

## TOPIC 4. FOUNDATION DRAINAGE

**1. GENERAL:** Subsoil (foundation) drainage provides a means of removing water which may percolate to the footing level of a building foundation system. Establish the need for a subsoil drainage system by an analysis of the climate, topography, soil character, water table, geological factors, and the judgment of the designer. Where topographical or other factors exist which would lead to uncertainty regarding the ability of natural drainage to function and avoid damage by subsurface water, provide a subsoil drainage system and show on the architectural basement floor plans. On sections, indicate the relative elevations compared to basement floor level.

### 2. CONSTRUCTION

a. Provide subsoil drains, when judged advantageous and where individually required, at building perimeter wall footings adjacent to basements, crawl spaces, or pipe basements below grade.

b. Install subsoil drains at the same elevation or higher than the base of adjacent footings. When an abrupt change in elevation of footings occurs, drain each level separately.

c. Maintain subsoil drains with a slope as uniform as possible.

*NOTE: The recommended minimum slope is 0.5%.*

d. Drain subsoil piping to a suitable outfall.

*NOTE: Unless site conditions otherwise dictate, do not traverse a building area to reach an outfall. Where a condition makes this imperative, use solid pipe with sealed joints to traverse a building area.*