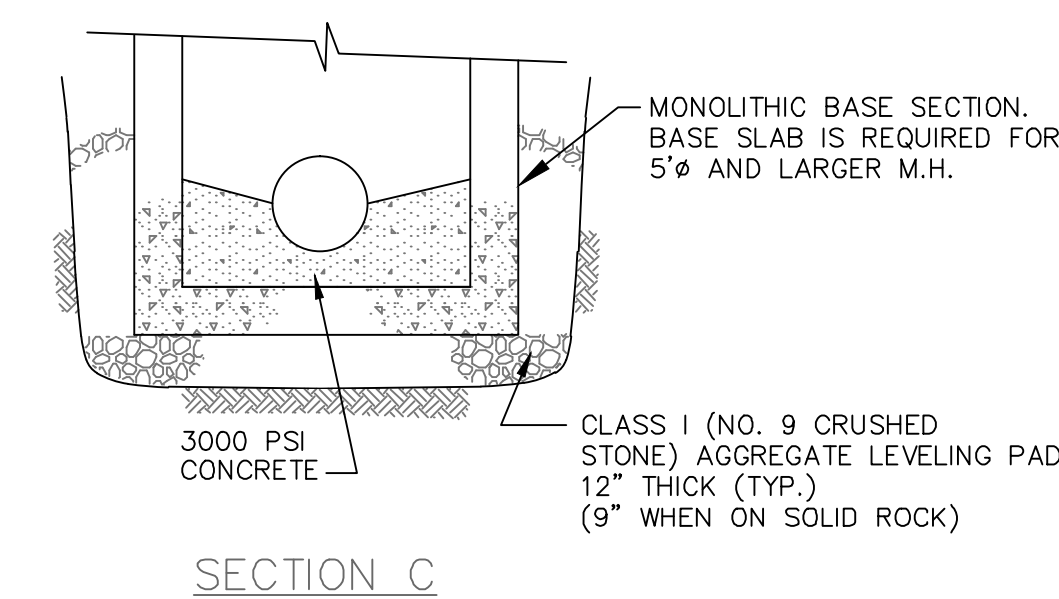
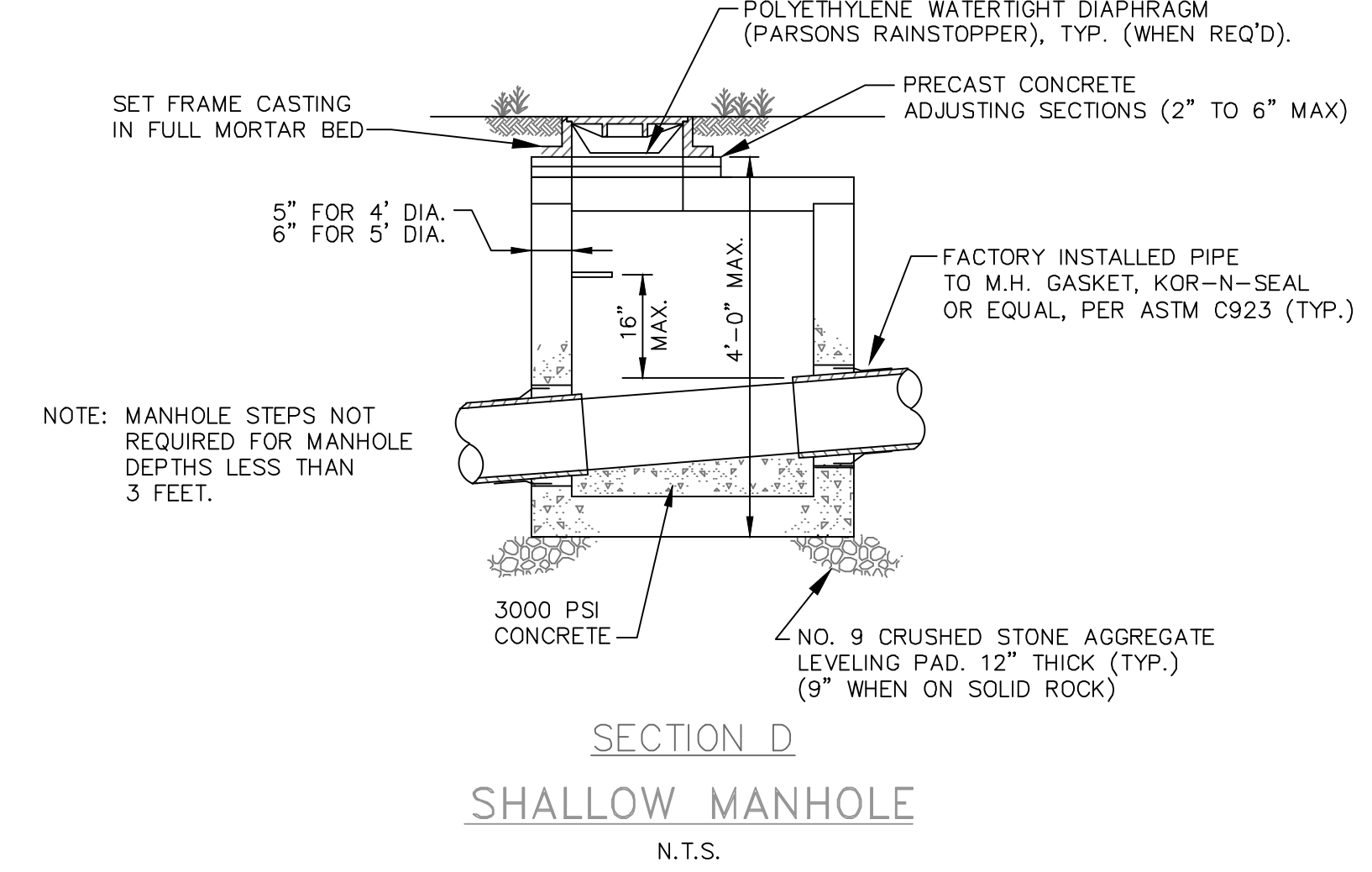
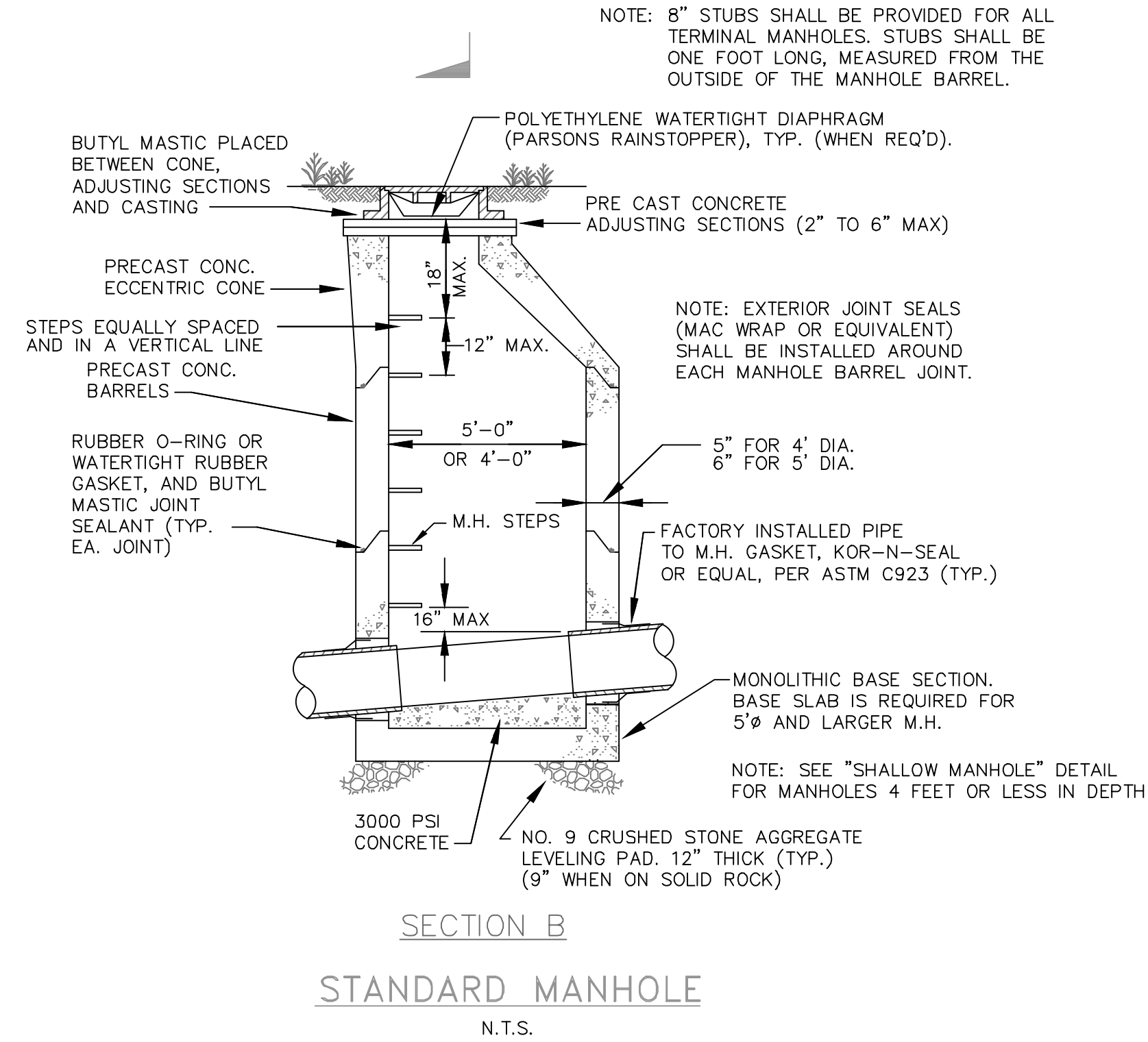
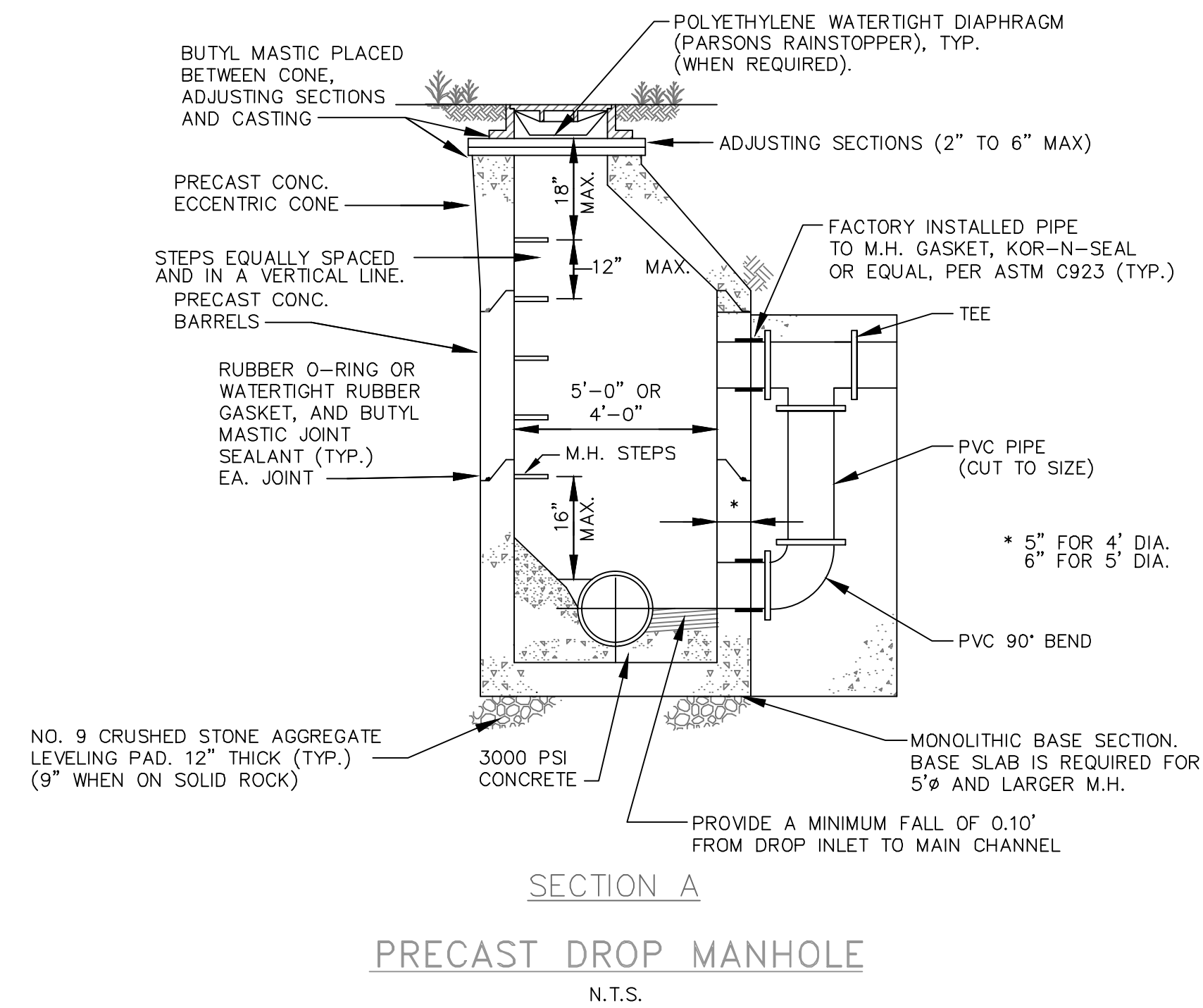
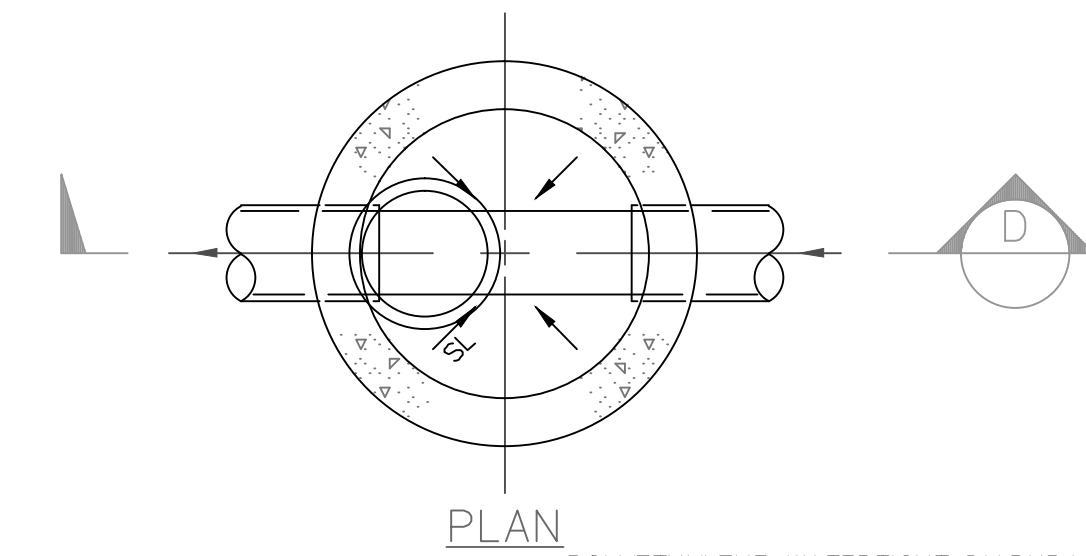
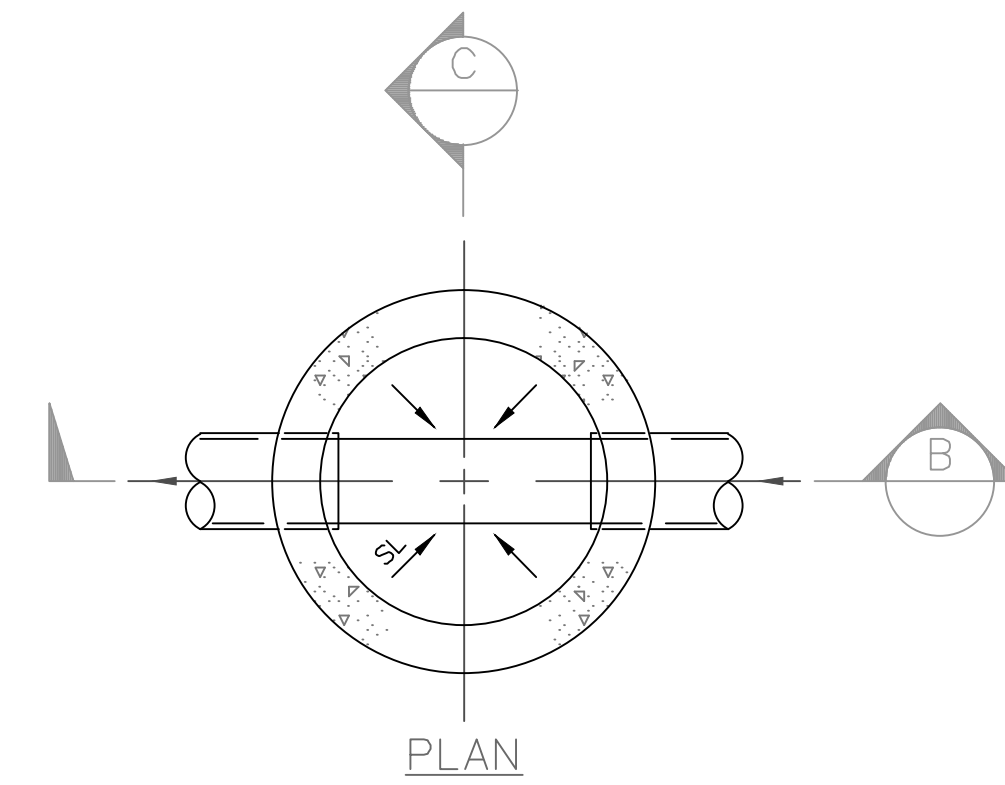
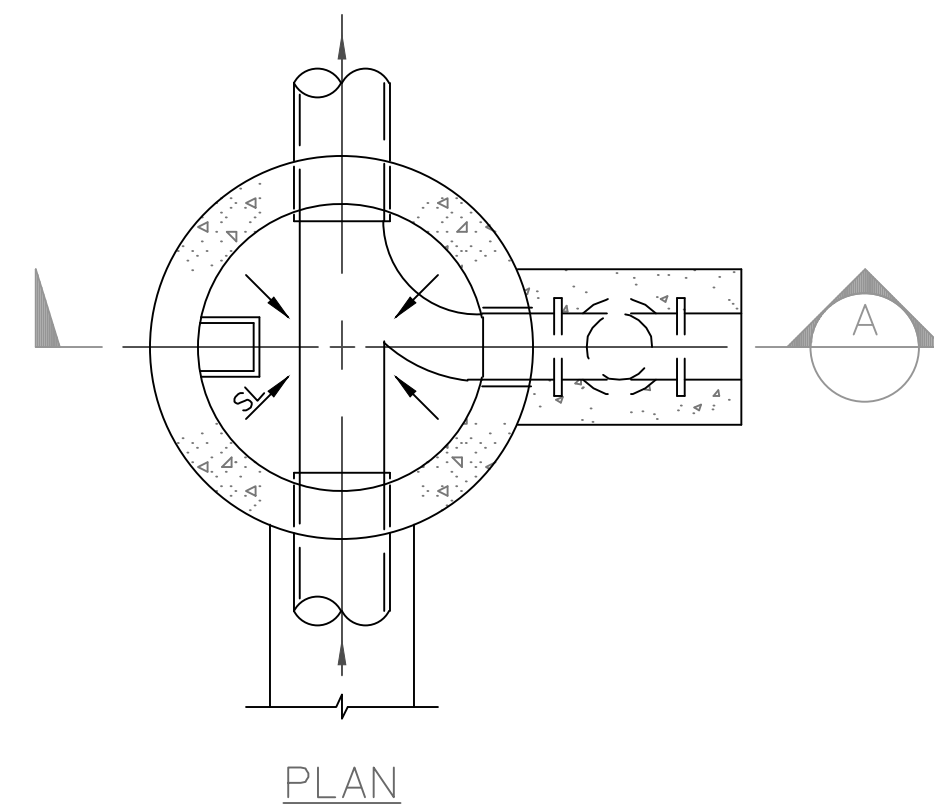
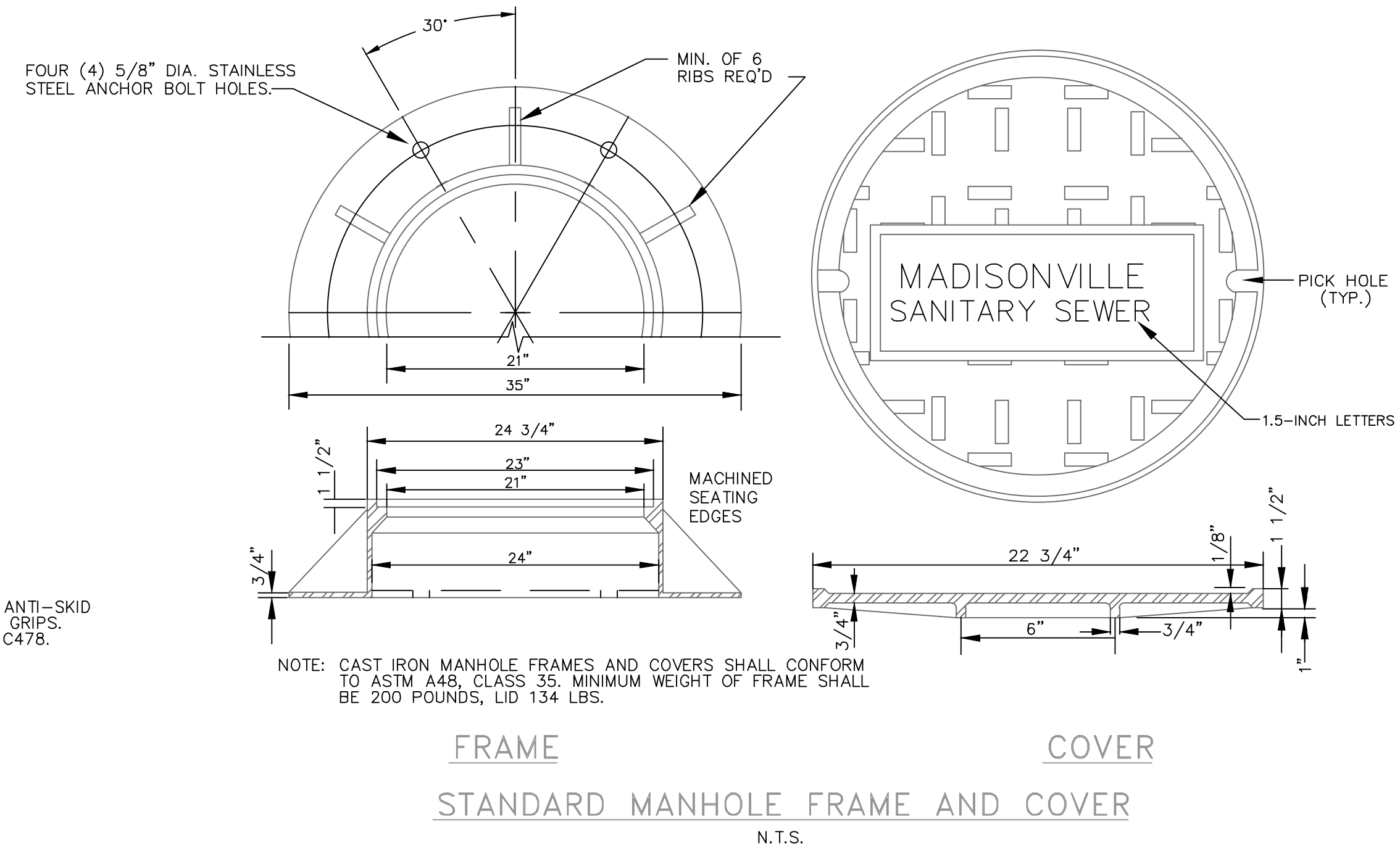
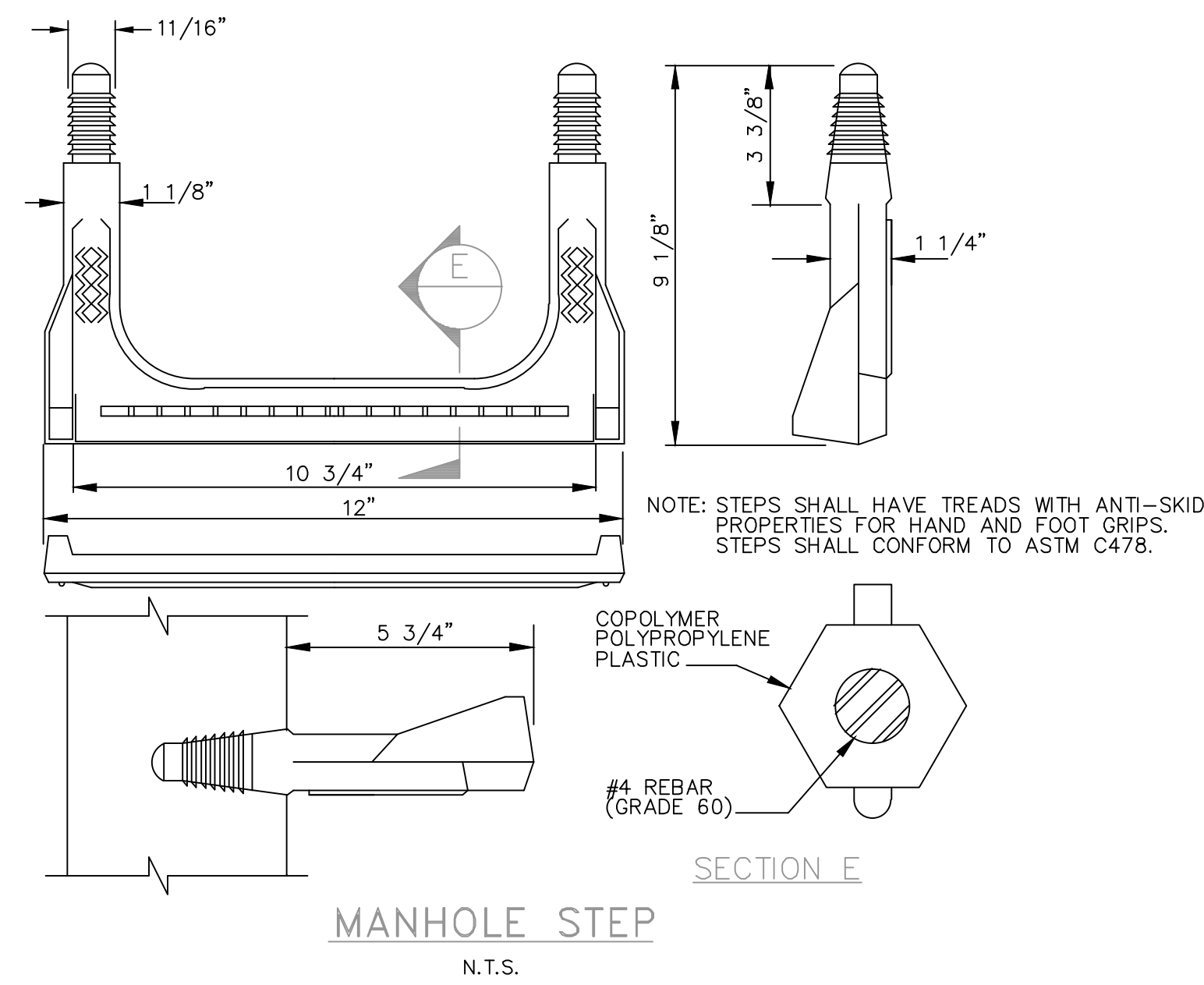


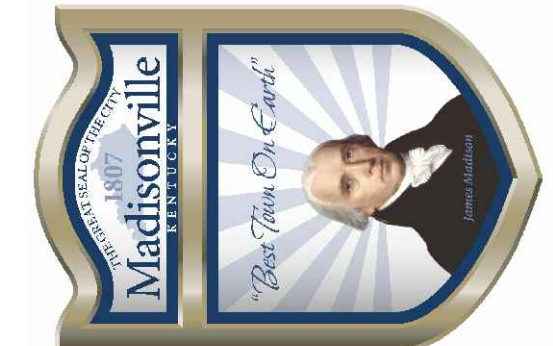
MANHOLE CONSTRUCTION NOTES

- Manholes with precast base sections or bottom slabs must be provided, except base slab is required for Manholes 5 ft. and larger in diameter. Base slab can be round or square. The diameter shall be 1 ft. wider than O.D. of Manhole.
- Precast concrete sections and appurtenances shall conform to the ASTM Standard Specifications for precast reinforced concrete manhole sections, designation C478, latest revision.
- Manholes with precast holes for pipe must be provided with rubber boot (factory installed pipe to manhole gasket) to seal out water.
- All joints on manhole barrel sections shall have a three-way sealing system:
 - Rubber O-Ring or single offset rubber gasket.
 - Butyl mastic joint sealant (Conseal or equivalent).
 - Exterior joint collar consisting of polypropylene fabric with rubberized mastic coating (MacWrap or equivalent).
 Butyl mastic joint sealant is also required between the manhole cone, adjusting sections, and frame.
- Manhole adjusting sections shall be precast concrete. Grade adjustment shall be 2" to 6" max. Only clean adjusting sections shall be used. Each adjusting section shall be laid in a bead of butyl mastic sealant and shall be thoroughly bonded.
- Crown elevation of inflow pipe shall equal or exceed the crown elevation of the outflow pipe.
- Minimum vertical drop across Manhole is 0.10 ft.
- Pipes shall not enter the cone section of the Manhole.
- Benches of Manhole shall be sloped 1" per ft. with smooth finish.
- Minimum Manhole diameters based on inflow and outflow pipe sizes (outside diameter) are as follows:

MANHOLE DIA.	MAX. PIPE O.D. ALLOWED*
4 ft.	30 in.
5 ft.	44 in.
6 ft.	51 in.
8 ft.	72 in.
- For straight through pipes to a 45° deflection. Deflection angles greater than 45° for 12 inch or larger sewers will require special approval of the City of Madisonville.
- Manholes exceeding 15 feet in depth and all drop manholes must be approved by the City of Madisonville prior to construction. The precast supplier should be given the manhole depth to properly design reinforcement. Reinforcement shall conform to ACI 318.
- Manholes installed in floodplain areas or areas subject to stormwater runoff or bonding shall be installed with a polyethylene watertight diaphragm (Parsons Rainstopper) under lid. Diaphragm shall have lifting straps and shall not have valves. The City of Madisonville shall specify where manhole diaphragms are to be installed.



CITY OF
 MADISONVILLE, KENTUCKY
 ENGINEERING DEPARTMENT
 STANDARD DETAILS - SANITARY SEWER CONSTRUCTION



SCALE:	AS NOTED
DATE:	APRIL, 2015
JOB NO.:	
DESIGNED:	RKS
DRAWN:	PTH
CHECKED:	
Q/C:	

OWNER APPROVAL:
 BY:
 TITLE:

REVISIONS:	
NO.:	DATE: