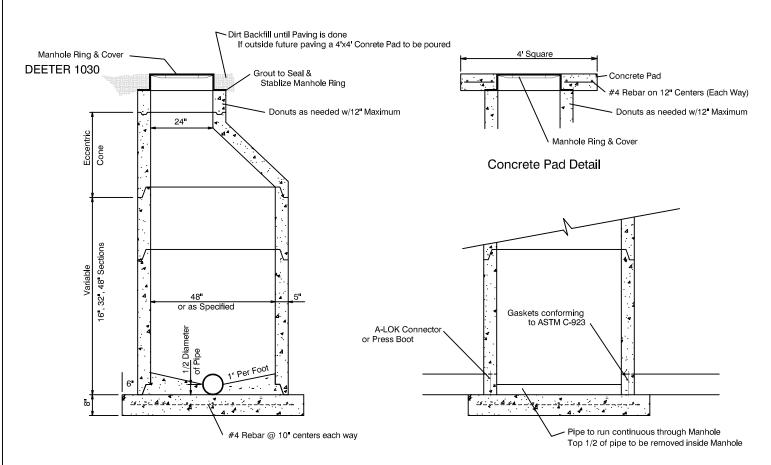


#### NOTES:

- 1. Manhole (Precast) reinforcement shall meet ASTM C-478 Requirements
- 2. Manhole Joints & Lift Holes shall be sealed with Portland Cement Mortar or Approved Equal
- 3. Connection of a Service Line to a Manhole MUST OBTAIN WRITTEN PERMISSION from CITY ENGINEER
- 4. Precast base section may be used if approved by City Engineer



Manhole Sectional Elevation

Pipe Section through Manhole

### Sanitary Sewer Manhole

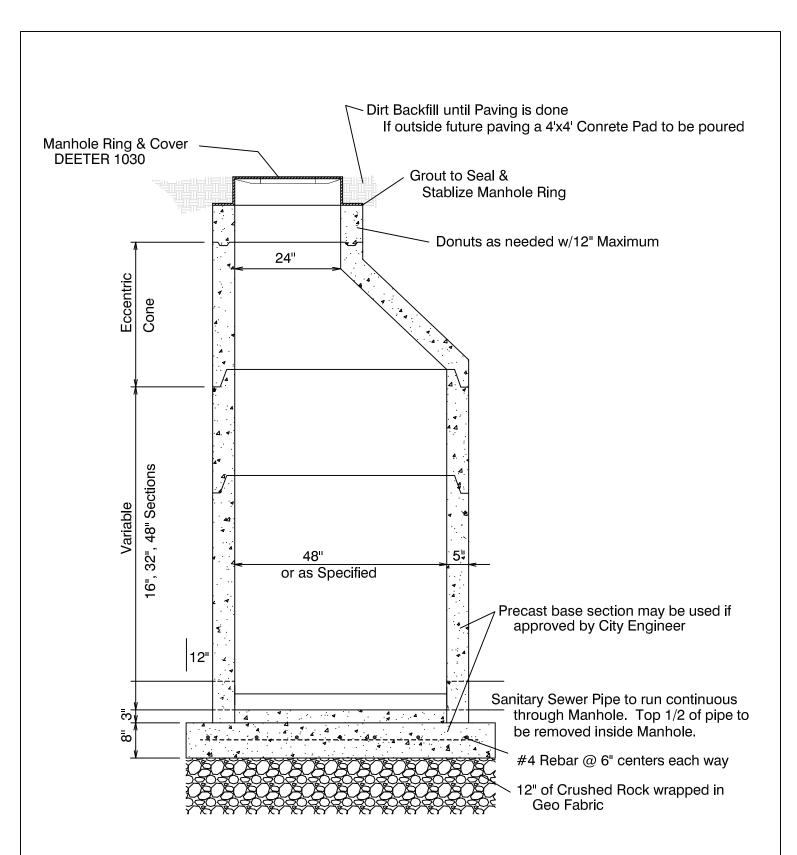
No Scale

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Page VI(A).12a

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	guidance.	

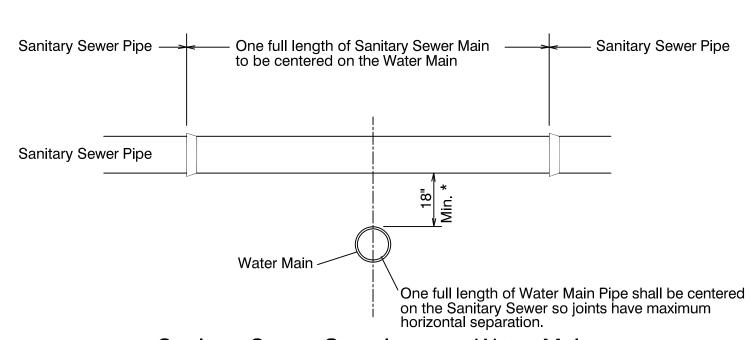


# Special Manhole Construction for High Ground Water or Unstable Soils

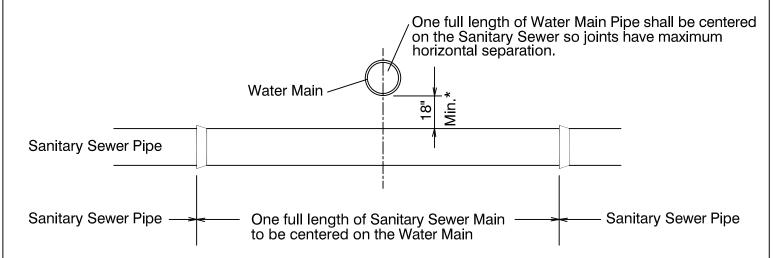
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No Scale

Page VI(A).14



## Sanitary Sewer Crossing over Water Main



#### NOTE:

Crossing of sewer and water mains shall be in accordance with current Nebraska DHHS and DEQ requirements.

\*If separation is less than 18" contact City Engineer. If separation is between 6" and 18" AWWA pressure class 150 psi pipe may be used for sewer main. One full stick of pipe shall be centered on water main if approved by City Engineer.

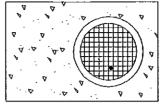
## Sanitary Sewer Crossing under Water Main

## Sanitary Sewer - Water Main Crossings

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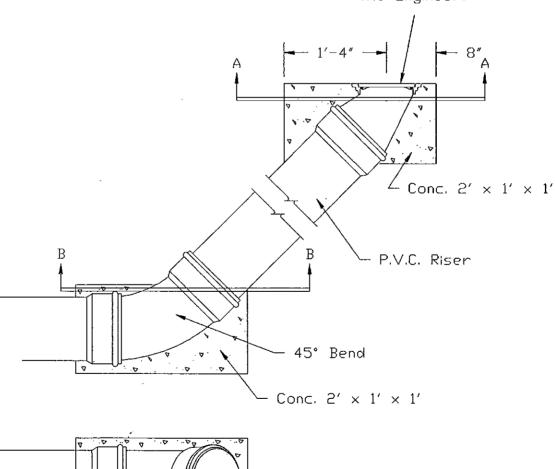
Page VI(A).15

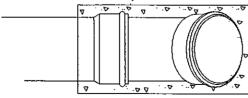


Section A - A

NDTE: Deeter Cleanout Ring & Solid Cover (Heavy Duty - 1810) or Equal

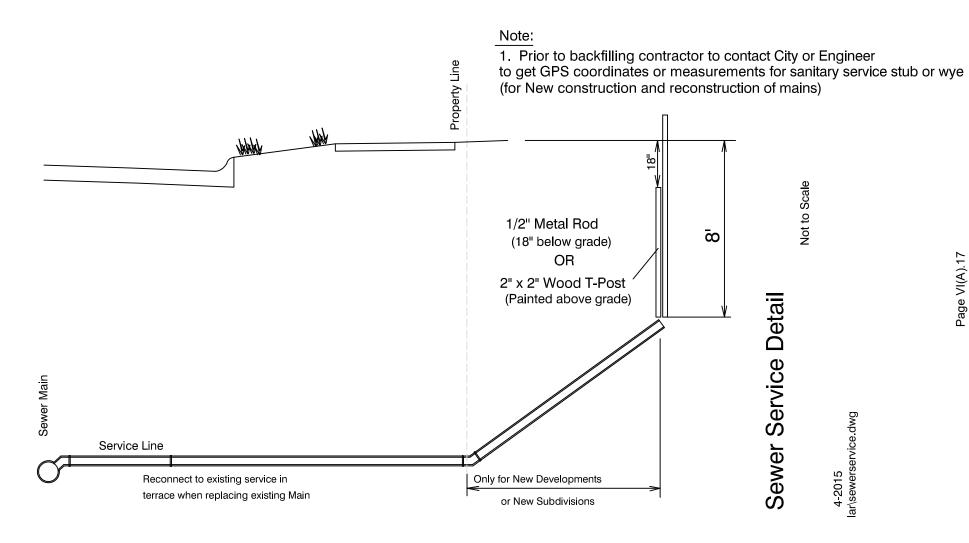
Top of Casting Elev. to be Established in the Field by the Engineer.

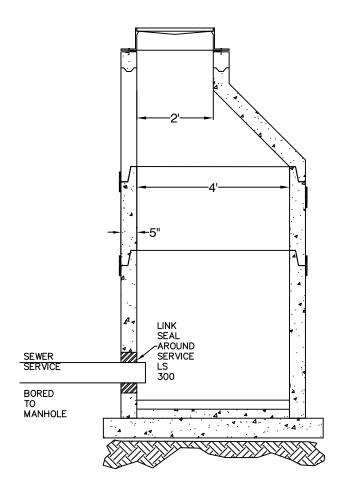




Section B - B

TYPICAL CLEANOUT





#### NOTES:

- 1. 45' ELBOW SHALL BE INSTALLED IF REQUIRED TO MEET FLOW LINE OF SEWER.
- 2. LINK SEAL SHALL BE LINK-SEAL MODULAR SEAL LS-300 OR APPROVED EQUAL

CONNECTION OF SERVICE LINE TO MANHOLE

Page VI(A).18