

City of Garden Grove

INTER-DEPARTMENT MEMORANDUM

To:	Matthew Fertal	From:	Susan Emery
Dept:	City Manager	Dept:	Community Development
Subject:	ARTIFICIAL TURF IN THE SINGLE-FAMILY RESIDENTIAL ZONE	Date:	October 28, 2008

OBJECTIVE

To review the information provided by artificial turf company representative, Joe Ayoub of Tiger Express, and landscape contractor Gary Hart of Hartscape.

BACKGROUND

At the City Council meeting on September 9, 2008, Council raised issues as a result of public input and concerns regarding the installation of artificial turf in the Single Family Residential (R-1) zone. City staff met with the individuals noted above to discuss the questions raised by Council, and the following information provides an overview of the input received.

DISCUSSION

Lead Content: A claim cannot be made that all artificial turf products will be 100% free of any lead content in any of the products manufactured due to the various types of material that go into making of artificial turf, such as using nylon-based material in the product. However, their recommendation would be to require that it "must meet California standards" for lead content. The lead comes in the way of the use of nylon in any of the products manufactured.

Smell or Odor: Some artificial turf emit a rubber tire smell as a result of the small rubber particles used as filler, which is needed in order to help the blades of grass maintain the appearance of being natural with the blades in an upright position. The recommendation is that the fill material be a non-tire rubber product such as silicon sand or a like material. If a rubber-based filler is used, the artificial turf will experience a higher heat gain, thereby causing an intensity of tire smell.

Also of note is that rubber can absorb urine, causing the smell and odor to last longer. With regard to cat and dog urine, in order to address the odor issue from the urine from cats and dogs, the industry has sprays that treat bacteria, urine, smell, and fungus associated with urine issues. For convenience to the homeowner, another way to treat the urine issue is to occasionally use a mixture of water and white vinegar and hose down the lawn area with this mixture.

Fungus Growth: The underneath or backing material typically used for the artificial turf is a polyurethane-based material. Polyurethane-based material does not create an environment for which the growth of mold or fungus can grow on the backing. Therefore, there is no issue with mold or fungus.

Artificial Turf Color: Color types can be specified for the desired artificial lawn color. The recommendation is that the code should indicate a natural grass green appearance. Further recommendation in the specification of the color is that the color be of a natural color of grass and to maintain that traditional green color, a blend of mostly green blades with some yellow blades in the mix, which is believed to give a more natural appearance.

Installation of Artificial Turf: Concern over the installation without an inspector could leave a homeowner without recourse. As with any product, improper installation could lead to invalidation of the manufacturer's warranty. Although indicated that the typical warranty period was eight to ten years, the product is expected to last much longer, upwards of 15 to 20 years with minimal fading. The industry representative also noted that they would anticipate at the current rate of residential purchases, the likely number of persons buying this product over the next several years would probably not exceed one percent of the number of homes in the City.

Inspector: With the representative's view on the number of installations likely to occur over several years across the City, in their opinion, allowing artificial turf would not warrant hiring an inspector. However, the recommendation is that any ordinance generated for the installation of artificial turf must specify that all installations shall be per the manufacturer's specifications so as not to void the manufacturer's warranty. In addition, the representative suggested adding specifications, such as staking down the material to keep it from buckling, folding, or coming loose and lifting up as a result of persons walking or playing on it. Also, the specifications should exclude rubber-based filler, and instead, use a silicon sand or similar product filler in order to avoid odors.

Drainage: The backing material used to create the artificial turf is porous and thereby can handle up to seven inches of rain per hour. The material is typically laid over a two-inch sub-base that is an aggregate mix of sand and dirt to a certain level of compaction. Also, the stapling (nailing) down of the artificial turf would be recommended at six inches on center around the edges and various nailing scattered throughout the field area. The surface area can be designed for large areas to have surface drains included or graded with swales to channel water runoff to desired locations.

Recycling: Most products are warranted between eight to ten years, however, there have been applications (artificial turf) that have been out there longer. Coupled with more recent developments in artificial turf manufacturing, the quality, durability, appearance, and types of application are far better today than compared to artificial turf of years past. With improvement in the product, recycling concerns

are not anticipated; however, methods are being worked on in order to reuse the material should the turf be removed from someone's property.

Additional Application: The representatives suggested bordering the turf in the front yard with live plants and shrubs (and trees) to give the turf, coupled with the overall front yard, a more natural look and create better aesthetics along the residential street frontage. In using a real estate selling term, "it would give it better curb appeal." However, with backyard installation, artificial turf did not seem to matter because backyards are typically not visible to the general public.

FINANCIAL IMPACT

Not applicable.

COMMUNITY VISION IMPLEMENTATION

It is desirable to continue to promote ways to maintain the highest levels of improvement, maintenance, and appearance of residential properties. The application of artificial turf in residential areas could help to achieve this desired goal.

RECOMMENDATION

Should City Council elect to proceed with a Code Amendment to allow artificial turf in the R-1 Single-Family Residential Zone, the following items are recommended to be included in the Ordinance:

- Regulation of Lead content;
- Means to minimize smell and odor;
- Require natural grass color;
- Allowed types of artificial turf;
- Have installation measures and specifications; and
- To require front yard applications have natural plant borders.

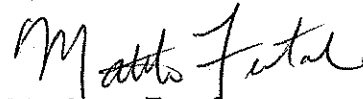


SUSAN EMERY
Community Development Director



By: Karl Hill
Planning Services Manager

Approved for Agenda Listing



Matthew Fertal
City Manager