

Description of Map Units

- QUATERNARY SYSTEM**
- HOLOCENE**
- Ha** **Alluvium**—Undifferentiated deposits of small upland streams; unconsolidated alluvial deposits of minor streams and creeks filling valleys incised into older deposits, with textures varying from gravely sand to sandy mud.
 - Hb** **Backswamp**—fine-grained Holocene deposits of rivers, underlying the flood basins between meander belts.
 - Hsm** **Small river meander-belt deposits**—point bar deposits underlying the meander belts of small rivers.
- QUATERNARY UNDIFFERENTIATED**
- Qaf** **Quaternary alluvial-fan deposits**—unnamed alluvial-fan deposits.
- PLEISTOCENE**
- DEWETVILLE ALLOGROUP**
- Pdmh** **Mitchell Hammock Alloformation**—alloformation intermediate in age and topographic position between the Gum Bayou and Foster Creek alloformations of the Deweyville Allogroup along the Bogue Chitto and Pearl rivers. It is named for Mitchell Hammock in the Bogalusa quadrangle.
 - Pph** **Hammond alloformation**—Deposits of middle to late Wisconsin coastal-plain streams in the Florida Parishes of southeastern Louisiana. In the area encompassing Waldheim quadrangle it consists of very fine to medium sand, in places clayey or with silty clay interbeds, and is grayish with yellowish, brownish, and/or reddish mottles.
 - Ppbu** **Bush alloformation**—fluvial deposits of the late Pleistocene Bogue Chitto River. These fluvial sediments form a well defined alluvial apron that has been built over the surface of the Hammond alloformation at the mouth of the Bogue Chitto valley.
- INTERMEDIATE ALLOGROUP**
- Pi** **Intermediate Allogroup, undifferentiated**—fluvial deposits of the Mississippi River, its tributaries, and coastal plain streams; includes terraces locally designated as Montgomery, Lissie, Elizabeth, Oakdale, and most of the Bentley. Included are broad areas of colluvial and slope deposits of the middle Pleistocene, locally derived from the Upland allogroup and/or Tertiary formations. Where mapped near the Mississippi River flood plain, the unit is blanketed by Peoria and/or Sicily Island Loess.
- TERTIARY SYSTEM**
- PLIOCENE**
- UPLAND ALLOGROUP**
- Puc** **Citronelle Formation**—Deeply dissected alluvial deposits of Pliocene streams originating from nonglacial sources in the Florida Parishes of southeastern Louisiana. Correlates with the Willis Formation in southwestern Louisiana. In the area encompassing the Waldheim quadrangle, the Citronelle Formation consists of clayey very fine to coarse sand, with gravely sand to sandy gravel (comprising chert, quartz, and/or light-colored mud), reddish to reddish brown with grayish to yellowish to brownish mottles, with occasional thin beds of pale red mud and purple clay, and is blanketed by less than 1 m of Sicily Island Loess. In places it includes abundant tree root casts and ironstone. Less-weathered exposures of Citronelle may show large-scale cross beds with light-grayish, whitish-weathering grains and sparse mica concentrated on cross beds; horizontal bedding; and mud rip-up clasts.
- Open Water, Inundated Area, Swamp**
- Streams**
- Contact**—includes inferred contacts.
- Topographic Contours**

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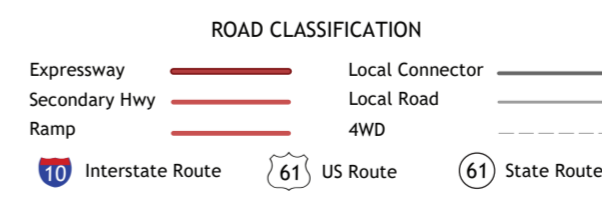
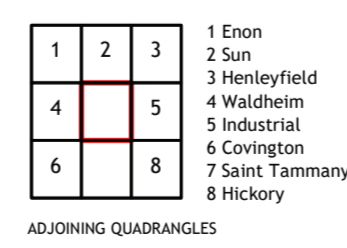
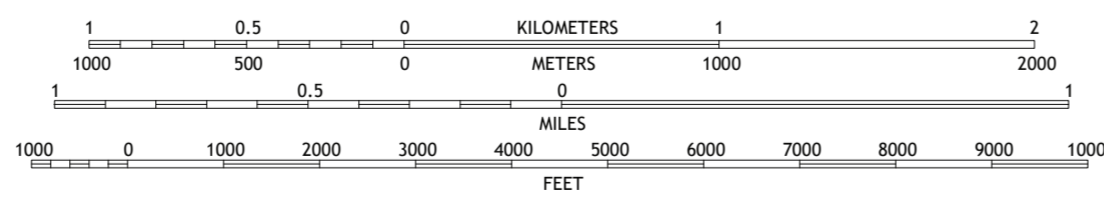
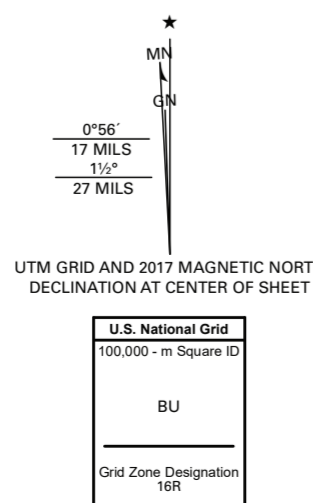
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1	2	3	1 Eron
2	3	4	2 Sun
3	4	5	3 Helderberg
4	5	6	4 Waldheim
5	6	7	5 Industrial
6	7	8	6 Covington
7	8		7 Saint Tammany
8			8 Hickory

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**Geologic Map of the Bush 7.5 Minute Quadrangle,
St. Tammany Parish, Louisiana**