

## **X. CONSTRUCTION MATERIALS**

### **A. Introduction**

A construction materials chapter was added to the statutory requirements for a Master Plan in recognition of both the need for earth materials to facilitate construction and development, as well as the concern for the potential damage to the environment and the community=s landscape that can result from unregulated excavation. Chapter 155-E, Local Regulation Excavations, of the state statutes was initially developed with the latter concerns in mind, but was later modified when it was recognized that both the State and local governments had need for construction materials (otherwise referred to as earth materials) for road construction and other public works activities. The Legislature sought to find a balance between the need to produce earth materials for both public and private use, and the need to protect against the economic, environmental, and aesthetic degradation that had generally ensued upon substantial depletion of commercially useful earth materials from any given excavation site.

### **B. Existing Deposits of Construction Materials**

No new studies have been conducted over the past eight years relative to the location of construction materials in Salem, and the U.S. Geological Survey analysis of geohydrology and stratified-drift aquifers that was cited in the 1992 Master Plan remains the best source of information. The USGS study identified four areas with deposits of sand and gravel within Salem, three of those areas being in north Salem, and one in west Salem, as follows: along Providence Hill Brook and the northerly reach of the Spicket River; westerly of the intersection of North Main Street and Haverhill Road; the northerly shore of Arlington Pond; and an area south of Lowell Road and north of Brady Avenue.

### **C. Existing Excavations**

The 1962 Master Plan contained a map of the Town=s surficial geology that indicated the sites of 60 gravel operations in Salem as of 1961. By the time of the preparation of the 1992 Master Plan, the number of active excavation operations was reduced to four. In 2000, only one of those operations, the 18-acre Merrill site on the Atkinson border off of Shannon Road, remains active. No information is available on the condition of the abandoned or completed excavations in Salem; however, pursuant to the Town=s excavation regulations, the Town is empowered to issue orders to land owners to address the reclamation of abandoned or completed excavations on their property.

### **D. Existing Excavation Regulations**

State law (RSA 155-E) sets forth the process by which, and the parameters within which, municipalities may regulate the excavation of earth materials. One provision of the law indicates that excavations shall be allowed by special exception in all non-residential areas of a municipality which has a zoning or other applicable ordinance@ that either prohibits excavation or does not address excavation, and where there are commercial earth resources on unimproved land within ... [the municipal] boundaries@. While Salem has adopted excavation regulations as

Chapter 182 of the Municipal Code which reasonably parallel the provisions of the state law, these regulations only set forth a process for regulating excavation and do not address the allowable locations for the same. The Town=s Zoning Ordinance does not address excavations as a permitted use, meaning that the statutory provisions are applicable in Salem for excavations to be allowed by special exception in all non-residential areas of the community. Whether land values will actually support any new excavations in Salem is unknown, but the Town has exercised that portion of the statutory authority to provide appropriate procedural safeguards for operation and reclamation of excavation sites.

#### **E. Construction Materials Recommendations**

XUndertake a review of the condition of abandoned or completed excavations, and where appropriate, issue orders, pursuant to the Town=s excavation regulations, to address the reclamation of these abandoned or completed excavations.

XAmend the Zoning Ordinance to allow excavations in specific districts where there are unimproved lands with identified areas of sand and gravel deposits.

XReview and revise, as necessary and appropriate, the Town=s excavation regulations.

## **Supporting Studies and References**

*X*Geohydrology and Water Quality of Stratified-Drift Aquifers in the Lower Merrimack and Coastal River Basins, Southeastern New Hampshire, prepared by Peter J. Stekl and Sarah M. Flanagan for the U.S. Geological Survey, 1992.