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dimension of the footing expressed in feet, up to a maximum value of 4 kips per sq. ft. We recommend that continuous wall footings be at least 2-ft. wide.

# Floor Slab

We recommend that the floor slab be designed as an earth-supported slab-on-grade. The floor slab should bear on a minimum of 8 in. of compacted structural fill.

The soils beneath the floor slab are expected to be moist. Therefore, normal damproofing of the floor slab is recommended.

#### Sidewalks

Concrete sidewalks provided around the exterior of the buildings should be supported on a minimum of 4 ft. of compacted structural fill to prevent differential frost heaving and settlement relative to the building foundation.

#### **Frost Protection**

Bottoms of exterior footings should be founded a minimum of 4.5 ft. below the lowest adjacent ground surface exposed to freezing. Bottoms of interior footings in heated areas should be founded a minimum of 18 in. below the top of the adjacent floor slab. However, if exposure to freezing is anticipated either during or following construction, these footings should be lowered in accordance with the recommendations for exterior footings, or the subgrades and foundations should be insulated to prevent freezing.

### **Foundation and Floor Slab Drains**

An underslab drainage system is not considered necessary beneath the ground floor slabs.

#### **Seismic Design Considerations**

We recommend that the building be designed in accordance with the seismic requirements of the latest edition of the BOCA National Building Code. The site coefficient, S, is 1.0; the effective peak velocity-related acceleration coefficient, Av, is 0.10 and the effective peak acceleration coefficient, As, is 0.10.

The soils at the site are not considered to be liquefaction susceptible.

## **Lateral Earth Pressures on Foundation Walls**

