



St. Christopher's School

Educating Boys For Life

Applicant Presentation – Ordinance 2022-019

Planning Commission

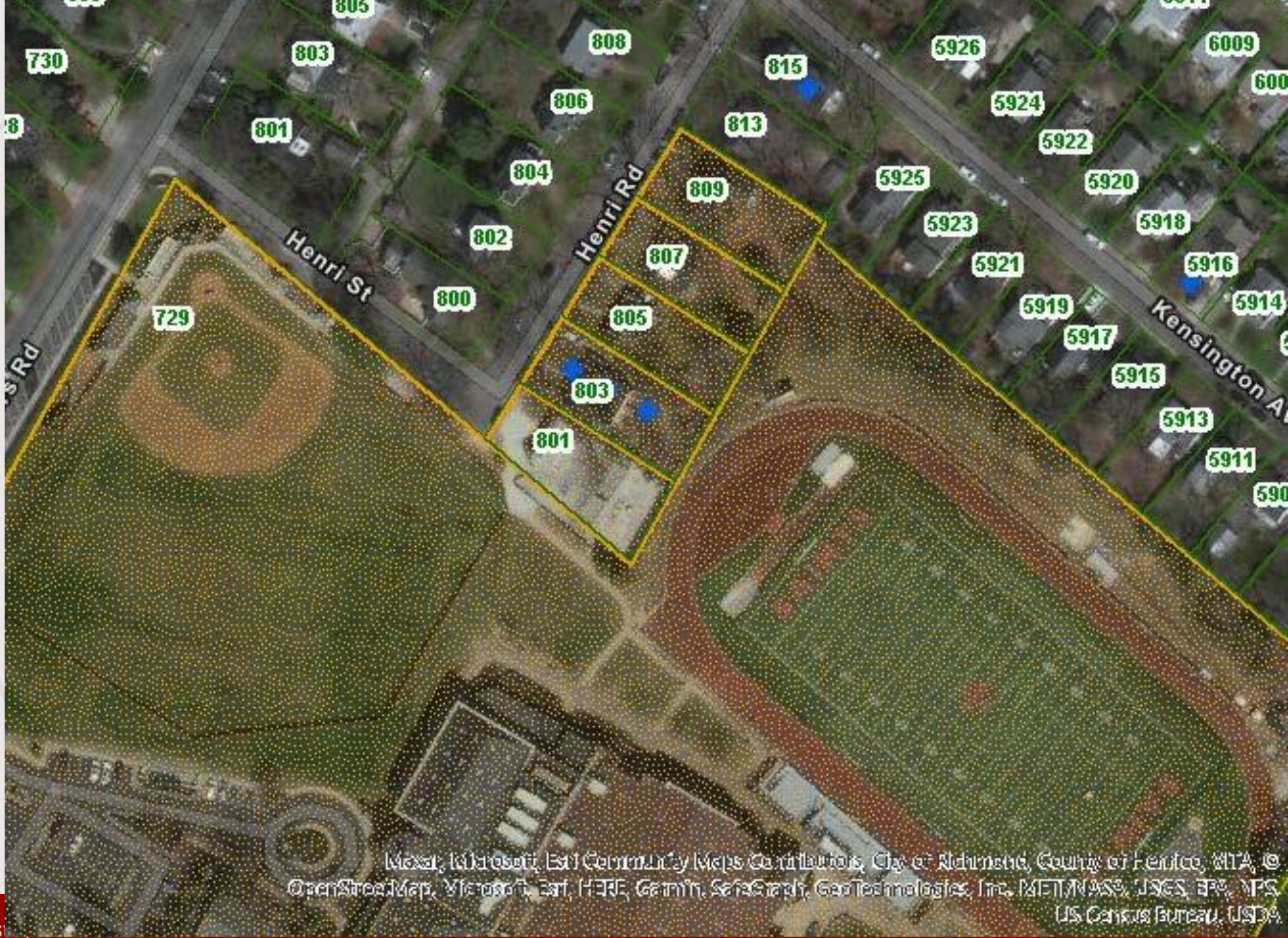
February 7, 2022

STC Field Lighting *Overview / Benefits*

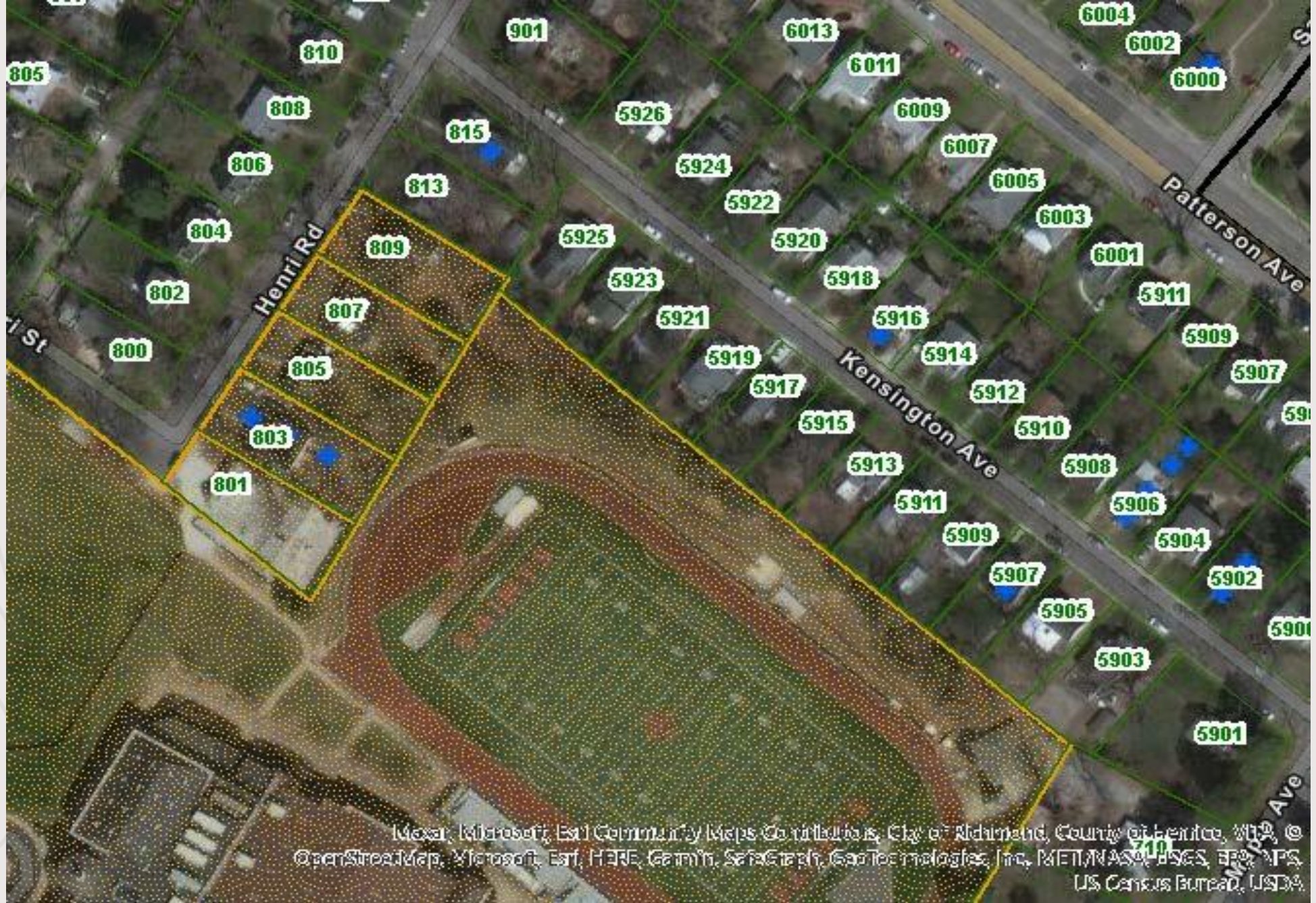
St. Christopher's plans to install field lighting to illuminate **Knowles Field** (supporting football, lacrosse, soccer & track) and **Jacobs / Massey Field** (supporting baseball & soccer). The addition of lighting to these fields allows the school to expand the usage of its outdoor field space to accommodate the largest Upper School student body in the school's history.

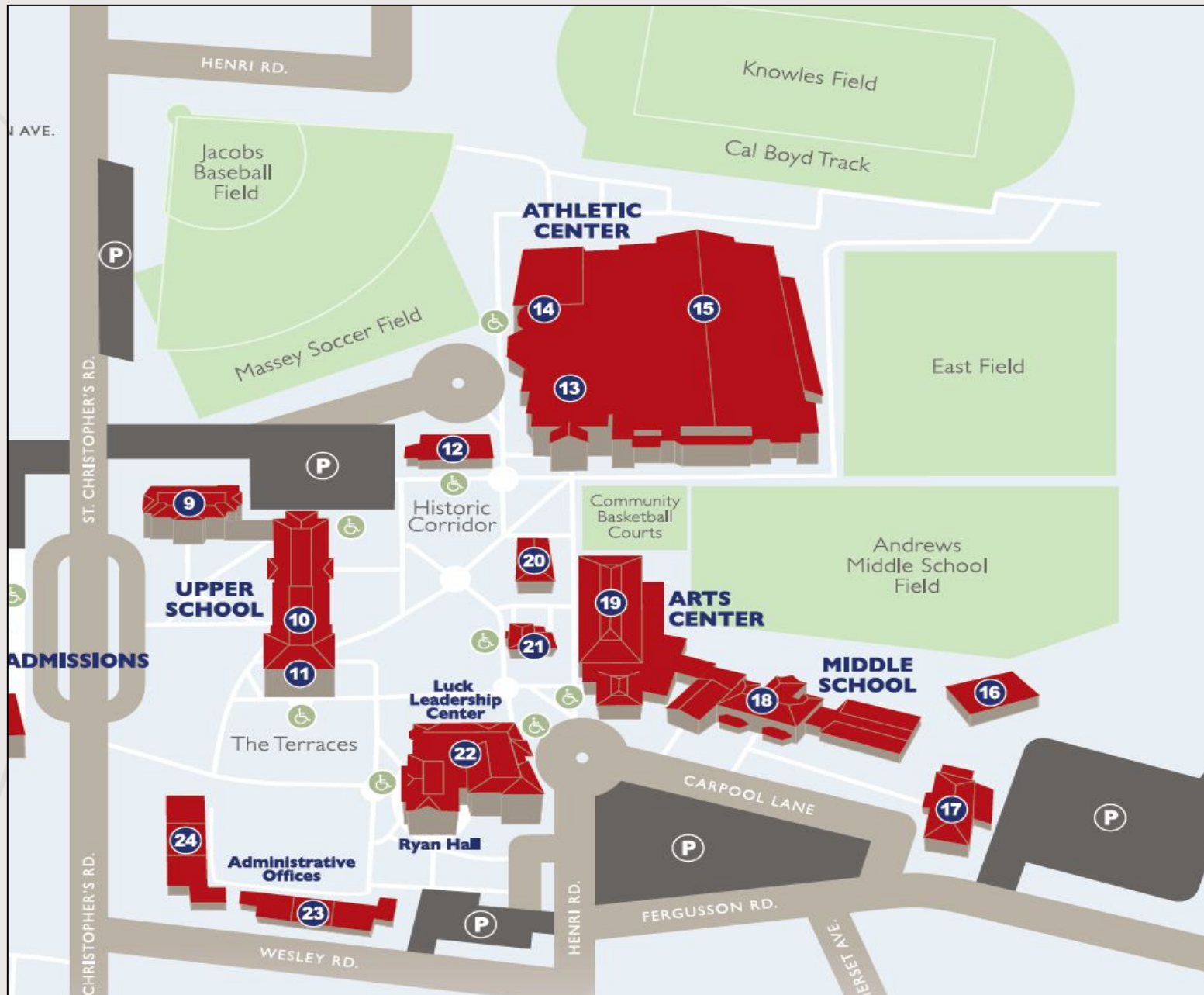
- Field lighting will support both **competition and practice**, provide added weather flexibility, reduce Saturday afternoon competition, improve the school community experience and strengthen St. Christopher's overall.
- Field lighting will enhance game day experience for fans and spectators.
- The availability of increased early evening athletic practice also expands the school's academic scheduling possibilities in both Upper and Middle Schools.
- There will not be a net increase in competition events.





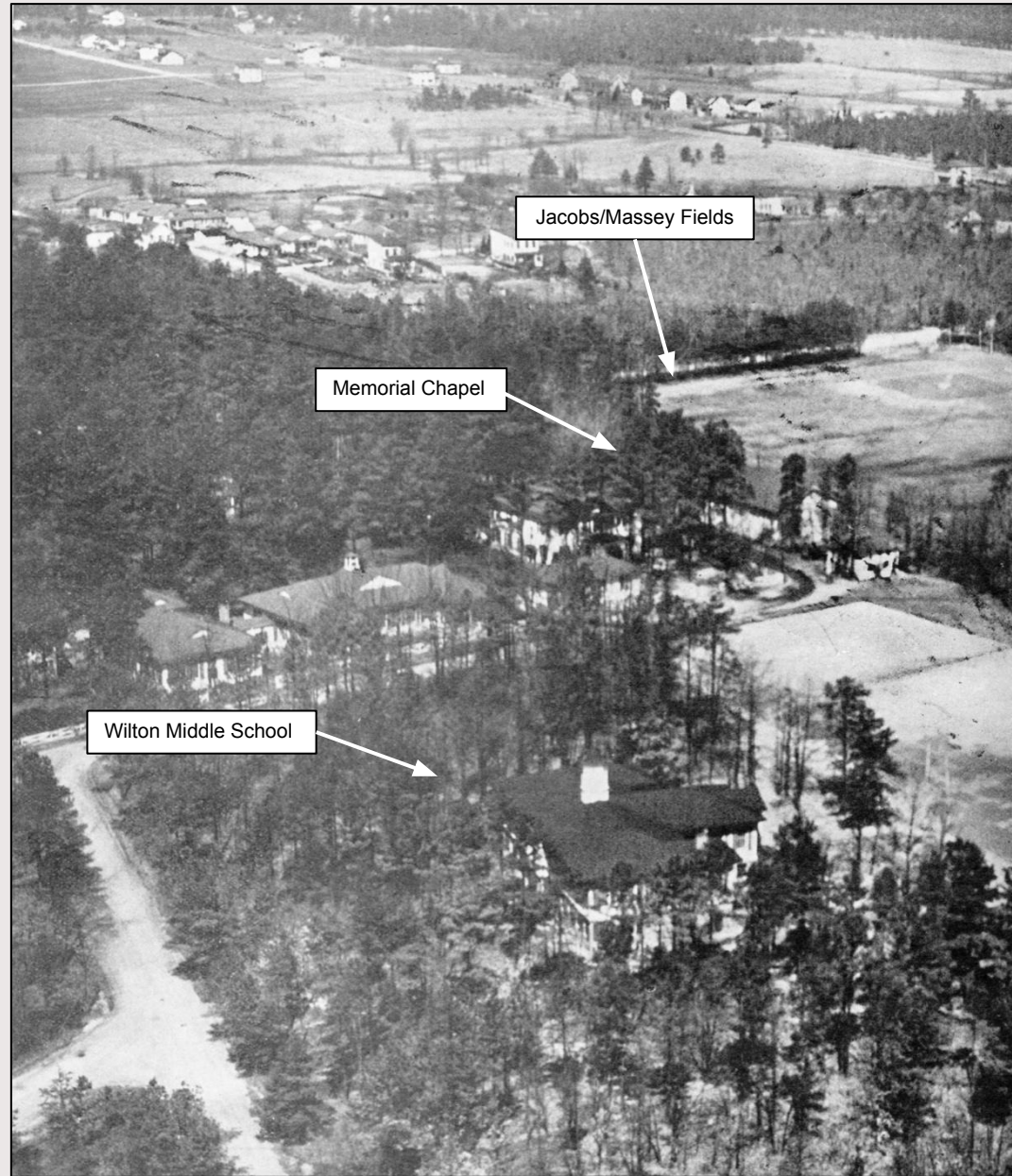
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St. Christopher's School Fields

Today vs. ± 80 Years Ago

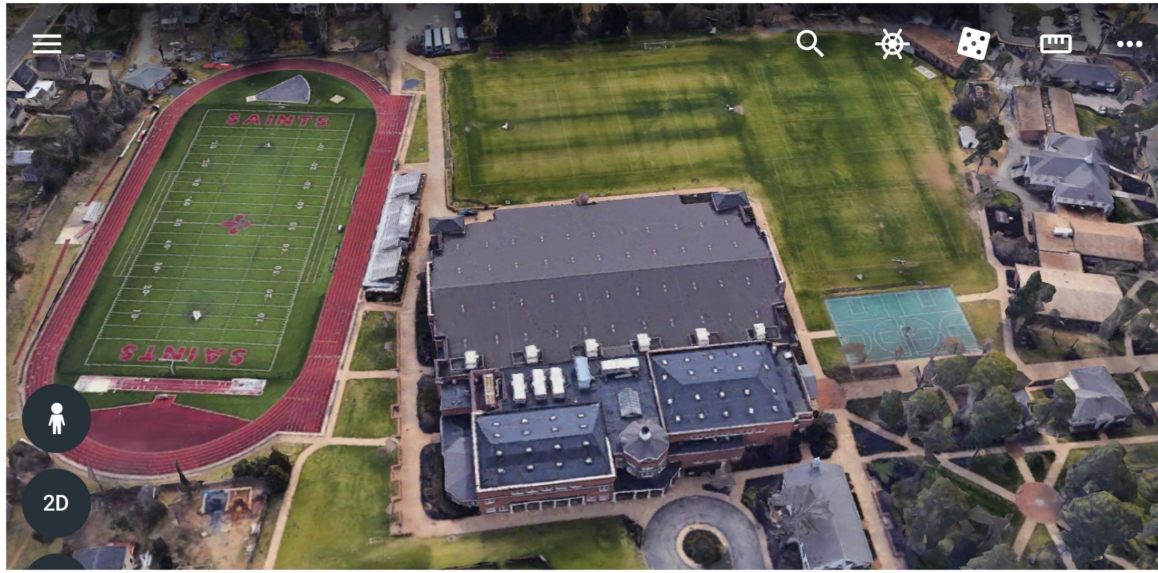


St. Christopher's School Fields

Today vs. ± 80 Years Ago

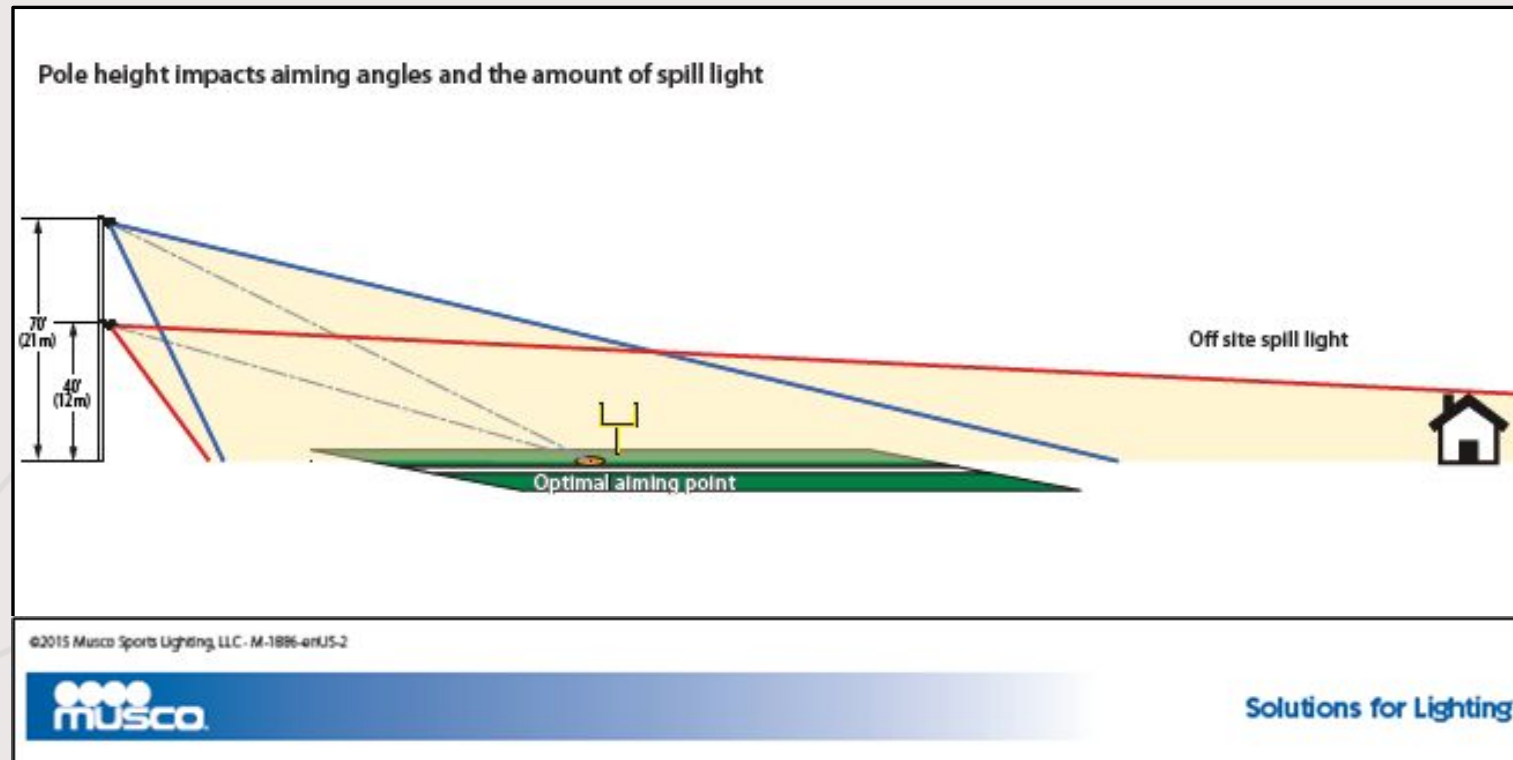


St. Christopher's School Fields – *Today vs. ± 80 Years Ago*



St. Christopher's School Fields –

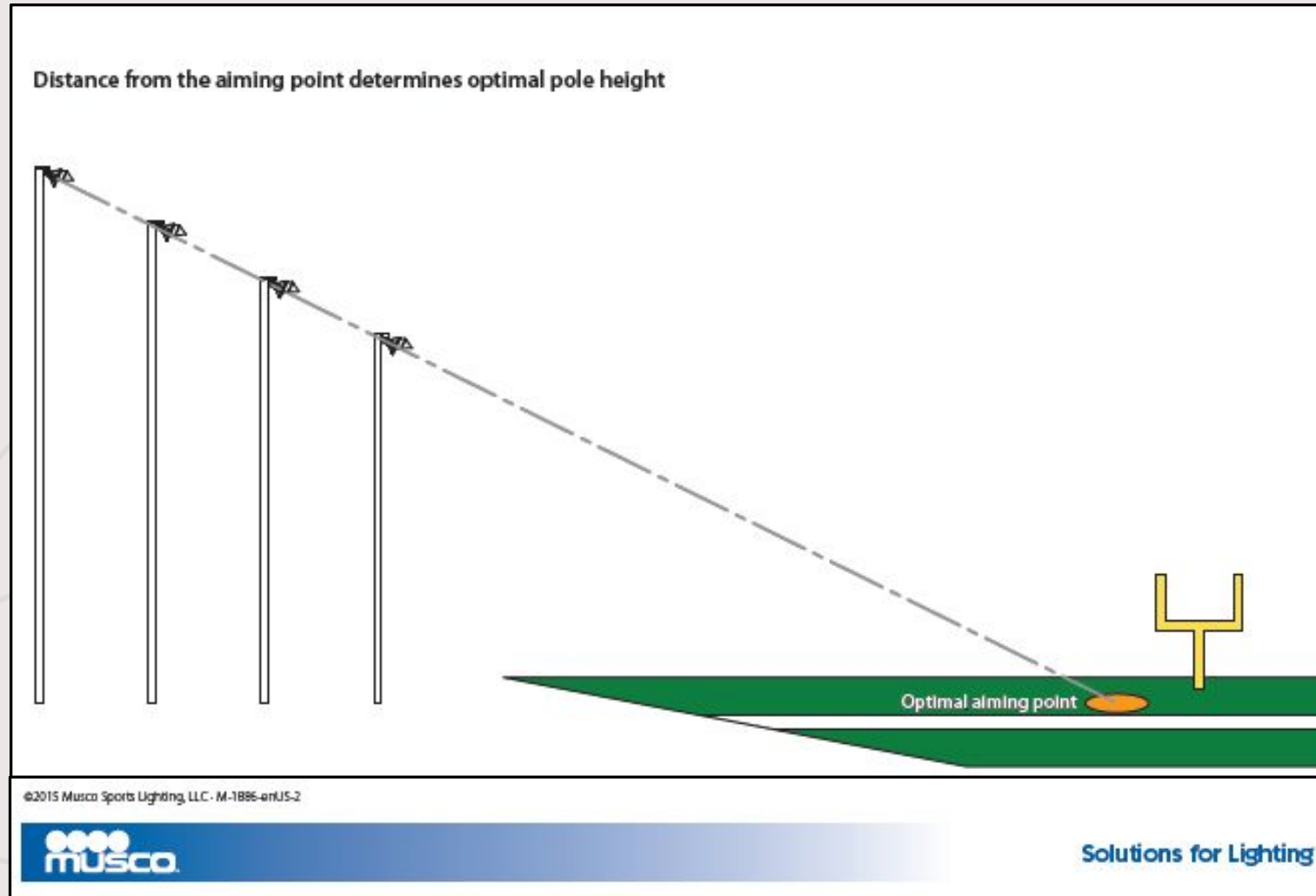
As with most athletic field lighting projects, pole heights of 60' – 80' are included in the St. Christopher's field lighting design to manage the light aiming angles and minimize the off site light spill and glare. Each LED is individually visored to direct the precisely onto the playing surface.



As illustrated, a “by-right” solution using poles with heights limited to 35' would require up to four times the number of poles and more significantly decrease the aiming angle to 10 degrees or less – significantly impacting the level of off site light spill and glare.

St. Christopher's School Fields –

Optimal field lighting solutions manage both pole locations and pole heights which angle the light downward onto the playing surface while controlling the glare and spill of light to neighboring properties.



Evolution of Field Light Control

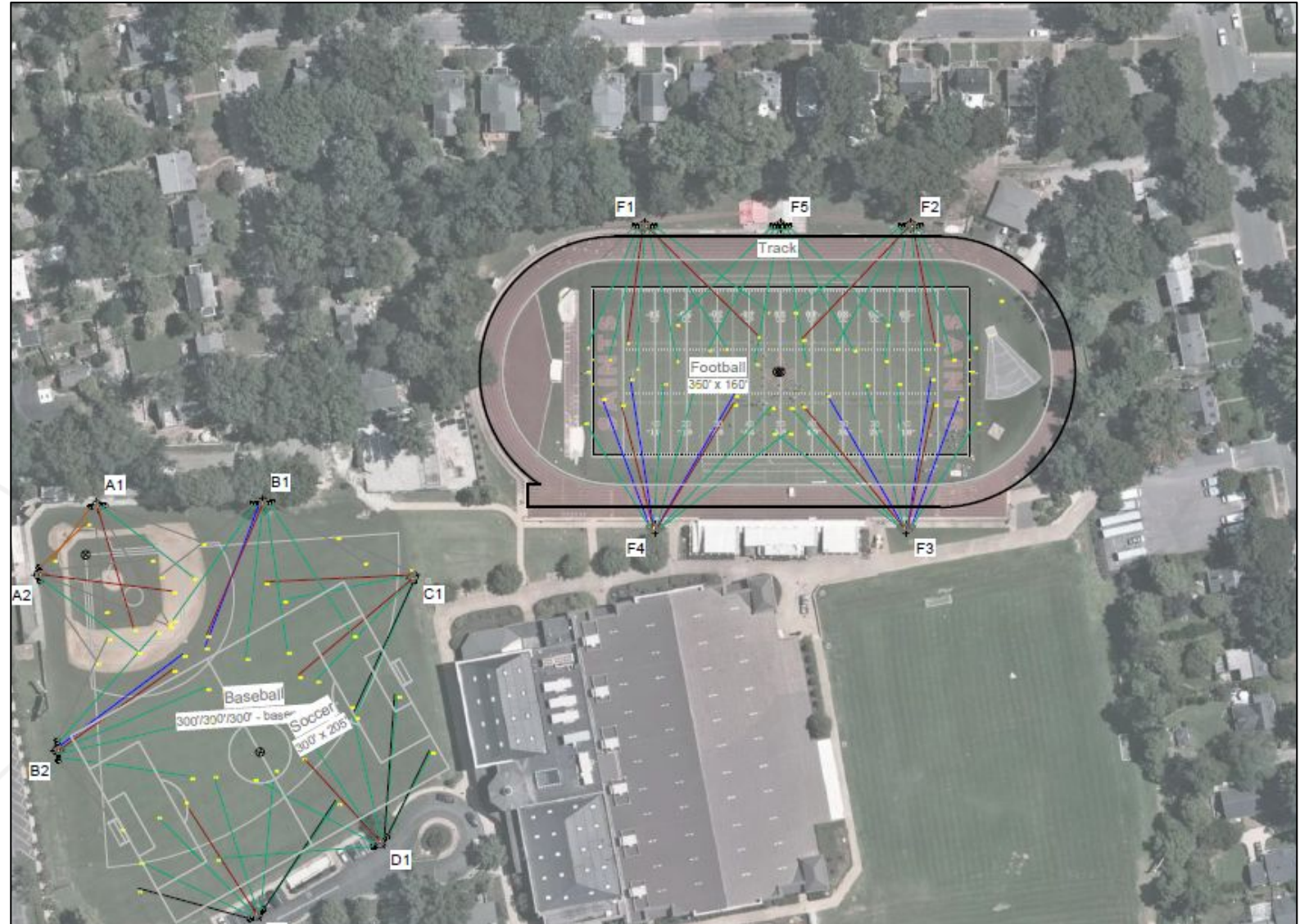


The design and use of **Light-Emitting Diode (LED) technology** eliminates disruptive glare or spill of light into neighboring areas and preserve the dark skies above.

What Matters in Lighting Technology

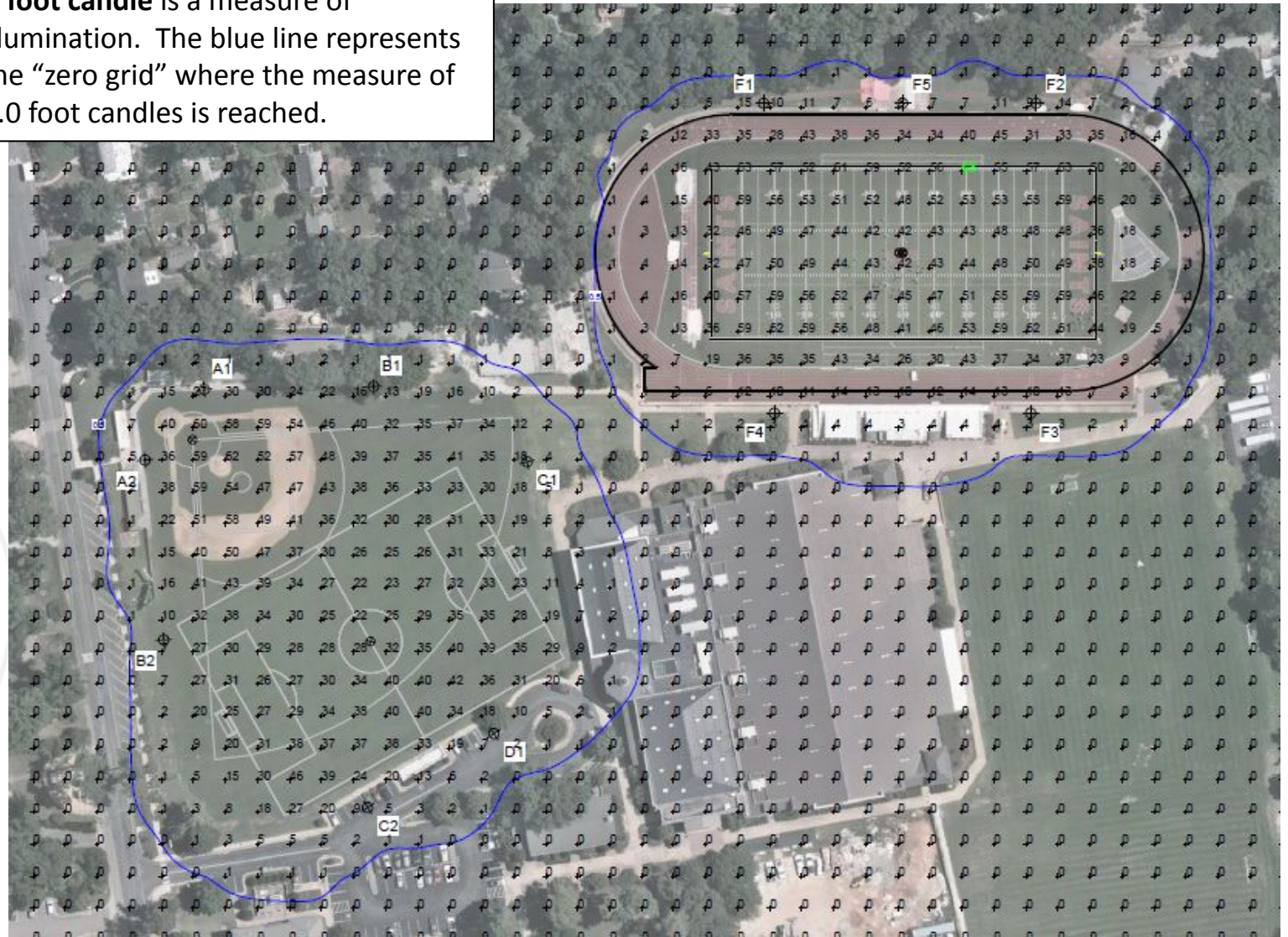
1977 SportsCluster-	1989 SportsCluster.2	1989 SportsCluster.2 Level 8"	1989 SportsCluster.2 Total Light Control™	2005 Light-Structure System™ Green Generation™	Today Light-Structure System™ TLC for LED™
<p>Photographed at 100 ft (30 m) from field edge</p> <p>Used equal parameters for:</p> <ul style="list-style-type: none"> <li style="width: 45%;">• On-field light level per pole <li style="width: 45%;">• Luminaire aiming angles <li style="width: 45%;">• Wattage per luminaire <li style="width: 45%;">• Pole distance from aiming point <li style="width: 45%;">• Mounting height 					
<p>©2015, 2017 Menco Sports Lighting, LLC - M-1909-en04-3</p>					

Field Light Layout / Photometric Planning



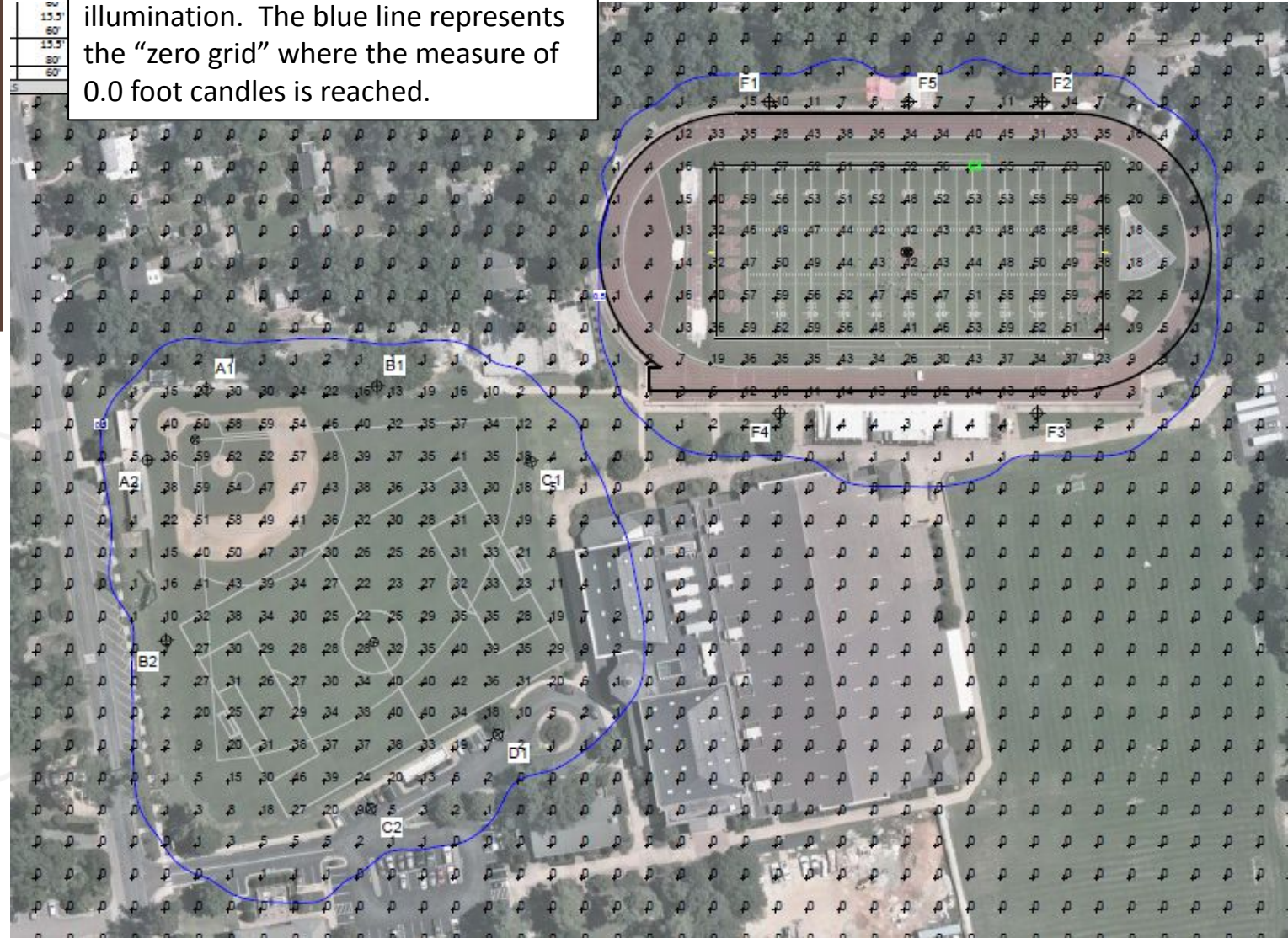
Photometric Planning / Foot Candle Review

A **foot candle** is a measure of illumination. The blue line represents the “zero grid” where the measure of 0.0 foot candles is reached.



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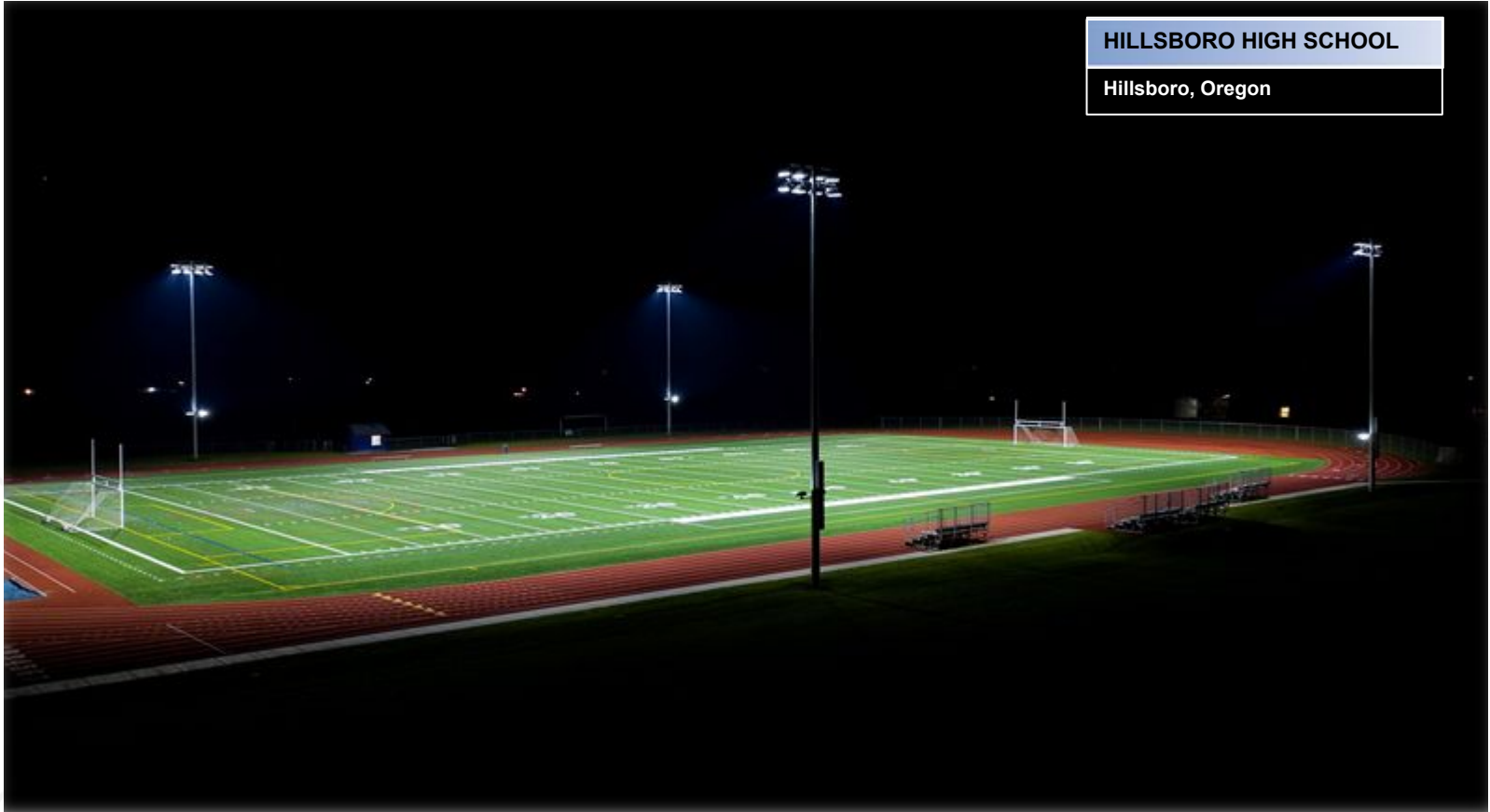
Photometric Planning / Foot Candle at STC Property Lines

A **foot candle** is a measure of illumination. The foot candle measurements at the STC property lines are shown here.



Similar Field Light Installations –

Spill / glare control



Field Lighting – *Photos of similar light poles*



Day



Night



Close-up

Field Lighting – *Knowles Field (approximate location and view of poles)*



Two 80' poles located on the south side of the field

Field Lighting – *Knowles Field (approximate location and view of poles)*



Three 60' poles located on the north side of the field

Field Lighting – *Jacobs/Massey Field* (approximate location and view of poles)



1st base line



3rd base line

The infield area includes two 60' poles and two 70' poles.

Field Lighting – *Jacobs/Massey Field (approximate location and view of poles)*



Left Field

Right Field

Three outfield area includes three 70' poles.

STC Field Lighting *Planned Use & Communication*

Competition:

Knowles Field

Football

Lacrosse

Soccer

Track & Field

Jacobs/Massey Field

Baseball

Soccer

Competition events – the total number of competition events utilizing field lighting past 8:00 p.m. is limited to fifteen (15) annually by the SUP ordinance.

Practice:

Knowles, Jacobs/Massey Fields

All Sports – routine early evening use of field lights between 5:00 – 8:00 p.m. late fall and early spring (expected use is approximately 20-25 evenings per year)

Communication:

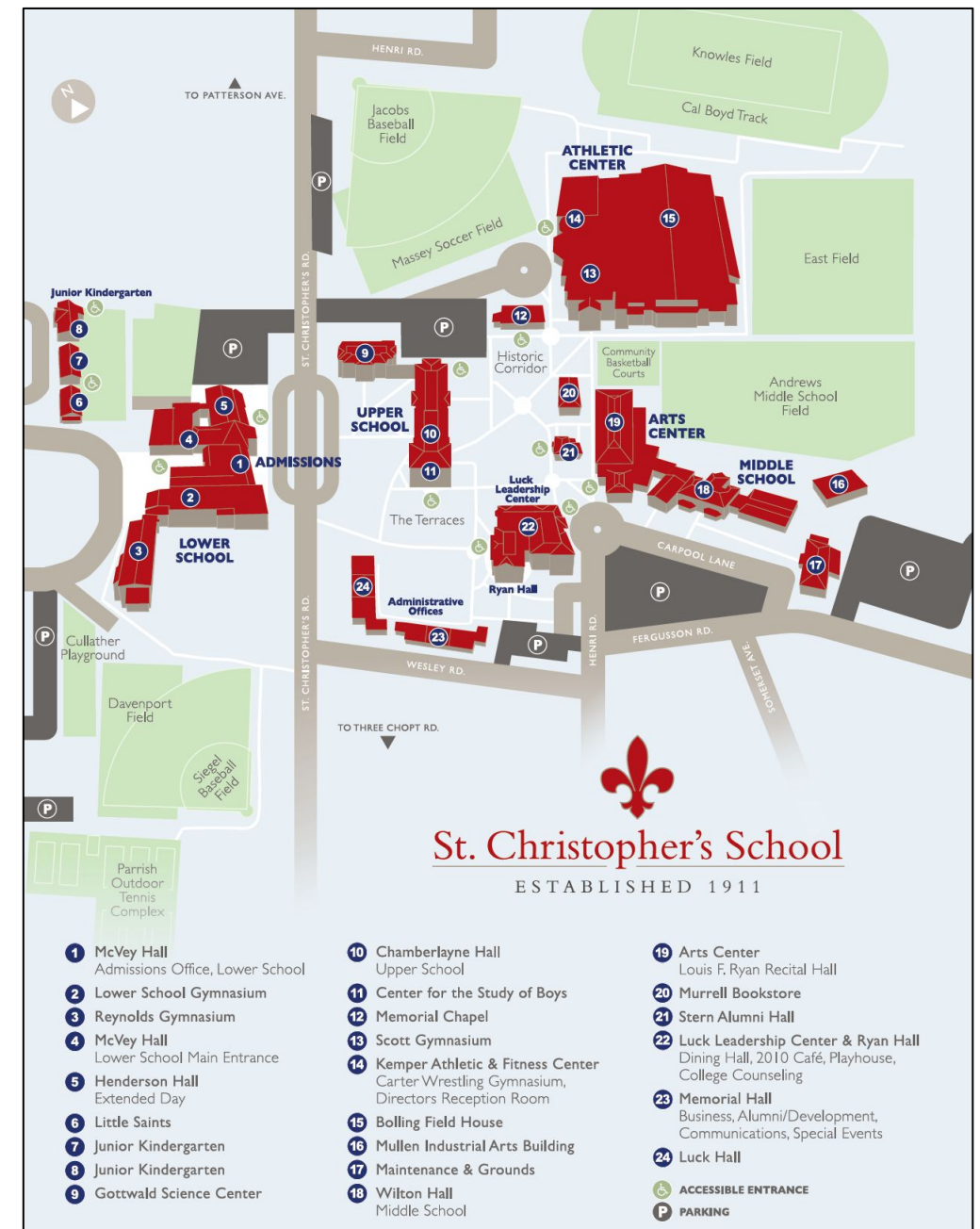
STC will communicate evening competition events in advance by:

- Posting calendar of evening athletic events on the STC website - fall schedule by June 15th / spring schedule by January 15th, annually;
- Posting reminders of evening competition events to social media (such as Nextdoor, Twitter, Instagram and Facebook);
- Direct e-mail reminders to the President of the Westhampton Civic Association.

STC Field Lighting *Event Management*

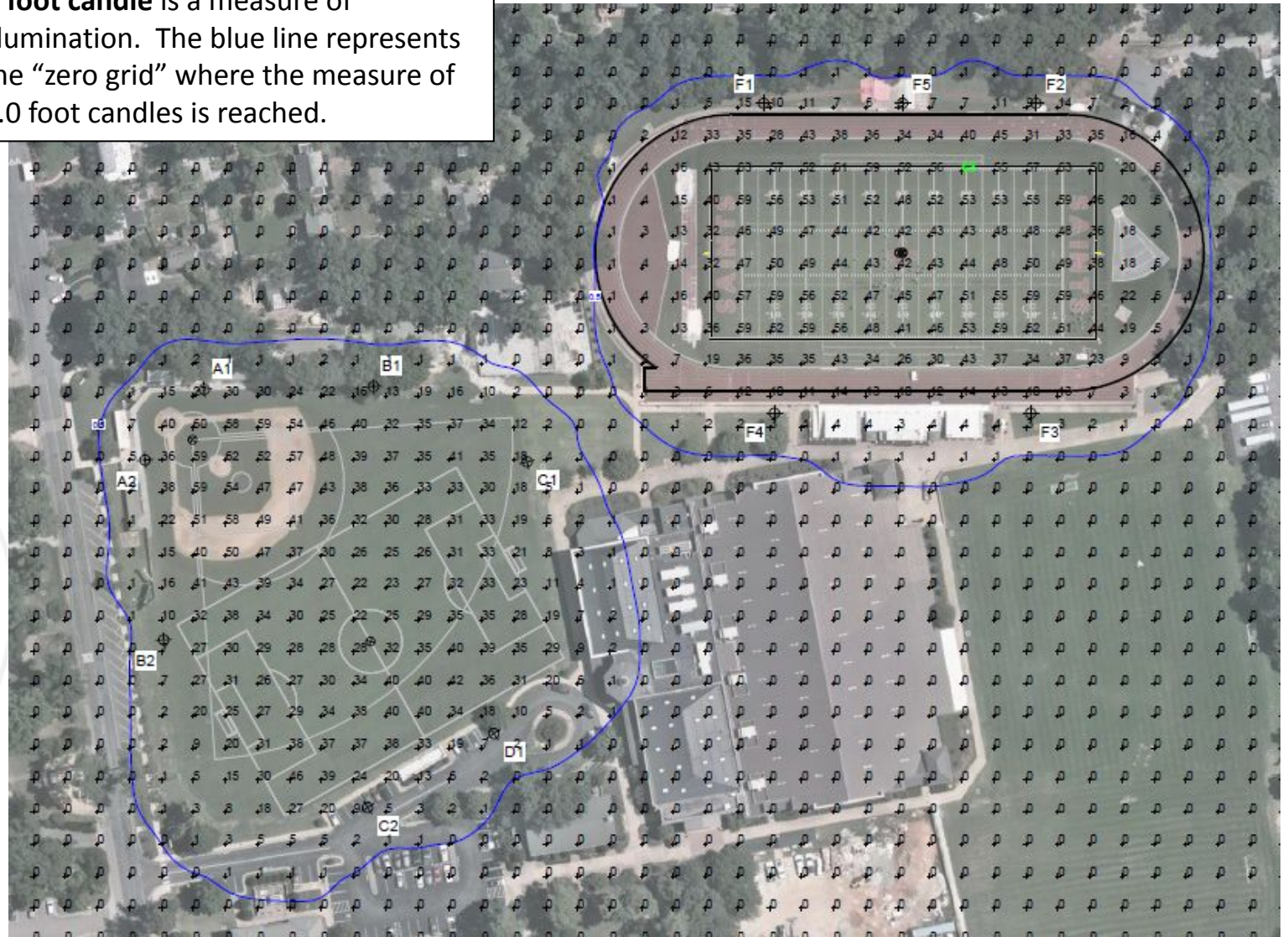
St. Christopher's is aware of the need to manage **parking** and traffic flow for those evening events with the highest level of attendance, primarily certain football games.

The campus has a total of **362 on campus parking spaces** (including 14 handicap spaces). Most of these spaces would be unused and available for evening games. The school will engage parking / traffic support (i.e. – RMC Events) for those games with significant attendance expected. In addition, the school will assess the availability to contract nearby lots for usage during large events.



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Located between Knowles (football) and Jacobs (baseball) fields, STC's planned **Community Pavilion** will provide a permanent gathering area to support outdoor activities including athletics, summer camp, classroom and other co-curricular gatherings.

The facility design is consistent with other campus facilities and will include:

- *Concession (food) area*
- *Concession (bookstore) area*
- *Covered terrace seating area*
- *Men's and women's restrooms*



**STC
Community
Pavilion
*Location***

