APPENDIX B

SCS SOIL DESCRIPTIONS
Soils Definitions

Adrian
The Adrian series consists of very deep, very poorly drained soils formed in herbaceous organic material over sandy deposits on outwash plains, lake plains, lake terraces, flood plains, moraines, and till plains. Permeability is moderately slow to moderately rapid in the organic material and rapid in the sandy material. Slope ranges from 0 to 1 percent. Mean annual precipitation is about 35 inches, and mean annual temperature is about 50 degrees F.

Alton
The Alton series consists of very deep, well drained and somewhat excessively drained soils formed in gravelly glacial outwash deposits. These soils are on terraces, kames, alluvial fans and remnant beach ridges. Slope ranges from 0 to 45 percent. Mean annual temperature is 49 degrees F, and mean annual precipitation is 38 inches.

Appleton
The Appleton series consists of very deep, somewhat poorly drained soils formed in loamy glacial till. They are on low ground moraines and on foot slopes of glaciated hills and ridges. Permeability is moderate in the surface layer and moderately slow or slow in the subsoil and substratum. Slope ranges from 0 to 15 percent. Mean annual temperature is 49 degrees F, and mean annual precipitation is 40 inches.

Canandaigua
The Canandaigua series consists of very deep, poorly and very poorly drained soils formed in silty glacio-lacustrine sediments. These soils are on lowland lake plains and in depressional areas on glaciated uplands. Slope ranges from 0 to 3 percent. Mean annual temperature is 49 degrees F, and mean annual precipitation is 39 inches.

Carlisle
The Carlisle series consists of very deep, very poorly drained soils formed in woody and herbaceous organic materials in depressions within lake plains, outwash plains, ground moraines, floodplains and moraines. These soils have moderately slow to moderately rapid permeability. Slopes are 0 to 2 percent. Mean annual precipitation is about 32 inches, and mean annual temperature is about 48 degrees F.
Covert
The Covert series consists of very deep, moderately well drained soils formed in sandy glacial drift on ground moraines, outwash plains, lake plains, and dunes. Permeability is rapid. Slope gradients range from 0 to 8 percent. Mean annual precipitation is about 35 inches, and mean annual temperature is about 47 degrees F.

Fredon
The Fredon series consists of very deep, poorly and somewhat poorly drained soils formed in glaciofluvial materials. Fredon soils are on outwash terraces. Permeability is moderate or moderately slow in the solum and rapid or moderately rapid in the substratum. Slope ranges from 0 to 8 percent. The mean annual temperature is about 48 degrees F. and the mean annual precipitation is about 46 inches.

Jebavy
The Jebavy series consists of poorly drained soils that are shallow to a cemented subsoil. These soils formed in glaciofluvial deposits on lake plains and outwash plains. Permeability is moderate in the ortstein and rapid in the remainder of the profile. Slope ranges from 0 to 2 percent. Mean annual precipitation is about 31 inches, and the mean annual temperature is about 47 degrees F.

Lamson
The Lamson series consists of very deep, poorly drained and very poorly drained soils formed in glacio-fluvial, glacio-lacustrine and deltaic deposits. They are level and nearly level soils in low areas on glacial lake plains. Slope ranges from 0 to 3 percent but is mostly less than 2 percent. Permeability is moderate or moderately rapid. Mean annual air temperature is 49 degrees F. and mean annual precipitation is 37 inches.

Minoa
The Minoa series consists of very deep, somewhat poorly drained soils formed in deltaic sediments. They are nearly level or gently sloping soils on lowland lake plains. Permeability is moderate in the solum, and moderate or moderately rapid in the substratum. Slope ranges from 0 to 8 percent, mean annual temperature is about 49 degrees F., and mean annual precipitation is about 39 inches.

Napoleon
The Napoleon series consists of very deep, very poorly drained soils formed in deep organic deposits. Permeability is moderate or moderately rapid. Slope gradients range from 0 to 2 percent. Mean annual precipitation is about 32 inches, and mean annual temperature is about 48 degrees F.
Niagara
The Niagara series consists of very deep, somewhat poorly drained soils formed in silty glacio-lacustrine deposits. These soils are in level to slightly concave areas on lake plains and in valleys. Slope ranges from 0 to 15 percent. The mean annual air temperature is 48 degrees F, and mean annual precipitation is 37 inches.

Otego
The Otego series consists of very deep, moderately well drained soils formed in post-glacial alluvium derived mainly from regolith containing sandstone, siltstone, and shale and are on flood plain steps on flood plains near till plateaus and glacial outwash terraces. Permeability is moderate in the solum and upper substratum, and moderate or moderately rapid in the lower substratum. Slope ranges from 0 to 3 percent. Mean annual temperature is about 49 degrees F., and mean annual precipitation is about 37 inches.

Palms
The Palms series consist of very deep, very poorly drained soils formed in herbaceous organic material 16 to 51 inches thick and the underlying loamy deposits in closed depressions on moraines, lake plains, till plains, outwash plains, hillside seep areas, and on backswamps of floodplains. They have moderately slow to moderately rapid permeability in the organic material, and moderate or moderately slow permeability in the loamy material. Slope ranges from 0 to 6 percent. Mean annual precipitation is about 35 inches, and mean annual temperature is about 50 degrees F.

Raynham
The Raynham series consists of very deep, poorly drained soils that formed in silty estuarine or glaciolacustrine deposits on glacial lake plains and terraces. Permeability is moderate or moderately slow in the solum and slow in the substratum. Slope ranges from 0 to 12 percent. Mean annual precipitation is about 34 inches and mean annual temperature is about 48 degrees F.

Rhinebeck
The Rhinebeck series consists of very deep, somewhat poorly drained soils formed in clayey lacustrine sediments. They are on glacial lake plains and uplands mantled with lake sediments. Slope ranges from 0 to 15 percent. Mean annual temperature is 48 degrees F, and mean annual precipitation is 39 inches.
Schoharie
The Schoharie series consists of very deep, moderately well drained soils formed in clayey lacustrine sediments. They are on glacial lake plains and uplands mantled with lake sediments. Permeability is slow or very slow throughout the soil. Slope ranges from 0 to 30 percent. Mean annual temperature is 48 degrees F., and mean annual precipitation is 39 inches.

Scio
The Scio series consists of very deep, moderately well drained soils formed in eolian, lacustrine, or alluvial sediments dominated by silt and very fine sand. They are on terraces, old alluvial fans, and in upland basins. Permeability is moderate to a depth of 40 inches and ranges from rapid to slow below 40 inches. Slope ranges from 0 to 25 percent. Mean annual temperature is 48 degrees F., and mean annual precipitation is 37 inches.

Udifluvents
Udifluvents consists of very deep, well drained and moderately well drained soils. These soils formed in recent alluvial deposits on flood plains of large, fast flowing streams that are subject to frequent flooding.

Udorthents
Udorthents consist of very deep, moderately well drained and well drained, clayey or loamy soils that have been reshaped in cutting and filling operations. These soils commonly near construction sites or urban developments that have been recently cut and filled.

Unadilla
The Unadilla series consists of deep and very deep, well drained soils formed in silty, lacustrine sediments or old alluvial deposits. These soils are on valley terraces and lacustrine plains. Permeability is moderate in the solum and moderately rapid or rapid in the substratum below 40 inches. Slope ranges from 0 to 50 percent. Mean annual temperature is 48 degrees F., and mean annual precipitation is 36 inches.

Wakeville
The Wakeville series consists of very deep, somewhat poorly drained soils on flood plains. They formed in silty alluvium. They are nearly level soils that are subject to common flooding. Permeability is moderate throughout the soil. Slope ranges from 0 to 3 percent. Mean annual temperature is 48 degrees F., and mean annual precipitation is 37 inches.

Wallington
The Wallington Series consists of very deep, somewhat poorly drained soils formed in silty lacustrine deposits. They are nearly level or gently sloping
soils on lacustrine plains or basins. Permeability is moderate above the fragipan and slow in the fragipan and substratum. Mean annual temperature is 48 degrees F., and mean annual precipitation is 37 inches.

**Wareham**
The Wareham series consists of very deep, poorly and somewhat poorly drained sandy soils formed in outwash on plains, deltas, and terraces. Slope ranges from 0 to 8 percent. Permeability is rapid throughout. Mean annual temperature is about 49 degrees F. and mean annual precipitation is about 47 inches.

**Wayland**
The Wayland series consists of very deep, poorly drained and very poorly drained, nearly level soils formed in recent alluvium. These soils are in low areas or slackwater areas on flood plains. Permeability is moderately slow to moderate in the A horizon and slow in the underlying horizons. Slope ranges from 0 to 3 percent. Mean annual temperature is 49 degrees F. and mean annual precipitation is 36 inches.

**Wenonah**
The Wenonah series consist of very deep, well drained, loamy soils on flood plains. These soils formed in alluvium derived from glacial drift containing sandstone, siltstone and shale. Slope ranges from 0 to 3 percent. The mean annual temperature is 48 degrees F. and the mean annual precipitation is 40 inches.

**Windsor**
The Windsor series consists of very deep, excessively drained soils formed in sandy glacial outwash. They are nearly level to very steep soils on glaciofluvial landforms. Slope ranges from 0 to 60 percent. Permeability is rapid or very rapid throughout. Mean annual temperature is about 50 degrees F., and mean annual precipitation is about 43 inches.