This map was prepared by the Illinois State Geological Survey, in cooperation with the Illinois Department of Commerce and Community Affairs and the Lee County Board. It is part of a suite of maps created to assist local government in... concerning capable sites for landfill development. Maps produced for this study are intended for regional land use planning purposes. More detailed mapping is needed for site specific considerations. This map has been reviewed for scientific accuracy and has been edited to meet the quality standards of maps in the ISGS Map Series.

Explanation

Relief is defined as the difference between the maximum and minimum elevations in surface topography within a geographic area. A relief map can be created using either topographic contours or shaded relief, and colors are used to represent the variation in elevation with abrupt color changes. Landform shading may also be influenced by the shadows of nearby landforms of higher elevation.

Although a shaded relief map does not depict absolute elevation, the variation in elevation can be used to more easily identify and interpret landforms. Several landforms are readily identifiable from the Shaded Relief of Lee County:

- **Green River Lowland.** The Green River Lowland is a low lying, poorly-drained outwash plain containing sand ridges and dunes (Leighton et al., 1948) trending east-west through the middle portion of Lee County. This low area is the site of the lowest land surface elevations in the county (less than 650 feet above mean sea level or MSL).

- **Bloomington Moraine.** One of the most prominent topographic features in Lee County is the broad morainic ridge of the Bloomington Moraine which extends along the southern and eastern edge of the county. The moraine consists of thick glacial till with the crest having an approximate elevation of 900 to 950 feet above MSL.

- **Temperance Hill.** Located slightly north of the center of Lee County is an east-west trending ridge with elevations of greater than 850 feet above MSL (Inset B). This ridge, called Temperance Hill, is the remnant of an Illinoian age moraine (Berg, et al., 1985).

Drainage Pattern.

The local relief in the northwest portion of the map accentuates a pattern of dendritic drainage. Dendritic drainage typically forms in areas of uniformly resistant, gently sloping near-surface bedrock (Ritter, 1986). The northwestern and north-central portion of the county lie within the Rock River Hill Country (Inset A). This area is typically underlain by a thin veneer of glacial drift overlying bedrock. Consequently, the topography of the Rock River Hill Country is determined primarily by the bedrock surface (Leighton et al., 1948).

This map was compiled from Digital Raster Graphic (DRG) files of 7.5-minute topographic quadrangles from the United States Geological Survey. The information shown on this map was used to create additional maps depicting shaded relief, drift thickness and bedrock surface topography.

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References

