

**SECTION 33 30 00****SANITARY SEWERAGE****PART 1 - DESIGN DIRECTIVES****1.1 NOTE TO A/E**

- A. All sanitary mains, services, manholes and appurtenances outside of the building shall be designed per Town of Hanover Standard Specifications for Sanitary Sewers, Manholes and Appurtenances, most current version. If there are any discrepancies between this specification and the Town of Hanover Standard Specifications, the Town of Hanover Standard Specifications will govern.

**1.2 PROJECT INCLUDES**

- A. Sanitary sewerage system piping and manholes.

**PART 2 - PRODUCTS****2.1 MATERIALS**

- A. All materials shall be per Town of Hanover Standard Specifications for Sanitary Sewers, Manholes and appurtenances, most current version.
- B. Identification: Metallic-lined plastic underground warning tapes.

**PART 3 - EXECUTION****3.1 PREPARATION**

- A. Manhole Safety Rules: All OSHA regulations and the following Dartmouth College requirements must be met when workers are in manholes.
  - 1. Whenever a manhole is to be opened, a barricade must be provided. If the manhole is in a road, a vehicle may act as a temporary barricade.
  - 2. When a manhole must be left open overnight, lights must be provided. Flashers are acceptable if no power is available.
  - 3. All persons who are working above an open manhole must wear a red or orange reflector signaling vest.
  - 4. Hardhats must be worn by all persons entering manholes. If the work task is in an area of the manhole where there is a possibility, however remote, of falling or flying objects, such as directly below the hole opening, hardhats must be worn.
  - 5. All employees entering electrical manholes shall wear hardhats at all times.
  - 6. Before entering a manhole, forced ventilation must be provided or the air must be tested for oxygen deficiency and the presence of explosive gasses or fumes.
  - 7. When work is to be performed in a manhole, a continuous supply of fresh air must be provided.
  - 8. No employee may enter a manhole for any reason without a second person at the site. On second or third shift the campus police will provide the extra person.
  - 9. Whenever people are in a manhole there must be either a hand held radio in the manhole or a person plus a vehicle radio above.

**3.2 TESTS**

- A. A representative from the Town of Hanover Department of Public Works shall be present to witness all testing.
- B. Provide Infiltration, Exfiltration and Vacuum tests.
- C. Contractor shall confirm that they have accommodated all testing required by the Town of Hanover for sanitary system connections and piping. Final payment to contractor will be contingent upon satisfying all testing requirements of the Town of Hanover.

END OF SECTION 33 30 00