



Zoning Committee Review

Rural Use ZOAM 2017-0004

Indoor/Outdoor Sportsplex

Location/Size Comparisons

October, 2017

Revised August, 2018

Primary purposes of sharing/reviewing this information are:

- to ensure ZOAG members have a clear and common view of the uses being proposed;
- to determine applicability of the use for the underlying area; and
- to confirm any recommended performance standards adequately address any associated impacts for:
 - Recreation Establishment, Indoor

Issues for Discussion: ZOAG Rural Subcommittee

- Recreation Establishment, INDOOR
 - to be added as new “special exception use” in AR-1, AR-2, CR-1, JLMA-3, JLMA-20 and TR-10

- Recreation Establishment, OUTDOOR
 - New regulations to be applied to AR-1, AR-2, A3, CR-1, RC, JLMA-3, JLMA-20 and TR-10

 - Compliance with **Road/Access Standards Section 5-654**
 - Would necessitate **Special Exception Review** (6-1300) for any facility with more than 1 field/court sponsoring multiple games/day (see examples).
 - Reconsider issues if approved for UNPAVED roads

- **Overall consistency with Zoning Ordinance Section 1-100: Goals, Purpose, Intent?**

- **Consistency with Comprehensive Plan -- Rural Agriculture and Rural Economy Sustainable Community?**

ZONING ORDINANCE Review

Section 1-100: GOALS, PURPOSE, INTENT

Section 1-102: Promote the health, safety and welfare of the residents of Loudoun County:

- A. Guide/regulate orderly growth
- B. Protect character and social/economic well being of private and public property
- C. Promote best utilization of land
- D. Provide light, air and safety from fire, flood and other dangers
- E. Reduce/prevent congestion in public streets
- H. Protect against destruction/encroachment upon historic areas
- J. Encourage economic development with desirable employment
- L. Provide for preservation of agricultural and forestal land for protection of natural environment



Indoor/Outdoor Recreation Facility – Need & Intensity

Adopted Capital Needs Assessment FY2021-2030

CNA FY2021-2030:

Parks/fields deficits are

- 70% in Eastern sub-areas
- 21% in Leesburg and
- 9% in West sub-areas.

SUMMARY

- Adding indoor/outdoor rec in West would not alleviate deficits in East;
- Would induce traffic from east to west (not west to east as claimed by industry).

Park type	Regional	District	Community	Neighborhood	Rec Center	TOTAL	
Fields:	19	7	4	3			
EAST							
Parks	1	2	6	14	0	23	63.9%
Fields	19	14	24	42	0	99	69.7%
Acres	200	398	444	406	0	1448	70.9%
Leesburg							
Parks	0	1	2	5	0	8	22.2%
Fields	0	7	8	15	0	30	21.1%
Acres	0	199	148	145	0	492	24.1%
WEST							
Parks	0	0	1	3	1	5	13.9%
Fields	0	0	4	9	0	13	9.2%
Acres	0	0	0	87	15	102	5.0%
TOTALS							
Parks	1	3	9	22	1	36	
Fields	19	21	36	66	0	142	
Acres	200	597	592	638	15	2042	

Evergreen SportsPlex

– Owner provided information

The table below provides average estimates for a variety of outdoor and indoor youth sporting events. The outdoor sports are those that are typically hosted at the Evergreen Sportsplex and include soccer, field hockey, lacrosse, and football. The indoor sports are those most frequently hosted at facilities that our management team operates in Fairfax County.

The average attendance is calculated using the same methodology for each sport. Specifically, it takes the average team size plus the average number of coaches per team and multiplies that total by two to account for the two teams playing in each game. The number of referees that each sport typically uses, and the number of anticipated spectators is then added. The spectator calculation is based on an estimated ratio of spectators to players. For youth sports, that number typically averages somewhere between 1-to-1 and 1.5-to-1.

Based on the assumptions used to populate the table below the average attendees for these games, including participants, ranges from 62 for indoor basketball per court to 134 for youth football per field. If games are scheduled back-to-back, which is typical, there will be overlap between attendees who are there for the game that is currently being played along with those who have arrived early for the next game. You would therefore double the numbers in the table below to get the maximum attendance number for any point during the day.

For example, if you had one field and it was to host five field hockey games back to back, you could expect total attendees throughout the day of approximately 415 (83 per game x 5 games), but you could expect that the most you would have at any one time would be 166 (83 per game x 2 games)

Youth Sporting Events	Soccer	Field Hockey	Lacrosse	Tackle Football	Basketball (indoor)	Volleyball (indoor)
Players per team	15	16	20	22	10	12
Coaches per team	2	2	2	4	2	2
Number of teams per Game	2	2	2	2	2	2
Total Players and Coaches per Game	34	36	44	52	24	28
Number of Referees	3	2	2	4	2	3
Spectator Ratio to Players	1-to-1	1.25-to-1	1.25-to-1	1.5-to-1	1.5-to-1	1.5-to-1
Total Spectators	34	45	55	78	36	42
Total Attendees Per Game	71	83	101	134	62	73

Notes:

1. Referees will often officiate multiple games back-to-back which would reduce the attendee estimates slightly as unique referees are assumed for each game in the above model
2. In many tournaments, teams will be scheduled for 2 or 3 games in one day (except tackle football). In some cases, the teams will stay at the fields/courts between their games. This will

increase the maximum number of people at the facility at any one time but will reduce the total attendees and trips during the day.



Source: Visit Loudoun website:

Our nearly **44 acre facility** features 4 fully lit over-sized FIFA certified, bio-turf fields capable for the use of a variety of sports. Our facility is like no other.

We will have **over 500 parking spaces** to be available once all phases of the complex are complete. Employing the latest synthetic turf playing surface insures that Evergreen Sports Complex's fields are just that—ever green. Utilizing the highest levels of irrigation planning allows our fields to be quick draining which means fewer rain outs and no sloppy fields. Plus, our **artificial surfaces** provide a soft landing when players fall, helping reduce the chance of injury. These fields have more inter-woven fiber and less fill, a superior product that performs more like natural grass.

Events: We host sporting organizations and clubs, private events, community and networking events as well as birthday parties, team building meetings and events as well as nonprofit fundraising events.

Owner-provided information

Volume of vehicles for 1 field/court for various sports*

Youth Sporting Events	Soccer	Field Hockey	Lacrosse	Tackle Football	Basketball (indoor)	Volleyball (indoor)
Players/team	15	16	20	22	10	12
Coaches/team	2	2	2	4	2	2
# teams/game	2	2	2	2	2	2
Total Players & Coaches/game	34	36	44	52	24	28
# Referees	3	2	2	4	2	3
Spectators Ratio to Players	1	1.25	1.25	1.5	1.5	1.5
Total Spectators	34	45	55	78	36	42
Total Attendees/Game	71	83	101	134	62	73
Avg duration of game (with break)	1	1.5	1.25	2	1.25	1
Quantity of Games/ field/ 8 hr day	5	5	5	3	5	5
Attendees/field/day	355	415	505	402	310	365
Quantity of fields/courts @ location	1	1	1	1	1	1
Total attendees/ day/location	355	415	505	402	310	365
Qty spectators cars (Player+spectators)	2.0	2.25	2.25	2.50	2.50	2.50
Est qty cars	177.5	184	224	161	124	146
Max Vehicle trips (in/out)**	355	369	449	322	248	292
Road Access Standards 5-654		Max VPD*				
Public Paved Road Standards		More than 600 VTD Special Exception Review required (Section 6-1300)				
<small>*VPD is calculated based on estimated two trips (in, out) per individual vehicle</small>						
<small>** Max vehicles could be less with multi-game tournaments (spectators staying for more than one game)</small>						

*Source:
Evergreen Sports
Attendee Estimates

Owner-provided information

Volume of vehicles for 4-6 fields/courts per sport*

Qty of fields for all sports require SPEX review for Road Access Standards

Youth Sporting Events	Soccer	Field Hockey	Lacrosse	Tackle Football	Basketball (indoor)	Volleyball (indoor)
Players/team	15	16	20	22	10	12
Coaches/team	2	2	2	4	2	2
# teams/game	2	2	2	2	2	2
Total Players & Coaches/game	34	36	44	52	24	28
# Referees	3	2	2	4	2	3
Spectators Ratio to Players	1	1.25	1.25	1.5	1.5	1.5
Total Spectators	34	45	55	78	36	42
Total Attendees/Game	71	83	101	134	62	73
Avg duration of game (with break)	1	1.5	1.25	2	1.25	1
Quantity of Games/ field/ 8 hr day	5	5	5	3	5	5
Attendees/field/day	355	415	505	402	310	365
Quantity of fields/courts @ location	4	4	4	4	4	6
Total attendees/ day/location	1420	1660	2020	1608	1240	2190
Qty spectators cars (Player+spectators)	2.0	2.25	2.25	2.5	2.5	2.5
Estimated quantity of cars	710	738	898	643	496	876
Max Vehicle trips/day (in/out)**	1420	1476	1796	1286	992	1752

*Source: Evergreen Sports Attendee Estimates

Road Access Standards 5-654	Max VPD*	
Public Paved Road Standards	More than 600 VTD	Special Exception Review required (Section 6-1300)
*VPD is calculated based on estimated two trips (in, out) per individual vehicle		
** Max vehicles could be less with multi-game tournaments (spectators staying for more than one game)		

Road Access Requirements & Safety

Section 5-654

TABLE 5-654: ROAD ACCESS STANDARDS

Maximum Vehicles Per Day (VPD) ⁽¹⁾	Onsite Private Road Construction Standards	Public Road Access	
		Public Paved Road Standards ⁽²⁾	Public Unpaved Road Standards ⁽²⁾
1 - 20 VTD	FSM Chapter 4, Table 3, Type C1 Roadway	Permitted	Permitted
21 - 70 VTD	FSM Chapter 4, Table 3, Type C2 Roadway	Permitted	Permitted
71 - 250 VTD	FSM Chapter 4, Table 3, Type C3 Roadway	Permitted	Permitted
251 - 600 VTD	FSM Chapter 4, Table 1, Type A1 Roadway	Permitted	Special Exception Review required (Section 6-1300)
More than 600 VTD	FSM Chapter 4, Table 1, Type A1 Roadway	Special Exception Review required (Section 6-1300)	Special Exception Review required (Section 6-1300)

* VPD is calculated based on an estimated two trips (one in, one out) per individual vehicle.

** Annual Avg Daily Traffic (AADT) is the total annual traffic estimate divided by the number of days in the year.

(Source data: http://www.virginiadot.org/info/resources/Traffic_2013/AADT_053_Loudoun_2013.pdf)



A SUSTAINABLE RURAL COMMUNITY



in **requires**

BALANCE

between:

Environment & Heritage

- Heritage & Archaeology
- Parks, Greenways & Trails
- Plant & Wildlife Habitats
- Forests, Trees & Vegetation
- Surface & Groundwater
- Open space easements
- Air, Dark Skies & Noise
- Farm & Historic assets
- Mountainsides
- Rivers & Streams
- Agricultural Soils

Social Interests

- Residents (Rural & Suburban, new & long term)
- Land Stewards / Property Owners
- Towns and Villages
- Patrons & Visitors

Rural Economy

- Traditional farming & farm leasing
- Equine/Animal Husbandry
- Wineries/Breweries/Craft Beverages
- Direct PYO Fruits/Veges
- Horticulture/Ornamentals
- Arts/Recreation/Tourism
- B&B's/Rural Lodging
- Commercial Restaurants & Event Centers
- Professional/Home Businesses & Services
- Education/Public & Institutional Uses



Walsh-Copeland Consulting, LLC

Copyright ©, 2017 Inspired by: Johann Dréo,
File:Developpement durable.svg. GFDL Ver. 1.2



Walsh-Copeland Consulting, LLC

For ZOAG Discussion



Facility / Location Overlays

For EXAMPLE locations and DISCUSSION only for impacts to Rural Policy Area farmland and residential.

**EXAMPLE
LOCATION 1**

Rte. 9 (Paved)
Farmland

@ Zoom 16



EXAMPLE OVERLAY LOCATION 1

Rte. 9 (Paved)

(252 acres)
(~150 acres)
@ Zoom 16

Example land size
ONLY

Evergreen Sportsplex,
Dulles Michael & Sons,
NVVA & Fairfax
Sportsplex overlays

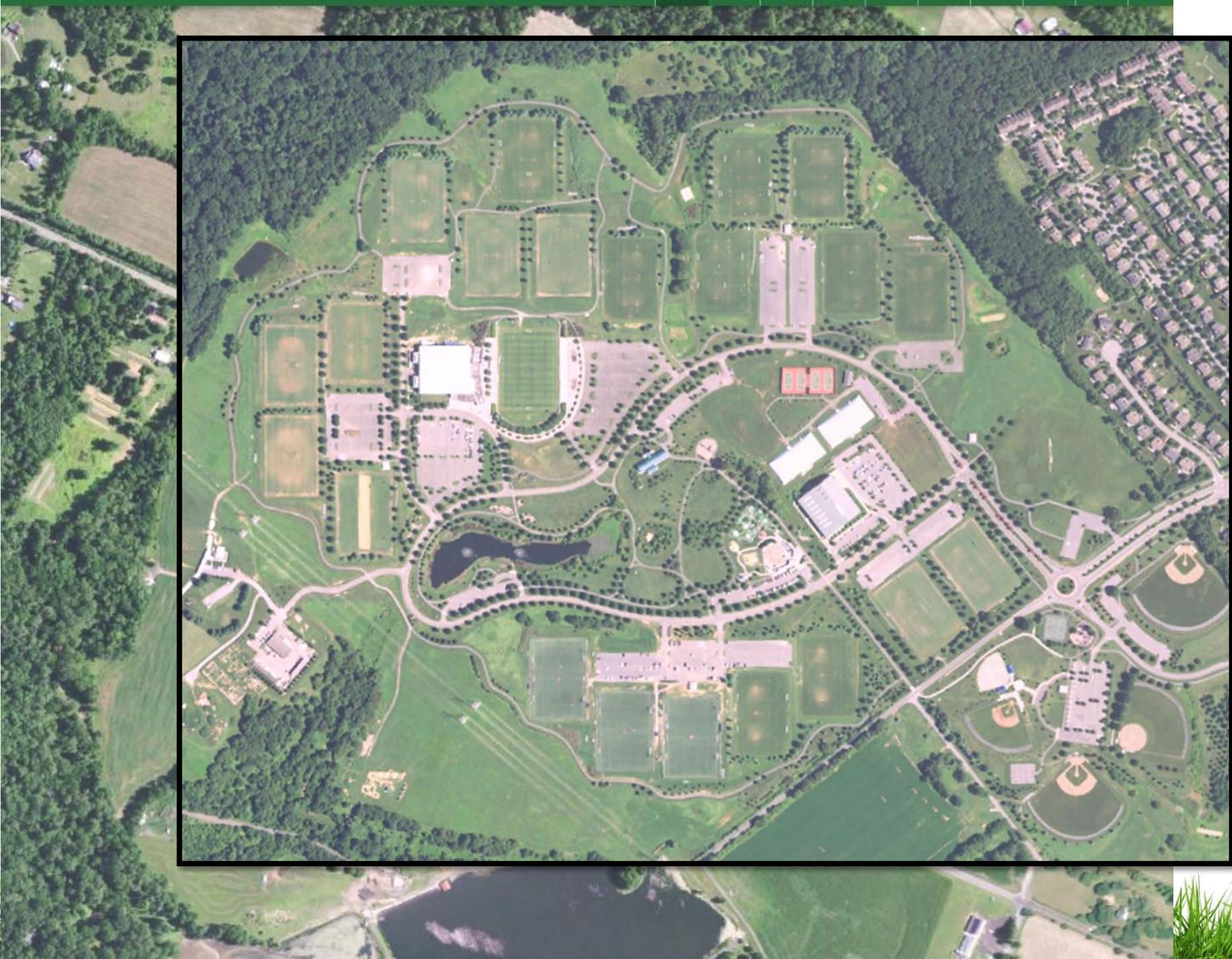


EXAMPLE OVERLAY LOCATION 1

Rte. 9 (Paved)

@ Zoom 16

Example
Discover Sportsplex
overlay



EXAMPLE OVERLAY LOCATION 2

West of Hillsboro
Farmland

Example --
Evergreen Sportsplex
overlay

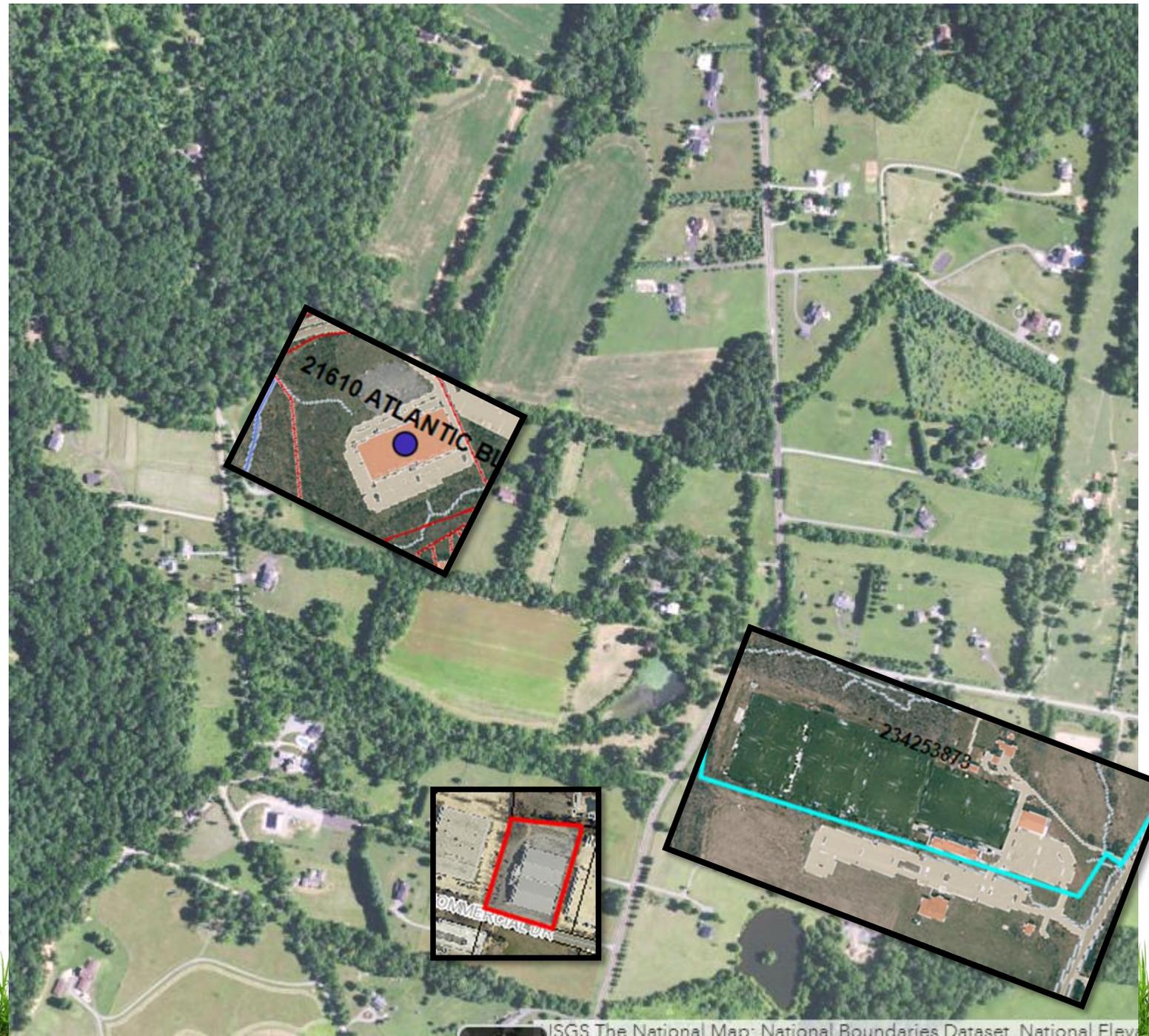


EXAMPLE OVERLAY LOCATION 3

Short Hill @ Zoom 16
Farmland, Residential

Example land size ONLY

Evergreen Sportsplex,
Dulles Michael & Sons, &
Fairfax Sportsplex overlays



EXAMPLE OVERLAY LOCATION 3

Short Hill @ Zoom 16
Farmland, Residential

Example land size ONLY

Evergreen Sportsplex,
Dulles Michael & Sons, &
Fairfax Sportsplex overlays



EXAMPLE OVERLAY LOCATION 3

Short Hill @ Zoom 16
Farmland, Residential

Example land size ONLY

Evergreen Sportsplex on 20
acre parcel



**EXAMPLE
OVERLAY
LOCATION 4**

Purcellville North
@ Zoom 15



EXAMPLE OVERLAY LOCATION 5

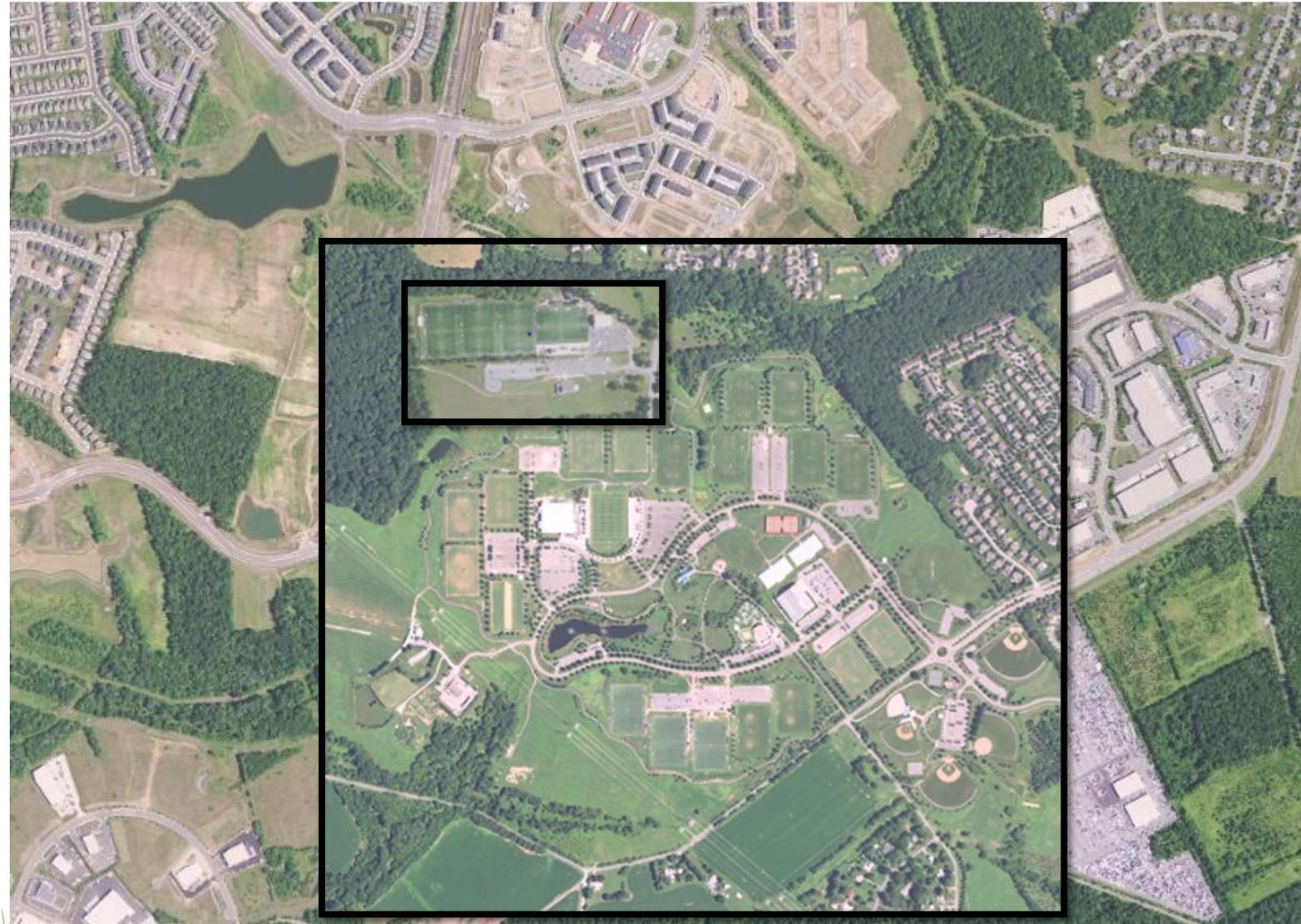
Loudoun County
Parkway,
West of Dulles Airport
@ Zoom 15



Dulles
Airport

EXAMPLE OVERLAY LOCATION 5

Loudoun County
Parkway,
West of Dulles Airport
@ Zoom 15



Dulles
Airport



Indoor/Outdoor Recreation Facilities Example

Evergreen Sportsplex

19623 Evergreen Mill Road

Leesburg, VA

On 37 ac
1:4800



1:7200, 600' Evergreen
Sports plex
On 37 ac, Zoom 16

Evergreen Sports
plex
On 37 ac, Zoom 15



PARID: 234253873000
EVG LAND LLC,

Commercial Buildings

Improvement Name	
Property Address	
Location 2	
City, State, Zip	
Land Use Code	Farm 20-99.99 AC
Structure Code	
Card #	2
Building #	1
Year Built	2014
Gross Floor Area	8,103
Units (if applicable)	
Identical Units	
CDU	Average
Interior Walls	
Air Conditioning	
Foundation Area	
Year Remodeled	
Year Addition	
Roof Type	
Roof Material	
Covered Parking	
Uncovered Parking	

PARID: 234253873000
EVG LAND LLC,

Detached Accessory Structures

Card

Card	Line	Structure Type	Size	Yr Bld.
1	1	WELL		1921
1	2	SEPTIC		1921
1	4	DET GAR FRAME-W/FIN ATTIC	896	2007
1	5	ATHLETIC FIELD-ARTIFICIAL	316,300	2014
1	6	ATHLETIC FIELD-ARTIFICIAL	97,400	2014
1	7	ASPHALT PAVING	40,600	2014
1	8	MISC OTHER	4,386	2014
1	9	MISC OTHER	17,512	2015

Commercial Sections

Card	2
Section ID #	1
Section Type	Storage Warehouse
Units	
Bldg Class	S
Year Built	2014
Floor	From 1 to 1
Total SF	8,103
Stories	1
Wall Height	25
Ecn Depr % Good	-
% Complete	

MAP #: 0802 07 R1

SPRINGFIELD TENNIS

6800 COMMERCIAL DR

Structure

Property Name	INDOOR SOCCER
Land Use Code	Industrial conglomeration
Year Built	1972
Gross Floor Area	49,541
Units (if applicable)	
Stories	1
Construction Type	Steel Frame/Cinder Block
Exterior Walls	Metal
Floor	Concrete
Roof	Metal
Elevator	0
Element #	E02698001
Note	THIS COMMERCIAL PROPERTY MAY BE COMPRISED OF MORE THAN ONE TAX MAP PARCEL. IF SO, THE ADDITIONAL TAX MAP PARCEL(S) WILL BE LISTED BELOW.

Associated Parcels

Structure Summary

Property Name	Land Use Code	Year Built	GFA	Units
INDOOR SOCCER	Industrial conglomeration	1972	49,541	

Fairfax Sportsplex

6800 Commercial Dr.,
Springfield, VA 22151

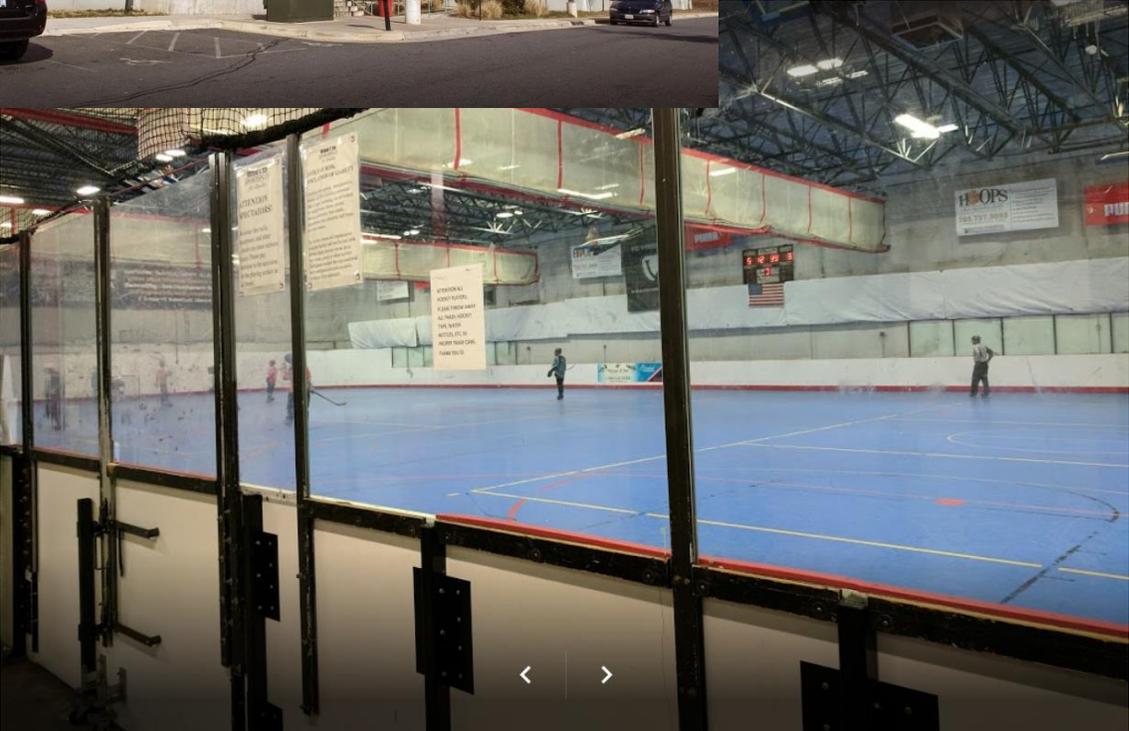
1:7200, 1-600', Zoom 16



Fairfax
Sportsplex zoom
15



Michael & Son's – Sterling



Dulles Michael & Son Sportsplex

21610 Atlantic Blvd

Sterling, VA



1:7200, 600'
Dulles Sports plex
(on 13 ac)

1:4800
Dulles Sports
plex
(on 13 ac)



For ZUAG Discussion



21610 Atlantic,
Zoom 15



21610 Atlantic,
Zoom 16

PARID: 031460125000
STEEPLECHASE SPORTSPLEX LLC,

Commercial Buildings

Improvement Name	
Property Address	21610 ATLANTIC BLVD
Location 2	
City, State, Zip	STERLING, VA, 20166
Land Use Code	Commercial/Indust
Structure Code	
Card #	1
Building #	
Year Built	2004
Gross Floor Area	79,258
Units (if applicable)	
Identical Units	
CDU	Average
Interior Walls	
Air Conditioning	
Foundation Area	CONCRETE
Year Remodeled	
Year Addition	
Roof Type	Flat/Shed
Roof Material	Built Up
Covered Parking	
Uncovered Parking	

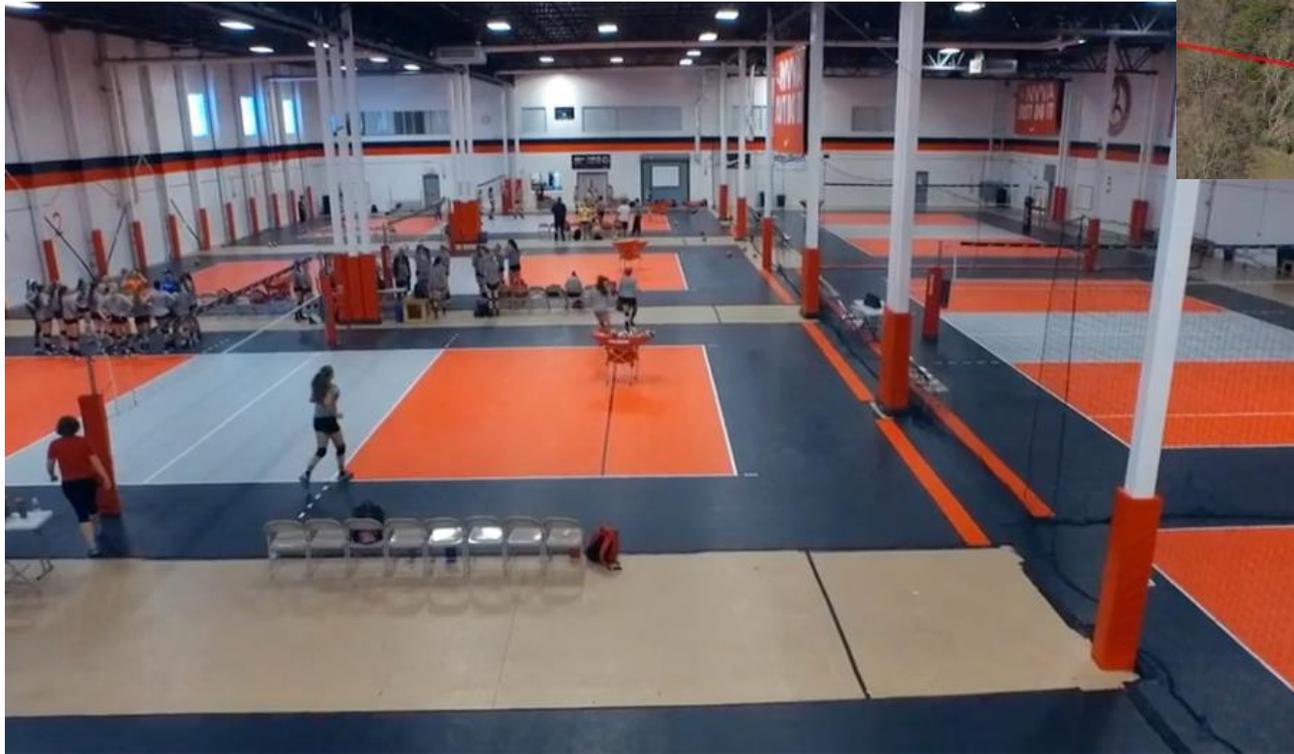
Commercial Sections

Card	1
Section ID #	1
Section Type	Industrial Flex Building
Units	
Bldg Class	C
Year Built	
Floor	From 01 to 01
Total SF	60,752
Stories	1
Wall Height	32
Ecn Depr % Good	-
% Complete	

Dulles Michael & Son
Sportsplex
21610 Atlantic Blvd
Sterling, VA



Virginia Volleyball Center -- Sterling



VIRGINIA VOLLEYBALL CENTER

The Virginia Volleyball Center (VVC) is the home of NVVA. This 55,000 square foot volleyball facility is equipped with all the tools to develop athletes and host the best volleyball tournaments and events.



- 6 full size indoor volleyball courts
- LCD TVs on each court
- 1 indoor beach volleyball court
- Fully stocked weight room
- Comfortable lobby area
- Convention room for up to 50 people

ZavaZone, an adventure park that combines indoor climbing, trampolines and obstacle courses a la “American Ninja Warrior,” plans to open a 34,000-square-foot location in Sterling on Oct. 28 with a grand opening planned for Nov. 4. The facility is larger than the Rockville original, and will include two rope walls and an obstacle made popular by the aforementioned show

NVVA & ZavaZone

45685 Oakbrook Ct
Sterling, VA
@ Zoom 16



PARID: 031181787000
22195 SHAW LLC,

Commercial Buildings

Improvement Name	
Property Address	45685 OAKBROOK CT
Location 2	
City, State, Zip	STERLING, VA, 20166
Land Use Code	Commercial/Indust
Structure Code	
Card #	1
Building #	
Year Built	2000
Gross Floor Area	82,526
Units (if applicable)	
Identical Units	
CDU	Average
Interior Walls	
Air Conditioning	
Foundation Area	CONCRETE
Year Remodeled	
Year Addition	
Roof Type	Flat/Shed
Roof Material	Built Up
Covered Parking	
Uncovered Parking	

Commercial Sections

Card	1
Section ID #	1
Section Type	Industrial Flex Building
Units	
Bldg Class	C
Year Built	
Floor	From 01 to 01
Total SF	82,526
Stories	1
Wall Height	18
Ecn Dep. % Good	





Discovery Sports Center – Boyd's, MD



Discovery Sportsplex, Boyd, MD

Montgomery County
@ Zoom 16 (600')



Discovery Sports Plex, Boyd
MD @ Zoom 15 (.2m (1056'))

Then in 1998 a group of soccer parents led by Maureen and John Hendricks, the founder of Discovery Communications, tried again. They established the Maryland Soccer Foundation (MSF), a non-profit corporation whose mission was to build, manage and maintain the 24-field soccer complex. A public-private partnership was formed with the Maryland National-Capital Park and Planning Commission (MNCPPC). A location for the complex was identified in Germantown, Maryland, a suburb of Washington, DC.

In October 2000, the Maryland SoccerPlex opened with 19 full sized irrigated soccer fields. Each field measures 115 x 75 yards and one side of each field has a berm ideal for spectator seating. The fields are organized in clusters of four or five fields with parking and a comfort station for each cluster. The parking was built at 75 spaces per field to ensure that teams coming for the next game would have ample parking. In 2008, 3 lighted synthetic turf fields were added to the SoccerPlex.

One of the attractions of the complex is the Championship Stadium. The stadium sits in a natural bowl with a paved lit plaza surrounding it. The field is a premier sand-based under drain construction that drains an average of eight inches of water an hour. There is seating for 4,000 spectators. The Musco lighting is broadcast quality and the field has Kwik Goal Pro Premier World Competition Goals.

The Maryland SoccerPlex welcomes more than 650,000 visitors a year. The majority of visitors come from the local soccer clubs and leagues that play more than 5,000 matches at the complex annually. However, teams from all over the country come to participate in some of the most competitive youth soccer and lacrosse tournaments in the country.

Overview



The foundation's next goal was to develop a state of the art multi-sport indoor facility to compliment the Maryland SoccerPlex. What better sponsor than the kid-powered Discovery Communications to support a 66,000 square foot complex. From leagues, clinics, and camps to conferences and parties, the center's possibilities are endless.

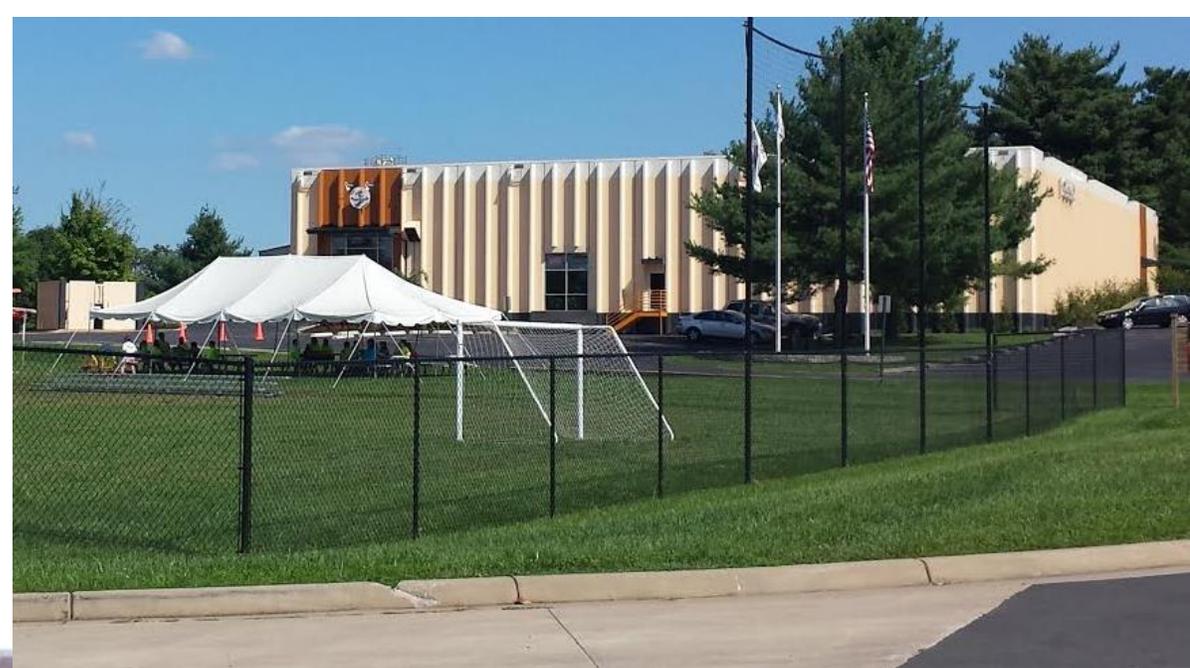
Picture a 46,000 square foot arena floor encompassing eight basketball and/or volleyball courts on a lined urethane surface from March to November. In November, two synthetic turf fields are rolled out complete with netting for indoor soccer, lacrosse, field hockey, baseball and rugby.

Enjoy a meal or snack at our Discovery Sports Center Cafe or schedule your next party or meeting in our party and conference room. The Discovery Sports Center has fully equipped men's and women's locker rooms and family bathrooms to compliment our indoor events as well as the Maryland SoccerPlex's marquee stadium events.

With its versatile surfaces and incredible architecture, the Discovery Sports Center offers something for everyone.

- 8 Basketball / Volleyball Courts
- Indoor Soccer on the Two Largest Indoor Fields in the Area
- Indoor Lacrosse
- Indoor Field Hockey
- Indoor Baseball
- Birthday Parties
- Bar/Bat Mitzvahs
- Play Time for the Kids
- Sports Banquets
- Cafe
- 50,000 sq/ft of Meeting / Conference Space
- Full Locker Rooms
- And Much More!

Dragon Yong In – Purcellville, 24,576 sqft



Campus Athletics Sterling (56K sqft)

3 Basketball Courts (HS Regulation)
4 Volleyball Courts (2) 90'x70' Turf Fields
Olympic weight room 3-lane sprint track
Fitness Center Multi-purpose rooms



Boo Williams Sportsplex



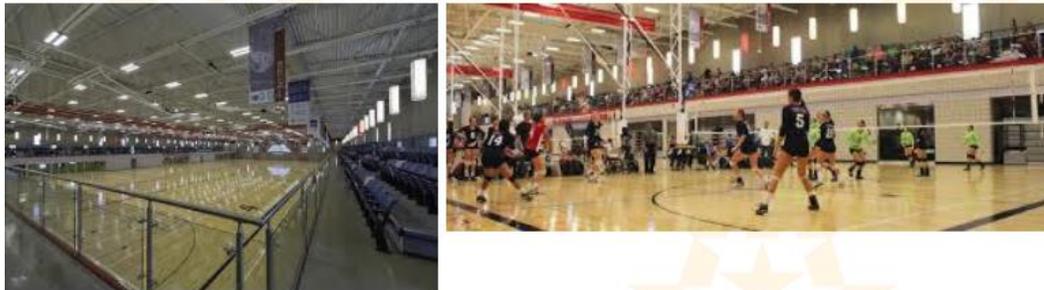
Prince George's Sports & Learning Complex



Virginia Beach Field House



Round Rock Sports Center



Spooky Nook Sports Center



The Spire Institute



Indoor Courts



Indoor Fields



Track & Field



Track & Field

