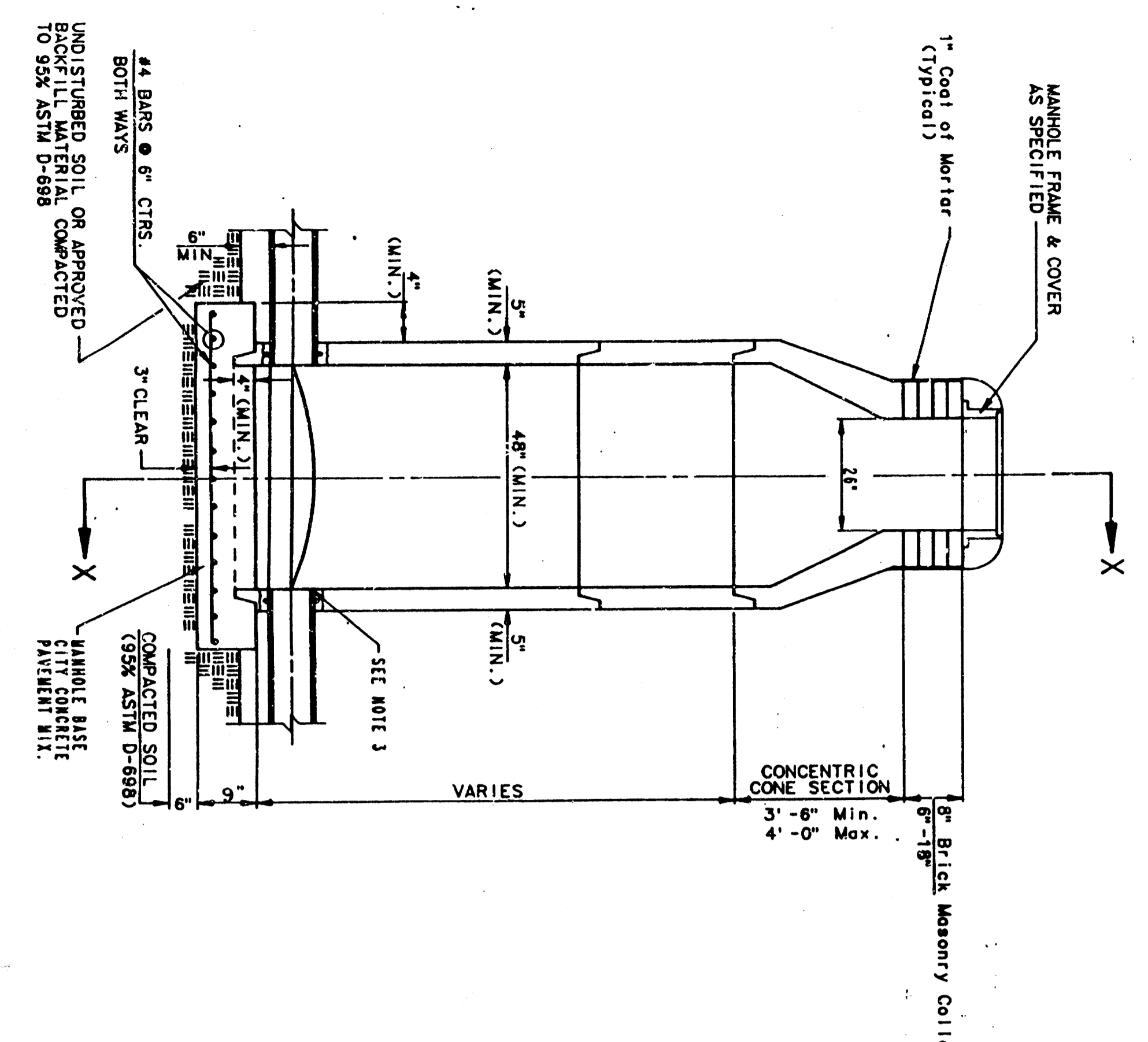
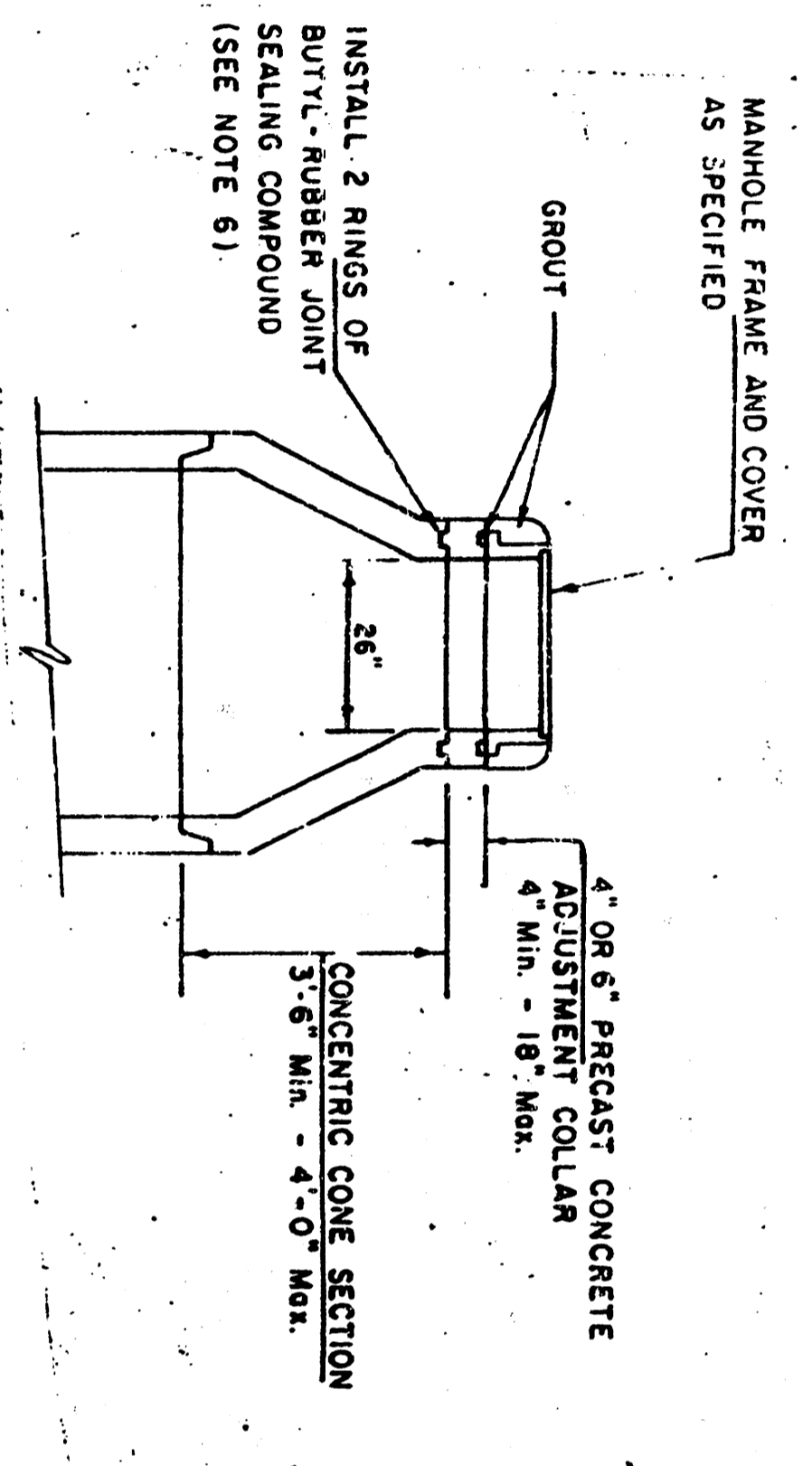


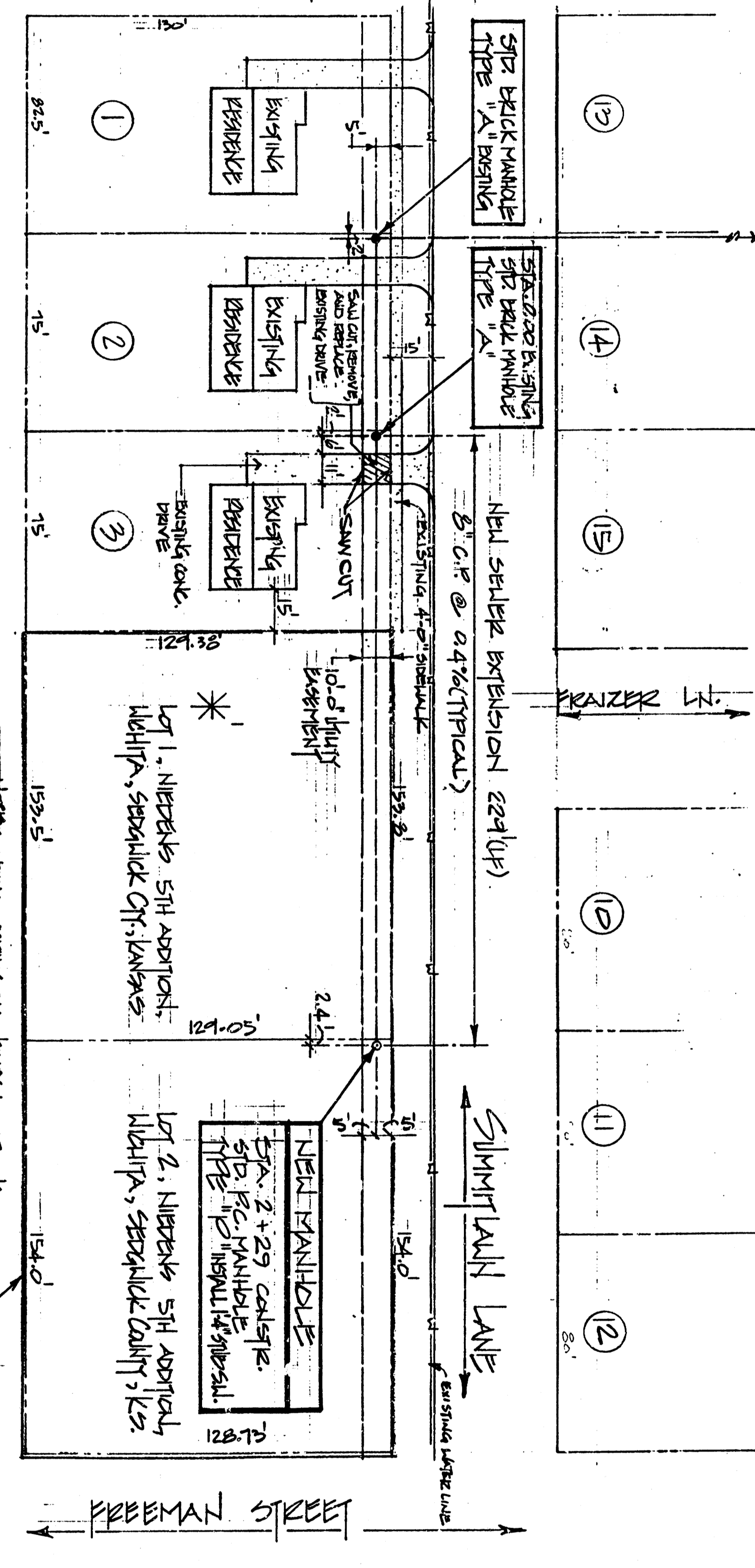
SECTION "X"  
NO SCALE



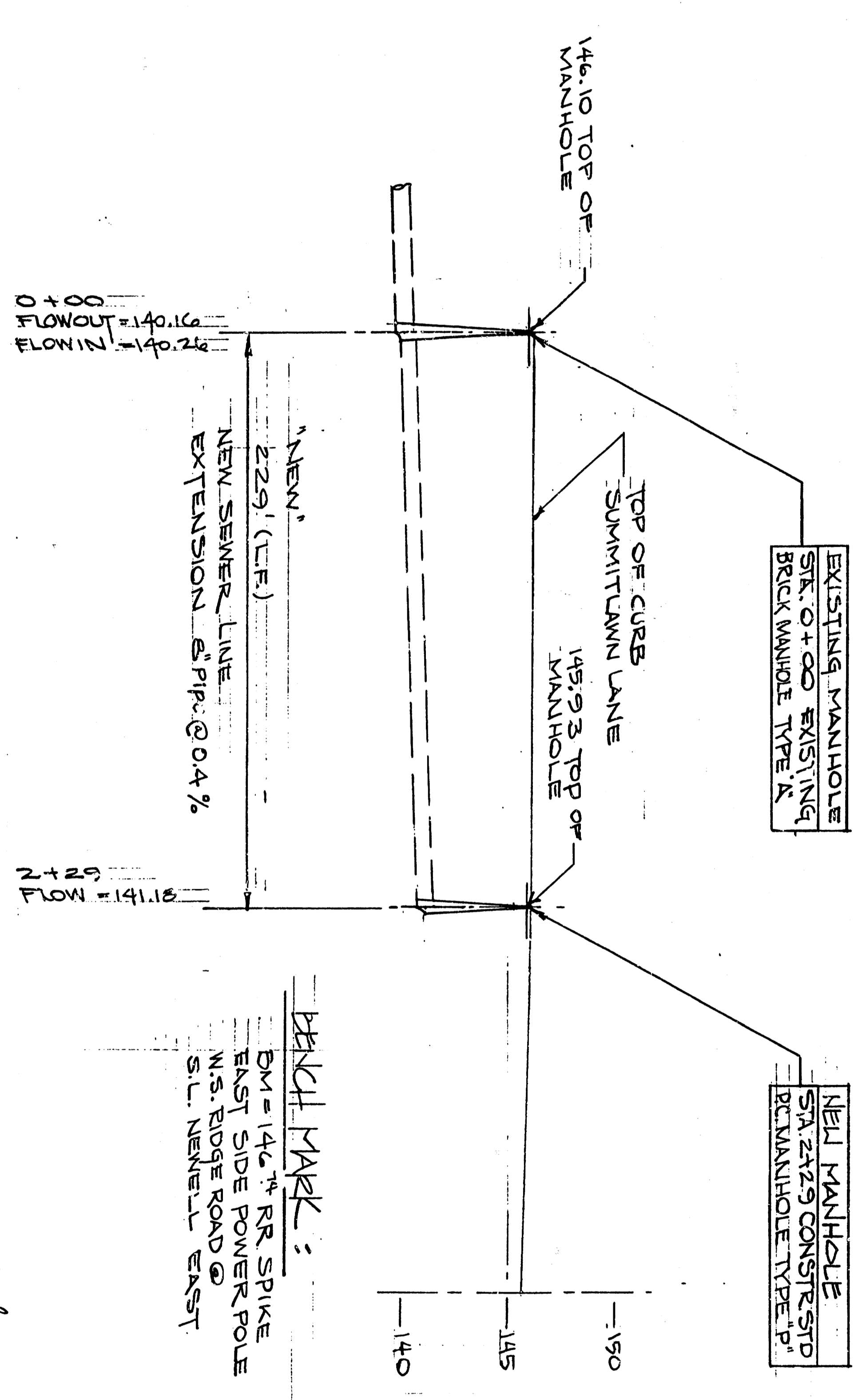
TYPE "P"  
STANDARD MANHOLE  
NO SCALE



ALTERNATE CONSTRUCTION  
IN UNPAVED AREAS  
NO SCALE



SEWER EXTENSION PLAN



SEWER EXTENSION PROFILE

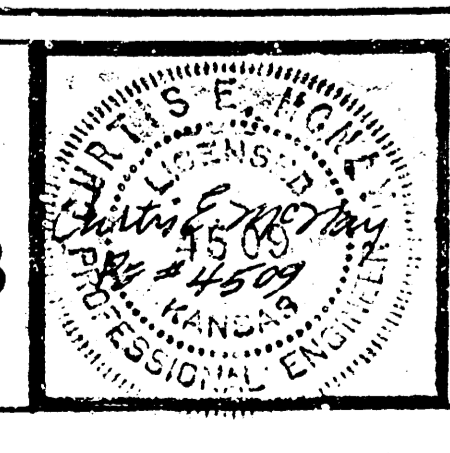
**ADDRESS:**  
534 N. RIDGE ROAD  
WICHITA, KS 67209

**LEGAL DESCRIPTION:**  
LOT 1, NIEDELS STA ADDITION,  
WICHITA, SEDGWICK COUNTY, KANSAS

**RIDGECREST BUILDING**  
**SEWER / MANHOLE**  
**GENERAL NOTES**

- All precast concrete manhole sections shall conform to the specifications of A.S.T.M. C978 as modified by the specifications.
- Non-shrink grout shall be non-metallic type.
- Approved flexible waterproof 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 12" above and below the pipe. The joint between the pipe and the manhole shall be grouted with a 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 TRENCO series 66 H-Build Epoxoline, dry thickness of 8 mils (min.).
- Exterior manhole walls shall be coated with 1 coat Mobilthera 633 Bitumastic 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 specifications. All concrete shall be placed in place with a minimum of 12" above and below the manhole. Manholes constructed where pipe size are smaller than 24" shall have an inside diameter of 24" manholes constructed where pipe size are 24" or larger shall have an inside diameter of 24" or larger. 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 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 to facilitate installing and grouting the new pipe in place. Masonry gaskets shall be used with P.V.C. and A.P.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 manhole shall be finished with a water tight 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 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 flow channels sloped toward the flow channels. Outside drop manholes 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 prevent the manhole excavation or to clay pipe joint 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 specifications and as shown in the standard detail drawing.
- The vertical drop in inside drop manholes shall not exceed inflowing pipes deeper than 12". The crown of inflowing pipes shall never be set lower than the crown of the outflowing pipe.
- Standard manholes and standard inside drop manholes shall be constructed with 12" diameter pipe and 12" diameter 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 a 6" wall and a vertical height of 6" minimum and 18" maximum. The coat of mortar will be plastered on the outside of the collar.

**CABER ASSOCIATES INC.**  
3817 WEST 13TH WICHITA, KS. 67203  
[316] 942-6740



LATERAL 156, SOUTHWEST INTERCEPTOR  
CITY OF WICHITA  
MICHAEL E. LINDEBAY P.E., CITY ENGINEER  
PROJECT NO.: 468-76-243-51871-000-000-001  
INDEX NO.: 740019

REVISIONS	BY
4-10-87	DM
5-10-89	JM

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