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August 5, 2023

Kirk Rother, PE, PLLC 5 Saint Stephens Place Warwick, New York 10990

Re: Habitat Report for Congregation Habones Inc., Prospect Road School

Dear Mr. Rother,

Our office conducted an inspection of the site on July 20, 2023 for the purposes of performing a habitat assessment. Using the Ecological Communities of New York State, Second Edition, March 2014 guide we find that there are 4 types of onsite habitat. First is the Mowed Lawn, unranked cultural which consists of all the areas around the existing two homes. Second is Successional Southern Hardwood, rank G5 S5. This is the upland wooded portions of the site. Third is Intermittent Stream, Rank G4 S4. This onsite stream reach is located to the rear of the property drains to the north. Forth is the Red Maple/ Hardwood Swamp, rank G5 S4 S5. This is the part of the site that flanks the intermittent drainage course that traverses the rear of the property.

Regarding habitat, there is nothing noteworthy about this location. The site itself is made up of two residential lots and is equally split between the existing residential lawns and the remaining forested habitat. The Hardwood Swamp has typical wet tolerant plant species such as Pin Oak, Red Maple, Green Ash, Spice Bush, Tussock Sedge, Soft Rush and Sensitive Fern. The unmapped-intermittent stream that runs through the site has banks that contain saturated soils with a chroma of 7.5YR 3/1 to a depth of 15 inches. The upland forested portion of the site has recognized upland plant species such as Red Oak, White Oak, Red Maple, Ash, Black Cherry and Multiflora Rose. The front portions of the site have common residential landscape type plants around the homes along with some scattered flowering Cherry trees in the front yards.

There are rare and endangered animal and plant species listed as possibly being found in this part of Orange County. These species include the Indiana Bat, Northern Long Eared Bat, Northern Timber Rattlesnake, Bog Turtle and the plant known as Small Whorled Pogonia. The Pogonia is a rare member of the Tulip family and currently is found in 13 states and parts of Canada. It is usually found in places with rich dark soils,

deep leaf debris and an open understory with few shrubs or other forbs. It often has been found along forest edges such as old roads or paths, often near a stream, however, it is not viewed as a wetland plant. Pogonia is associated with forest habitat made up of Beech, Birch, Maple and Oak. This site has no Beech or Birch trees. Additionally, onsite soils are of a silty clay that are not suitable for the Pogonia.

The Bog Turtle, as the name implies, is found in bogs, fens and wetland areas that have a specific type of habitat that is suitable for the turtle. The ground must be saturated for much of the year and is usually fed by springs and ground water outlets as opposed to storm water runoff since the turtle cannot reproduce in areas that flood. The turtle requires soft organic based soils within which it digs tunnels during dry, hot weather and for winter hibernation. Ideal habitat consists of open wet areas dominated by grasses, sedges and ferns. Areas having a dense canopy do not allow the required sunlight to reach the ground. Occasional shrubs or small trees are acceptable but forested areas, like are present at the Prospect Road school site, are not suitable for these creatures. Bog Turtle habitat is lost primarily due to development and the natural aging of swamps as they gradually grow over with deciduous shrubs and trees. This site has no habitat suitable for Bog Turtles.

The Northern Timber Rattlesnake is known to be found in Blooming Grove in and around the mountains between Clove Road and the NYS Thruway. This office has personally documented several animals in the past. The steep rocky slopes found in some areas of the town are ideal habitat for hibernation dens. The forested slopes lower down the mountain provide excellent summer hunting grounds. There is no such habitat near the Prospect School site. The general area of the school site consists of gently sloping hills with no rocky outcrops or cliffs like the snake prefers. Rattlesnakes have been known to travel from their winter dens during the summer months, however this site is far from any known den habitat. Given the distance from known dens and the presence of bisecting roadways, as well as the lack of rocky hillsides used for basking, the site is not considered to contain potential rattlesnake habitat.

The Indiana Bat and the Northern Long Eared Bat both emerge from their winter hibernation and spread out over the lower Hudson Valley. The nearby Bull Mine is a known hibernation spot with another location found in Wurtsboro. Both bats use the same sort of tree for roosting during the summer months. Shagbark Hickory is preferred however, any damaged, dead or cracked tree may be used if they provide a secure hiding spot. If the roost tree is exposed to sun light it will be chosen over one within densely forested areas. Indiana Bats feed over both forested and open wetlands and they also prefer feeding along tree lines at the edges of fields and forests. Northern Long Eared Bats feeds under the forest canopies of hillsides and ridges. Since being listed as endangered, both species have been documented in many locations across Orange

County. The Indiana Bat is the more commonly found species and suitable roost habitat can be found all over the County. To mitigate against incidental take of the bat species, tree clearing should be limited to the times the bats are hibernating, which the NYS Department of Environmental conservation identifies as from November 1 to March 31. It is noted that based on the site inspection performed by this office, suitable roost trees do not appear to be present on the project site.

Yours truly.

Peter Torgesen

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