

Athletic Field Options Community Input Meeting 10.02.2024



# AGENDA

- Introductions
- $\circ$  Field Use
- $\circ$  Considerations
- Field Options
- Discussion





# Parametrix





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INTRODUCTIONS

# FIELD USE

- MS & HS PE Programs 5 days a week, all day
- HS Athletics Soccer, Football, Track & Field, Cross-Country
- MS Athletics Soccer, Football, Track & Field, Cross-Country
- Community Events with Parks & Rec Dept.
- Emergency Helicopter Landing



# CONSIDERATIONS

• Maintenance Required

Mowing – every 2-3 days in Fall + Spring Fertilizer required for playability Watering (irrigation maintenance) Hole filling Redo the Striping of Fields Tracking dirt/grass clippings into the building Limited use in Spring while waiting for field to be repaired in Summer

- Environmental Impact
- Health & Safety of Players
- Alternative Locations for Play/Practice required when field not usable



# **FIELD OPTIONS**

- 3 Types of Athletic Fields
- Components of Natural Grass fields
- Components of Synthetic Turf fields
- Health and safety
- Benefits and Challenges
- Resource considerations
- Environmental impacts



## **Field Types**

#### 1. Sand Based Natural Grass

- Requires subdrainage / detention
- Requires irrigation system
- High nutrient needs /requirements
- High water use requirements
- High maintenance requirements
- Some playability in wet weather

#### 2. Topsoil Based Natural Grass

- Less playable in wet weather
- Lower cost

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## **Field Types**

## 3. Synthetic Turf

- High initial resource requirements
- Requires subdrainage and detention (possibly additional stormwater treatment)
- Increased use and playability
- Long term replacement costs
- Environmental concerns



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#### **Natural Grass Fields**

- 1. Compacted Subgrade and Drainage
- 2. Irrigation System
- 3. Well-Drained Sand
- 4. Athletic Field Seed
- 5. Fertilizer and Continual Maintenance



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#### **Synthetic Turf Fields**

- 1. Base Layer and Drainage
- 2. Pad/ Impact Layer
- 3. Turf and Fibers
- 4. Infill Materials





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#### 1. Base Layer, Drainage, Detention, and Treatment

- Clearing and haul off and grading
- Detention system
- Subdrainage
- Geotextile fabric for poorer soils
- Permeable crushed rock base course and top course







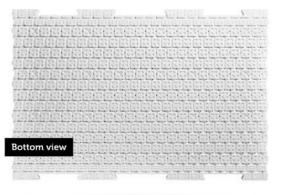


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## 2. Pad / Impact Attenuation Layer

- E-layer
- Brock type foam pad
- ProPlay foam pad
- Rubber pads
- Other

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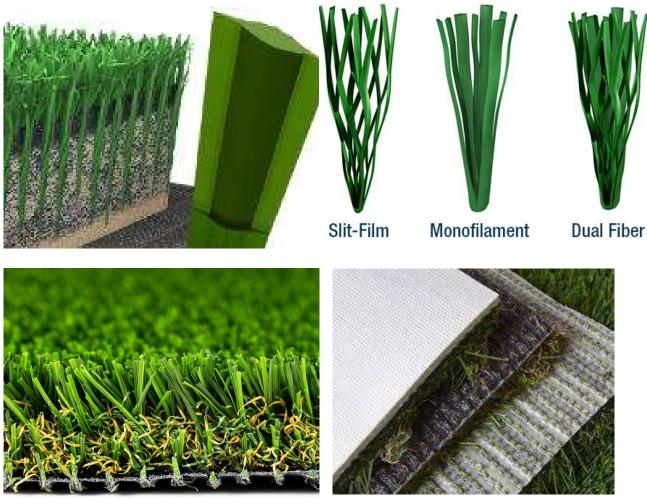






## 3. Turf and Fiber Types

- Monofilament / Blade
- Slit Film
- Dual Fiber
- Thatch Layer / Root Zones
- Backing and Drainage



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## 4. Infill Options

- SBR Tire Rubber
- Plastics, TPE / EPDM
- Cork
- Nut / Organics
- Wood Fibers
- Sand
- Coated Rubber
- Other

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### **Current Topics**

- Environmental issues
- Life cycle costs
- Drainage / treatment
- Lead
- PFAS
- 6 ppd (salmon)
- Microplastics
- Injury
- Concussions
- Other





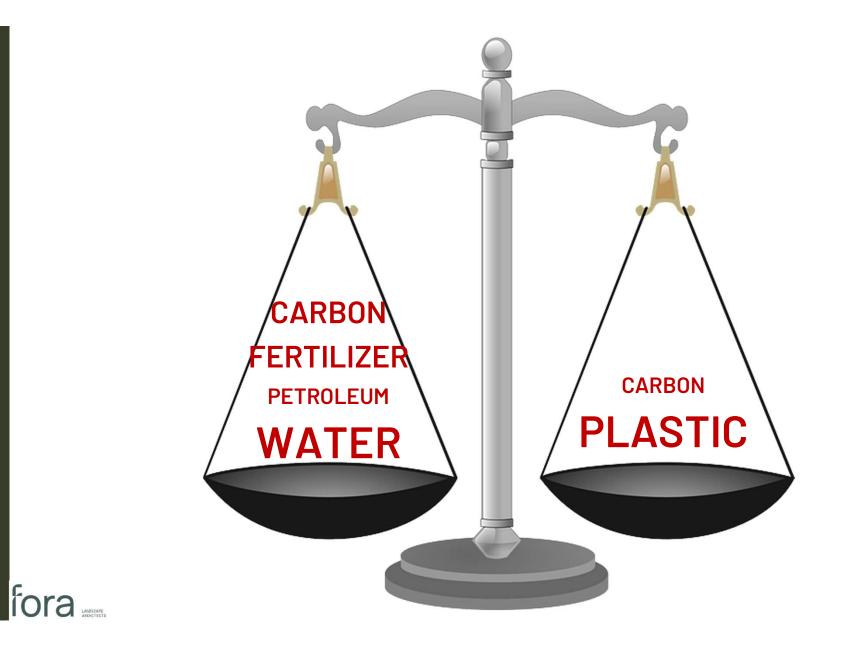






|                         | SAND-BASED NATURAL GRASS | SYNTHETIC TURF |
|-------------------------|--------------------------|----------------|
| Subdrainage / Detention | Yes                      | Yes            |
| Upfront Cost            | Medium                   | High           |
| Maintenance Cost        | High                     | Low            |
| Replacement Cost        | Low                      | High           |
| Irrigation System       | Yes                      | No             |
| Nutrient Needs          | High                     | Low            |
| Continual Maintenance   | High                     | Low            |
| Water Use               | High                     | Low            |
| Playability / Use       | Medium                   | High           |
| Environmental Impacts   | High                     | High           |

BENEFITS AND CHALLENGES



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ENVIRONMENTAL IMPACTS

#### Life Cycle of Synthetic Turf

- Averages 10-15 years
- After that?
  - 1. <u>Landfill</u>: It is thrown out.
  - 2. <u>Waste to Energy</u>: It is incinerated to produce electricity or steam.
  - 3. <u>Repurpose:</u> It is reused somewhere else, like a batting cage.
  - <u>Recycle</u>: It becomes a new raw material ready to be made into limitless number of things. This takes specialized equipment, and there are few facilities. However, it is likely this will be feasible in PNW in next 10 years.





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## **Resource Considerations**







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RESOURCE CONSIDERATIONS

#### Life Cycle Costs



Minimal maintenance



RESOURCE CONSIDERATIONS

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# Discussion



Please share any items that you would like to discuss further.

# SURVEY

# Which type of field did you think was the right choice before the meeting?

#### Which type of field do you think is the right choice

now?



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# **THANK YOU!**

