



Triple H Wind Project

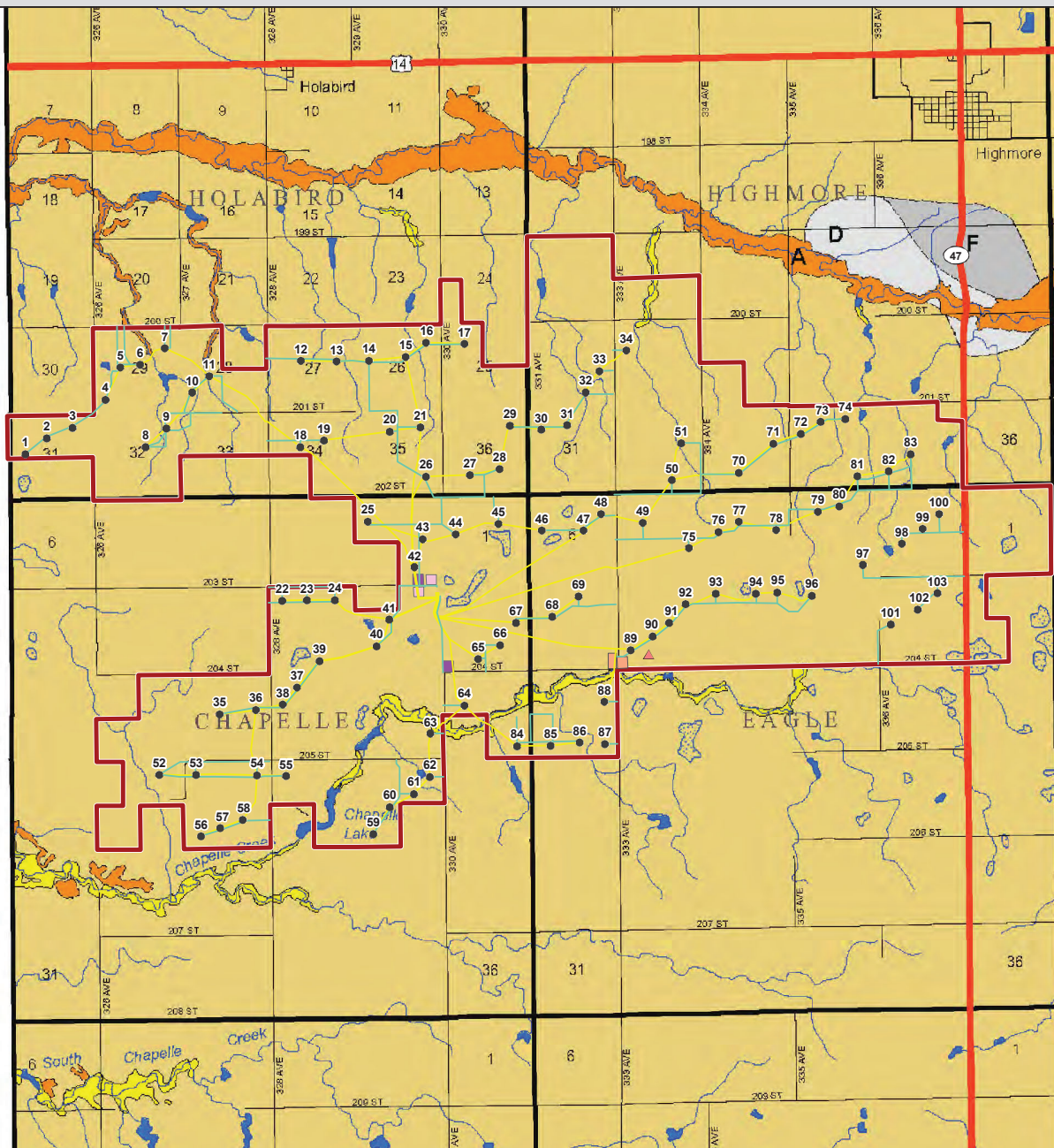
Figure 6 Hydrogeology

Hyde County, South Dakota

Explanation

This map is intended for use as a tool to aid in identifying areas underlain by aquifer material. The aquifer materials shown on this map are categorized below. This map does not show individual aquifers. There may be more than one type of aquifer material present in an area. However, only the aquifer material that would be first encountered is shown. Within the boundaries of any given map unit, there may be localized areas where aquifer material is absent. The thickness and permeability of aquifer material may vary significantly. Also, no attempt was made to distinguish between saturated and unsaturated material. Therefore, not all of the areas defined on this map may be an aquifer. Site-specific information should always be examined when making land management or water development decisions.

- Alluvium:** Consists of clay and silt with minor amounts of sand and gravel; occurs at land surface
- Sand and Gravel:** First occurrence is generally at land surface; may be silty and clayey
 - All mapped areas in this category that are not labeled **A, B, or C** are sand and gravel mapped on the basis of the presence of soil derived from alluvium or siltstone; maximum thickness is approximately 30 feet
 - A** Valley train outwash sand and gravel of Medicine Knoll Creek and South Fork Medicine Knoll Creek; maximum thickness is approximately 30 feet; outwash in South Fork Medicine Knoll Creek partially comprises the Highmore-Bluff aquifer
 - B** Valley train outwash sand and gravel occupying former stream channels; maximum thickness is approximately 30 feet; may occur sporadically in some of its mapped area
 - C** Outwash stream sand and gravel adjacent to and northeast of the confluence of Elm Creek and the West Fork Elm Creek; maximum thickness is approximately 30 feet
- Sand and Gravel:** First occurrence is generally below land surface and is probably continuous in lateral extent; may be silty and clayey
- D** Outwash sand and gravel located 1 mile south of Highmore; maximum thickness is approximately 120 feet; bottom of interval lies directly on or nearly on the bedrock surface; partially comprises the Highmore-Bluff aquifer
- Sand and Gravel:** First occurrence is generally below land surface and is probably discontinuous in lateral extent; may be silty and clayey
- E** Outwash sand and gravel located in northeastern part of the county; maximum thickness is approximately 50 feet; bottom of interval lies directly on or nearly on the bedrock surface
- Sand and Gravel:** Generally continuous in lateral extent; may be silty and clayey
- F** Outwash sand and gravel located 1 mile south of Highmore; maximum thickness is approximately 15 feet; bottom of interval lies directly on or nearly on the bedrock surface; partially comprises the Highmore-Bluff aquifer
- Sand and Gravel:** Generally discontinuous in lateral extent; may be silty and clayey
- G** Outwash sand and gravel located in northeastern part of the county; maximum thickness is approximately 40 feet; bottom of interval lies directly on or nearly on the bedrock surface
- H** Outwash sand and gravel located in northeastern part of the county; maximum thickness is approximately 30 feet; bottom of interval lies well above the bedrock surface
- Sand and Gravel:** Generally continuous in lateral extent; may be silty and clayey
- I** Outwash sand and gravel located in the north-central part of the county; consists of two outwash bodies; one outwash body is positioned directly on or nearly on the bedrock surface with a maximum thickness of approximately 40 feet; occurs approximately 250 feet below land surface; the other outwash body has a maximum thickness of approximately 40 feet and occurs from 120 to 170 feet below land surface; well above the bedrock surface; one or both outwash bodies may be present depending upon the location
- Sand and Gravel:** Generally discontinuous in lateral extent; may be silty and clayey
- J** Outwash sand and gravel located in the northern part of the county; consists of sand and gravel directly on or nearly on top of the bedrock surface with a maximum thickness of approximately 40 feet; usually occurs approximately 200 feet below land surface
- K** Outwash sand and gravel located in the northeastern part of the county; consists of sand and gravel directly on or nearly on top of the bedrock surface with a maximum thickness of approximately 30 feet; usually occurs approximately 200 feet below land surface
- L** Outwash sand and gravel located in four areas in the northern part of the county; occurs at a depth of approximately 150 feet with a maximum thickness of approximately 50 feet; bottom of outwash lies well above the bedrock surface
- Dakota Sandstone:** Consists of interbedded sandstone, siltstone, and shale; maximum thickness is approximately 300 feet; depth below land surface to the Dakota Sandstone ranges from 900 feet along the Missouri River to 1,750 feet in the south-central part of the county



- Project Area**
- Proposed Turbine**
- Potential Permanent MET Tower Location**
- Proposed Access Road**
- Proposed Collector Line**
- Potential Collection Substation Location**
- Potential Interconnection Switching Station Location**
- Potential Laydown Area Location**



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