1 2 3	Attachment A: Previous DRAFT Artificial Turf Exhibit that was stricken from Ordinance 2020-15 on November 17, 2020					
4 5	Chapter 23					
6 7	ARTICLE 6 "ENVIRONMENTAL REGULATIONS"					
8 9	Sec. 23.6-1 Landscape regulations.					
10 11 12	(k) Landscape design standards. The following are the minimum standards for the design and installation of all landscaping within the City of Lake Worth Beach:					
13 14	***					
15 16	(15) Artificial turf.					
17 18	a. All installation of artificial turf shall require a landscape permit. The use and location of artificial turf shall be limited to the following:					
19 20	(1) Single family and duplex properties in the rear yard only and not visible from the right of way.					
21 22 23 24 25 26 27	(2) Between parking strips in the front yard of non-conforming properties previously constructed with off-street parking utilizing sixty percent (60%) or more of the width of the front yard. This application of artificial turf shall be approved by the Development Review Official or applicable review board, which shall review the proposed application for consistency with the City's land development regulations, visual appropriateness, enhanced site design and appearance, and improved drainage.					
28	(3) On roof top terraces.					
29	(4) As part of a planned development in a recreation or amenity area.					
30 31 32 33	b. In all areas of installation, artificial turf shall be treated as a semi-pervious surface. The quantity of artificial turf to be incorporated into a project shall be limited by the maximum percentage of impervious surface for the subject property within the applicable zoning district.					
34	c. Artificial turf shall not be installed:					
35	(1) as part of any landscape buffer or landscape area required by this article;					
36	(2) within permanent drainage features (e.g., ponds, swales); or					
37	(3) in any public right of way.					
38 39	d. Minimum material standards. All artificial turf shall comply with each of the following minimum standards:					
40 41 42 43	(1) Artificial turf shall consist of green lifelike individual blades of grass that emulate natural turf in look and color and shall have a minimum pile height of one- and one-half inches and shall have a minimum tufted weight of 80 ounces per square yard.					

44	(2) Artificial turf installations shall have a minimum permeability of 30 inches per
45	hour per square yard.
46	(3) All artificial turf shall have a minimum ten-year manufacturer's warranty that
47	protects against color fading and a decrease in pile height.
48 49	(4) Artificial turf shall be lead free and be partially or wholly manufactured from recyclable materials.
50	(5) All materials must include test documentation which declares that the artificial
51	turf yarn and backing materials are disposable under normal conditions, at
52	any U.S. landfill station (Total Content Leach Protocol (TCLP) test).
53	Documentation must also be provided that identifies all components that are
54	recyclable and all components that consist of recycled material.
55	(6) The use of indoor or outdoor plastic or nylon carpeting as a replacement for
56	artificial turf or natural turf shall be prohibited.
57	(7) The artificial turf system shall utilize organic plant-derived and other natural
58	infill components, including, but not limited to, cork, coconut, corn husk, rice
59	husk, and sand. The use of crumb rubber and other synthetic materials shall
60	be prohibited in all applications except for sports fields.
61	(8) Artificial Turf shall not be treated as a fill in material, but rather as a planned
62	element of the site or yard outside of required landscape areas and buffers
63	e. Installation, maintenance and repair.
64	(1) All artificial turf shall, at a minimum, be installed according to the
65	manufacturer's specifications.
66 67	(2) All artificial turf installations shall be anchored to ensure that the turf will withstand the effects of wind.
68 69	(3) All seams shall be secured and edges shall be trimmed to fit against all regular and irregular edges to resemble a natural look.
70	(4) If artificial turf is planned to be installed immediately adjacent to a seawall,
71	the artificial turf shall be pinned or staked behind the seawall. No artificial
72	turf or installation mechanism shall be attached directly to or placed on a
73	seawall or seawall cap.
74	(5) All artificial turf shall be installed over a subgrade prepared to provide
75	positive drainage and an evenly graded mass of compacted, porous
76	crushed rock aggregate material. Base comprising of sand only is not
77	permitted. Proper drainage shall be provided for all Artificial Turf
78	installations to prevent runoff or pooling of water.
79 80	(6) Artificial turf shall be visually level, with the grain pointing in a single direction.
81 82 83 84	(7) An appropriate solid barrier device (e.g., concrete mow strip, bender board or other barrier with a minimum of 38" thickness) is required to separate artificial turf from soil and live vegetation and to prevent intrusion of living plant material.

- (8) Artificial turf shall not be installed directly against the trunk of trees and/or palms. A 3-foot mulch bed measured from the base of the tree or palm must be maintained around all tress and or palms. Precautions for installation around existing trees shall be monitored and may be restricted to ensure tree roots are not damaged with the installation of the base material and that the overall health of the tree will not be compromised.
 - (9) All artificial turf shall be maintained in a green fadeless condition and shall be maintained free of dirt, mud, stains, weeds, debris, tears, holes, and impressions. Maintenance shall include, but not be limited to cleaning, brushing, debris removal; repairing of depressions and ruts to maintain a visually-level surface; elimination of any odors, flat or matted areas, weeds, and invasive roots; and all edges of the artificial turf shall not be loose and must be maintained with appropriate edging or stakes.
- (10) There shall be no parking on artificial turf.

- (11) Artificial turf shall not be visible from public rights-of-way except where it is installed between parking strips or approved as part of a planned development.
- (12) All other landscape requirements must be meet.
- (13) Applicants shall provide an owner affidavit agreeing to perpetually maintain the artificial turf system in good working order to ensure that there is continued permeability. If the artificial turf falls into disrepair with fading or holes or loose areas. The replacement and/or repairs shall be done with like for like materials from the same manufacturer and done so in a manner that results in a repair that blends in with the existing artificial turf.
- f. A landscape permit shall be obtained from the City prior to the installation of any artificial turf. The permit application shall include the following material specifications and plans.
 - (1) A landscape plan showing the area of synthetic turf, area of living plant material, and separation between these areas;
 - (2) A dimensioned cross section of proposed materials and installation details, including subgrade, drainage, base or leveling layer, and infill;
 - (3) Edge material and detail for seams;
 - (4) Material description and specifications, including manufacturer,
 - (5) Installer (with contact information), and warranty information.
 - (6) A sample of the artificial turf proposed that meets these standards.
 - (7) Product specifications that demonstrate compliance the requirements for artificial turf in this article and the ability to be warrantied in the United States of America.
 - (8) The plan shall demonstrate conformance with the City's landscape requirements.
- g. A Certificate of Appropriateness shall be obtained from the HRPB prior to the installation of any artificial turf in a historic district.

127	<u>h.</u>	Inspections.	An in	-progress	inspe	ction	shall be r	equire	ed to	ensure	that	the
128		appropriate	base	material	has	been	installed	in	acco	rdance	to	the
129		manufacture	s' spec	cifications.	A fina	al inspe	ection sha	all als	o be r	equired	<u>-</u>	

- <u>Exhibit G</u>: Article 6 Section 23.6-1 Landscape Regulations (Artificial Turf)
 - The proposed amendments would allow for artificial turf within the City subject to the requirements related to location, quality and installation.



Pros/Cons Artificial Turf:

Pros	Cons
Maintains Color and Appearance Year Round	Can be damaged and torn or worn down with heavy foot traffic over time
Not Damage by Pests	50 to 100 degrees hotter than ambient air temperature
May be lower maintenance than traditional sod applications. No fertilizer or pest control treatments.	Regular washing and raking of the product is necessary to mitigate the accumulation dirt and odor from leaves, pet hair and animal waste
New less toxic products are on the market and alternate fill is available to crumb rubber.	Some products can leach into soils and there are concerns about water run-off from crumb rubber infill which might be harmful to families, pets, or the environment.
Some products are made from recycled materials	Artificial turf is not recyclable
Semi-pervious surface when correctly installed	Is not a fully pervious surface as soil or landscaping. Incorrectly installed material may pool water.

- Exhibit G: Article 6 Section 23.6-1 Landscape Regulations (Artificial Turf)
- Where should it be allowed?
- How should it be maintained and permitted?
- What quality of material should be required?







• Exhibit G: Article 6 - Section 23.6-1 – Landscape Regulations (Artificial Turf)

Where

- > Single family and duplex properties in the rear yard only and not visible from the right of way.
- Between parking strips in the front yard of non-conforming properties previously constructed with off-street parking utilizing sixty percent (60%) or more of the width of the front yard. This application of artificial turf shall be approved by the Development Review Official or applicable review board, which shall review the proposed application for consistency with the City's land development regulations, visual appropriateness, enhanced site design and appearance, and improved drainage. Properties located in historic districts will require a Certificate of Appropriateness from the HRPB.
- On roof top terraces.
- As part of a planned development in a recreation or amenity area.
- Artificial turf shall **not** be installed:
 - (1) as part of any landscape buffer or landscape area required by this article;
 - (2) within permanent drainage features (e.g., ponds, swales); or
 - (3) in any public right of way.

• Exhibit G: Article 6 - Section 23.6-1 – Landscape Regulations (Artificial Turf)

➢ How

- Landscape permit is required with 2 inspections
- Affidavit of maintenance is required
- Barrier is required between the artificial turf and landscaping
- Subsurface material specifications, crumb rubber is not permitted

What

- Minimum quality standards
 - Test documentation which declares that the artificial turf yarn and backing materials are disposable under normal conditions, at any U.S. landfill station (Total Content Leach Protocol (TCLP) test).
- Appearance standards
 - Artificial turf shall consist of green lifelike individual blades of grass that emulate natural turf in look and color and shall have a minimum pile height of one- and one-half inches and shall have a minimum tufted weight of 80 ounces per square yard.
- > 10 Year Warranty
- Drainage standards

• Exhibit G: Article 6 - Section 23.6-1 — Landscape Regulations (Artificial Turf)

➤ Board Discussion