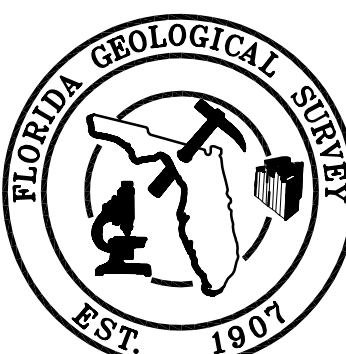


SURFICIAL SEDIMENTS OF THE
WESTERN PORTION OF THE U.S.G.S.
1:100,000 SCALE SARASOTA QUADRANGLE

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The surficial sediments and soils of the western portion of the U.S.G.S. 1:100,000 scale Sarasota Quadrangle are moderately variable in their makeup. End-member lithologies of sediments in the study area include quartz sand, silt, clay, and organic material.

For the purposes of this map, surficial sediment types were determined by examining material from within the upper two meters of the land surface. Data utilized in creating this map came from a variety of sources, including the United States Department of Agriculture (U.S.D.A.) soil surveys of Manatee, Sarasota, and Charlotte Counties (Hyde and Huckle, 1983; Hyde, et al., 1991; and Henderson, 1984), hand-augered samples, surficial samples, well cuttings, and cores.

Over 50 different soil classifications were identified for the Sarasota quadrangle in the U.S.D.A. soil surveys for Manatee, Sarasota, and Charlotte Counties. For the purposes of this map, these soil types were combined into six units. These units are based on the lithologies of the constituent components of the soil types and did not take into account factors such as moisture content and plasticity. For more detailed information on soil types in the area, the reader should refer to the U.S.D.A. Soil Surveys for Manatee, Sarasota and Charlotte Counties (see Hyde and Huckle, 1983; Hyde et al., 1991; and Henderson, 1984, respectively).

The predominant constituent of the surficial sediments throughout the quadrangle is quartz sand. This is most evident in the northeastern part of the study area, where elevations are relatively high, and the undifferentiated Quaternary (Qu) sediments are thickest (see accompanying geologic map). All of the sediment types shown on this map contain at least some quartz sand. In some areas, the unit mapped as sand contains minor shell material. Although much of the area mapped as Tertiary/Quaternary undifferentiated fossiliferous sediments (TQu) on the accompanying geologic map does contain significant amounts of shell material, it was generally deeper than two meters below the land surface.

The next most common sediment type in the study area is loam. Loam, which is defined as "soil material that is 7 to 27 percent clay particles, 28 to 50 percent silt particles, and less than 52 percent sand particles" (Hyde, et al., 1991, p. 97), occurs throughout much of the map area, particularly in drainage features and basins. Occurrences of loam are most prevalent in areas where the Qu is relatively thin (see geologic map).

The remaining units depicted on this map: sand/loam, clay/sand/loam, muck, and sand/rock, are relatively minor in areal extent. Mixtures of sand and loam are most prevalent in the southern part of the study area. Clayey sediments, with admixtures of sand and loam, are present near the southern Myakka River basin. Muck, soil material which contains slowly decaying organic matter and may contain some silt and clay, is present around the Myakka River basin, the Braden River basin, and in other areas where drainage is poor. The unit mapped as sand/rock generally coincides with areas where the Arcadia Formation is within a few meters of the land surface, such as around the Braden River and Bradenton.

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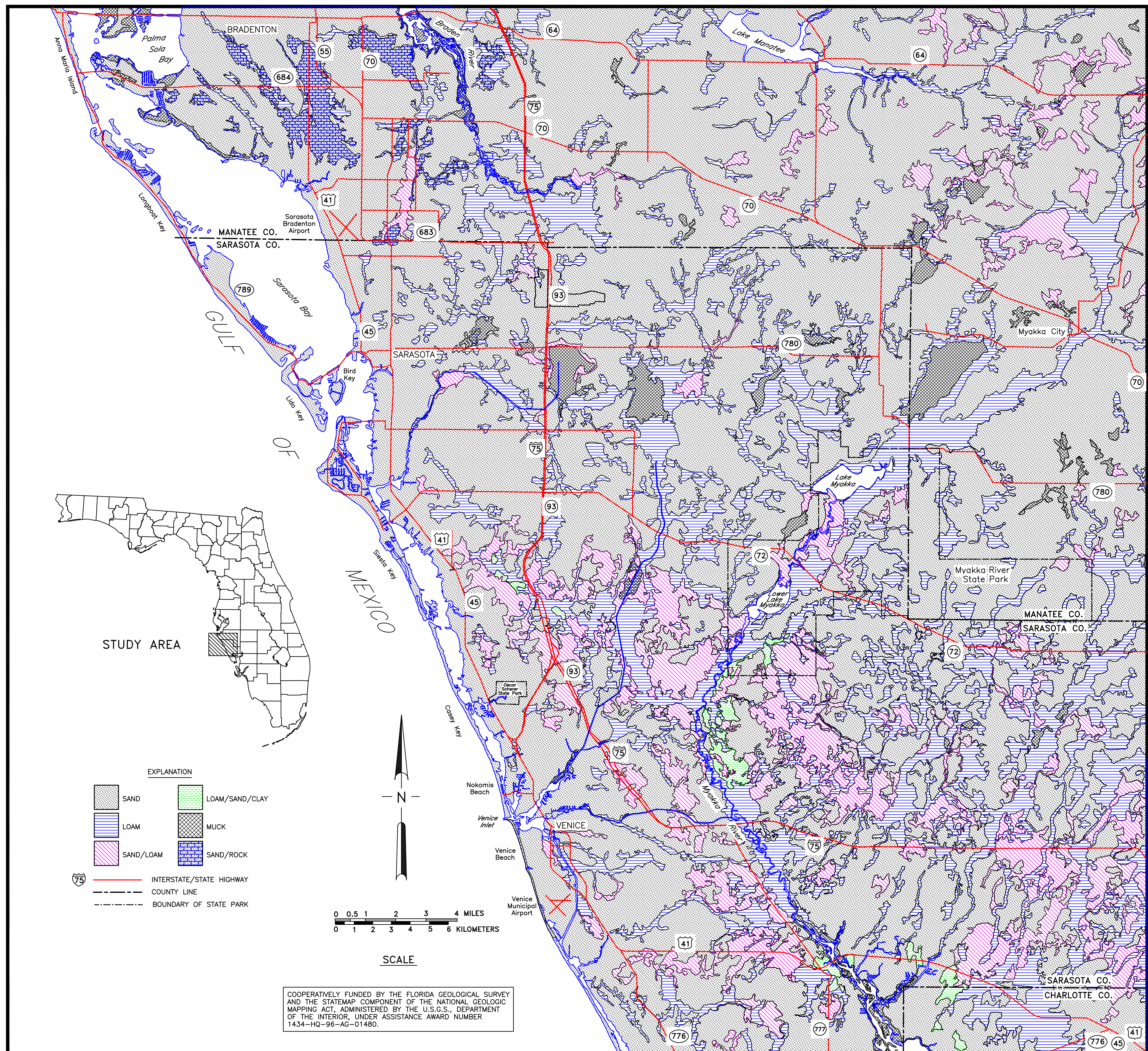
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