Verona Environmental Commission

600 Bloomfield Avenue
Verona, New Jersey 07044
www.veronaec.org

Minutes of the Verona Environmental Commission Special Meeting on September 14, 7:00 P.M., Conference Room, Verona Community Center, 880 Bloomfield Avenue, Verona N.J.
Attendees: Gloria Machnowski (Chairwoman), Anthony Saltalamacchia (Vice Chairman), Members Jessica Pearson, Sarah Yauch O'Farrell, Sean DiBartolo, Martin Golan, Alternate Frank Ceccacci; Mayor Kevin Ryan (Council Liaison), and Town Manager Matt Cavallo.
Absent: Member Michael Foley and Alternate Walter Steinmann.
Public attending: Geordan Smith, Dina Lilley and daughter.

MINUTES:
1. Chairperson calls the meeting to order at 7:05 PM and reads the notice of Open Public Meetings Act. Six Members and one Alternate are present; one Member and one Alternate are absent. There is a quorum to go ahead and hold an official meeting.

2. The Municipal Clerk advised to review the July 19th Minutes during the September 20th regular meeting, since the topic of the current meeting is the Impervious Coverage of Verona Park. Jessica asked if the Commission was going to vote on a recommendation to the County. Gloria explained that members would have the opportunity to vote after a brief presentation and discussion about the proposal.

3. Chairperson gave background information and power point presentation:

The VEC made 2 main formal recommendations to the governing body in July 2017 :
1) Implement measures to reduce greenhouse gas emissions in Verona, at a rate of at least 3.6% a year. -Based on the Sustainable Jersey Program
2) Implement green infrastructure to reduce impervious area in Verona by 10 percent.
-Based on the Impervious Cover Assessment (ICA) prepared for Verona Township by the Rutgers Cooperative Extension Water Resources Program in 2016.

A total of 82.5% of Verona's land use is classified as urban (2012 NJDEP land use/land cover data). According with NJDEP data the and use/land cover in New Jersey changed from Urban 22%, Forest 30% and Wetlands 19% in 1986 to Urban 27%, Forest 27% and Wetlands 17%. During the same period of time the data highlights that developed lands have expanded at a greater rate than population growth.

According to ANJEC: New Jersey's total impervious footprint as of 2007 was nearly 800 square miles of concrete and asphalt and rooftop. During the 2002-2007 period, NJ added 33.4 square miles of additional impervious surface. This is an annual rate of 4,270 acres of impervious surface increase per year or 9 American football fields of new impervious surface per day (including end zones). This annual increase in impervious surface results in an

annual run-off increase of over 5 billion gallons per year.

According to the ICA New Jersey has the highest percent of impervious cover in the country at 12.1% of its total area. Based upon the 2012 NJDEP land use/land cover data, approximately 31.5% of Verona has impervious cover. This high level of impervious cover suggests that the streams in Verona Township are likely non-supporting
Historically, municipalities have managed stormwater utilizing "gray" infrastructure (gutters, basins, pipes) that transport stormwater quickly to streams, rivers, and lakes. Many municipalities struggle to maintain this aging stormwater infrastructure, the result is frequent flooding and nonpoint source pollution degrading local watersheds.

New Jersey has 675,200 acres of impervious cover. Verona is in the area marked on deep orange on the map (30% to 50% coverage). As the amount of impervious surfaces like roadways, parking lots and rooftops increase, stormwater runoff increases. Scientific research has linked these increases in impervious surfaces to degraded waterways. Green Infrastructure can be designed to mitigate these increases in impervious cover by reducing their impact to local waterways (Source: Rutgers Cooperative Extension Water Resources Program, 2016).

According to the 2015 Final Report of the New Jersey State Comparative Risk Project, the Ecological impacts in NJ Ecosystems are many including: approximately 36% of New Jersey's native plants and 7% of vertebrate species are in danger of becoming increasingly rare or extinct; 65% of monitored waterways in New Jersey have moderately to severely impaired benthic communities (bottom-dwelling).

Canoe Brook, Peckman River, Upper Pasaic River, and Second River are Verona's Sub-watersheds. The ICA concluded:
"The next step is to set a reduction goal for impervious area in each subwatershed. Based upon the Rutgers Cooperative Extension (RCE) Water Resources Program's experience, a 10% reduction would be a reasonably achievable reduction for these subwatersheds in Verona Township." and "Verona Township can reduce flooding and improve its waterways by better managing stormwater runoff from impervious surfaces. The next step is to develop an action plan to eliminate, reduce, or disconnect impervious surfaces where possible a practical."

Green infrastructure practices capture, filter, absorb, and/or reuse stormwater to help restore the natural water cycle; an approach to stormwater management that is cost-effective, sustainable, and environmentally friendly. In addition to effectively retaining and infiltrating rainfall, these technologies can simultaneously help filter air pollutants, reduce energy demands, mitigate urban heat islands, and sequester carbon while also providing communities with aesthetic and natural resource benefits. (USEPA, 2013).

The following are some examples of Green Infrastructure:
Green streets and alleys. Cornell parking lot and the adjacent bioswale, Ithaca, NY, 2010. Bioswales move water from one location to another while filtering pollutants ("A ditch that cleanses water"). Permeable paver parking lot in Parsippany-Troy Hills, NJ. Bioswales in parking lot, Thompson Park, Monroe, NJ. Green roof, Essex County Environmental Center in Roseland, NJ. New York City Announced Major Expansion of Nationally Recognized Green Infrastructure Program to Further Improve the Health of Local Waterways in 2014, that will

Beautify Neighborhoods, Help Clean the Air and Improve the Health of the Bronx River, Flushing Bay, Gowanus Canal, Jamaica Bay and Newtown Creek (2014). Bioswales differ from standard tree pits in that they include curb cuts to allow stormwater to enter. Each of these gardens have the capacity to collect and absorb up to 2,500 gallons of stormwater when it rains. Data Collected from Pilot Program Demonstrates that Green Infrastructure Installations Performed Even Better Than Anticipated. As of 2016, approximately 1000 rain gardens have been built throughout New York City, 1500 currently are under construction, and thousands more are planned for the next several years. Rapid infiltration of water through porous pavement is demonstrated at the USEPA Edison New Jersey test site

Other strategies are curb extensions, which increase the overall visibility of pedestrians by aligning them with the parking lane and reducing the crossing distance. Providing infrastructure to encourage walking, cycling and transit use is a priority for cities everywhere. Discouraging driving reduces emissions as well as the need for more parking. An infiltration bump out is a traffic calming element that diverts the stormwater from the street into a planting bed that is built into the parking lane of the street.

Climate Change is happening and accelerating. Increasingly, climate change is being addressed by adaptation, not prevention. Green Infrastructure is primarily adaptive in nature. The overall goal of Green Infrastructure is to disconnect impervious surfaces that are connected (i.e., drain directly to sewer systems or local waterways). These practices tent to filter water using soil (bioretention) or stone (porous asphalt). Rain barrels and cisterns are used to harvest stormwater runoff for watering gardens, etc.

When used as components of a stormwater management system Green Infrastructure can produce a variety of environmental benefits:
● Effectively retaining and infiltrating runoff
● Help filter air pollutants
● Reduce energy demands
● Mitigate urban heat islands
● Sequester Carbon
● Provide aesthetic and natural resource benefits
● Improve both groundwater and surface water quality.
● Increase shallow & deep groundwater recharge
● Stabilize stream flows (base flows).
● Reduce the percentage of precipitation that runs off.
● Reduce flood frequency, severity and temperature of run-off.
● Be cost effective and extend the life of existing stormwater and sewer infrastructure.

Some Practices to Consider:
● Downspout Disconnection
● Infiltration Practices and Pocket Wetlands
● Permeable Pavement (South Orange)
● Rain Barrels (Verona) / Cisterns
● Rain Gardens / Bioretention (Cranford) (Fanwood)
● Soil Amendments and Filter Strips
● Street Trees and Afforestation (Verona) (Cranford)
● Tree Box Filters and Vegetated Roofs (Roseland)

● Vegetated Swales
● Impervious Cover Reduction (Cranford) (Union Twp.)
● Curb Cuts, Eliminate Curbs (Cranford)
● Dry Wells (Millburn)

Land conservation is another good tool for communities to use for reducing the risks of stormwater runoff and sewer overflows. Natural areas that should be a focus of this effort include riparian areas, wetlands, and steep hillsides.
Source https://www.epa.gov/green-infrastructure/what-green-infrastructure.

Potential state and federal funding for green infrastructure:
● The New Jersey Environmental Infrastructure Financing Program (low interest loans)
● New Jersey Statewide Nonpoint Source Pollution Program Grants (Section 319h Program)
● Department of Transportation Enhancement Activities
● Environmental Protection Agency's Targeted Watershed Grants Program
https://njaes.rutgers.edu/pubs/fs1197/

Green Acres funding: A 2017 New Jersey Department of Environmental Protection program will provide nearly $80.7 million in funding to local governments and nonprofit land trusts to acquire open space, develop parks and perform stewardship activities on parks throughout New Jersey.

Gloria mentioned that Bloomfield township will receive a $1 million matching grant toward the acquisition of 12.7 acres along the Third River and Spring Brook. Jessica asked if that is a Township or a County project. Gloria clarified that these are township projects, in 2016, Bloomfield received a $3 million DEP grant to turn the former site of Scientific Glass Co., into a park. They intent to restore the area as wetlands to hold flood waters and provide a wildlife habitat. The total of 18 acres of preserved parkland could create passive and active recreation facilities, and provide environmental education. Belleville Township will receive a $1 million matching grant to develop and rehabilitate the Municipal Stadium's recreational fields; and Nutley Township will get a $262,586 matching grant and $87,529 loan to replace the synthetic turf at the Father Glotzbach Park soccer field, located off Park Avenue.

Regarding Essex County Parks, this is the NJDEP statement:
"Having completed improvements at Weequahic Park, Glenfield Park and Cedar Grove Park, Essex County wishes to continue renovations at other parks throughout the county park system. The next series of improvements will focus on Riverbank Park and Vailsburg Park, both located in Newark; Verona Park, located in Verona Township; Yanticaw Park, located in Nutley Township; Grover Cleveland Park, located in the Boroughs of Caldwell and Essex Fells; and other county parks as funding allows. At Yanticaw, Verona, and Grover Cleveland Parks, the playground areas will be refurbished; field house improvements are planned at Vailsburg Park; and at Riverbank Park, the baseball field and stadium will be renovated." $1.5 million Matching Grant Award - Park Development - Urban Aid Municipality

Martin visits Verona Park often and explained that about 2 weeks ago he saw the sign announcing construction in the playground, starting on September 2017 and opening Spring of 2018. Mayor Ryan mentioned that they started construction on time, the playground was fenced in and closed due to construction by Sept. 5.

Martin explained that he called the County inquiring for information about the project, he was directed to contact Public Works and several people promised to call him back but nobody did. Therefore he contacted the Verona Park Conservancy and they sent him an electronic copy of the plan for a new parking lot by the tennis court. Gloria contacted Verona Mayor and Town Manager and she was informed that Essex County plans to add a 50 space parking lot to Verona Park. That is about 0.4 acres of grassed open space that will be converted to parking and could potentially increase runoff rates and decrease water quality. Gloria distributed copies of the plan to members.

Mr. Cavallo informed that the County Executive and a member of his staff, probably County Parks Director Mr. Salvante, confirmed to meet him, Councilman McEvoy, VEC Chairperson and two more VEC members at Verona Park's Boat House on Wednesday September 20th at 5:00 PM. The Mayor will be out of town and unable to attend. Mr. Cavallo explained that only 3 VEC members should attend since otherwise it would need to be advertised as a public meeting, the VEC quorum requirement is 4 members.

Jessica stated that in her opinion the current special meeting was not needed since the County Executive already agreed to meet with the VEC Chairperson, two VEC members and Township authorities next week. Gloria mentioned that she and several members prefer to have an open public meeting and vote on the matter before meeting the County Executive.

The County will be replacing the playground, refurbishing the tennis court and expanding the parking area to the east of the driveway. Verona Township does not have any jurisdiction in Verona park when it comes to this matter. Mayor Ryan said that he would inquire about this since somebody should have called Martin back, but he emphasized that Verona Park is under County jurisdiction and the Township has no control over construction in the park. He added that the County was very happy about the project and met at the playground with members of the Verona Park Conservancy to explain the project. What happened with Martin was not right but this is a County property.

Mr. Cavallo mentioned that a County representative announced the upcoming construction during a Verona Town Council meeting last August, and added that the playground didn't meet current requirements, usually playgrounds need to be renovated every 15 years to meet safety requirements, this is why the Verona Community Center playground will be removed.

Martin added that he lives by the park and took pictures of the parking areas, which are usually empty during the week and become occupied during weekends. He mentioned that adding a parking lot will attract even more drivers instead of encouraging people to park near by and walk to the park.

Gloria asked him about his experience when he was a Montclair resident. Mr. Cavallo said that Montclair built a parking deck but it is too expensive to do that in Verona. Martin mentioned that the parking deck in Montclair did not alleviate the parking shortage because there is no really a parking shortage, but a lack of one right in front of where you're going to.

Mayor Ryan mentioned that the footprint of the playground will be the same, and it is nice that they waited until after the summer to start construction.

Mrs. Lilley mentioned that the grassy area where the parking lot will be installed is used for

school picnics, usually during the end of the school year. Mr. Cavallo explained that the Verona Police Department and the Town Council had been asking the County for this parking lot for a while and the parking lot is a done deal. Gloria asked what is the Township planning to do in 5 years if other residents complain again about lack of parking, instead of parking nearby and walking to their final destination. The Mayor said that probably Verona will need to install another parking lot in the future, but suggested the VEC to do a similar but shorter, 15 minutes presentation during a township meeting and to petition the Town Council to adopt a resolution directing the Town Manager to follow certain recommendations. The Mayor explained that he has only one vote and 3 votes are needed to adopt any resolution. Jessica proposed to have two votes during the meeting. Gloria noted that it was not necessary to vote to have a presentation, and clarified that the VEC already recommended the Township to adopt a resolution stating its commitment to implement green infrastructure and reduce impervious area in the township by 10 percent.

Frank said that if the parking lot is a done deal probably we could appeal to the progressive interests of the County to modify the project. Jessica mentioned that the County Executive probably planted the most trees of anyone that has ever served in New Jersey.

Gloria distributed copies of a Draft that she put together. Tony, the VEC Vice-Chair, read aloud the following draft:

The Verona Environmental Commission (VEC) petitions the Verona Township governing body as soon as possible to recommend the County reducing impervious area where possible. Please ask the County to consider using Green Infrastructure such as Permeable Pavement, instead of impervious materials, in projects such as the upcoming new parking lot in Verona Park.

According to the EPA Green Infrastructure is a cost-effective, resilient approach to managing wet weather impacts that provides many community benefits. The cost of porous pavement can be somewhat higher than that of conventional pavement, but long-term savings and benefits make it competitive because it is not susceptible to freeze-thaw cycles that often damage conventional pavement.

Green Infrastructure Practices include: Depaving, Green Parking Lots, Permeable Pavement, Pervious Paths, Green Streets, Bioswales, Curb Cuts, Rain Gardens, Filter Strips, Infiltration Bump Out, Downspout Disconnection, Rain Barrels, Cisterns and Green Roofs.

The Impervious Cover Assessment prepared for Verona Township by the Rutgers Cooperative Extension Water Resources Program states that the primary cause of the pollution, flooding, and erosion problems is the quantity of impervious surfaces draining directly to local waterways. As the amount of impervious surfaces like roadways, parking lots and rooftops increase, stormwater runoff increases. The report recommends implementing Green Infrastructure, and concludes that setting a goal of a 10% reduction of impervious area would be a reasonably achievable reduction for each subwatershed in Verona Township. The VEC formally extended those recommendations to the Verona Township governing body in July 2017.

New Jersey has the highest percent of impervious cover in the country at 12.1% of its total area. Based upon the 2012 NJDEP land use/land cover data, approximately 31.5% of Verona

has impervious cover, suggesting that the streams in Verona Township are likely non-supporting. A total of 82.5% of the municipality's land use is classified as urban.
During the 2002-2007 period, New Jersey added 33.4 square miles of additional impervious surface. This is an annual rate of 4,270 acres of impervious surface increase per year or 9 American football fields of new impervious surface per day (including end zones), resulting in an annual run-off increase of over 5 billion gallons per year.

Green Infrastructure can mitigate increases in impervious cover by reducing their impact to local waterways. The overall goal of Green Infrastructure is to eliminate, reduce, or disconnect impervious surfaces that are connected (i.e., drain directly to sewer systems or local waterways), where possible and practical, in order to repair our waterways, improve water quality and reduce flooding.

Kind Regards,
The Verona Environmental Commission

----------end of the draft----------

The Chairperson asks if there is a motion to vote on the proposal, Jessica moved the motion and Sean seconded. After a brief discussion, members voted and the motion passed with 6 votes in favor** (Gloria Machnowski, Anthony Saltalamacchia, Jessica Pearson, Sarah Yauch O'Farrell, Sean DiBartolo, and Martin Golan); none against.

**Frank Ceccacci is an Alternate Member. According to Verona Code Chapter 16-2 F Alternates may participate in discussions of the proceedings but may not vote except in the absence or disqualification of a regular member.

Mrs. Lilley mentioned that she doesn't have a lot of experience on these matters but she thinks that the document is great, very informative and to the point.

In addition, Sean proposed to form a subcommittee, which will meet with the County Executive and put together further presentations about this matter. He proposed this subcommittee to be comprised by Gloria, Martin, himself, and Walter as a backup, in case one of the other 3 members were unable to attend. Tony seconded the motion. After brief discussion, members voted and the motion passed with 6 votes in favor, none against.

Adjournment 8:05 PM – Next Meeting September 20th at 7:00 PM, 2017.