Memo

To:	Board of Adjustment Chairperson McGinley and Secretary Kester Verona Board of Adjustment (BoA)
From:	Plan Review Committee of the Verona Environmental Commission
c:	Verona Environmental Commission Chair
Date:	November 10, 2024
Re:	**Case # 2024-17** 29 Otsego Road [Block 804, Lot 23] Verona, New Jersey
Zone:	R-50B (Residential Medium/High Density)

The Plan Review Committee of the Verona Environmental Commission (VEC) reviewed the application for 29 Otsego Road in Verona submitted by Jerry DeYoung, which we received on October 21, 2024. We understand that the Applicant is seeking to obtain a variance(s) to add fencing in the front yard adjacent to Lanning Avenue. The comments below are provided for the Board's consideration:

1) The VEC PRC reviewed the Applicant's survey with markups and the pictures provided. We note that the Applicant has what appears to be one dogwood tree on site and that the proposed fencing is to run on the inside of the property line, in effect, fencing out the hedge line and the dogwood tree.

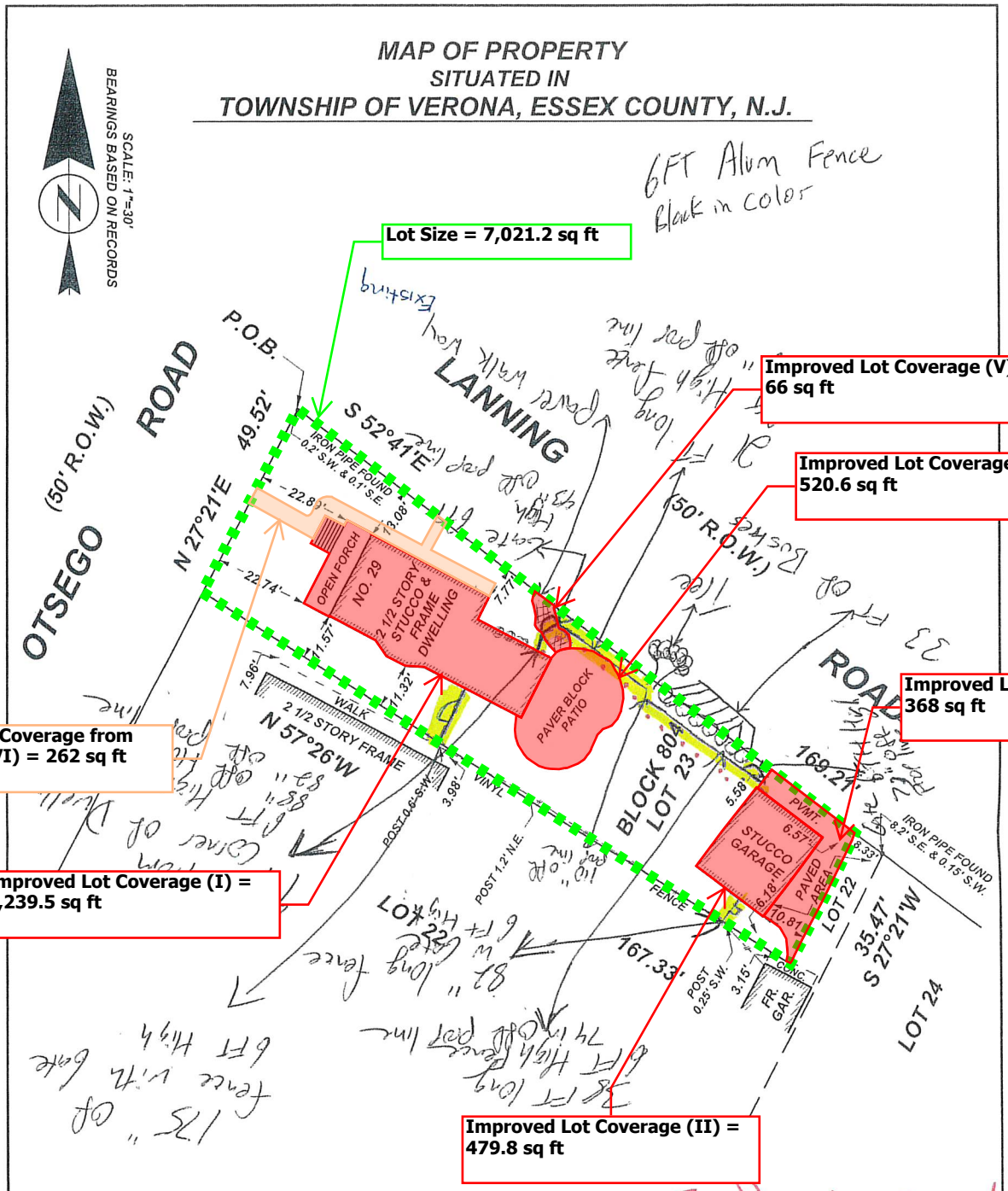
2) The Applicant should provide testimony regarding the preservation of this dogwood tree and how the fencing posts will be properly situated to leave the tree's dripline undisturbed, as best possible. Please note that there are also two street trees that are not shown on the survey, and we did not want to confuse the Applicant's dogwood tree with the Township's Shade Trees.

3) There appears to be a discrepancy with the application value and the calculated lot area described by the Surveyor's distance and bearing measurements of the lot line on the survey plan. Based on the Surveyor's distance and bearing measurements of the lot line, the Lot Size is approximately 7,083.75 ft^2, which is in contrast to the 8,379.27-ft^2 value on the application. Scaling off the provided plan (attached), we estimated a Lot Size of about 7,021.2 ft^2.

4) Improved Lot Coverage values were not provided in the application, as it was not a consideration with the Lot Size assumed in the application. However, given the calculated smaller lot size, the Improved Lot Coverage for this property should be reviewed by the Town Engineer. Scaling off the drawing, we calculated an Existing Improved Lot Coverage of 41.8% based on an Existing "Improved Area" of 2,935.9 ft^2 (please see attached annotated pdf). We understand that the maximum Improved Lot Coverage for the R-50B Zone is 40%.

5) In addition to the above comments, please see attached the Low Impact Planning and Construction Checklist. This suggested list was compiled by the VEC based on best available practices.

[JP/STD/WS]
VEC_2024-11-10 Comments 29 Otsego Road.docx



Areas (based on Survey Boundary Enclosure)
Lot size ≈7,083.75 ft2

Areas (scaled off plan)
Lot size ≈7,021.2 ft2

Existing "Improved Area" = 1,239.5 (I) + 479.8 (II) + 520.6 (III) + 368 (IV) + 66 (V) + 262 (VI) = 2,935.9 ft2

Existing Improved Lot Coverage = 2,935.9 ÷ 7,021.2 = 41.8%

Definitions:
IMPROVED LOT COVERAGE = The percentage of lot area which is improved with principal and accessory buildings and structures, including all impervious surface areas such as buildings, driveways, parking lots and garages and other man-made improvements, and swimming pools.

PERVIOUS INTERLOCKING PAVERS = Any pavers with a void area of 20% or less will be considered completely impervious for the purposes of the Stormwater Management rules. In pavers with greater than 20% void area, the applicant may count only the non-void area as impervious, provided the void areas are not grouted or made impermeable in any way.

. HINGOS, INC.
. LAND SURVEYORS
AD P.O. BOX 43752
CLAIR, N.J. 07043
E: (973) 783-1114
GOS@COMCAST.NET

MOLDOVANY
SURVEYOR N.J. LIC. NO. 35863

. HINGOS, JR.
SURVEYOR N.J. LIC. NO. 43231

Verona Environmental Commission

Low Impact Checklist: Construction

This suggested list has been compiled by the Verona Environmental Commission based on best available practices. This is not a requirement of the uniform construction code. It is intended to be beneficial to all residents considering renovations and new construction. The purposes of this list are to 1) assist those planning construction projects to do so in a manner that causes the least disruption to the environment; 2) establish a healthy setting for those occupying the new or renovated space; and 3) reduce waste and save resources. Implementing environmentally friendly practices can be economical when considered at pre-construction stages and are often beneficial in the long term.

General Construction

- ☐ Recycle and/or salvage non-hazardous construction and demolition debris
- ☐ Use renewable building material and products
- ☐ Incorporate renewable energy (i.e. geothermal, solar)
- ☐ Use local products (i.e. local and sustainable woods)
- ☐ Use local construction products and companies
- ☐ Conserve energy and reduce electricity use as much as possible

Grounds & Landscaping

- ☐ Create a sedimentation control plan to prevent sediment from moving off site.
- ☐ Use native plantings (Native plans are adapted to thrive in local conditions)
- ☐ Use captured rainwater or recycled grey water for irrigation
- ☐ Provide bicycle parking to help reduce overcrowded streets and CO2 emissions.

Storm Water Management

- ☐ Avoid runoff to other properties by installing an underground cistern or rain garden. This will keep water on your own property and out of the sewer system.
- ☐ Limit impervious surfaces – use an open grid pavement system (at least 50% pervious)
- ☐ Promote infiltration that captures and treats storm water runoff from rainfall
- ☐ Use a water retention system (i.e. rain barrel) to collect rainwater for non-potable uses

Lighting

- ☐ Choose LED lights (the most environmentally-efficient option)
- ☐ Purchase renewable electricity, either directly from your power supplier, from an independent clean power generator, or through renewable energy certificates.
- ☐ Use skylights or solo tubes for natural daytime lighting. Use sensor controls in commercial or industrial settings and solar lighting outdoors.

Foundation & Basement

- ☐ Use environmentally friendly foundation sealants (rather than black tar)
- ☐ Prevent sump pump water from flowing into the sewer system

Roofing

- ☐ Use light color roofing materials to limit heat absorption created by darker roofs
- ☐ Use roofing material with a solar reflectance index (SRI) equal to or greater than 78 for low roofs and 29 for steep-sloped roofs
- ☐ Install tile or metal roofs
- ☐ Consider installing a vegetated roof

Heating & Cooling

- ☐ Use 2 x 6 studs instead of 2 x 4 to increase amount of insulation
- ☐ Install programmable thermostats that adjust temperatures throughout the day
- ☐ Use occupant sensing and/or remote control thermostat technologies
- ☐ Install heat pumps to transfer energy heat and cold Use high-efficiency boilers/furnaces
- ☐ Use attic fans to regulate heating and cooling

Windows

- ☐ Choose ultraviolet window protection to protect against sun damage
- ☐ Install triple pane windows or windows with Argon or Kryton gas between panes

Products

- ☐ Choose products with low VOCs (VOCs are found in adhesives, interior paints, cabinets, etc)
- ☐ Avoid products that contain hazardous chemicals such as formaldehyde and cyanide
- ☐ Choose ENERGY STAR® appliances
- ☐ Install dual flush toilets Install low flow shower heads
- ☐ Avoid garbage disposals and make provisions for composting

Verona Environmental Commission

Low Impact Checklist: Planning

This suggested list has been compiled by the Verona Environmental Commission based on best available practices. This list is intended to assist individuals involved in planning and building projects in Verona Township towards submitting low impact plans. The goal of a low impact plan is not only to increase cost savings and add value to your project but to make environmentally responsible choices and eliminate project delays in early stages of the planning process.

General Construction & Design

- ☐ Provide occupants with connection to outdoor space through increased natural light and views
- ☐ Orient buildings facing southwest to maximize potential solar installation
- ☐ Use orientation and design to maximize passive solar heat/cooling
- ☐ Use proper planning to prevent damage to surrounding properties and public spaces
- ☐ Minimize disturbance to soils and vegetation
- ☐ Recycle and/or salvage non-hazardous construction and demolition debris
- ☐ Use renewable building materials and products
- ☐ Use local and sustainable woods
- ☐ Incorporate renewable energy and reduce energy use

Grounds & Landscaping

- ☐ Create a sedimentation control plan Limit altering steep slope areas
- ☐ Encourage landscaping that requires limited moving, trimming, and watering
- ☐ Create landscapes that limit the need for lawn chemicals and maintenance
- ☐ Position evergreens to the north to shield wind/ Position deciduous trees to the south to cool buildings
- ☐ Use native plantings (Native plans are adapted to thrive in local conditions)
- ☐ Place parking spaces in shaded areas
- ☐ Place bicycle parking racks in secure areas near entrances
- ☐ Use paving materials with an SRI value >29. This will reflect, not absorb solar heat.

Storm Water Management

- ☐ Limit impervious surfaces – use an open grid pavement system (at least 50% pervious)
- ☐ Reduce impervious cover to promote infiltration that captures and treats storm water
- ☐ Use a water retention system (i.e. rain barrel) to collect rainwater or recycled gray water for non-potable uses

Foundation & Basement

- ☐ Use alternative practices (rather than black tar) for foundation sealants
- ☐ Encourage aeration and ventilation
- ☐ Draw sunlight into basement areas through access windows

Roofing

- ☐ Use light color roofing materials to limit heat absorbed by dark colored roofs
- ☐ Use roofing material with a solar reflectance index (SRI) equal to or greater than 78 for low roofs and 29 for steep sloped roofs
- ☐ Consider Tile or Metal roofs
- ☐ Construct roofs that can support solar installations

Lighting

- ☐ Use solar lighting outdoors
- ☐ Use skylights or solo tubes for natural daytime lighting
- ☐ Use motion sensor lighting where applicable
- ☐ Choose energy-efficient light bulbs

Products

- ☐ Avoid products that contain hazardous chemicals such as formaldehyde and cyanide
- ☐ Use local products (i.e. local and sustainable woods)
- ☐ Use local construction equipment and companies when possible

For more information and resources please see:

The Native Plant Society of New Jersey - http://www.npsnj.org
The Association of New Jersey Environmental Commissions - http://www.anjec.org
US Green Building Council NJ Chapter - http://usgbc.org
New Jersey Green Building Manual - http://greenmanual.rutgers.edu
The New Jersey Department of Transportation Master Plan - http://njbikepedplan.com
Rutgers Center for Green Building - http://greenbuilding.rutgers.edu
The Verona Environmental Commission - http://www.veronaec.org