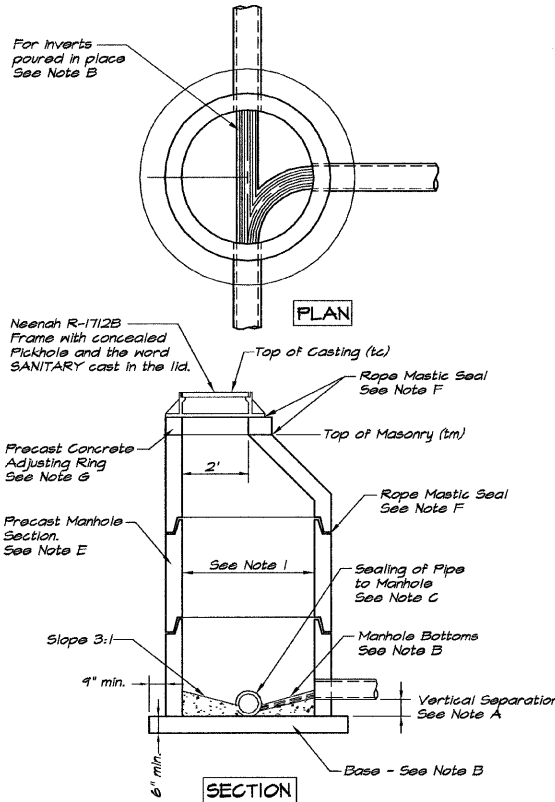


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**NOTE A:**  
For vertical separations greater than 2 feet use dropstack.

**NOTE B:**  
Manholes may have poured in place, precast, or precast bottoms with preformed invert. The manhole bases shall be precast with connection opening specifically designed to accommodate the pipe connection stub and gasket. Poured bases shall have a diameter exceeding the manhole outside diameter by a minimum of 18". On poured in place or precast bottoms without inverts the invert shall be formed by laying the sewer through the manhole. The bottom shall then be shaped as shown in the Standard and the upper half of the sewer carefully removed. All manholes where the pipe size changes, or where there are change in direction, the invert of the manhole shall be shaped with concrete fill to accomplish the change in elevation, diameter and or direction by easy curves.

**NOTE C:**  
Method of sealing connection sewer pipe to manhole shall be approved by the engineer and shall be such as to provide a watertight junction eliminating all infiltration around the pipe. Mortar shall not be used.

**NOTE D:**  
No manhole steps are to be precast into the manhole.

**NOTE E:**  
Precast manhole sections shall be required. Poured in place manholes may be allowed if requested in writing and approved.

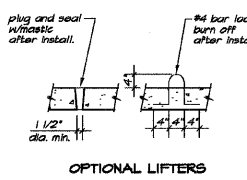
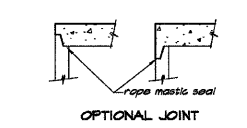
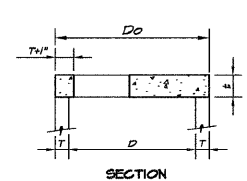
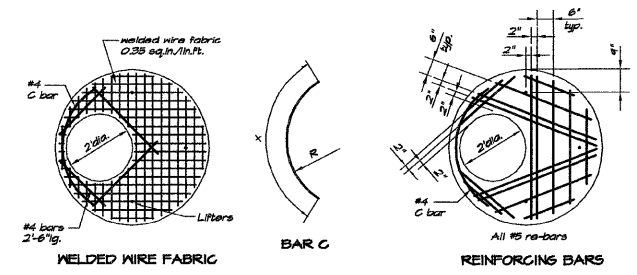
**NOTE F:**  
All masonry joints in the structure shall be sealed using Fernagum Rope Mastic or approved equal. Adjusting rings and the casting shall be sealed using 2 loops of 3/4" Fernagum or mastic.

**NOTE G:**  
Final upward adjustment to grade shall be made using precast concrete adjusting rings. If the required adjustment is 16" or greater, additional manhole sections shall be installed below the cone, except where noted.  
Downward adjustment shall be accomplished by removing existing masonry units and adjusting to final grade as outlined above.

**NOTE H:**  
Entire excavation to be backfilled with trench backfill material, if any edge of excavation is within 2 feet of any paved surface.

**NOTE I:**  
For pipes less than 18", 4' diameter manhole shall be used. For pipes 24" to 42", 5' diameter manhole shall be used.

**STANDARD DESIGN SANITARY MANHOLE**

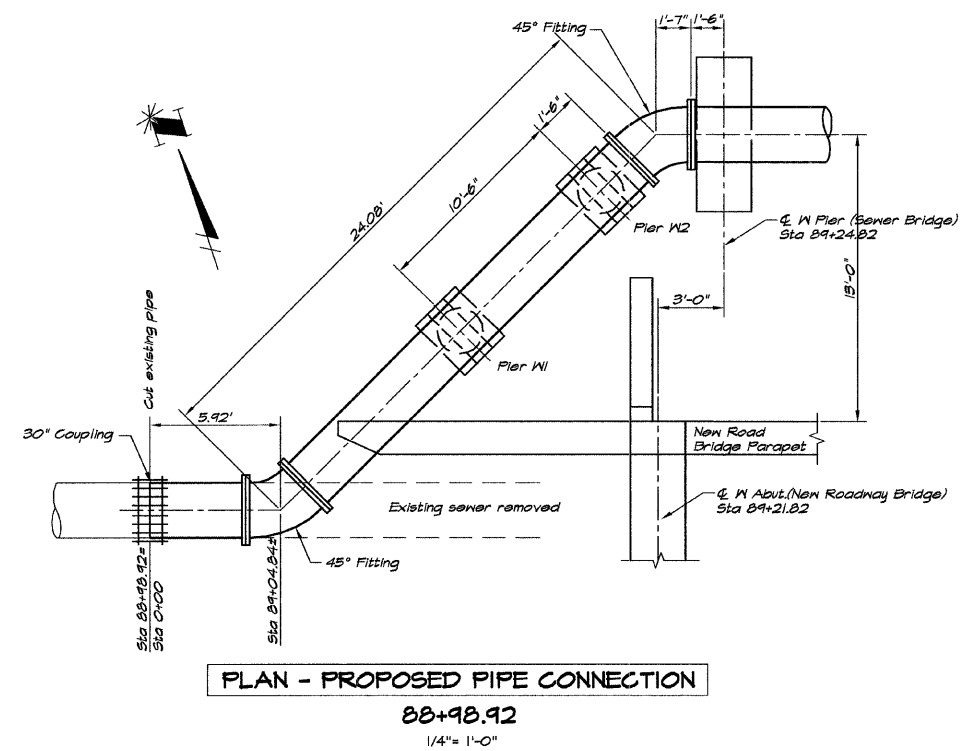


D	T	Do (min)	T (min)	X	R
4'-0"	4"	24-2"	6"	4'-6"	2'-2"
5'-0"	5"	24-2"	6"	5'-0"	2'-6"

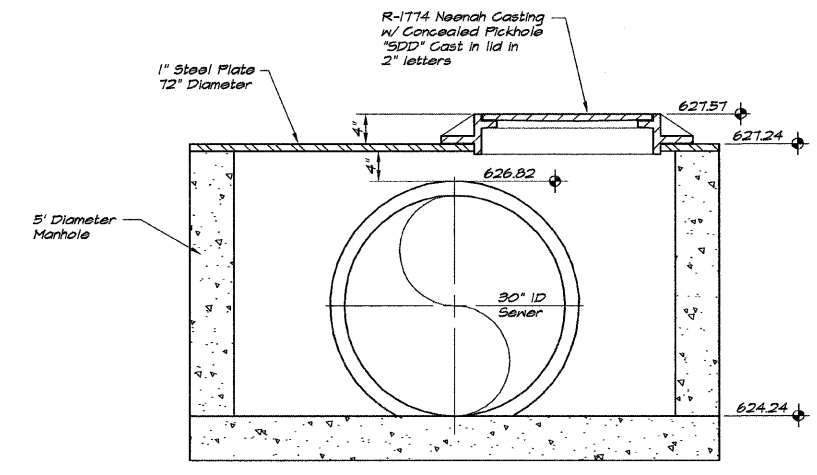
**GENERAL NOTES**

- The Flat Top may be used in lieu of the tapered tops shown in SANITARY MANHOLE at the option of the contractor or when field conditions prohibit the use of tapered tops.
- The cost of furnishing and installing the flat top shall be included in the Contract Unit Price for Manholes, as applicable.
- Joint configurations and dimensions shall match and fit the riser joint detail.
- Lifting devices other than shown may be used upon approval by the Engineer.
- All masonry joints in the manhole shall be sealed using Fernagum Rope Mastic or approved equal. Adjusting rings and the casting shall be sealed using 2 loops of 3/4" Fernagum Rope Mastic.

**PRECAST FLAT TOP**



**PLAN - PROPOSED PIPE CONNECTION**  
88+98.92  
1/4" = 1'-0"



**MANHOLE DETAIL**  
92+28.82 Lt 36'  
1" = 1'-0"

**NOTES**

- Construction shall be in accordance with Standard Specifications for water and Sewer Construction in Illinois, Edition 6.
- 8" sewer shall be SDR 21 PVC, ASTM D-3034.
- 30" sewer shall be Class 350 DIP, AWWA C151, Mechanical Joint and Push-on Joint as noted.
- Manholes shall be tested for tightness in accordance with ASTM C-969 or ASTM C-1244, latest edition.
- 8" and 30" sewers shall be tested and televised for acceptance using Method A, Exfiltration of Air Under Pressure, Deflection for Flexible & Thermoplastic Pipe (8" only), and Method E. Televising as specified in Article 31-1.12 of the Standard Specifications for Water and Sewer Construction in Illinois.

FILE NAME =	USER NAME = \$USER\$	DESIGNED - CRH / BGM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOUTH SHORES DRIVE OVER SAND CREEK ARM SANITARY SEWER STANDARD DETAILS	F.A.U. RTE.	SECTION	CITY	TOTAL SHEETS	SHEET NO.
\$FILE\$	PLOT SCALE = \$SCALE\$	DRAWN - LES JENKINS	REVISED -			7398	09-00905-00-BR	DECATUR	63	20
	PLOT DATE = \$DATE\$	CHECKED - CRH	REVISED -			SCALE: NONE SHEET NO. OF SHEETS STA. TO STA.		CONTRACT NO. 95687		
		DATE - 1/12/12	REVISED -			ILLINOIS FED. AID PROJECT				