

19. Manholes Built Over Existing Sewers.

a. General Requirements.

- 1) When designing a new manhole over an existing sewer pipeline, see Standard Details S/2.0 and S/2.1. If existing sewer pipeline is PVC, see Standard Detail S/2.2.
- 2) Design the built-over manhole to maintain flow in the existing pipeline at all times.
- 3) For additional requirements, see Part Two, Section 7 (Relocating Sewer Pipelines).

b. Design Requirements.

- 1) Do not design the built-over manhole as a brick manhole.
- 2) When cast in place manholes are to be designed over an existing sewer, see Part Two, Section 11 (Design of Structures).
- 3) Provide clearances between the OD's of the existing and proposed sewer pipelines, for the relationship between the two pipeline, see Part Two, Section 14 (Pipe to Manhole Geometry).
- 4) Design the channel to conform to Standard Detail S/3.3 and provide adequate space within the manhole for removal of existing pipe. Design the channel to suit the existing channel flow and provide adequate width at the top of the bench within the manhole for worker safety and maintenance, see requirements in Part Two, Section 17 (Manhole Channel Design).
- 5) The diameter of the manhole will depend on the requirements in Part Two, Section 14 (Pipe to Manhole Geometry).
- 6) For depth requirements, see Part Two, Section 18 (Manhole Depth Design).
- 7) Design manhole drop connections only for the new sewer pipeline entering into the built-over manhole.
- 8) When the existing pipeline is 12-inch or less above the new pipeline, slope the channel to suit; see Part Two, Section 17 (Manhole Channel Design). For differences over 12-inch, provide two manholes, one to be built over the existing sewer pipeline and the other to make up the difference in elevation.
- 9) When a manhole is built over an existing Asbestos Cement Pipe (ACP), abandon ACP following the requirements for abandonment of sewers in the Sanitary Sewage System Specification.

