: Brass disc City of Wichita #1. City Elevation = 198.30
Rock Rd Sta 33+46.18, 58.84 RL. Elevation = 1385.70
BENCHMARK #2: Brass disc City of Wichita #2. City Elevation = 200.18
Rock Rd Sta 26+35.82, 4791' LI. Elevation = 1387.58
BENCHMARK #3: Railroad spike in 5th power pole East of Rock Road
along Interstate 96, 1/2 mile North of 29th Street. Benchmark #65
per Kansas Highway Plans 96. Elevation = 1401.37

As BUILT MARCH, 1993

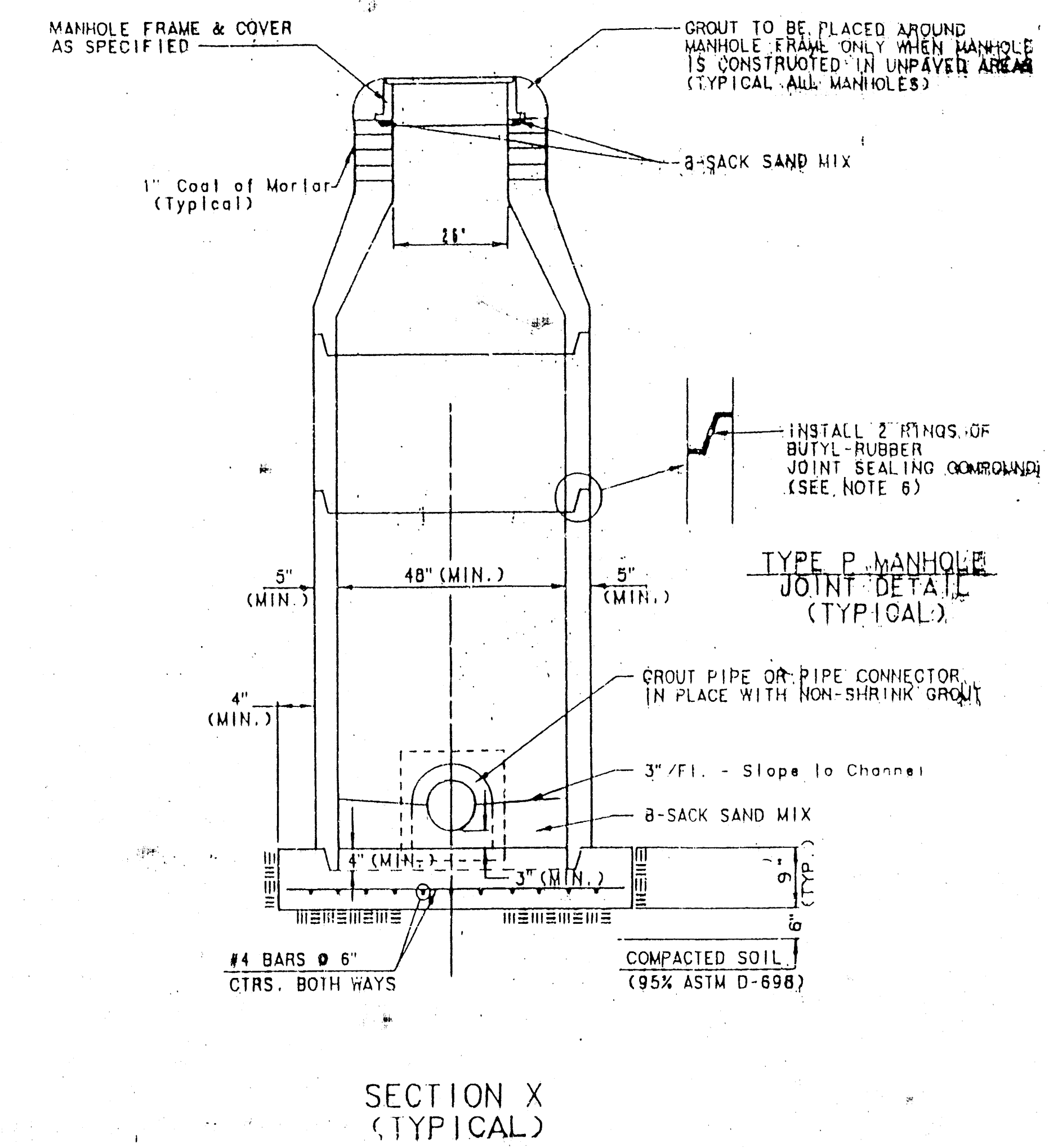
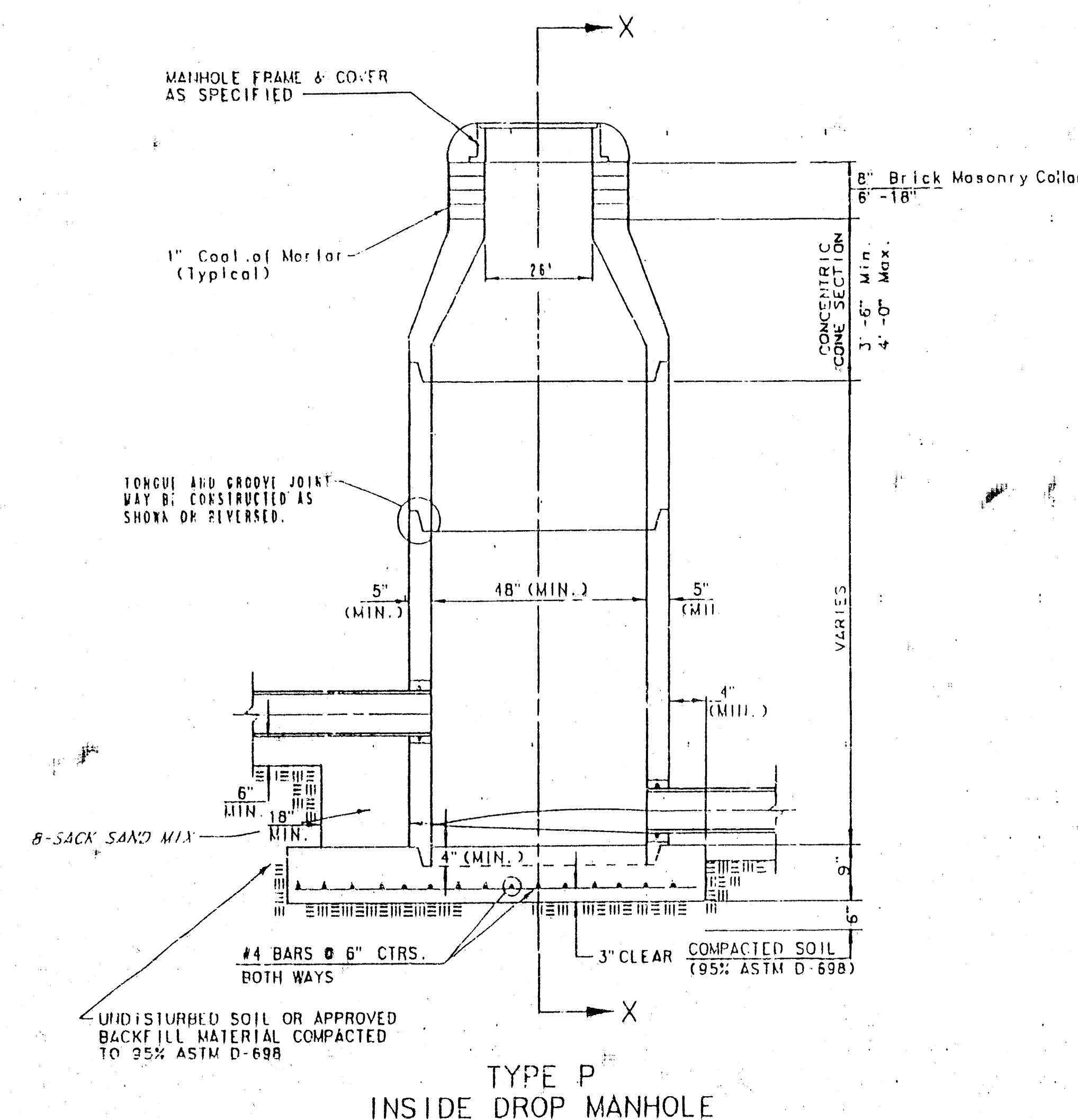
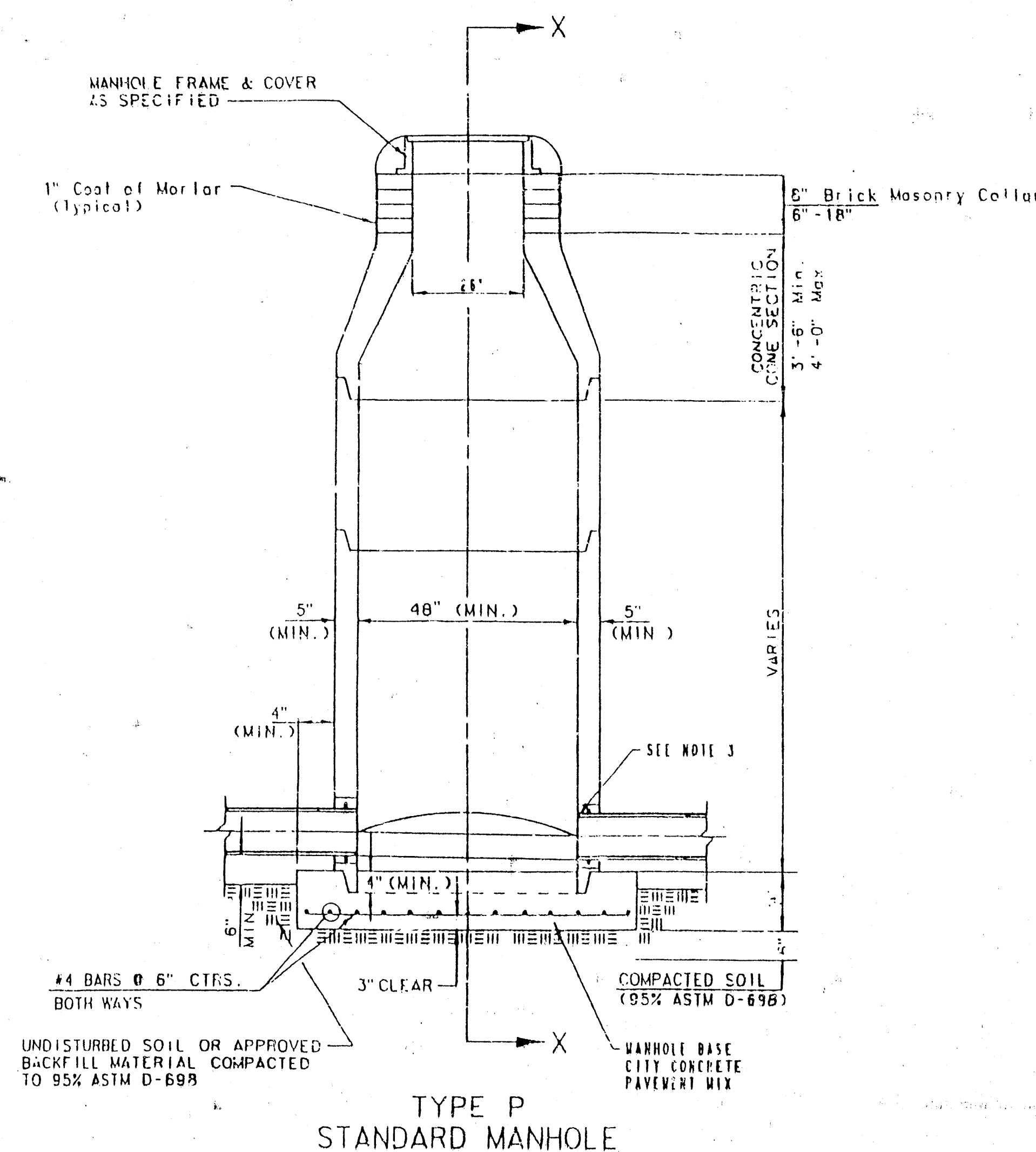
NO.	DATE	REVISION	BY
1	8/28/92	REVISED PER CITY REQUEST	JQ
TITLE SHEET			
PROJ. NO. 92-1393			
DATE AUG 17, 1992			
DESIGNER BVC			
DRAWN BY JQ/BH			
CHECKED BY LDO			
SHEET 1 OF 6			



P.O. BOX 1304
2319 NORTH JACKSON
JUNCTION CITY, KANSAS 66441
(913) 762-5040
FAX 913-762-7744

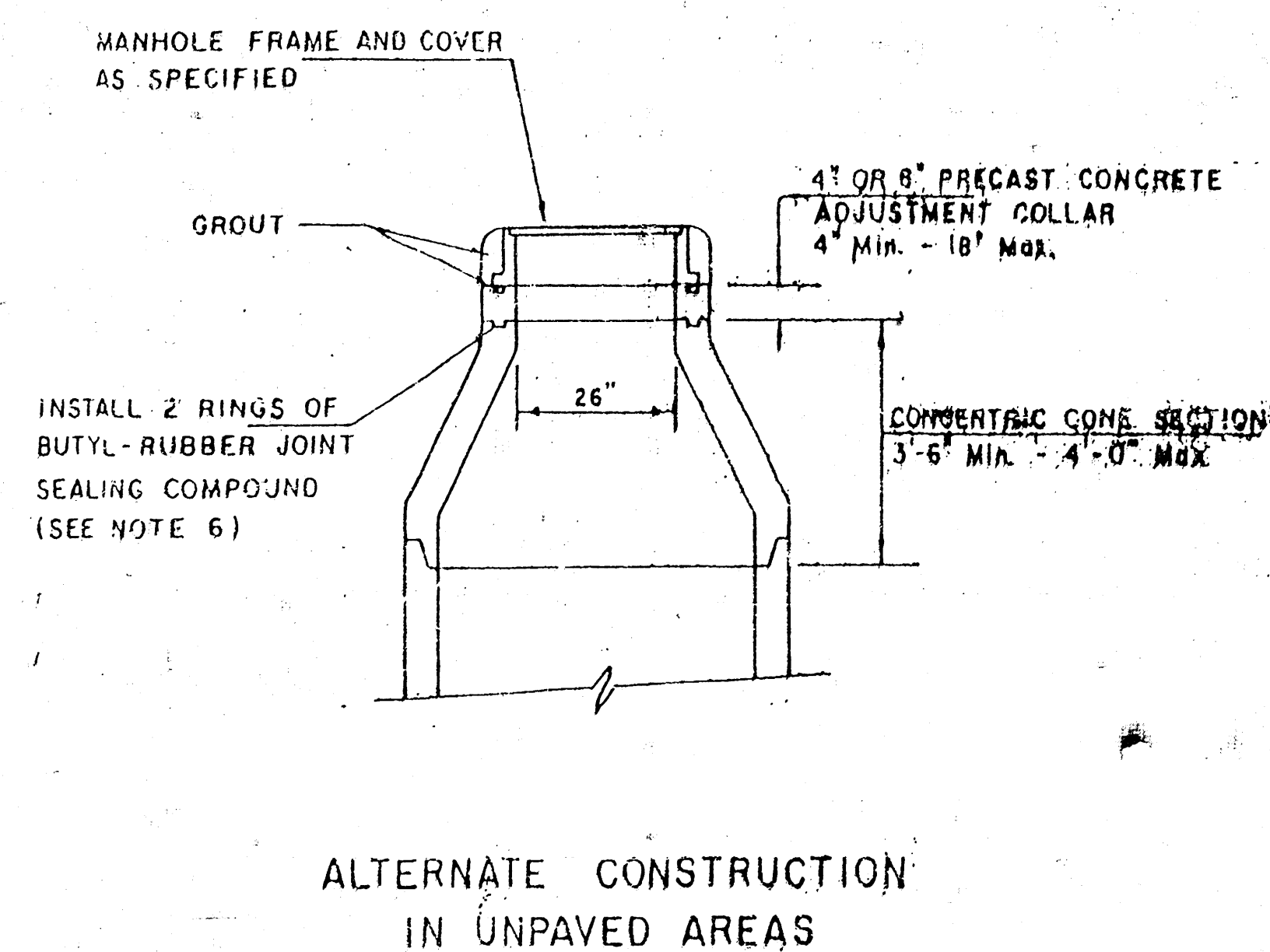
KAW VALLEY
ENGINEERING

22 N.W. PARKWAY
RIVERSIDE, MISSOURI 64150
(816) 587-3033
FAX 816-587-0128



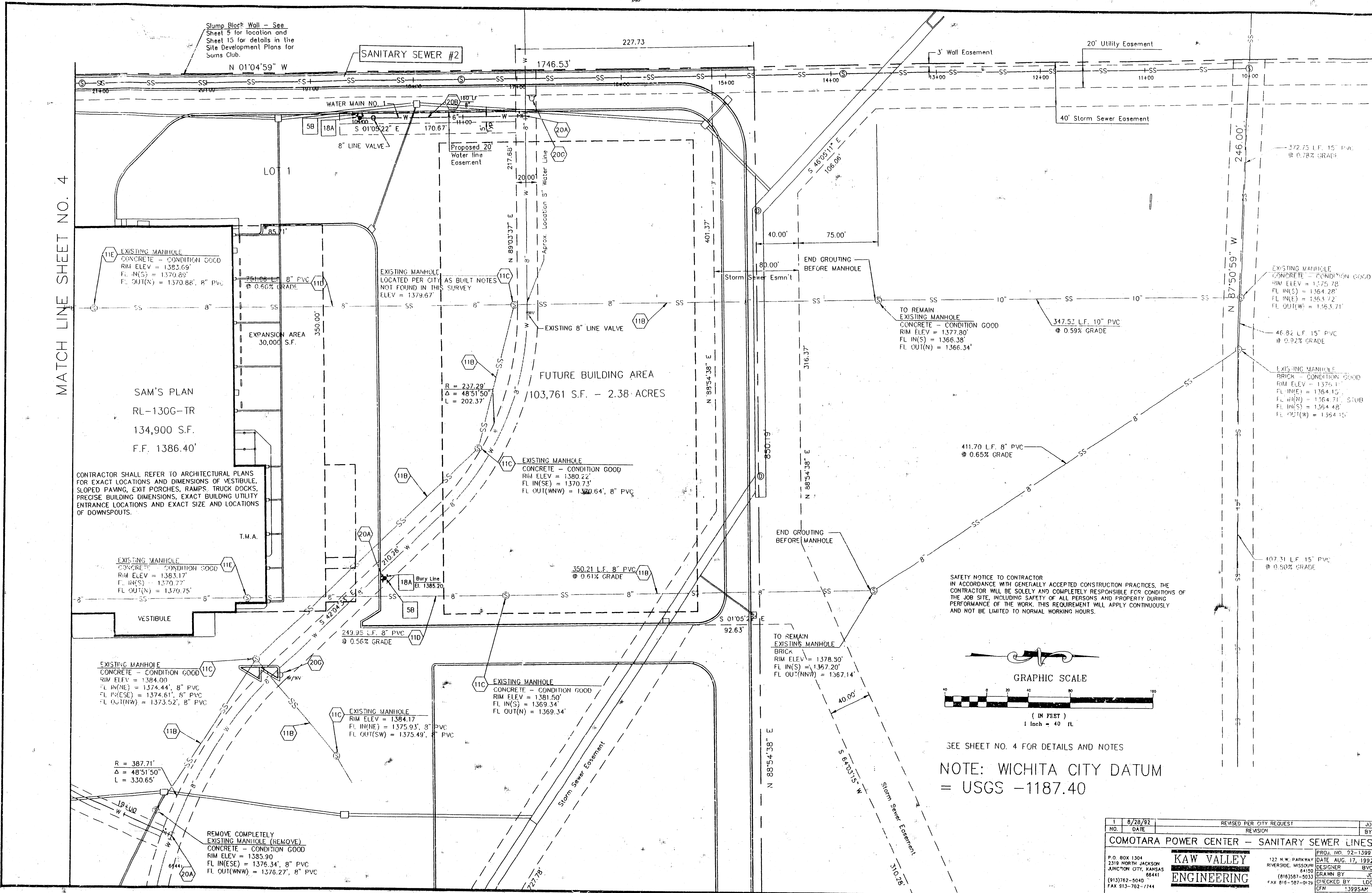
GENERAL NOTES PRECAST MANHOLE NOTES

- All precast concrete manhole sections shall conform to the latest revision of A.S.T.M. C478 as modified by the Specifications.
- Non-shrink grout shall be non-metallic type.
- Approved flexible watertight 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 P.V.C. such that its joint remains flexible.
- All inside surfaces of the concrete manhole which would be exposed to sewer gas shall be coated with 2 coats Inmatec Series 66 Hi-build Epoxypolymer, thickness of 8 mils (min.).
- Exterior manhole wall shall be coated with 1 coat Mobarm 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 sloped 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 inches shall have an inside diameter of 4 feet. Manholes constructed where pipe sizes are 24 inches or larger shall have an inside diameter of 5 feet. 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 inch centers in both directions. The manhole base reinforcement shall be placed at least 3 inches above the bottom of the manhole base.
- 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. Watertight 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 non-shrink 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.
- The floors of all manholes shall be sloped with flow channels such that the manholes will be self cleaning and free of areas where solids could be deposited or 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 drawings. 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 meet 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.
- 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 free fall drop inside manholes shall not exceed 2 feet. The crowns of inflowing pipes shall never be set lower than the crown to the outflowing pipe.
- A brick masonry collar shall be installed between the cast iron frame and the concrete cone. The collar shall have 8 inch walls and a vertical height of 6 inches minimum and 18 inches maximum. A 3 inch coat of mortar will be plastered on the outside of the collar.



NO.	DATE	REVISION	BY
MANHOLE DETAILS			
KAW VALLEY			
ENGINEERING			
& DEVELOPMENT, INC.			
P.O. BOX 1304 2314 NORTH JACKSON JUNCTION, OTC. KANSAS (913)782-5040	122 NW PARKWAY OVERSEAS, MISSOURI (816)587-5033	PROJ. NO. 92-1999 DATE AUG 28, 1992 DESIGNER BVC CHECKED BY GM DRAWN BY JO SHEET 2 OF 6	

MATCH LINE SHEET NO. 4



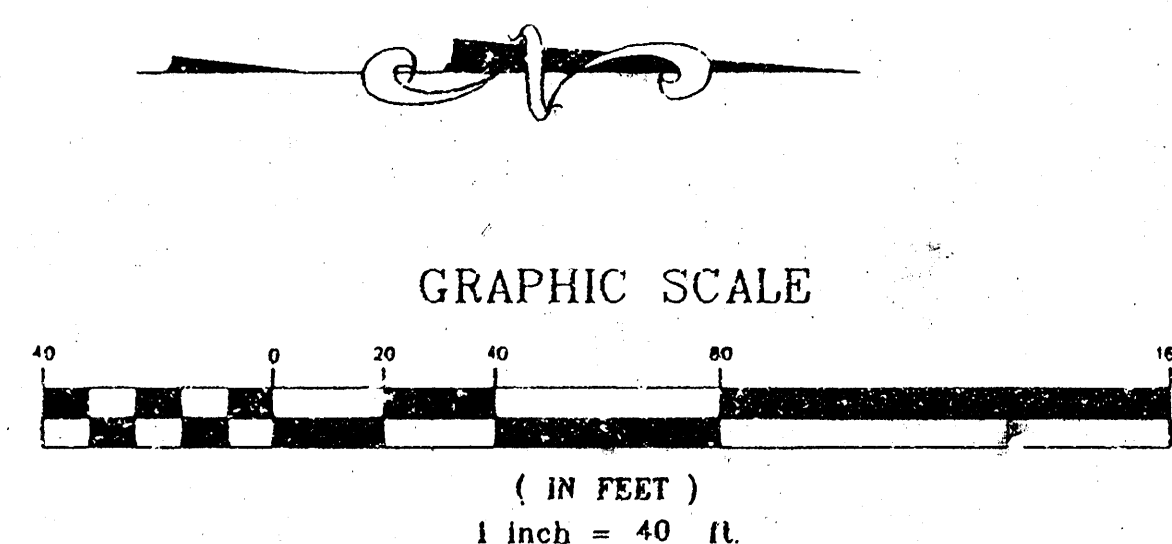
DETAILS -- SEE DETAIL SHEETS FOR THE FOLLOWING DETAILS

- 2A. DOWNSPOUT COLLECTOR
- 5A. GUARD POST (SINGLE)
- 5B. GUARD POST (GROUP/FIRE HYDRANT PROTECTION)
- 9D. LANDSCAPE ISLAND
- 15A. SANITARY MANHOLE
- 15B. SANITARY DROP MANHOLE
- 15C. CLEAN-OUT
- 16A. BACKING BLOCKS
- 16B. TRENCH BEDDING DETAIL (TYP)
- 17A. BACKFLOW PREVENTER PIT
- 18A. FIRE HYDRANT ASSEMBLY
- 18B. 2" BLOW-OFF ASSEMBLY
- 18C. STANDARD VAULT FOR SINGLE 2" METER

See Detail 15A for Backing Blocks at all Water Main direction changes.

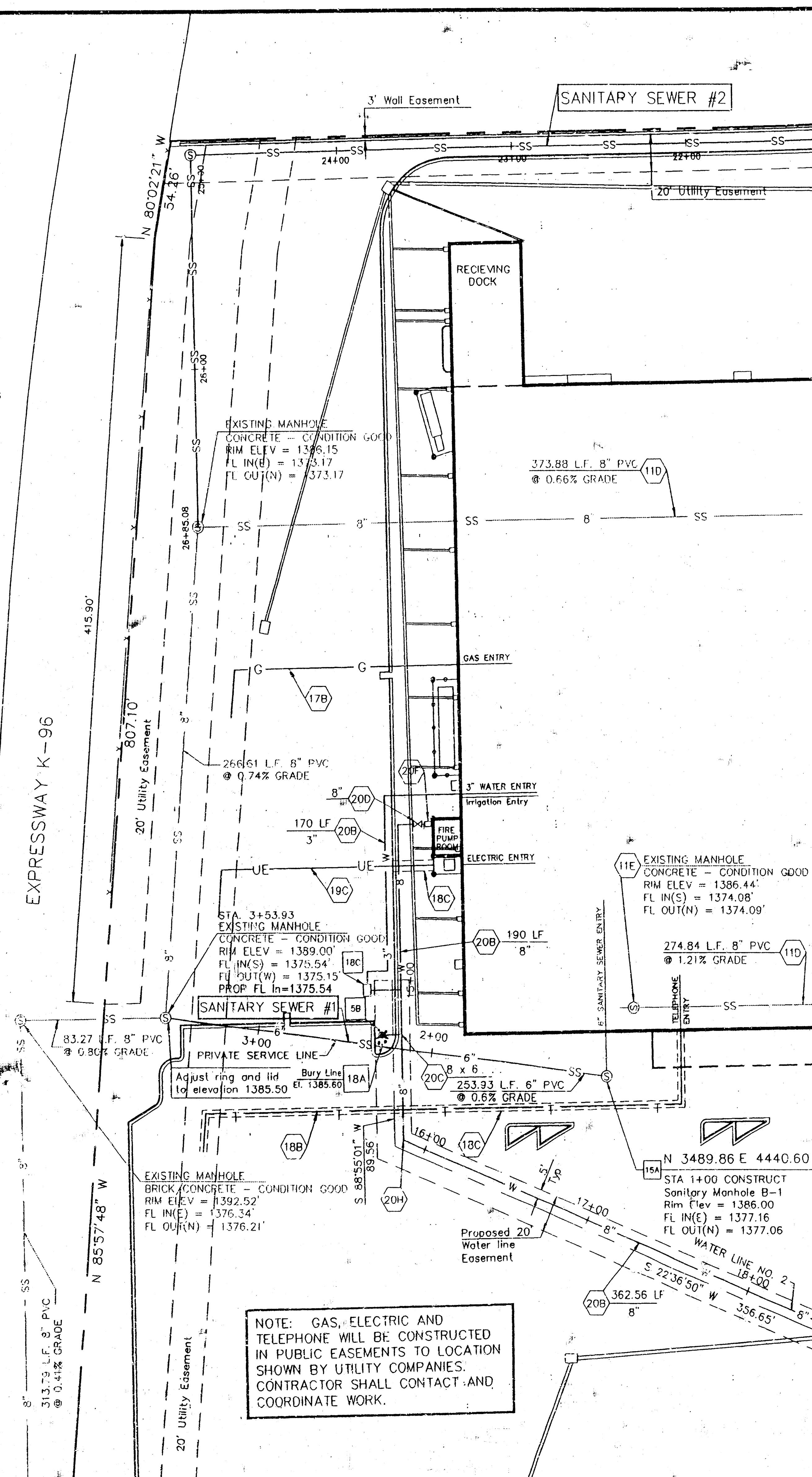
NOTES:

- 2R. TRANSFORMER PAD (SEE ARCH. PLANS)
- 7A. SIDEWALK (SEE ARCH. PLANS)
- 7B. SLOPED PAVING @ VESTIBULE (SEE ARCH. PLANS)
- 7C. RAMP IN SIDEWALK (SEE ARCH. PLANS)
- 8A. VESTIBULE (SEE ARCH. PLANS)
- 11B. EXISTING SANITARY SEWER ABANDONED IN PLACE PER CITY OF WICHITA STANDARD SPECIFICATIONS
- 11C. MANHOLE TO BE REMOVED PER CITY OF WICHITA STANDARD SPECIFICATIONS
- 11D. EXISTING SANITARY SEWER SHALL BE COMPLETELY ROUTED IN PLACE
- 11E. MANHOLE TO BE REMOVED TO A MINIMUM OF FOUR FEET BELOW FINISH GRADE. REMAINDER TO BE COMPLETELY GROUTED.
- 17A. POINT OF CONNECTION - GAS SERVICE
- 17B. GAS SERVICE PER LOCAL GAS COMPANY (SEE SIZE THIS SHEET)
- 17C. GAS METER
- 18A. POINT OF CONNECTION - TELEPHONE SERVICE
- 18B. UNDERGROUND TELEPHONE SERVICE PER LOCAL TELEPHONE CO.
- 18C. CONDUIT INSTALLED BY CONTRACTOR
- 19A. POINT OF CONNECTION - ELECTRIC SERVICE
- 19B. OVERHEAD POWER PER LOCAL POWER COMPANY
- 19C. UNDERGROUND POWER PER LOCAL POWER COMPANY
- 20A. POINT OF CONNECTION - WATER SERVICE - TAPPING TEE & VALVE
- 20B. WATER LINE (SEE SIZE AND LF THIS SHEET)
- 20C. TEE
- 20D. WATER VALVE
- 20E. IRRIGATION CONTROLLER (SEE IRRIGATION PLAN)
- 20F. BACKFLOW PREVENTER
- 20G. REMOVE FIRE HYDRANT
- 20H. STA. 15+86.29 - 90' AND 22 1/2' BEND



SAFETY NOTICE TO CONTRACTOR
IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.

NOTE: WICHITA CITY DATUM
= USGS -1187.40

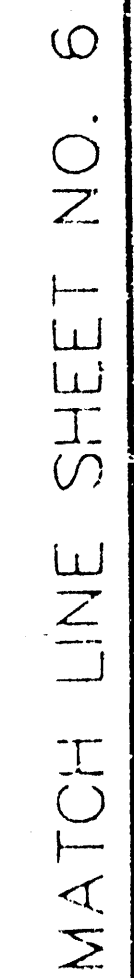


MATCH LINE SHEET NO. 3

CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULE, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY ENTRANCE LOCATIONS AND EXACT SIZE AND LOCATIONS OF DOWNSPOUTS.

NOTE: GAS, ELECTRIC AND TELEPHONE WILL BE CONSTRUCTED IN PUBLIC EASEMENTS TO LOCATION SHOWN BY UTILITY COMPANIES. CONTRACTOR SHALL CONTACT AND COORDINATE WORK.

NO.	DATE	REVISION	BY
1	8/28/92	REVISED PER CITY REQUEST	JO
COMOTARA POWER CENTER - SANITARY SEWER LINES			
P.O. BOX 1304 2319 NORTH JACKSON JUNCTION CITY, KANSAS 66441 (913)762-0040 FAX 913-762-7744		KAW VALLEY ENGINEERING 122 N.W. PARKWAY RIVERSIDE, MISSOURI 64150 (816)587-0033 FAX 816-587-0128	
PROJ. NO. 92-1389 DATE AUG. 17, 1992 DESIGNER BVC DRAWN BY JO CHECKED BY LDO CITY 1389SAN SHEET 4 OF 6			



1		8/28/92		REVISED PER CITY REQUEST		CITY DRAWN		JC	
NO.		DATE		REVISION				B	
COMOTARA POWER CENTER - SANITARY SEWER									
P.O. BOX 1304 2318 NORTH AVENUE JENKINS, KANSAS (913) 762-5040 (913) 762-7744				KAW LALEY 122 N W PARKWAY RIVERVIEW, MISSOURI 64150 (816) 867-5033 FAX 816-857-0129				PROJ. NO. 92-1360 DATE AUG 17, 1992 CHECKED BY 81 DRAWN BY CHECKED BY LB SHEET 5 OF 13980	

