

## **ENVIRONMENTAL COMMISSION**

- To: Montgomery Township Development Review Committee
- From: Montgomery Township Environmental Commission
- Re: BA-09-23 George Thomas
- Date: January 3, 2024

## A. Lot Coverage

- 1. The Environmental Commission has reviewed the application, plans, and soil testing report for the George Thomas application. The change proposed in lot coverage is minimal, but the existing lot coverage already far exceeds the maximum allowed in this zone.
- B. Mitigation
  - 1. Should the Board decide to grant the variance, mitigation should be provided, but the Stormwater Management Facility Soil Testing Results Narrative by Michael Ford of Van Cleef indicates that the soil is unsuitable for onsite infiltration such as a rain garden, infiltration basin or drywell.
  - 2. The Environmental Commission recommends that the applicant provide mitigation the excess stormwater runoff from the excess lot coverage in one of the following forms: rain barrels, green roof, downspout planter (possibly on the pool house), native trees, removal of part of the extensive network of brick pathways, or conversion of a portion of the lawn into a wildflower meadow.
- C. Trees
  - 1. The Shade Tree Committee would be happy to recommend some trees suitable for this property, whether the applicant would like shade trees, ornamental trees, or screening. The Committee provides this service free of charge.
- D. Lighting
  - 1. Should exterior lighting be planned, the Environmental Commission recommends that lights should be pointed downwards, shielded from the sides, and as low in elevation and intensity as possible, in keeping with Montgomery's Dark Skies policy.
  - 2. Yellow light bulbs, which are the least disorienting to wildlife, should be used. Please be aware that overly bright lights can cause glare and temporarily blind people, reducing visibility; and any lighting may interfere with nocturnal

Montgomery Municipal Center • 100 Community Drive, Skillman, NJ 08558 (908) 359-8211 montgomerynj.gov pollinators, fireflies, bats, and migrating birds. Security lights should be on a motion detector.

- 3. Exterior lights should be turned off as early as possible in the evening, and the applicant might consider special protocols, such as brief shut-offs during spring and fall migration.
- 4. There is a Model Lighting Ordinance jointly developed by the Illuminating Engineering Society and the International Dark Sky Association that provides guidance on developing a lighting plan that will meet the applicant's needs and protect the wildlife that provides us with so vital many ecosystem services, including pollination and pest control. The Environmental Commission requests that your design follow those guidelines. The International Dark Sky Association provides a lot of information on the least harmful yellow lights and on other issues in their website.
- 5. Should the applicant plan on skylights in the kitchen addition, the interior lights should also be shielded from above and pointed downward.
- E. Energy
  - 1. We also suggest that the applicant might like to install geothermal heat exchange HVAC at a time when their lawn is already being torn up for the temporary construction access driveway. This type of heating system can greatly reduce energy bills and emissions.
  - 2. We also recommend an electric stove to prevent methane and other indoor air pollution from cooking.