The Downtown Silver Spring project was reviewed by the Art Review Panel on April 8, 2020. The following meeting minutes summarize the Applicant’s presentation, the discussion during the meeting, and recommendations regarding the public art for the public benefits package. The Panel’s final recommendations will be incorporated into the Staff Report and strongly considered by the Planning Board prior to the certification of the Site Plan and/or prior to the release of the first building permit. Should you have any additional questions and/or comments please feel to contact the Public Art Coordinator.

Attendance:
Grace Bogdan (Area 1 - Lead Plan Reviewer)
Robert Kronenberg (Deputy Planning)
Kelly Price (Applicant – Peterson Companies)
Barbara Sears (Applicant’s Attorney)
Bryant Foulger (Applicant – Foulger Pratt)
Brian Flynn (Applicant’s Landscape Architect)
Donald Hoover (Applicant’s Landscape Architect)
Jessie Silver (Public Artist)
Yurick Surdent (Artist)

Charles Bergen (Panelist)
Claudia Rousseau (PATSC Rep and Panelist)
Christine Farley (Panelist)
Clare Winslow (Arts & Humanities Council, PATSC Representative)
Francoise Carrier (Panelist)
Hiroshi Jacobs (Panelist)
Lee Goodwin (Panelist)
Mansur Abdul-Malik (Panelist)
Molline Jackson (Art Review Panel Coordinator)
Reemberto Rodriguez (Regional Service Director)
Elizabeth Gallauresi (Arts & Entertainment District Rep.)
Valentina Nahon (Panelist)
Summary of Background Information:

- The subject property is in Downtown Silver Spring; near the intersection of Georgia Avenue and Colesville Road on the southern quadrant.
- This development provides 1,175,935 square feet of retail, office entertainment, restaurants, hotel and housing on 22.5 acres of CBD zoned land with the Silver Spring Arts and Entertainment District.
- The total percentage of approved public use space is 29.91%.
- This Site Plan Amendment will modify the design of the public use space to include 1) modifications to the hardscape and landscape design, 2) remove existing public artworks, 3) modifications to Ellsworth Drive to restrict non-essential vehicles, and 4) reductions to the total number of parking spaces.
- The four existing artworks (shown below) that were approved with the original Site Plan application are: 1) A Celebration of Life: Homage to Food Plants of the World by Jorge Somarriba (2004), 2) Silver Creek by Deirdre Saunder (2004), 3) Lightweb by Craig Kraft (2004), and 4) Fearless Flier (translucent acrylic glass panels on the railings) by David Carlson (2016). The existing public artworks are located at the center of the subject property (along Ellsworth Drive).

Existing Public Artworks:
• The Applicants presented their initial concept at the February 2020 meeting and proposed a work of public art titled: *Blumen Lumen II*; a bouquet of oversized illuminated steel flowers ranging in height (18-24 feet). The proposed artwork is located at the corner of Colesville Road and Georgia Avenue and is intended to replace the existing signage along the street.

• The buds and stems of the flowers will be constructed of steel sheets and tubing. Arduino motion sensors, a motor, and LED-lighting will also be incorporated.

• Pedestrians will be able to interact with the flower heads and the articulations of the flower petals from the concrete base of the artwork. The lights will respond to pedestrians as pressure-sensitive plates embedded in the pavement (i.e. real time technology) will activate the on/off and color changing controls of the lights.

• The animation of the artwork is linked to the time of day, opening with sunrise and/or the opening of the adjacent stores, closing/opening at noon and a few times during the day/evening before closing for the night.

• The Applicant was not prepared to discuss the removal of the artworks, nor the details of the redesigned public plaza area at the February 2020 meeting (1st Art Review Panel meeting).

**Discussion Points:**

➢ After 15-years of the original construction, the Applicant is seeking to refresh the look and feel of the retail experience and open spaces that increase “dwell time.”

➢ Downtown Silver Spring will be fun, eclectic, artistic, flexible, whimsical, curious, comfortable, surprising, and high-quality. The proposed artwork from the Artist (Full House) expresses the intended outcomes.

➢ The Gateway Plaza area *(shown in Image A below)* has a historic designation, which makes any changes to the storefronts and building façade difficult.

![](Gateway_Planza.png) **Image A: Gateway Plaza (near the intersection of Georgia Avenue and Colesville Road)**

301-495-4573 (office), 301-495-1306 (fax)
molline.jackson@MontgomeryPlanning.org
www.montgomeryplanning.org

3 | Page
➢ The some of the building facades that are more internal to the public use space areas were refreshed with bright and colorful murals.
➢ Activation of the central public use space is currently supported by the water feature, the stairwell, and the outdoor seating. However, the water feature and stairwell will be removed due to on-going maintenance issues. As a replacement to these fun elements, Ellsworth Drive will be activated with the 1) Silver Spring Sculpture (centerpiece) and water feature, 2) a floating stage with outdoor seating, 3) a community chalkboard (like the one in Charolettesville), 4) kiddy horse rides, 5) work stations, 6) ping pong, 7) porch swings, and 8) tree lighting. These elements are shown in the site plan below (Image B)

Image B: Public Amenities Site Plan

➢ There will also be synthetic turf installed on Ellsworth Drive.
➢ Gateway Plaza (located near the intersection of Georgia Avenue and Colesville Road) will be activated with the installation of the Blumen Lumen II artwork plus temporary outdoor seating.
➢ Additional murals (other types of public artwork) have been installed on the existing building facades. For example, two murals on the movie theater.
➢ The Celebration of Life Mural by Jorge Somarriba (shown in Image C) is being proposed to be reinstalled along the brick wall facing the skating rink.
➢ The Applicant is trying to see if it’s possible to relocate Light Web, a light sculpture by Craig Kraft (shown in Image D) on the façade of an existing building.

*Image C: Celebration of Life Mural by Jorge Somarriba (2004)*

➢ *Blumen Lumen (Image E below)* will be a beacon that introduces some fun and excitement along the street edge. In response to the initial comments, the Applicant has provided a walkway through the garden. One of the flowers from Blumen Lumen II will be oriented to hover over the walkway.

➢ Blumen Lumen II will sit inside a garden that blooms with the seasons. A bench will also be added for pedestrians to “sit in the garden.” The garden is a part of the artwork.

➢ Blumen Lumen II will respond to pedestrians as they move through the garden. During the night, the lighting will be seen in the stems and flowers (3 flowers clustered together). The pavement will be pressure sensitive and will change when users walk through the garden in real-time reaction. The flowers will also move throughout the day (maybe 3 times a day) and they will respond (stay closed) to severe weather conditions based on technology inherent in the work.

*Image D: Light Web artwork by Craig Kraft (2004)*
Blumen Lumen II is an origami made of 250 pieces of stainless-steel pieces (approximately 18-20 feet tall). The foundation of the artwork will be a concrete pad, similar to a streetlight fixture. The light will reflect on the surface. During the day, the natural colors will show on the top layer via a process called “Light Interference Coloring.”

Panel Recommendations:
1. The Art Review Panel supports the installation of Blumen Lumen II in addition to the following public amenities: 1) Silver Spring (centerpiece) and water feature, 2) a floating stage with outdoor seating, 3) a community chalkboard, 4) kiddy horse rides, 5) work stations, 6) ping pong tables, 7) porch swings, and 8) tree lighting as an adequate replacement for the existing public artworks.
2. The public artworks to be removed and not relocated are: 1) Silver Creek by Deirdre Saunder (2004), and 2) Fearless Flier (translucent acrylic glass panels on the railings) by David Carlson (2016). The water feature is being removed due to maintenance issues and the translucent glass panels are site specific and were installed as the railings to the stairwell that will be removed.
3. Planning Staff recommends that the Applicant contact the Arts and Humanities Council regarding the final location for the Jorge Somarriba mural. The Arts and Humanities Council, the Arts and Entertainment District, and the Silver Spring Urban District should be well-informed moving forward.
4. The Panel also supports the relocation of the 1) *Lightweb* by Craig Kraft, and 2) *A Celebration of Life: Homage to Food Plants of the World* by Jorge Somarriba (2004). Prior to the first building permit (per page 15 of the Art Review Panel’s Policies and Procedures), the Applicant will need to notify the Art Review Panel about the final location of the artwork.

5. The Certified Site Plan must contain site details that clearly indicate the overall dimensions, prescribed materials, necessary lighting fixtures, footers, and fasteners to ensure adequate safety and proper inspection of the artworks by the AHCMC and Montgomery County Department of Permitting Services (DPS). The final site details for the artwork will be certified by a structural engineer.

6. The Developer and Artist(s) will execute a maintenance agreement for the public artwork and other public benefits will present the signed document to the DPS and Montgomery County Planning Department prior to the issuance of the first building permit.

7. The appropriate signage should be clearly visible, specifically identifying the title of the piece, artist’s name, materials, completion date, and overall dimensions.

8. Prior to final inspection of the public artwork, the Developer must submit to the Public Art Coordinator with the Montgomery County Planning Department at least three images of the artwork on-site and information regarding the 1) associated project number, 2) title of the piece, 3) date of completion, 4) description of materials used, and 5) address. This information will be added to the existing inventory of public artworks throughout the County (*mcatlas.org/art*).

9. The Developer must comply with the implementation section of the Art Review Panel Policies and Procedures.
The Montgomery County Safe Healthy Playing Fields Coalition (MCSHPFC) has raised a number of concerns over artificial turf fields. Gretchen Ekstrom, an Environmental Health Specialist with the Department of Environmental Protection (DEP), conducted multiple site visits to artificial turf fields in the County to determine compliance with Montgomery County’s environmental regulations, specifically County laws related to water quality (Chapter 19 of the County Code) and air quality (Chapter 3). One primary purpose of these investigations was to determine if any materials (artificial turf blades or infill material) were leaving the property and being conveyed by stormwater into storm drains or streams in the vicinity of these fields.

Artificial turf fields consist of several layers: a compacted subgrade, a stone base (may include several layers of different stone and a drainage system), synthetic turf, and turf infill. The infill material may include sand, crumb rubber, clinoptilolite zeolite, or an organic material such as coconut husks, corn husks, cork, olive pits, and pine. Ekstrom identify twenty-one government owned locations and fourteen privately owned properties with artificial turf fields. Some locations like the Germantown Soccer Plex have multiple fields.

**Field Inspections:**
Ekstrom conducted inspections at Mater Dei, 9600 Seven Locks Rd, Bethesda; Paint Branch HS, 14121 Old Columbia Pike, Burtonsville; Richard Montgomery HS, 250 Richard Montgomery Dr, Rockville; Walter Johnson HS, 6400 Rock Spring Dr, Bethesda; and Wootton HS, 2100 Wootton Pkwy, Rockville.

Mater Dei constructed a new artificial turf field with cryogenic crumb rubber. Ekstrom inspected the work on November 20, 2019 and conducted several follow up inspections. FieldTurf, the installation company for the new field, and Mater Dei removed excess infill material from the grounds after completion of the work. No artificial turf blades or infill material were found in the storm drains around the field. Verdeline hauled away the waste material. No particulate discharges were seen during the spreading of the crumb rubber.

On November 20, 2019, Ekstrom inspected the crumb rubber artificial turf field at Water Johnson High School (WJHS). The track at WJHS is deteriorating. The artificial turf field is scheduled for replacement in early 2020. Ekstrom observed black particulate material tracked from the field up the stairs to the parking lot. Black particulate material was observed in the storm drain prior to an underground storm water facility, asset 18219. Asset 18219 contained standing water.

On December 5, 2019, Ekstrom and Steve Martin inspected the crumb rubber artificial turf field at Wootton HS. Unlike WJHS, the artificial turf field has a 12” perimeter curb and trench drain between the field and the track. Ekstrom observed 2-4” of crumb rubber in the trench train. Ekstrom contacted MCPS-Stormwater and confirmed that the trench drain was last cleaned on September 21, 2018.
Sand, crumb rubber, and some artificial turf blades were seen in the trench drain next to the north side grandstand. Crumb rubber and sand are stored under this grandstand in bulk tote bags. Ekstrom observed some crumb rubber on the ground near the bags. An existing storm drain inlet remained under the grandstand after their completion in 2013. The inlet is wrapped in a geotextile membrane. The vault contains some black particulate material.

Ekstrom checked the outfall which drains the storm drain under the north grandstand. Sheet flow from the parking lot as well as the artificial turf field trench drain and underdrain flow to this outfall on the east side of the field. No crumb rubber or artificial turf blades were seen in the outfall. The outfall was rechecked during a rain event on December 9, 2019. No crumb rubber or artificial turf blades were seen in the outfall.

During a rain event on December 9, 2019, Ekstrom inspected runoff from the Richard Montgomery HS artificial turf field. The storm water runoff runs through a pipe along Mt Vernon Place. Ekstrom opened a manhole near the artificial turf field. No zeolite or turf blades were seen in the vault.

On December 10, 2019, Ekstrom inspected the crumb rubber field at Paint Branch HS. Rain was falling in the area. Stormwater facilities are located at each end of the field: north and south. The southern stormwater facility, asset 18112, is a sand filter. Ekstrom observed crumb rubber in two 9” PVC outfalls coming from the field and discharging to the sand filter. The crumb rubber didn’t extend past the immediate discharge area of the outfall. Ekstrom inspected a manhole near the sand filter and the outfall on the stream. No crumb rubber or artificial turf blades were found.

A sand filter, asset 18119, is located on the north end of the field. Ekstrom observed crumb rubber in a 9” PVC pipe discharging into the sand filter. The crumb rubber remained near the end of the pipe.

Bulk crumb rubber is stored under the west side grandstand. The bulk tote bags are upright and in good condition. No crumb rubber was seen on the ground surrounding the bags.

On December 10, 2019, Ekstrom inspected Montgomery Blair HS (MBHS). This artificial turf field is coconut husk/cork and maintained by M-NCPPC. The artificial turf field is surrounded by a concrete curb. Ekstrom found no infill or artificial turf blades outside the field. Ekstrom inspected the two storm drains inlets closest to the west end of the field. No infill material nor artificial turf blades were found around the inlet.
Sand is stored next to a shed south of the artificial turf field. One of the bulk tote bags has sand around the base.

Old bags of crumb rubber are stored next to the baseball field. The bulk tote bags are in poor condition. Ekstrom observed crumb rubber on the ground next to the bags and in the storm drain. An attempt has been made to protect the inlet with a boom. MBHS has at least six underground storm water facilities that prevent infill material and turf blades from entering streams.

Records Review:
Ekstrom conducted a records review of MCPS maintenance records for the last year. Outside contractors conduct maintenance on the artificial turf fields including brushing, grooming, redistribution of infill, replenishment of infill, and sweeping for metal items. The field reports are posted on the MCPS website. No indication was given if the contractors used surfactants to reduce static electricity or herbicides to remove unwanted vegetative matter. A discrepancy was found in the maintenance records. On May 2, 2019, FieldTurf (subcontracted to King Sports) performed aggressive brushing/leveling, magnet sweeping, refilled infill, and a Tier 2 decompaction at Wootton HS. No mention was made of the collection and disposition of the debris generated by the maintenance. On May 4, 2019, Kathleen Michels photographed artificial turf blades in the trench drain next to the north grandstand. All other FieldTurf reports include statements and some photographs of the debris removal. MCPS was unable to verify if oversight is provided after maintenance is performed.

Best management practices:
Storage of infill should be away from inlets and properly covered. The bulk tote bags should be closed and intact. Regular removal of migrated infill and artificial turf blades should be implemented as well as routine monitoring of stormwater facilities.

Additional Resources:
EPA is working on the Federal Research Action Plan on Recycled Tire Crumb Used on Playing Fields and Playgrounds with CDC and CPSC. The study has four parts that will fill in the important data and knowledge gaps associated with crumb rubber, characterize tire crumb, and identify exposure pathways through:

- Literature Review/Gap Analysis (EPA and CDC/ATSDR) – completed 2016
- Recycled Tire Crumb Characterization (EPA and CDC/ATSDR) – published July 2019
- Exposure Characterization Study (EPA and CDC/ATSDR) – study not complete
- Playground Study (Consumer Product Safety Commission) – review completed and awaiting peer review
DATE: APRIL 10, 2020

PROJECT: DOWNTOWN SILVER SPRING

TO: PAUL WEINSCHENK (PETERSON), BRYANT FOULGER (FOULGER-PRATT)

FROM: BRIAN C. FLYNN (OCULUS)

SUBMITTAL NO: SYNTHETIC TURF ON ELLSWORTH DRIVE

CC: IAN DUKE (VIKA), JOSHUA SLOAN (VIKA), BARBARA SEARS (MILES STOCKBRIDGE), KELLY M. PRICE (PETERSON), TODD LANGFORD (PETERSON)

RESPONSE:

1. Product Specification:
   a. The material specified is Syntipede243 from SynLawn with a 1” pile height;
   b. The blades are polyethylene with an Enviroloc backing – including a “Super Yarn” offering anti-microbial, anti-static, and HeatBlock technology;
   c. The backing is 15 / 18 PP 1-Part / 20 oz. Enviroloc – a durable two-part woven Polypropylene backing fabric constructed to lock in the tuft fibers. The backing fabric and stitched fibers receive a thick layer of a biobased Enviroloc coating created with polymers from sustainable resources, including soybean oil.

2. Flammability
   a. Based on the manufacturer’s published literature, the specified material has passed flammability testing according to D2859 “Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials”; This test method determines the flammability of finished textile floor covering materials when exposed to an ignition source; The specified material has passed this test and, as such, is rated as “flame resistant” under laboratory conditions.
   b. The material also passed testing according to ASTM E108-17 “Standard Test Methods for Fire Tests of Roof Coverings, Class A Spread of Flame Testing”. The specified material is therefore a Class A roofing material, offering the highest rating for resistance to fire. Note: SYNTipede 243, the specified material, is essentially the same, but with a shorter pile height.

3. Installation method
   a. We are proposing to install the turf by gluing it directly to the asphalt roadbed substrate (See the attached details). The glue will be applied continuously at the perimeter and in a pattern at the interior to ensure a good bond to the substrate. The edges of the drive at the concrete gutter will be milled to provide continuous drainage to the adjacent gutters. No infill will be used on the project.
4. Maintenance  
   a. Since the turf will be attached directly to the roadbed, vehicles will be able to drive on the turf, but they will have to drive slowly. The only concern is for oil and/or other fluids leaking from the vehicle remaining on the turf. The attached maintenance guidelines discuss the procedures to remove stains from the turf emanating from vehicles and other potential sources of contamination.

5. Specified Adhesive  
   a. The specified adhesive is SDS #34-2. The specification is attached.

6. Runoff  
   a. We are unaware of any contamination coming from the specified turf. There is no infill specified, so the only materials are the fibers, backing, and glue. Every SynLawn product meets EPA, Consumer Product Safety Commission, and California Proposition 65, and other requirements.

7. Slippery when wet  
   a. The manufacturer has not needed to test the turf for slip resistance in the past. We are currently investigating slip resistance testing with the manufacturer and will provide if we are able to obtain the test results.  
   b. Similar material from the manufacturer is installed in public spaces throughout the country, including a similar installation at National Harbor in Maryland that has similar climate conditions. There has been no instance the manufacturer is aware of where a pedestrian slipped and fell on the synthetic turf.

8. Roadway Restoration

“What would it take to restore roadway to its current condition should the turf be removed in the future?”

Should the County decide to restore the area to a roadway in the future, the County could simply pull up the turf. Because of the strength of the bond of the glue, some adhesive would remain attached to the asphalt roadway. The County could surface mill the roadbed to eliminate any proud glue spots and repave and recoat the asphalt surface to have a fully functioning roadway. Because none of the drains along the turf area are being altered, drainage of the roadway would be as it is today.

9. Heat Build-up

“Synthetic turf is approximately 20 degrees hotter than Natural Grass, but not sure how much hotter than asphalt. Perhaps 10 degrees.”

This specified product contains built-in HeatBlock technology that minimizes rising temperatures by reflecting sunlight. The infrared reflective pigment embedded in the fibers of the turf help dissipate heat build-up, reduce thermal emissivity, and make this product as much as 20% cooler than similar artificial turf products.
In addition to the HeatBlock technology, the location of the existing roadway will help to minimize any heat build-up. The portion of Ellsworth Drive to receive the turf installation is a tree-covered and building-lined space. These factors will limit the amount of sun that reaches the surface of the turf. The attached heat map shows the amount of shading time resulting from the surrounding buildings for mid-summer (July 15). In addition, the tree coverage along Ellsworth Drive, not reflected in the calculation, will provide additional shading and further limit any potential heat build-up in the synthetic turf.
Table of Contents - Exhibits

2. Product Specification – 2: SY20027_SuperYarn
3. Installation Method: L0802 Details – Synthetic Turf
6. Runoff: SYNLawn 100 percent safe certification

Attachments - Exhibits

**SYNTipede 243**

When performance matters, this turf delivers. With a low profile pile height and heavy-duty Super Yarn™ grass blades, this artificial grass provides strength and resiliency not commonly found in competitor turf varieties.

### PRODUCT SPECIFICATIONS

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<th>Feature</th>
<th>Specification</th>
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<td>Grass Zone Denier</td>
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### SUPER YARN™ TECHNOLOGY

- **Sanitized®**: Antimicrobial
- **DualChill™**: IR Reflective
- **StatBlock™**: Anti-Static

### FEATURES

- **Antimicrobial**
- **IR Reflective**
- **Anti-Static**

### RECOMMENDED USES

- Landscape
- Pets
- Play
- Rooftop
- Golf

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Learn more at CADdetails.com

Not to scale. For illustration only.
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Primary Yarn Polymer: Polyethylene
Yarn Cross Section: Omega
Standard Color: Field Green / Apple
Fabric Construction: Tufted
Second Yarn Polymer Thatch: Polyethylene
Secondary Yarn Color: Field Green / Beige

Primary Backing: 15/18 PP 2-Part
Coating Type: 20 oz. EnviroLoc™
PE Yarn Denier / Ends: 10,000 / 6
Texturized Thatch Denier / Ends: 5,040 / 12
Warranty Period: Limited Lifetime
Super Yarn™ technology is a quantum leap in the advancement of synthetic turf products. Now in its fifth generation of artificial grass enhancements, SYNLawn's Super Yarn technology changes the landscape of the turf industry by binding three incredible features into one extruded grass yarn formulation. Bound at the molecular level, Super Yarn combines Sanitized® antimicrobial technology with DualChill™ IR reflective technology, and StatBlock™ anti-static technology to create the first of its kind artificial grass fiber.

- SYNLawn Super Yarn is the first fifth generation turf product produced and presented to the market.
- Super Yarn technology binds each additive to the molecular level of the fiber meaning that you cannot reach down and remove one element.
- SYNLawn is the only company in the industry to combine these three molecular components into a single yarn package.

For ordering and questions, contact SYNLawn at 866-796-5296 or visit SYNlawn.com
SANITIZED®
SILVER-BASED TECHNOLOGY

- Helps eliminate pet odors and provides long lasting protection against the formation of bacteria and algae.
- Works by eliminating bacterial growth and preventing the propagation of microbes on SYNLawn face fibers.
- Used for centuries, thus meaning the additive is very dependable and extremely safe.

New carbon-based anti-static ingredient molecularly bound into the face fiber that inhibits the buildup of static electricity.
- Anti-static components are used in the industry but SYNLawn brings the first DNA level addition.
- Testing shows up to a 17x reduction in static levels when StatBlock™ is introduced into the turf.

DUALCHILL™
THERMAL SHIELD

- Infrared light is a detriment to turf. DualChill™ acts as a thermal shield ensuring IR is not absorbed into the fibers.
- DualChill’s ability to act as a thermal shield strengthens the fibers allowing them to be more resilient and durable over long time periods.
- Test results done on the same fiber package, with and without DualChill™, shows that there is an average of a 42% increase in IR reflectivity.

STATBLOCK™
ANTI-STATIC COMPONENT

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SYNTHETIC TURF AT ASPHALT PAVING

SYNTHETIC TURF ON EXISTING BRICK PAVING

SYNTHETIC TURF AT CURB AND GUTTER

SYNTHETIC TURF AT FLUSH CURB

SYNTHETIC TURF GLUED TO SURFACE OF ASPHALT
ROADWAY.

NOTE:
1. ALL CONDITIONS TO BE VERIFIED IN THE FIELD.
2. CONTRACTOR AND SUPPLIER TO PROVIDE
INSTALLATION RECOMMENDATIONS.
3. ROADWAY WILL RECEIVE INTERMITTENT VEHICLE
AND FIRETRUCK ACCESS. SYNTHETIC TURF
SHALL ACCOMMODATE ALL APPLICABLE LOADS
AND CONDITIONS.

SYNTHETIC TURF GLUED TO SURFACE OF EXISTING
BRICK ROADWAY.

NOTE:
1. ALL CONDITIONS TO BE VERIFIED IN THE FIELD.
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AND FIRETRUCK ACCESS. SYNTHETIC TURF
SHALL ACCOMMODATE ALL APPLICABLE LOADS
AND CONDITIONS.

SYNTHETIC TURF AT CURB AND GUTTER.

NOTE:
1. ALL CONDITIONS TO BE VERIFIED IN THE FIELD.
2. CONTRACTOR AND SUPPLIER TO PROVIDE
INSTALLATION RECOMMENDATIONS.
3. ROADWAY WILL RECEIVE INTERMITTENT VEHICLE
AND FIRETRUCK ACCESS. SYNTHETIC TURF
SHALL ACCOMMODATE ALL APPLICABLE LOADS
AND CONDITIONS.

SYNTHETIC TURF AT FLUSH CURB.

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SYNTHETIC TURF MILLED ROAD.

NOTE:
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SYNTHETIC TURF GLUED TO SURFACE OF EXISTING
BRICK ROADWAY.

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SYNTHETIC TURF GLUED TO SURFACE OF ASPHALT
ROADWAY.

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AND CONDITIONS.
CARE & MAINTENANCE Manual

SCM.v140324
INTRODUCTION
Thank you for choosing SYNLawn®. Even though your SYNLawn® does not require the traditional maintenance of natural grass, there are maintenance procedures that can help protect your investment and extend the useful life of your SYNLawn® brand turf.

The following procedures are important in helping to preserve your turf.

- Keep it clean
- Brush periodically
- Do no abuse
- Report any problems promptly to your SYNLawn® dealer

INITIAL REQUIREMENTS
SYNLawn® products/systems require a minimum two (2) week stabilization period. This period of time varies depending on local conditions, use, and product/system specifications. During this time, it may be necessary to make minor adjustments to the product and installation.

You should also review the Warranty provided to you for specific prohibitions and limitations confirmed therein.

If you have further questions, contact your local SYNLawn® dealer or contact SYNLawn® at 2680 Abutment Road, Dalton, GA 30721 or telephone us at 866-796-5296.

CLEANING AND STAIN REMOVAL

I. Keep it clean
   A. Dust, pollen, and airborne pollutants
      Rainfall is the best cleanser. In areas where rainfall is scarce, an occasional water flush is beneficial to cleanse the turf. For lightly soiled areas, it may be necessary to sponge mop with a five (5) percent solution of low sudsing household detergent in hot water followed by a thorough rinsing with hot water. For heavily soiled areas, repeat procedure for lightly soiled areas follow with sponge mopping using a three (3) percent solution of household ammonia in hot water followed by a thorough rinsing with hot water.

Synlawn® makes no representation, guarantees or warranties, express or implied, regarding the information contained herein.
B. Stains and other blemishes

The first rule is promptness. It is always easier to clean up a fresh spill than one that has dried and hardened. Remove any solid or paste-like deposit with a spatula or table knife. Blot up excess liquids with paper towels, a clean cloth, or a dry absorbent, such as kitty litter or fuller’s earth. (Fuller’s earth is an absorbent claylike earthy material and is often found as a component of kitty litter.) Dry absorbents can then be swept or vacuumed up afterwards.

Synthetic fibers have good resistance to staining. However, it is important to realize they are only one part of a sophisticated system of various components designed for overall performance. Some cleaning agents safe for the face fibers can be harmful to other components of the turf system. Therefore, cleaning agents are grouped into two sets, one of which can be used in liberal amounts directly on the turf surface, and the second of which should only be applied by rubbing a cloth soaked in the cleaner in order to minimize penetration of possible harmful agents below the turf surface. In the first group of cleaners which generally can be applied without any special precautions are the following:

- Simple Green bio-friendly cleaner. Follow the manufacturer’s instructions.
- A warm, mild solution of granular household detergent or any low sudsing detergent for fine fabrics. Use approximately one teaspoon to one pint of water. This will handle most waterborne stains including:

<table>
<thead>
<tr>
<th>Coffee</th>
<th>Ketchup</th>
<th>Cocoa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tea</td>
<td>Butter</td>
<td>Ice cream</td>
</tr>
<tr>
<td>Fruit juices</td>
<td>Alcohol</td>
<td>Mustard</td>
</tr>
<tr>
<td>Vegetable juices</td>
<td>Cola</td>
<td>Glue</td>
</tr>
<tr>
<td>Milk</td>
<td>Water colors</td>
<td>Latex paint</td>
</tr>
</tbody>
</table>

- A three (3) percent solution of household ammonia in water may be used in lieu of household detergent for more stubborn stains.
- Do not use cleaners that contain chlorine bleaches or caustic cleaners (ph above 9) or highly acidic cleaners (ph. below 5).
- Rinse area thoroughly with clean cold water to remove any traces of soap or ammonia.
- Blot up excessive liquid.
The second group of cleaners must be applied sparingly with care taken to avoid penetration of the agent beneath the turf are the following:

- Mineral spirits or a grease spot remover like perchlorethylene (dry cleaning solution) of the type sold by most variety stores and supermarkets. In general, cleansers in this category should handle most oil-based stains including:

<table>
<thead>
<tr>
<th>Asphalt and tar</th>
<th>Suntan oil</th>
<th>Nail polish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooking oil</td>
<td>Chewing gum</td>
<td>Crayon</td>
</tr>
<tr>
<td>Floor wax</td>
<td>Shoe polish</td>
<td></td>
</tr>
<tr>
<td>Motor oil &amp; grease</td>
<td>Lipstick</td>
<td></td>
</tr>
<tr>
<td>Ballpoint ink</td>
<td>Paraffin wax</td>
<td></td>
</tr>
</tbody>
</table>

**Caution:** Mineral spirits and other petroleum based solvents are flammable. Do not smoke or permit open flames near where these are being used. Be sure the area is well ventilated where solvent cleaners are used.

C. Animal Waste

Although all SYNLawn® products are pet friendly, there is additional maintenance necessary to keep odors to a minimum. Allow waste to dry and then dispose. Consider use of products such as Simple Green or Pro-vet-logic that are pet safe. Depending on the amount of usage and number of dogs, enzyme neutralizers may also be helpful to control odors. Neutralize with mixture of white distilled vinegar in an equal amount of water. Some odor control infills require flushing with water and some do not, so it’s important to ask for specific recommendations from your local SYNLawn dealer in accordance with the infill product used for your installation.

D. Mineral deposits

Apply a mixture of white distilled vinegar in an equal amount of water to grass and lightly brush. Flush thoroughly with water after application.

E. Chewing gum or tree sap

In addition to dry cleaning fluid, chewing gum and tree sap can be removed by freezing. Aerosol packs of refrigerant are available from most carpet cleaning suppliers for this purpose, or dry ice can be used. After freezing, scrape with a knife.
F. Fungus or mold spots
A one (1) percent solution of hydrogen peroxide in water can be sponged on to the affected area. Flush thoroughly with clean water after application.

G. Oil paints and more difficult stains
Please consult your SYNLawn® dealer as these may require a commercial carpet cleaner.

Caution! Do not use high-pressure water spray with stream force in excess of 300 psi as this can severely damage the turf and displace any infill material.

BRUSHING

II. Periodic brushing
The frequency for suggested brushing is directly related to the amount of foot traffic you have in your turf area. Matting of fibers may occur in areas of high foot traffic, especially if fibers have become soiled with dirt and other airborne pollutants.

Periodic “cross brushing” of the turf with a Grandi Groomer rake can help restore the aesthetic appearance of the turf. “Cross brushing” means all brushing activity takes place against the grain, nap, or sweep of the turf fibers. By brushing against the turf, the fibers are “fluffed up”. A brush with synthetic bristles should be used. The use of a Grandi Groomer is highly recommended.

Caution! Never use a brush with metal or wire bristles as these will change the turf fibers.

Take note to heavier trafficked areas for matting of fibers that might appear different than other areas that do not see heavy traffic. Brushing these areas is highly recommended as it will ensure the full life of your SYNLawn®. Brushing with a Grandi Groomer cannot hurt the turf, so brush as often as needed, again keeping in mind that the more traffic, the more frequent the brushing.

High traffic areas might include, but are not limited to:
- Commercial applications
- Multiple dogs
- Heavy play activity by children
- Paths in the yard that are traveled more often
Protect Your Grass

Although your SYNLawn® brand turf is made of tough, durable fibers, certain precautions should be taken to prevent damage to the turf.

- Ensure that your SYNLawn® is not exposed to reflected sunlight from windows, metallic or other reflective items as this may cause fiber shrinkage and/or melting of fibers.
- Avoid leaving any heat-absorbent material on the turf during daylight hours. Clear or dark plastic sheeting, articles made of metal, garden hoses, pool floats or toys for example will absorb heat at a higher rate than the turf and may cause localized shrinkage as the temperature may exceed the turf stabilization temperature.
- Lighted cigarettes cannot ignite the turf, but they can damage the turf by fusing the tips of the fibers together. Cigarettes, fireworks, and open flames should be kept away from the turf.
- Furniture and equipment with sharp or jagged edges should not be placed on turf as this may puncture or tear the turf.
- Cap off or remove nearby sprinkler heads. Water from sprinkler systems can leave mineral deposits on turf that may cause discoloration.
- Ensure recommended “infill” levels are maintained.

Report any issues/problems

Minor problems can become major problems if not corrected quickly. Any problem should be reported promptly to your local SYNLawn® dealer.

Conclusion

The proper care and maintenance program can enhance the aging, usefulness, and aesthetics of your SYNLawn® brand turf. This manual attempts to encounter and answer the most frequently asked questions regarding your SYNLawn®. However, there are always unanticipated questions or needs so do not hesitate to call us!
1. Identification

1.1. Product identifier

Product Identity: NORDOT® Adhesive/Prepolymer #34N-2
Alternate Names: Polyisocyanate Resin

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use: See Technical Data Sheet.
Application Method: See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name: Synthetic Surfaces Inc.
P.O. Box 241
2450 Plainfield Avenue, Scotch Plains
NJ 07076-0241

Emergency
CHEMTREC (USA): (800) 424-9300
24 hour Emergency Telephone No.: (908) 233-6803
(908) 377-5112
Customer Service: Synthetic Surfaces, Inc. (908) 233-6803

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Flam. Liq. 2;H225: Highly Flammable liquid and vapor.
Skin Irrit. 2;H315: Causes skin irritation.
Eye Irrit. 2;H319: Causes serious eye irritation.
Skin Sens. 1;H317: May cause an allergic skin reaction.
Resp. Sens. 1;H334: May cause allergy or asthma symptoms of breathing difficulties if inhaled.
Carc. 2;H351: Suspected of causing cancer.
STOT SE 3;H336: May cause drowsiness or dizziness.
STOT RE 2;H373: May cause damage to organs through prolonged or repeated exposure. Specific Target Organs: (Not Available)

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.
H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.
H336 May cause drowsiness and dizziness.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.

[Prevention]:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.
P235 Keep cool.
P240 Ground / bond container and receiving equipment.
P241 Use explosion-proof electrical / ventilating / light / equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust / fume / gas / mist / vapors / spray.
P264 Wash thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves / eye protection / face protection.

[Response]:
P302+352 IF ON SKIN: Wash with plenty of soap and water.
P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.
P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.
P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P308+313 IF exposed or concerned: Get medical advice / attention.
P314 Get Medical advice / attention if you feel unwell.
P321 Specific treatment (see information on this label).
P333+313 If skin irritation or a rash occurs: Get medical advice / attention.
P337+313 If eye irritation persists: Get medical advice / attention.
P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P341 If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342+311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor / physician.
P362 Take off contaminated clothing and wash before reuse.
P363 Wash contaminated clothing before reuse.
P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.
3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

<table>
<thead>
<tr>
<th>Ingredient/Chemical Designations</th>
<th>Weight %</th>
<th>GHS Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butanone</td>
<td>33 – 36</td>
<td>Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336</td>
<td>[1][2]</td>
</tr>
<tr>
<td>CAS Number: 0000078-93-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diphenylmethanediisocyanate</td>
<td>&lt; 3</td>
<td>Carc. 2; H351 Acute tox. 4; H332 STOT RE 2; H373 Eye Irrit. 2; H319 STOT SE 3; H335 Skin Irrit. 2; H315 Resp. Sens. 1; H334 Skin Sens. 1; H317</td>
<td>[1][2]</td>
</tr>
<tr>
<td>CAS Number: 0000101-68-8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[1] Substance classified with a health or environmental hazard.
*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General
In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

Inhalation
Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes
Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

Skin
Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

Ingestion
If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.
4.2. Most important symptoms and effects, both acute and delayed

**Overview**

Acute: Causes irritation to eyes, respiratory tract and skin.

Chronic: May cause serious and possibly irreversible pulmonary injury.

Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure.

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for further details.

**Inhalation**

May cause drowsiness or dizziness. May cause allergy or asthma symptoms of breathing difficulties if inhaled.

**Eyes**

Causes serious eye irritation.

**Skin**

May cause an allergic skin reaction. Causes skin irritation.

### 5. Fire-fighting measures

**5.1. Extinguishing media**

Recommended extinguishing media; alcohol resistant foam, CO₂, powder. Avoid contact with water.

**5.2. Special hazards arising from the substance or mixture**

Hazardous decomposition: By fire: CO₂, CO, Oxides of Nitrogen

Keep away from heat / sparks / open flames / hot surfaces - No smoking.

Keep cool.

Ground / bond container and receiving equipment.

Use explosion-proof electrical / ventilating / light / equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing dust / fume / gas / mist / vapors / spray.

**5.3. Advice for fire-fighters**

Self-contained breathing apparatus. Avoid contact with water.

ERG Guide No. ----

### 6. Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

Put on appropriate personal protective equipment (see section 8).

**6.2. Environmental precautions**

Do not allow spills to enter drains or waterways.
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Avoid open flames or sparks. Provide adequate ventilation. Absorb with sweeping/cleaning compound.

Follow practice for disposal of flammable organic solvent and be in accordance with Federal, State and Local regulations regarding environmental control.

7. Handling and storage

7.1. Precautions for safe handling

Avoid open flames, sparks, static electricity or other sources of ignition. When spraying, use respiratory protection approved for organic vapors, isocyanates and solvents. The TLV for airborne isocyanates is 0.005 ppm. Be vigilant about no smoking, grounding equipment to avoid static electricity, plus avoid other possible sources of ignition.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.

Examination of lung function should be carried out on a regular basis on persons applying this preparation.

Incompatible materials: Avoid contact with water.

Do not store containers in direct sunlight, hot "desert like" or other high heat conditions as the increase in internal pressure from heat may cause the containers to rupture and/or explode. Provide adequate ventilation.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000078-93-3</td>
<td>Butanone</td>
<td>OSHA</td>
<td>TWA 200 ppm (590 mg/m3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA: 50 ppm STEL: 100 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>TWA 200 ppm (590 mg/m3) ST 300 ppm (885 mg/m3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
<tr>
<td>0000101-68-8</td>
<td>Diphenylmethanediisocyanate</td>
<td>OSHA</td>
<td>C 0.2 mg/m3 (0.02 ppm)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA: 0.005 ppm Ceiling: 0.01 ppm Skin, S</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>TWA 0.05 mg/m3 (0.005 ppm) C 0.2 mg/m3 (0.020 ppm) [10-minute]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
</tr>
</tbody>
</table>
Carcinogen Data

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>0000078-93-3</td>
<td>Butanone</td>
<td>OSHA</td>
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<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: No; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;</td>
</tr>
<tr>
<td>0000101-68-8</td>
<td>Diphenylmethanediisocyanate</td>
<td>OSHA</td>
<td>Select Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: No; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Respiratory: Approved for organic vapors, isocyanates and solvents.

Eyes: Chemical safety goggles

Skin: Wear overalls to keep skin contact to a minimum. Chemically resistant rubber or plastic

Engineering Controls: Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices: Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Hazy, amber Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Solvent odor</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not Measured</td>
</tr>
<tr>
<td>pH</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Flash Point</td>
<td>21°F Tag Open Cup</td>
</tr>
<tr>
<td>Evaporation rate (Ether = 1)</td>
<td>Slower than ether</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Lower Explosive Limit: Not Measured</td>
</tr>
<tr>
<td></td>
<td>Upper Explosive Limit: Not Measured</td>
</tr>
<tr>
<td>Vapor pressure (Pa)</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Heavier than air</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.99</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water (log Pow)</td>
<td>Not Measured</td>
</tr>
</tbody>
</table>
Safety Data Sheet
NORDOT® Adhesive/Prepolymer #34N-2
SDS Revision Date: 01/01/2019

Auto-ignition temperature: Not Measured
Decomposition temperature: Not Measured
Viscosity (cSt): Not Measured
VOC Content (theoretical): 346 g/l
% Non-Volatile: 64 - 67%

9.2. Other information
No other relevant information.

10. Stability and reactivity

10.1. Reactivity
Hazardous Polymerization will not occur.

10.2. Chemical stability
Stable under normal circumstances.

10.3. Possibility of hazardous reactions
No data available.

10.4. Conditions to avoid
Contact with moisture and other materials which react with isocyanates.

10.5. Incompatible materials
Avoid contact with water.

10.6. Hazardous decomposition products
By fire: CO2, CO, Oxides of Nitrogen

11. Toxicological information

Acute toxicity
Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50, mg/kg</th>
<th>Skin LD50, mg/kg</th>
<th>Inhalation Vapor LD50, mg/L/4hr</th>
<th>Inhalation Dust/Mist LD50, mg/L/4hr</th>
<th>Inhalation Gas LD50, ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butanone - (78-93-3)</td>
<td>2,737.00, Rat - Category: 5</td>
<td>6,480.00, Rabbit - Category: NA</td>
<td>32.00, Mouse - Category: NA</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Diphenylmethanediisocyanate - (101-68-8)</td>
<td>4,700.00, Rat - Category: 5</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).
12. Ecological information

12.1. Toxicity
The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and GHS and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details.

Aquatic Ecotoxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>96 hr LC50 fish, mg/l</th>
<th>48 hr EC50 crustacea, mg/l</th>
<th>ErC50 algae, mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butanone - (78-93-3)</td>
<td>400.00, Cyprinodon variegatus</td>
<td>520.00, Daphnia magna</td>
<td>500.00 (96 hr), Skeletonema costatum</td>
</tr>
<tr>
<td>Diphenylmethanediisocyanate - (101-68-8)</td>
<td>Not Available</td>
<td>129.70, Daphnia magna</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
There is no data available on the preparation itself.

12.3. Bioaccumulative potential
Not Measured

12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects
No data available.
13. Disposal considerations

13.1. Waste treatment methods
Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

1. Carrier must be hazmat certified.
2. Packaging: five-gallon pail.
3. Gross weight: ~46.5 lbs.
4. Dimensions: ~12” diameter x 13” h.
5. This item is not stackable.
6. UN Number: 1133.
7. UN Packaging Group: II.

15. Regulatory information

Regulatory Overview  The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA)  All components of this material are either listed or exempt from listing on the TSCA Inventory.

US EPA Tier II Hazards  Fire: Yes
Sudden Release of Pressure: No
Reactive: No
Immediate (Acute): Yes
Delayed (Chronic): Yes

EPCRA 311/312 Chemicals and RQs (lbs):

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butanone</td>
<td>5,000.00</td>
</tr>
<tr>
<td>Diphenylmethanediisocyanate</td>
<td>5,000.00</td>
</tr>
</tbody>
</table>

EPCRA 302 Extremely Hazardous:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:
- Diphenylmethanediisocyanate

Proposition 65 - Carcinogens (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%^):
- Butanone
- Diphenylmethanediisocyanate
Pennsylvania RTK Substances (>1%):

- Butanone
- Diphenylmethanediisocyanate

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

- H225 Highly flammable liquid and vapor.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness and dizziness.
- H351 Suspected of causing cancer.
- H373 May cause damage to organs through prolonged or repeated exposure.

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this product or information, the safety of this product, or the hazards related to its use. The information and product are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use thereof.

End of Document
What does 100% Safe mean? It means that SYNLawn guarantees that every product made meets EPA, Consumer Product Safety Commission, Prop 65 and all California requirement and have been tested to ensure they uphold the highest standards in the synthetic grass industry.

100% Safe – for kids, for pets, for the environment. Made in the USA. 100% recyclable.
AREA TO RECEIVE SYNTHETIC TURF
June 01, 2020

Ms. Grace Bogdan, Planner Coordinator
Area 1 Planning Division
The Maryland-National Capital Park & Planning Commission
8787 Georgia Avenue
Silver Spring, MD  20910-3760

RE:  Project Plan No. 91998005C
     Downtown Silver Spring

REVISIED LETTER

Dear Ms. Bogdan:

This letter **supersedes** the previous letter dated March 20, 2020. We have completed our review of the project plan amendment uploaded on eplans on January 13, 2020. We recommend approval of the plan subject to the following comments:

All Planning Board Opinions relating to this plan or any subsequent revision, project plans or site plans should be submitted to the Department of Permitting Services (DPS) in the package for record plats, storm drain, grading or paving plans, or application for access permit. Include this letter and all other correspondence from this department.

**Significant Plan Review Comments**

The following comments will be conditions of the certified of site plan:

1. With respect to the unabandoned portion of Ellsworth Drive in front of City Place (closer to Fenton Street intersection).
   a) No clearing and grading or construction of improvements shall be permitted until the right of way is abandoned by the Montgomery County Council.
b) The applicant and the County need to agree to an amendment of the Ground Lease governing the portion of Ellsworth abandoned under Resolution 13-1429 to include this portion after it is abandoned.

c) The applicant enters into any other agreements with Montgomery County, and obtains all required permits to allow the construction of the proposed improvements in Ellsworth Drive closer to Fenton Street and in front of City Place (existing right-of-way portion).

2. With respect to the portion of Ellsworth that was abandoned under Resolution 13-1429:

   a) The applicant needs to file an abandonment application for a partial abandonment of the Public Access Easement (recorded in Book 21768 at Page 658) to limit vehicular access over Ellsworth to (i) ingress to and egress from the public garage at the intersection of Ellsworth Drive and Georgia Avenue and (ii) emergency vehicular access.

   b) The partial abandonment must be approved by the Montgomery County Council.

   c) The applicant and the County need to agree to an amendment of the Ground Lease.

   d) The applicant needs to enter into any other agreements with the County and obtains all required permits to allow the construction of the proposed improvements in Ellsworth Drive with respect to the portion of Ellsworth that was abandoned under Resolution 13-1429.

   e) Ingress and egress via Ellsworth Drive to the public garage at the corner of Ellsworth and Georgia must be provided 24 hours/day, 7 days/week, 365 days/year.

3. We defer to DPS or other approving agency for the installation of synthetic turf on top of existing roadway pavement.

4. We defer to DPS for any additional comments related to Site Plan Amendment (#81999002M)

   Thank you for the opportunity to review this preliminary plan. If you have any questions or comments regarding this letter, please contact Mr. Deepak Somarajan, our Development Review Engineer for this project at deepak.somarajan@montgomerycountymd.gov or at (240) 777-7170.

Sincerely,

Deepak Somarajan

Deepak Somarajan, Engineer III
Development Review Team
Office to Transportation Policy
cc: Letters notebook

cc-e: Todd Langford Peterson Companies
     Paul Weinschenk Peterson Companies
     Ian Duke Vika Inc.
     Barbara Sears Miles & Stockbridge
     Atiq Panjshiri MCDPS RWPR
     Sam Farhadi MCDPS RWPR
     Cliff Royalty MC OCA
     Gaul, Vickie MC OCA
     Eric Willis MC DTE
     Katie Mencarini MNCPPC
     Matthew Folden MNCPPC
     Chris Conklin MCDOT Director
     Rebecca Torma MCDOT OTP
     Deepak Somarajan MCDOT OTP
Date: October 28, 2019

To: Mr. Mark Etheridge
Via: Email
Re: Downtown Silver Spring – 81999002M

Dear Mr. Etheridge

VIKA Maryland, LLC (VIKA) is seeking Montgomery County Department of Permitting Services (MCDPS) to grant an exemption of stormwater management requirements for this site because less than 5,000 square feet of land will be disturbed under this project. The site is exempt under Article II, 19-31(c).

The project is for maintenance and reconfiguration of existing impervious vehicular and pedestrian areas within public and private areas. The Applicant will replace the existing hardscape and pavers with newer materials and adding benches and tables; remove a wall at the corner of Colesville Road and Georgia Avenue; demolish the plaza elevator and move it within the building; and, demolish the plaza staircase and reconstruct it within a smaller footprint. There will be no increase to the impervious area.

M-NCPPC staff is requesting tangible proof for their staff report that DPS agrees this project is exempt from the SWM requirements. A Site Plan Amendment and a Project Plan Amendment are in intake review and waiting for this exemption notice.

Simply by signing this letter, MCDPS is acknowledging that this project is exempt from stormwater management requirements because the disturbance to the site is less than 5,000 square feet and is not associated with the construction of a new commercial building.

Sincerely,

Jeffrey B. Amateau, P.E.
Senior Associate

If this language dated October 28, 2019 is acceptable, please signify your acceptance by signing in the space provided and returning a copy to our office so that we may furnish it to MNCPPC for their records.

Mark C. Etheridge, Manager
Montgomery County Department of Permitting Services – Water Resources Section
DATE: 26-May-20
TO: Jeff Amateau
VIKA, Inc
FROM: Marie LaBaw
RE: Downtown Silver Spring - Ellsworth Drive
81999002M

PLAN APPROVED

1. Review based only upon information contained on the plan submitted 22-May-20. Review and approval does not cover unsatisfactory installation resulting from errors, omissions, or failure to clearly indicate conditions on this plan.

2. Correction of unsatisfactory installation will be required upon inspection and service of notice of violation to a party responsible for the property.

*** See Statement of Performance Based Design and Statement of Operations: applicant is attempting to create festival space out of existing public right of way.

Any method of access control not described in the attached Statement of Performance Based Design and the Statement of Operations shall be reviewed and approved by DPS Section of Fire Department Access & Water Supply prior to implementation.

All fire department vehicular access surfaces and subgrades shall meet minimum MCDOT tertiary road load bearing capacity.

No existing hydrants shall be removed or relocated as part of this approval. **
May 13, 2020

Ms. Marie LaBaw PhD, PE
Fire Department Access and Water Supply
Department of Permitting Services
255 Rockville Pike, 2nd Floor
Rockville, MD 20850

Re: Downtown Silver Spring
Performance Based Review
Site Plan #81999002M
VIKA PROJECT #VM50378A

Dear Marie:

On behalf of our client, Peterson Companies, the developer of the proposed site improvements within the Downtown Silver Spring Plaza, we are requesting the review and approval of a performance-based design for Site Plan # 81999002M.

In order to meet the prescriptive code requirements for this project, we have provided an access lane onto the site from Georgia Avenue & Fenton Street. The delineated fire access lane will meet the structural requirements for the 85,000 lbs. as Ellsworth Road was built to a public Standard originally, and the inherent road section/base will remain unchanged. As for access to the portions of the access lane within the abandoned Ellsworth Drive ROW, the area will be accessible to fire trucks via a mountable curb (MC-104.1).

In the center of the plaza area there is a proposed movable stage. The stage is comprised of multiple bench seating pieces when separated, but all connect into a singular piece to become a ‘stage’. This stage will be constructed on fixed rails that will allow the stage piece(s) to shift along the designed pathway. However, at the stage’s maximum extent, it will ensure the fire access travel lane is no less than 12’ along Ellsworth Drive.

In addition to the proposed mountable curb, the developer is also proposing a layer of vehicular-rated artificial turf to be affixed to the existing asphalt within a portion of the abandoned Ellsworth Drive. This material will be securely adhered to the existing asphalt drive and is not to contain any infill material. As such, the artificial turf installation will not impede emergency vehicular access. In the event of a snowstorm or other weather phenomena that could impact fire access to and around the property, the developer has contracted with a snow removal company to ensure prompt removal. Snow removal from the surfaces of the artificial turf will consist of using a mechanical plow with an appropriate edge and/or hand brooms to ensure complete removal.

We hope that this letter and the Fire Access Plan are acceptable for your approval. Please contact me with any questions or if you need additional information.

VIKA Maryland, LLC
20251 Century Boulevard, Suite 400  Germantown, Maryland 20874  301.916.4100  Fax 301.916.2262
Tysons, VA  Germantown, MD  Washington, DC
www.vika.com
May 22, 2020

Ms. Marie LaBaw PhD, PE
Fire Department Access and Water Supply
Department of Permitting Services
255 Rockville Pike, 2nd Floor
Rockville, MD 20850

Re: Downtown Silver Spring
Maintenance Agreement
Site Plan #81999002M
VIKA PROJECT #VM50378A

Dear Marie:

With regard to the proposed site improvements within the Downtown Silver Spring Plaza, we are providing the following long-term maintenance agreement for Site Plan # 81999002M.

**Long-term Maintenance Agreement**

When the forecast is calling for ice/snow conditions the following procedures are followed:

1. Perform pretreatment when rain/snow conditions are forecasted, and the temperature falls below freezing.

2. Snow removal is implemented once snow accumulation is greater than 2”.

3. Will maintain at least a 20’ wide clearance on the street between the curbs when snowfall accumulates greater than 2”.

4. Different manufacturer approved equipment is used for each surface type. (Sidewalks, asphalt, turf, etc.)

5. Per the submitted plan, the stage is designed to be mobile on a fixed track system. The track system limits the movement of the stage in order to always maintain a life safety access route upon Ellsworth, between Fenton and Wayne, regardless of the configuration of the stage.

6. Future changes to this agreement will be brought to DPS before implementation.

Sincerely,

Paul Weinschenk
President, Retail

CC:  
K. Price, Peterson Cos.  
D. Figueroa, Peterson Cos.  
I. Duke, VIKA  
B. Sears, Esq., Miles & Stockbridge
DATE: APRIL 17, 2020

PROJECT: DOWNTOWN SILVER SPRING

TO: ATIQ PANJSHIRI (MONTGOMERY COUNTY) ATIQ.PANJSHIRI@MONTGOMERYCOUNTY.GOV

FROM: BRIAN C. FLYNN (OCULUS)

SUBMITTAL NO: SYNTHETIC TURF ON ELLSWORTH DRIVE

CC: PAUL WEINSCHENK (PETERTSON), BRYANT FOULGER (FOULGER-PRATT), DON HOOVER (OCULUS)

RESPONSE:

1. Product Specification:
   a. The material specified is Syntipede243 from SynLawn with a 1” pile height;
   b. The blades are polyethylene with an Enviroloc backing – including a “Super Yarn” offering anti-microbial, anti-static, and HeatBlock technology;
   c. The backing is 15 / 18 PP 1-Part / 20 oz. Enviroloc – a durable two-part woven Polypropylene backing fabric constructed to lock in the tuft fibers. The backing fabric and stitched fibers receive a thick layer of a biobased Enviroloc coating created with polymers from sustainable resources, including soybean oil.

2. Flammability
   a. Based on the manufacturer’s published literature, the specified material has passed flammability testing according to D2859 “Standard Test Method for Ignition Characteristics of Finished Textile Floor Covering Materials”; This test method determines the flammability of finished textile floor covering materials when exposed to an ignition source; The specified material has passed this test and, as such, is rated as “flame resistant” under laboratory conditions.
   b. The material also passed testing according to ASTM E108-17 “Standard Test Methods for Fire Tests of Roof Coverings, Class A Spread of Flame Testing”. The specified material is therefore a Class A roofing material, offering the highest rating for resistance to fire. This test was conducted by the Southwest Research Institute, a 3rd-party independent testing agency. This test method is used to measure and describe the properties of materials, products, or assemblies in response to heat and flame under controlled laboratory conditions. The results indicate that there was no lateral spread of the flame beyond the path directly exposed to the flame. The turf melted in the direct path of the flame, but did not catch fire. If a burner could not light the turf on fire, it is reasonable to assume that cigarette would not as well.
3. Installation method
   a. We are proposing to install the turf by gluing it directly to the asphalt roadbed substrate (See the attached details). The glue will be applied continuously at the perimeter and in a pattern at the interior to ensure a good bond to the substrate. The edges of the drive at the concrete gutter will be milled to provide continuous drainage to the adjacent gutters. No infill will be used on the project.

4. Maintenance
   a. Since the turf will be attached directly to the roadbed, vehicles will be able to drive on the turf, but they will have to drive slowly. The only concern is for oil and/or other fluids leaking from the vehicle remaining on the turf. The attached maintenance guidelines discuss the procedures to remove stains from the turf emanating from vehicles and other potential sources of contamination.

5. Specified Adhesive
   a. The specified adhesive is SDS #34-2. The specification is attached.

6. Runoff
   a. We are unaware of any contamination coming from the specified turf. There is no infill specified, so the only materials are the fibers, backing, and glue. Every SynLawn product meets EPA, Consumer Product Safety Commission, and California Proposition 65, and other requirements.

7. Slippery when wet
   a. The manufacturer has not needed to test the turf for slip resistance in the past. We are currently investigating slip resistance testing with the manufacturer and will provide if we are able to obtain the test results.
   b. Similar material from the manufacturer is installed in public spaces throughout the country, including a similar installation at National Harbor in Maryland that has similar climate conditions. There has been no instance the manufacturer is aware of where a pedestrian slipped and fell on the synthetic turf.

8. Roadway Restoration

   “What would it take to restore roadway to its current condition should the turf be removed in the future?”

   Should the County decide to restore the area to a roadway in the future, the Applicant could simply pull up the turf. Because of the strength of the bond of the glue, some adhesive would remain attached to the asphalt roadway. The Applicant could surface mill the roadbed to eliminate any proud glue spots and repave and recoat the asphalt surface to have a fully functioning roadway. Because none of the drains along the turf area are being altered, drainage of the roadway would be as it is today.

9. Heat Build-up

   “Synthetic turf is approximately 20 degrees hotter than Natural Grass, but not sure how much hotter than asphalt. Perhaps 10 degrees.”
This specified product contains built-in HeatBlock technology that minimizes rising temperatures by reflecting sunlight. The infrared reflective pigment embedded in the fibers of the turf help dissipate heat build-up, reduce thermal emissivity, and make this product as much as 20% cooler than similar artificial turf products.

In addition to the HeatBlock technology, the location of the existing roadway will help to minimize any heat build-up. The portion of Ellsworth Drive to receive the turf installation is a tree-covered and building-lined space. These factors will limit the amount of sun that reaches the surface of the turf. The attached heat map shows the amount of shading time resulting from the surrounding buildings for mid-summer (July 15). In addition, the tree coverage along Ellsworth Drive, not reflected in the calculation, will provide additional shading and further limit any potential heat build-up in the synthetic turf.
Table of Contents - Exhibits

1. Product Specification – 1: SYNlawn SYNTipede 243 ST243
2. Product Specification – 2: SY20027_SuperYarn
3. Installation Method: L0802 Details – Synthetic Turf
6. Runoff: SYNLawn 100 percent safe certification

Attachments - Exhibits

Exhibit 1: Product Specification - 1: SYNLawn SYNTipede 243 ST243

Exhibit 1: Product Specification - 2: SY20027_SuperYarn

Exhibit 3: Installation Method: L0802 Details - Synthetic Turf

Exhibit 4: Maintenance: C&M Guide 2018

Exhibit 5: Specified Adhesive: SDS #34N-2 (2019-01-01)

Exhibit 6: Runoff: SYNLawn 100 percent safe certification

Exhibit 7: Ellsworth Drive - July 15 - Heat Map
When performance matters, this turf delivers. With a low profile pile height and heavy-duty Super Yarn™ grass blades, this artificial grass provides strength and resiliency not commonly found in competitor turf varieties.

**SYNTipede 243**

- **Grass Zone Yarn/Color**: PE / Field Green / Apple
- **Grass Zone Denier**: 10,000 / 6
- **Thatch Zone Yarn/Color**: PE / Field Green / Beige
- **Thatch Zone Denier**: 5,040 / 12
- **Grass Zone Shape**: Omega
- **Finished Pile Height**: 1”
- **Finished Pile Weight**: 60 oz.
- **Backing**: 15 / 18 PP 2-Part / 20oz. EnviroLoc™
- **Tuft Gauge**: 3/8”
- **Total Weight**: 86 oz.
- **Tuft Bind**: > 8 lbs.
- **Permeability**: > 100 inches per / SY
- **Features**: Sanitized®, EnviroLoc™, StatBlock™ Anti-Static, DualChill™ IR Reflective, Deluster, UV Stabilizers
- **Test Data**: ASTM F1292, F1951, IPEMA Certified

**SUPER YARN™ TECHNOLOGY**

- **Sanitized®**: Antimicrobial
- **DualChill™**: IR Reflective
- **StatBlock™**: Anti-Static

**Recommended Uses**

- **landscape**
- **pets**
- **Play**
- **RoofTop**
- **Golf**

**Learn more at CADdetails.com**

Not to scale. For illustration only.
### Finish Fabric English System ASTM Test

<table>
<thead>
<tr>
<th>Nominal Specification</th>
<th>Value</th>
<th>Units</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pile Height (Nominal)</td>
<td>1</td>
<td>inch</td>
<td>D-5823</td>
</tr>
<tr>
<td>Face Weight</td>
<td>60</td>
<td>oz/yd²</td>
<td>D-5848</td>
</tr>
<tr>
<td>Total Fabric Weight</td>
<td>86</td>
<td>oz/yd²</td>
<td>D-5848</td>
</tr>
<tr>
<td>Primary Backing Weight</td>
<td>6</td>
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</tr>
<tr>
<td>Secondary Coating Weight</td>
<td>20</td>
<td>oz/yd²</td>
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<tr>
<td>Tuft Bind</td>
<td>&gt; 8</td>
<td>lbs.</td>
<td>D-1335</td>
</tr>
<tr>
<td>Grab Tear Strength (Average)</td>
<td>&gt; 200</td>
<td>lbs.</td>
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<tr>
<td>Total Yarn Linear Density</td>
<td>15,040</td>
<td>Denier</td>
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</tr>
<tr>
<td>Elongation to Break</td>
<td>&gt; 30</td>
<td>%</td>
<td>D-2256</td>
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<tr>
<td>Yarn Breaking Strength</td>
<td>&gt; 20</td>
<td>lbs.</td>
<td>D-5793</td>
</tr>
<tr>
<td>Machine Guage</td>
<td>3/8</td>
<td>inches</td>
<td>D-5793</td>
</tr>
<tr>
<td>Flammability</td>
<td>Passed</td>
<td>-</td>
<td>D-2859</td>
</tr>
<tr>
<td>Water Permeability</td>
<td>344.31</td>
<td>in/hr</td>
<td>D-1551</td>
</tr>
<tr>
<td>Fabric Width</td>
<td>15</td>
<td>ft</td>
<td>-</td>
</tr>
</tbody>
</table>

### Primary Yarn Polymer
- **Polyethylene**

### Yarn Cross Section
- **Omega**

### Standard Color
- **Field Green / Apple**

### Fabric Construction
- **Tufted**

### Second Yarn Polymer Thatch
- **Polyethylene**

### Secondary Yarn Color
- **Field Green / Beige**

### Primary Backing
- **15/18 PP 2-Part**

### Coating Type
- **20 oz. EnviroLoc™**

### PE Yarn Denier / Ends
- **10,000 / 6**

### Texturized Thatch Denier / Ends
- **5,040 / 12**

### Warranty Period
- **Limited Lifetime**

---

For ordering and questions, contact SYNLawn at 866-796-5296 or visit SYNLawn.com
Exhibit 1: Product Specification - 1: SYNLawn SYNTipede 243 ST243

Exhibit 1: Product Specification - 2: SY20027_SuperYarn

Exhibit 3: Installation Method: L0802 Details - Synthetic Turf

Exhibit 4: Maintenance: C&M Guide 2018

Exhibit 5: Specified Adhesive: SDS #34N-2 (2019-01-01)

Exhibit 6: Runoff: SYNLawn 100 percent safe certification

Exhibit 7: Ellsworth Drive - July 15 - Heat Map
Super Yarn™ technology is a quantum leap in the advancement of synthetic turf products. Now in its fifth generation of artificial grass enhancements, SYNLawn's Super Yarn technology changes the landscape of the turf industry by binding three incredible features into one extruded grass yarn formulation. Bound at the molecular level, Super Yarn combines Sanitized® antimicrobial technology with DualChill™ IR reflective technology, and StatBlock™ anti-static technology to create the first of its kind artificial grass fiber.

- SYNLawn Super Yarn is the first fifth generation turf product produced and presented to the market.
- Super Yarn technology binds each additive to the molecular level of the fiber meaning that you cannot reach down and remove one element.
- SYNLawn is the only company in the industry to combine these three molecular components into a single yarn package.
SANITIZED®
SILVER-BASED TECHNOLOGY

- Helps eliminate pet odors and provides long-lasting protection against the formation of bacteria and algae.
- Works by eliminating bacterial growth and preventing the propagation of microbes on SYNlawn face fibers.
- Used for centuries, thus meaning the additive is very dependable and extremely safe.

NEW CARBON-BASED ANTI-STATIC INGREDIENT molecularly bound into the face fiber that inhibits the build-up of static electricity.

ANTI-FUNGAL
ANTI-BACTERIAL
MOISTURE WICKING

WASHINGTON SANITIZED® TECHNOLOGY

STATBLOCK™
ANTI-STATIC COMPONENT

- New carbon-based anti-static ingredient molecularly bound into the face fiber that inhibits the build-up of static electricity.
- Anti-static components are used in the industry but SYNlawn brings the first DNA level addition.
- Testing shows up to a 17x reduction in static levels when StatBlock™ is introduced into the turf.

DUALCHILL™
THERMAL SHIELD

- Infrared light is a detriment to turf. DualChill™ acts as a thermal shield ensuring IR is not absorbed into the fibers.
- DualChill’s ability to act as a thermal shield strengthens the fibers allowing them to be more resilient and durable over long time periods.
- Test results done on the same fiber package, with and without DualChill™, shows that there is an average of a 42% increase in IR reflectivity.

ASTM E2149-01/10 - Sanitized in face fiber

Reduction of Bacteria Including E.Coli and Strep®

Reduction of Static Levels when using Statblock™

Improvement in IR Reflectivity with DualChill™

ATTACHMENT D
Exhibit 1: Product Specification - 1: SYNLawn SYNTipede 243 ST243

Exhibit 1: Product Specification - 2: SY20027_SuperYarn

**Exhibit 3: Installation Method: L0802 Details - Synthetic Turf**

Exhibit 4: Maintenance: C&M Guide 2018

Exhibit 5: Specified Adhesive: SDS #34N-2 (2019-01-01)

Exhibit 6: Runoff: SYNLawn 100 percent safe certification

Exhibit 7: Ellsworth Drive - July 15 - Heat Map
NOTES:
1. ALL CONDITIONS TO BE VERIFIED IN THE FIELD.
2. CONTRACTOR AND SUPPLIER TO PROVIDE INSTALLATION RECOMMENDATIONS.
3. ROADWAY WILL RECEIVE INTERMITTENT VEHICLE AND FIRETRUCK ACCESS. SYNTHETIC TURF SHALL ACCOMMODATE ALL APPLICABLE LOADS AND CONDITIONS.

SYNTHETIC TURF GLUED TO SURFACE OF ASPHALT ROADWAY.

ADD ALT: TOP 1-1/2" MAX TO BE MILLED TO ALLOW FOR INSTALLATION OF TURF.

EXISTING BRICK PAVING.

PAVERS TO BE REMOVED AND REPLACED WITH ASPHALT SURFACE COURSE.

EXISTING CONCRETE BASE TO REMAIN.

EXISTING CURB AND GUTTER, UNMODIFIED ADJACENT PAVING, SEE PLANS.

EDGE OF TURF TO BE GLUED TO MILLED ROADWAY.

SEE ENLARGEMENT.

EXISTING ASPHALT ROADWAY.

SEE ENLARGEMENT.

EDGE OF TURF TO BE GLUED TO MILLED ROADWAY.

EXISTING CURB AND GUTTER, UNMODIFIED ADJACENT PAVING, SEE PLANS.

SEE ENLARGEMENT.

EXISTING FLUSH CURB

SEE ENLARGEMENT.

EDGE OF TURF TO BE GLUED TO MILLED ROADWAY.

SEE ENLARGEMENT.

EXISTING ASPHALT ROADWAY.

SEE ENLARGEMENT.

EDGE OF TURF TO BE GLUED TO MILLED ROADWAY.

SEE ENLARGEMENT.

EXISTING FLUSH CURB

SEE ENLARGEMENT.

EDGE OF TURF TO BE GLUED TO MILLED ROADWAY.

SEE ENLARGEMENT.

EXISTING ASPHALT ROADWAY.

SEE ENLARGEMENT.

EDGE OF TURF TO BE GLUED TO MILLED ROADWAY.

SEE ENLARGEMENT.

EXISTING FLUSH CURB

SEE ENLARGEMENT.

EDGE OF TURF TO BE GLUED TO MILLED ROADWAY.

SEE ENLARGEMENT.
Exhibit 1: Product Specification - 1: SYNLawn SYNTipede 243 ST243

Exhibit 1: Product Specification - 2: SY20027_SuperYarn

Exhibit 3: Installation Method: L0802 Details - Synthetic Turf

**Exhibit 4: Maintenance: C&M Guide 2018**

Exhibit 5: Specified Adhesive: SDS #34N-2 (2019-01-01)

Exhibit 6: Runoff: SYNLawn 100 percent safe certification

Exhibit 7: Ellsworth Drive - July 15 - Heat Map
CARE & MAINTENANCE Manual

SCM.v140324
INTRODUCTION
Thank you for choosing SYNLawn®. Even though your SYNLawn® does not require the traditional maintenance of natural grass, there are maintenance procedures that can help protect your investment and extend the useful life of your SYNLawn® brand turf.

The following procedures are important in helping to preserve your turf.

- Keep it clean
- Brush periodically
- Do no abuse
- Report any problems promptly to your SYNLawn® dealer

INITIAL REQUIREMENTS
SYNLawn® products/systems require a minimum two (2) week stabilization period. This period of time varies depending on local conditions, use, and product/system specifications. During this time, it may be necessary to make minor adjustments to the product and installation.

You should also review the Warranty provided to you for specific prohibitions and limitations confirmed therein.

If you have further questions, contact your local SYNLawn® dealer or contact SYNLawn® at 2680 Abutment Road, Dalton, GA 30721 or telephone us at 866-796-5296.

CLEANING AND STAIN REMOVAL

1. Keep it clean
   
   A. Dust, pollen, and airborne pollutants
   Rainfall is the best cleanser. In areas where rainfall is scarce, an occasional water flush is beneficial to cleanse the turf. For lightly soiled areas, it may be necessary to sponge mop with a five (5) percent solution of low sudsing household detergent in hot water followed by a thorough rinsing with hot water. For heavily soiled areas, repeat procedure for lightly soiled areas follow with sponge mopping using a three (3) percent solution of household ammonia in hot water followed by a thorough rinsing with hot water.

Synlawn® makes no representation, guarantees or warranties, express or implied, regarding the information contained herein.
B. Stains and other blemishes

The first rule is promptness. It is always easier to clean up a fresh spill than one that has dried and hardened. Remove any solid or paste-like deposit with a spatula or table knife. Blot up excess liquids with paper towels, a clean cloth, or a dry absorbent, such as kitty litter or fuller’s earth. (Fuller’s earth is an absorbent claylike earthy material and is often found as a component of kitty litter.) Dry absorbents can then be swept or vacuumed up afterwards.

Synthetic fibers have good resistance to staining. However, it is important to realize they are only one part of a sophisticated system of various components designed for overall performance. Some cleaning agents safe for the face fibers can be harmful to other components of the turf system. Therefore, cleaning agents are grouped into two sets, one of which can be used in liberal amounts directly on the turf surface, and the second of which should only be applied by rubbing a cloth soaked in the cleaner in order to minimize penetration of possible harmful agents below the turf surface. In the first group of cleaners which generally can be applied without any special precautions are the following:

- Simple Green bio-friendly cleaner. Follow the manufacturer’s instructions.
- A warm, mild solution of granular household detergent or any low sudsing detergent for fine fabrics. Use approximately one teaspoon to one pint of water. This will handle most waterborne stains including:

  | Coffee | Ketchup | Cocoa | Blood |
  | Tea    | Butter  | Ice cream | Urine |
  | Fruit juices | Alcohol | Mustard | Dye |
  | Vegetable juices | Cola | Glue | |
  | Milk   | Water colors | Latex paint | |

- A three (3) percent solution of household ammonia in water may be used in lieu of household detergent for more stubborn stains.
- Do not use cleaners that contain chlorine bleaches or caustic cleaners (ph above 9) or highly acidic cleaners (ph. below 5).
- Rinse area thoroughly with clean cold water to remove any traces of soap or ammonia.
- Blot up excessive liquid.
The second group of cleaners must be applied sparingly with care taken to avoid penetration of the agent beneath the turf are the following:

- Mineral spirits or a grease spot remover like perchlorethylene (dry cleaning solution) of the type sold by most variety stores and supermarkets. In general, cleansers in this category should handle most oil-based stains including:

<table>
<thead>
<tr>
<th>Mineral spirits</th>
<th>Suntan oil</th>
<th>Nail polish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooking oil</td>
<td>Chewing gum</td>
<td>Crayon</td>
</tr>
<tr>
<td>Floor wax</td>
<td>Shoe polish</td>
<td></td>
</tr>
<tr>
<td>Motor oil &amp; grease</td>
<td>Lipstick</td>
<td></td>
</tr>
<tr>
<td>Ballpoint ink</td>
<td>Paraffin wax</td>
<td></td>
</tr>
</tbody>
</table>

**Caution:** Mineral spirits and other petroleum based solvents are flammable. Do not smoke or permit open flames near where these are being used. Be sure the area is well ventilated where solvent cleaners are used.

C. Animal Waste
Although all SYNLawn® products are pet friendly, there is additional maintenance necessary to keep odors to a minimum. Allow waste to dry and then dispose. Consider use of products such as Simple Green or Pro-vet-logic that are pet safe. Depending on the amount of usage and number of dogs, enzyme neutralizers may also be helpful to control odors. Neutralize with mixture of white distilled vinegar in an equal amount of water. Some odor control infills require flushing with water and some do not, so it’s important to ask for specific recommendations from your local SYNLawn dealer in accordance with the infill product used for your installation.

D. Mineral deposits
Apply a mixture of white distilled vinegar in an equal amount of water to grass and lightly brush. Flush thoroughly with water after application.

E. Chewing gum or tree sap
In addition to dry cleaning fluid, chewing gum and tree sap can be removed by freezing. Aerosol packs of refrigerant are available from most carpet cleaning suppliers for this purpose, or dry ice can be used. After freezing, scrape with a knife.
F. Fungus or mold spots
   A one (1) percent solution of hydrogen peroxide in water can be sponged on to the affected area. Flush thoroughly with clean water after application.

G. Oil paints and more difficult stains
   Please consult your SYNLawn® dealer as these may require a commercial carpet cleaner.

Caution! Do not use high-pressure water spray with stream force in excess of 300 psi as this can severely damage the turf and displace any infill material.

**BRUSHING**

II. Periodic brushing
   The frequency for suggested brushing is directly related to the amount of foot traffic you have in your turf area. Matting of fibers may occur in areas of high foot traffic, especially if fibers have become soiled with dirt and other airborne pollutants.

Periodic “cross brushing” of the turf with a Grandi Groomer rake can help restore the aesthetic appearance of the turf. “Cross brushing” means all brushing activity takes place against the grain, nap, or sweep of the turf fibers. By brushing against the turf, the fibers are “fluffed up”. A brush with synthetic bristles should be used. The use of a Grandi Groomer is highly recommended.

Caution! Never use a brush with metal or wire bristles as these will change the turf fibers.

Take note to heavier trafficked areas for matting of fibers that might appear different than other areas that do not see heavy traffic. Brushing these areas is highly recommended as it will ensure the full life of your SYNLawn®. Brushing with a Grandi Groomer cannot hurt the turf; so brush as often as needed, again keeping in mind that the more traffic, the more frequent the brushing.

High traffic areas might include, but are not limited to:
   - Commercial applications
   - Multiple dogs
   - Heavy play activity by children
   - Paths in the yard that are traveled more often
Protect Your Grass

Although your SYNLawn® brand turf is made of tough, durable fibers, certain precautions should be taken to prevent damage to the turf.

- Ensure that your SYNLawn® is not exposed to reflected sunlight from windows, metallic or other reflective items as this may cause fiber shrinkage and/or melting of fibers.
- Avoid leaving any heat-absorbent material on the turf during daylight hours. Clear or dark plastic sheeting, articles made of metal, garden hoses, pool floats or toys for example will absorb heat at a higher rate than the turf and may cause localized shrinkage as the temperature may exceed the turf stabilization temperature.
- Lighted cigarettes cannot ignite the turf, but they can damage the turf by fusing the tips of the fibers together. Cigarettes, fireworks, and open flames should be kept away from the turf.
- Furniture and equipment with sharp or jagged edges should not be placed on turf as this may puncture or tear the turf.
- Cap off or remove nearby sprinkler heads. Water from sprinkler systems can leave mineral deposits on turf that may cause discoloration.
- Ensure recommended “infill” levels are maintained.

Report any issues/problems

Minor problems can become major problems if not corrected quickly. Any problem should be reported promptly to your local SYNLawn® dealer.

Conclusion

The proper care and maintenance program can enhance the aging, usefulness, and aesthetics of your SYNLawn® brand turf. This manual attempts to encounter and answer the most frequently asked questions regarding your SYNLawn®. However, there are always unanticipated questions or needs so do not hesitate to call us!
Exhibit 1: Product Specification - 1: SYNLawn SYNTipede 243 ST243

Exhibit 1: Product Specification - 2: SY20027_SuperYarn

Exhibit 3: Installation Method: L0802 Details - Synthetic Turf

Exhibit 4: Maintenance: C&M Guide 2018


Exhibit 6: Runoff: SYNLawn 100 percent safe certification

Exhibit 7: Ellsworth Drive - July 15 - Heat Map
Safety Data Sheet
NORDOT® Adhesive/Prepolymer #34N-2
SDS Revision Date: 01/01/2019

1. Identification

1.1. Product identifier
Product Identity: NORDOT® Adhesive/Prepolymer #34N-2
Alternate Names: Polyisocyanate Resin

1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended use: See Technical Data Sheet.
Application Method: See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet
Company Name: Synthetic Surfaces Inc.
P.O. Box 241
2450 Plainfield Avenue, Scotch Plains
NJ 07076-0241

Emergency
CHEMTREC (USA): (800) 424-9300
24 hour Emergency Telephone No.: (908) 233-6803
(908) 377-5112
Customer Service: Synthetic Surfaces, Inc. (908) 233-6803

2. Hazard(s) identification

2.1. Classification of the substance or mixture
Flam. Liq. 2;H225: Highly Flammable liquid and vapor.
Skin Irrit. 2;H315: Causes skin irritation.
Eye Irrit. 2;H319: Causes serious eye irritation.
Skin Sens. 1;H317: May cause an allergic skin reaction.
Resp. Sens. 1;H334: May cause allergy or asthma symptoms of breathing difficulties if inhaled.
Carc. 2;H351: Suspected of causing cancer.
STOT SE 3;H336: May cause drowsiness or dizziness.
STOT RE 2;H373: May cause damage to organs through prolonged or repeated exposure. Specific Target Organs: (Not Available)

2.2. Label elements
Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

Danger

Page 1 of 10
Safety Data Sheet  
NORDOT® Adhesive/Prepolymer #34N-2  
SDS Revision Date: 01/01/2019

H225 Highly flammable liquid and vapor.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.  
H336 May cause drowsiness and dizziness.  
H351 Suspected of causing cancer.  
H373 May cause damage to organs through prolonged or repeated exposure.

[Prevention]:

P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.  
P235 Keep cool.  
P240 Ground / bond container and receiving equipment.  
P241 Use explosion-proof electrical / ventilating / light / equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P261 Avoid breathing dust / fume / gas / mist / vapors / spray.  
P264 Wash thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves / eye protection / face protection.

[Response]:

P302+352 IF ON SKIN: Wash with plenty of soap and water.  
P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.  
P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.  
P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.  
P308+313 IF exposed or concerned: Get medical advice / attention.  
P314 Get Medical advice / attention if you feel unwell.  
P321 Specific treatment (see information on this label).  
P333+313 If skin irritation or a rash occurs: Get medical advice / attention.  
P337+313 If eye irritation persists: Get medical advice / attention.  
P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P341 If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P342+311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor / physician.  
P362 Take off contaminated clothing and wash before reuse.  
P363 Wash contaminated clothing before reuse.  
P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.
[Storage]:
P403+233 Store in a well ventilated place. Keep container tightly closed.  
P405 Store locked up.  

[Disposal]:
P501 Dispose of contents / container in accordance with local / national regulations.  

---  

### 3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

<table>
<thead>
<tr>
<th>Ingredient/Chemical Designations</th>
<th>Weight %</th>
<th>GHS Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butanone</td>
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<td>Flam. Liq. 2; H225</td>
<td>[1][2]</td>
</tr>
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<td></td>
<td>Eye Irrit. 2; H319</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>STOT SE 3; H336</td>
<td></td>
</tr>
<tr>
<td>Diphenylmethanediisocyanate</td>
<td>&lt; 3</td>
<td>Carc. 2; H351</td>
<td>[1][2]</td>
</tr>
<tr>
<td>CAS Number: 0000101-68-8</td>
<td></td>
<td>Acute tox. 4; H332</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>STOT RE 2; H373</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eye Irrit. 2; H319</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td>STOT SE 3; H335</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin Irrit. 2; H315</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Resp. Sens. 1; H334</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Skin Sens. 1; H317</td>
<td></td>
</tr>
</tbody>
</table>

[1] Substance classified with a health or environmental hazard.  
*The full texts of the phrases are shown in Section 16.

---  

### 4. First aid measures

#### 4.1. Description of first aid measures

**General**

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

**Inhalation**

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

**Eyes**

Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

**Skin**

Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.

**Ingestion**

If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.
4.2. Most important symptoms and effects, both acute and delayed

Overview
- Acute: Causes irritation to eyes, respiratory tract and skin.
- Chronic: May cause serious and possibly irreversible pulmonary injury.
- Possible cancer hazard. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure.
- Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.
- Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for further details.

Inhalation
- May cause drowsiness or dizziness. May cause allergy or asthma symptoms of breathing difficulties if inhaled.

Eyes
- Causes serious eye irritation.

Skin
- May cause an allergic skin reaction. Causes skin irritation.

5. Fire-fighting measures

5.1. Extinguishing media
Recommended extinguishing media; alcohol resistant foam, CO₂, powder. Avoid contact with water.

5.2. Special hazards arising from the substance or mixture
Hazardous decomposition: By fire: CO₂, CO, Oxides of Nitrogen
Keep away from heat / sparks / open flames / hot surfaces - No smoking.
Keep cool.
Ground / bond container and receiving equipment.
Use explosion-proof electrical / ventilating / light / equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Avoid breathing dust / fume / gas / mist / vapors / spray.

5.3. Advice for fire-fighters
Self-contained breathing apparatus. Avoid contact with water.

ERG Guide No. ----

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions
Do not allow spills to enter drains or waterways.
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up
Avoid open flames or sparks. Provide adequate ventilation. Absorb with sweeping/cleaning compound.

Follow practice for disposal of flammable organic solvent and be in accordance with Federal, State and Local regulations regarding environmental control.

7. Handling and storage

7.1. Precautions for safe handling
Avoid open flames, sparks, static electricity or other sources of ignition. When spraying, use respiratory protection approved for organic vapors, isocyanates and solvents. The TLV for airborne isocyanates is 0.005 ppm. Be vigilant about no smoking, grounding equipment to avoid static electricity, plus avoid other possible sources of ignition.

See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities
Handle containers carefully to prevent damage and spillage.

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.

Examination of lung function should be carried out on a regular basis on persons applying this preparation.

Incompatible materials: Avoid contact with water.

Do not store containers in direct sunlight, hot "desert like" or other high heat conditions as the increase in internal pressure from heat may cause the containers to rupture and/or explode. Provide adequate ventilation.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)
No data available.

8. Exposure controls and personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Exposure</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000078-93-3</td>
<td>Butanone</td>
<td>OSHA</td>
<td>TWA 200 ppm</td>
<td>(590 mg/m3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA: 50 ppm</td>
<td>STEL: 100 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>TWA 200 ppm</td>
<td>(590 mg/m3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
<td></td>
</tr>
<tr>
<td>0000101-68-8</td>
<td>Diphenylmethanediisocyanate</td>
<td>OSHA</td>
<td>C</td>
<td>0.2 mg/m3 (0.02 ppm)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA: 0.005 ppm</td>
<td>Ceiling: 0.01 ppmSkin, S</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>TWA 0.05 mg/m3</td>
<td>(0.005 ppm)</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>No Established Limit</td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Carcinogen Data

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000078-93-3</td>
<td>Butanone</td>
<td>OSHA</td>
<td>Select Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: No; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;</td>
</tr>
<tr>
<td>0000101-68-8</td>
<td>Diphenylmethanediisocyanate</td>
<td>OSHA</td>
<td>Select Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: No; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;</td>
</tr>
</tbody>
</table>

### 8.2. Exposure controls

**Respiratory**

Approved for organic vapors, isocyanates and solvents.

**Eyes**

Chemical safety goggles

**Skin**

Wear overalls to keep skin contact to a minimum. Chemically resistant rubber or plastic

**Engineering Controls**

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

**Other Work Practices**

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

### 9. Physical and chemical properties

- **Appearance**: Hazy, amber Liquid
- **Odor**: Solvent odor
- **Odor threshold**: Not Measured
- **pH**: Not Measured
- **Melting point / freezing point**: Not Measured
- **Initial boiling point and boiling range**: Not Measured
- **Flash Point**: 21°F Tag Open Cup
- **Evaporation rate (Ether = 1)**: Slower than ether
- **Flammability (solid, gas)**: Not Applicable
- **Upper/lower flammability or explosive limits**
  - **Lower Explosive Limit**: Not Measured
  - **Upper Explosive Limit**: Not Measured
- **Vapor pressure (Pa)**: Not Measured
- **Vapor Density**: Heavier than air
- **Specific Gravity**: 0.99
- **Solubility in Water**: Insoluble
- **Partition coefficient n-octanol/water (log Pow)**: Not Measured
10. Stability and reactivity

10.1. Reactivity
Hazardous Polymerization will not occur.

10.2. Chemical stability
Stable under normal circumstances.

10.3. Possibility of hazardous reactions
No data available.

10.4. Conditions to avoid
Contact with moisture and other materials which react with isocyanates.

10.5. Incompatible materials
Avoid contact with water.

10.6. Hazardous decomposition products
By fire: CO2, CO, Oxides of Nitrogen

11. Toxicological information

Acute toxicity
Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50, mg/kg</th>
<th>Skin LD50, mg/kg</th>
<th>Inhalation Vapor LD50, mg/L/4hr</th>
<th>Inhalation Dust/Mist LD50, mg/L/4hr</th>
<th>Inhalation Gas LD50, ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butanone - (78-93-3)</td>
<td>2,737.00, Rat - Category: 5</td>
<td>6,480.00, Rabbit - Category: NA</td>
<td>32.00, Mouse - Category: NA</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Diphenylmethanediisocyanate - (101-68-8)</td>
<td>4,700.00, Rat - Category: 5</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).
12. Ecological information

12.1. Toxicity
The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and GHS and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. See section 3 for details

Aquatic Ecotoxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>96 hr LC50 fish, mg/l</th>
<th>48 hr EC50 crustacea, mg/l</th>
<th>ErC50 algae, mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butanone - (78-93-3)</td>
<td>400.00, Cyprinodon variegatus</td>
<td>520.00, Daphnia magna</td>
<td>500.00 (96 hr), Skeletonema costatum</td>
</tr>
<tr>
<td>Diphenylmethane(i)socyanate - (101-68-8)</td>
<td>Not Available</td>
<td>129.70, Daphnia magna</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
There is no data available on the preparation itself.

12.3. Bioaccumulative potential
Not Measured

12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects
No data available.
13. Disposal considerations

13.1. Waste treatment methods
Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

1. Carrier must be hazmat certified.
2. Packaging: five-gallon pail.
3. Gross weight: ~46.5 lbs.
4. Dimensions: ~12” diameter x 13” h.
5. This item is not stackable.
6. UN Number: 1133.
7. UN Packaging Group: II.

15. Regulatory information

Regulatory Overview
The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA)
All components of this material are either listed or exempt from listing on the TSCA Inventory.

US EPA Tier II Hazards

- Fire: Yes
- Sudden Release of Pressure: No
- Reactive: No
- Immediate (Acute): Yes
- Delayed (Chronic): Yes

EPCRA 311/312 Chemicals and RQs (lbs):
- Butanone     ( 5,000.00)
- Diphenylmethanediisocyanate     ( 5,000.00)

EPCRA 302 Extremely Hazardous:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:
- Diphenylmethanediisocyanate

Proposition 65 - Carcinogens (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):
- Butanone
- Diphenylmethanediisocyanate
Pennsylvania RTK Substances (>1%):  
Butanone  
Diphenylmethanediisocyanate

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:
H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H334 May cause allergic or asthmatic symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness and dizziness.
H351 Suspected of causing cancer.
H373 May cause damage to organs through prolonged or repeated exposure.

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats are not applicable.

The information in this document is believed to be correct as of the date issued. However, no warranty of merchantability, fitness for any particular purpose, or any other warranty is expressed or implied regarding the accuracy or completeness of this information, the results to be obtained from the use of this product or information, the safety of this product, or the hazards related to its use. The information and product are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the risk of their use thereof.

End of Document
Exhibit 1: Product Specification - 1: SYNLawn SYNTipede 243 ST243

Exhibit 1: Product Specification - 2: SY20027_SuperYarn

Exhibit 3: Installation Method: L0802 Details - Synthetic Turf

Exhibit 4: Maintenance: C&M Guide 2018

Exhibit 5: Specified Adhesive: SDS #34N-2 (2019-01-01)

**Exhibit 6: Runoff: SYNLawn 100 percent safe certification**

Exhibit 7: Ellsworth Drive - July 15 - Heat Map
What does 100% Safe mean? It means that SYNLawn guarantees that every product made meets EPA, Consumer Product Safety Commission, Prop 65 and all California requirement and have been tested to ensure they uphold the highest standards in the synthetic grass industry.

100% Safe – for kids, for pets, for the environment. Made in the USA. 100% recyclable.
Exhibit 1: Product Specification - 1: SYNLawn SYNTipede 243 ST243

Exhibit 1: Product Specification - 2: SY20027_SuperYarn

Exhibit 3: Installation Method: L0802 Details - Synthetic Turf

Exhibit 4: Maintenance: C&M Guide 2018

Exhibit 5: Specified Adhesive: SDS #34N-2 (2019-01-01)

Exhibit 6: Runoff: SYNLawn 100 percent safe certification

Exhibit 7: Ellsworth Drive - July 15 - Heat Map
EVALUATION OF THE EXTERNAL FIRE RESISTANCE CHARACTERISTICS OF ROOF COVERING SYSTEMS IN ACCORDANCE WITH ASTM E108-17, STANDARD TEST METHODS FOR FIRE TESTS OF ROOF COVERINGS, CLASS A SPREAD OF FLAME TESTING

MATERIAL ID: ST243
TRADE NAME: SYNTipede 243

FINAL REPORT
Consisting of 8 Pages

SwRI® Project No.: 01.24104.01.1201
Test Date: June 5, 2019
Report Date: July 2, 2019

Prepared for:
Synlawn
2680 Abutment Road SE
Dalton, GA 30721

Prepared By: Natasha Albracht
Research Engineer
Material Flammability Section

Approved By: Matthew S. Blais, Ph.D.
Director
Fire Technology Department
1.0 INTRODUCTION
This report describes a fire performance evaluation conducted for Synlawn in accordance with ASTM E108-17, *Standard Test Methods for Fire Tests of Roof Coverings, Class A Spread of Flame (SOF) test requirements*. Testing was conducted at the Fire Technology Department of Southwest Research Institute (SwRI), located in San Antonio, Texas.

This test method should be used to measure and describe the properties of materials, products, or assemblies in response to heat and flame under controlled laboratory conditions and should not be used to describe or appraise the fire hazard or fire risk of materials, products, or assemblies under actual fire conditions. However, results of this test may be used as elements of a fire risk assessment which takes into account all the factors that are pertinent to an assessment of the fire hazard of a particular end use.

This report describes the testing of the assembly tested and the results obtained. The results presented in this report apply specifically to the material tested, in the manner tested, and not to the entire production of these or similar materials, nor to the performance when used in combination with other materials.

2.0 SAMPLE DESCRIPTION
SwRI received samples on April 24, 2019, and the test deck build and installation happened at a later date by SwRI personnel. The sample is described below in Table 1.

<table>
<thead>
<tr>
<th>Material ID</th>
<th>Description</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST243</td>
<td>Tufted synthetic turf with 15/18 PP 2-part/20 oz EnviroLoc backing.</td>
<td>Field Green/Apple</td>
</tr>
</tbody>
</table>

3.0 TEST SETUP AND CRITERIA
Class A tests are applicable to roof coverings that are effective against severe test exposure, afford a high degree of fire protection to the roof deck, do not slip from position, and do not present a flying brand hazard. When a roof covering is restricted for use on noncombustible decks (steel, concrete or gypsum) only the spread of flame test is required. To be regarded as Class A, a roofing system shall meet the requirements of two spread of flame tests. Each of the 3 ft-4 in. × 8 ft test decks were inclined at a slope of 1/2":12 and were exposed to a 1400°F ± 50°F flame for 10 min. All tests were performed in the presence of a 1056 ± 44-ft/min air velocity.

In order to meet acceptance criteria in accordance with ASTM E108-17, a roof covering material shall meet the following conditions when subjected to the particular class of fire tests:

1. At no time, during or after, the Class A spread of flame test:
• Any portion of the roof covering material be blown or fall off the test deck in the form of flaming or glowing brands that continue to glow after reaching the floor,
• The roof deck be exposed (except for roof coverings restricted to use over noncombustible deck), or
• Portions of the roof deck fall away in the form of particles that continue to glow after reaching the floor.

2. During the Class A spread of flame tests, the flaming shall not spread beyond 6 ft (1.8 m) and there shall be no significant lateral spread of flame from the path directly exposed to the test flame.

4.0 RESULTS
The material identified as 7ST243 passed the Class A SoF tests according to the requirements of ASTM E108-17. Visual observations are presented in Appendix A and photographic documentation is in Appendix B.
APPENDIX A

VISUAL OBSERVATIONS

(CONSISTING OF 1 PAGE)
Test ID: #1  
Material ID: *ST243*  
Ambient air temperature: 77°F  
Relative humidity: 55%

<table>
<thead>
<tr>
<th>Time (min:s)</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:00</td>
<td>Start of test; burner on.</td>
</tr>
<tr>
<td>10:00</td>
<td>Burner off. Turf melted in the flame path. PASS</td>
</tr>
</tbody>
</table>

**Flame-Spread Distance and Time**

<table>
<thead>
<tr>
<th>Distance</th>
<th>1 ft</th>
<th>2 ft</th>
<th>3 ft</th>
<th>4 ft</th>
<th>5 ft</th>
<th>6 ft</th>
<th>7 ft</th>
<th>8 ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time (min:s)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

Test ID: #2  
Material ID: *ST243*  
Ambient air temperature: 77°F  
Relative humidity: 52%

<table>
<thead>
<tr>
<th>Time (min:s)</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:00</td>
<td>Start of test; burner on.</td>
</tr>
<tr>
<td>10:00</td>
<td>Burner off. Turf melted in application flame path. PASS</td>
</tr>
</tbody>
</table>

**Flame-Spread Distance and Time.**

<table>
<thead>
<tr>
<th>Distance</th>
<th>1 ft</th>
<th>2 ft</th>
<th>3 ft</th>
<th>4 ft</th>
<th>5 ft</th>
<th>6 ft</th>
<th>7 ft</th>
<th>8 ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time (min:s)</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>
APPENDIX B
PHOTOGRAPHIC DOCUMENTATION
(CONSISTING OF 2 PAGES)
Figure B-1. SoF Test #1. Test setup.

Figure B-2. SoF Test #1. Sample after flame exposure.
Figure B-3. SoF Test #2. Test setup.

Figure B-4. SoF Test #2. Sample after fire exposure.
No existing hydrants shall be relocated as part of this approval**

FIRE ACCESS

UNIT PAVING ON GRADE - VEHICULAR

FD. ACCESS

MOUNTABLE CURB DETAIL FOR FIRE ACCESS VEHICLE

FIRE ACCESS SIGN

RAIL/TRACK SYSTEM

Note: Subgrade to remain, most of asphalt to remain unchanged, portion of Ellsworth currently surfaced with brick that will be surfaced with synthetic turf shall retain existing road bed; stone paving shown on Ellsworth shall be vehicular rated.

All fire department vehicular access surfaces and subgrades shall meet minimum MCDOT tertiary road load bearing capacity ***

*** No existing hydrants shall be relocated as part of this approval

SML 5/26/2020

*** Bollards are not approved as part of this package ***

SML 5/26/2020

*** SEE NOTES THIS SHEET

No existing hydrants shall be removed or relocated as part of this approval ***

SML 5/26/2020

Digitally signed by Jeffrey B Amateau
DN: c=US, o=Unaffiliated, ou=A01427E0000016514328970000FC85, cn=Jeffrey B Amateau
Date: 2020.05.22 07:09:54 -04'00'
DPS-ROW CONDITIONS OF APPROVAL

81999002M Downtown Silver Spring
Contact: Sam Farhadi at 240 777-6333

We have reviewed site and landscape plans files:

“08-LL-81999002M-L0101.pdf V3” uploaded on/ dated “5/8/2020” and

The followings need to be conditions of the certified site plan:

1) With respect to the unabandoned portion of Ellsworth Drive in front of City Place (closer to Fenton Street intersection):
   
   (a) No clearing and grading or construction of improvements shall be permitted until the right of way is abandoned by the Montgomery County Council.

   (b) The applicant and the County need to agree to an amendment of the Ground Lease governing the portion of Ellsworth abandoned under Resolution 13-1429 to include this portion after it is abandoned.

   (c) The applicant enters into any other agreements with Montgomery County, and obtains all required permits to allow the construction of the proposed improvements in Ellsworth Drive closer to Fenton Street and in front of City Place (existing right-of-way portion).

2) With respect to the portion of Ellsworth that was abandoned under Resolution 13-1429:

   (a) The applicant needs to file an abandonment application for a partial abandonment of the Public Access Easement (recorded in Book 21768 at Page 658) to limit vehicular access over Ellsworth to (i) ingress to and egress from the public garage at the intersection of Ellsworth Drive and Georgia Avenue and (ii) emergency vehicular access.

   (b) The partial abandonment should be approved by the Montgomery County Council.

   (c) The applicant and the County need to agree to an amendment of the Ground Lease.

   (d) The applicant needs to enter into any other agreements with the County and obtains all required permits to allow the construction of the proposed improvements in Ellsworth Drive with respect to the portion of Ellsworth that was abandoned under Resolution 13-1429.

   (e) Ingress and egress via Ellsworth Drive to the public garage at the corner of Ellsworth and Georgia must be provided 24 hours/day, 7 days/week, 365 days/year.
3) Proposed streetscape within Fenton Street ROW needs to comply with standard Silver Spring streetscape.

4) The proposed Synthetic Turf installation on top of the existing roadway pavement, is conditioned on the approval of Ellsworth Drive abandonment by the County Council.

5) The applicant must obtain a permit pursuant to section 49-11 of the County Code, for the installations of all removable elements under 49-11(a)(3) and Bill 39-18 within the existing Public Right of Way.
January 29, 2020

Marc Elrich, County Executive
Montgomery County

[Delivered via e-mail]

Advice from the Silver Spring Citizens Advisory Board re:

Foulger-Pratt Plans for Ellsworth (downtown Silver Spring)

Dear County Executive Elrich,

The Silver Spring Citizens Advisory Board attended the Foulger-Pratt presentation on September 16 on the changes being made to downtown Silver Spring and, after careful consideration, we offer the following advice:

- We understand that the current fountain/splash pad is old and suffers from a great number of technical troubles and agree with the need for changes to the feature. However, we strongly urge that a new and improved splash pad be installed as opposed to the complete removal of such a beloved feature which is enjoyed not only by those with young families, but all the community.

- The painting and, thereby, brightening of the buildings is a welcome feature, but we would urge Foulger-Pratt to utilize local artists for future mural painting. Montgomery County has a large number of renowned artists and we feel we should promote them when the opportunity presents itself, especially considering the Arts & Humanities Council of Montgomery Council is located in Downtown Silver Spring.

- This Board believes that the limiting of parking in front of Panera is acceptable, but should still allow for handicapped and ride-share parking.

- The closing of Ellsworth drive is overdue and welcome. With that said, we recommend that any closure allow for the ability for bikers and skaters to safely ride through the area. Further, we would advise that changes are made in a manner that ensures that the farmers market on the site is not affected. Additionally, it is critical that those with disabilities and seniors are able to navigate the new design safely. As such, the suggested turf will need to be well maintained. We would further suggest and advise that the turf and other materials used be environmentally friendly.

- On a related point, ADA accessibility was highlighted during the presentation, but Silver Spring is an aging community and ADA is a minimum standard. If this area is to be “refreshed” and offer new and revolutionary public activities, we need to ensure all of our residents are able to fully enjoy them and access the area safely. At this time, several stores on premises are inaccessible to those with disabilities. This must be remedied, and we cannot, in good conscience, condone changes if, under the best circumstances, those changes do not address these issues or, at worst, could exacerbate them. It is more cost-effective to incorporate these changes now, than to wait for ADA compliance standards to be updated with mandatory changes. Beyond the design and redevelopment of the site, resources should be available to blind and deaf users in the form of upgraded websites and customer service tools, ensuring that design and development plans for the site are fully communicated to all members of the community.
Lastly, the community would like a commitment to using **zero hostile design features**.

While we do express the concerns, recommendations, and advice listed above, **overall, we look forward to experiencing this newly refreshed downtown Silver Spring** and the exciting new opportunities that will arrive with it.

Sincerely on behalf of the board,

Matt Losak*  
Chair

Michelle Desidero*  
Vice-Chai

Mark Mendez*  
Secretary

Lysette House*  
Parliamentarian

(*Signatures on file)

CC:  
Montgomery County Council Members  
Reemberto Rodriguez, Silver Spring Regional Area Director  
Members of the SSCAB
April 20, 2020

To: Casey Anderson, Chair, Montgomery County Planning Board
Cc: Natali Fani-Gonzalez, Vice Chair, Montgomery County Planning Board
    Gerald R. Clichy, Commissioner, Montgomery County Planning Board
    Tina Patterson, Commissioner, Montgomery County Planning Board
    Partap Verma, Commissioner, Montgomery County Planning Board
    Marc Elrich, County Executive, Montgomery County
    Sidney Katz, President, Montgomery County Council
    Tom Hucker, Vice President, Montgomery County Council
    Gabe Albornoz, Councilmember, Montgomery County Council
    Andrew Friedson, Councilmember, Montgomery County Council
    Evan Glass, Councilmember, Montgomery County Council
    Will Jawando, Councilmember, Montgomery County Council
    Nancy Navarro, Councilmember, Montgomery County Council
    Craig Rice, Councilmember, Montgomery County Council
    Hans Riemer, Councilmember, Montgomery County Council

Reference: Project Plan No. 91998005C and Site Plan No. 81999002M
Foulger Pratt proposal to install plastic carpet on Ellsworth Drive, Downtown Silver Spring, Montgomery County Planning Board hearing, possibly in May

Dear Chair Anderson:

“DO NO HARM”

We are writing on behalf of the Friends of Sligo Creek (FOSC) to state our opposition to the proposal by the developer Foulger Pratt to install plastic carpet on a portion of Ellsworth Drive in Downtown Silver Spring, part of the DTSS project now pending before the Planning Board. The proposal may be before you soon, possibly at a May meeting.

FOSC is the nonprofit organization dedicated to protecting and improving the health, safety and environmental quality of the Sligo Creek Watershed, in partnership with Montgomery and Prince George’s County governments and agencies, Montgomery Parks and the people in our communities.

Your decision will affect our water quality.
FOSC urges the Planning Board to reject the proposal to put plastic carpet on Ellsworth Drive. The proposal raises troubling issues concerning its likely effects on the quality of our water, public safety, and watershed health. Simply put, we expect that Sligo Creek and our watershed would be degraded by installation of the plastic carpet.

Details of our specific concerns are below.

However, we would be remiss if we did not draw your attention to a set of issues that are likely to be front and center on the public policy agenda in the near future. The developer’s proposal raises issues that may not be easily addressed under current regulations but are nonetheless critical to the protection of human health and watershed health. Scientists are starting to raise health concerns over the use of the PFAS family of chemicals in synthetic turf, including the “blades” of plastic grass and possibly the turf backing.¹ We have not seen studies of manufacturer SYNLawn’s SYNTipede243 product and do not know if any exist, but, to protect the public, it is important that the Planning Board and County Executive obtain technical information from the firm about its use of any PFAS in its product.

We are also very troubled about how limited publicly available information on the product proposed and product testing is, based on project filings on the Planning Board’s website and information on the manufacturer’s website (SYNLawn.com). Synthetic carpets are known to contain uniquely harmful constituents such as heavy metals in pigments, color stabilizers, UV inhibitors, plasticizers, non-stick chemicals, and flame retardant.

We all need to know what’s in this product. To further clarify the risks to Sligo Creek and the watershed, we have requested technical information from the carpet’s manufacturer (SYNLawn) and the manufacturer of the storm water management facility now in place under Ellsworth to protect Sligo Creek from Downtown Silver Spring runoff (Contech’s StormFilter). We understand that SYNLawn will have proprietary concerns, but to understand public risks, we need better information.

Due diligence to protect Sligo Creek is also a responsibility of government. We strongly urge that the Planning Board and County Executive will step up their due diligence with the applicant, carpet manufacturer and DTSS storm water management facility manufacturer so that any decision can be based on sound science and risk assessment.

¹According to recent studies, the artificial grass “blades” in synthetic turf may contain PFAS chemicals, known as “forever chemicals” (ie, they don’t break down). PFAS chemicals are thought to be used to keep the plastic “blades” from sticking to the extrusion machinery. Some industry members have noted that they have no other cost effective process. PFAS chemicals also have been identified in certain products’ backing. Researchers have called for firms to identify any PFAS used in the manufacturing of their turf product. For details on the science, see the February 2020 Fact Sheet on Per-and Poly-fluoroalkyl Substances (PFAS) in Artificial Turf Carpet by the well-respected TURI (Toxics Use Reduction Institute) at UMass Lowell; and recent work by PEER (Public Employees for Environmental Responsibility) and The Ecology Center.

https://www.turi.org/TURI_Publications/TURI_Chemical_Fact_Sheets/PFAS_in_Artificial_Turf_Carpet; https://www.peer.org/industry-in-a-dither-about-pfas-in-synthetic-turf/ SYNLawn products have not been tested in publicly available research, as far as we can tell, but until SYNLawn reassures the Planning Board and County, the PFAS question remains open. We should not give SYNLawn the benefit of the doubt.
In conclusion, we urge Foulger Pratt and the Planning Board to do no harm to our water or watershed. There are healthier and safer solutions for Ellsworth that can be adopted – without the risks involved. Why not choose healthier and safer solutions that protect Sligo Creek – and pose no potential risks and liability for the County?

Healthier and Safer Solutions to Protect Sligo Creek

- **The best solution to protect Sligo Creek would be to remove the asphalt and replace it with undergrading and permeable pavement (stone or concrete, no synthetics) on Ellsworth - not plastic turf.**

  This solution would:

  (1) Protect the current Ellsworth storm water maintenance facility in place because it would not be burdened by the new plastics pollution load (it is probably not up to protecting Sligo Creek from the new plastics pollutants);

  (2) Lower the temperature of runoff into Sligo Creek (runoff from plastic is hotter; higher water temperatures kill aquatic life); and

  (3) Slow down storm water run-off (run off is faster on plastic surfaces; rapid runoff rates are degrading our stream and riparian buffers).

Permeable pavement would be an improvement over the current asphalt.

- **Another option would be to use a “green streets” concept to channel storm water runoff and then cover the remaining asphalt with durable wood planking.** Asphalt could be removed in strategically placed areas on the sides and where utilities are not underneath, which could then serve as multiple mini-water retention and or infiltration sites. The remaining asphalt could be covered with durable wood planking or other stone or concrete paver material strategically designed to help to slow and route storm water run-off to mini-garden areas.

- **A distant next best option might well be to leave the asphalt in place.**

Our concerns are set out in detail below.

**Our Concerns.**

We object to the installation of plastic carpet (and the particular plastic carpet proposed) on Ellsworth Drive on public safety, health, and environmental grounds:

1. **The plastic grass product proposed is substantially petroleum-based.** It is not “environmentally friendly”, contrary to representations by the manufacturer that some input materials are plant-based and the product is “Bio-based Synthetic
Turf”.\(^2\) (See Appendix 1 for product details provided by the manufacturer.) Rather, the substantial petroleum content makes the product flammable, as the County’s Departments of Permitting Services and Transportation have recognized.\(^3\) **Montgomery County should not allow people to use and vehicles to drive on a flammable surface.**

2. Plastic carpets are known to many in the scientific community to contain hazardous chemicals related to higher cancer rates and disruption of human growth regulators, to name just a few very serious concerns. **Runoff containing these toxicants should not be allowed into Sligo Creek.**

3. According to the manufacturer, the product proposed is not designed or certified for heavy foot traffic or the vehicular use that will occur on Ellsworth, a very busy and complex stretch of Downtown Silver Spring.

The manufacturer recommends the product only for landscape, pets, play, rooftop, and golf. (See Appendix 2) Foulger Pratt proposes closing off Ellsworth to normal vehicle traffic so that only minimal access is allowed, but emergency vehicles, delivery trucks and weekly Farmers’ Market trucks would still be able to drive on it, according to its filings with the Planning Board. Any other option would be better: **plastic carpets are not up to or certified for the type of use proposed.**

4. Bearing more weight and friction than the carpet was designed for, the plastic blades of grass and their synthetic backing can be expected to degrade even more rapidly than “normal”.\(^4\) By permitting this carpet to be installed, the Planning Board and County make it very likely that the degraded carpet will show up in Sligo Creek, in either particulate or dissolved chemical form.

5. Storm water management filtration under Ellsworth is the main line of defense protecting Sligo Creek from pollutants coming down from DTSS. Keeping a filter cleared of sediment is critical, so how and how rapidly the carpet will degrade in

---

\(^2\) The environmentally friendly features of the product SYNLawn’s SYNTipede 243 appear to be exaggerated. According to technical specifications on the product website, the synthetic grass blades are made of polyethylene and the turf backing is made out of polypropylene. Both are petroleum-based. SYNLawn’s proprietary coating of the carpet backing (Enviroloc) is described as containing “biobased resources including soybean oil”, but a closer look at the manufacturer’s description indicates that it, too, is heavily petroleum-based. See Appendix 1.

\(^3\) The County’s Department of Permitting Services has recognized the flammability hazard in its review of the proposal. See DAIC Document 81999002M-DPS-RPP.pdf. The Department of Transportation also opposes the use of synthetic turf on Ellsworth because it is flammable. See DAIC Document 91998005C. On its website, the manufacturer represents its products as having a Class A Fire Rating, but it is not at all clear how this rating was determined.

\(^4\) A widely accepted rule of thumb is that 5-10% of a plastic synturf carpet typically disintegrates off the carpet each year. On this basis, have the Planning Board and County Executive estimated the amount of plastic debris to be expected for the quantity of SYNTipede 243 plastic carpeting proposed? Keep in mind, this figure would need to be adjusted to reflect the fact that the product will likely deteriorate faster than “normal” because the product is not designed for the specific usage proposed. Also, because installation is unusual and does not appear to be recommended by the manufacturer (it is proposed to go on top of the asphalt), even more friction is likely to be generated, resulting in faster plastic deterioration.
combination with the design of Contech’s StormFilter storm water management facility under Ellsworth are significant.

**Because it was not designed for SYNLawn and has been in place since around 2005, we would not expect Contech’s system to be up to the job.** We are also concerned that the normal pre-plastic pollution operation of the system itself will likely be degraded by the additional pollution burden. Normal maintenance will not be enough.

Furthermore, we do not know if the storm water runoff flow rate would change and how that would affect current the storm water facility. Typically, the flow rate for synthetic turf would be higher.

An additional critical question: how will Sligo Creek be protected from hotter storm water runoff? Outdoor plastic carpets typically heat up more than most other surfaces despite chemical treatment. Hotter storm water temperatures will kill life in Sligo Creek. Winter issues concerning anti-ice treatment are also important. Have the Planning Board and County determined that this storm water system can handle the new pollutant load in all weather?

We urge the Planning Department, the Department of Permitting Services, the Department of Environmental Protection and Montgomery Parks to investigate our concerns by requesting additional technical details and research from the applicant, SYNLawn and the designers of the current SWM system under Ellsworth.

Key information includes the particulate and chemical filtration capability of the SWM system now in place; the chemical and particulate size properties of how the plastic carpet/synthetic turf typically deteriorates; and the expected temperature of the carpet (average and peak) and how the storm water facility will handle this.

**6. Prior to a Planning Board decision on this proposal, we request that a thorough review of the storm water management situation be undertaken by the County in light of the concerns we have raised.** While we understand that the applicant has represented the particular project would disturb less than 5,000

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5 We are also trying to find out from DEP whether any special storm water protection was put in place for the several years that artificial turf was installed on what is now the ice rink area on Veterans’ Plaza. It is important to note that the product used at the time was not the same product that is now proposed by the applicant and that the usage proposed did not involve any vehicular or similarly heavy foot traffic, for which the product was not designed. From what we can tell so far, there is no evidence that the StormFilter storm water maintenance facility was designed to handle the artificial turf that was installed at the time.

6 To evaluate whether the existing storm water facilities can handle the new pollution load, we have asked SYNLawn for information on how its product deteriorates, whether it degrades in chemical or particulate form and, if in particulate form, what size particles? We have also reached out to the manufacturer of the Ellsworth storm water facilities (Contech’s StormFilter), designed to protect Sligo Creek from DTSS runoff, to find out what particulate size and chemicals its facilities are designed to handle. Preliminary guidance from Contech suggests that the product now in place is not what they now suggest to handle storm water runoff from artificial turf. While more frequent maintenance of the facility by DEP would help protect our Creek, it probably would not be enough.
square feet of surface area and therefore is exempt from storm water management requirements, we have not been able to confirm its calculations. **We request confirmation from the County and Planning Board staff on the dimensions of the proposed carpet area.**

7. **The coronavirus situation raises additional public health questions about our ability to keep this product clean and whether our storm water management system in place under Ellsworth can handle relevant cleaning agents or anti-microbial technology.**\(^7\) Will the County have to close down part of Ellsworth because it is a health hazard, if we have a situation in the future similar to what we face now? It is important that SYNlawn will provide technical details about sanitization of its product and possible effects on water that can be evaluated by the County.

**Conclusion.** Plastic carpets used in outdoor public spaces pose major threats to our water and environmental quality. These threats are often unrecognized or unacknowledged, in part because technical product information may be proprietary and may not be available. As is often the case, the only way the public can know enough about the product in order to evaluate it is to buy a sample and have it tested.

Nonetheless, in this case, there is enough information on the product to raise large red flags about the public risks.

What is at stake? Sligo Creek is the focus of many of our communities. As the current quarantine situation clearly illustrates, people cherish Sligo Creek. People rely upon it and are active in improving - not harming – its water quality. Our wildlife depends on it. What goes into Sligo Creek ultimately ends up in the Chesapeake Bay and our drinking water. Our water is not protected from this type of plastic pollution.

**We urge the Planning Board, County Executive, County Council and Foulger Pratt to “Do No Harm”. The Planning Board should deny this proposal to install synthetic turf carpeting on Ellsworth.**

Please require installation of permeable pavement rather than plastic carpeting/synthetic turf to protect public health and safety, Sligo Creek and the watershed.

Thank you for your consideration.

Additional details documenting our concerns taken directly from the product manufacturer’s website are below.

\(^7\) According to a recent study published in correspondence to The New England Journal of Medicine, the current COVID19 virus can stay on plastic up to three days. [https://www.nejm.org/doi/full/10.1056/NEJMc2004973?query=featured_home](https://www.nejm.org/doi/full/10.1056/NEJMc2004973?query=featured_home)
Sincerely,

Mike Smith, President, Friends of Sligo Creek

Kit Gage, Director of Advocacy, Friends of Sligo Creek
Advocacy@fosc.org

The Water Quality Committee, Friends of Sligo Creek
WaterQuality@fosc.org

cc: Adam Ortiz, Department of Environmental Protection
Hadi Mansouri, Acting Director, Department of Permitting Service
Christopher Conklin, Director, MCDOT
Mike Riley, Director, Montgomery Parks

Gwen Wright, Planning Director, Montgomery County Planning Board
Robert Kronenburg, Deputy Planning Director, Montgomery County Planning Board
Elza Hisel-McCoy, Chief, Area 1, Montgomery County Planning Board
Stephanie Dickel, Supervisor, Area 1, Montgomery County Planning Board
Grace Bogdan, Plan Coordinator, Area 1 (the reviewer of the proposal), Montgomery County Planning Board
Steve Shofar, Manager II, Intergovernmental Affairs Division, Department of Environmental Protection
Stan Edwards, Manager II, Energy, Climate and Compliance Division, Department of Environmental Protection
Pamela Parker, Stormwater BMP Maintenance and Inspection Program, Department of Environmental Protection
Mark Etheridge, Manager, Water Resources Plan Review, Montgomery County, Department of Permitting Services
Atiq Panjshiri, Manager, Right-of-Way Review, Montgomery County Department of Permitting Services
Sam Farhadi, Plan Reviewer, Right-of-Way Plan Review, Montgomery County, Department of Permitting Services
David Kuykendall, Plan Reviewer, Water Resources Plan Review, Montgomery County, Department of Permitting Services
Tim Cupples, Chief, Division of Transportation Engineering, Montgomery County Department of Transportation
Dan Sheridan, Chief, Transportation Planning and Design Section, Division of Transportation Engineering, Department of Transportation
Bill Hamilton, Supervisor, Natural Resources Stewardship, Montgomery Parks
Matt Harper, Supervisor, Resource Analysis, Montgomery Parks
APPENDIX 1

The plastic carpet proposed (SYNLawn’s SYNTipede 243) is substantially petroleum-based, even though the manufacturer highlights materials described as plant-based and markets the product as “Bio-based Synthetic Turf”. Because of the large petroleum content, it is flammable, as the County’s Department of Permitting Services and Department of Transportation have recognized.

We have been able to document the petroleum-based content, in the manufacturer’s own words.

Screenshots 1 – 3 below are pages from the manufacturer’s website that list technical specifications for the plastic carpet proposed for Ellsworth Drive. Screenshots 1 and 2 document in the manufacturer’s own words that the product’s grass blades (called “yarns”) and its primary backing are made of petroleum-based plastics:

- The artificial blades of grass are made of polyethylene (a thermoplastic polymer)
- The primary turf backing is polypropylene-based.

SYNLawn’s claim that its plastic carpet is environmentally friendly and bio-based rests solely on the contents of its proprietary Enviroloc turf coating. (See Screenshots 1 and 3.) The company describes Enviroloc as replacing a “large portion of petroleum-based polymers (up to 60%) with bio-based polymers created from sustainable resources including soybean oil.”

Taking the converse of SYNLawn’s petroleum claim, at least 40% of polymers for the turf backing are petroleum-based. Without additional information, the actual percentage of petroleum-based polymers for coating of the backing is impossible to determine.

Similarly, there is not sufficient information to assess the description of soybean oil and other sustainable resource content. Scientifically, biopolymers are not necessarily benign. Many of these polymers have been designed to be environmentally persistent. Micro or nano particles from a persistent biopolymer may be just as hazardous as those from a synthetic polymer.

We urge the Planning Board and County Executive to request that SYNLawn provide additional technical information in support of its descriptions.
Product Specifications for Syntipede 243 From Manufacturer Synlawn’s Website:

- The backing and grass blades (referred to as “yarn”) are petroleum-based plastics. See also Screenshot 2.
- The manufacturer claims that the proprietary coating of its backing (Enviroloc) is “plant-based”.
- But more details provided by the manufacturer are not consistent with its plant-based claim. See Screenshot 3 below.

Screenshot 2: Additional SYNTipede 243 Petroleum-based Specifications from SYNLawn’s Website

<table>
<thead>
<tr>
<th>Primary Yarn Polymer</th>
<th>Polyethylene</th>
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<tbody>
<tr>
<td>Yarn Cross Section</td>
<td>Omega</td>
</tr>
<tr>
<td>Standard Color</td>
<td>Field Green / Apple</td>
</tr>
<tr>
<td>Fabric Construction</td>
<td>Tufted</td>
</tr>
<tr>
<td>Second Yarn Polymer Thatch</td>
<td>Polyethylene</td>
</tr>
<tr>
<td>Secondary Yarn Color</td>
<td>Field Green / Belgo</td>
</tr>
<tr>
<td>Primary Backing</td>
<td>15/18 PP 2-Part</td>
</tr>
<tr>
<td>Coating Type</td>
<td>20 oz. EnviroLoc™</td>
</tr>
<tr>
<td>PE Yarn Denier / Ends</td>
<td>10,000 / 6</td>
</tr>
<tr>
<td>Texturized Thatch Denier / Ends</td>
<td>5,040 / 12</td>
</tr>
<tr>
<td>Warranty Period</td>
<td>Limited Lifetime</td>
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Screenshot 3: How “Truly Green” is SYNTipede 243? SYNLawn’s Website Describes its Proprietary Enviroloc Turf Coating

- The manufacturer claims that the proprietary coating of its backing (Enviroloc) is “plant-based”.
- The company describes Enviroloc as replacing a “large portion of petroleum-based polymers (up to 60%) with bio-based polymers created from sustainable resources including soybean oil.”
- Taking the converse of SYNLawn’s petroleum claim, at least 40% of polymers for the turf backing are petroleum-based. Without additional information, the actual content is impossible to evaluate.

APPENDIX 2

Plastic carpet/synthetic turf is the wrong thing to install on Ellsworth Drive. SYNLawn’s products are not designed for the type of usage that will occur if the proposal goes through.

As Screenshot 4 (below) from the website documents, the manufacturer recommends the product only for landscape, pets, play, rooftop, and golf. It is not designed for the very heavy foot traffic or vehicular use that will occur on Ellsworth Drive.

Foulger Pratt proposes closing off Ellsworth to normal vehicle traffic, but emergency vehicles, delivery trucks and weekly Farmers’ Market trucks would still be able to drive on it.

No substitute would be any better: plastic carpets are not up to or certified for the type of use proposed.

Note also that the listed certifications are not relevant for the use proposed.

Screenshot 4: Recommended uses of SYNLawn’s SYNTipede 243 are for “landscape, pets, play, rooftop and golf”, according to the manufacturer

Dear Planning Board Chair Casey Anderson,

This idea is about the worst since the installation of the horribly bright blue lighting along Ellsworth Avenue by a few of the storefronts there. Turning night into a garish imitation of daylight was ill-conceived and tasteless.

Now there is an idea to invoke ugly artificial turf along this same stretch? This will age very poorly, looking tackier and tackier as the months go by.

By contrast, digging up the asphalt and planting native trees and shrubs along carefully planned walkways will grow into increasingly beautiful, cooling shade enjoyable by pedestrians for decades. I suggest the example of the Riverwalk in San Antonio, where hundreds of hugely profitable businesses reap the benefit of such a wise landscaping decision. The city planners there chose this second planning strategy - no artificial turf there.

Someone in the leadership of our county needs to reverse this trend for poor urban planning in Silver Spring.

Sincerely,

Jane Harman
7241 Garland Ave
Takoma Park, MD 20912

Attachments

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Page 1
E-mail

From  Catherine Brousseau
To  <MCP-Chair MCP-Chair>; Leo Juezan; MCP-Chair; MCP-Chair@mncppc-mc.org
Cc
Subject  Ellsworth artificial turf
Date Sent 4/1/2020 2:58 PM
Date Received 4/1/2020 2:58 PM

Dear Mr. Anderson,

I am a long-term resident of Silver Spring MD, and live close enough to downtown that I often walk there in good weather. I oppose to the installation of artificial turf on Ellsworth Street in the heart of Silver Spring. Yes, it has become a town-center of sorts. Yes, it bustles with commerce and families gathering, children romping, teenagers hanging out, and people spending money for food, entertainment, and consumer goods.

However, I do not see it as a “playground” or a street that tempts someone to sit or lie on it. I see it as a thoroughfare for walking, occasional vehicles, and festivities. To that end, Ellsworth Street needs to have a surface that is easy to wash and clear of trash, that is open bandstand and food market trucks, as well as above mentioned activities; that is, tarmac.

Thank you for your public service to our county, particularly in these difficult times.

Sincerely, Catherine Brousseau
9039 Sligo Creek Parkway

Attachments

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Email

Downtown Silver Spring Pr...

Email
From
Stephen Estrada

To
<MCP-Chair MCP-Chair>; Councilmember Hucker; Leo Juezan; MCP-Chair #; MCP-Chair@mncppc-mc.org; Tom Hucker

Cc
lesliesmithmsw@gmail.com; Stephen Estrada

Subject
Downtown Silver Spring Project Plan No. 91998005C and Site Plan No. 81999002M

Date Sent
4/3/2020

Date Received
9:22 PM

I am OPPOSED TO PLASTIC TURF on Ellsworth St. in downtown Silver Spring for the following reasons:

— This material is not rated for the type of use and abuse it will be subjected to.
— As it deteriorates plastic fibers will be released into the environment and into the Sligo waterway where it will cause harm to natural systems.
— It will quickly become worn and dirty and will look like hell.
— Even when new it looks cheap.

— I’d like to know whose harebrained idea this was and why it is being foisted on residents of Silver Spring. There are other alternatives such as more benches and seating arrangements, natural pavers and more attractive streetscaping. If the idea is simply to save money, then do nothing and leave the street the way it is which is fine.

Plastic turf is the worst possible alternative and just further downgrades the look of Downtown Silver Spring!

Sincerely,
Stephen Estrada

Stephen Estrada
se@stephenestradaart.com
https://nam03.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.stephenestradaart.com%2F&amp;data=02%7C01%7CMCP-Chair%40mncppc-mc.org%7Cf191163cad6847105d5a08d7d8360dc7%7Ca9061e0c24ca4c1cebffe039bb8c05816%7C0%7C1%7C637215598994645956&amp;data=r6RfxedVxl1z0b9yoLpvRaEfd7nPALPNNh8mJHJUy4%3D&amp;reserved=0
610 Greenbrier Drive
Silver Spring MD 20910
I am OPPOSED TO PLASTIC TURF on Ellsworth St. in downtown Silver Spring for the following reasons:

— This material is not rated for the type of use and abuse it will be subjected to.
— As it deteriorates plastic fibers will be released into the environment and into the Sligo waterway where it will cause harm to natural systems.
— It will quickly become worn and dirty and will look like hell.
— Even when new it looks cheap.

— I'd like to know whose harebrained idea this was and why it is being foisted on residents of Silver Spring. There are other alternatives such as more benches and seating arrangements, natural pavers and more attractive streetscaping. If the idea is simply to save money, then do nothing and leave the street the way it is which is fine.

Plastic turf is the worst possible alternative and just further downgrades the look of Downtown Silver Spring!

Sincerely,
Stephen Estrada

Stephen Estrada
se@stephenestradaaart.com
https://nam03.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.stephenestradaaart.com%2F&amp;data=02%7C01%7CMCP-Chair%40mncppc-mc.org%7Cf191163cad6847105d5a08d7d8360dc7%7Ca9061e0c24ca4c1cbeff039bb8c05816%7C0%7C1%7C637215598994645956&amp;sdata=r6RfxedVxl1z0b9yoLpvRaEfd7nPALPNNhBmJHJUy4%3D&amp;reserved=0
610 Greenbrier Drive
Silver Spring MD 20910
Regarding artificial turf in downtown Silver Spring

Downtown Silver Spring Project Plan No. 91998005C and Site Plan No. 81999002M

I truly do not understand the appeal of artificial turf in the downtown Silver Spring area. I have enjoyed the brightening up of the buildings and look forward to the renovation of public space, but turf is a bizarre proposal. It won't be comfortable like grass, and it won't be durable like asphalt. If the idea is to make the ground more "fun" like the buildings why not paint the asphalt? That would raise fewer durability concerns (especially related to water quality), would be easier to clean, would allow full access by vehicles for emergencies and for the farmers market (or for unforeseen events like now, when the street is open to vehicles for restaurant carry out!) It would have to be repainted occasionally, sure, but turf would be sure to require a great deal of maintenance as well.

Meghan Hess
506 Pershing Drive

Attachments

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Plastic carpet/terf in downtown Silver Spring

If this was 1950 rather than 2020, I might find this idea funny. However, there is no reason on this earth to use plastic which is hard to clean, is not biodegradable and pollutes our streams. Why not use paint to designate areas! Cheap and very effective. Chairs are better than sitting on the ground. Consider the health of generations to come. Do the right thing!

Use common sense and scientific expertise; that is why we pay you the big bucks.

Sincerely,
Cathy Henderson

Attachments

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Oppose turf carpet on Ells...

E-mail
From mvlally@gmail.com
To <MCP-Chair MCP-Chair>; MCP-Chair #; MCP-Chair@mncppc-mc.org
Cc
Subject Oppose turf carpet on Ellsworth
Date Sent 5/8/2020 6:45 PM
Date Received 5/8/2020 6:45 PM

Please do not put down a giant plastic carpet on Ellsworth Dr in DTSS. This will be so detrimental to Sligo Creek, and to the environment. Thank you,
Marian Lally on Normandy Drive, Silver Spring

--
Follow me on Instagram @DoThisNotThatFitness

Attachments

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I write as a resident of County Council District 5, whose home is located between Downtown Silver Spring and Sligo Creek.

I have read the statement provided the Planning Board by Friends of Sligo Creek. I am not technically qualified to add or otherwise comment on its contents -- other than note that the multiple concerns it raises warrant processing Foulger Pratt’s plastic carpeting proposal with caution.

What I can add, as a County resident living near both DTSS and Sligo Creek, is my surprise to learn Foulger Pratt has gone ahead with this proposal, notwithstanding the many objections submitted by area residents in months past. We form, after all, the core neighborhood patronizing commercial enterprises located in and around the area where this "carpeting" is to be placed. Although Foulger Pratt may be discounting our objections, I wonder if that nonchalance extends to DTSS commercial tenants' views -- who would bear the brunt of consumer discomfort at being complicit in jeopardizing Sligo Creek's health.

What seems especially ironic in this situation is that Foulger Pratt is itself a beneficiary of "neighborhood objections" -- inasmuch as they contributed to the dismantling of an earlier proposal for revitalizing a derelict downtown and laid the foundation for what DTSS has become. In considering this proposal, I hope the Planning Board takes into account not just unanswered technical concerns associated with plastic carpeting but the known ones of area residents.

James Ehrman

Attachments
Thanks so much, Ms. Coello.

Anne Vorce

-----Original Message-----
From: MCP-Chair <mcp-chair@mncppc-mc.org>
To: Avorce <avorce@aol.com>
Sent: Mon, May 11, 2020 12:57 pm
Subject: RE: Project 91998005C Plastic carpet

Good afternoon Ms. Vorce,

I am confirming receipt for distribution and confirming it will be included in the record.

Thank you,

Catherine Coello, Administrative Assistant
The Maryland-National Park and Planning Commission
Montgomery County Chair’s Office
8787 Georgia Ave, Silver Spring, MD 20910
Main: 301-495-4605 | Direct: 301-495-4608 | Fax: 301-495-1320
www.MontgomeryPlanningBoard.org

Hello Ms. Coello.

I was just writing to confirm that you had received and had distributed Friend's of Sligo Creek's (FOSC's) testimony/letter on Project Plan No. 91998005C and Site Plan 81999002M, sent via email by FOSC's Advocacy Director Kit Gage on April 20. Her email to you all is below.
We may have already received your confirmation, but I am just double checking.

Thank yo.

Anne Vorce, FOSC

-----Original Message-----
From: Kit Gage <kgage@verizon.net>
To: Anderson, Casey <Casey.Anderson@mncppc-mc.org>
Cc: natali.Fani-Gonzalez@mncppc-mc.org; Gerald.Clichy@mncppc-mc.org; Tina.Patterson@mncppc.org; Partap.Verma@mncppc-mc.org; Partap.Verma@mncppc-mc.org; Gwen.Wright@montgomeryplanning.org; Robert.Kronenburg@montgomeryplanning.org; mccoy@montgomeryplanning.org; stephanie.dickel@montgomeryplanning.org; grace.bogdan@montgomeryplanning.org
Sent: Mon, Apr 20, 2020 3:19 pm
Subject: Project 91998005C Plastic carpet

Project Plan No. 91998005C and Site Plan 81999002M

Chair Anderson, Vice Chair Fani-Gonzalez and Commissioners,
Please see attached written testimony on the Founger Pratt proposal to install plastic carpet on a portion of Ellsworth Drive in Silver Spring, a portion of the project now under consideration.

Please be in touch with any questions or updates on hearing and project status.

Kit Gage
Advocacy Director
Friends of Sligo Creek

On behalf of Mike Smith, President, and the Water Quality Committee.

CC: Separately to Montgomery County Executive
Montgomery County Council
Adam Ortiz, Director DEP
Hadi Mansouri, Acting DPS
Mike Riley, Director Montg. Parks
Other staffers in DEP, Permitting, DOT, Parks

**Attachments**

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There are no Attachments to show in this view. To get started, create one or more Attachments.
Email

Correspondence FW: artificial turf in downtown Silver Spring

From: Tanya DeKona <tdekona@hotmail.com>
Sent: Thursday, April 30, 2020 1:19 PM
To: Anderson, Casey <Casey.Anderson@mncppc.mc.org>
Subject: artificial turf in downtown Silver Spring

Dear Ms. Anderson,

I would like to express my strong opposition to laying artificial turf on Ellsworth street in Silver Spring. It wears badly, causes terrible pollution, and is hard to dispose of. Those are just some of the reasons why this is a bad idea.

You have the letter from Friends of Sligo Creek (FOSC) presenting excellent details of the harms of this change. As a volunteer who participates in FOSC clean ups and regularly picks up trash and recycling on my walks, I can't believe this harmful plastic turf is even a consideration. As a resident of Montgomery County all my life, I do not want my taxes to add to the offense.

I vote for leaving the street as is. If change is absolutely necessary, laying down pavers to help with run off would be my second choice. What I absolutely oppose is artificial turf.

Thank you for reconsidering artificial turf.

I would welcome your reply.

Sincerely yours,

Tanya DeKona
7407 Buffalo Avenue
Takoma Park, Maryland 20912-4125

Attachments
# Downtown Silver Spring

## Index of Approved Plans

February 2016

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**ATTACHMENT F**

Diagram of Silver Spring Downtown area with blocks and streets labeled.

- **BLOCK C**: Silver Plaza
- **BLOCK B**: Block C
- **BLOCK E**: Block E
- **928 Ellsworth Drive**: Civic Building & Plaza
- **Civic Building & Plaza**: Block E