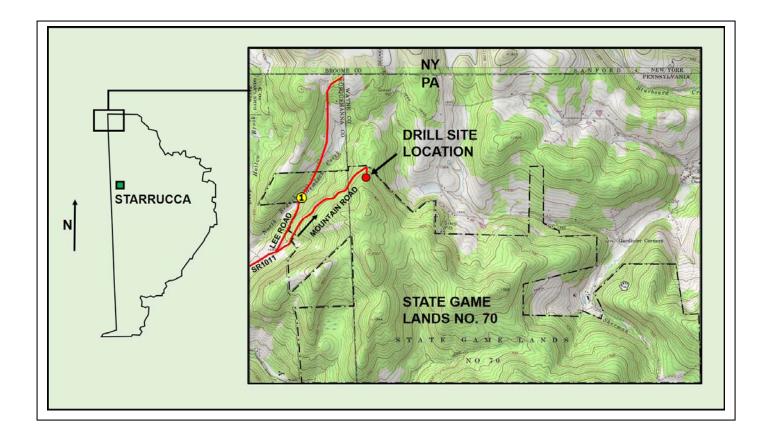
# ATTACHMENT B: DRILL-HOLE SITE WAY127-0426 DESCRIPTION AND LOCATION MAP

# Pennsylvania Department of Conservation and Natural Resources Bureau of Topographic and Geologic Survey 2016 Exploratory Drilling Program Starrucca 7.5-Minute Quadrangle, Wayne County

Note: This attachment contains the site description and location map for the proposed exploratory vertical core hole to be completed in 2016 in the Starrucca 7.5-minute topographic quadrangle, Wayne County. To assist prospective bidders in understanding the probable subsurface geology and drilling conditions to be encountered, descriptions of the likely geologic formations and rock types to be penetrated by the borehole are included. These descriptions (assessments) are a reasonable attempt by the Department to provide objective geologic information about the work site. As such, they should be considered average probable conditions for the drill hole, including estimated footages, and should not be considered guarantees. Unanticipated rock types and/or drilling conditions may occur.





#### Drill Hole Site: Wayne County State Game Lands 70

## Lat/ Long: 41.98610, -75.48031

## Property Owner: Commonwealth of Pennsylvania, Pennsylvania Game Commission

#### Quad/County/ Township: Starrucca/ Wayne/ Scott

#### Anticipated Total Depth: 1000'

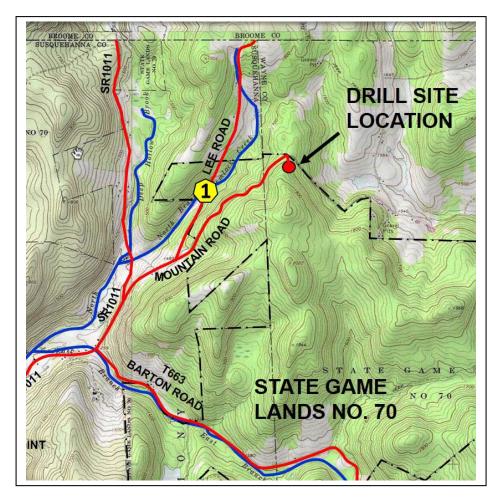
Access: Access to the site is on improved secondary roads from state routes.

There are a two main routes leading to the site:

- At intersection of Interstate 81 and 84 at Dunmore, north on I-81 North 65 miles to Lenox exit. Then east and north approx. 16.2 miles on SR 92, then bear right onto Turnpike Street (SR1013, SR 92 continues straight) for 3.2 miles; right onto Main Street towards Lanesboro; approx. 1 mile then right onto Viaduct Street. East on Viaduct Street (SR1009) which becomes Starrucca Creek Road; 3.6 miles to Stevens Point; left onto SR 1011; 1.6 miles then bear right onto Mountain Road (dirt road angling up hill). On mountain Road, approx. 1.6 miles, gate to SGL on right.
- 2. North from the intersection of Interstate 81 and 84 at Dunmore on Casey/Lackawanna Valley Industrial Highway (SR 6) left onto Business Route 6, Carbondale/Simpson Exit. Approx. 1.3 miles, right onto Belmont Street (SR171). North on SR171 5.7 miles through Vandling to Forest City. Continue on SR171 20 miles to Thompson. Continue straight onto East Jackson Street/Starrucca Creek Road (SR1005) for 4 miles to Starrucca. Left on Starrucca Creek Road through Starrucca (SR1009) 5.4 miles to Stevens Point. At

Stevens Point right onto SR 1011, 1.6 miles then bear right onto Mountain Road (dirt road angling up hill). On mountain Road, approx. 1.6 miles, gate to SGL on right.

The work site is located off Mountain Road (T787) on State Game Land (SGL) No. 70. The SGL roadway has a gated entry and will be locked with a combination padlock. There is a short uphill climb to a cleared area used as a log landing. The preferred site is marked by a brightly colored stake on the west (right) side of the SGL roadway.



**Water Availability:** Water will be hauled to the site by truck. The best location for water is designated 1 on the map shown above (blue lines water, red are roads). Exiting the SGL gate, turn left onto Mountain Road, at approx. 1 mile turn right onto Lee Road. The road is somewhat narrow but passable. Travel .5 miles to a point where the North Branch of Hemlock Creek intersects the road (coordinates 41.984305, -75.490464). Flow is through a culvert beneath the roadway. The rate and amount of water is partially controlled by a beaver dam ~170 feet upstream. The pond can also serve as a water source. At its closest point to the road, the pond is approximately 50 feet away.

It may be best to continue past the stream to a SGL parking area (continuing on Lee Road ~225 feet past the stream crossing; coordinates 41.987195, -75.488210, to turn around and then fill up on the return trip.

**Geologic Setting:** The purpose of the drilling is to characterize as much of the Catskill Formation as is possible, all the while targeting the underlying the Lock Haven Formation. It is estimated that the Catskill Formation is approximately 800 to 900 feet thick at this location.

At this site, bedrock should be fairly close to the surface, based on nearby outcrops. The Catskill bedrock is near horizontal to slightly dipping westward (4 degrees on average) and consists for the most part of light olive gray to olive gray sandstone and siltstone with minor olive gray shale. Some calcareous sandstone/conglomeratic ("limestone") lenses or beds ranging from 1 to 6 feet in thickness may be encountered. **Surface exposures** of this rock type are oftentimes moderately to highly weathered and cavy in part; it is not known how this will present itself in the subsurface. Beds of reddish-gray mudstone, shale, siltstone, and sandstone are also expected. The drilling will continue through the Catskill, targeting the underlying Lock Haven Formation, a sequence of mixed greenish-gray, thin-bedded shale, siltstone, and fine-grained sandstone. Marine fossils are common to the Lock Haven and will serve as a usable indicator.