Cross Sections

- Sand and gravel; may contain some silt or diamicton
- Laminated silt and clay
- Diamicton, massive silt, or other fine-grained sediment
- Contact

Detailed legend: 1 inch = 2,000 feet
Detailed legend: 1 inch = 100 feet
Detailed exaggeration: 20x
Peat and organic silts were deposited in current and former poorly drained (but typically much thinner), are common in depressions and low-lying areas and are not predictable in their dimensions. Sand and gravel deposits in central Kane County were more extensive than in other areas of Kane County. Peat and organic silt deposits in Kane County are mapped as “green clay” in water-well drillers’ logs. Where redeposited in low-lying areas, late glacial lake deposits (Teneriffe Silt) may have been partially mixed with the overlying deposits, but they are not shown. Dashed lines in the cross sections indicate areas where boring (stippled areas on the cross sections) within the Glasford, Tiskilwa, and Robein Members of the Roxana Silt and the Harwood Member of the Tiskilwa Formation were carried out as part of the geotechnical exploration borings (Kempton et al. 1987, Graese et al. 1988). This temporary consolidation of glacial tills was measured by deposition of fine to medium sand, and peat and organic silt deposits also are present.

Between 20 to 30 and 40,000 radiocarbon years ago, during the Wisconsin Episode, glacial Lake Kankakee was overridden by glaciers that advanced from the north and south. The boundaries of this former lake are inferred from sand and gravel deposits in Kane County (Curry et al. 1989, 1995, 1999). The stratigraphic nomenclature is from Hansel (1976). The locations of most important data sources used are shown on the map (fig. 1). The most important data sources include the Illinois State Geological Survey’s unpublished reports (Kempton et al. 1987, Graese et al. 1988), Illinois State Geological Survey’s unpublished reports (Kempton et al. 1987, Graese et al. 1988), and Illinois State Geological Survey’s unpublished reports (Kempton et al. 1987, Graese et al. 1988).

Methods

Sedimentology

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Environmental Hazards

Surface contaminants pose a potential threat to groundwater supplies and to the public. Surface contamination and subsurface deposits, such as buried peat and organic silt deposits, are mapped as “green clay” in water-well drillers’ logs. Where redeposited in low-lying areas, late glacial lake deposits (Teneriffe Silt) may have been partially mixed with the overlying deposits, but they are not shown. Dashed lines in the cross sections indicate areas where boring (stippled areas on the cross sections) within the Glasford, Tiskilwa, and Robein Members of the Roxana Silt and the Harwood Member of the Tiskilwa Formation were carried out as part of the geotechnical exploration borings (Kempton et al. 1987, Graese et al. 1988). This temporary consolidation of glacial tills was measured by deposition of fine to medium sand, and peat and organic silt deposits also are present.

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