

Description of Map Units

QUATERNARY SYSTEM

HOLOCENE

- Ha** **Holocene undifferentiated alluvium**—Undifferentiated deposits of small upland streams; alluvial deposits of minor streams and creeks of varying textures, filling valleys incised into older deposits.
- Hb** **Backswamp deposits**—Fine-grained Holocene deposits of rivers, underlying the flood basins between meander belts.
- Hll** **Little River natural levee deposits**—deposits forming low natural levees flanking the meander belts of the Little River.
- Hlr** **Little River alluviation**—sediment forming low terraces of the Little River, preserved as small remnants and possibly comprising two or more levels in places, of probable early to middle Holocene age.
- Hlpb** **Point bar deposits of the Little River meander belt**—deposits underlying the meander belts of the Little River.

PLEISTOCENE

- DEWEYVILLE ALLOGROUP**
- Pd** **Deweyville Allogroup, undifferentiated**—Terraced late Pleistocene alluvial deposits of the Red and Little Rivers.
- PRAIRIE ALLOGROUP**
- Pp** **Prairie Allogroup, undifferentiated**—a diverse depositional sequence of late to middle Pleistocene deposits of the Mississippi River, its tributaries, and coastal plain streams; includes terraced fluvial (meander belt, backswamp, and braided stream), colluvial, estuarine, deltaic, and marine units deposited over a considerable interval (Wisconsin to Sangamon) of the late Pleistocene. Multiple levels are recognized along alluvial valleys and coast-parallel trends, and are grouped into two principal temporal phases. The allogroup is undifferentiated where local fluvial terrace remnants flank the more headward portions of stream bottoms.
- Ppl** **Upper Prairie Allogroup**—Late Pleistocene alluvial deposits of the younger of the Prairie Allogroup temporal phases of the Red River valley. Where observed in the area northwest of Shreveport, the unit consists of grayish clayey very fine sand, with red mottles in places, weathering yellowish to yellowish brown.
- Ppe** **Prairie Allogroup, Early Sangamon**—older of the Prairie Allogroup temporal phases; an equivalent of the Beaumont of Texas and Eunice Terrace of southwestern Louisiana. A diverse depositional sequence of flood-plain, meander-belt, and backswamp deposits of the middle Pleistocene ancestral Mississippi River, Red River, local fluvial equivalents of tributary streams, and coastal plain streams. Where mapped near the Mississippi River flood plain, this unit is blanketed by both Peoria and Sicily Island colluvium.
- Ppbe** **Beaumont Alluviation**—coastal-plain deposits of late to middle Pleistocene streams, forming the oldest and topographically highest of the Prairie surfaces of southwestern Louisiana. The surface exhibits relict channels of the Red and Calcasieu River, and the unit includes deposits of the Ingleside barrier trend.

INTERMEDIATE ALLOGROUP

- Pib** **Montgomery Alluviation**—meander belt deposits of the Red River in central Louisiana. The unit is blanketed by yellow loam, incises the Bentley alluviation and older units, and is incised by Prairie Allogroup and Holocene units.

TERTIARY SYSTEM

MIOCENE

- FLEMING GROUP**
- Mfw** **Williamson Creek Formation, Fleming Group**—very fine to very coarse sand, averaging very fine to medium overall, with overall poor sorting. Overall grain size appears coarser than in other Fleming subunits, with sands containing much more of the coarser size fractions and a larger proportion of quartz granules in places. Granules are extremely abundant locally and consist almost exclusively of quartz, in places comprising sandy granule conglomerate. Internal features include medium-scale trough cross beds in coarser, granule-rich sand and sandy granule conglomerate, with bedding sets fine upward in places. Characteristics of the surface Williamson Creek accord generally with continental, fluvial-dominated deposition.
- Mfd** **Dough Hills Formation, Fleming Group**—clay, sand and sandstone, and silt and siltstone, in varying proportions. Includes calcareous clay, containing characteristic calcareous nodules, and may include in places anomalous localized concentrations of fine-grained calcareous rock. According to Hinds (1999), calcareous clay occurs more in the western portion of the outcrop belt, and noncalcareous clay in the eastern part. May weather to black soil. Sand and sandstone are poorly sorted, range in grain size from very fine to very coarse, and contain sparse quartz granules at a number of localities. Overall texture and internal features were interpreted by Fisk (1940) and Hinds (1999) as reflecting more brackish-water-influenced deposition than for the superjacent Williamson Creek and the subjacent Carnahan Bayou.
- Mfcb** **Carnahan Bayou Formation, Fleming Group**—texturally heterogeneous suite of generally poorly sorted sediments comprising varying admixtures of sand/sandstone, with granules in places; silt/siltstone; and clay/mud. Primarily clayey very fine to fine sand containing some coarse and very coarse sand with some granules. Granules and pebbles include both quartz and rock fragments, with granules comprising predominantly quartz, and pebbles and cobbles consisting mostly of rock fragments; the rock fragments comprise both lightish clay/mud rip-up clasts, and in places, dark or black chert. Includes petrified wood and thin tuffaceous beds locally. Characteristics of the surface Carnahan Bayou accord generally with continental, fluvial-dominated deposition, with the large proportion of silt observed in places suggestive of the onset of transition to deltaic facies. In eastern Texas the Carnahan Bayou is classified as the uppermost portion of the Catochuua Formation.

- Open Water, Inundated Area, Swamp**
- Contact**—includes inferred contacts.
- Streams**
- Topographic Contours**

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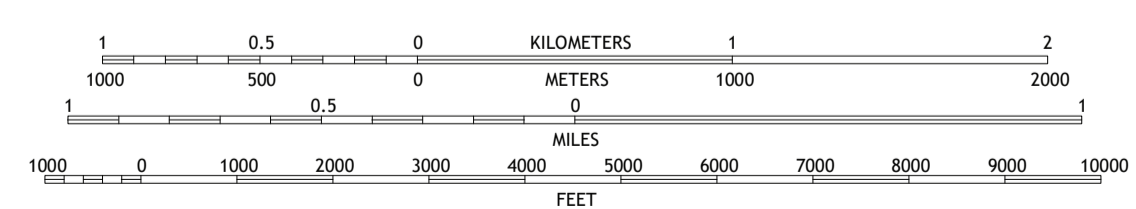
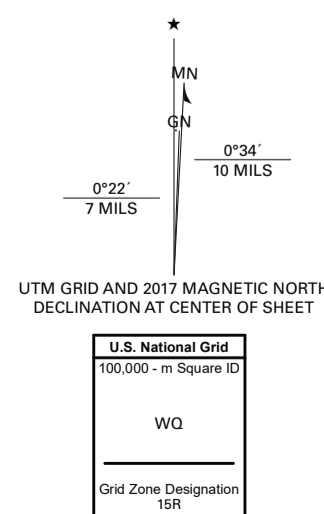
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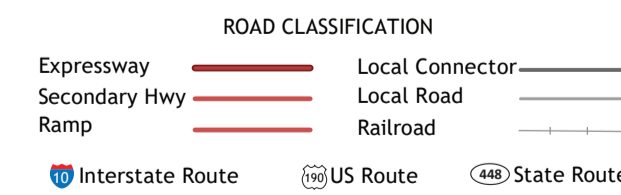
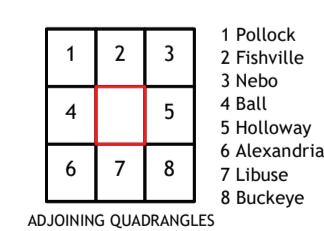
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SCALE 1:24,000
CONTOUR INTERVAL 10 FEET
NORTH AMERICAN DATUM OF 1983 (NAD 83)
WORLD GEODETIC SYSTEM 1984 (WGS 84)
UNIVERSAL TRANSVERSE MERCATOR PROJECTION, ZONE 15
NORTH AMERICAN VERTICAL DATUM OF 1988



Base Map.....United States Geological Survey, 2020
Boundaries.....LADOTD, 2007
Contours.....National Elevation Dataset, 2008 - 2011
Hydrography.....National Hydrography Dataset, 2002 - 2017
Names.....GNIS, 1980 - 2017
Roads.....U.S. Census Bureau, 2017
Wetlands.....FWS National Wetlands Inventory 2021
Roads within US Forest Service Lands.....FSTopo Data

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Geologic Map of the Green Gables 7.5 minute quadrangle
Rapides, Grant, and LaSalle Parishes, Louisiana