

**Exhibits for Record of Dec. 1, 2020 Common Council Meeting on Edgewood High School  
Condition Use Permit Application for Stadium Lights**

- 1) Goodman Athletic Complex Master Plan Addendum, PDF pages 1-32.
- 2) Electrical Permit, PDF pages 33-57.
- 3) Edgewood Neighborhood Communication and Event Review Committee Presentation, PDF pages 58-63.
- 4) Talaske Sound Study, PDF pages 64-86.
- 5) Outdoor Lighting Facilities Table, PDF pages 87-97.
- 6) One-Pager to Neighbors, PDF page 98.
- 7) EHS submittal to City of Madison containing data on proposed lights, PDF pages 99-134.
- 8) October 26, 2018 Email from Matt Tucker regarding lighting application, PDF pages 135-137.
- 9) February 27, 2019 Correspondence from Matt Tucker, PDF pages 138-143.
- 10) September 30, 2019 lighting application, PDF page 143.
- 11) December 3, 2019 Edgewood Rebuttal Letter to Plan Commission, PDF pages 144-147.

# Goodman Athletic Complex: Master Plan Addendum

Edgewood Campus  
Madison, Wisconsin  
November 14, 2018



Edgewood High School

2219 Monroe Street





## Contents

Introductory Letter .....	2
Executive Summary .....	3
History .....	3
Why Now? .....	4
Process .....	5
Existing Facility .....	6
Existing Site Photos .....	7
Existing Use .....	9
Edgewood School Use: .....	9
Edgewood Team Use: .....	9
Current Varsity Game Summary.....	11
Total Fall Varsity Games: .....	11
Total Spring Varsity Games/Meets:.....	11
Total Varsity Games/Meets Currently Held On-site:.....	11
Community Use: .....	12
Proposed Amendments .....	13
Expanded Seating & Support Facilities .....	13
Proposed Use: .....	14
Edgewood School Use: .....	14
Edgewood Team Use: .....	14
Proposed Varsity Game Summary .....	15
Total Fall Varsity Games: .....	15
Total Spring Varsity Games/Meets:.....	15
Total Varsity Games/Meets (eligible for lighting use): .....	15
Comparison of Existing Varsity Games versus Proposed Varsity Games.....	15
Proposed Community Use: .....	16
Lighting Improvements.....	16
Traffic & Parking.....	17
Amplified Sound System.....	19
Additional General Conditions & Commitments:.....	19
Exhibits .....	20



2219 MONROE STREET • MADISON, WI 53711-1999

608.257.1023 • 608.257.9133 (Fax) • edgewoodhs.org

Heather Stouder  
Planning Department  
Suite 017  
215 Martin Luther King Jr. Blvd.  
Madison, WI 53703

Re: Edgewood High School: Goodman Athletic Complex

Dear Heather,

Edgewood High School has been working closely with the City of Madison, our Liaison Committee and local neighbors for the past year and a half about opportunities we are seeking to enrich the offerings of the Goodman Athletic Complex. This facility has become a true community asset that is regularly utilized by several of our athletic teams, other local middle-school and high-school sports teams, UW-Madison athletic teams and our neighbors.

Now, we believe the time is right to upgrade the Goodman Athletic Complex to incorporate new technology that will allow our students to host a limited number of night home games at Edgewood like other teams in our conference host night games on their campuses. We are diligently working through the city's adopted process to amend our Campus Master Plan to allow for better and more strategic usage of this important community resource. Specifically, our hope is to build upon the existing facility by increasing seating, adding site-focused LED lighting and installing a directional sound system to enhance the overall experience for all users. We believe adding a limited number of high school night events hosted within our campus would allow the Edgewood athletics program to remain competitive with other teams in our conference by hosting true home games while contributing to the continued, holistic, well-rounded development of our students.

Throughout this detailed process we have been careful to adhere to our core principles of commitment to Community, Partnerships, Truth and an authentic dedication to preparing the whole student for a successful future. We have worked closely with local officials to meet or exceed City of Madison requirements on lighting, sound, parking and traffic; we have held neighborhood listening sessions to identify areas of concern and explore potential modifications, as necessary and appropriate; and we have worked hard to ensure that everyone involved receives accurate and timely information regarding the various aspects of the process and the modifications we are seeking.

Sincerely,

A handwritten signature in black ink that reads "Michael Elliott". The signature is written in a cursive, flowing style.

Michael Elliott  
President

## Executive Summary

Edgewood High School is seeking an amendment to the adopted Master Plan for the Goodman Athletic Complex to incorporate a limited number of night games and improve the existing facility to include increased seating, LED lighting, and a directional sound system. These improvements would replace the existing stands and portable PA system while allowing for high school sports to be hosted on-site during the evening hours. This document outlines the details of the existing use and offers specific standards and programming requirements for all the proposed uses of the facility.

## History

The Goodman Athletic Complex is the most recent configuration of the field that has existed on-site since the founding of the Edgewood High School of the Sacred Heart in 1927. Edgewood High School's teams and classes have used this facility as the main outdoor athletics facility with events ranging from football, soccer, and track & field, to baseball and summer sports camps, with the only breaks in activity being linked to field condition issues and subsequent upgrades.

The current field configuration and improvements were completed in 2015 through a partnership with the Goodman Foundation and other donors. The Goodman Foundation support of the facility was expressly tied to creating a facility that is a "community-wide venue that will serve all of Madison, from children to seniors, through games, camps, and other activities" (E.G. Schramka, Executive director of the Goodman Foundation). This partnership has led to the field being used not just by Edgewood, but members of the entire community through hosting summer camps and games by teams from throughout the community ranging from soccer (Madison 56ers, MAYSA (Madison Area Youth Soccer Association)) to lacrosse (Westside Lacrosse Club); as well as practices by West high School, MAISL (Madison Area Independent Sports Teams) teams, and UW teams.



Edgewood High School & Athletic Field 1937

## Why Now?

Edgewood High School has a nearly 100-year history of using its athletic facilities for practice purposes, hosting day-time sporting events and allowing access to the community for game and recreational purposes. The Goodman Athletic Complex has deeply enriched Edgewood’s ability to serve as a community-wide asset for the greater Madison area. When the Edgewood Campus Master Plan was originally developed and approved in 2014, Edgewood leadership was up front about the continued desire to have the ability to have a true home field that could enrich our athletic program by hosting night games as required by the Badger Athletic Conference, but were very sensitive about how a limited number of night games may impact our surrounding neighborhoods.

Two major factors prompted us to begin the formal amendment process over a year and a half ago, as outlined in our Campus Master Plan:

1. Our primary agreement with Middleton to serve as a “home” field is no longer feasible. This is due not only to Middleton’s own athletic program demands, but financial ramifications, safety concerns and scheduling for Edgewood’s athletes. This fact has left Edgewood scrambling to find a location for “home” games, often ending up with multiple locations for our games — a scenario that few other schools have to address. Teams currently have held “home games” at Reddan Field (Verona), Middleton, Lussier Stadium, and Breese Stevens Field, resulting in significant travel, logistical hurdles, cost, and scheduling conflicts between Edgewood and visiting schools.
2. Advancements in both lighting and sound technology have made it possible to ensure that two of the major neighborhood concerns we acknowledged early in the Campus Master Plan process — light and sound — could now be addressed in a fashion that not only meets, but exceeds the City of Madison requirements.

As with our efforts during the original Campus Master Plan process, Edgewood High School remains committed to engaging with our neighbors and community partners as we follow the deliberative amendment process outlined in the 2014 Master Plan.



1930



1993



2018

## Process

The proposed amendment to the Master Plan has followed and exceeded the City of Madison process as outlined in the City of Madison Zoning Code and Adopted Master Plan. This effort has spanned several years of active dialog including public outreach to the Dudgeon Monroe Neighborhood, Vilas Neighborhood, and Liaison Committee through listening sessions, concept presentations, and neighborhood meetings along with coordination of outreach efforts with former Alder Sarah Eskrich and current Alder Allen Arntsen. Input gathered throughout the process has been integrated into the proposal or addressed through careful study and quantification by experts in lighting, sound, and traffic.

Efforts prior to submittal:

1. Hosted two listening sessions in 2017 with neighbors to gather feedback
2. Worked with design team to address comments
3. Visited existing (Waunakee) facilities with LED fixtures with Liaison Committee
4. Worked with the City, Liaison Committee, & Neighborhood Associations to distribute information about the amendment
5. Held 3 additional Informational Presentations (Vilas Neighborhood Board, Dudgeon Monroe Neighborhood Board, Liaison Committee)
6. Hosted a Neighborhood-wide informational & listening session

### **“A team without a home”**

Edgewood Football plays all their home games at locations throughout the city. The resulting distance traveled, team logistics (moving equipment), financial implications, and scheduling difficulty creates significant impacts on schools, players, and fans for all of the teams involved.

In 2018 this led to the team playing at the following stadiums:

Breitenbach Stadium (Middleton)



Lussier Stadium (Madison)



Breese Stevens Field (Madison)





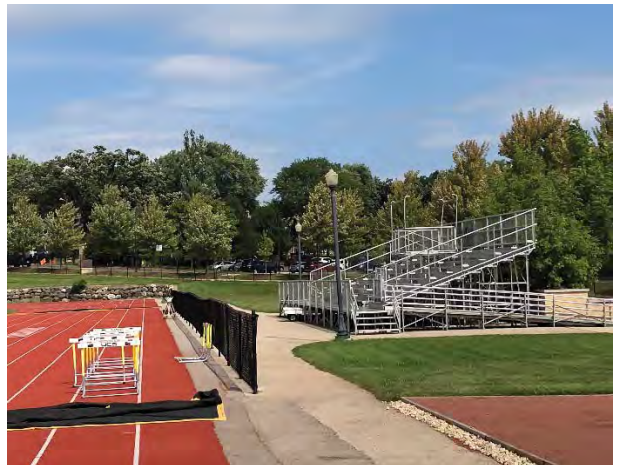
## Existing Facility

The existing field improvements, installed as part of the field upgrades in 2015, include upgrade field turf, track & field facilities, and bleacher seating for 450 fans. The total field attendance capacity is approximately 700-800 attendees.

Parking for activities on the field is delivered through on-site lots immediately adjacent to the entrance and Edgewood College Drive.



## Existing Site Photos



*Site Photos (continued)*



## Existing Use

The Goodman Athletic Complex serves as the main outdoor athletic facility for Edgewood High School as well as a wide range of Community athletic practices, games, and events throughout the year. The High School season is clustered into a three-month spring and three-month fall season for a variety of boys' and girls' sports. Community use is spread throughout the year. The current uses for the field occur during the daytime hours including weekday afternoon/evenings and weekend days.



**Edgewood School Use:**  
 Physical Education Classes  
 Outdoor classroom use

**Edgewood Team Use:**  
 The athletic field is used for practices, junior varsity games (JV), and varsity games by Edgewood's teams. Games and practices are held during the daytime hours on weekday and weekend dates during the fall and spring seasons.

*Fall Sports Season:*  
 The fall sport season occurs August through November with the regular season wrapping up late October. Playoff games may extend the season into November, dependent on team performance.

*Boys Soccer*  
 Boys soccer practices and hosts junior varsity games and varsity games on-site along with off-site games & tournaments at the Reddan Soccer Complex in Verona. These games are held during weekday afternoon/evenings and weekends.

**Existing Use:**  
 Practices  
 Junior Varsity Games  
 Varsity Games 8 regular season games  
 Up to 4 playoff games

Average Length of Varsity Game: 1 hour 40 minutes  
 Average Varsity Game Attendance: 150

### Football

The football team currently practices and plays junior varsity games on the field. The varsity team practices on the field and plays "home" games at other locations throughout the City (2018 locations: Breitenbach Stadium, Breese Stevens Stadium, Lussier Stadium). Junior varsity games are held Thursday afternoon/evenings with varsity games held on Fridays at 7:00 PM off-site.

Football anticipates that they will be re-aligning the Badger Football conference in 2020 to move Edgewood High School into a conference consisting of comparably sized smaller schools. The new conference will include Edgewood, McFarland, Edgerton, Monroe, Jefferson, Evansville/Albany,

East Troy, and Whitewater. The resulting realignment means that Edgewood will no longer play larger schools such as Waunakee in the regular season.

Existing Use:  
 Practices  
 Junior Varsity Games

Average Length of Varsity Game: 2 hours 30 minutes (Off-site)  
 Average Varsity Game Attendance: 500 (off-site)

*Spring Sports Season:*

The spring sports season occurs April through June with the regular season wrapping up in late May. Playoff games may extend the season into June, dependent on team performance.

*Girls Soccer*

Girls soccer practices and hosts junior varsity games and varsity games on-site along with off-site games & tournaments at the Reddan Soccer Complex in Verona. These games are held during weekday afternoon/evenings and weekends.

Existing Use:  
 Practices  
 Junior Varsity Games  
 Varsity Games

8 regular season games  
 Up to 4 playoff games

Average Length of Varsity Game: 1 hour 40 minutes  
 Average Varsity Game Attendance: 250

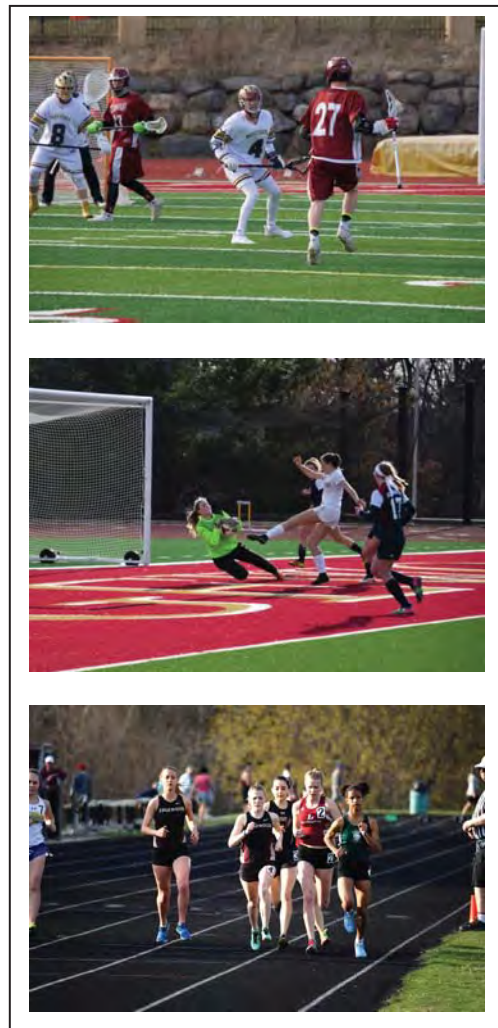
*Track & Field*

Track & Field practices and hosts 1-2 track meets on-site. Track meets are held during the week.

Existing Use:  
 Practices  
 Track Meets

1-2 meets

Average Length of Meet: 3 hour 30 minutes  
 Average Meet Attendance: 350



*Westside Boys Lacrosse*

Westside Lacrosse is a community-based team made up of Edgewood, Memorial, and West High students. This team uses the field for practices and a portion of their home games.

Existing Use:

Practices

Junior Varsity Games

Varsity Games 6 regular season games

Average Length of Varsity Game: 1 hour 30 minutes

Average Varsity Game Attendance: 100

Current Varsity Game Summary

Total Fall Varsity Games:

Total Regular Season Varsity Games: 8

Potential Playoff Games: 4

Total Spring Varsity Games/Meets:

Total Regular Season Varsity Games/Meets: 16

Potential Playoff Games: 4

Total Varsity Games/Meets Currently Held On-site:

Current Regular Season Varsity Games/Meets: 24

Potential Playoff Games: 8



6.7.18  
 Edgewood 1, McFarland 0 WIAA Sectional Game  
 Attendance: ~450 fans

### Community Use:

Consistent with the requirements of the Goodman Foundation grant, the field is available for use by numerous community groups throughout the year, including general neighborhood use.



#### *Open Field Use*

The field and track are available for general use by the community every day from dawn until dusk, when not in use by a previously scheduled group or team.

#### *Community Team Use (Practice & Games)*

The complex is used by a large number of additional community groups throughout the year for practices, events (camps), and games.




Recent community group use includes:

- Jeff Trickey/Randy Wright Quarterback camp
- Edgewood College Men's Soccer team Practice
- Edgewood College Women's Soccer team Practice
- Madison 56ers Youth Soccer Games
- UW-Women's Lacrosse team Practice
- Great Lakes UW Men's Lacrosse Games
- West H.S. Girls Soccer team Practice
- Numerous area Catholic Grade schools Games
- Edgewood All-Sports Camp
- Madison West Boys' Soccer team Practice
- MAISL Touch FB Tournament
- Edgewood College Men's Track Practice
- Edgewood Women's Track Practice
- Westside Girls Lacrosse Youth Organization Summer Conditioning Camp
- AAU Soccer youth group (MAYSA) Games

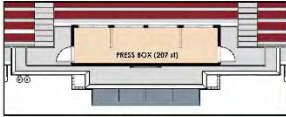
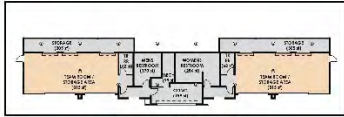
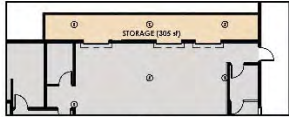
## Proposed Amendments

### Expanded Seating & Support Facilities


The proposed seating enhancements replace the existing temporary bleacher seating (450 seats) with a permanent structure featuring 1000 seats, concessions, storage rooms, restrooms, and team rooms. The requested seating has been reduced from the originally proposed 1,300 seat facility as part of the conversation with the neighborhood. The current proposal is the minimum seating required to meet WIAA requirements to host playoff games. The final design of the proposed structure will be subject to a separate review and approval per the Adopted Master Plan Process.



ATHLETIC STADIUM SEATING REDEVELOPMENT FROM WEST







PRESS BOX
TEAM ROOM / STORAGE AREA
STORAGE








**EDGEWOOD HIGH SCHOOL OF THE SACRED HEART**

ATHLETIC STADIUM SEATING & CONCESSION STAND REDEVELOPMENT






ATHLETIC STADIUM CONCESSION FACILITY FROM EAST

CONCESSION STAND
TICKET BOOTH
COURTYARD / ENTRY PLAZA
TEAM ROOM / STORAGE
ADA ACCESSIBLE RAMP



**EDGEWOOD HIGH SCHOOL OF THE SACRED HEART**





**Proposed Use:**

Edgewood School Use:  
Physical Education Classes  
Outdoor classroom use

**Edgewood Team Use:**

Edgewood High School would continue to host games on-site throughout the weekdays and weekends including fall and spring sport seasons. Varsity games would be eligible for use of the lighting and PA system. Junior varsity games would not use lighting or the PA system. Practices would be held the weekday afternoon/evenings and weekend days with lighting allowed until 7:00 PM.



10.25.18  
Edgewood 0, Mount Horeb 0 (5-4 Shootout Edgewood)  
WIAA Sectional Game  
Attendance: ~350 fans

*Fall Sports Season:*

The fall sports season occurs August through November with the regular season wrapping up late October. Playoff games may extend the season into November, dependent on team performance. Soccer and lacrosse games are held weeknights and weekend afternoon. Junior varsity football would be held on Thursday late afternoons and varsity football would be Friday evenings.

*Boys Soccer*

Practices	
Junior Varsity Games	
Varsity Games	8 regular season games Up to 4 playoff games

*Football*

Practices	
Junior Varsity Games	
Varsity Games	5 games Up to 3 playoff games

*Spring Sports Season:*

The spring sports season occurs April through June with the regular season wrapping up in late May. Playoff games may extend the season into June, dependent on team performance. Soccer and lacrosse games are held weeknights and weekend afternoon. Track meets would be held weekday afternoons/early evenings, consistent with their current usage of the facility.

*Girls Soccer*

Practices

Junior Varsity Games

Varsity Games                                8 regular season games  
Up to 4 playoff games*Track & Field*

Track &amp; Field practices and hosts 1 to 2 track meets on-site. Track meets are held during the week.

Practices

Track Meets                                    1-2 meets

*Westside Boys Lacrosse*

Practices

Junior Varsity Games

Varsity Games                                6 regular season games

Note: Lacrosse home games are limited under this proposal to 4-6 games. Additional regular season games will be held off-site or during daytime hours.

## Proposed Varsity Game Summary

Total Fall Varsity Games:

Total Regular Season Varsity Games:                    13

Potential Playoff Games:                                    7

Total Spring Varsity Games/Meets:

Total Regular Season Varsity Games/Meets:            16

Potential Playoff Games:                                    4

Total Varsity Games/Meets (eligible for lighting use):

Total Regular Season Varsity Games/Meets:            29

Potential Playoff Games:                                    11

## Comparison of Existing Varsity Games versus Proposed Varsity Games

**Soccer/Track/Lacrosse**

<u>Existing</u>	<u>Proposed</u>	<u>Average Attendees</u>
24 regular season games	24 regular season	150-200 attendees
Up to 8 playoff games	Up to 8 playoff games	

**No net increase of games****Football**

0 regular season	5 regular season	500 attendees
0 playoff games	Up to 3 playoff games	

**Net increase of 5 regular season and up to 3 playoff games**

**Proposed Community Use:**

Community use of the field will continue per the current use agreement. Community uses will be limited to daytime scheduling to reduce the overall use of the lights.

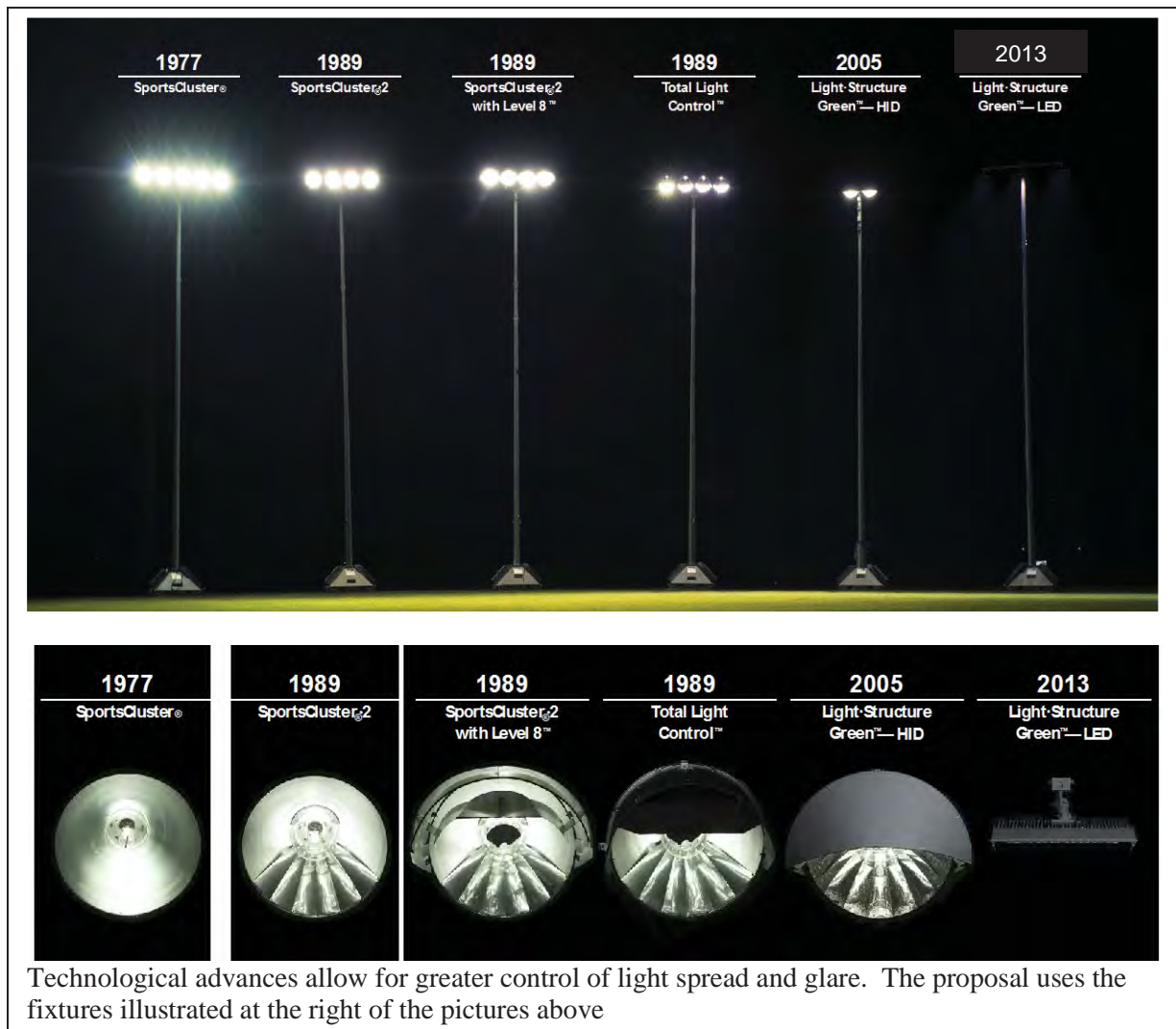
Open Field Use (Daytime)

Community Team Use (Practice & Games) (Daytime)

Other daytime Community Functions may be allowed, as guided by the process outlined in the Master Plan and approved by the Liaison Committee.

**Lighting Improvements**

The field lighting will feature carefully designed and shielded LED lighting that maintains appropriate field level lighting while minimizing light spread, glare, and sky glow. This technology, as illustrated in the attached photometrics, is designed to be dark sky compliant and focuses the light on the facility and away from the adjoining streets. Musco Lighting has worked closely with Edgewood High School to design a facility that meets the minimum standards for game lighting while maintaining a safe environment. The photometrics, confirmed by Rettler Corporation’s engineers, included in this packet will form the standard for reviewing light performance on the site once installed.



Technological advances allow for greater control of light spread and glare. The proposal uses the fixtures illustrated at the right of the pictures above

Lighting for the field will be clustered onto (4) 80' Poles utilizing LED fixtures set at 30 foot candles (minimum level for high school football). The field lighting will be installed on 3 circuits with "punt lighting (not needed for non-football events), field lighting, and general seating area lighting having separate controls to stage lighting based on demand.

Team use of lighting will be restricted to practices (ending by 7:00 PM) and varsity team games. Lighting will not be used for JV games. Lighting use will also be moderated by the time of year and on-field light conditions with an anticipated use of 18-27 games per year.

Sunset:	September 1 <sup>st</sup>	7:32 PM
	October 1 <sup>st</sup>	6:38 PM
	November 1 <sup>st</sup>	5:49 PM
	April 1 <sup>st</sup>	7:23 PM
	May 1 <sup>st</sup>	7:58 PM
	June 1 <sup>st</sup>	8:30 PM

See Exhibit C for proposed lighting details and photometrics.

#### Proposed Lighting Conditions:

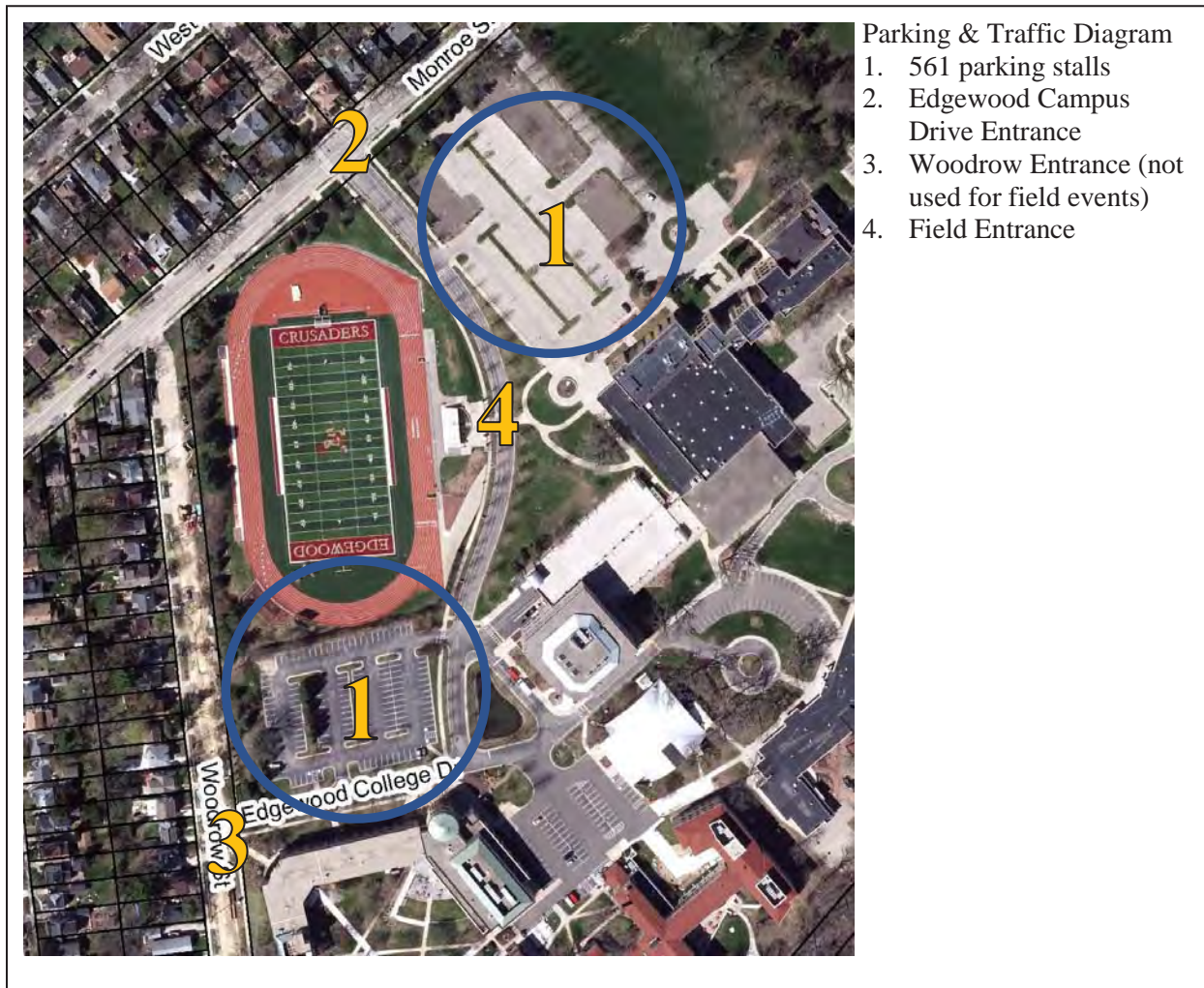
1. Lighting may be used for High School Athletics with up to 29 regular season varsity games and 11 varsity playoff games. Additional games may not be substituted for playoff games in the event that teams do not qualify for the post season.
2. Lighting may not be used for non-high school events.
3. Lighting for soccer, track, and lacrosse games may be utilized until 8:30 PM (24 regular season games, up to 8 playoff games).
4. Football games may utilize the lighting until 10:00 PM (5 regular season games, up to 3 playoff games).
5. Main field lighting will be turned off as soon as possible upon the completion of the game.
6. Site and seating lighting will be allowed to remain on until the stadium is cleared.
7. Lighting will be turned off once the complex is no longer in use, except for health and safety lighting.
8. Main field lights may be allowed to exceed the target turn off time for exceptional circumstances, such as overtime games weather delays, or health and safety delays.
9. Games will not be scheduled with a start time after 7:30 PM, unless weather delay conditions dictate.
10. Lighting may be allowed for practices until 7:00 PM.
11. "Punt lighting" will not be utilized during non-football events.
12. Lighting shall be used during high school sporting events only.

#### Traffic & Parking

The existing traffic and parking facilities (more than 561 on-site parking stalls in immediate proximity to the field) will accommodate the proposed amendments, as guided by the adopted Traffic Management Plan. The traffic management plan and operation of the campus has hosted events exceeding the capacity of the field with examples ranging from Graduation to College Events without issue. Initial conversations with the Traffic Engineering Department indicate that the shift in game start time later in the evening will benefit overall neighborhood traffic as it will avoid peak commuter traffic time on Monroe Street.

Edgewood has added the following conditions based on feedback from the neighborhood to help eliminate potential issues:

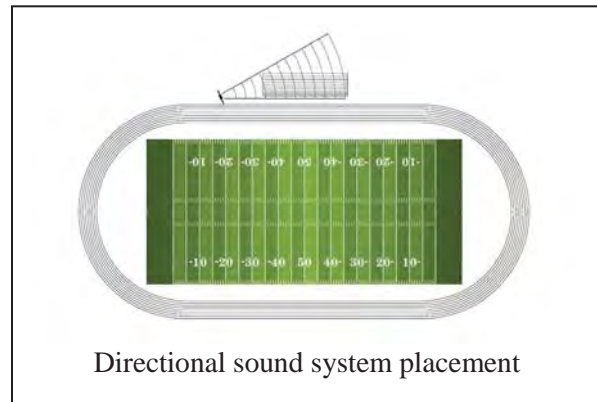
1. The Woodrow Street entrance will not be used for events in the complex.
2. Edgewood will distribute parking and circulation maps to all visiting schools stressing use of Edgewood College Drive for access and parking on-site.
3. The main entrance will feature a permanent large-scale parking & circulation map illustrating the location of on-site parking & access while discouraging parking within the neighborhood and detailing the parking restrictions on Monroe Street.
4. Parking attendants will be used on site to communicate and execute the parking & circulation plan, including posting signage along Monroe Street/Woodrow Street to direct traffic to Edgewood College Drive, and directing parking on-site.
5. The existing pedestrian entrance along Edgewood College Drive will be maintained as the only non-emergency point of access to the facility.



**Parking & Traffic Diagram**  
 1. 561 parking stalls  
 2. Edgewood Campus Drive Entrance  
 3. Woodrow Entrance (not used for field events)  
 4. Field Entrance

### Amplified Sound System

The amplified sound system for the facility will be an improvement over the current portable system utilized on the field. The proposed system is designed as a directional sound system placed adjacent to the seating and directed to the east, away from the closest neighbors and into the hill and adjoining campus. Amplified sound will not be directed onto the playing field. This placement and directional system will allow the sound to be focused onto the stands where desired with the attenuation resulting sound levels around 60 decibels at the adjoining streets.



Proposed amplified sound conditions:

1. Sound system will be utilized during games only (no practice use).
2. Music will not be allowed to be played through the PA system (excluding the national anthem and incidental pickup of music played by the pep band).
3. Sound levels will meet or exceed all applicable City of Madison Standards.

### Additional General Conditions & Commitments:

1. Lighting may only be used for high school sports. All non-high school events will occur during daytime hours.
2. Facility will not be rented out for events that require lighting.
3. Facility will not be used for concerts.
4. Additional landscape screening will be added to the Woodrow Street side of the track to further enhance the existing mature landscape.

## Exhibits:

Exhibit A:	Legal Description Property Data
Exhibit B:	Submittal Notification Letter
Exhibit C:	Lighting Details & Specifications

## Photo & Graphic Credits:

Page 3:	Edgewood High School
Page 4 Top	Mentzer, Martinelli/Edgewood High School
Middle	Mentzer, Martinelli/Edgewood High School
Lower	Grosenheider
Page 9:	Grosenheider
Page 10:	Grosenheider
Page 11:	Grosenheider
Page 12:	Grosenheider
Page 13:	Rettler Corporation
Page 14:	Madson
Page 15:	Musco Lighting

All other photos sourced by Vandewalle & Associates

Exhibit A:

Legal Description

Edgewood Condominium, Unit 1 as declared and recorded in Dane County Register of Deeds as Document #4790400.

Property Data

Address: 2219 Monroe Street  
Parcel Size: 19.97 acres  
PIN Number: 0709-272-0101-5



## Exhibit B: Submittal Notification Letter

**From:** Elliott, Michael <michael.elliott@edgewoodhs.org>  
**Sent:** Wednesday, August 15, 2018 11:58 AM  
**To:** Anne Palzkill; Susan VanderSanden; Michael Guns; Scott Flanagan; Jon standridge; Douglas Poland; Samip Kothari; DMNA President; Daryl Sherman; Thomas Huber; Tucker, Matthew; Parks, Timothy; Allen Arntsen; Brian Munson; Margaret Watson  
**Subject:** Master Plan Amendment

Edgewood High School will be requesting an amendment to the Adopted Master Plan to allow for improvements to the Goodman Athletic Complex, including expanded seating, storage, restrooms, amplified sound, and lighting. This request will follow the adopted modification process per the master plan and will be presented at a neighborhood meeting and public hearings. We anticipate beginning the formal review process in October with review before the Plan Commission and Common Council later this year or early 2019. We will contact the neighborhood associations with further details on the timing of the submittal, neighborhood meeting, and exact review dates prior to submitting.

We look forward to discussing the proposal with the neighborhood.

Michael Elliott  
President  
Edgewood High School of the Sacred Heart  
2219 Monroe St. Madison, WI 53711  
(608) 257-1023 x 103  
[edgewoodhs.org](http://edgewoodhs.org) | [facebook.com/EdgewoodHS](https://facebook.com/EdgewoodHS)

# Edgewood High School Of Sacred Heart SO

Madison,WI

## Lighting System

Pole / Fixture Summary						
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
F1-F2	80'	15'	2	TLC-BT-575	1.15 kW	A
		80'	8	TLC-LED-1150	9.20 kW	A
		50'	1	TLC-LED-1150	1.15 kW	A
F3-F4	80'	15'	2	TLC-BT-575	1.15 kW	A
		80'	8	TLC-LED-1150	9.20 kW	A
<b>4</b>			<b>42</b>		<b>43.70 kW</b>	

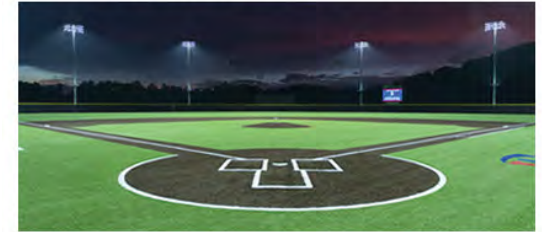
Circuit Summary			
Circuit	Description	Load	Fixture Qty
A	Football	43.7 kW	42

Fixture Type Summary							
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>81,000	>81,000	>81,000	8
TLC-LED-1150	LED 5700K - 75 CRI	1150W	121,000	>81,000	>81,000	>81,000	34

## Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Blanket Grid	Horizontal	6.25	0	47	0.00		A	42
Bleachers	Horizontal	14.2	11	20	1.77	1.29	A	42
Football	Horizontal Illuminance	32	26	45	1.75	1.23	A	42
Soccer	Horizontal Illuminance	32.6	26	46	1.81	1.25	A	42
Track	Horizontal Illuminance	8.76	1	18	29.34	8.76	A	42

## From Hometown to Professional



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.

### EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	F1-F2	80'	-	15'	TLC-BT-575	2	2	0
				50'	TLC-LED-1150	1	1	0
				80'	TLC-LED-1150	8	8	0
2	F3-F4	80'	-	15'	TLC-BT-575	2	2	0
				50'	TLC-LED-1150	1	1	0
				80'	TLC-LED-1150	8	8	0
4	TOTALS					42	42	0

Edgewood High School Of Sacred Heart SO  
Madison,WI

### GRID SUMMARY

**Name:** Football  
**Size:** 360' x 160'  
**Spacing:** 30.0' x 30.0'  
**Height:** 3.0' above grade

### ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

Entire Grid	
<b>Guaranteed Average:</b>	<b>30</b>
Scan Average:	32.01
Maximum:	45
Minimum:	26
Avg / Min:	1.25
<b>Guaranteed Max / Min:</b>	<b>2.5</b>
Max / Min:	1.75
UG (adjacent pts):	1.31
CU:	0.46
No. of Points:	72

### LUMINAIRE INFORMATION

**Color / CRI:** 5700K - 75 CRI  
**Luminaire Output:** 52,000 / 121,000 lumens  
**No. of Luminaires:** 42  
**Total Load:** 43.7 kW

Luminaire Type	Lumen Maintenance		
	L90 hrs	L80 hrs	L70 hrs
TLC-BT-575	>81,000	>81,000	>81,000
TLC-LED-1150	>81,000	>81,000	>81,000

Reported per TM-21-11. See luminaire datasheet for details.

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

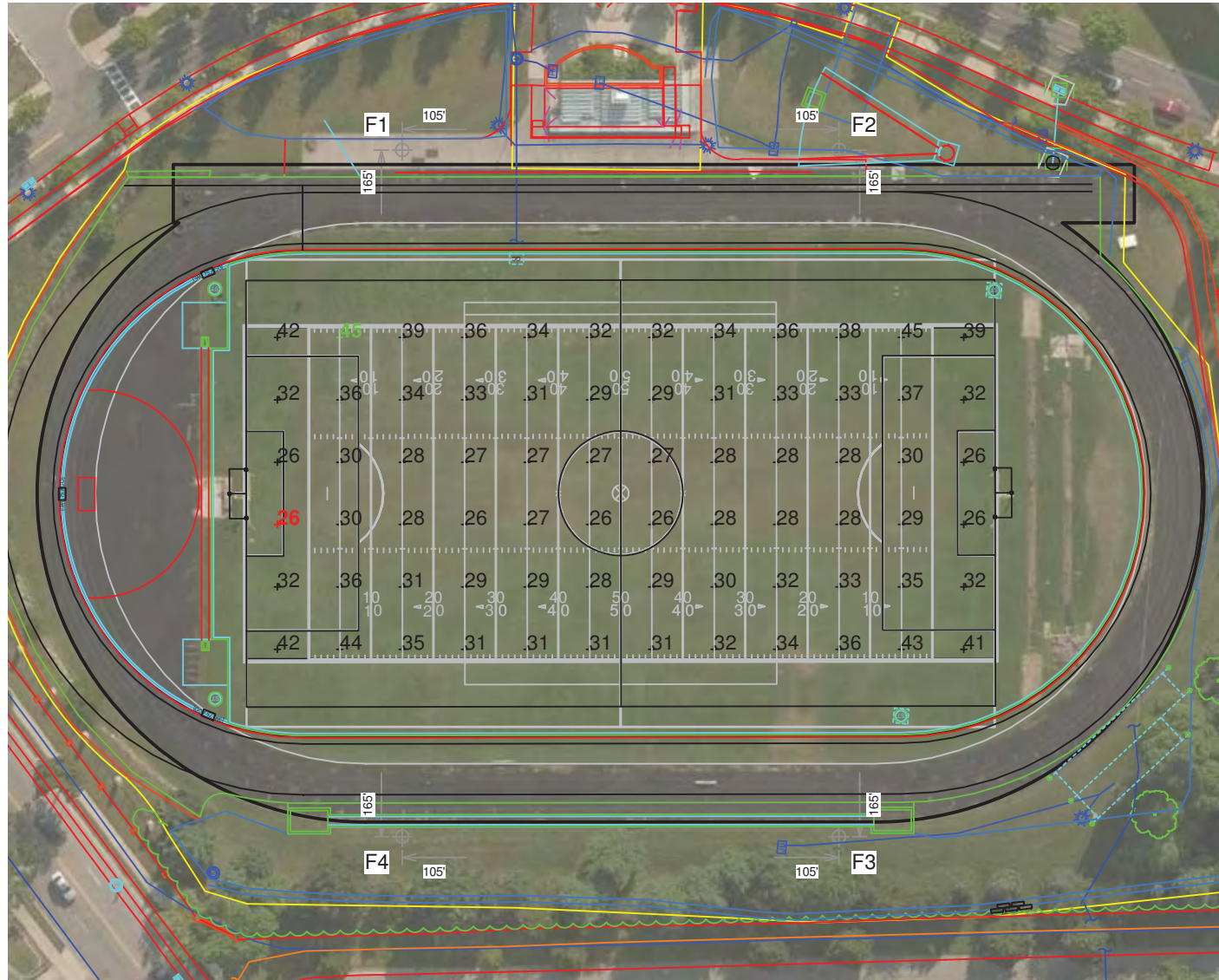
**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

### EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	F1-F2	80'	-	15'	TLC-BT-575	2	2	0
				50'	TLC-LED-1150	1	1	0
				80'	TLC-LED-1150	8	8	0
2	F3-F4	80'	-	15'	TLC-BT-575	2	2	0
				80'	TLC-LED-1150	8	8	0
4	TOTALS					42	42	0

### Edgewood High School Of Sacred Heart SO Madison,WI

#### GRID SUMMARY

**Name:** Track  
**Size:** Irregular  
**Spacing:** 30.0' x 30.0'  
**Height:** 3.0' above grade

#### ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

Entire Grid

**Scan Average:** 8.76  
 Maximum: 18  
 Minimum: 1  
 Avg / Min: 14.47  
**Max / Min:** 29.34  
 UG (adjacent pts): 0.00  
 CU: 0.08  
 No. of Points: 47

LUMINAIRE INFORMATION

**Color / CRI:** 5700K - 75 CRI  
**Luminaire Output:** 52,000 / 121,000 lumens  
**No. of Luminaires:** 42  
**Total Load:** 43.7 kW

Lumen Maintenance

Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-BT-575	>81,000	>81,000	>81,000
TLC-LED-1150	>81,000	>81,000	>81,000

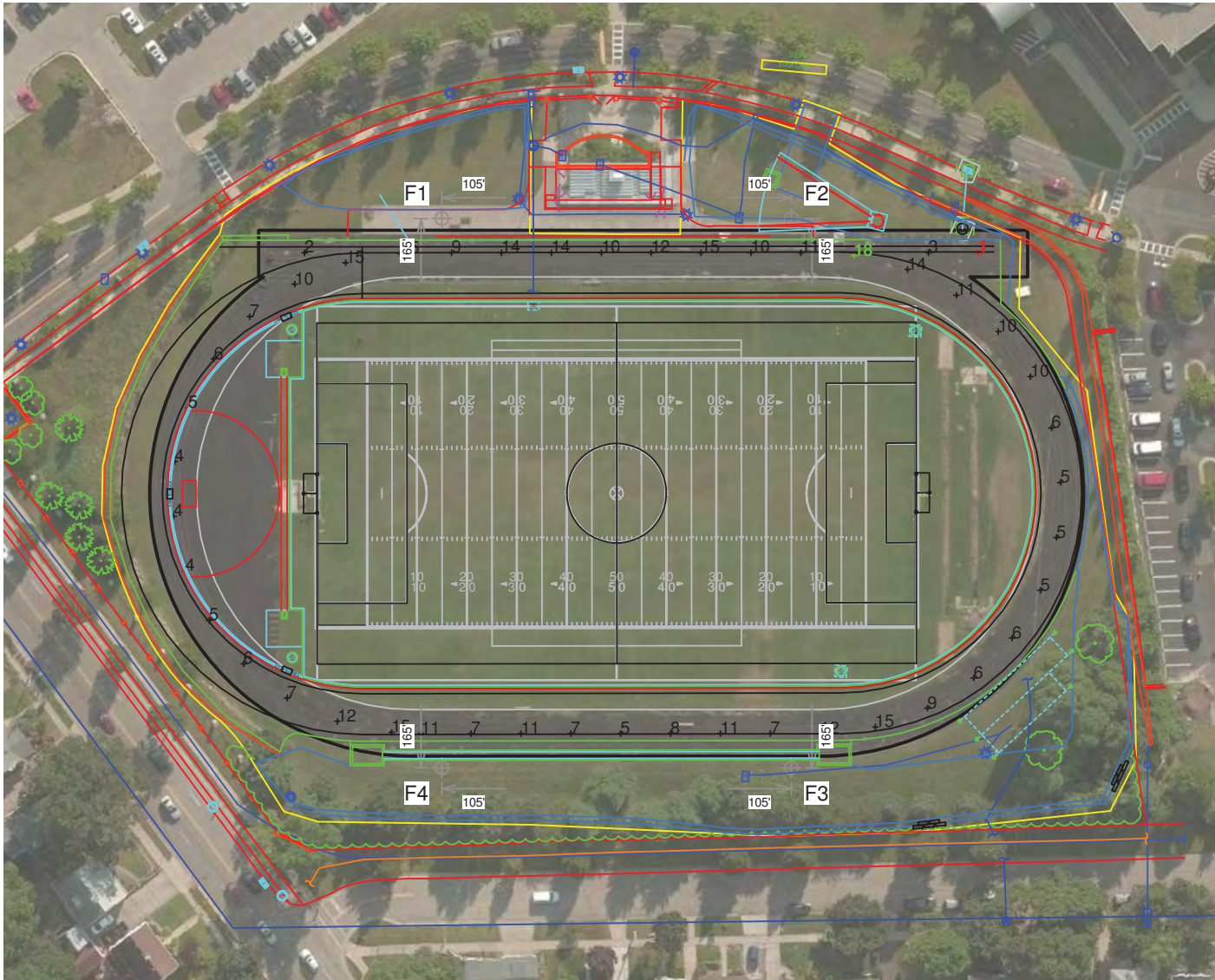
Reported per TM-21-11. See luminaire datasheet for details.

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



SCALE IN FEET 1 : 100



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



**We Make It Happen.**

### EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	F1-F2	80'	-	15'	TLC-BT-575	2	2	0
				50'	TLC-LED-1150	1	1	0
				80'	TLC-LED-1150	8	8	0
2	F3-F4	80'	-	15'	TLC-BT-575	2	2	0
				50'	TLC-LED-1150	1	1	0
				80'	TLC-LED-1150	8	8	0
4	TOTALS					42	42	0

Edgewood High School Of Sacred Heart SO  
Madison,WI

### GRID SUMMARY

**Name:** Soccer  
**Size:** 360' x 225'  
**Spacing:** 30.0' x 30.0'  
**Height:** 3.0' above grade

### ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

Entire Grid	
<b>Guaranteed Average:</b>	<b>30</b>
Scan Average:	32.55
Maximum:	46
Minimum:	26
Avg / Min:	1.27
<b>Guaranteed Max / Min:</b>	<b>2.5</b>
Max / Min:	1.81
UG (adjacent pts):	1.38
CU:	0.63
No. of Points:	96

### LUMINAIRE INFORMATION

**Color / CRI:** 5700K - 75 CRI  
**Luminaire Output:** 52,000 / 121,000 lumens  
**No. of Luminaires:** 42  
**Total Load:** 43.7 kW

Luminaire Type	Lumen Maintenance		
	L90 hrs	L80 hrs	L70 hrs
TLC-BT-575	>81,000	>81,000	>81,000
TLC-LED-1150	>81,000	>81,000	>81,000

Reported per TM-21-11. See luminaire datasheet for details.

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

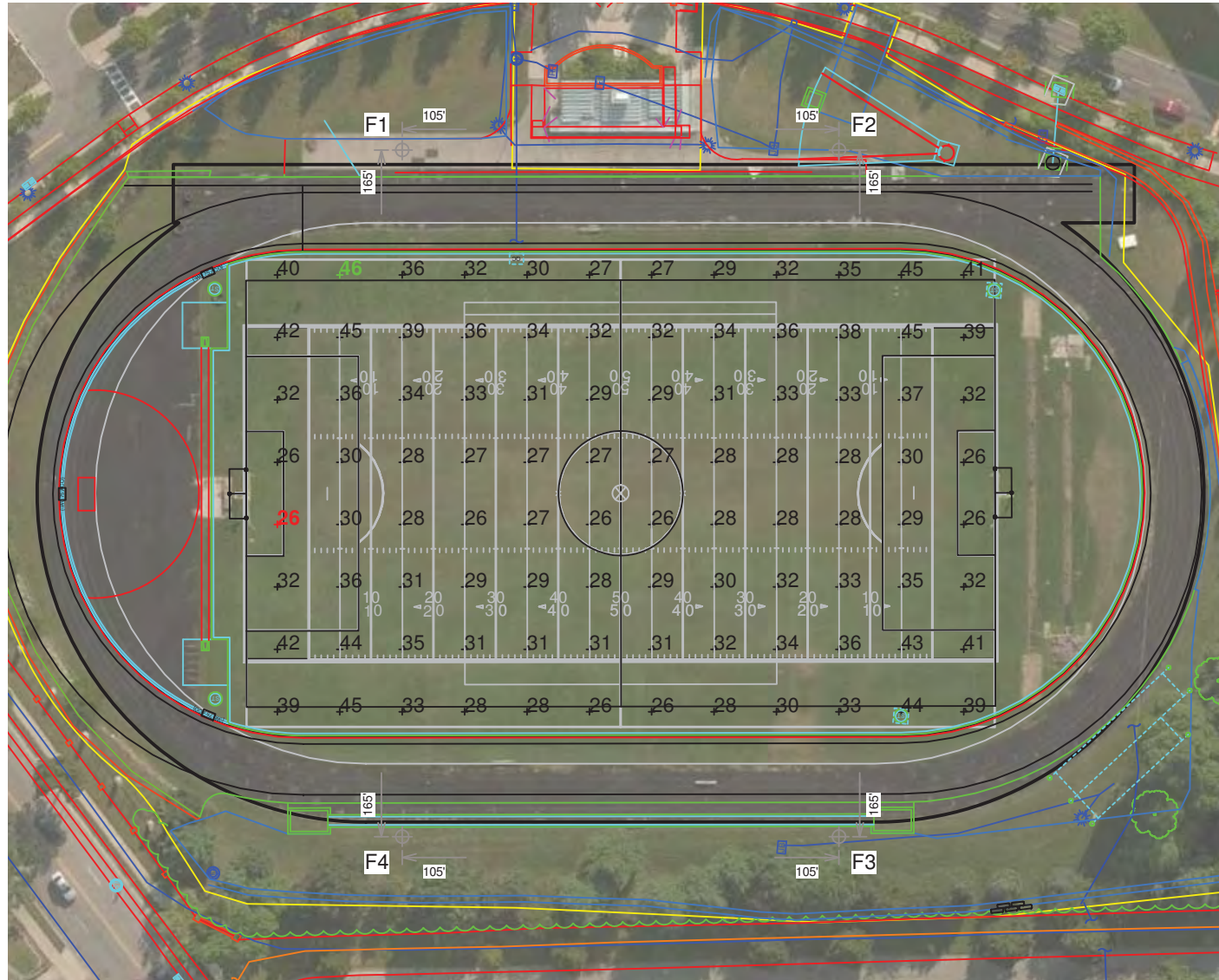
**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.



SCALE IN FEET 1 : 80



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

### EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	F1-F2	80'	-	15'	TLC-BT-575	2	2	0
				50'	TLC-LED-1150	1	1	0
				80'	TLC-LED-1150	8	8	0
2	F3-F4	80'	-	15'	TLC-BT-575	2	2	0
				80'	TLC-LED-1150	8	8	0
4	TOTALS					42	42	0

Edgewood High School Of Sacred Heart SO  
Madison,WI

### GRID SUMMARY

**Name:** Bleachers  
**Size:** 360' x 225'  
**Spacing:** 10.0' x 10.0'  
**Height:** 3.0' above grade

### ILLUMINATION SUMMARY

#### MAINTAINED HORIZONTAL FOOTCANDLES

Entire Grid

**Scan Average:** 14.18

Maximum: 20

Minimum: 11

No. of Points: 24

#### LUMINAIRE INFORMATION

Color / CRI: 5700K - 75 CRI

Luminaire Output: 52,000 / 121,000 lumens

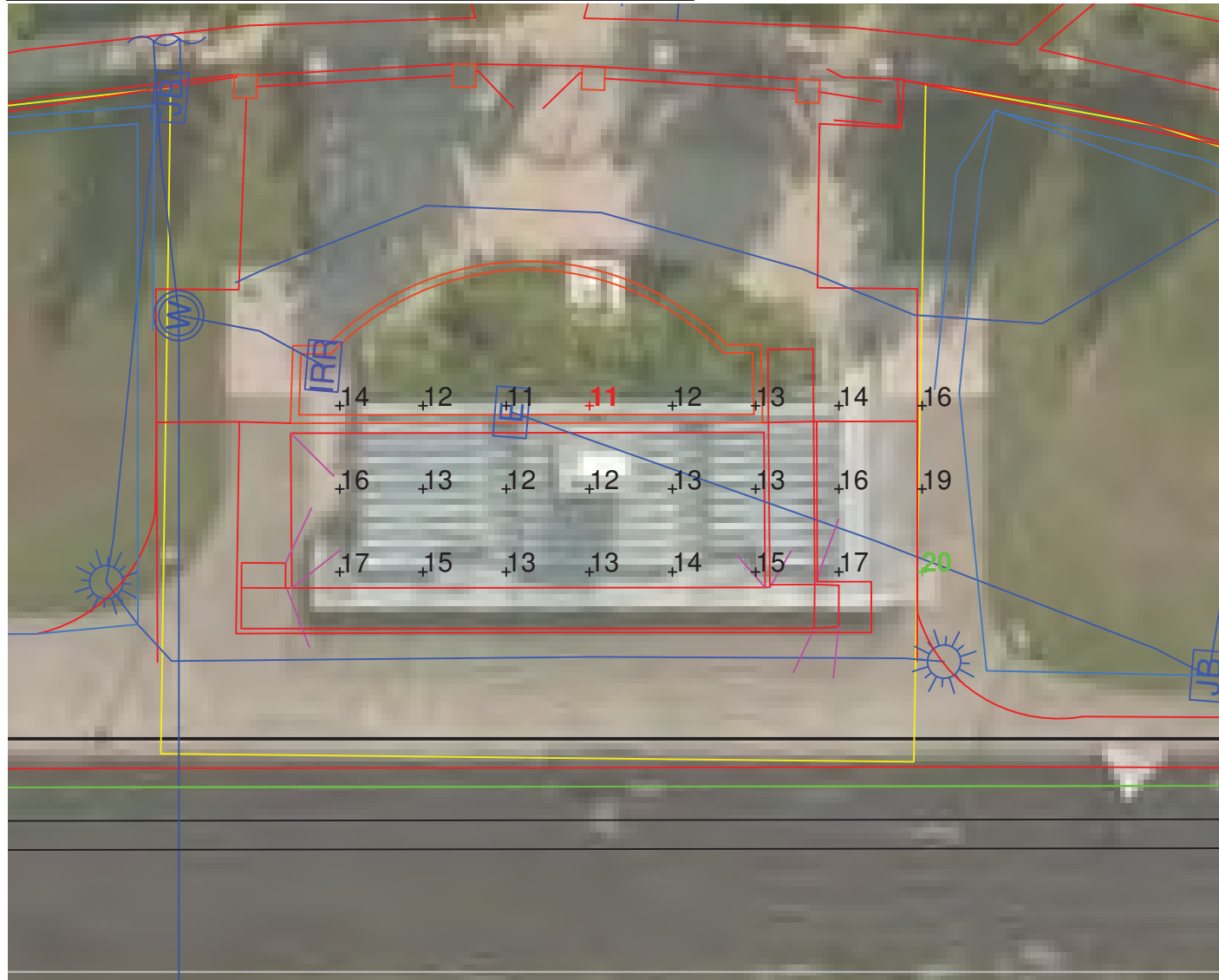
**No. of Luminaires:** 42

Total Load: 43.7 kW

#### Lumen Maintenance

Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-BT-575	>81,000	>81,000	>81,000
TLC-LED-1150	>81,000	>81,000	>81,000

Reported per TM-21-11. See luminaire datasheet for details.



**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume  $\pm$  3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

### EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	F1-F2	80'	-	15'	TLC-BT-575	2	2	0
				50'	TLC-LED-1150	1	1	0
				80'	TLC-LED-1150	8	8	0
2	F3-F4	80'	-	15'	TLC-BT-575	2	2	0
				50'	TLC-LED-1150	1	1	0
				80'	TLC-LED-1150	8	8	0
4	TOTALS					42	42	0

### Edgewood High School Of Sacred Heart SO Madison,WI

#### GRID SUMMARY

**Name:** Blanket Grid  
**Size:** 360' x 225'  
**Spacing:** 30.0' x 30.0'  
**Height:** 3.0' above grade

#### ILLUMINATION SUMMARY

##### MAINTAINED HORIZONTAL FOOTCANDLES

Entire Grid

**Scan Average:** 6.25

Maximum: 47

Minimum: 0

No. of Points: 713

##### LUMINAIRE INFORMATION

Color / CRI: 5700K - 75 CRI

Luminaire Output: 52,000 / 121,000 lumens

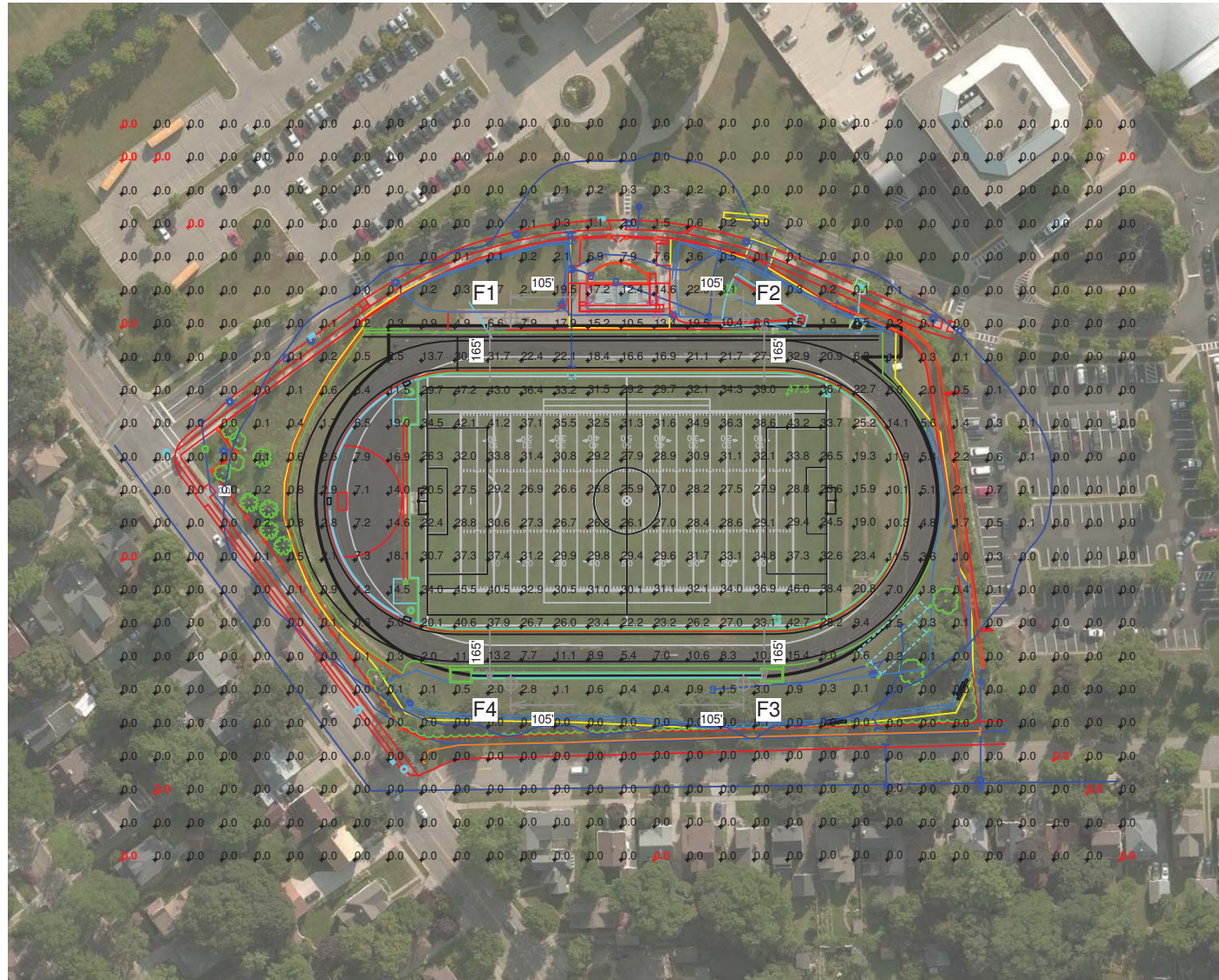
**No. of Luminaires:** 42

Total Load: 43.7 kW

##### Lumen Maintenance

Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-BT-575	>81,000	>81,000	>81,000
TLC-LED-1150	>81,000	>81,000	>81,000

Reported per TM-21-11. See luminaire datasheet for details.



**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



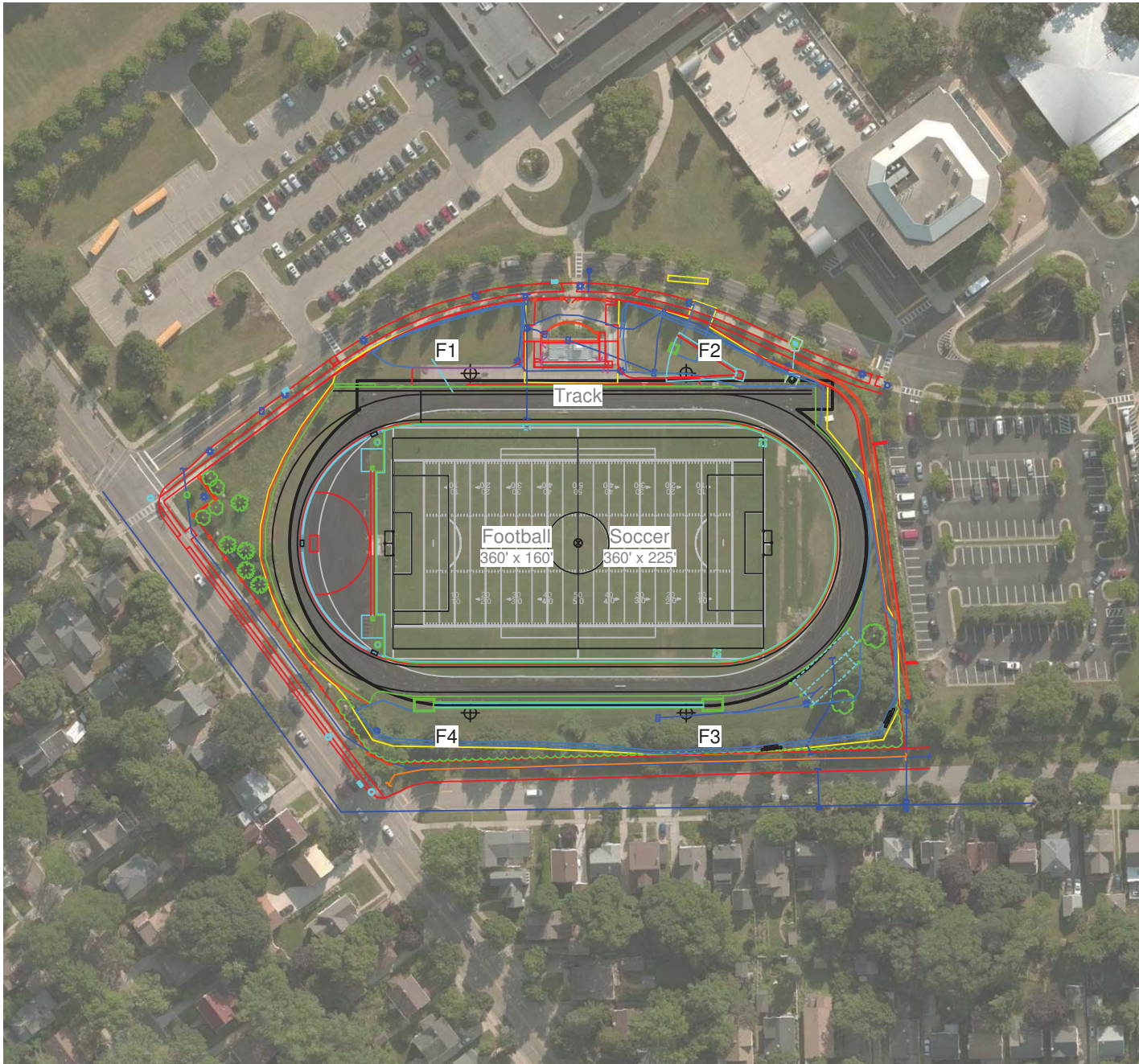
**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

**Edgewood High School Of Sacred Heart SO  
Madison,WI**



**EQUIPMENT LAYOUT**

**INCLUDES:**

- Football
- Soccer
- Track

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

**EQUIPMENT LIST FOR AREAS SHOWN**

QTY	LOCATION	Pole		Luminaires		QTY / POLE
		SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	
2	F1-F2	80'	-	15'	TLC-BT-575	2
				50'	TLC-LED-1150	1
				80'	TLC-LED-1150	8
2	F3-F4	80'	-	15'	TLC-BT-575	2
				50'	TLC-LED-1150	8
				80'	TLC-LED-1150	8
4	TOTALS					42

**SINGLE LUMINAIRE AMPERAGE DRAW CHART**

Ballast Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)						
	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC-BT-575	3.2	3.0	2.8	2.4	1.9	1.7	1.4
TLC-LED-1150	6.8	6.5	5.9	5.1	4.1	3.7	3.0



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.



**GLARE IMPACT**

Summary

Map indicates the maximum candela an observer would see when facing the brightest light source from any direction.

A well-designed lighting system controls light to provide maximum useful on-field illumination with minimal destructive off-site glare.

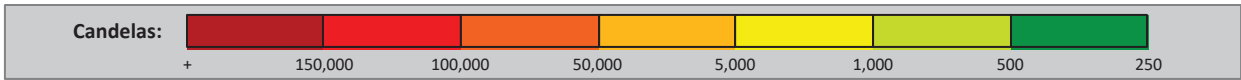
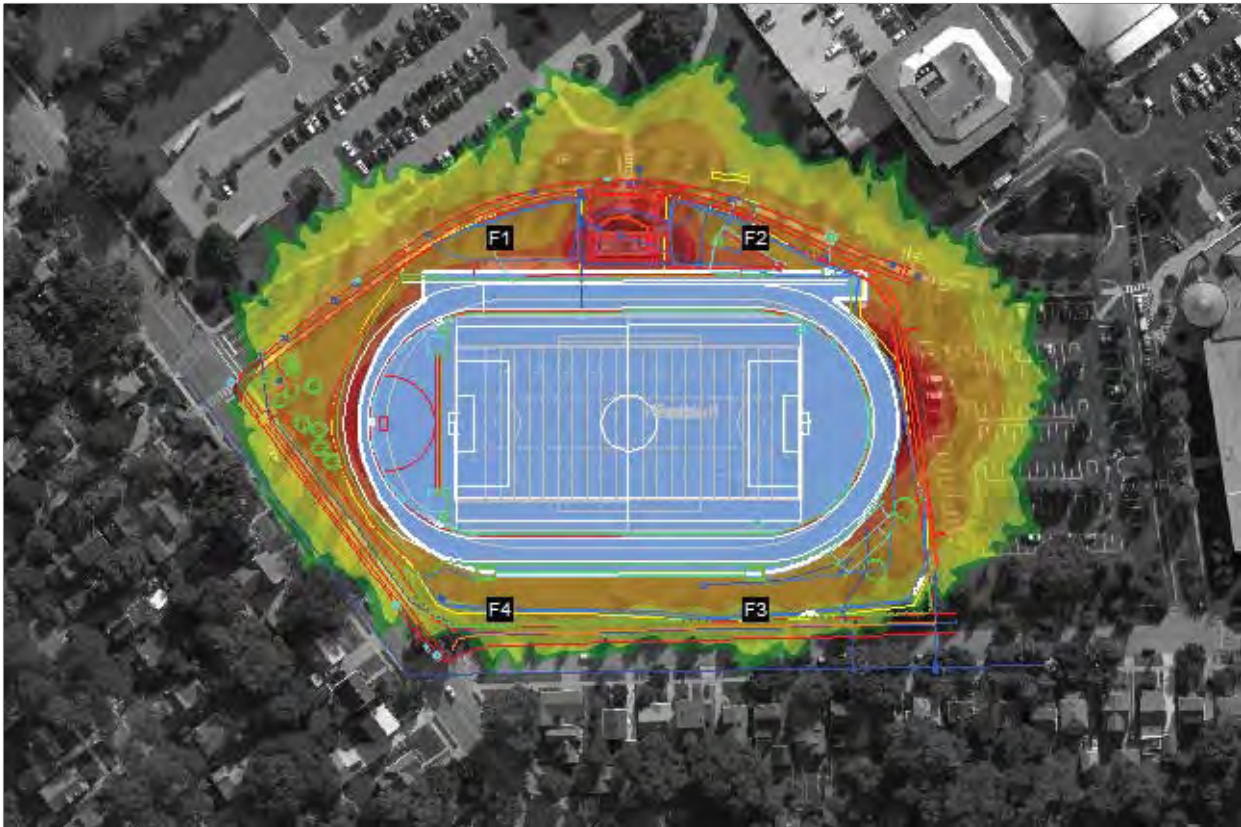
**GLARE**

Candela Levels

**High Glare: 150,000 or more candela**  
Should only occur on or very near the lit area where the light source is in direct view. Care must be taken to minimize high glare zones.

**Significant Glare: 25,000 to 75,000 candela**  
Equivalent to high beam headlights of a car.

**Minimal to No Glare: 500 or less candela**  
Equivalent to 100W incandescent light bulb.



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.



# City of Madison

## ELECTRICAL

### Permit

#### Building Inspection Division

126 South Hamilton St  
P.O. Box 2984  
Madison WI 53701-2984  
Phone (608)266-4551  
Fax (608)266-6377

Property located at: <b>201 S GAMMON RD</b>	Permit date: <b>08/13/2018</b>	Permit number: <b>BLDELE-2018-11184</b>
Owner name <b>MADISON METRO SCHOOL DIST</b>	Owner mailing address <b>545 W DAYTON ST MADISON, WI 53703</b>	

Contractor Name: <b>FORWARD ELECTRIC INC</b>	License holder number <b>252204</b>
Contractor Mailing address <b>6909 RAYWOOD RD MADISON, WI 53713</b>	Phone <b>(608) 221-1945</b>  <b>jennifer@forwardelectric.com</b>

This permit is issued for execution of the work indicated. It is hereby agreed that all work will be installed in accordance with all City of Madison Ordinances and department rules relating to such work.

TYPE OF BUILDING: **COMMERCIAL**  
PROJECT DESC: **NEW LIGHTING FOR FOOTBALL AND BASEBALL FIELDS**  
NATURE OF JOB: **REPAIR/ALTERATION**

#### EXISTING BUILDING

(Number of Openings Added) (Includes: Convenience Outlets, Switches, Fixture, Fixed Appliances, etc.)

Minimum fee \$15.00

\$2.00 per opening for the first 20 openings, plus

\$1.50 per opening for the additional 21-40 openings, plus

\$1.00 per opening for the additional 41-99 openings, plus

\$0.50 per opening for all openings over 100.

#### FEES:

Item Description	Units	Fee
Number of Openings Added or Moved	15	30.00
TOTAL INSPECTION FEES:		30.00

#### Inspector Assigned

James Ruetten  
608-266-4554  
jruetten@cityofmadison.com

ElectricalPermit\_20180813\_133020.pdf - (Read-Only)

Home Annotations Edit View Collaboration

Check Out | Check In | Discard Check Out | Check In/Out

Download Properties | Edit Properties | Copy | Manage | Bookmarks

Attachment Link | Email

Related Documents | Document Set Explorer | Linked Documents | Search Document | Find Document



# City of Madison

## ELECTRICAL

### Permit

**Building Inspection Division**  
 126 South Hamilton St  
 P.O. Box 2984  
 Madison WI 53701-2984  
 Phone (608)266-4551  
 Fax (608)266-6377

Property located at: <b>201 S GAMMON RD</b>	Permit date: <b>08/13/2018</b>	Permit number: <b>BLDELE-2018-11184</b>
Owner name <b>MADISON METRO SCHOOL DIST</b>	Owner mailing address <b>545 W DAYTON ST MADISON, WI 53703</b>	

Contractor Name: <b>FORWARD ELECTRIC INC</b>	License holder number <b>252204</b>
Contractor Mailing address <b>6909 RAYWOOD RD</b>	Phone <b>(608) 221-1945</b>



# City of Madison Site Plan Verification

**PROJECT:** LNDSPP-2018-00101

**Address:** 201 S Gammon RD

**Current Revision #:** 0

**Submitted by:** Forward Electric

**Contact:** Jenn Luhman  
(608) 221-1945  
jennifer@forwardelectric.com

**Project Type:** Permitted Use Site Plan Review

**Description:** Updating lighting for Memorial High School's football and baseball fields

**Status:** Approved

**Revision History:** 0

Review	Status	Reviewer	Reviewed
Lighting Review	APPROVED	Steve Rewey	Aug 2 2018
Urban Design Commission Review	APPROVED	Janine Glaeser	Aug 6 2018
Zoning Review	APPROVED	Christina Thiele	Jul 31 2018

## URBAN DESIGN COMMISSION

**Note** **Comment Date:** 08/06/2018

Building Plan review team to confirm no light trespass and full light cut-off fixtures.

## ZONING

**Supplement Accepted** **Comment Date:** 07/30/2018

Submit \$50 site plan review fee. Checks are made out to City of Madison.

**Supplement Accepted** **Comment Date:** 07/30/2018

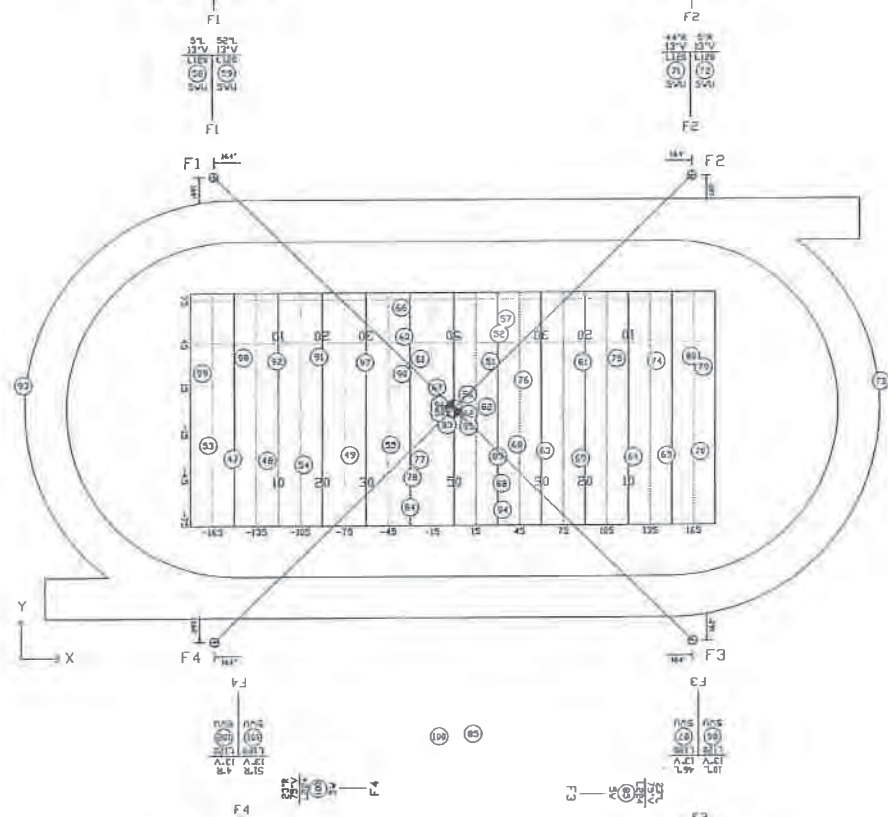
Per Section 28.186(4)(b), the property owner or operator is required to bring the property into compliance with all elements of the approved site plans by the date established by the Zoning Administrator as part of the site and building plan approval. Work with Zoning staff to establish a final site compliance date.

\*\*Applicant provided the date 9/1/18\*\*



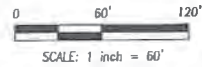
47	57	67	77	87	97
124	134	144	154	164	174
184	194	204	214	224	234
244	254	264	274	284	294
304	314	324	334	344	354
364	374	384	394	404	414
424	434	444	454	464	474
484	494	504	514	524	534
544	554	564	574	584	594
604	614	624	634	644	654
664	674	684	694	704	714
724	734	744	754	764	774
784	794	804	814	824	834
844	854	864	874	884	894
904	914	924	934	944	954
964	974	984	994	1004	1014

37	47	57	67	77	87
124	134	144	154	164	174
184	194	204	214	224	234
244	254	264	274	284	294
304	314	324	334	344	354
364	374	384	394	404	414
424	434	444	454	464	474
484	494	504	514	524	534
544	554	564	574	584	594
604	614	624	634	644	654
664	674	684	694	704	714
724	734	744	754	764	774
784	794	804	814	824	834
844	854	864	874	884	894
904	914	924	934	944	954
964	974	984	994	1004	1014



54	64	74	84	94	104
124	134	144	154	164	174
184	194	204	214	224	234
244	254	264	274	284	294
304	314	324	334	344	354
364	374	384	394	404	414
424	434	444	454	464	474
484	494	504	514	524	534
544	554	564	574	584	594
604	614	624	634	644	654
664	674	684	694	704	714
724	734	744	754	764	774
784	794	804	814	824	834
844	854	864	874	884	894
904	914	924	934	944	954
964	974	984	994	1004	1014

37	47	57	67	77	87
124	134	144	154	164	174
184	194	204	214	224	234
244	254	264	274	284	294
304	314	324	334	344	354
364	374	384	394	404	414
424	434	444	454	464	474
484	494	504	514	524	534
544	554	564	574	584	594
604	614	624	634	644	654
664	674	684	694	704	714
724	734	744	754	764	774
784	794	804	814	824	834
844	854	864	874	884	894
904	914	924	934	944	954
964	974	984	994	1004	1014



Wind Design Criteria: IBC STD 2009 90MPH Exposure C

Lighting Equipment											
PROJECT NO:		50 Fc		DRAWING NO:		163423-p-FB		DATE:		22/MAY/18	
SHEET NO.:		2/1		SHEET TOTAL:		406724					
POLE				LUMINAIRES				ELECTRICAL			
POLE QUANTITY	POLE LOCATION	MOUNTING HEIGHT	POLE SIZE	ELEV.	LUMINAIRE TYPE	LUMINAIRE PER POLE	POLE TOTAL	CONDUIT SIZE	CONDUIT TYPE	CONDUIT SIZE	CONDUIT TYPE
1	F1	15'	806	0'	TLC-BT-575	2	2	4.15	1.15		
		80'			TLC-LED-1150	11	11	12.65	12.65		
1	F2	15'	806	0'	TLC-BT-575	2	2	4.15	1.15		
		80'			TLC-LED-1150	11	11	12.65	12.65		
1	F3	15'	806	0'	TLC-BT-575	2	2	4.15	1.15		
		50'			TLC-LED-400	1	1	0.40	0.40		
		80'			TLC-LED-1150	12	12	13.00	13.00		
1	F4	15'	806	0'	TLC-BT-575	2	2	4.15	1.15		
		50'			TLC-LED-400	1	1	0.40	0.40		
		80'			TLC-LED-1150	12	12	13.00	13.00		
TOTALS						56	56	58.30			

Overcurrent devices and conductors MUST be sized using the Manufacturer's rated ampere draw per luminaire (kVA). Using the kW rating can result in undersized calculations. Refer to Musco's Control System Summary or Specification Chart (located below) for manufacturer's ampere draw.

DRIVER SPECIFICATIONS		VOLTAGE: 480v			3 PHASE		
TLC-LED-1150 MAX WATT	208	220	230	240	277	347	380
Per LED Luminaire	6.83	5.46	6.18	5.92	5.13	4.10	3.74
	3.56	3.43	2.96				

DRIVER SPECIFICATIONS		VOLTAGE: 480v			3 PHASE		
TLC-LED-575 MAX WATT	208	220	230	240	277	347	380
Per LED Luminaire	3.17	3.00	2.87	2.75	2.33	1.96	1.74
	1.65	1.59	1.38				

DRIVER SPECIFICATIONS		VOLTAGE: 480v			3 PHASE		
TLC-LED-400 MAX WATT	208	220	230	240	277	347	380
Per LED Luminaire	2.31	2.18	2.09	2.00	1.73	1.39	1.27
	1.20	1.18	1.10				

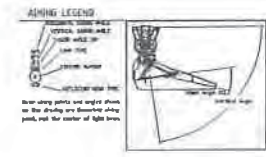
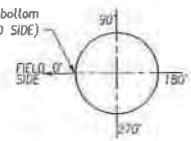
Field Name	Pole ID	Laser Aiming Points	
		X	Y
Football	F1 Pole	0	0
	F2 Pole	0	0
	F3 Pole	0	0
	F4 Pole	0	0

If you have questions pertaining to this document, please contact CONNOR RAMSTEAD, your project engineer. Phone: 800-825-6025 ext: 2153# DATE: 05/22/18

The following poles ECE's will have spare fuses: F3

This symbol represents the 0,0 point for locating poles. This field uses a 30' x 30' grid. FIELD ID: Football

Align weld marks located at bottom of pole sections @ 0'(FIELD SIDE)



Madison Memorial HS  
Madison, WI  
Field Aiming Diagram

CORPORATE OFFICE:  
P.O. Box 808  
100 1st Avenue West  
Musco Lighting  
800/825-6020



REVISIONS:
DATE:
BY:
DATE:

DWG NUMBER: 163423  
DRAWN BY: C. RAMSTEAD  
PROJECT ENGINEER: C. RAMSTEAD  
REPRESENTING: G. SMIDT  
SCALE: 1 = 60  
DATE: 05/22/18  
DRAWING NUMBER: 163423A1  
1 of 1 SHEETS

Information contained herein is the intellectual property of Musco Lighting, LLC and/or its parent corporation, affiliates, successors and assigns. Reproduction, distribution, or use of this information other than as stated, without the prior written consent of Musco Lighting, LLC is prohibited.

# Madison Memorial High School

Madison, WI

## Lighting System

Pole / Fixture Summary						
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
F1-F2	80'	15'	2	TLC-BT-575	1.15 kW	A
		80'	11	TLC-LED-1150	12.65 kW	A
F3-F4	80'	15'	2	TLC-BT-575	1.15 kW	A
		80'	12	TLC-LED-1150	13.80 kW	A
		50'	1	TLC-LED-400	0.40 kW	A
<b>4</b>			<b>56</b>		<b>58.30 kW</b>	

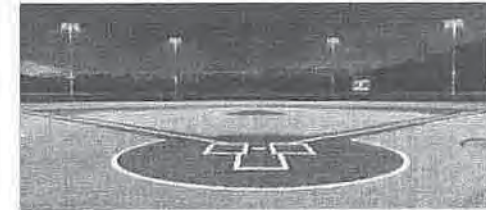
Circuit Summary			
Circuit	Description	Load	Fixture Qty
A	Football	58.3 kW	56

Fixture Type Summary							
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1150	LED 5700K - 75 CRI	1150W	121,000	>63,500	>63,500	>63,500	46
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>63,500	>63,500	>63,500	8
TLC-LED-400	LED 5700K - 75 CRI	400W	38,600	>63,500	>63,500	>63,500	2

## Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Bleachers	Horizontal	4.60	0	14	62.20		A	56
Football	Horizontal Illuminance	50.8	41	62	1.50	1.24	A	56
Soccer	Horizontal Illuminance	51	41	63	1.56	1.24	A	56
Track	Horizontal Illuminance	16.3	0	44	205.30		A	56

From Hometown to Professional



**We Make It Happen.**

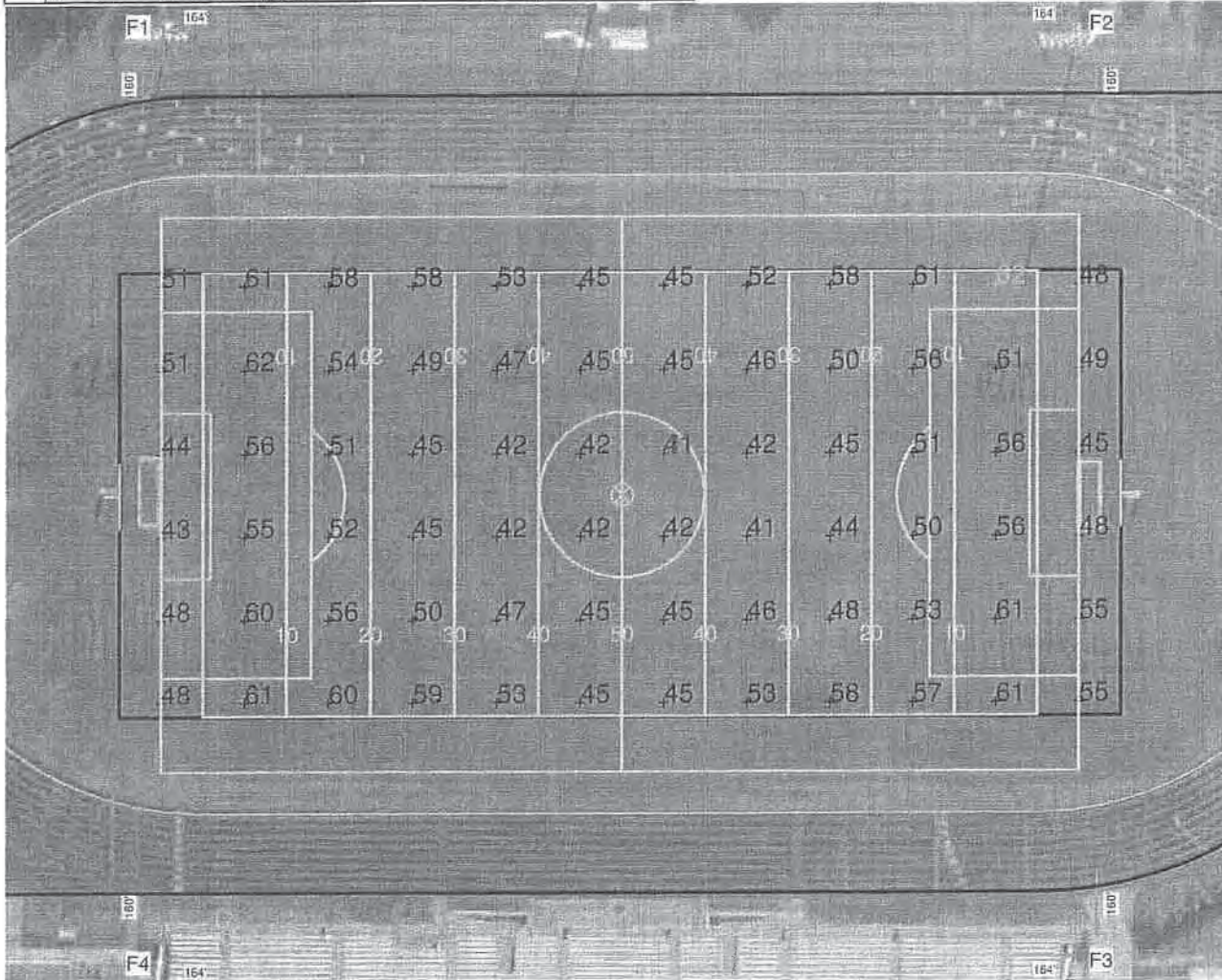
Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.

ENGINEERED DESIGN By: Connor Ramstead • File #163423-p-FB • 23-May-18

**PROJECT SUMMARY**

**EQUIPMENT LIST FOR AREAS SHOWN**

Pole			Luminaires					
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	F1-F2	80'		15'	TLC-BT-575	2	2	0
				80'	TLC-LED-1150	11	11	0
2	F3-F4	80'		15'	TLC-BT-575	2	2	0
				50'	TLC-LED-400	1	1	0
				80'	TLC-LED-1150	12	12	0
4	TOTALS:					56	56	0



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

ENGINEERED DESIGN By: Connor Ramstead • File #163423-p-FB • 23-May-18

**Madison Memorial High School**

Madison, WI

GRID SUMMARY	
Name:	Football
Size:	360' x 160'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY			
MAINTAINED HORIZONTAL FOOTCANDLES			
Entire Grid			
Guaranteed Average:	50		
Scan Average:	50.77		
Maximum:	62		
Minimum:	41		
Avg / Min:	1.23		
Guaranteed Max / Min:	2		
Max / Min:	1.50		
UG (adjacent pts):	1.29		
CU:	0.54		
No. of Points:	72		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	121,000 / 52,000 / 38,600 lumens		
No. of Luminaires:	56		
Total Load:	58.3 kW		
Luminaire Interference			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1150	>63,500	>63,500	>63,500
TLC-BT-575	>63,500	>63,500	>63,500
TLC-LED-400	>63,500	>63,500	>63,500

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.

**ILLUMINATION SUMMARY**

# Madison Memorial High School

Madison, WI

## GRID SUMMARY

Name: Soccer  
 Size: 330' x 200'  
 Spacing: 30.0' x 30.0'  
 Height: 3.0' above grade

## ILLUMINATION SUMMARY

### MAINTAINED HORIZONTAL FOOTCANDLES

Entire Grid  
 Guaranteed Average: 50  
 Scan Average: 50.99  
 Maximum: 63  
 Minimum: 41  
 Avg / Min: 1.25  
 Guaranteed Max / Min: 2  
 Max / Min: 1.56  
 UG (adjacent pts): 1.33  
 CU: 0.64  
 No. of Points: 84

### LUMINAIRE INFORMATION

Color / CRI: 5700K - 75 CRI  
 Luminaire Output: 121,000 / 52,000 / 38,600 lumens  
 No. of Luminaires: 56  
 Total Load: 58.3 kW

Luminaire Type	Lumens Maintenance		
	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1150	>63,500	>63,500	>63,500
TLC-BT-575	>63,500	>63,500	>63,500
TLC-LED-400	>63,500	>63,500	>63,500

Reported per TM-21-11 See luminaire datasheet for details

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

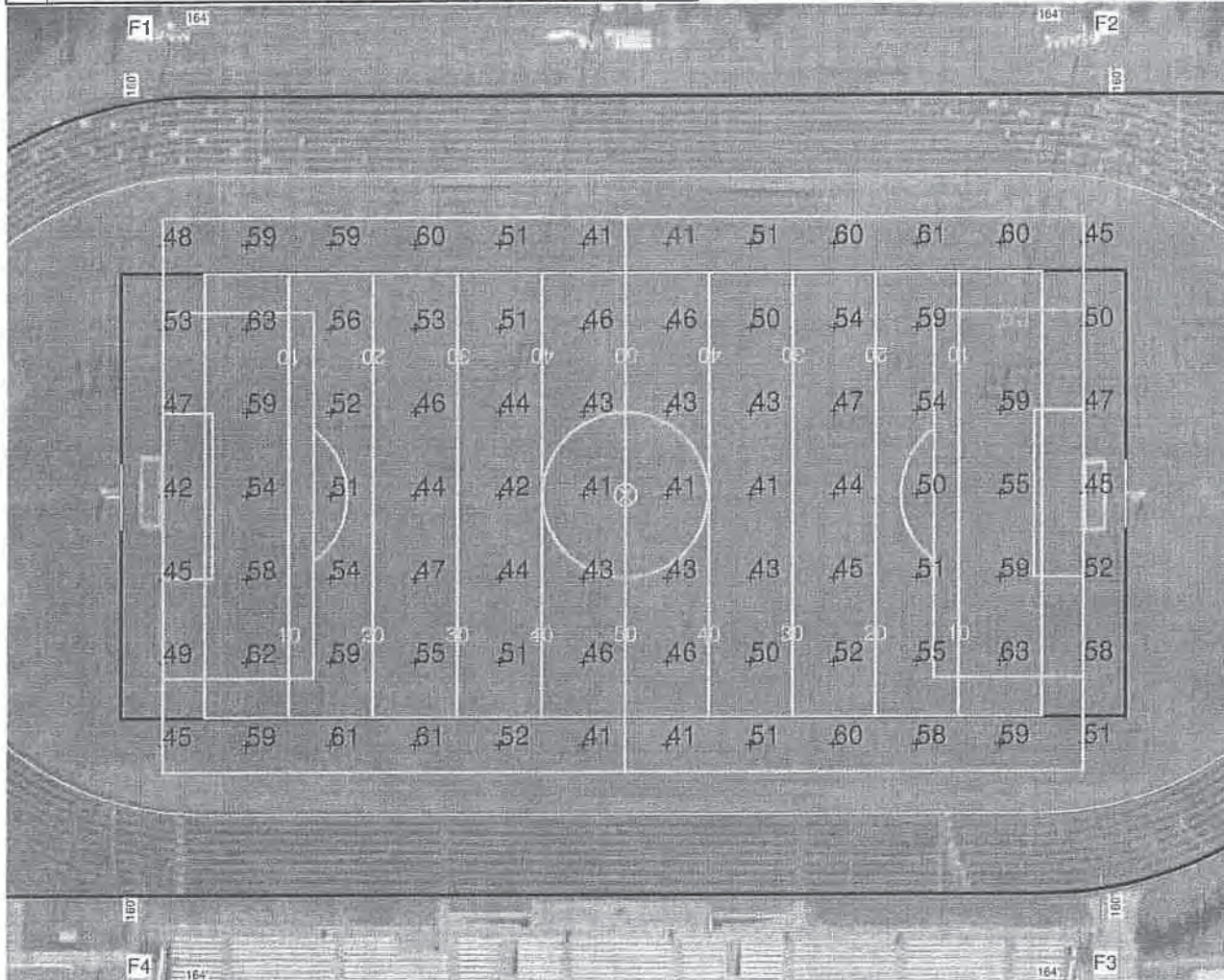


**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC ©1981, 2018 Musco Sports Lighting, LLC

## EQUIPMENT LIST FOR AREAS SHOWN

QTY	LOCATION	Pole		Luminaires				
		SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	F1-F2	80'		15'	TLC-BT-575	2	2	0
				80'	TLC-LED-1150	11	11	0
2	F3-F4	80'		15'	TLC-BT-575	2	2	0
				50'	TLC-LED-400	1	1	0
				80'	TLC-LED-1150	12	12	0
4	TOTALS					56	56	0



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



# Madison Memorial High School

Madison, WI

GRID SUMMARY	
Name:	Track
Size:	Irregular
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY			
MAINTAINED HORIZONTAL FOOTCANDLES			
Entire Grid			
Scan Average:	16.34		
Maximum:	44		
Minimum:	0		
Avg / Min:	76.92		
Max / Min:	205.30		
UG (adjacent pts):	0.00		
CU:	0.12		
No. of Points:	50		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	121,000 / 52,000 / 38,600 lumens		
No. of Luminaires:	56		
Total Load:	58.3 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1150	>63,500	>63,500	>63,500
TLC-BT-575	>63,500	>63,500	>63,500
TLC-LED-400	>63,500	>63,500	>63,500

Reported per FM-21-11. See luminaire datasheet for details.

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

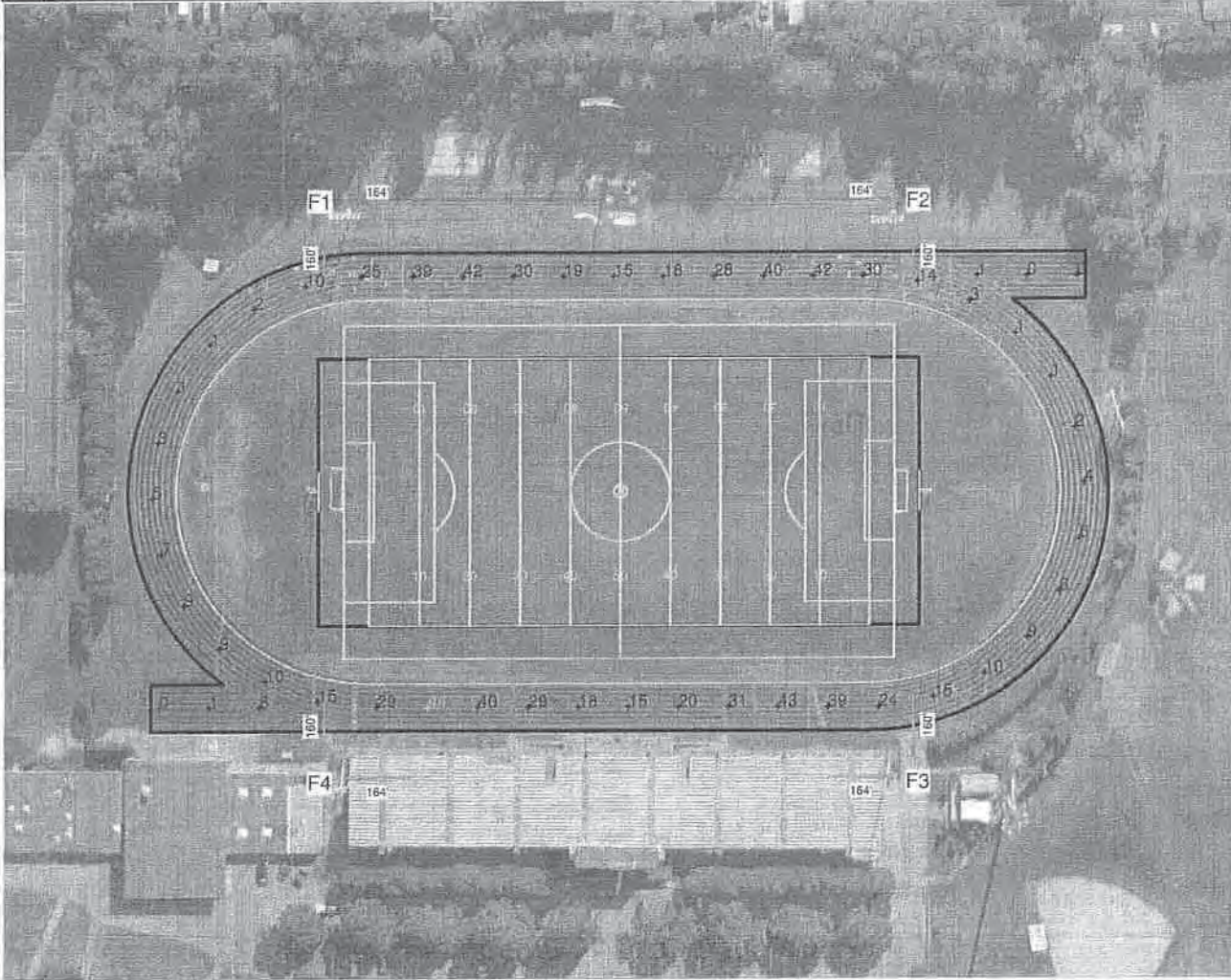


**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.

## ILLUMINATION SUMMARY

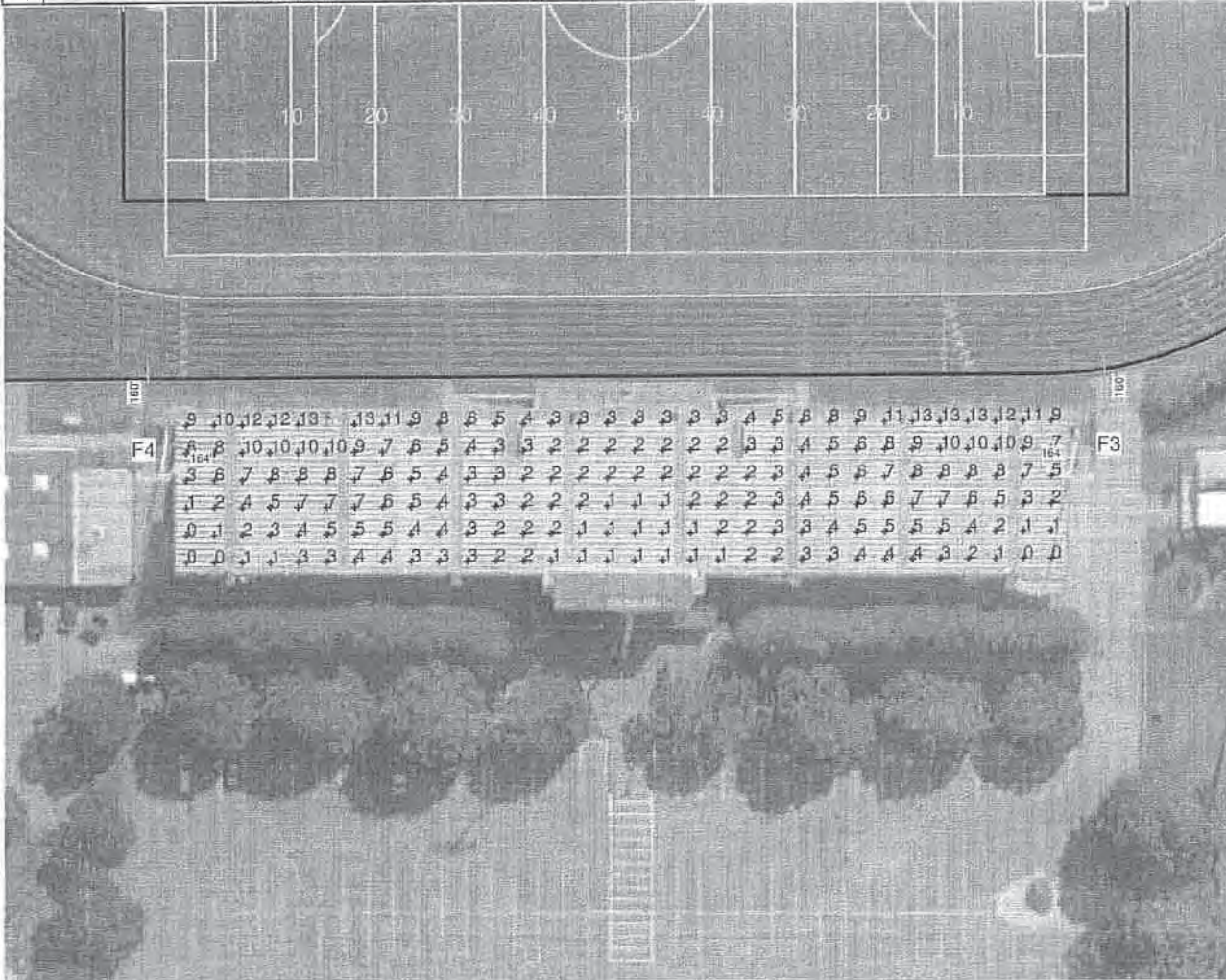
EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	F1-F2	80'		15'	TLC-BT-575	2	2	0
				80'	TLC-LED-1150	11	11	0
2	F3-F4	80'		15'	TLC-BT-575	2	2	0
				50'	TLC-LED-400	1	1	0
				80'	TLC-LED-1150	12	12	0
4	TOTALS					56	56	0



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

**EQUIPMENT LIST FOR AREAS SHOWN**

QTY	LOCATION	SIZE	GRADE ELEVATION	Pole		Luminaires		
				MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	F1-F2	80'	-	15'	TLC-BT-575	2	2	0
				80'	TLC-LED-1150	11	11	0
2	F3-F4	80'	-	15'	TLC-BT-575	2	2	0
				50'	TLC-LED-400	1	1	0
				80'	TLC-LED-1150	12	12	0
4	TOTALS					56	56	0



Pole location(s) Ⓞ dimensions are relative to 0,0 reference point(s) ⊗

ENGINEERED DESIGN By: Connor Ramstead • File #163423-p-FB • 23-May-18

**Madison Memorial High School**  
Madison, WI

**GRID SUMMARY**

Name:	Bleachers
Size:	Irregular
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

**ILLUMINATION SUMMARY**

MAINTAINED HORIZONTAL FOOTCANDLES			
Entire Grid			
Scan Average:	4.60		
Maximum:	14		
Minimum:	0		
Avg / Min:	21.04		
Max / Min:	62.20		
UG (adjacent pts):	3.10		
CU:	0.01		
No. of Points:	192		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	121,000 / 52,000 / 38,600 lumens		
No. of Luminaires:	56		
Total Load:	58.3 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1150	>63,500	>63,500	>63,500
TLC-BT-575	>63,500	>63,500	>63,500
TLC-LED-400	>63,500	>63,500	>63,500

Reported per TM-21-11. See luminaire datasheet for details.

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.

**ILLUMINATION SUMMARY**

# Madison Memorial High School

Madison, WI

## EQUIPMENT LAYOUT

### INCLUDES:

- Football
- Soccer
- Track

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

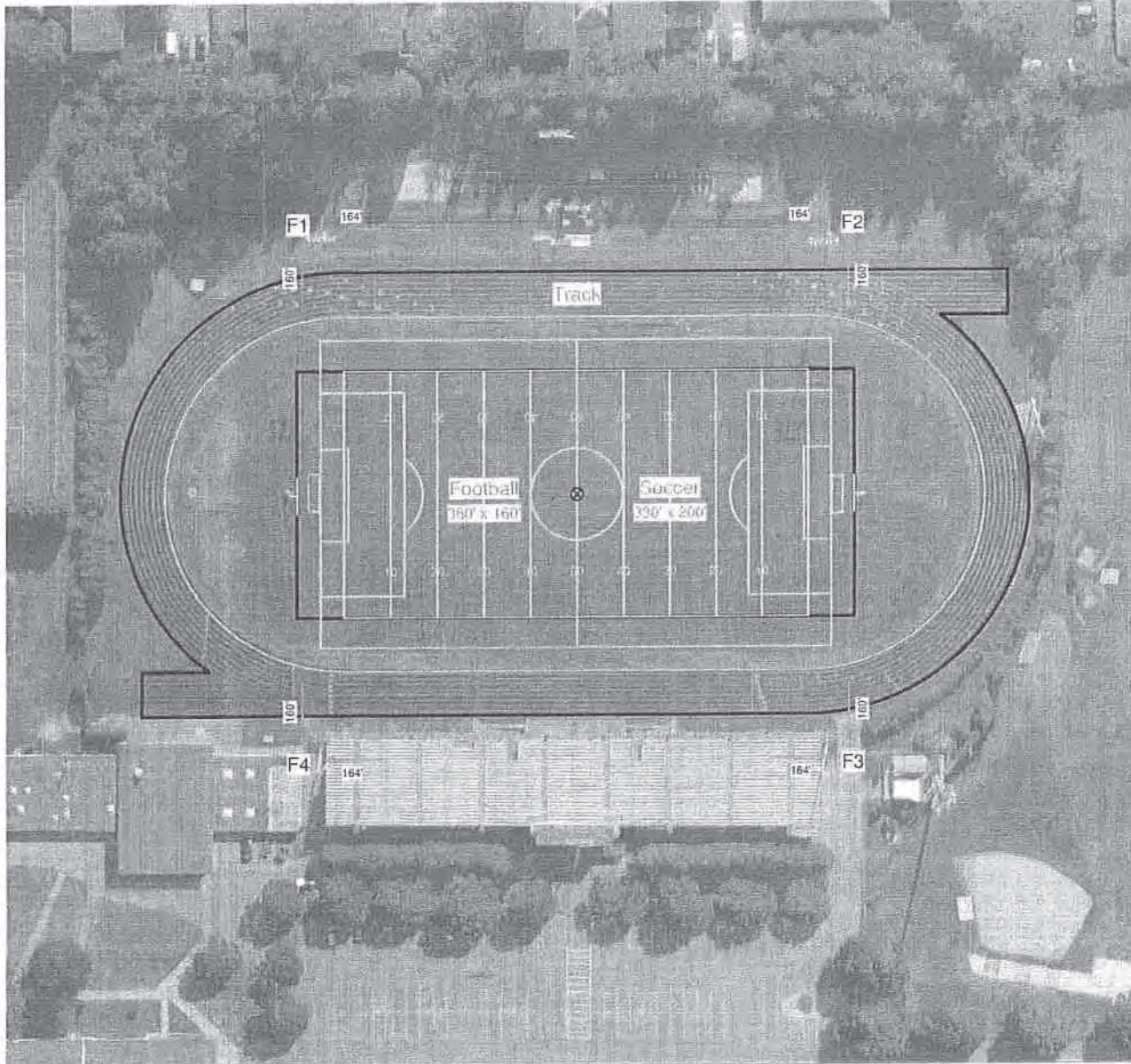
**Installation Requirements:** Results assume  $\pm 3\%$  nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

## EQUIPMENT LIST FOR AREAS SHOWN

QTY	LOCATION	Pole		Luminaire		QTY / POLE
		SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	
2	F1-F2	80'		15'	TLC-BT-575	2
		80'		80'	TLC-LED-1150	11
2	F3-F4	80'		15'	TLC-BT-575	2
				50'	TLC-LED-400	1
				80'	TLC-LED-1150	12
4	TOTALS					56

## SINGLE LUMINAIRE AMPERAGE DRAW CHART

Ballast Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)					
	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	480 (60)
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	480 (60)
TLC-LED-1150	6.8	6.5	5.9	5.1	4.1	3.7
TLC-BT-575	3.2	3.0	2.8	2.4	1.9	1.4
TLC-LED-400	2.5	2.3	2.1	1.9	1.5	1.1



Pole location(s)  $\oplus$  dimensions are relative to 0,0 reference point(s)  $\otimes$

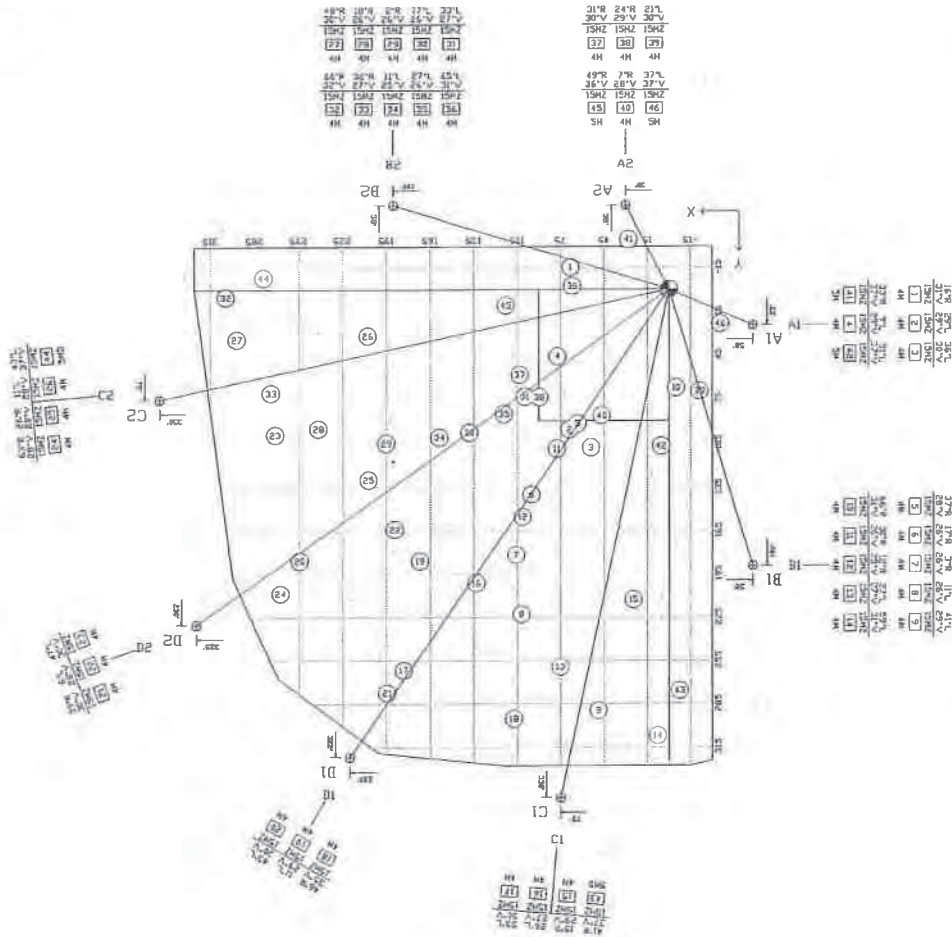
ENGINEERED DESIGN By: Connor Ramstead • File #163423-p-FB • 23-May-18



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.

**EQUIPMENT LAYOUT**



Wind Design Criteria: IBC STD 2009 90MPH Exposure C

Lighting Equipment										
PROJECT		JOB NO.		DATE		REVISIONS				
50/30 Fc		163423-d-SB1		23/MAY/18						
2:1/15:1		406773								
POLE			LUMINAIRE				ALTIMETRIC LOAD			
POLE QUANTITY	POLE LOCATION	MOUNTING HEIGHT	POLE SIZE	ELEV.	LUMINAIRE TYPE	LUMINAIRE USE LINE	SOUL	W. BENT	COMPARA	FEET
1	A1	80'	80A	0"	1500W MZ	6	6	9.36	9.36	
1	A2	80'	80B	0"	1500W MZ	6	6	9.36	9.36	
1	B1	80'	80B	0"	1500W MZ	10	10	15.60	15.60	
1	B2	80'	80B	0"	1500W MZ	10	10	15.60	15.60	
1	C1	80'	80A	0"	1500W MZ	4	4	6.24	6.24	
1	C2	80'	80A	0"	1500W MZ	4	4	6.24	6.24	
1	D1	80'	80AA	0"	1500W MZ	3	3	4.68	4.68	
1	D2	80'	80AA	0"	1500W MZ	3	3	4.68	4.68	
8	TOTALS					46		71.76		

Overcurrent devices and conductors MUST be sized using the Manufacturer's rated ampere draw per luminaire (kVA). Using the kW rating can result in undersized calculations. Refer to Musco's Control System Summary or Specification Chart (located below) for manufacturer's ampere draw.

BALLAST SPECIFICATIONS	VOLTAGE: 480v		3 PHASE							
SINGLE PHASE VOLTAGE	208	220	230	240	277	347	380	400	415	480
1500 WATT METAL HALIDE LAMP	8.6	8.3	7.7	7.5	6.5	5.1	4.7	4.4	4.2	3.7
1000 WATT METAL HALIDE LAMP	6.5	6.4	5.9	5.8	4.9	4.0	3.6	3.4	3.2	2.9

Field Name	Pole Laser Aiming Points			
	ID	ID	X	Y
Baseball	A1	Pole	0	0
	A2	Pole	0	0
	B1	Pole	0	0
	B2	Pole	0	0
	C1	Pole	0	0
	C2	Pole	0	0
	D1	Pole	0	0
	D2	Pole	0	0

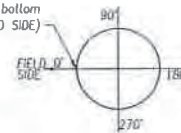
If you have questions pertaining to this document, please contact CONNOR RAMSTEAD, your project engineer. Phone: 800-825-6025 ext: 2153// DATE: 05/23/18

This symbol represents the 0,0 point for locating poles. This field uses a 20' x 20' grid. This field has a 60' basepath. SOFTBALL FIELD: 324'/378'/324' FIELD ID: Baseball

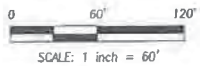
The following poles ECE's will have spare fuses: A1

Poles P1-P4 are donated from project #157610 to become poles A1, A2, B1, B2  
Fixtures 1-40 are donated from project #157610

Align weld marks located at bottom of pole sections @ 0 (FIELD SIDE)



AIMING LEGEND



Intentionally voiding claims to the exclusive property of Musco Sports Lighting. All work is the property of Musco Sports Lighting. No warranty is made for use of this information other than for the specific intended project without written express permission of Musco Sports Lighting.

Madison Memorial HS  
Madison, WI  
Field Aiming Diagram

CORPORATE OFFICE:  
P.O. Box 808  
100 1st Avenue West  
Oshkosh, Iowa 52577  
807/823-8020

DATE:	REV:	BY:	DATE:
05/23/18	1	CR	05/23/18

JOB NUMBER: 163423  
DRAWN BY: C.RAMSTEAD  
PROJECT CHECKED: C.RAMSTEAD  
REPRESENTATIVE: G.SMIDT  
SCALE: 1 = 60  
DATE: 06/18/18  
DRAWING NUMBER: 163423A2  
1 OF 1 SHEETS



**Pole / Fixture Summary**

Pole ID	Pole Height	Fixture Qty.	Lamp Type	Circuit
A1	80'	6	1500W MZ	B
A2	80'	6	1500W MZ	B
B1	80'	10	1500W MZ	B
B2	80'	10	1500W MZ	B
C1	80'	4	1500W MZ	B
C2	80'	4	1500W MZ	B
D1	80'	3	1500W MZ	B
D2	80'	3	1500W MZ	B
<b>8</b>		<b>46</b>		

**MY PROJECT**

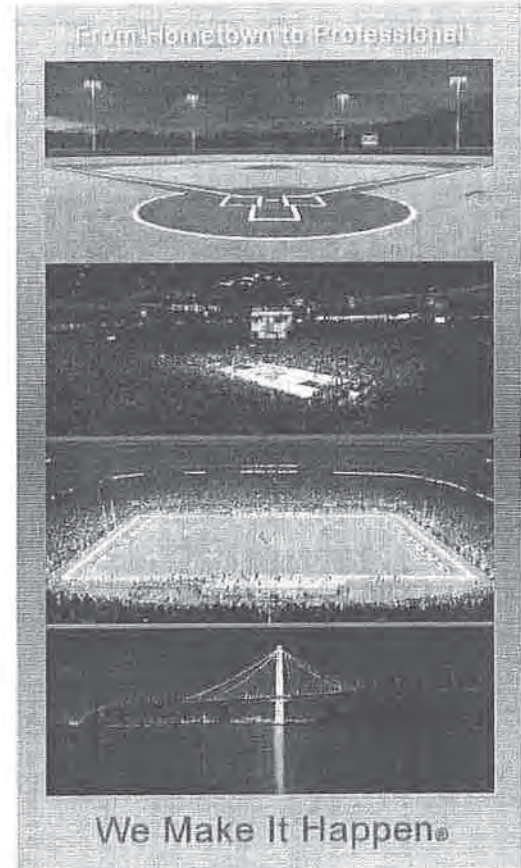
Name: Madison Memorial High School  
 Location: Madison, WI

**Calculation Grid Summary**

Grid Name	Calculation Metric	Light Level			Uniformity		Circuits	Fixture Qty	
		Type	Ave	Min	Max	Max/Min			Ave/Min
Baseball (Infield)	Horizontal Illuminance	Constant	51	36	60	1.66	1.41	B	46
Baseball (Outfield)	Horizontal Illuminance	Constant	30.9	22	45	2.08	1.42	B	46

**Circuit Summary**

Circuit	Description	Load	Fixture Qty
B	Baseball	71.94 kW	46



**ENGINEERED DESIGN**

By: Connor Ramstead  
 File # / Date: 163423-p-5B3 18-Jun-18

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.

**PROJECT SUMMARY**

**EQUIPMENT LIST FOR AREAS SHOWN**

Pole			Luminaires					
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	A1-A2	80'	-	80'	1500W MZ	6	6	0
2	B1-B2	80'	-	80'	1500W MZ	10	10	0
2	C1-C2	80'	-	80'	1500W MZ	4	4	0
2	D1-D2	80'	-	80'	1500W MZ	3	3	0
8	TOTALS					46	46	0



**MY PROJECT**

Name: Madison Memorial High School  
Location: Madison, WI

**GRID SUMMARY**

Name: Baseball  
Size: Irregular 324' / 379' / 326'  
Spacing: 30.0' x 30.0'  
Height: 3.0' above grade

**CONSTANT ILLUMINATION**

SUMMARY	HORIZONTAL FOOTCANDLES	
	Infield	Outfield
Guaranteed Average:	50	30
Scan Average:	50.96	30.85
Maximum:	60	45
Minimum:	36	22
Avg / Min:	1.41	1.42
Guaranteed Max / Min:	2	2.5
Max / Min:	1.66	2.08
UG (adjacent pts):	1.32	1.56
No. of Points:	25	100
LUMINAIRE INFORMATION		
Luminaire Type:	Green Generation	
Design Usage Hours:	5,000 hours	
Design Lumens:	134,000	
Avg Lamp Tilt Factor:	1.000	
No. of Luminaires:	46	
Avg KW:	71.94 (78.2 max)	

**Guaranteed Performance:** The Guaranteed Average CONSTANT ILLUMINATION described above is guaranteed for the design usage hours of the system.

**Field Measurements:** Illumination measured in accordance with IESNA RP-6-15 and CIBSE LG4. Individual values may vary. See the Warranty document for details.

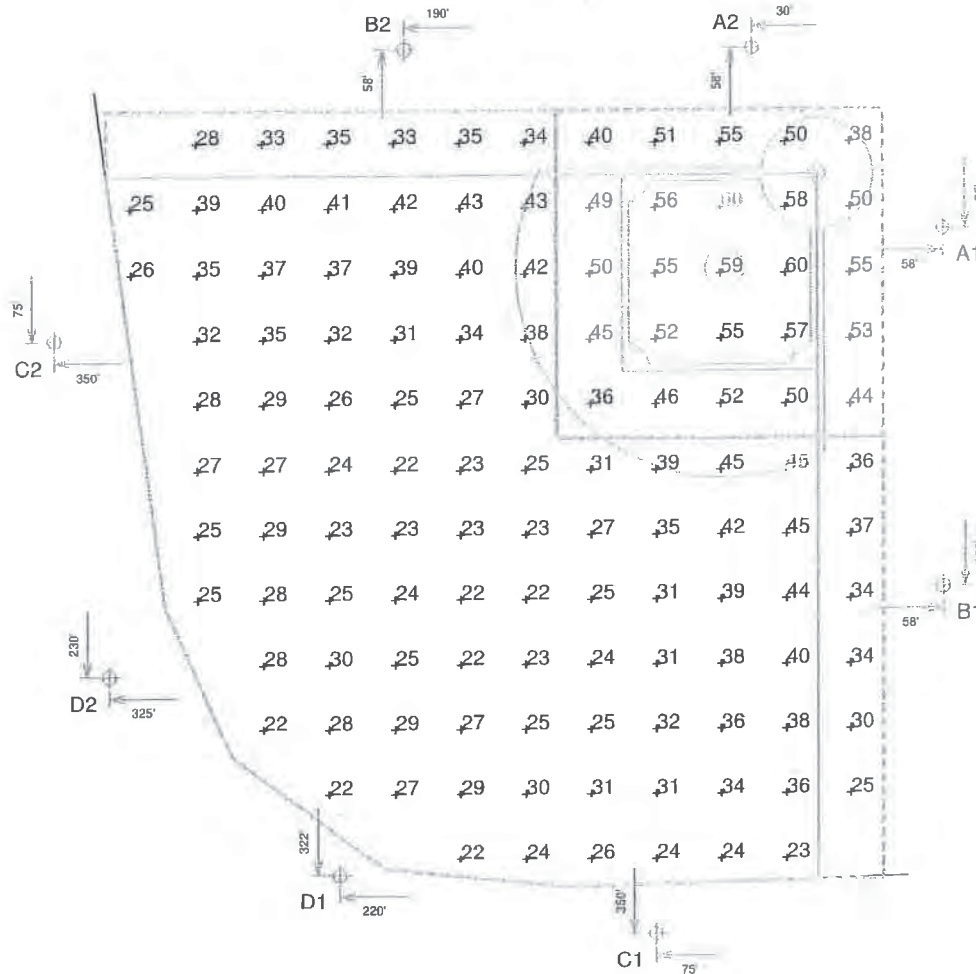
**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume +/- 3% nominal voltage at line side of the ballast and structures located within 3 feet (1m) of design locations.

**ENGINEERED DESIGN**

By: Connor Ramstead  
File # / Date: 163423-p-SB3 18-Jun-18

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.



Pole location(s) Ⓢ dimensions are relative to 0,0 reference point(s) ⊗

**ILLUMINATION SUMMARY**



**MY PROJECT**  
 Name: Madison Memorial High School  
 Location: Madison, WI

**EQUIPMENT LAYOUT**

**INCLUDES:**  
 Baseball

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing

**Installation Requirements:** Results assume +/- 3% nominal voltage at line side of the ballast and structures located within 3 feet (1m) of design locations

**EQUIPMENT LIST FOR AREAS SHOWN**

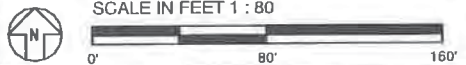
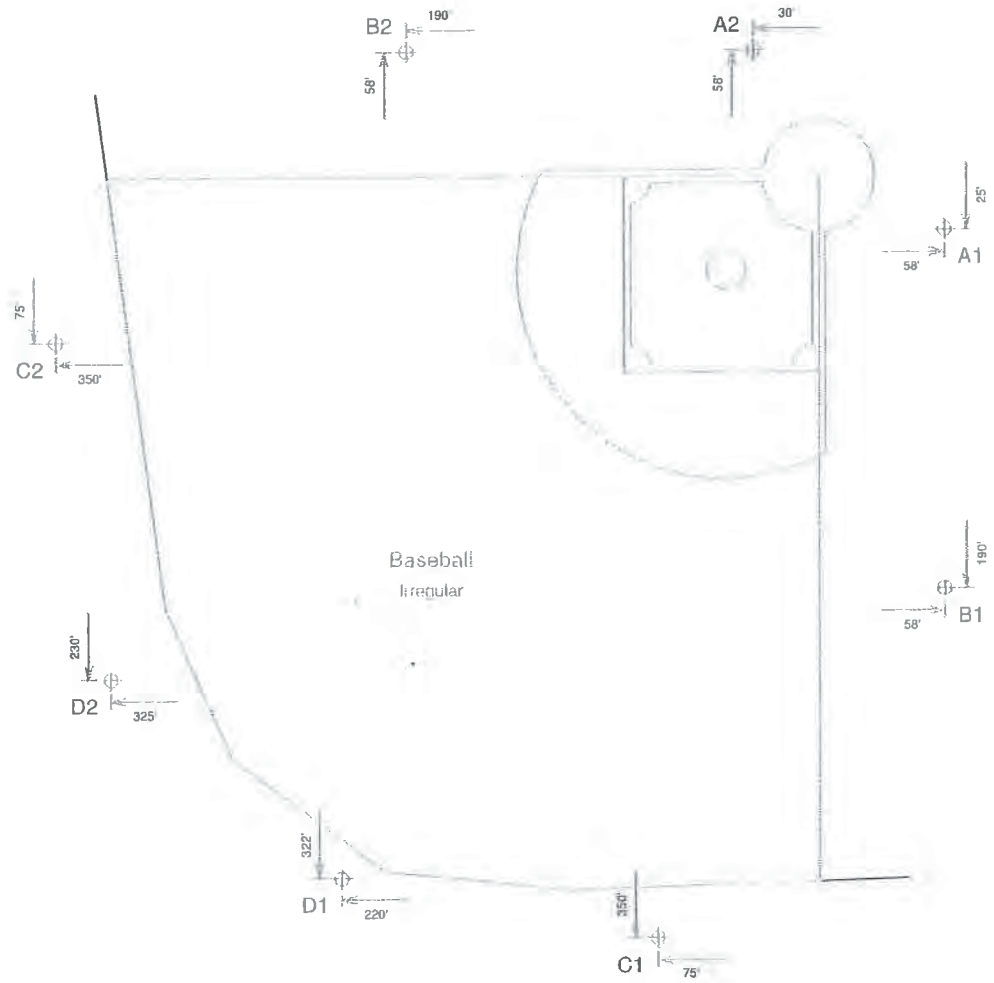
QTY	LOCATION	Pole		Luminaires		QTY / POLE
		SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	
2	A1-A2	80'	-	80'	1500W MZ	6
2	B1-B2	80'	-	80'	1500W MZ	10
2	C1-C2	80'	-	80'	1500W MZ	4
2	D1-D2	80'	-	80'	1500W MZ	3
8	TOTALS					46

**SINGLE LUMINAIRE AMPERAGE DRAW CHART**

Ballast Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)						
	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
1500 watt MZ	8.6	8.3	7.5	6.5	5.1	4.7	3.7

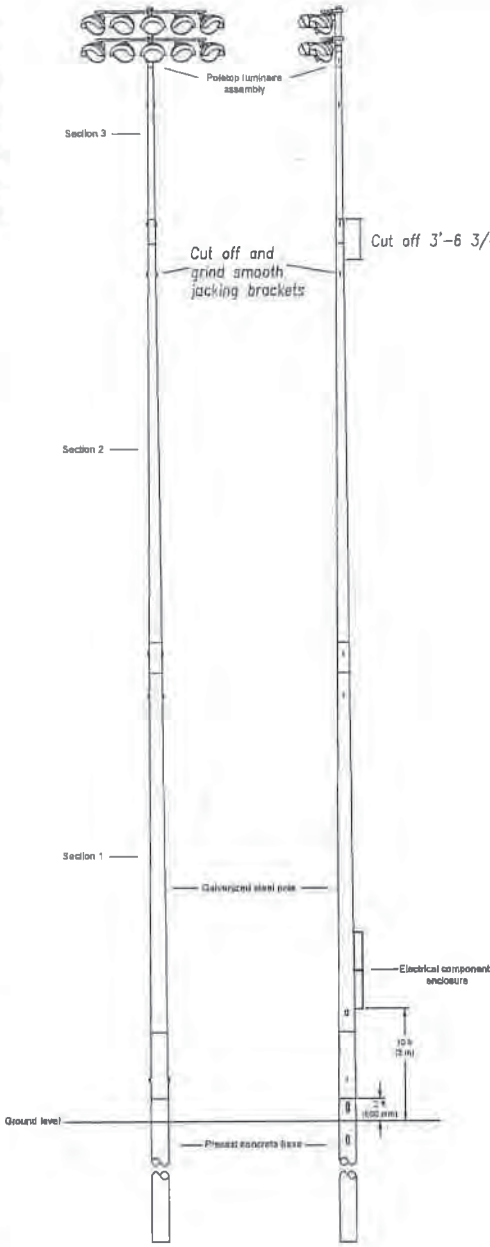
**ENGINEERED DESIGN**  
 By: Connor Ramstead  
 File # / Date: 163423-p-5B3 18-Jun-18

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.

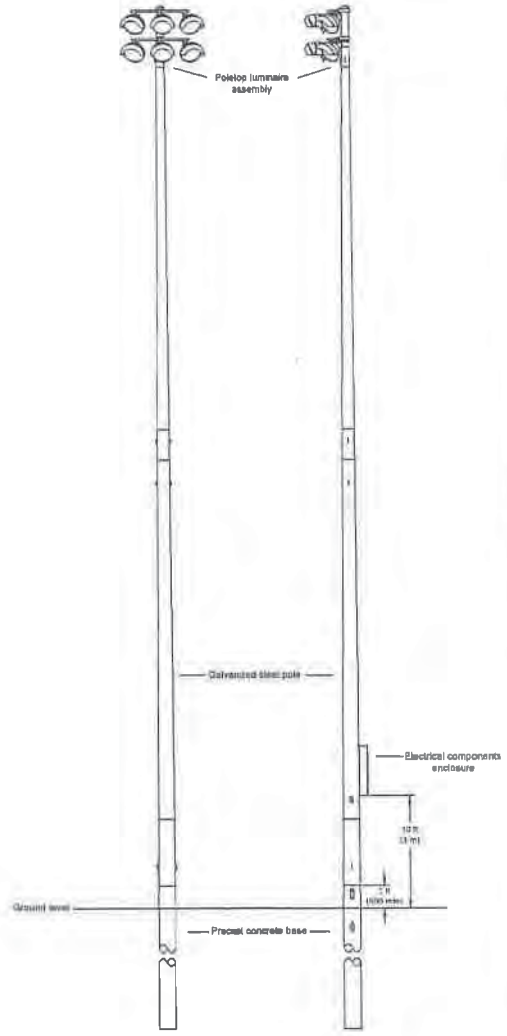


Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

© 2018 Musco Lighting, Inc. All rights reserved. This document is the property of Musco Lighting, Inc. and is intended for use only for the project specified. No part of this document may be reproduced without written permission from Musco Lighting, Inc.



**POLE(S): P1-P4**  
 Musco 100FT Light-Structure System™ pole  
 Green Generation™ luminaires



**POLE(S): A1, A2**  
 Musco 80FT Light-Structure System™ pole  
 Green Generation™ luminaires

1. Cut off and grind smooth upper jacking brackets on section 2.
2. Apply cold galv. spray on exposed areas per instructions.
3. Cut 3'-6 3/4" off the top of the pole section 2.
4. Attach new filter from one the following methods:
  - A: Use lower jacking brackets.
  - B: Reweld the jacking brackets 55" from the new cut top of section 2.

DATE: 05/23/2018  
 BY: NTS  
 R.L.:  
 165423P1

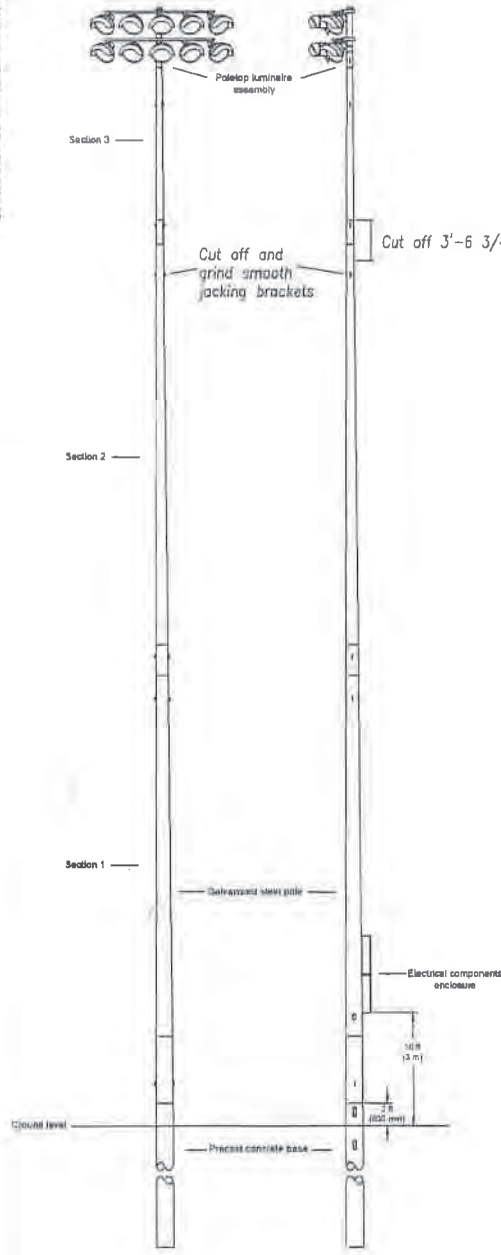
DATE	BY	R.L.	REVISIONS

**MUSCO Lighting**  
 CORPORATE OFFICE:  
 P.O. Box 808  
 100 1st Avenue West  
 Oskaloosa, Iowa 52577  
 +1-800-525-6030  
 +1-561-973-0411

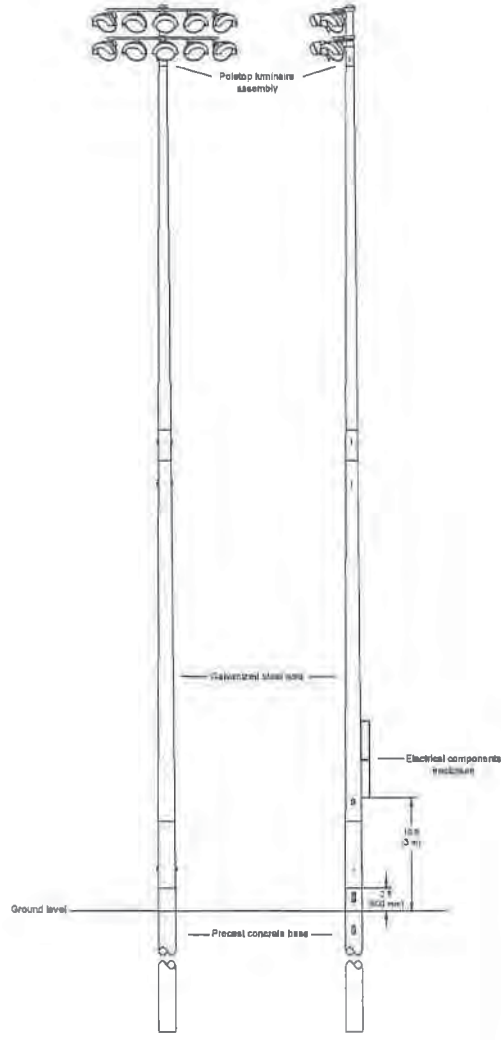
Madison Memorial High School  
 Madison, WI  
 Donated Pole Instructions



This document is the property of Musco Lighting, Inc. It is to be used only for the project and location specified. It is not to be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of Musco Lighting, Inc.



**POLE(S): P1-P4**  
 Musco 100FT Light-Structure System™ pole  
 Green Generation™ luminaires



**POLE(S): B1, B2**  
 Musco 80FT Light-Structure System™ pole  
 Green Generation™ luminaires

1. Cut off and grind smooth upper jacking brackets on section 2.
2. Apply cold galv. spray on exposed areas per instructions.
3. Cut 3'-6 3/4" off the top of the pole section 2.
4. Attach new fitter from one the following methods:
  - A: Use lower jacking brackets.
  - B: Reweld the jacking brackets 55" from the new cut top of section 2.

PROJECT NUMBER	1534233
DATE	05/23/2016
BY	NTS
REVISIONS	
PROJECT LOCATION	153423P1
DATE	5/23/2016

DATE	BY	R.L.	REVISIONS

**MUSCO**  
 Lighting

CORPORATE OFFICE:  
 P.O. Box 805  
 100 1st Avenue West  
 Oshkosh, Iowa 52577  
 +1-800-825-6020  
 +1-541-623-0411

Madison Memorial High School  
 Madison, WI  
 Donated Pole Instructions

## PRELIMINARY FOUNDATION AND POLE ASSEMBLY DRAWING

POLE ID	POLE HEIGHT ft (m)	# OF LUMINAIRES	ASSEMBLED POLE WEIGHT <sup>1</sup> lb (kg)
A1	80 (24.4)	8	3113 (1412)
A2	80 (24.4)	6	3113 (1412)
B1	80 (24.4)	10	3473 (1575)
B2	80 (24.4)	10	3473 (1575)
C1	80 (24.4)	4	2069 (952)
C2	80 (24.4)	4	2069 (952)
D1	80 (24.4)	3	1851 (749)
D2	80 (24.4)	3	1851 (749)
F1	80 (24.4)	13	4185 (1898)
F2	80 (24.4)	13	4185 (1898)
F3	80 (24.4)	15	4433 (2011)
F4	80 (24.4)	15	4433 (2011)

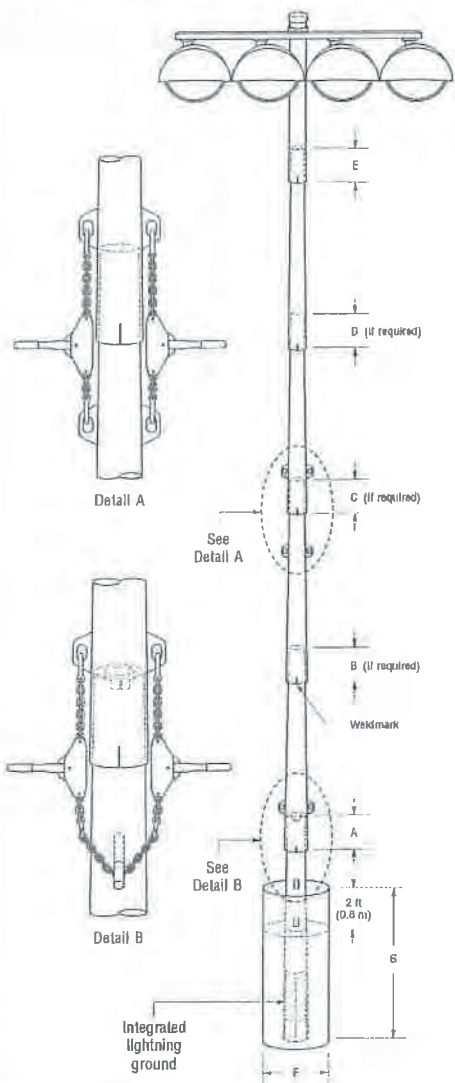
**Pole Assembly Notes:**

1. Steel pole should overlap concrete base and be sealed light with 1 1/2 ton come-along (contractor provided)
2. Align weldmarks on steel sections before assembling
3. Assembled pole weight includes steel sections, crossarms, luminaires, and electrical components enclosure
4. Section overlap must be pulled together until tight. Overlap measurement should be +/- 6 in (150 mm).
5. This document is not intended for use as an assembly instruction. See *Installation Instructions Light-Structure System™* Lighting System for complete assembly procedure

POLE ID	CONCRETE BASE WEIGHT lb (kg)	F in (mm)	BURIAL INFORMATION <sup>1,2</sup> G ft (m)	CONCRETE BACKFILL <sup>1,2</sup> yd <sup>3</sup> (m <sup>3</sup> )	CUT BASE	LIGHTING GROUND <sup>3</sup> TYPE	SUPPLEMENTAL INSTRUCTION
A1	5300 (2404)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED <sup>4</sup>	N/A
A2	5300 (2404)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED <sup>4</sup>	N/A
B1	5300 (2404)	30 (762)	18 (4.9)	1.6 (1.2)	NO	INTEGRATED <sup>4</sup>	N/A
B2	5300 (2404)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED <sup>4</sup>	N/A
C1	3810 (1728)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED <sup>4</sup>	N/A
C2	3810 (1728)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED <sup>4</sup>	N/A
D1	2780 (1261)	30 (762)	12 (3.7)	1.5 (1.1)	NO	INTEGRATED <sup>4</sup>	N/A
D2	2780 (1261)	30 (762)	12 (3.7)	1.5 (1.1)	NO	INTEGRATED <sup>4</sup>	N/A
F1	5300 (2404)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED <sup>4</sup>	N/A
F2	5300 (2404)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED <sup>4</sup>	N/A
F3	5300 (2404)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED <sup>4</sup>	N/A
F4	5300 (2404)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED <sup>4</sup>	N/A

**Foundation Notes:**

1. Concrete backfill is calculated to 2 ft (0.6m) below grade (no overage included). Top 2 ft (0.6m) to be class 5 soil compacted to 95% density of surrounding undisturbed soil unless otherwise specified in stamped structural design
2. Concrete backfill required 3000 (psi) (20 MPa) minimum
3. Foundation design per 2009 IBC, 60 mph exposure category C variation STD.
4. Assumes IBC class 5 soils.
5. Standard bases include integrated lightning protection. If bases are cut, supplemental lightning protection is required. Contact Musco for materials and instruction.
6. Lightning protection is a manufacturer installed concrete encased electrode and connector. Ground connection is made when concrete base is installed and footing is poured. No additional steps required.



R60-60-00\_A

Musco Illumination High Street SO BR PB - Mainville, PA, USA

Date: 04/28/2018 Scale: N/A  
 Rep: Greg Strahl Page: 1 of 1  
 Project: 163423 Preliminary





# Control System Summary

## Project Specific Notes:

## Project Information

Project #: 163423  
 Project Name: Madison Memorial High School SO SB FB  
 Date: 05/24/18  
 Project Engineer: CRamstead  
 Sales Representative: Greg Smidt  
 Control System Type: Control and Monitoring  
 Communication Type: Digital Cellular  
 Scan: 163423-p-SB1,163423-p-FB  
 Document ID: 163423P3V1-0524093230  
 Distribution Panel Location or ID: Service FB  
 Total # of Distribution Panel Locations for Project: 2  
 Design Voltage/Hertz/Phase: 480/60/3  
 Control Voltage: 120

## Equipment Listing

DESCRIPTION	APPROXIMATE SIZE	
1. Control and Monitoring Cabinet	24 X 48	
	QTY	SIZE
Total Contactors	4	30 AMP
Total Off/On/Auto Switches:	1	

## Materials Checklist

### Contractor/Customer Supplied:

- A single control circuit must be supplied per distribution panel location.
  - If the control voltage is NOT available, a control transformer is required.
- Electrical distribution panel to provide overcurrent protection for circuits
  - Thermal/Magnetic circuit breaker sized per full load amps on Circuit Summary by Zone Chart
- Wiring:
  - Dedicated control power circuit
  - Power circuit to and from lighting contactors
  - Harnesses for cabinets at remote locations
  - Means of grounding, including lightning ground protection
- Electrical conduit wireway system
  - Entrance hubs rated NEMA 4: must be die-cast zinc, PVC, or copper-free die-cast aluminum
- Mounting hardware for cabinets
- Control circuit lock-on device to prevent unauthorized power interruption to control power
- Anti-corrosion compound to apply to ends of wire, if necessary

Call Control-Link Central™ operations center at 877/347-3319 to schedule activation of the control system upon completion of the installation.  
 Note: Activation may take up to 1 1/2 hours

## IMPORTANT NOTES

1. Please confirm that the design voltage listed above is accurate for this facility. Design voltage/phase is defined as the voltage/phase being connected and utilized at each lighting pole's ballast enclosure disconnect. Inaccurate design voltage/phase can result in additional costs and delays. Contact your Musco sales representative to confirm this item.
2. In a 3 phase design, all 3 phases are to be run to each pole. When a 3 phase design is used Musco's single phase luminaires come pre-wired to utilize all 3 phases across the entire facility.
3. One contactor is required for each pole. When a pole has multiple circuits, one contactor is required for each circuit. All contactors are UL 100% rated for the published continuous load. All contactors are 3 pole.
4. If the lighting system will be fed from more than one distribution location, additional equipment may be required. Contact your Musco sales representative.
5. A single control circuit must be supplied per control system.
6. Size overcurrent devices using the full load amps column of the Circuit Summary By Zone chart- Minimum power factor is 0.9.

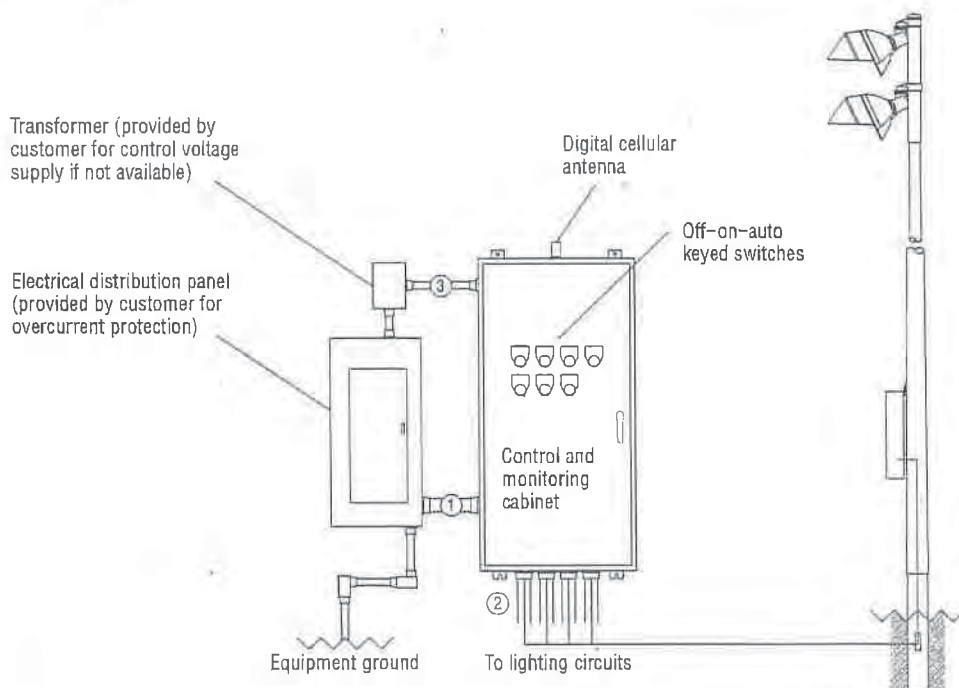
*NOTE: Refer to Installation Instructions for more details on equipment information and the installation requirements*



# Control System Summary

Madison Memorial High School SO SB FB / 163423 - 163423-p-FB  
Service FB - Page 2 of 8

## Control-Link. Control and Monitoring System



Wire	Description	# of Wires	Typ. Wire Size (AWG)	Max. Wire Length (FT)	Wire from Musco	Notes
1	Line power to contactors, and equipment grounding conductor	Note A	Note B	27	No	A - E
2	Load power to lighting circuits	Note A	Note B	N/A	No	A - D
3	Control power (dedicated, 20A)	3	12	N/A	No	C, D

R60-32-00\_C

- Notes:
- A. Voltage and phasing per the notes on cover page.
  - B. Calculate per load and voltage drop.
  - C. All conduit diameters should be per code.
  - D. Refer to control and monitoring system installation instructions for more details on equipment information and the installation requirements.
  - E. Contact Musco if maximum wire length from circuit breaker to contactor exceeds value in chart.

**IMPORTANT:** Control (3) wires must be in separate conduit from line and load power wiring (1, 2).



# Control System Summary

Madison Memorial High School SO SB FB / 163423 - 163423-p-FB  
Service FB - Page 3 of 8

## SWITCHING SCHEDULE

Field/Zone Description	Zones
Football	1

CONTROL POWER CONSUMPTION	
120V Single Phase	
VA loading of Musco Supplied Equipment	INRUSH: 1568.0 SEALED: 194.8

CIRCUIT SUMMARY BY ZONE							
POLE	CIRCUIT DESCRIPTION	# OF FIXTURES	# OF DRIVERS	*FULL LOAD AMPS	CONTACTOR SIZE (AMPS)	CONTACTOR ID	ZONE
F1	Football	13	13	21.7	30	C1	1
F2	Football	13	13	21.7	30	C2	1
F3	Football	15	15	22.9	30	C3	1
F4	Football	15	15	22.9	30	C4	1

\*Full Load Amps based on amps per driver.



# Control System Summary

Madison Memorial High School SO SB FB / 163423 - 163423-p-FB  
Service FB - Page 4 of 8

PANEL SUMMARY						
CABINET #	CONTROL MODULE LOCATION	CONTACTOR ID	CIRCUIT DESCRIPTION	FULL LOAD AMPS	DISTRIBUTION PANEL ID (BY OTHERS)	CIRCUIT BREAKER POSITION (BY OTHERS)
1	1	C1	Pole F1	21.70		
1	1	C2	Pole F2	21.70		
1	1	C3	Pole F3	22.90		
1	1	C4	Pole F4	22.90		

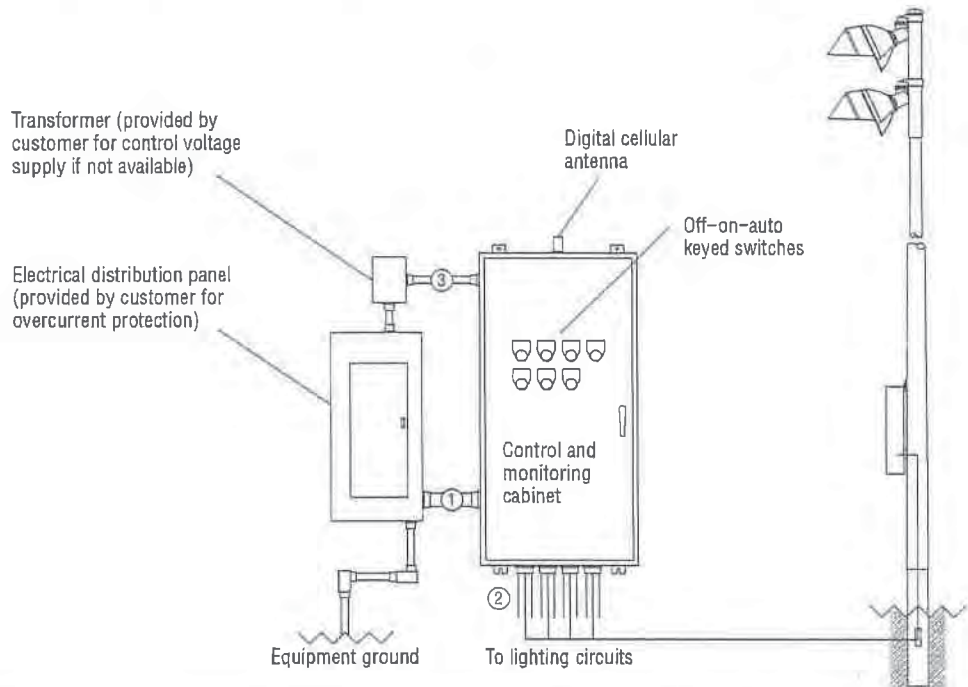
ZONE SCHEDULE				
ZONE	SELECTOR SWITCH	ZONE DESCRIPTION	CIRCUIT DESCRIPTION	
			POLE ID	CONTACTOR ID
Zone 1	1	Football	F1	C1
			F2	C2
			F3	C3
			F4	C4



# Control System Summary

Madison Memorial High School SO SB FB / 163423 - 163423-p-SB1  
Service BB - Page 6 of 8

## Control-Link. Control and Monitoring System



Wire	Description	# of Wires	Typ. Wire Size (AWG)	Max. Wire Length (FT)	Wire from Musco	Notes
1	Line power to contactors, and equipment grounding conductor	Note A	Note B	27	No	A - E
2	Load power to lighting circuits	Note A	Note B	N/A	No	A - D
3	Control power (dedicated, 20A)	3	12	N/A	No	C, D

R60-32-00\_C

- Notes:
- A. Voltage and phasing per the notes on cover page.
  - B. Calculate per load and voltage drop.
  - C. All conduit diameters should be per code.
  - D. Refer to control and monitoring system installation instructions for more details on equipment information and the installation requirements.
  - E. Contact Musco if maximum wire length from circuit breaker to contactor exceeds value in chart.

**IMPORTANT:** Control (3) wires must be in separate conduit from line and load power wiring (1, 2).



# Control System Summary

Madison Memorial High School SO SB FB / 163423 - 163423-p-SB1  
Service BB - Page 7 of 8

## SWITCHING SCHEDULE

Field/Zone Description	Zones
Baseball	1

CONTROL POWER CONSUMPTION	
120V Single Phase	
VA loading of Musco Supplied Equipment	INRUSH: 2548.0
	SEALED: 298.8

BALLAST SPECIFICATIONS 90 Minimum Power Factor	VOLTAGE: 480v THREE PHASE						
	208	220	240	277	347	380	480
BALLAST OPERATING VOLTAGE							
1500 Watt Metal Halide Lamp Operating line amperage per fixture- maximum	8.6	8.3	7.5	6.5	5.1	4.7	3.7
1000 Watt Metal Halide Lamp Operating line amperage per fixture- maximum	6.5	6.4	5.8	4.9	4.0	3.6	2.9

CIRCUIT SUMMARY BY ZONE							
POLE	CIRCUIT DESCRIPTION	# OF FIXTURES	FULL LOAD AMPS	CONTACTOR SIZE (AMPS)	CONTACTOR ID	ZONE	
A1	Baseball	6	14.8	30	C1	1	
A2	Baseball	6	14.8	30	C2	1	
B1	Baseball	10	25.9	30	C3	1	
B2	Baseball	10	25.9	30	C4	1	
C1	Baseball	4	11.1	30	C5	1	
C2	Baseball	4	11.1	30	C6	1	
D1	Baseball	3	7.4	30	C7	1	
D2	Baseball	3	7.4	30	C8	1	





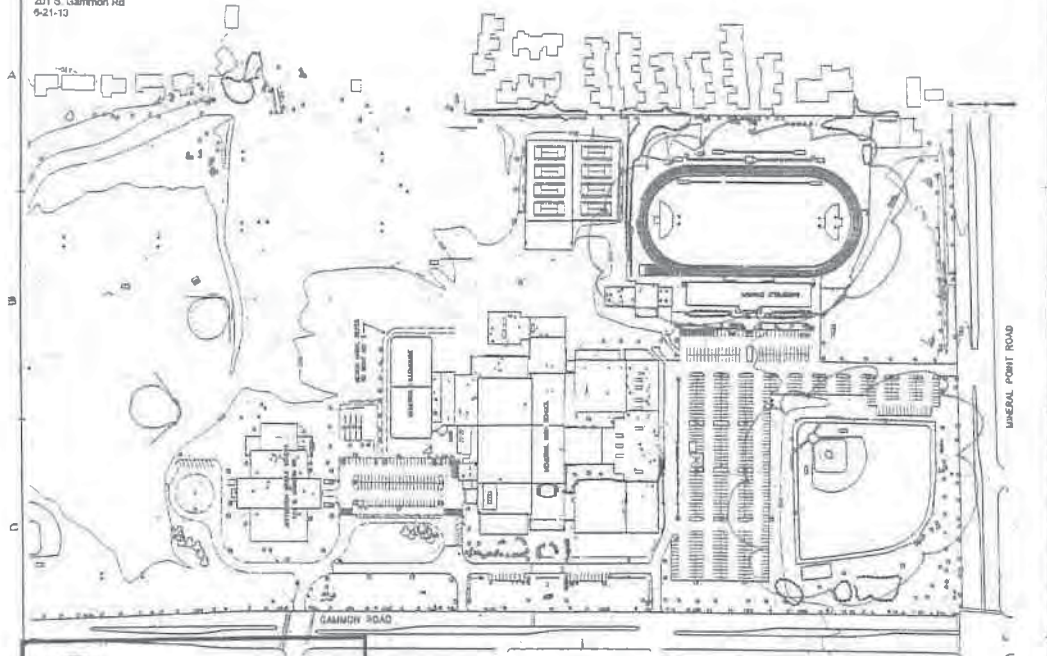
# Control System Summary

Madison Memorial High School SO SB FB / 163423 - 163423-p-SB1  
 Service BB - Page 8 of 8

PANEL SUMMARY						
CABINET #	CONTROL MODULE LOCATION	CONTACTOR ID	CIRCUIT DESCRIPTION	FULL LOAD AMPS	DISTRIBUTION PANEL ID (BY OTHERS)	CIRCUIT BREAKER POSITION (BY OTHERS)
2	2	C1	Pole A1	14.80		
2	2	C2	Pole A2	14.80		
2	2	C3	Pole B1	25.90		
2	2	C4	Pole B2	25.90		
2	2	C5	Pole C1	11.10		
2	2	C6	Pole C2	11.10		
2	2	C7	Pole D1	7.40		
2	2	C8	Pole D2	7.40		

ZONE SCHEDULE				
ZONE	SELECTOR SWITCH	ZONE DESCRIPTION	CIRCUIT DESCRIPTION	
			POLE ID	CONTACTOR ID
Zone 1	1	Baseball	A1	C1
			A2	C2
			B1	C3
			B2	C4
			C1	C5
			C2	C6
			D1	C7
			D2	C8

201 S. Gammon Rd  
9-21-13



**SITE PLAN APPROVAL**  
(MGO 28.186)

Address 201 S. Gammon Rd  
 Permit # LV05PL-2016-00181  
 Date Submitted 7/25/16  
 Original                      Revision #                       
 Final Approval Date 8/17/16  
 Signature [Signature]  
 Planning Department, City of Madison

SCALE: 1" = 40' - 0" PER  
 SHEET 3

**MATERIALS KEY**

NO.	DESCRIPTION	QUANTITY	UNIT
1	ASPH/FLY	177	CY
2	CONCRETE	100	CY
3	GRAVEL	100	CY
4	PAVING	100	CY
5	LANDSCAPE	100	CY
6	IRRIGATION	100	CY
7	SEWER	100	CY
8	WATER	100	CY
9	ELECTRICAL	100	CY
10	MECHANICAL	100	CY
11	PLUMBING	100	CY
12	PAINT	100	CY
13	FINISH	100	CY
14	ROOFING	100	CY
15	CLADDING	100	CY
16	GLASS	100	CY
17	STEEL	100	CY
18	WOOD	100	CY
19	BRICK	100	CY
20	STONE	100	CY

MEMORIAL, H. S. Additions  
 201 South Gammon Road  
 Madison, WI 53717

NO.	DESCRIPTION	QUANTITY	UNIT
1	ASPH/FLY	177	CY
2	CONCRETE	100	CY
3	GRAVEL	100	CY
4	PAVING	100	CY
5	LANDSCAPE	100	CY
6	IRRIGATION	100	CY
7	SEWER	100	CY
8	WATER	100	CY
9	ELECTRICAL	100	CY
10	MECHANICAL	100	CY
11	PLUMBING	100	CY
12	PAINT	100	CY
13	FINISH	100	CY
14	ROOFING	100	CY
15	CLADDING	100	CY
16	GLASS	100	CY
17	STEEL	100	CY
18	WOOD	100	CY
19	BRICK	100	CY
20	STONE	100	CY

SITE PLAN  
 S1.1



## Edgewood High School – Goodman Athletic Complex Lights

Neighborhood Communication and Event Review Committee



## Edgewood High School – Goodman Athletic Complex Lights

### **Introduction**

We believe that Edgewood, Vilas and Dudgeon Monroe are all in agreement that having a good communication plan and an Event Review Committee is essential to ensuring a smooth transition to lights at the Goodman Athletic Complex.

We look forward to working with our neighbors on this discussion.



## Edgewood High School – Goodman Athletic Complex Lights

### **Event Review Committee**

Edgewood agrees an Event Review Committee would be helpful for both the Neighborhoods and Edgewood:

- Edgewood will work with Neighborhoods to ensure the proper representatives are included.
- Based on a few comments during initial meeting, Edgewood suggests one meeting after the fall schedule and one meeting after the spring schedule – these should be scheduled early to ensure good attendance
  - However, Edgewood is open for more frequent meetings in years 1 & 2 if desired
- Discuss any issues, develop solutions, and then communicate with the Neighborhoods and Edgewood community
- Committee can have ad hoc / unscheduled meetings if the need arises
  - Edgewood would prefer to address any concerns as quickly as possible
- Publish a single phone number and email address for any questions, concerns or inquiries



## Edgewood High School – Goodman Athletic Complex Lights

### **Scheduled Games with Lights Communication Plan**

While Edgewood generally knows the number of home games in a season, typically, the high school sports schedules are finalized at least one month prior to games being played. At this point, Edgewood would be able to publish a list of all games scheduled to be played with lights. Edgewood would endeavor to provide the formal finalized schedule at the earlier possible time. Edgewood suggests the following:

Develop a webpage that has the following information for each scheduled game with lights:

- Date
- Start time of game
- Sport
- Opponent

Publish a single phone number and email address for any questions, concerns or inquiries - Include an updated news section of the webpage to update the neighbors with any additional information as needed



## Edgewood High School – Goodman Athletic Complex Lights

### **Edgewood Game Manager**

Edgewood has been playing home games on the field well before the completion of the Goodman Athletic Complex in 2015. Since the turf was installed at the Goodman Athletic Complex in 2015, Edgewood always has someone within athletics who was present and assigned as the Game Manager during Edgewood High School home game competitions on the field. As we phase in evening games Edgewood High School will commit to the following:

- Edgewood will provide a single phone number to call that will ring to a mobile phone with the Game Manager
- Publish this single phone number on the same web page as the list of the games for situations where a more timely response may be required
- Edgewood will also publish an email address that can be used for other questions / comments that are less urgent in nature



## Edgewood High School – Goodman Athletic Complex Lights

### **Rescheduled Use of Lights for Games**

There may be some instances where lights must be used at a time not scheduled originally. This situation may occur based on, but not limited to, the following circumstances. Please note that it is Edgewood's intention to adhere to the originally published schedule unless absolutely necessary.

- Weather delay or other weather conditions
- Game cancelled and rescheduled
- Player injury
- Overtime or play extended beyond the normal / average game length
- Some other unforeseen circumstance

When this occurs, Edgewood will provide an update to the reason for the use of the lights within 48 hours of the completion of the game. This update will be provided on the web page in the news / update section. The intention will be to do this for the first two years.



**AMBIENT NOISE MEASUREMENTS  
AND  
GRANDSTAND NOISE SIMULATION MODEL**

for

**EDGEWOOD HIGH SCHOOL  
GOODMAN ATHLETIC COMPLEX**

Madison, Wisconsin

prepared by

TALASKE and TLC Engineering  
For  
Professional Audio Designs, Inc.  
Wauwatosa, WI

Issue Date: January 4, 2019

## **I. EXECUTIVE SUMMARY**

Professional Audio Designs was asked to provide a sound study predicting the noise related effects of the proposed new Grandstand at Edgewood High School Goodman Athletic Complex. We employed the services of TALASKE of Oak Park, IL and TLC Engineering to accomplish this task. What follows is an evaluation of the existing conditions, a prediction of the conditions that can be anticipated based on a detailed computer model simulation of the proposed grandstands, and commentary on the modeled predictions as well as options for sound reduction.

## **II. MEASUREMENT OF AMBIENT NOISE LEVELS**

The ambient noise level was measured at three locations surrounding the Edgewood campus as approximately noted on Figure 1. Measurements were performed for approximately 2 hours duration during late afternoon hours using two Larson-Davis LXT sound level meters and one Larson-Davis 831 sound level meter. Time history information was measured for the two LXT sound level meters. The equipment was calibrated at the start and end of the measurement sessions using a Larson-Davis CAL200 precision sound calibrator. All equipment has been calibrated by Larson-Davis within the past year.



Figure 1 – Location of ambient noise level measurements.

The results of the ambient noise measurements are noted Figures 2 and 3. The results indicate  $L_{eq}$  values ranging from 50.6 to 63.2, with an average of 56.5 dBA. Peak levels measured ranged from 68.5 to 75.8 dBA, with an average of 72.5 dBA.

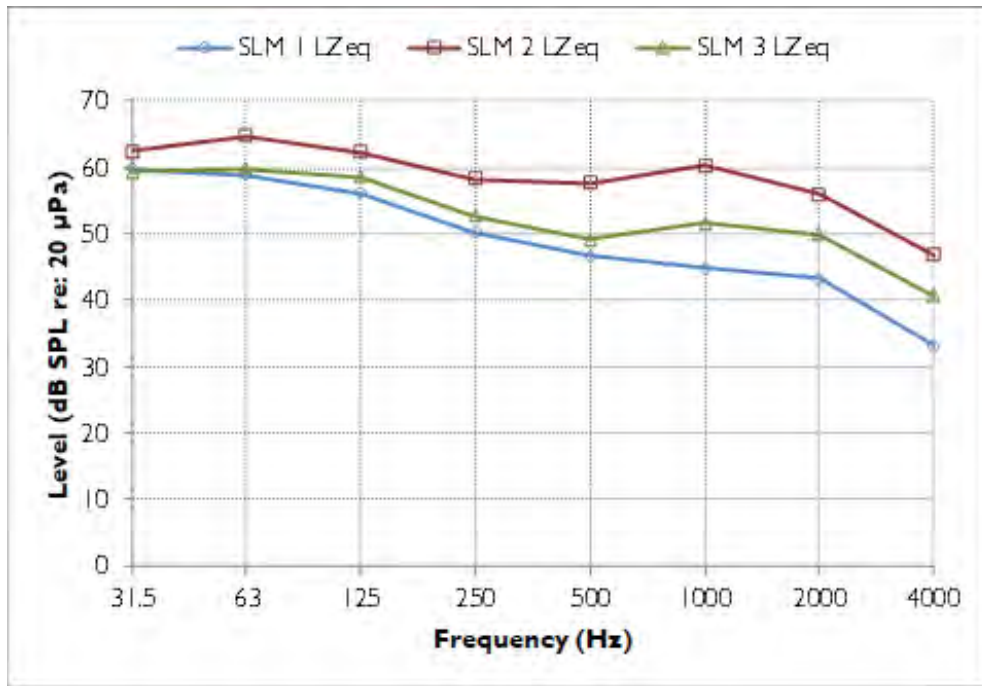


Figure 2 – Summary of average octave band ambient noise level measurements during late afternoon of 6 December 2018, presented as  $L_{eq}$  per octave band. The results indicate  $L_{eq}$  values ranging from 50.6 to 63.2, with an average of 56.5 dBA.

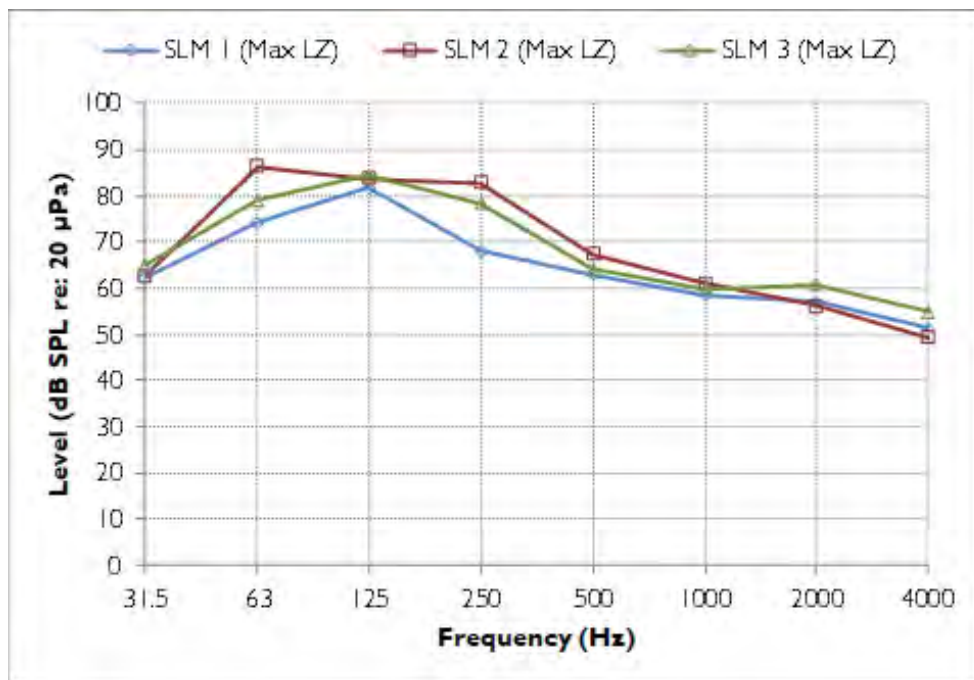


Figure 3 – Summary of maximum measured octave band ambient noise level measurements during late afternoon of 6 December 2018, presented as  $L_{max}$  per octave band. Peak levels measured ranged from 68.5 to 75.8 dBA, with an average of 72.5 dBA.

### **III. REVIEW OF MADISON NOISE ORDINANCE**

A search was performed to determine the noise limits established by the City of Madison. The sections we feel are pertinent to the Edgewood High School Stadium are excerpted below and shown in Figure 4. The legal counsel for the City of Madison should confirm the legality and applicable requirements. The comments which follow are based on our understanding of established limits along with opinions regarding the technical meaning and shortcomings of the language of the Ordinance.

Considering many activities at the stadium are expected to occur during evening time periods, the 70 dBA appears to be the applicable limit associated with sound entering adjacent residential property. It is not clear to us regarding how to address the fluctuations in sound level which are inherent to sound radiating from the stadium. Reference is made to the needle of the sound level meter, but contemporary (precision) sound level meters do not utilize needles.

Most ordinances identify an objective means for addressing the normal variation in sound level versus time. Examples include utilizing the “slow setting” (one second integration time) or “fast setting” ( $1/8^{\text{th}}$  second integration time) or  $L_{\text{eq}}$  (equivalent, or average) sound pressure level over a defined time period, usually many minutes, an hour, or a day. Since the sound level from the stadium will certainly vary more than plus or minus two decibels, this aspect of the Noise Regulation seems to not be applicable to this application.

24.08 NOISE REGULATION.  
 (1) Sound levels under this section shall be measured with a Type 1 sound level meter manufactured according to standards prescribed by the American National Standards Institute in specification S1.4 (Revised 1971). Measurements shall be made using an "A" weighted network of the sound level meter. All noises shall be subject to the standards contained in subsection (2) provided that such noise shall be capable of being accurately measured with such equipment. Under this section, noises capable of being accurately measured with such equipment shall be deemed to be those noises which cause fluctuations of the needle of the sound level meter with a variation of no more than plus or minus two (2) decibels.

**SOUND PRESSURE LEVEL TABLE**

<u>Zone</u>	<u>Time</u>	<u>Decibel (dBA) Level</u>
R1, R2, R3, R4, R4A, R4L, Agriculture Conservancy, Office Residence	7:00 p.m. to 7:00 a.m.	70 dBA
	7:00 a.m. to 7:00 p.m.	75 dBA
R5, R6	All times	75 dBA
Commercial, Manufacturing	All times	80 dBA
Except where such operations are adjacent to Residential District		75 dBA

5

---

(2) In the following zoning districts established under Chapter 28 of the Madison General Ordinances, the noise emitted from any source and measured at any point within any distance beyond fifty (50) feet of the property or public right-of-way where the noise is produced or beyond fifty (50) feet from the noise source when such exists on public property shall not exceed the amounts indicated in the table.

**Figure 4 - Excerpts from the Madison Noise Ordinance**

To address the situation of the noise leaving the stadium, we adopted two methods of predicting sound levels in the surrounding neighborhood. These are:

1. Identify the maximum sound level expected in the neighborhood due to normal stadium activities.
2. Identify the  $L_{eq}$  over a typical loud activity within the stadium based on a presumed distribution of noisy and quiet activities over a one-hour period.

Determination of the maximum sound level expected in the neighborhood due to normal stadium activities included the sound contributions from crowd noise, whistle from referee, audio system announcements, and pep bands (see section V for details).

Estimating the  $L_{eq}$  over the duration of a typical loud activity within the stadium. A football game was assumed and is based on the following presumed distribution of noisy and quiet activities”

- 120 plays from scrimmage per game, or 60 plays per hour.
- 20-second duration of each play from scrimmage. Crowd noise averages six decibels less than the maximum sound level capable for the assembly.

<u>Noise Sources</u>	<u>Characteristics</u>
150-1000 Spectators	Shouting, 20 sec per play
2 Loudspeakers	Broadband music*/voice, 20 sec per play
28 Pep Band Musicians	Various tonalities, 20 min per hour
22 Football Players	Shouting, 5 sec per play
1 Referee’s Whistle	Once per play
Background Noise	56.5 dBA, based on site measurements

The analysis was perform using the following attendance figures:

- 150 people
- 500 people
- 1000 people.

In all cases, the people in attendance are distributed throughout the stadium seating area.

\*Note: Even though broadband music was included in this simulation, it is our understanding that the school has committed to no music being played over the loud speakers (other than national anthem).

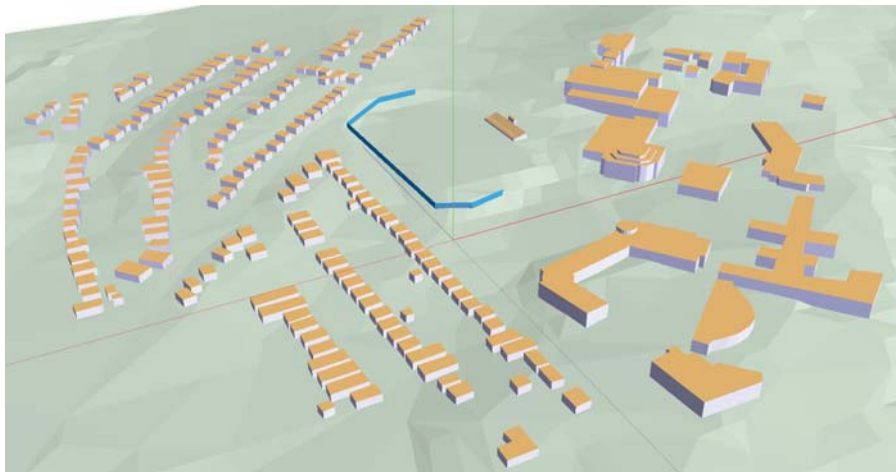
Based on these two analysis methods, maximum sound pressure levels and average sound pressure levels over a one-hour period, have been estimated over the neighborhood adjacent to the Edgewood campus. See attached document “SoundPLAN Runs 101-303 (2018-12-21).pdf” for output of this analysis. Note: predictions are not a guarantee of results, but the findings illustrated here represent a thorough, highly detailed, quantitative prognosis of the noise levels the school and the surrounding neighbors can expect to experience using the best tools available. If levels at the center of the field are exceeded, sound levels in the residential areas will increase commensurately.

#### **IV. NOISE SIMULATION MODEL**

Calculations for predicted noise levels were simulated using SoundPLAN®, a software suite of indoor and outdoor noise prediction modules developed to comply with international standards for environmental noise calculations. On the market since 1986, it has a worldwide user base who use it for urban planning, traffic and railway noise studies, indoor room acoustics, factory noise, outdoor noise propagation, aircraft noise, sound system coverage, and wind turbine analysis.

##### *Terrain & Buildings*

This model was started using Google Maps topography data to provide a basis for terrain. Buildings were then located in the model including residential homes, school buildings, and the proposed new grandstands for the Goodman Athletic Complex.



**Figure 5 - Overview of 3D Noise Model**

Areas of terrain were marked with their appropriate *Ground Factor*. Areas such as parking lots and the nearby waterfront have a “Hard” ground factor that is acoustically reflective, whereas areas with grass and dense foliage are “Soft” and are marginally absorptive. Trees and foliage were not individually modeled however as they are not considered acoustically significant and have minimal absorptive properties.



### *Spectator Noise*

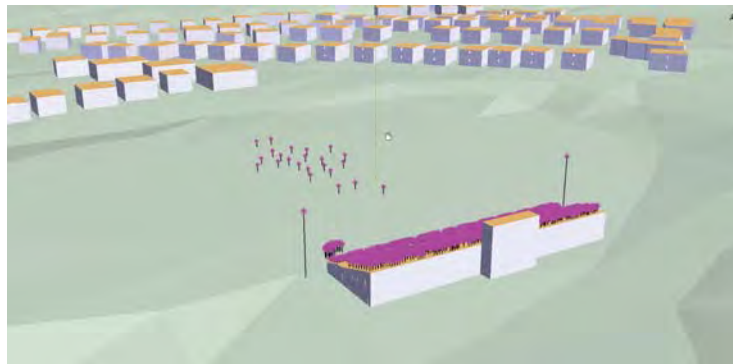
Various quantities of spectators were located on the grandstands as noise sources. Each human noise source in the model is based on measured laboratory data for spectral content and directivity of people shouting.

### *Game Noise*

Players were located on the field for two football teams with an estimated amount of shouting between players during each play. A referee's whistle was included in this noise group from the sidelines at the 50-yard line.

### *Pep Band*

An ensemble of musicians was located on the track near the stands, with a varied range of tonalities and intensities to represent different instruments such as bass drums, flutes, clarinets, trumpets, and trombones.



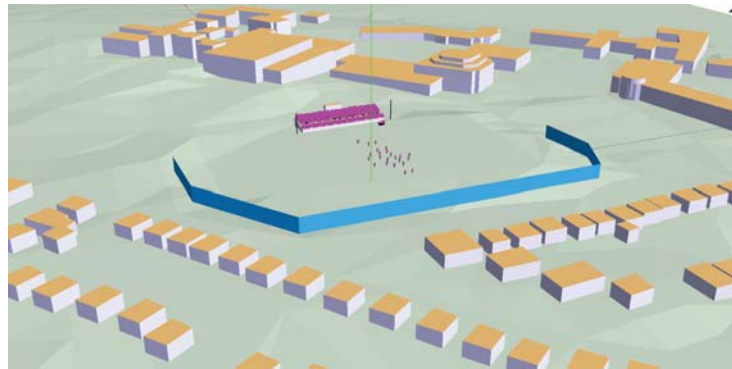
**Figure 6 - View of Stands (Pink Dots Indicate Noise Sources)**

A separate series of simulations was not performed for the event that the pep band may march on the field during half-time. This is because while the pep band itself would be more prominent -- the crowd cheering/shouting, audio system announcements, and player noise would not be concurrent with a half-time performance and overall noise levels would not be significantly impacted.

### *Loudspeakers*

A pair of loudspeakers were modeled, one on each of the light poles flanking either side of the stands, at the approximate height and angle these speakers would be installed. Calibrated speaker

data was used representing Community R2-96 speakers. These are of the same product series and brand as the speakers being proposed for this project. Voice announcements and occasional broadband music clips were the assumed content to be played on the speakers for an estimated amount of time per hour.



**Figure 7 - Noise Model with Noise Barrier Shown**

*Possible Noise Barrier*

For a comparative analysis of the effectiveness of a noise control barrier, a wall was modeled around the edge of the field and additional simulations were performed at two heights to demonstrate the noise reduction impact of a barrier to the surrounding areas.

## **V. EXPECTED RESULTS**

For residents exposed to sound levels produced during normal waking hours as predicted on the attached *SoundPlan* diagrams, we offer the following conclusions. These comments are based on 1) measured ambient noise levels at the site, 2) the predicted sound levels in the neighborhood due to expected activities within the stadium, and 3) typical human response to the expected sound levels:

- The average exposure of residents ( $LA_{eq}$  1-Hour Average) to noise from a typical football game event at the stadium is less than the stated maximum 70 dBA level within the Madison Noise Ordinance, understanding that the averaging method is not clearly identified within the Noise Ordinance.
- The maximum estimated sound level is expected to exceed occasionally the stated maximum 70 dBA level within the Madison Noise Ordinance. The expected maximum levels are similar in intensity to noise events measured at the site. See Figure 3.
- The *SoundPlan* studies presented within this report are based on neutral weather conditions. The prevailing winds in the area, generally from the south, <http://www.aos.wisc.edu/~sco/clim-history/stations/msn/madwind.html> will tend to 1) steer westbound sound somewhat to the north, and 2) bend northbound sound downward. During such wind conditions, close in residents to the west will experience somewhat lesser sound levels versus those noted on the *SoundPlan* studies and residents to the north beyond Monroe Street will experience somewhat greater sound levels versus those noted on the *SoundPlan* studies.
- Constructing a barrier can reduce sound impact to nearby residents, as discussed further below.
- The noise exposure is well below the requirements established by OSHA (which start at 85/90 dBA over 8 hours on a daily basis) which are intended to minimize risk of hearing impairment.
- The nature of the sound produced at the stadium is not threatening to the general public.
- The sound generally does not include tonal qualities or regular/repetitive impulsive sounds which are generally deemed more disturbing versus other sounds.
- The sound created at the stadium does not include sub-audible, very low-pitched sound which is known to cause distress for some members of the population. Likewise, ground-borne vibration associated with activities within the stadium is not expected to be feelable.
- The expected sound levels, especially low-pitched sound, are expected to be sufficiently quiet to avoid rattling of windows and/or other lightweight building materials.
- While the sound levels may be loud enough to impair conversation between residents when outdoors (such as in a restaurant) these louder sound levels are expected to occur for only short time periods.

- The arrangement of houses most impacted by the sound from the stadium is such were backyard areas benefit from the barrier effect of individual houses. Sound levels are lower in areas where owners are most likely to be enjoying relaxing outdoor activities.
- If activities are restricted to avoid nighttime time periods (which is recommended) normal sleep patterns of the residents should not be negatively impacted. Generally, nighttime periods are defined as starting at 10:00 pm based on other typical municipal codes. Note that the 70 dBA reference in the Madison Noise Ordinance is the stated limit between 7:00 PM to 7:00 AM, which of course includes the time period before and after 10:00 PM.
- Indoors within houses of normal construction, the sound levels are expected to be 5 decibels less (with windows open) to 30-plus decibels less (with windows closed) versus the predicted exterior sound levels. The indoor sound levels are expected to be well below standards for suitable interior sound levels (average 45 dBA with windows closed) established by the Housing and Urban Develop department of the U.S. federal government.

## **VI. SOUND REDUCTION OPTIONS**

Sound levels within the residential areas located west and northwest of the stadium can be reduced by the construction of a barrier. An effective noise barrier can take many forms, including:

- Solid wall.
- Berm landform.
- Building.

Effective barriers are non-porous with a minimum surface weight of five pounds per square foot. This could be concrete or wood. If wood, the gaps between wood sections would need to be relatively airtight.

The key considerations for an effective noise barrier are:

- Breaking line-of-sight (line-of-hearing) between the sound source and the sound receiver, as a minimum. Additional height above this reference line is desirable and often ranges from and additional four to ten feet.
- Placing the noise barrier in close proximity to the source of sound or the receiver.
- Minimizing sound reflections off secondary surfaces.

If additional control of the sound from the stadium is desirable, constructing a barrier remains an option. Based on our *SoundPlan* evaluation, we have concluded that sound from the stadium as heard by the nearest residents could be reduced up to 5 dBA with a 16.6-foot tall barrier and up to 10 dBA for a 26.2-foot tall barrier, assuming neutral weather conditions.

We envision no significant change would result if the grandstands were redesigned to be lower and wider. Because of the long distance between stands and the wall, and that the primary goal is to eliminate line of sight from the stands to the homes, a change in grandstand height would be of marginal impact (maybe 6-12" difference in the height of the wall for equivalent performance).

The presence of the existing retaining wall / grade change along Monroe street may allow for a slightly lower (in appearance to the neighbors) barrier to be built to achieve equivalent effectiveness. This could be studied further if this option is pursued.

The development of any barrier walls will require design review to avoid problematic sound reflections back into the residential community and/or reflections which may impair sound clarity during the operation of the audio system.

Other noise reduction options for consideration include:

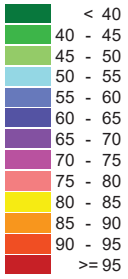
- Restrict activities in the stadium to daytime time periods only. Generally, municipalities limit activities creating exterior noise events to 7:00 AM to 10:00 PM.
- Design the audio system to minimize sound impact to the residents. The current preliminary design concept utilizes directional loudspeakers that are aimed at the stands from the light poles and away from the surrounding housing. Ultimately, a limiter could be put on the system so that it would not be permitted to produce sound levels above a certain threshold. This threshold could be established to assure a certain maximum level at the property lines of the adjacent houses. However, this could result in the sound system level falling below the level of the crowd in scenarios involving large crowds and enthusiastic cheering.
- Constructing a sound barrier above the audience seating with sound absorbing finishes facing the attendees.

# Goodman Athletic Complex

101 - No Wall 150 People

Rev. 12/21/2018

### Levels in dB(A)

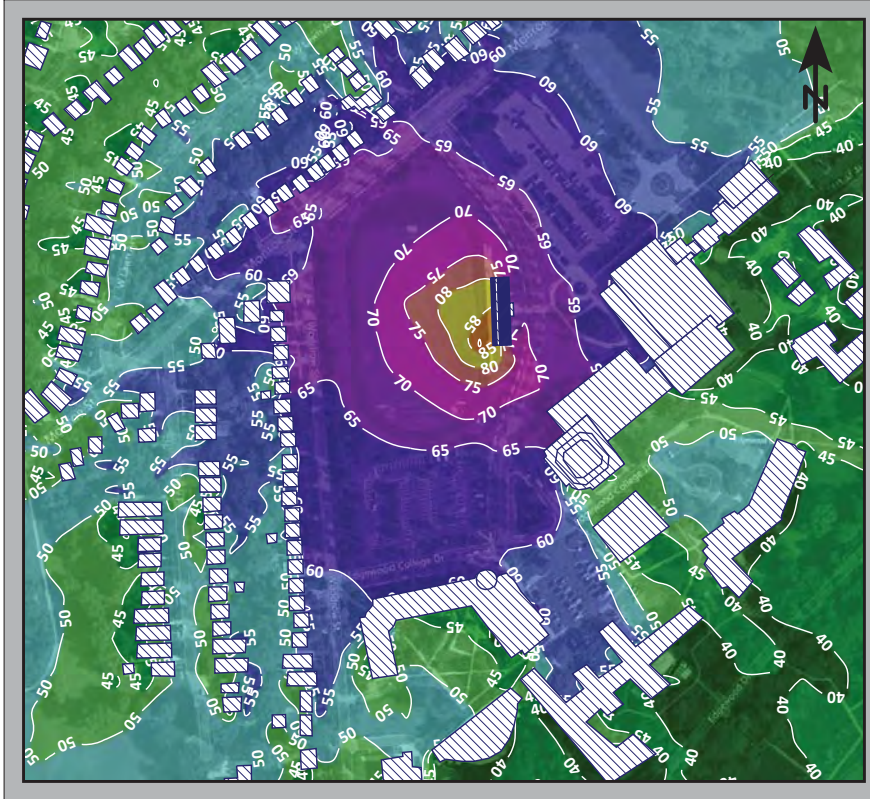


### Noise Sources:

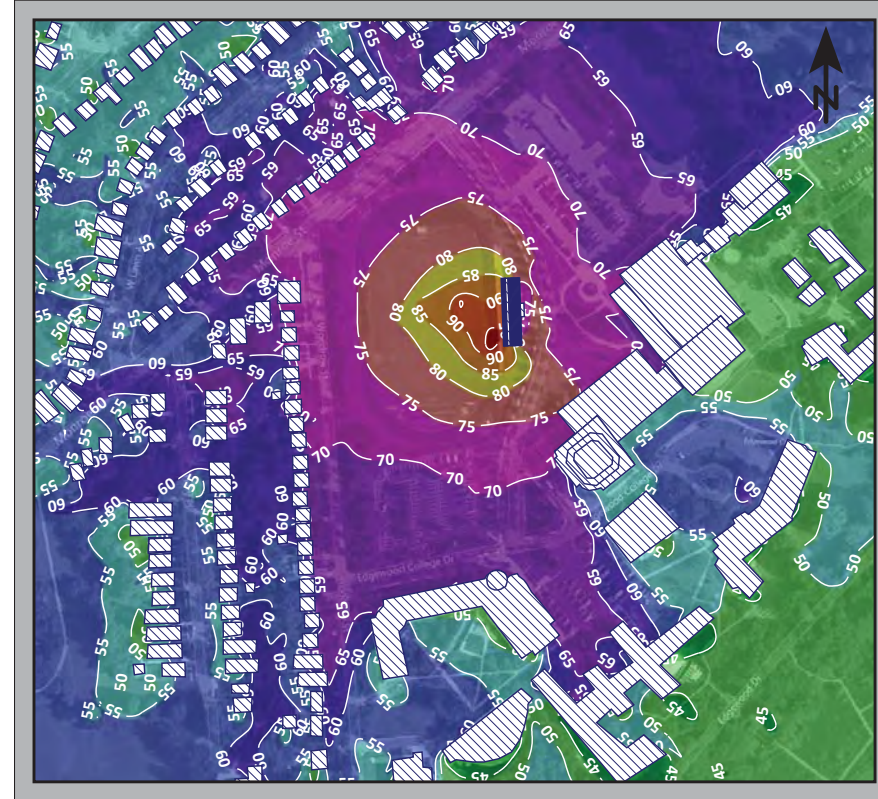
- (150) Spectators
- (22) Players On Field
- (1) Referee's Whistle
- (2) R2-94 Loudspeakers
- (28) Pep Band Musicians

### Conditions

Calculations based at 1.5m above terrain.

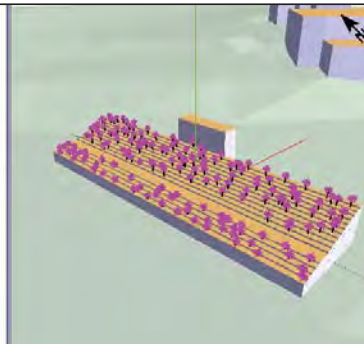
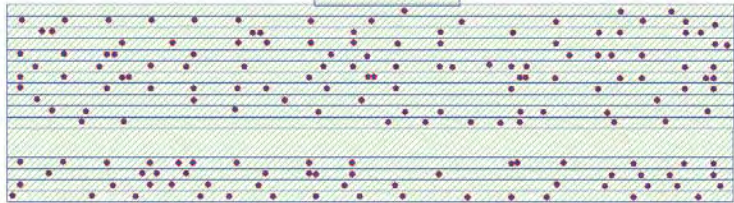


**LAeq (1-Hour Average)**



**LAmx (Peak)**

Blue Dots Indicate Spectators



Prepared For:  
Phillip Roeglin  
Professional Audio Designs, Inc.

Prepared By:  
Mike Nicolai  
TLC Engineering for Architecture

Reviewed By:  
Richard Talaske  
The Talaske Group

Project Owner:  
Edgewood High School  
Madison, WI



Calculation Date: 12/21/2018    Run No. 101    Run: 101-No Wall/150 People    SoundPLAN 8.0 11/9/2018

Length Scale 1:278

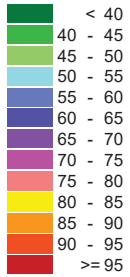


# Goodman Athletic Complex

102 - No Wall 500 People

Rev. 12/21/2018

### Levels in dB(A)

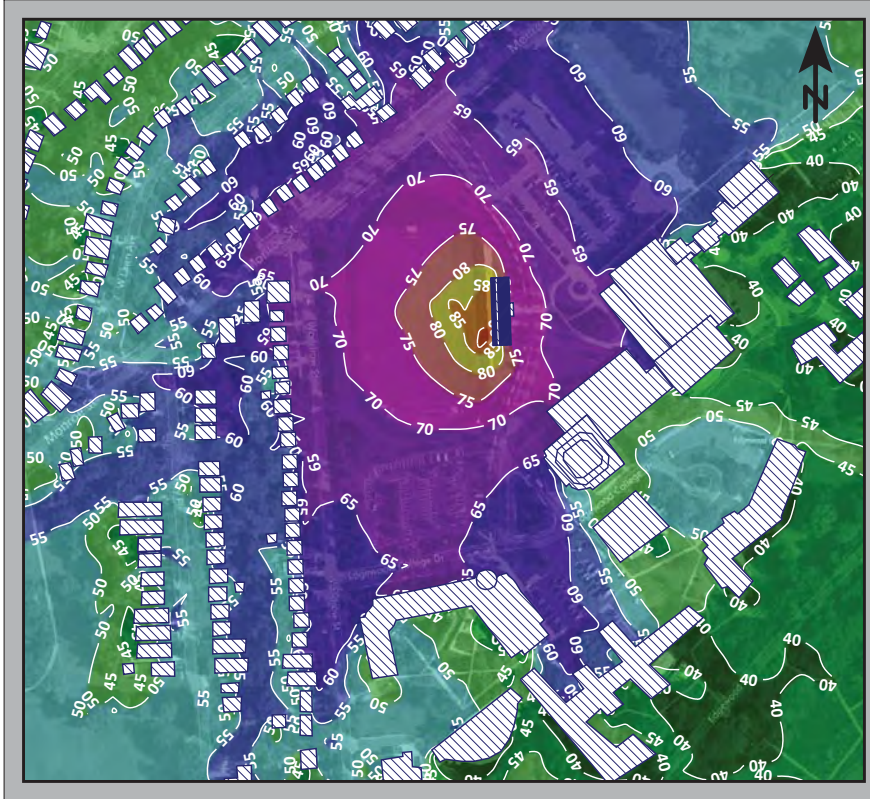


### Noise Sources:

- (500) Spectators
- (22) Players On Field
- (1) Referee's Whistle
- (2) R2-94 Loudspeakers
- (28) Pep Band Musicians

### Conditions

Calculations based at 1.5m above terrain.

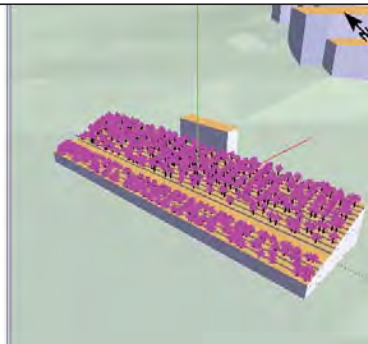
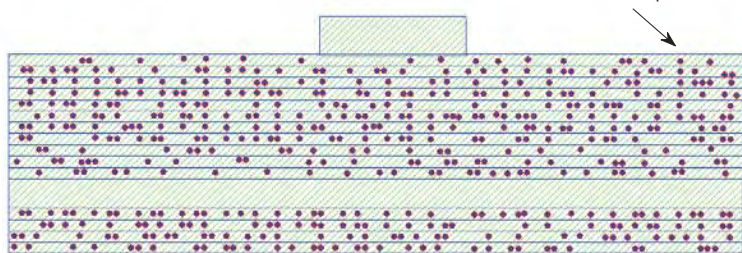


**LAeq (1-Hour Average)**



**Lmax (Peak)**

Blue Dots Indicate Spectators



Prepared For:

Phillip Roeglin  
Professional Audio Designs, Inc.

Prepared By:

Mike Nicolai  
TLC Engineering for Architecture

Reviewed By:

Richard Talaske  
The Talaske Group

Project Owner:

Edgewood High School  
Madison, WI



Calculation Date: 12/21/2018

Run No. 102

Run: 102-No Wall/500 People

SoundPLAN 8.0 11/9/2018

Length Scale 1:278



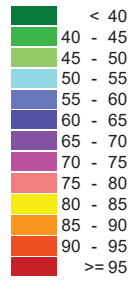


# Goodman Athletic Complex

103 - No Wall 1000 People

Rev. 12/21/2018

## Levels in dB(A)

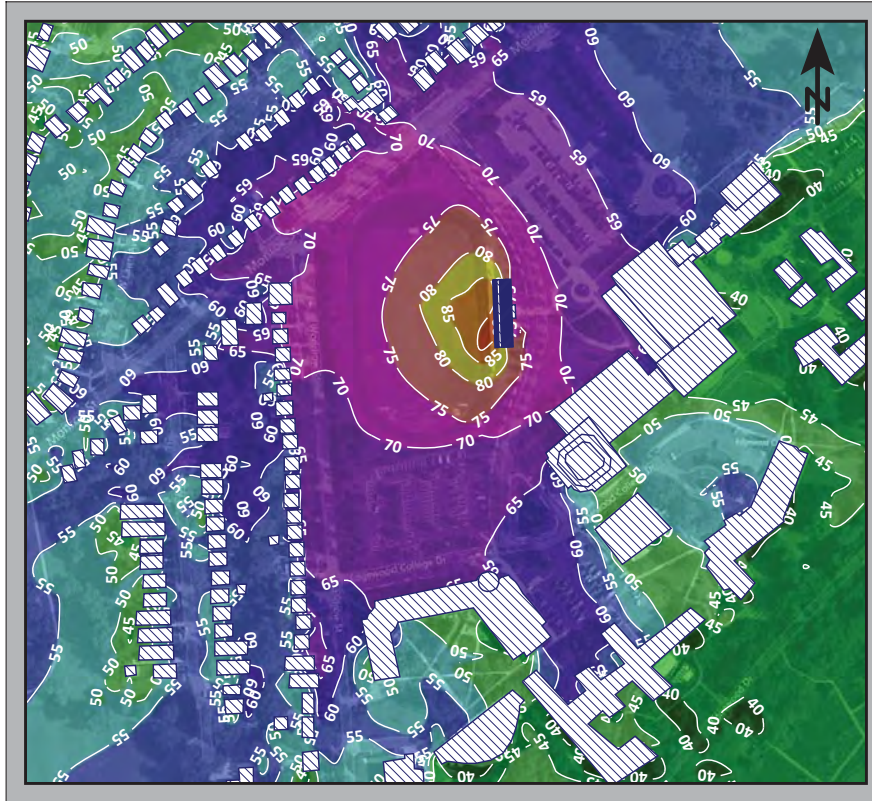


## Noise Sources:

- (1000) Spectators
- (22) Players On Field
- (1) Referee's Whistle
- (2) R2-94 Loudspeakers
- (28) Pep Band Musicians

## Conditions

Calculations based at 1.5m above terrain.

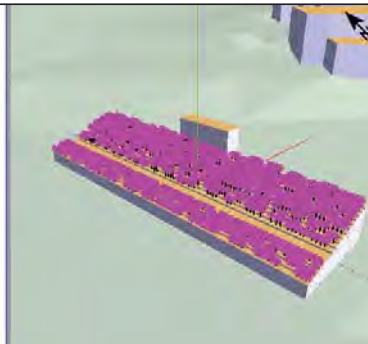
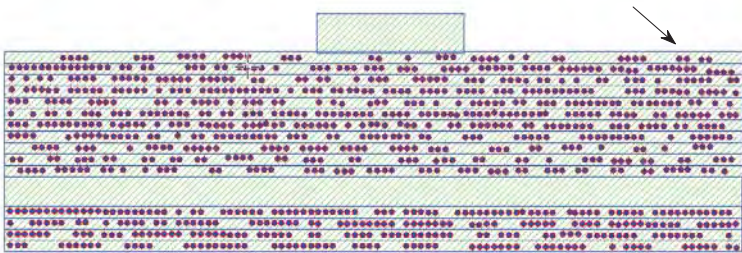


**LAeq (1-Hour Average)**



**Lmax (Peak)**

Blue Dots Indicate Spectators



Prepared For:  
Phillip Roeglin  
Professional Audio Designs, Inc.

Prepared By:  
Mike Nicolai  
TLC Engineering for Architecture

Reviewed By:  
Richard Talaske  
The Talaske Group

Project Owner:  
Edgewood High School  
Madison, WI



Calculation Date: 12/21/2018    Run No. 103    Run: 103-No Wall/1000 People    SoundPLAN 8.0 11/9/2018

Length Scale 1:278

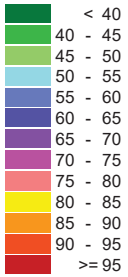


# Goodman Athletic Complex

201 - Medium Barrier 150 People

Rev. 12/21/2018

### Levels in dB(A)



### Noise Sources:

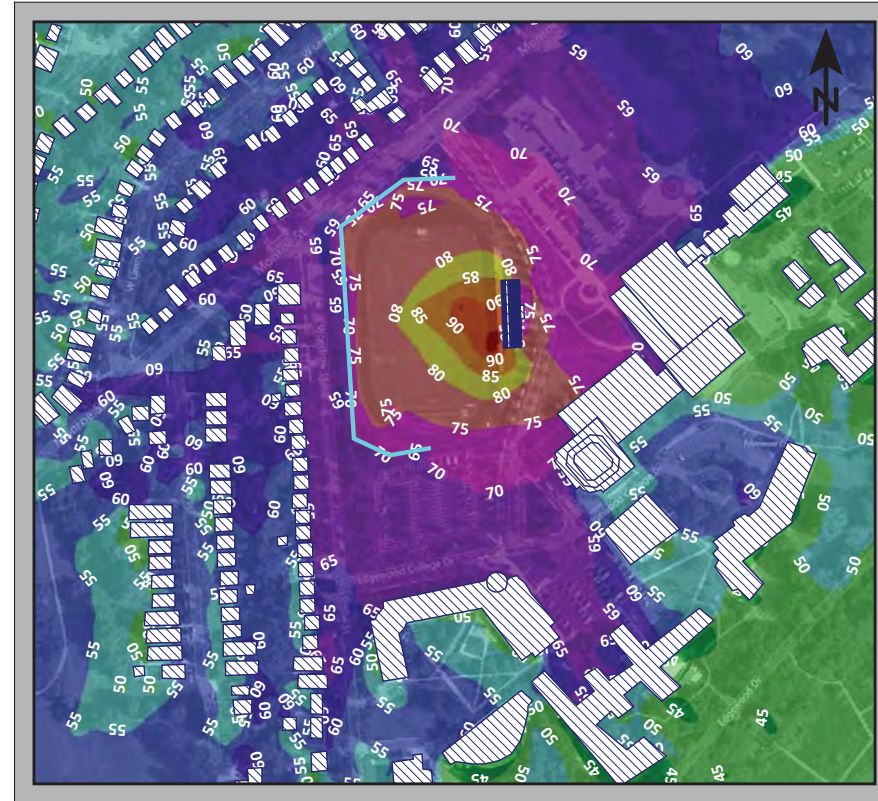
- (150) Spectators
- (22) Players On Field
- (1) Referee's Whistle
- (2) R2-94 Loudspeakers
- (28) Pep Band Musicians

### Conditions

Calculations based at 1.5m above terrain.

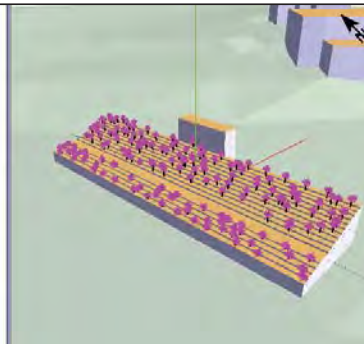
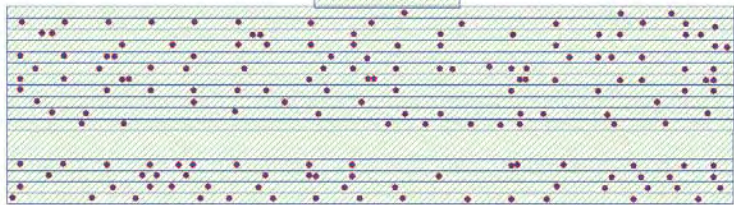


**LAeq (1-Hour Average)**



**LAmx (Peak)**

Blue Dots Indicate Spectators



Prepared For:  
Phillip Roeglin  
Professional Audio Designs, Inc.

Prepared By:  
Mike Nicolai  
TLC Engineering for Architecture

Reviewed By:  
Richard Talaske  
The Talaske Group

Project Owner:  
Edgewood High School  
Madison, WI



Calculation Date: 12/21/2018    Run No. 201    Run: 201-Medium Wall/150 People    SoundPLAN 8.0 11/9/2018

Length Scale 1:278

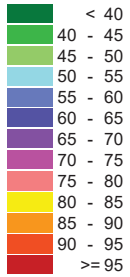


# Goodman Athletic Complex

202 - Medium Barrier 500 People

Rev. 12/21/2018

### Levels in dB(A)



### Noise Sources:

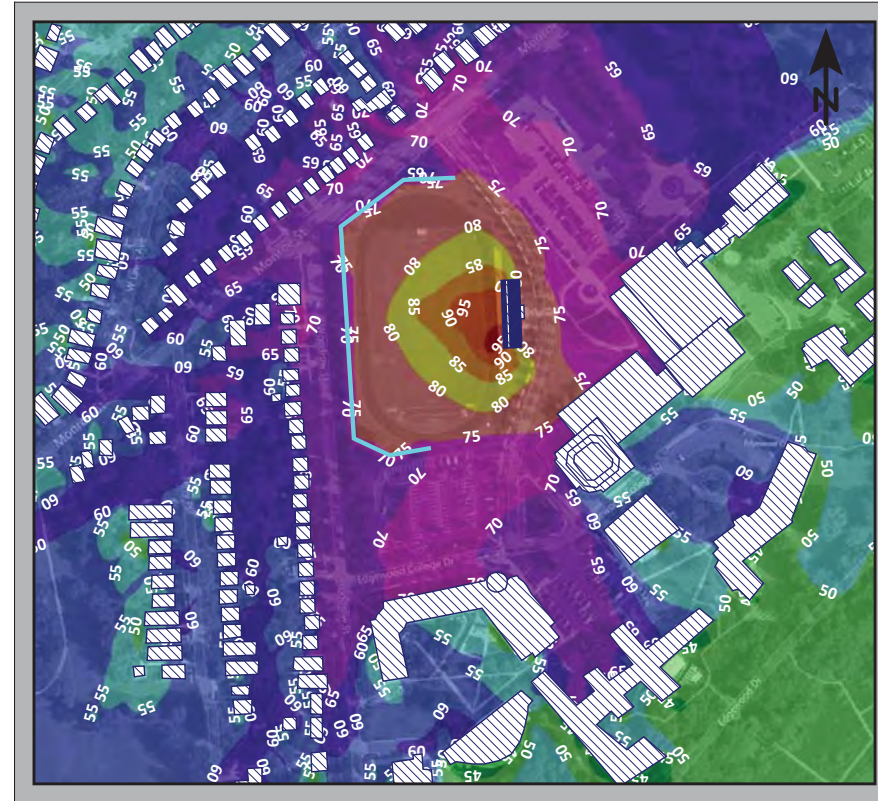
- (500) Spectators
- (22) Players On Field
- (1) Referee's Whistle
- (2) R2-94 Loudspeakers
- (28) Pep Band Musicians

### Conditions

Calculations based at 1.5m above terrain.

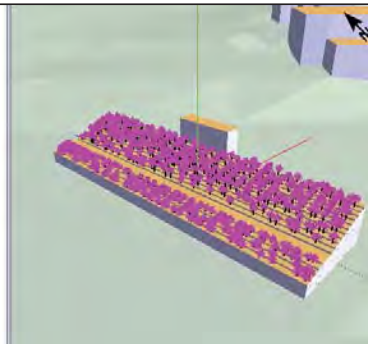
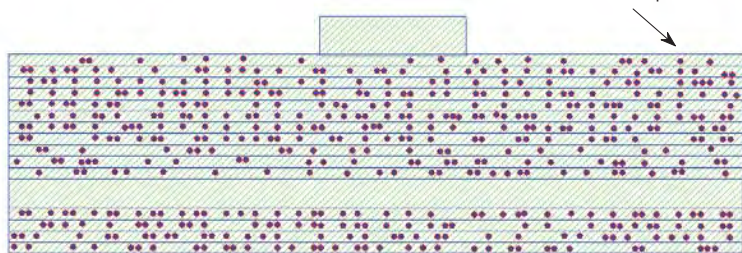


**LAeq (1-Hour Average)**



**Lmax (Peak)**

Blue Dots Indicate Spectators



Prepared For:  
Phillip Roeglin  
Professional Audio Designs, Inc.

Prepared By:  
Mike Nicolai  
TLC Engineering for Architecture

Reviewed By:  
Richard Talaske  
The Talaske Group

Project Owner:  
Edgewood High School  
Madison, WI



Calculation Date: 12/21/2018    Run No. 202    Run: 202-Medium Wall/500 People    SoundPLAN 8.0 11/9/2018

Length Scale 1:278

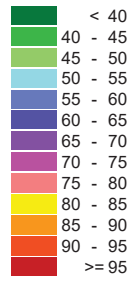


# Goodman Athletic Complex

203 - Medium Barrier 1000 People

Rev. 12/21/2018

### Levels in dB(A)

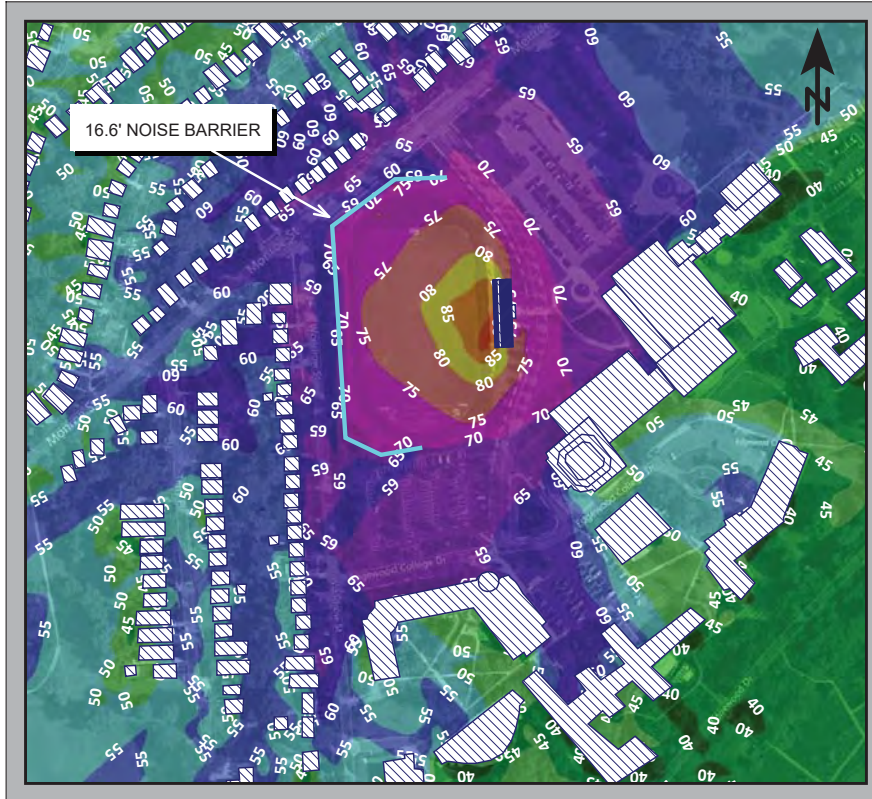


### Noise Sources:

- (1000) Spectators
- (22) Players On Field
- (1) Referee's Whistle
- (2) R2-94 Loudspeakers
- (28) Pep Band Musicians

### Conditions

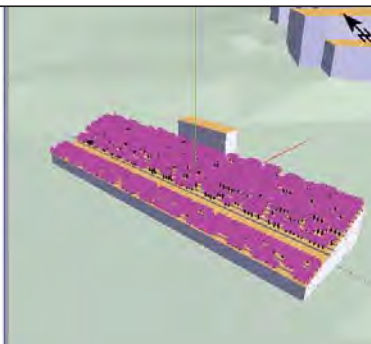
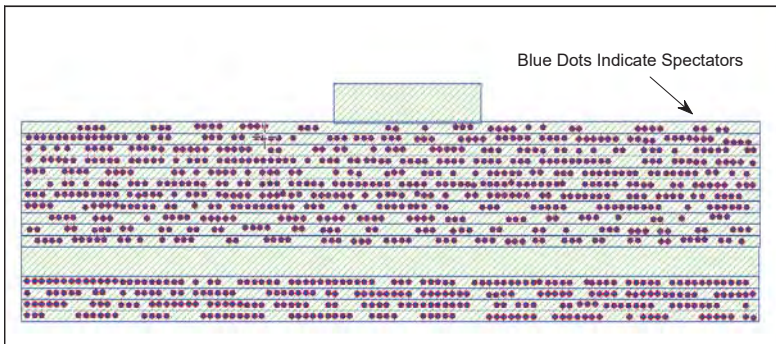
Calculations based at 1.5m above terrain.



**LAeq (1-Hour Average)**



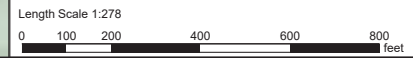
**LMax (Peak)**



Prepared For: Phillip Roeglin Professional Audio Designs, Inc.	Prepared By: Mike Nicolai TLC Engineering for Architecture	Reviewed By: Richard Talaske The Talaske Group	Project Owner: Edgewood High School Madison, WI
--	--	--	---



Calculation Date: 12/21/2018    Run No. 203    Run: 203-Medium Wall/1000 People    SoundPLAN 8.0 11/9/2018

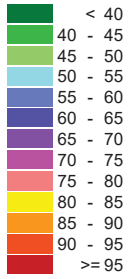


# Goodman Athletic Complex

301 - High Barrier 150 People

Rev. 12/21/2018

### Levels in dB(A)

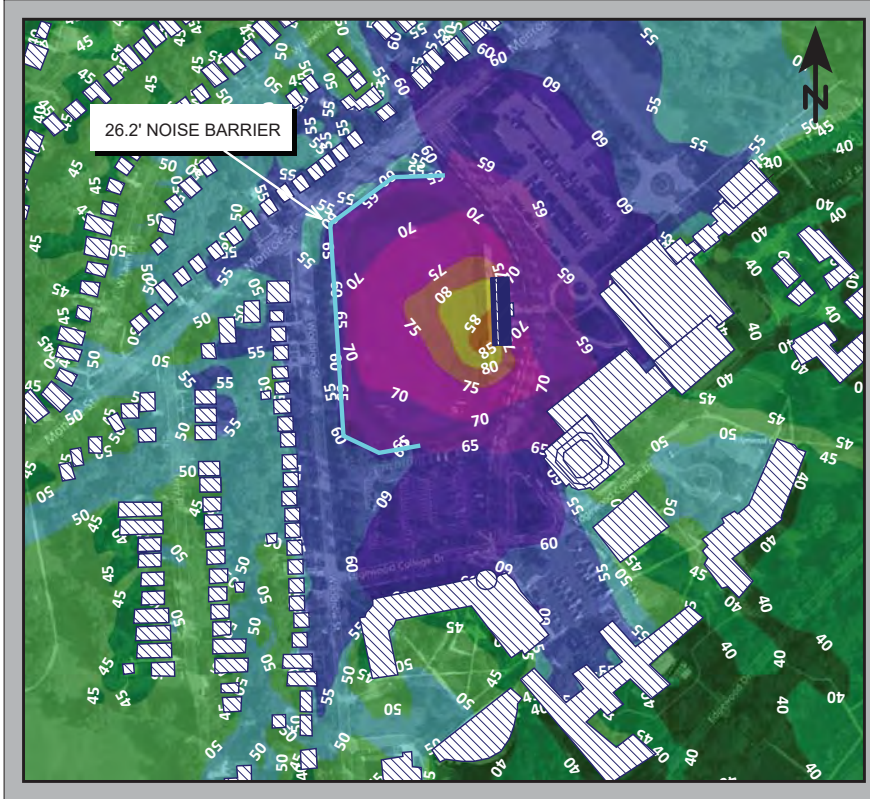


### Noise Sources:

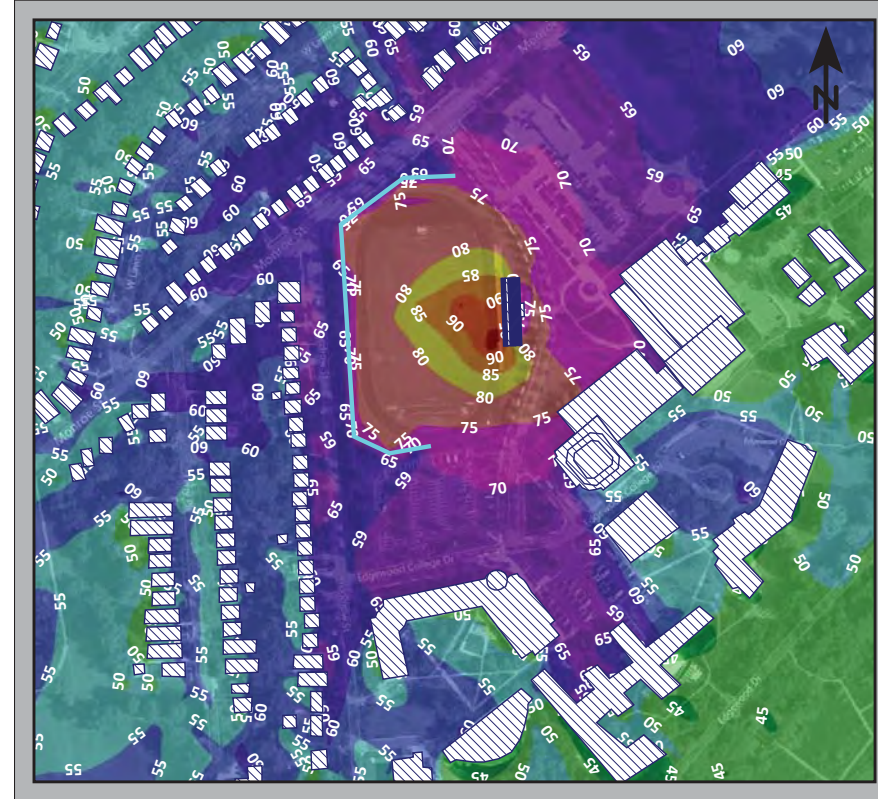
- (150) Spectators
- (22) Players On Field
- (1) Referee's Whistle
- (2) R2-94 Loudspeakers
- (28) Pep Band Musicians

### Conditions

Calculations based at 1.5m above terrain.

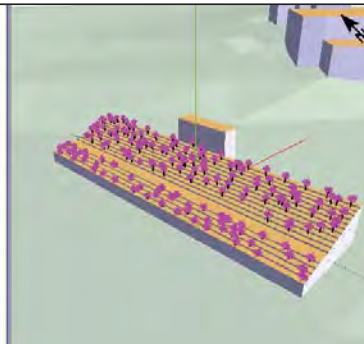
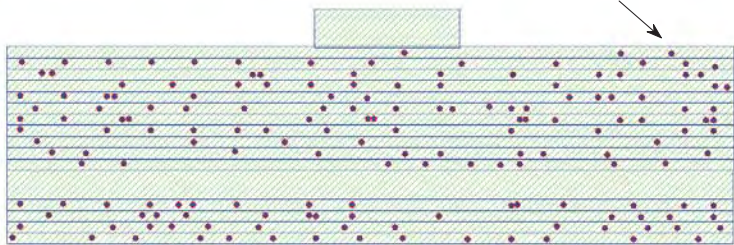


**LAeq (1-Hour Average)**



**LAmx (Peak)**

Blue Dots Indicate Spectators



Prepared For:

Phillip Roeglin  
Professional Audio Designs, Inc.

Prepared By:

Mike Nicolai  
TLC Engineering for Architecture

Reviewed By:

Richard Talaske  
The Talaske Group

Project Owner:

Edgewood High School  
Madison, WI



Calculation Date: 12/21/2018

Run No. 301

Run: 301-High Wall/150 People

SoundPLAN 8.0 11/9/2018

Length Scale 1:278

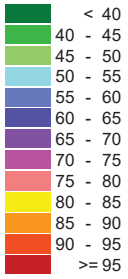


# Goodman Athletic Complex

302 - High Barrier 500 People

Rev. 12/21/2018

### Levels in dB(A)



### Noise Sources:

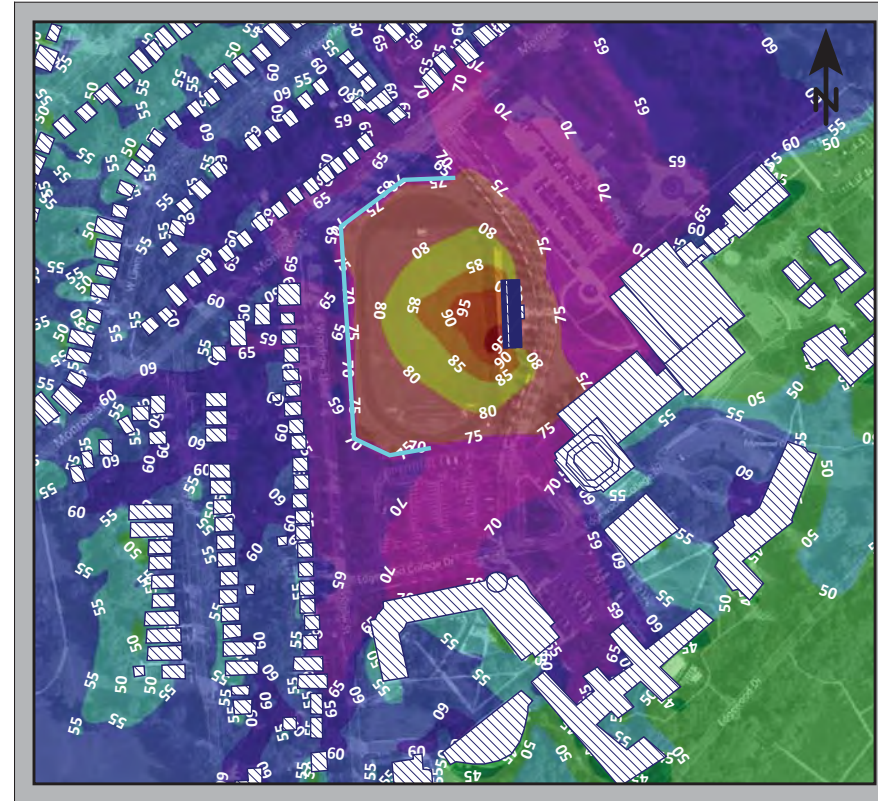
- (500) Spectators
- (22) Players On Field
- (1) Referee's Whistle
- (2) R2-94 Loudspeakers
- (28) Pep Band Musicians

### Conditions

Calculations based at 1.5m above terrain.

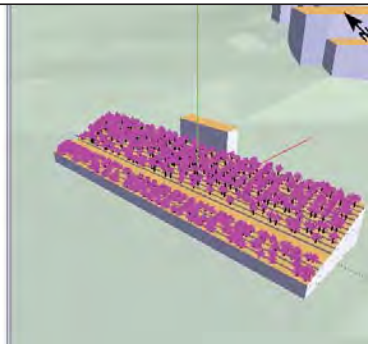
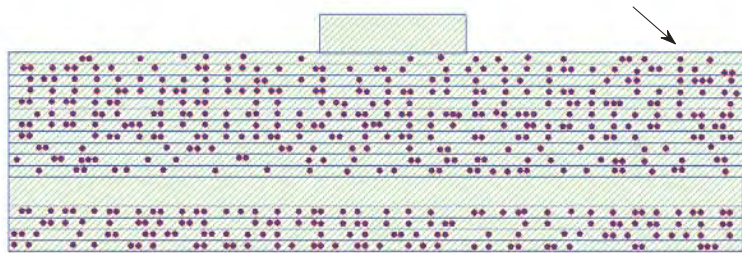


**LAeq (1-Hour Average)**



**LMax (Peak)**

Blue Dots Indicate Spectators



Prepared For:  
Phillip Roeglin  
Professional Audio Designs, Inc.

Prepared By:  
Mike Nicolai  
TLC Engineering for Architecture

Reviewed By:  
Richard Talaske  
The Talaske Group

Project Owner:  
Edgewood High School  
Madison, WI



Calculation Date: 12/21/2018    Run No. 302    Run: 302-High Wall/500 People    SoundPLAN 8.0 11/9/2018

Length Scale 1:278

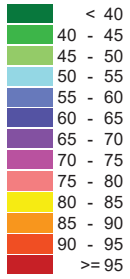


# Goodman Athletic Complex

303 - High Barrier 1000 People

Rev. 12/21/2018

### Levels in dB(A)

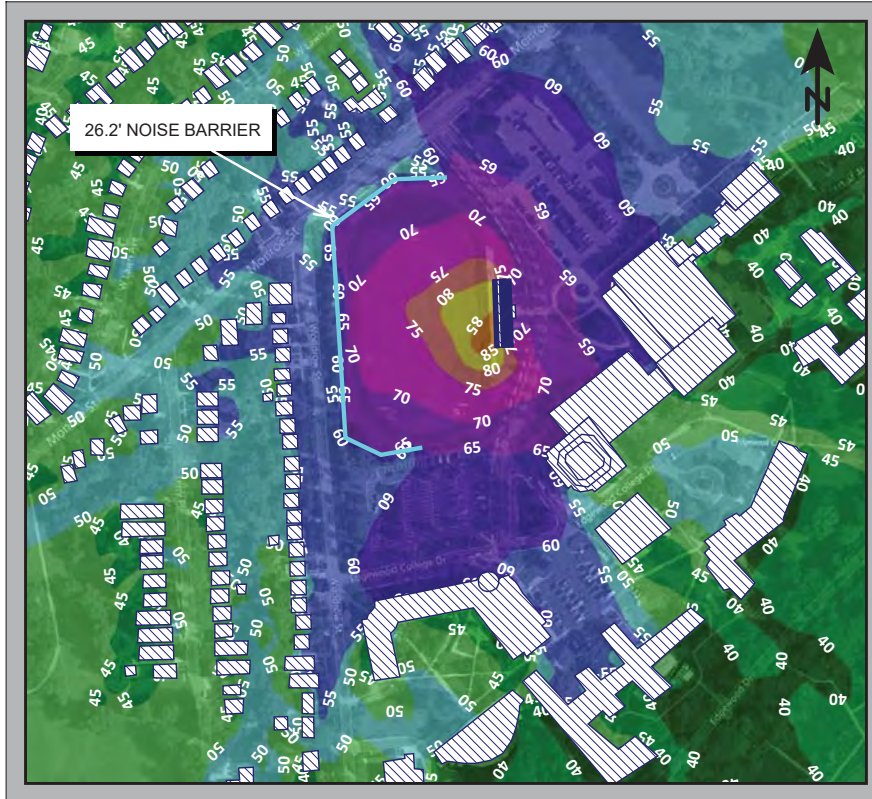


### Noise Sources:

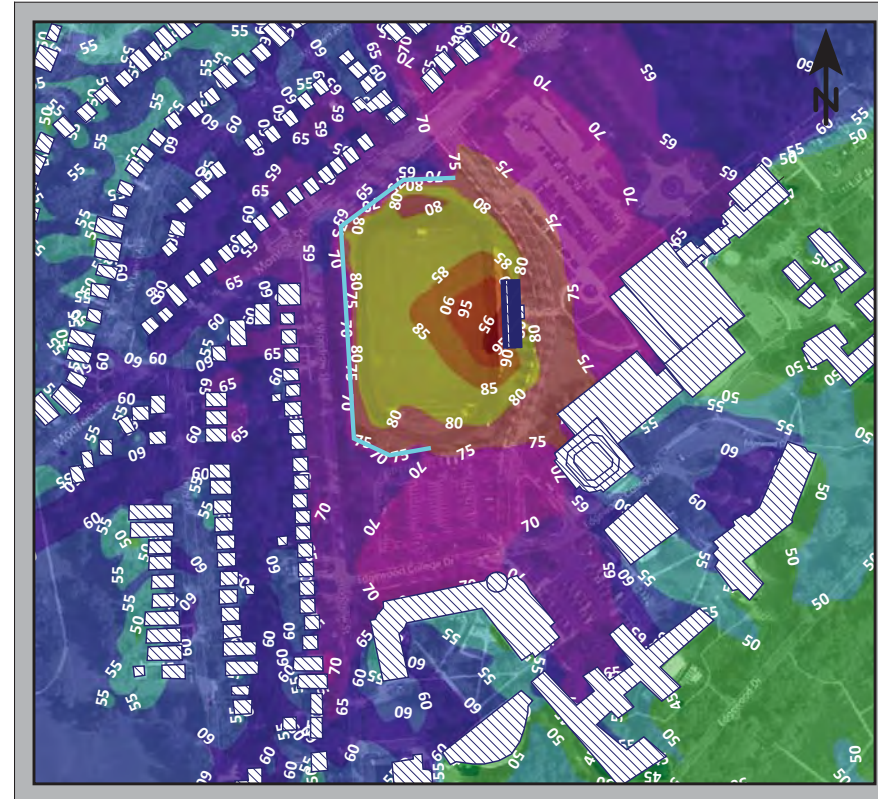
- (1000) Spectators
- (22) Players On Field
- (1) Referee's Whistle
- (2) R2-94 Loudspeakers
- (28) Pep Band Musicians

### Conditions

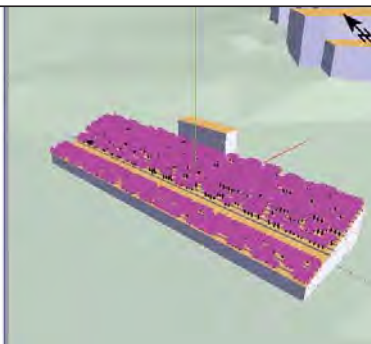
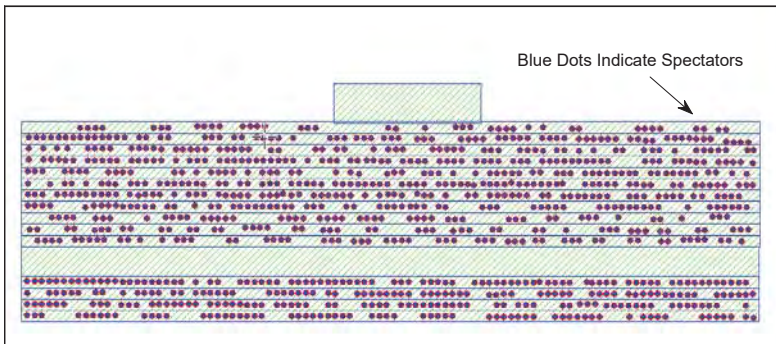
Calculations based at 1.5m above terrain.



**LAeq (1-Hour Average)**

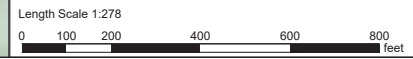


**Lmax (Peak)**



Prepared For: Phillip Roeglin Professional Audio Designs, Inc.	Prepared By: Mike Nicolai TLC Engineering for Architecture	Reviewed By: Richard Talaske The Talaske Group	Project Owner: Edgewood High School Madison, WI
<b>Professional AUDIO DESIGNS inc</b>	<b>TLC ENGINEERING FOR ARCHITECTURE</b>	<b>TALASKE GROUP</b>	<b>EDGEWOOD HIGH SCHOOL OF THE SACRED HEART</b>

Calculation Date: 12/21/2018    Run No. 303    Run: 303-High Wall/1000 People    SoundPLAN 8.0 11/9/2018



SLocation	City of Madison Zoning	City of Madison Zoning of Neighboring Areas	Lighted Facility/Activities	Hours of Operation	Notes
Edgewood High School; Goodman Athletic Complex <ul style="list-style-type: none"> <li>• 2219 Monroe St.</li> </ul>	CI	TR-C2 and TR-C3	Athletic Field	Proposed Hours [Subject to Comment]:  Sunday – Thursday: Until 8:45 PM  Friday – Saturday: Until 10:30 PM  The above times are subject to extension based on extenuating circumstances on a given day such as weather delays and/or overtime.	Conditional Use Application – "Conditional Use for Outdoor Field Lighting" <ul style="list-style-type: none"> <li>• Edgewood proposes construction and installation of 4 80' lighting poles utilizing LED lighting fixtures set at 30' candles. [Note: this may change to 68']</li> <li>• LED lighting and technology minimizes light spread, glare, and sky glow, is designed to be dark sky compliant, and focuses the light on the facility and away from adjoining streets</li> <li>• Edgewood High School proposes use of such lighting poles during a broad range of existing permitted use activities related to the missions of Edgewood High School, Edgewood College, and the Edgewood Campus School, including outdoor recreational uses during</li> </ul>



					<p>evening hours. It is Edgewood's intention to also continue its historical practice of allowing athletic teams of the Madison Metropolitan School District, particularly West High School, to use Goodman Athletic Complex when available at no cost.</p> <ul style="list-style-type: none"> <li>• Using Musco Lighting for photometrics</li> </ul>
<p>Breese Stevens Field</p> <ul style="list-style-type: none"> <li>• Address: 917 E. Mifflin St.</li> </ul>	PR	TR-V1, TE and TR-C4	<p>Soccer Field          Concerts          East High Athletics          Ultimate Frisbee Field</p>	4:00am – 10:00pm	<p>Managed by Big Top Events</p> <ul style="list-style-type: none"> <li>• Use Agreement - Hours of Operation: “Except as provided for in this paragraph, the Stadium shall not be open past 10PM on weeknights and 10:30PM on weekends. Big Top must submit a written request to the Superintendent of Parks, at the address listed in Section 14, with a copy to the Alder and the Neighborhood Association, at least twenty-one (21) days prior to the date of any event or promotion that requires the hours of operation at Stadium to be extended beyond these hours. In the event a game</li> </ul>

					<p>extends beyond these times, the game may continue until 10:30PM on weeknights or 11:00PM on weekends, at which time the game must be suspended. The Parks Superintendent may approve an extension beyond these times based upon extenuating circumstances such as weather.”</p>
<p>Burr Jones Park</p> <ul style="list-style-type: none"> <li>Address: 1820 East Washington Avenue</li> </ul>	CN	TR-V1, IL, PD, PR and TE	Athletic Field	Start time unpublished – 10:00pm	<p>Under Construction/Active Project – “Burr Jones Park Improvements”</p> <ul style="list-style-type: none"> <li>City of Madison Parks Division proposed the addition of an athletic field lighting system. “The lighting system will help address the demand for an athletic field space on the isthmus by offering extended play during the spring and fall. The proposed lighting system utilizes the latest technology in sharp cut-off, low-glare, energy efficient LED lighting. The field lights will automatically turn of at 10pm when the park is closed.”</li> <li>(8) 70’ lighting poles</li> </ul>

					<ul style="list-style-type: none"> <li>• Resource: Urban Design Commission Application</li> <li>• Used Musco Lighting for photometrics</li> </ul>
Demetral Field <ul style="list-style-type: none"> <li>• Address: 601 N. Sixth Street</li> </ul>	PR	TR-C4, TR-V1, NMX, PD, IG and IL	Softball Fields	4:00am – 10:00pm	
Duane F. Bowman Park <ul style="list-style-type: none"> <li>• Address: 1775 Fish Hatchery Road</li> </ul>	PR	CN, IL, SR-C2 and CC-T	Softball and Baseball Fields	4:00am – 10:00pm	

<p>Elver Park</p> <ul style="list-style-type: none"> <li>Address: 1250 McKenna Blvd</li> </ul>	A	PD, SR-V2, SR-C1 and SR-V1	Ice Skating Sledding Softball Field	<p>4:00am – 10:00pm</p> <p>Staffed Warming Shelter with Concessions and Rental Opens:</p> <p>Monday-Thursday: 4:00pm – 8:00pm</p> <p>Friday: 4:00pm-9:00pm</p> <p>Saturday: 11:00am – 9:00pm</p> <p>Sunday: 11:00am – 6:00pm</p>	
<p>Goodman Park</p> <ul style="list-style-type: none"> <li>Address: 1402 Wingra Creek Pkwy.</li> <li>Ice Skating Address: 37 Van Deusen St.</li> </ul>	PR	CN, SE, TR-C2, TR-C1, IL and TE	Ice Skating Pool Softball Field	4:00am – 10:00pm	New LED Lighting for Ice Skating – Lights are activated by a push button located at the maintenance shed and operate for one-hour. A five minute warning strobe will alert skaters to reactivate the lights.
<p>Madison College; Goodman Sports Complex</p> <ul style="list-style-type: none"> <li>Address: 3201 Anderson Street</li> </ul>	PR	IL, TR-V2, TR- C1, TR-V1, CI, AP, SE, PD, CN and SR-V2	Softball Field Baseball Field Soccer Field	7:00am – 10:00pm	

MMSD - Memorial High School; Marshfield Stadium <ul style="list-style-type: none"> <li>Address: 201 S. Gammon Road</li> </ul>	CI	SE, SR-C1, SR-V2 and CC	Football, Track and Baseball Field	No restrictions on lights found	2018 Lighting Permit for Madison Memorial High School <ul style="list-style-type: none"> <li>12 80' lighting poles</li> <li>Used Musco Lighting for photometrics</li> </ul>
MMSD – La Follette High School; Lussier Stadium <ul style="list-style-type: none"> <li>Address: 702 Pflaum Road</li> </ul>	CI	CN, SR-C1, PR and SR-C3	Football and Track Field	No restrictions on lights found	
McPike Park <ul style="list-style-type: none"> <li>Address: 202 S. Ingersoll Street</li> </ul>	PR	TE, TR-V2, PD and PR	Skatepark	Summer Hours: 8:00am -10:00pm with evening lighting  Spring/Fall Hours: 8:00am – dusk  Winter Hours: Closed	
Olbrich Park <ul style="list-style-type: none"> <li>Address: 3527 Atwood Ave</li> <li>Ice Rink Address: 201 Garrison St.</li> </ul>	PR	TE, TR-V1, TR-C2, TR-C4, TR-C3 CN, SR-V2, PD and NMX	Ice Skating Softball Fields	4:00am – 10:00pm  Warming Shelter Hours:  Monday – Friday: 4:00 pm – 8:45 pm	

				Weekends/MLK Day: 11:00 am – 8:45 pm	
Rennebohm Park <ul style="list-style-type: none"> <li>Address: 115 N. Eau Claire Ave.</li> </ul>	CN	SR-V2, TR-U2, SR-C1, PD and NMX	Ice Skating Tennis Court	4:00am – 10:00pm  Lights: 4:30pm – 9:00pm	
Reynolds Park <ul style="list-style-type: none"> <li>Address: 810 E. Mifflin St</li> </ul>	PR	TR-U2, TR-V2, TR-V1 and TE	Bike Polo/Tennis Courts	4:00am – 10:00pm	Under Construction/Active Project – “Water Utility Building Rooftop Lighting” <ul style="list-style-type: none"> <li>City of Madison will be adding (4) 25’ high security lights to the rooftop of the existing water utility building</li> <li>Installed near the bike polo courts and on the exterior staircase of the building</li> <li>Will be programmed to turn on when activated for recreation use after dusk and shut off when the park closes at 10:00pm</li> <li>Resources: City of Madison PowerPoint</li> </ul>

					<ul style="list-style-type: none"> <li>Used Musco Lighting for photometrics</li> </ul>
<p>Tenney Park</p> <ul style="list-style-type: none"> <li>Address: 1414 E. Johnson St.</li> <li>Ice Skating Address: 402 N. Thornton Ave.</li> </ul>	PR	SE, PD, CN, TR-C2, TR-V1, TR-V2 and TR-C4	Ice Skating Pickleball Court Tennis Courts	<p>4:00am – 10:00pm</p> <p>Winter Warming Shelter, Restrooms, Concessions, and Rental Open Hours:</p> <p>Monday – Friday 3:00 – 9:00 PM</p> <p>Saturday and Sunday 10:00am –9:00pm</p>	
<p>UW – Goodman Softball Complex</p> <ul style="list-style-type: none"> <li>2415 University Bay Drive</li> </ul>	CI	CN	Softball Field	No restrictions on lights found	

<p>UW – McClimon Track/Soccer Complex</p> <ul style="list-style-type: none"> <li>• 702 Walnut Street</li> </ul>	CI	CN	Track/Soccer Field	No restrictions on lights found	
<p>UW – Nielsen Tennis Stadium</p> <ul style="list-style-type: none"> <li>• 1000 Highland Avenue</li> </ul>	CI	CN	Tennis Courts	<p>Spring Hours:</p> <p>Monday – Friday: 6:15am – 10:30pm Saturday – Sunday: 7:45am – 10:30pm</p> <p>Summer Hours:</p> <p>Monday – Friday: 6:15am – 8:45pm Saturday – Sunday Closed</p>	<p>2018/2019 Nielsen Tennis Court Outdoor Expansion</p> <ul style="list-style-type: none"> <li>• “10 60’ light poles with directional LEDs to meet NCAA standards. The design allows a subset of courts to be lit. The master lighting control system will only allow use during specified times.”</li> <li>• Used Musco Lighting for photometrics</li> </ul>
<p>Vilas (Henry) Park</p> <ul style="list-style-type: none"> <li>• Address: 1602 Vilas Park Dr.</li> </ul>	PR	CN, PD, TR-C3, TR-V1, TR-C2 and NMX	Ice Skating	<p>4:00am – 10:00pm</p> <p>Winter Warming Shelter, Restrooms, Concessions, and Rental Open: Monday - Thursday: 4:00 - 8:00pm Friday: 4:00 - 9:00pm</p>	



				<p>Saturday: 11:00am - 9:00pm  Sunday: 11:00am - 6:00pm</p>	
<p>Warner Park</p> <ul style="list-style-type: none"> <li>Address: 2930 N. Sherman Avenue</li> </ul>	PR	SR-V2, PD, SR-C1, SR-V1, CC-T and NMX	<p>Baseball Field  Softball Field  Basketball Court  Football Field  Ice Skating  Soccer Field</p>	<p>4:00am – 10:00pm</p> <p>Warming Shelter Hours:</p> <p>Monday – Friday  4:00pm – 8:45pm</p> <p>Weekends/MLK Day: 11:00am – 8:45pm</p>	
<p>Westmorland Park</p> <ul style="list-style-type: none"> <li>Address: 4114 Tokay Blvd</li> </ul>	CN	TR-C1, TR-C2, SR-C1, SR-C2 and TR-C3	Ice Skating	<p>4:00am – 10:00pm</p> <p>Warming Shelter Hours:</p> <p>Monday-Friday  4:00pm – 8:45 pm</p> <p>Weekends/MLK Day: 11:00am – 8:45pm</p>	

Wexford Park <ul style="list-style-type: none"> <li>Address: 1201 N. Westfield Rd.</li> </ul>	PD	PD, SR-C1, SR-C3 and SR-V2	Ice Skating	4:00am – 10:00pm  Ice Skating Lights: 4:30pm – 9:00 pm	
---	----	----------------------------------	-------------	---	--

**City of Madison Traffic Flow Map** (Average weekday traffic counts (AWT) are collected at count stations throughout the city and represent the daily average for Monday-Friday traffic volume; AWT\_Count: most recent average weekday traffic count)

- 2015 Station 3448, Monroe Adjacent to Edgewood: AWT\_Count – 17,450
- 2017 Station 3449, Monroe Adjacent to Wingra Park: AWT\_Count – 16,900
- 2017 Station 3003, Monroe North of Edgewood: AWT\_Count – 14,500
- 2015 Station 3282, Monroe and Regent: AWT\_Count – 12,750
- 2015 Station 5212, Monroe and Randall: AWT\_Count – 9,150

# EDGEWOOD HIGH SCHOOL OF THE SACRED HEART

Edgewood High School students deserve the same equal treatment as other schools in Madison concerning use of their longstanding athletic field. Edgewood students should be allowed to play athletic games on the same athletic field they have always played on – under the lights.

## **#1 – Lighting and sound solutions benefit the school and neighborhood**

- Edgewood plans to use Musco Lighting to install new dark-sky compliant LED lights on the athletic field. There will only be four poles. Three other facilities in Madison recently installed these types of dark-sky compliant lights. Unlike traditional stadium lighting found at most Madison athletic fields and ice rinks, the fixtures on the proposed lighting point down to the playing surface and do not put off glare or spillover to neighboring properties.
- A custom-designed sound plan with directional speakers, aimed and pitched precisely at the fan seating level and away from any neighboring residential properties, will help minimize concerns raised about existing sound from the field.

*Musco's lighting is "better for neighbors who don't want glare in or around their homes or lights left on when not in use." – City of Madison*

## **#2 – Limiting lighting of the field**

- Complies with Madison outdoor lighting ordinances.
- Edgewood goes a step further by agreeing to limits requiring turn-off of lights no later 7 p.m. for practice events.
- For non-practice events, lights will be shut off 30 minutes following the conclusion of an event and no later than 10 p.m., Sunday-Thursday and 11 p.m., Friday and Saturday, with limited exceptions.
- No one else can use the lights for non-practice events.

## **#3 – Edgewood should be treated like other Madison schools**

- The repeal of the Master Plan confirms Edgewood can use its field in the same manner as other Madison schools.
- Common Council voted 15-5 to allow Edgewood to repeal its Master Plan and return to Campus Institutional zoning like all other high schools in Madison.
- Permitted uses of the field include a broad range of activities related to Edgewood's mission, and the historical practice of allowing athletic teams affiliated with the Madison Metropolitan School District, particularly West High School, and community parochial schools to use the field at no cost.

*"Rather than having to drive to the far east or far west edges of Madison for access to athletic fields, people can walk, people can bike. It really does reduce vehicle trips. It's just more accessible." – Mike Sturm, landscape architect with Madison Parks Division*

## PERMIT COUNTER INFORMATION

---

Submit your plans and applications at the Permit Counter.

Permit Counter  
Department of Planning and Community and Economic Development  
126 S. Hamilton St.  
Madison, WI 53703

Phone Number: 266-4551

## NOTES

---



---

Department of Planning and Community and Economic Development  
126 S. Hamilton St.  
Madison, WI 53701  
266-4551

## Getting Your Parking Lot/Site Plan Approved

In this packet, you'll find:

- Parking Lot/Site Plan Approval Application and Checklist
- Plan Approval Procedures and Instructions
- Example plans for parking lot layout, drainage, landscaping and erosion control
- Parking Lot Design Standards
- Landscape Worksheet
- Outdoor Lighting Standards
- Street Terrace Permit Application
- Erosion Control Permit Application
- Storm Water Management Permit Application
- Application to Excavate in Public Right-of-Way
- Fire Apparatus Access and Fire Hydrant Worksheet

## APPLICATION INSTRUCTIONS – PARKING LOT/SITE PLAN APPROVAL PROCESS

Our process and forms were designed with input from customers and City staff who provided tips on how to prevent errors and reduce time. Our process works best if we receive complete, accurate and legible information.

**1 Before you submit our plans and required information, discuss your proposal with City staff.** At this time you can discuss the City's standards for site design. See the *Parking Lot/Site Plan Approval Application Checklist, Section G, for staff phone numbers.*

**2 Determine the items you need to include in your application.** At a minimum, you need:

- The *Parking Lot/Site Plan Approval Application Checklist*
- Seven sets of scaled (1" = 20' or similar) drawings

To determine the other items you need to include, answer these questions.

1. Is this parking lot an approved Conditional Use, Demolition or PD?

- No  
 Yes →  Attach signed copy of *Letter of Conditions*

2. Is this parking lot new construction?

- No  
 Yes →  Attach *street terrace permit*

3. Is the site one acre or more?

- No  
 Yes →  Attach *Land Disturbing Activity application* and five sets of Erosion Control Plan

4. Does this parking lot have a joint driveway or joined parking lots on separate parcels?

- No  
 Yes →  Attach *easement agreements*

5. Will this parking lot have outdoor lighting?

- No  
 Yes →  Attach *lighting plan and manufacturers specs & plan*

6. Does the site meet the applicability standards of Sec. 28.142(2) or it the approved landscape plan changing?

- No  
 Yes →  Attach *Landscape Worksheet & plan*

**3 Prepare your plans.** Use the application checklist to be sure you show all the information that is needed for review of your plans/project.

**4 Submit Checklist, plans and all attachments at the Permit Counter in the Department of Planning & Community & Economic Development in the Madison Municipal Building.** A zoning staff person will review your application to see if it is complete. If it is not complete, the staff person will return your plans to you and explain what other items you need to submit. If it is complete, a zoning staff person will accept the application for review.

**5 Pay fees.** A site plan review fee is due when plans and attachments are submitted for staff review. The fee is \$100 plus \$50 for each acre of land in excess of one acre, or fraction thereof, up to a maximum of 5 acres or \$300. \$50 fee for Government agencies, schools, NGO's non-profits. You can consult with zoning staff prior to submitting plans to calculate the fee.

**6 Track site plan review.** You can track the progress of the City agencies' reviews on the [City of Madison Site Plan Verification](#) website. If an agency requests additional information, submit the materials or information directly to that agency. If a plan is rejected by an agency, revised plans will need to be resubmitted for a new review along with an additional site plan review fee.

**7 Return to pick up your plans.** Usually the parking lot/ site plan review process takes about 7- 14 days. It can take longer if an agency requests additional information or if the plans need to be revised and resubmitted. You will receive an email notification alerting you when the plans have been approved. You can then return to the Zoning Counter to pick up the approved plans.

**8** Pay all permit fees at the Permit Counter and get your permit(s) and a signed, approved copy of your plan.

## WHO TO CALL FOR HELP

As you look over the application and checklist you may be confused about what you need to submit or show on your plans. City staff can advise you. Give them a call before you draw your plans or submit your application.

TOPIC	CITY AGENCY	PHONE NUMBER
Building use Setbacks Landscaping Occupancy	Zoning	(608) 266-4551
Parking lot geometrics	Traffic Engineering	(608) 266-4761
Drainage Land disturbing activity Soil erosion	Engineering	(608) 266-4751
Fire hydrants/access	Fire	(608) 266-4484
Outdoor lighting	Building Inspection	(608) 266-4551

## Why the City Needs So Much Information

The City of Madison reviews and approves parking lot plans to answer these questions:

- Will there be the required number of car/bike spaces for visitors, customers and employees?
- Will drivers of different-sized vehicles be able to get in and out of the spaces safely?
- Will customers and employees with disabilities be able to park and have easy access to the building?
- Can drivers enter and exit the lot safely?
- Will parking lot lighting help keep customers, employees and property safe, while not disturbing adjacent property owners?
- Will the lot's construction and use cause minimal soil erosion and runoff?
- Will the lot drain properly?
- Will fire trucks be able to get in and have adequate water supply to put out a fire?
- Will the development meet city aesthetic design requirements?

There is a lot to consider, but understanding why the City reviews parking lot plans will help you understand the information you need to provide for review and approval of your plans.

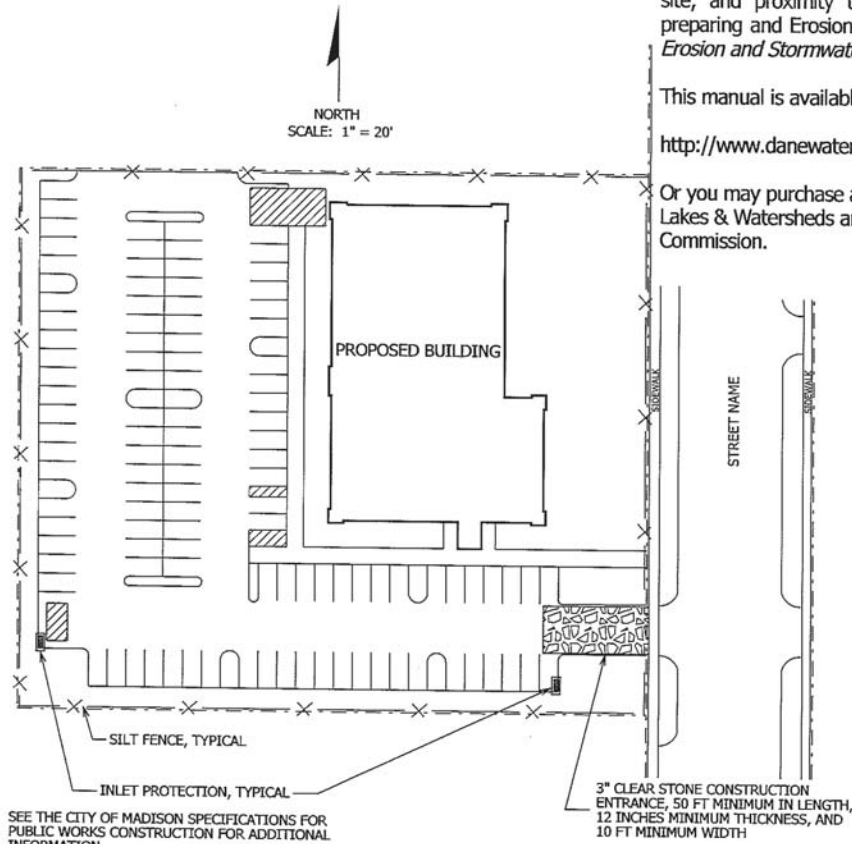
# EXAMPLE PLAN Z - EROSION CONTROL PLAN

This Erosion Control Plan shows the minimum requirements for this site only. Each site should be analyzed with regard to total drainage area, location of the site within the drainage area, topography of the site, and proximity to the receiving body of water. Applicants preparing an Erosion Control Plan should refer to the *Dane County Erosion and Stormwater Management Manual* for guidance.

This manual is available on-line at:

[http://www.danewaters.com/pdf/manual/ecsm\\_manual.pdf](http://www.danewaters.com/pdf/manual/ecsm_manual.pdf)

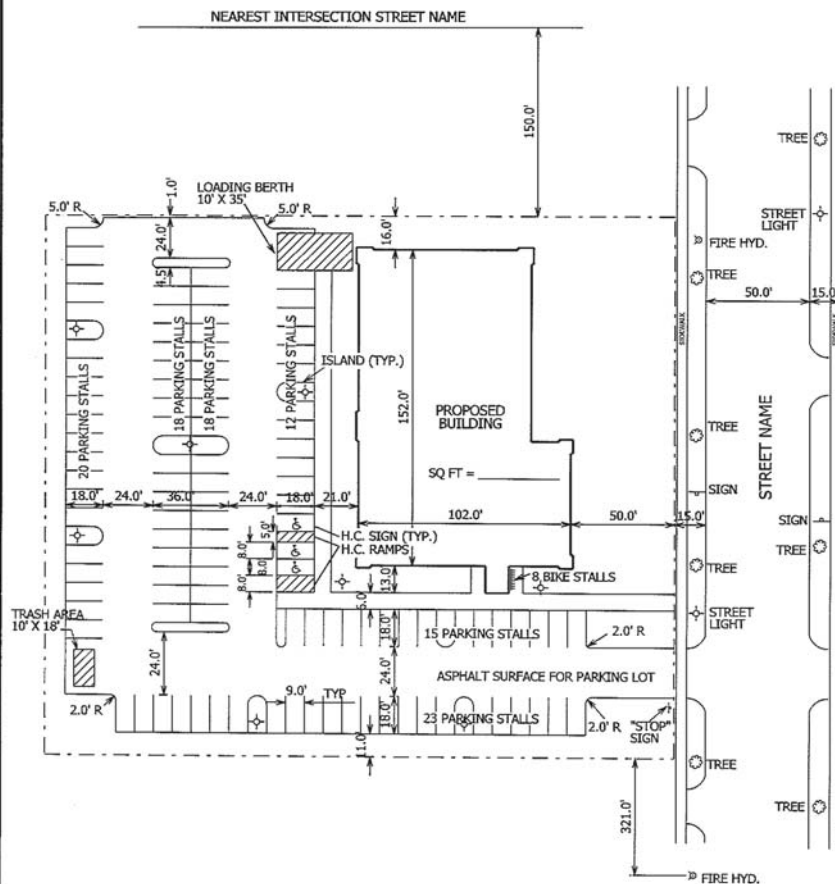
Or you may purchase a hardcopy from the Dane County Office of Lakes & Watersheds and the Dane County Lakes and Watershed Commission.



SEE THE CITY OF MADISON SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION FOR ADDITIONAL INFORMATION.

Call City Engineering at 266-4751, with questions regarding this plan.

# EXAMPLE PLAN W - SITE PLAN



Call Zoning at 266-4551, with questions regarding this plan.

**Parking Lot Plan Site Information Block**

Site Address \_\_\_\_\_  
 Site acreage (total) \_\_\_\_\_

Number of building stories (above grade) \_\_\_\_\_  
 Building height \_\_\_\_\_  
 DILHR type of construction (new structures or additions) \_\_\_\_\_  
 Total square footage of building \_\_\_\_\_

Use of property \_\_\_\_\_  
 Gross square feet of office \_\_\_\_\_  
 Gross square feet of retail area \_\_\_\_\_  
 Number of employees in warehouse \_\_\_\_\_  
 Number of employees in production area \_\_\_\_\_  
 Capacity of restaurant/place in assembly \_\_\_\_\_

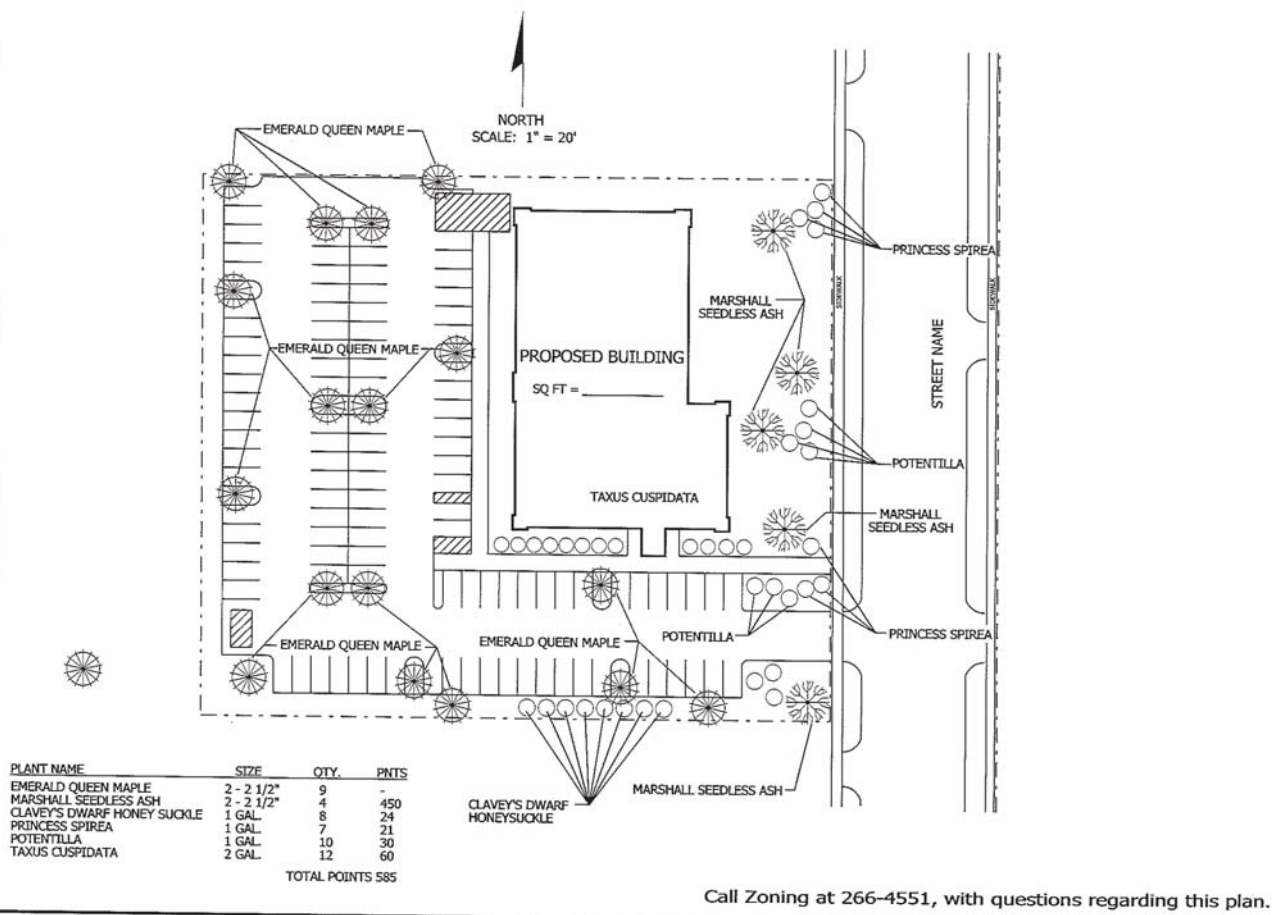
Number of bicycle stalls shown \_\_\_\_\_

Number of parking stalls:

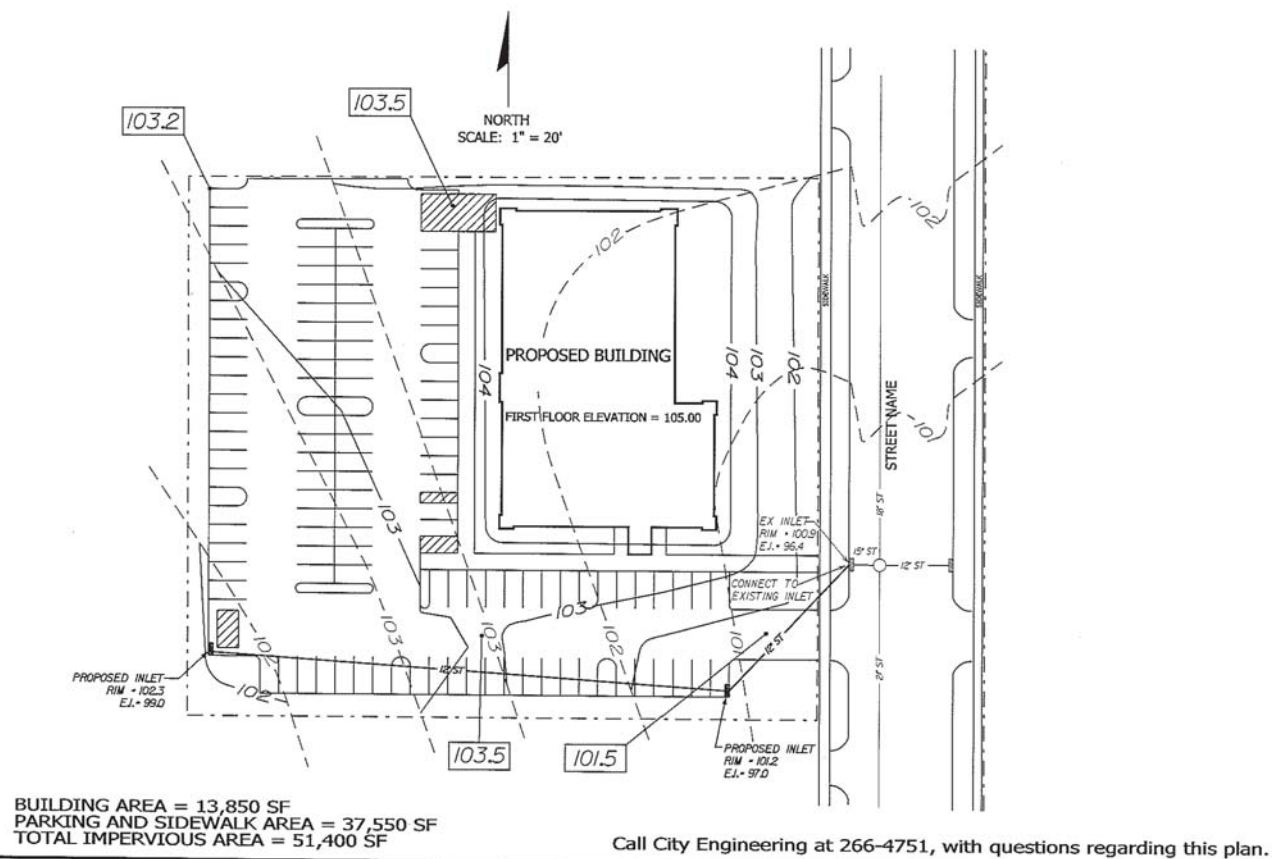
Small car	_____
Large car	_____
Accessible	_____
Total	_____

Number of trees shown \_\_\_\_\_

# EXAMPLE PLAN X - LANDSCAPE PLAN



# EXAMPLE PLAN Y - DRAINAGE PLAN



# Parking Design Standards

## Medium & Large Vehicles

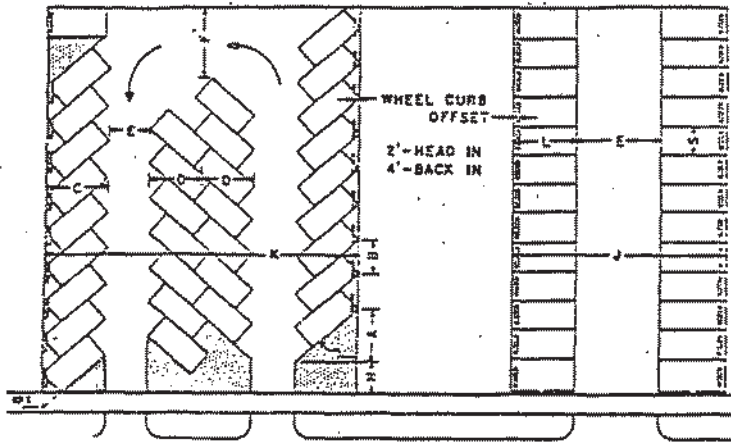


TABLE OF DIMENSIONS (IN FEET)

θ	S	L	A	B	C	D	E	F	G	H	J	K
0°	8.0	22.0	0.0	22.0	8.0	8.0	11.0		0.0	0.0	27.0	
	8.6	23.0	0.0	23.0	8.5	8.5	10.5		0.0	0.0	27.5	
	9.0	25.0	0.0	25.0	9.0	9.0	10.0		0.0	0.0	28.0	
20°	8.0	18.0	38.5	23.5	14.0	13.0	10.0		19.8	4.0	38.0	74.0
	8.6	18.0	40.0	25.0	14.5	13.5	9.5		21.8	4.0	38.5	75.0
	9.0	18.0	41.0	26.0	15.0	14.0	9.5		22.8	4.0	39.5	77.0
	9.6	18.0	41.0	28.0	15.0	14.5	9.5		23.8	4.0	39.5	77.0
	10.0	18.0	42.5	29.0	15.5	15.0	9.0		24.8	4.0	40.0	79.0
30°	8.0	18.0	28.5	16.0	15.5	12.5	10.5		12.0	6.0	41.5	77.0
	8.6	18.0	29.0	17.0	16.0	12.5	10.0		12.5	6.0	42.0	77.0
	9.0	18.0	30.0	18.0	16.5	13.0	9.5		13.5	6.0	42.5	78.0
	9.6	18.0	30.0	19.0	17.0	13.5	9.0		14.3	6.0	43.0	79.0
	10.0	18.0	30.5	20.0	17.5	13.5	9.0		14.8	6.0	44.0	80.0
40°	8.0	18.0	21.5	12.5	18.0	14.5	11.0		7.3	9.0	47.0	87.0
	8.6	18.0	22.0	13.0	18.5	14.5	10.5		7.8	8.5	47.5	87.0
	9.0	18.0	22.5	14.0	19.0	15.0	10.0		8.3	8.0	48.0	88.0
	9.6	18.0	22.5	15.0	19.0	15.0	10.0		8.8	7.5	48.0	88.0
	10.0	18.0	23.0	15.5	19.5	15.5	9.5		9.0	7.0	48.5	88.0
45°	8.0	18.0	19.0	11.5	18.0	16.0	11.0	15.0	5.7	10.0	47.0	90.0
	8.6	19.5	19.5	12.0	18.5	16.0	10.5	15.5	6.0	9.5	47.5	90.0
	9.0	18.0	20.0	12.5	19.0	16.0	10.0	16.0	6.4	9.0	48.0	90.0
	9.6	18.0	20.0	13.5	19.5	16.5	9.0	16.5	6.8	8.5	48.0	90.0
	10.0	18.0	20.5	14.0	20.0	16.5	9.0	17.0	7.0	8.0	49.0	90.0
50°	8.0	18.0	16.0	10.5	19.0	16.5	12.0	15.5	4.9	11.0	50.0	95.0
	8.6	18.0	16.5	11.0	19.5	17.0	11.0	16.0	5.0	10.5	50.0	95.0
	9.0	18.0	17.0	12.0	20.0	17.5	10.5	16.5	5.5	10.0	50.5	96.0
	9.6	18.0	17.0	12.5	20.5	18.0	10.0	16.5	5.8	9.5	51.0	97.0
	10.0	18.0	17.0	13.0	20.5	18.0	10.0	17.0	6.0	9.0	51.0	97.0
60°	8.0	18.0	12.0	9.0	20.0	17.5	18.0	15.0	2.3	13.0	58.0	111.0
	8.6	18.0	12.0	10.0	20.5	18.0	17.0	15.0	2.5	12.5	58.0	111.0
	9.0	18.0	12.0	10.5	20.5	18.0	17.0	15.0	2.6	12.0	58.0	111.0
	9.6	18.0	12.5	11.0	21.0	18.0	16.0	15.0	2.8	11.5	58.0	110.0
	10.0	18.0	12.5	11.5	21.0	18.0	15.0	15.0	2.9	11.0	57.0	108.0
70°	8.0	18.0	7.5	8.5	20.5	18.0	19.5	17.0	1.0	15.0	60.5	116.0
	8.6	18.0	7.5	9.0	20.5	18.0	19.0	17.0	1.0	14.5	60.0	115.0
	9.0	18.0	7.5	9.5	20.5	18.0	18.5	17.0	1.0	14.0	59.5	114.0
	9.6	18.0	7.5	10.0	21.0	18.0	17.5	17.0	1.0	13.5	59.5	114.0
	10.0	18.0	7.5	10.5	21.0	18.5	17.0	17.0	1.0	13.0	59.0	113.0
80°	8.0	18.0	3.5	8.0	20.0	17.0	27.0	18.0	0.3	17.5	67.0	128.0
	8.6	18.0	3.5	8.5	20.0	17.5	25.0	18.0	0.3	17.0	65.0	125.0
	9.0	18.0	3.5	9.0	20.0	17.5	23.0	18.0	0.3	16.0	63.0	121.0
	9.6	18.8	3.5	9.5	20.0	17.5	22.0	18.0	0.3	15.5	62.0	119.0
	10.0	18.0	3.5	10.0	20.0	17.5	22.0	18.0	0.3	14.5	62.0	119.0
90°	8.0	18.0	0.0	8.0	18.0	18.0	28.0	20.0	0.0	0.0	64.0	128.0
	8.6	18.0	0.0	8.5	18.0	18.0	26.0	20.0	0.0	0.0	62.0	124.0
	9.0	18.0	0.0	9.0	18.0	18.0	24.0	20.0	0.0	0.0	60.0	120.0
	9.6	18.0	0.0	9.5	18.0	18.0	23.0	20.0	0.0	0.0	59.0	118.0
	10.0	18.0	0.0	10.0	18.0	18.0	22.0	20.0	0.0	0.0	58.0	116.0

Call Traffic Engineering.

267-8755.

with your questions

about these standards.



# Parking Design Standards

## Small Vehicles

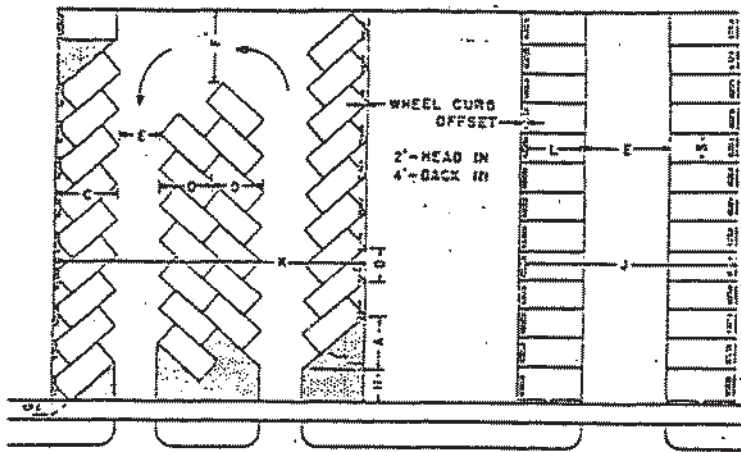


TABLE OF DIMENSIONS (IN FEET)

$\theta$	S	L	A	B	C	D	E	F	G	H	J	K
0°	7.5	20.0	0.0	20.0	7.5	7.5	9.0		0.0	0.0	24.0	
	8.0	21.0	0.0	21.0	8.0	8.0	8.5		0.0	0.0	24.5	
	8.5	22.0	0.0	22.0	8.5	8.5	8.0		0.0	0.0	25.0	
20°	7.5	16.0	36.0	22.0	12.0	9.0	9.0		18.2	3.5	33.0	60.0
	8.0	16.0	37.5	23.5	12.5	9.0	8.5		19.8	3.5	33.5	60.0
	8.5	16.0	39.0	25.0	13.0	9.5	8.5		21.8	3.5	34.5	62.0
	9.0	16.0	40.5	26.0	13.0	10.0	8.5		22.8	3.5	34.5	63.0
	9.5	16.0	42.0	27.0	13.5	10.5	8.0		23.8	3.5	35.0	64.0
30°	7.5	16.0	25.0	15.0	14.0	11.0	9.5		11.0	5.5	37.5	69.0
	8.0	16.0	26.0	16.0	14.5	11.5	9.0		12.0	5.5	38.0	70.0
	8.5	16.0	27.0	17.0	15.0	12.0	8.5		12.5	5.5	38.5	71.0
	9.0	16.0	28.0	18.0	15.5	12.5	8.0		13.5	5.5	39.0	72.0
	9.5	16.0	28.5	19.0	16.0	13.0	8.0		14.3	5.5	40.0	74.0
40°	7.5	16.0	19.0	11.5	16.0	13.0	10.0		6.8	8.0	42.0	78.0
	8.0	16.0	19.5	12.5	16.0	13.5	10.0		7.3	7.5	42.0	79.0
	8.5	16.0	20.0	13.0	16.5	14.0	9.0		7.8	7.5	42.0	79.0
	9.0	16.0	20.5	14.0	17.0	14.0	8.5		8.3	7.0	42.5	79.0
	9.5	16.0	21.0	15.0	17.0	14.5	8.5		8.8	6.5	42.5	80.0
45°	7.5	16.0	17.0	10.5	16.5	14.0	10.0	13.0	5.2	9.0	43.0	81.0
	8.0	16.0	17.0	11.0	17.0	14.0	9.5	13.5	5.7	8.5	43.5	81.0
	8.5	16.0	17.5	12.0	17.0	14.5	9.5	14.0	6.0	8.0	43.5	82.0
	9.0	16.0	18.0	13.0	17.5	15.0	8.5	14.5	6.4	7.5	43.5	82.0
	9.5	16.0	18.5	13.5	18.0	15.5	8.0	15.0	6.8	7.5	44.0	83.0
50°	7.5	16.0	14.5	10.0	17.0	15.0	11.0	13.5	4.5	10.0	45.0	86.0
	8.0	16.0	15.0	10.5	17.5	15.0	10.5	14.0	4.9	9.5	45.5	86.0
	8.5	16.0	15.0	11.0	18.0	15.5	10.0	14.5	5.0	9.0	46.0	87.0
	9.0	16.0	15.5	12.0	18.0	15.5	10.0	14.5	5.5	8.5	46.0	87.0
	9.5	16.0	16.0	12.5	18.5	16.0	9.0	15.0	5.8	8.0	46.0	87.0
60°	7.5	16.0	10.0	8.5	18.0	15.5	17.0	13.0	2.0	11.5	53.0	101.0
	8.0	16.0	10.5	9.0	18.0	16.0	16.5	13.0	2.3	11.5	52.5	101.0
	8.5	16.0	10.5	10.0	18.0	16.5	16.0	13.0	2.5	11.0	52.0	101.0
	9.0	16.0	11.0	10.5	18.5	16.5	15.5	13.0	2.6	10.5	52.0	101.0
	9.5	16.0	11.0	11.0	18.5	17.0	15.0	13.0	2.8	10.0	52.0	101.0
70°	7.5	16.0	6.5	8.0	18.0	16.0	18.0	15.0	1.0	13.5	54.0	104.0
	8.0	16.0	6.5	8.5	18.0	16.5	17.0	15.0	1.0	13.0	53.0	103.0
	8.5	16.0	6.5	9.0	18.0	16.5	17.0	15.0	1.0	12.5	53.0	103.0
	9.0	16.0	6.5	9.5	18.5	17.0	16.0	15.0	1.0	12.0	53.0	103.0
	9.5	16.0	6.5	10.0	18.5	17.0	16.0	15.0	1.0	11.5	53.0	103.0
80°	7.5	16.0	3.0	7.5	18.0	16.5	24.0	16.0	0.3	15.5	60.0	117.0
	8.0	16.0	3.0	8.0	18.0	16.5	22.0	16.0	0.3	15.5	58.0	113.0
	8.5	16.0	3.0	8.5	18.0	16.5	21.0	16.0	0.3	14.5	57.0	111.0
	9.0	16.0	3.0	9.0	18.0	17.0	20.0	16.0	0.3	14.0	56.0	110.0
	9.5	16.0	3.0	9.5	18.0	17.0	19.0	16.0	0.3	13.0	55.0	108.0
90°	7.5	16.0	0.0	7.5	16.0	16.0	25.0	18.0	0.0	0.0	57.0	114.0
	8.0	16.0	0.0	8.0	16.0	16.0	23.0	18.0	0.0	0.0	55.0	110.0
	8.5	16.0	0.0	8.5	16.0	16.0	22.0	18.0	0.0	0.0	54.0	108.0
	9.0	16.0	0.0	9.0	16.0	16.0	21.0	18.0	0.0	0.0	53.0	106.0
	9.5	16.0	0.0	9.5	16.0	16.0	20.0	18.0	0.0	0.0	52.0	104.0



Department of Planning & Community & Economic Development  
 126 S. Hamilton Street  
 Madison, WI 53703  
 Phone: 266-4551 Email: Zoning@cityofmadison.com

## Parking Lot / Site Plan Approval Application Checklist

**Instructions:** Please complete this form and submit it with all the materials necessary for a parking lot plan review and approval. Check boxes for the items submitted that apply to your project. If you are not sure about what to show or submit, call the appropriate agency (*see Box G*). Once your application is accepted, staff will review, approve and return your application materials within 7 working days or sooner.

Site Address 2219 Monroe St		
Contact Person Jennifer Luhman	Company Forward Electric, Inc	Phone/FAX 608-221-1945 / 608-221-9307
Contact Person Address 6909 Raywood Rd, Madison, WI 53713		
<b>Project Type</b> (check one): <input type="checkbox"/> New <input checked="" type="checkbox"/> Alteration		

**A. These items must be included with an application:**

- 1. Scaled drawing(s): 1" = 20' or similar: 5 sets
- 2. PDF copy of plans on non-returnable CD, USB Flash Drive, or emailed to [zoning@cityofmadison.com](mailto:zoning@cityofmadison.com)
- 3. Conditional Use or PD/SIP approval letter (*if applicable*)
- 4. Driveway Opening Permit application
- 5. Easements for joint driveways or joined parking lots on separate parcels (*if applicable*)
- 6. Land Disturbing Activity Permit Application (*sizes 1 acre or more in size*)
- 7. Erosion Control Plan: 5 sets (*sizes 1 acre or more in size-See Example Plan 2*)
- 8. Landscape Plan/Worksheet (*if applicable per Sec. 28.142(2)*)
- 9. Outdoor Lighting Plan and manufacturers specs (*if applicable*)

**B. Information about your property that must be shown on your drawing(s). See Example Plan W:**

- 9. Project information block on first page of plan
- 10. Property lines
- 11. Abutting right-of-way, roadways, driveways and terraces shown and dimensioned
- 12. Elevations of existing and proposed site to City datum
- 13. Elevation of top of curb
- 14. Storm sewers or drainage pattern (*See Example Plan Y*)
- 15. Proposed driveway radii
- 16. Type of surface on driveway, approach and lot (*grass, landscaping, concrete, bituminous paving, mulch, etc.*)
- 17. Location of existing and proposed impervious surfaces
- 18. Means of separation between parking lot and sidewalk or adjoining property
- 19. Tree islands
- 20. Screening or landscaping (*See Example Plan X*)
- 21. On-site fire hydrants

**C. Information about the structures that must be shown on your drawing:**

- 22. Existing structures (*footprints and dimensions*)
- 23. Proposed structures (*footprints and dimensions*)
- 24. Setbacks and distance to lot lines (*front, rear and sides*)

**OFFICE USE ONLY:**

Date/Time Received:	Accepted:
Staff Person	

**D. Parking layout information that must be on your drawing(s). See Example Plan W:**

- 25. Dimensions of parking stalls and drive aisles
- 26. Location of accessible parking stalls
- 27. Location of accessible parking stall signs
- 28. Location and width of accessibility ramps
- 29. Location of loading facilities
- 30. Bicycle parking rack locations, spaces, and rack detail

**E. "Off-property" information that must be shown on your drawing(s):**

- 31. Trees, poles, signs in the right-of-way (*if applicable*)
- 32. Medians (*if applicable*)
- 33. Driveway openings directly across the street (*if applicable*)
- 34. Distance to nearest intersection
- 35. Fire hydrants within 500 feet of your property line

**F. Other information you want staff to know:**


**G. Questions: Call City Staff for help.**

ZONING	Building Use	266-4551
	Setbacks	
	Landscaping	
	Occupancy	
TRAFFIC ENGINEERING	Parking lot geometrics	266-4761
ENGINEERING	Drainage	266-4751
	Land disturbing activity	
	Soil erosion	
FIRE	Fire hydrants / access	266-4484
BUILDING INSPECTION	Parking lot lighting	266-4551



# CITY OF MADISON LANDSCAPE WORKSHEET

Section 28.142 Madison General Ordinance

Project Location / Address \_\_\_\_\_  
 Name of Project \_\_\_\_\_  
 Owner / Contact \_\_\_\_\_  
 Contact Phone \_\_\_\_\_ Contact Email \_\_\_\_\_

**\*\* Landscape plans for zoning lots greater than ten thousand (10,000) square feet in size  
MUST be prepared by a registered landscape architect. \*\***

### Applicability

The following standards apply to all exterior construction and development activity, including the expansion of existing buildings, structures and parking lots, except the construction of detached single-family and two-family dwellings and their accessory structures. The entire development site must be brought up to compliance with this section unless **all** of the following conditions apply, in which case only the affected areas need to be brought up to compliance:

- (a) The area of site disturbance is less than ten percent (10%) of the entire development site during any ten-(10) year period.
- (b) Gross floor area is only increased by ten percent (10%) during any ten-(10) year period.
- (c) No demolition of a principal building is involved.
- (d) Any displaced landscaping elements must be replaced on the site and shown on a revised landscaping plan.

### Landscape Calculations and Distribution

Required landscaped areas shall be calculated based upon the total developed area of the property. Developed area is defined as that area within a single contiguous boundary which is made up of structures, parking, driveways and docking/loading facilities, but excluding the area of any building footprint at grade, land designated for open space uses such as athletic fields, and undeveloped land area on the same zoning lot. There are three methods for calculating landscape points depending on the size of the lot and Zoning District.

- (a) For all lots except those described in (b) and (c) below, five (5) landscape points shall be provided for each three hundred (300) square feet of developed area.

Total square footage of developed area \_\_\_\_\_

Total landscape points required \_\_\_\_\_

- (b) **For lots larger than five (5) acres**, points shall be provided at five (5) points per three hundred (300) square feet for the first five (5) developed acres, and one (1) point per one hundred (100) square feet for all additional acres.

Total square footage of developed area \_\_\_\_\_

Five (5) acres = 217,800 square feet

First five (5) developed acres = 3,630 points

Remainder of developed area \_\_\_\_\_

Total landscape points required \_\_\_\_\_

- (c) **For the Industrial – Limited (IL) and Industrial – General (IG) districts**, one (1) point shall be provided per one hundred (100) square feet of developed area.

Total square footage of developed area \_\_\_\_\_

Total landscape points required \_\_\_\_\_

**Tabulation of Points and Credits**

Use the table to indicate the quantity and points for all existing and proposed landscape elements.

Plant Type/ Element	Minimum Size at Installation	Points	Credits/ Existing Landscaping		New/ Proposed Landscaping	
			Quantity	Points Achieved	Quantity	Points Achieved
Overstory deciduous tree	2½ inch caliper measured diameter at breast height (dbh)	35				
Tall evergreen tree (i.e. pine, spruce)	5-6 feet tall	35				
Ornamental tree	1 1/2 inch caliper	15				
Upright evergreen shrub (i.e. arborvitae)	3-4 feet tall	10				
Shrub, deciduous	#3 gallon container size, Min. 12"-24"	3				
Shrub, evergreen	#3 gallon container size, Min. 12"-24"	4				
Ornamental grasses/ perennials	#1 gallon container size, Min. 8"-18"	2				
Ornamental/ decorative fencing or wall	n/a	4 per 10 lineal ft.				
Existing significant specimen tree	Minimum size: 2 ½ inch caliper dbh. *Trees must be within developed area and cannot comprise more than 30% of total required points.	14 per caliper inch dbh. Maximum points per tree: 200				
Landscape furniture for public seating and/or transit connections	* Furniture must be within developed area, publically accessible, and cannot comprise more than 5% of total required points.	5 points per "seat"				
<b>Sub Totals</b>						

**Total Number of Points Provided \_\_\_\_\_**

\* As determined by ANSI, ANLA- American standards for nursery stock. For each size, minimum plant sizes shall conform to the specifications as stated in the current American Standard for Nursery Stock.

Landscaping shall be distributed throughout the property along street frontages, within parking lot interiors, as foundation plantings, or as general site landscaping. The total number of landscape points provided shall be distributed on the property as follows.

**Total Developed Area**

Required landscaped areas shall be calculated based upon the total developed area of the property. Developed area is defined as that area within a single contiguous boundary which is made up of structures, parking, driveways and docking/loading facilities, but excluding the area of any building footprint at grade, land designated for open space uses such as athletic fields, and undeveloped land area on the same zoning lot.

**Development Frontage Landscaping**

Landscaping and/or ornamental fencing shall be provided between buildings or parking areas and the adjacent street(s), except where buildings are placed at the sidewalk. Landscape material shall include a mix of plant materials.

**Interior Parking Lot Landscaping**

The purpose of interior parking lot landscaping is to improve the appearance of parking lots, provide shade, and improve stormwater infiltration. All parking lots with twenty (20) or more parking spaces shall be landscaped in accordance with the interior parking lot standards.

**Foundation Plantings**

Foundation plantings shall be installed along building facades, except where building facades directly abut the sidewalk, plaza, or other hardscape features. Foundation plantings shall consist primarily of shrubs, perennials, and native grasses.

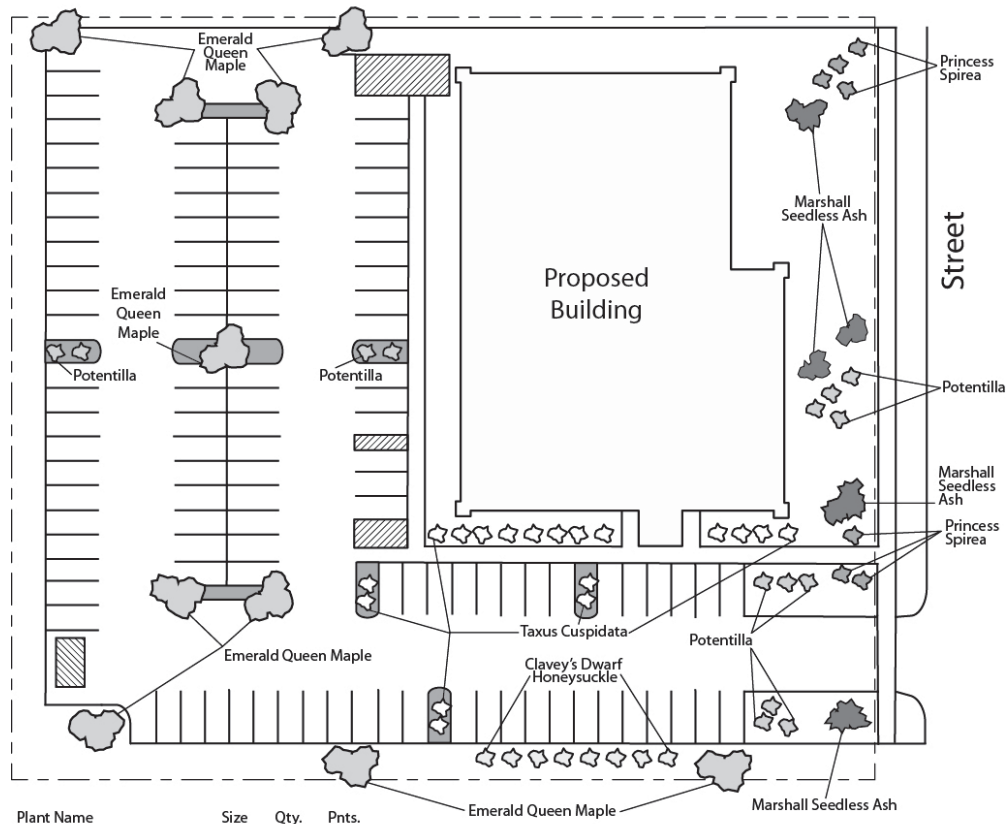
**Screening Along District Boundaries**

Screening shall be provided along side and rear property boundaries between commercial, mixed use or industrial districts and residential districts.

**Screening of Other Site Elements**

The following site elements shall be screened in compatibility with the design elements, materials and colors used elsewhere on the site: refuse disposal areas, outdoor storage areas, loading areas, and mechanical equipment.

**Example Landscape Plan**



Plant Name	Size	Qty.	Pnts.
Emerald Queen Maple	2-2.5"	9	-
Marshall Seedless Ash	2-2.5"	4	450
Clavey's Dwarf Honeysuckle	1 Gal	8	24
Princess Spirea	1 Gal	7	21
Potentilla	1 Gal	10	30
Taxus Cuspidata	2 Gal	12	60
			TOTAL 585

Call City Zoning, 266-4551, with your questions about this type of plan

## LANDSCAPE PLAN AND LANDSCAPE WORKSHEET INSTRUCTIONS

Refer to Zoning Code Section 28.142 LANDSCAPING AND SCREENING REQUIREMENTS for the complete requirements for preparing and submitting a Landscape Plan and Landscape Worksheet.

### **Applicability.**

The following standards apply to all exterior construction and development activity, including the expansion of existing buildings, structures and parking lots, except the construction of detached single-family and two-family dwellings and their accessory structures. The entire development site must be brought up to compliance with this section unless all of the following conditions apply, in which case only the affected areas need to be brought up to compliance:

- (a) The area of site disturbance is less than ten percent (10%) of the entire development site during any ten-(10) year period.
- (b) Gross floor area is only increased by ten percent (10%) during any ten-(10) year period.
- (c) No demolition of a principal building is involved.
- (d) Any displaced landscaping elements must be replaced on the site and shown on a revised landscaping plan.

### **Landscape Plan and Design Standards.**

Landscape plans shall be submitted as a component of a site plan, where required, or as a component of applications for other actions, including zoning permits, where applicable. Landscape plans for zoning lots greater than ten thousand (10,000) square feet in size must be prepared by a registered landscape architect.

- (a) Elements of the landscape plan shall include the following:
  - 1. Plant list including common and Latin names, size and root condition (i.e. container or ball & burlap).
  - 2. Site amenities, including bike racks, benches, trash receptacles, etc.
  - 3. Storage areas including trash and loading.
  - 4. Lighting (landscape, pedestrian or parking area).
  - 5. Irrigation.
  - 6. Hard surface materials.
  - 7. Labeling of mulching, edging and curbing.
  - 8. Areas of seeding or sodding.
  - 9. Areas to remain undisturbed and limits of land disturbance.
  - 10. Plants shall be depicted at their size at sixty percent (60%) of growth.
  - 11. Existing trees eight (8) inches or more in diameter.
  - 12. Site grading plan, including stormwater management, if applicable.
- (b) Plant Selection. Plant materials provided in conformance with the provisions of this section shall be nursery quality and tolerant of individual site microclimates.
- (c) Mulch shall consist of shredded bark, chipped wood or other organic material installed at a minimum depth of two (2) inches.

### **Landscape Calculations and Distribution.**

Required landscaped areas shall be calculated based upon the total developed area of the property. Developed area, for the purpose of this requirement, is defined as that area within a single contiguous boundary which is made up of structures, parking driveways and docking/loading facilities, but **excluding** the area of any building footprint at grade, land designated for open space uses such as athletic fields, and undeveloped land area on the same zoning lot.

- (a) Landscaping shall be distributed throughout the property along street frontages, within parking lot interiors, and as foundation plantings, or as general site landscaping.
- (b) Planting beds or planted areas must have at least seventy-five percent (75%) vegetative cover.
- (c) Canopy tree diversity requirements for new trees:
  - 1. If the development site has fewer than 5 canopy trees, no tree diversity is required.
  - 2. If the development site has between 5 and 50 canopy trees, no single species may comprise more than 33% of trees.
  - 3. If the development site has more than 50 canopy trees, no single species may comprise more than 20% of trees.

### **Development Frontage Landscaping.**

Landscaping and/or ornamental fencing shall be provided between buildings or parking areas and the adjacent street(s), except where buildings are placed at the sidewalk. Landscape material shall include a mix of plant material meeting the following minimum requirements:

- (a) One (1) overstory deciduous tree and five (5) shrubs shall be planted for each thirty (30) lineal feet of lot frontage. Two (2) ornamental trees or two (2) evergreen trees may be used in place of one (1) overstory deciduous tree.
- (b) In cases where building facades directly abut the sidewalk, required frontage landscaping shall be deducted from the required point total.
- (c) In cases where development frontage landscaping cannot be provided due to site constraints, the zoning administrator may waive the requirement or substitute alternative screening methods for the required landscaping.
- (d) Fencing shall be a minimum of three (3) feet in height, and shall be constructed of metal, masonry, stone or equivalent material. Chain link or temporary fencing is prohibited.

**Interior Parking Lot Landscaping.**

The purpose of interior parking lot landscaping is to improve the appearance of parking lots, provide shade, and improve stormwater infiltration. **All parking lots with twenty (20) or more parking spaces** shall be landscaped in accordance with the following interior parking lot standards.

- (a) For new development on sites previously undeveloped or where all improvements have been removed, a minimum of eight percent (8%) of the asphalt or concrete area of the parking lot shall be devoted to interior planting islands, peninsulas, or landscaped strips. For changes to a developed site, a minimum of five percent (5%) of the asphalt or concrete area shall be interior planting islands, peninsulas, or landscaped strips. A planting island shall be located at least every twelve (12) contiguous stalls with no break or alternatively, landscaped strips at least seven (7) feet wide between parking bays.
- (b) The primary plant materials shall be shade trees with at least one (1) deciduous canopy tree for every one hundred sixty (160) square feet of required landscaped area. Two (2) ornamental deciduous trees may be substituted for one (1) canopy tree, but ornamental trees shall constitute no more than twenty-five percent (25%) of the required trees. No light poles shall be located within the area of sixty percent (60%) of mature growth from the center of any tree.
- (c) Islands may be curbed or may be designed as uncurbed bio-retention areas as part of an approved low impact stormwater management design approved by the Director of Public Works. The ability to maintain these areas over time must be demonstrated. (See Chapter 37, Madison General Ordinances, Erosion and Stormwater Runoff Control.)

**Foundation Plantings.**

Foundation plantings shall be installed along building facades, except where building facades directly abut the sidewalk, plaza, or other hardscape features. Foundation plantings shall consist primarily of shrubs, perennials, and native grasses. The Zoning Administrator may modify this requirement for development existing prior to the effective date of this ordinance, as long as improvements achieve an equivalent or greater level of landscaping for the site.

**Screening Along District Boundaries.**

Screening shall be provided along side and rear property boundaries between commercial, mixed use or industrial districts and residential districts. Screening shall consist of a solid wall, solid fence, or hedge with year-round foliage, between six (6) and eight (8) feet in height, except that within the front yard setback area, screening shall not exceed four (4) feet in height. Height of screening shall be measured from natural or approved grade. Berms and retaining walls shall not be used to increase grade relative to screening height.

**Screening of Other Site Elements.**

The following site elements shall be screened in compatibility with the design elements, materials and colors used elsewhere on the site, as follows:

- (a) Refuse Disposal Areas. All developments, except single family and two family developments, shall provide a refuse disposal area. Such area shall be screened on four (4) sides (including a gate for access) by a solid, commercial-grade wood fence, wall, or equivalent material with a minimum height of six (6) feet and not greater than seven (7) feet.
- (b) Outdoor Storage Areas. Outdoor storage areas shall be screened from abutting residential uses with a by a building wall or solid, commercial-grade wood fence, wall, year-round hedge, or equivalent material, with a minimum height of six (6) feet and not greater than seven (7) feet. Screening along district boundaries, where present, may provide all or part of the required screening.
- (c) Loading Areas. Loading areas shall be screened from abutting residential uses and from street view to the extent feasible by a building wall or solid, commercial-grade wood fence, or equivalent material, with a minimum height of six (6) feet and not greater than seven (7) feet. Screening along district boundaries, where present, may provide all or part of the required screening.
- (d) Mechanical Equipment. All rooftop and ground level mechanical equipment and utilities shall be fully screened from view from any street or residential district, as viewed from six (6) feet above ground level. Screening may consist of a building wall or fence and/or landscaping as approved by the Zoning Administrator.

**Maintenance.**

The owner of the premises is responsible for the watering, maintenance, repair and replacement of all landscaping, fences, and other landscape architectural features on the site. All planting beds shall be kept weed free. Plant material that has died shall be replaced no later than the upcoming June 1.

# CITY OF MADISON OUTDOOR LIGHTING STANDARDS



## Approval Process

Submit the following to the Zoning Counter in the Inspection Unit:

1. A catalog page, cut sheet, or photograph of the lighting fixtures, including the mounting method with a graphic depiction of the lamp concealment and light cutoff angles of the lighting fixture.
2. A photometric data report of the proposed lighting fixture graphically showing the distribution in all angles vertically and horizontally around the fixture (this is available from your lighting supplier).
3. A plot plan showing:
  - a. The location of all outdoor lighting fixtures proposed,
  - b. The mounting of installation height,
  - c. The overall illumination levels and uniformities,
  - d. The point where 0.5 horizontal footcandles occurs on the property or adjacent property at a distance four (4) feet above the ground.

This may be accomplished by means of an isolux curves or a photometric plot of the illumination levels.

## Design Requirements – Open Parking Facilities

The illumination requirements of an open parking facility depend on the amount of usage the facility receives. Three levels of activity shall be established as high, medium, and low, reflecting both traffic and pedestrian activity. The following examples are nonexclusive and include:

**High Activity (.12):** Facilities for major league athletic events or major cultural or civic events.

**Medium Activity (.10):** Shopping centers, retail parking areas, hospital and clinic parking areas, transportation parking (airports, commuter lots, etc.), cultural, civic or recreational events, and fast food facilities.

**Low Activity (.08):** Employee parking, educational facility parking, office parks, and church parking.

- An outdoor lighting system for illuminating buildings and structures shall have a maximum connected lighting load of five (5) watts per lineal foot. Watts shall mean lamp wattage and ballast consumption.
- A residential site shall be lighted to provide at least .25 footcandles on any surface in the lot with an average illumination level of at least .75 footcandles. Outdoor light fixtures shall be designed and installed to minimize light trespass. In addition, the uniformity ration between the average illumination and minimum illumination shall be no greater than 4:1.
- For an outdoor merchandising area, the maximum level of 75% in the lot shall not exceed 20 footcandles. A contiguous area not to exceed 25% of the lot may be illuminated to a level which shall not exceed 40 footcandles.
- The maximum illumination level under an outdoor canopy shall not exceed 50 footcandles at any point.



## HORIZONTAL ILLUMINANCES FOR PARKING FACILITIES

### a. *Open Parking Facilities*

Level of Activity	Min. Footcandles on Pavement <sup>1</sup>	Max. Avg. Footcandles on Pavement	Max. Uniformity Ratio <sup>1</sup> (Avg:Min)	Max Watts <sup>2</sup> /Sq. Ft. Lighting Load <sup>3</sup>	Min. Footcandles on Pavement <sup>1</sup>	Max. Avg. Footcandles on Pavement	Max Uniformity Ratio <sup>1</sup> (Avg:Min)
High	0.6 fc	3.75 fc	5:1	.12	.67 fc	2.5 fc	5:1
Med	0.4 fc	2.50 fc	5:1	.10	.33 fc	1.5 fc	5:1
Low	0.2 fc	1.50 fc	5:1	.08	.125 fc	1.0 fc	5:1

### b. *Covered Parking Facilities*

Areas	Minimum Footcandle Average on Pavement	Minimum Footcandles on Pavement	Maximum Average Footcandles on Pavement	Maximum Uniformity Ratio (Avg:Min)	Maximum Watts/Sq. Ft. Lighting Load
General parking & ped. areas	5 fc	1.25 fc	9 fc	4:1	.2
Private controlled entry parking	3 fc	.75 fc	6 fc	4:1	.2

- **The International Code Council, National Electrical Code, and others may have additional requirements.**
- **For further information, call Harry Sulzer at 266-4568.**

<sup>1</sup> Not mandatory within 4 feet of the pavement edge.

<sup>2</sup> Not mandatory for driveways

<sup>3</sup> Watts shall mean lap wattage and ballast consumption.

# CITY ENGINEERING DIVISION - STREET TERRACE PERMIT

Please send completed form to: Brenda Stanley, City of Madison Engineering Division, 1600 Emil St, Madison, WI 53713  
or fax (608) 267-1123



**Address:**

***I hereby request permission to install the following improvement(s):***

**Sidewalk**

- New  L.F.
- Reconstruct  L.F.

**Residential Drive Opening**

- New
- Reconstruct
- Widen Existing
- Profile Sawcut  L.F.

**Terrace Treatment**

- Asphalt
- Concrete
- Rain Garden (see also *Rain Garden Permit*)
- Other

**Curb and Gutter**

- New  L.F.
- Reconstruct  L.F.

**Asphalt Drive Apron**

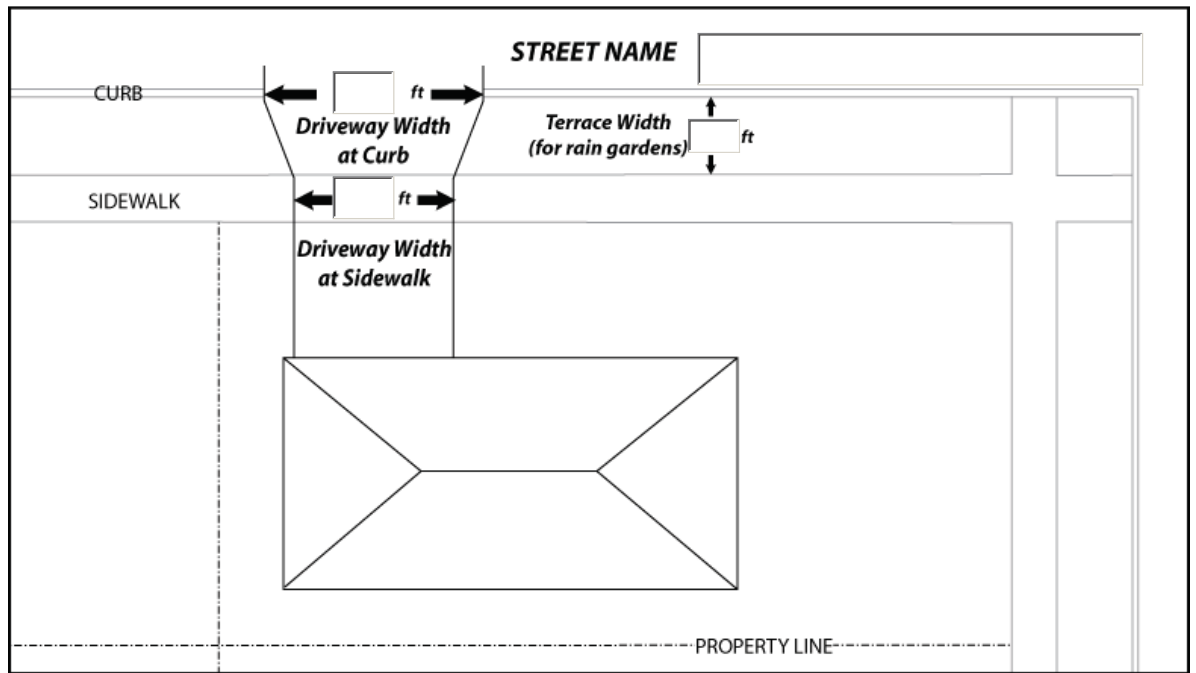
- New
- Reconstruct
- Overlay Existing

**Concrete Drive Apron**

- New
- Reconstruct

Please fill in blanks in the diagram:

**ALL UNUSED CURB CUTS OR PORTIONS THEREOF SHALL BE CLOSED AS PART OF THIS PERMIT WHEN ALTERING EXISTING OR CONSTRUCTING A NEW CURB CUT OR DRIVEWAY APRON**



I agree to notify the City Engineering Inspection Division, telephone number 266-4088, a minimum of 24 hours before any concrete or asphalt is placed. I further agree that all work will be done in accordance with City of Madison rules, regulations, ordinances, and specifications. This permit is valid for a period of one (1) year from the date approved.

\_\_\_\_\_  
Licensed Contractor Firm Name

\_\_\_\_\_  
Property Owner

\_\_\_\_\_  
Address/Phone

\_\_\_\_\_  
Address/Phone

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

Permission is hereby granted for the above mentioned improvement.

Approved By \_\_\_\_\_  
City Engineering Division

Inspected \_\_\_\_\_  
Date

Date \_\_\_\_\_

Accepted \_\_\_\_\_  
Inspector



# Erosion Control Permit Application

City of Madison Engineering Division

210 Martin Luther King Jr. Blvd. ■ City-County Building Suite 115 ■ Madison, WI 53703

## Section 1 ■ Property Information

Project Name: \_\_\_\_\_

Property Address: \_\_\_\_\_

*Street* *Lot Number(s)* *Parcel Number*

*City* *State* *ZIP Code*

*Plat or CSM*

## Section 2 ■ Landowner Information

Company: \_\_\_\_\_

Full Name: \_\_\_\_\_

*Last* *First* *Title*

Mailing Address: \_\_\_\_\_

*Street* *Apartment/Unit #*

*City* *State* *ZIP Code*

Contact Phone: \_\_\_\_\_ E-Mail: \_\_\_\_\_

## Section 3 ■ Applicant Information *(If different than Landowner)*

**Same as Landowner** *(Check if YES, and continue with Section 4)*

Company: \_\_\_\_\_

Full Name: \_\_\_\_\_

*Last* *First* *Title*

Mailing Address: \_\_\_\_\_

*Street* *Apartment/Unit #*

*City* *State* *ZIP Code*

Contact Phone: \_\_\_\_\_ E-Mail: \_\_\_\_\_

**The applicant will be responsible for compliance with MGO Chapter 37 and the conditions of the permit, and may be cited for violations that occur on the premises.**

**Section 4 ■ Authorized Erosion Control Inspector (if known)**

**Same as Applicant** (Check if YES, and continue with Section 5)

Company: \_\_\_\_\_

Full Name: \_\_\_\_\_

*Last* *First* *Title*

Mailing Address: \_\_\_\_\_

*Street* *Apartment/Unit #*

*City* *State* *ZIP Code*

Contact Phone: \_\_\_\_\_ E-Mail: \_\_\_\_\_

**Section 5 ■ Permit Type**

*Check Only One Option*

Simplified Plan Checklist—Disturbed Area < 20,000 ft<sup>2</sup>, Slopes < 6% (\$100.00 permit base fee)

1. Provide construction entrances with tracking controls.
2. Protect any inlets receiving run-off from the disturbed construction area.
3. Provide perimeter control to retain sediments on the construction site.
4. Provide timely restoration with 14 days of land disturbance activities.

Full Erosion Control Plan (\$200.00 permit base fee)  
**Attach erosion control report and plan for review**

Renewal of Expired Permit (\$50.00 permit base fee)

**Work to be performed by:**

Same as Landowner (Check if YES)     Same as Applicant (Check if YES)     Same as Authorized Inspector (Check if YES)

Construction Contact \_\_\_\_\_

Contact Phone: \_\_\_\_\_ E-Mail: \_\_\_\_\_

**Section 6 ■ Fee Calculation**

Permit Base Fee (Permit type selected above in Section 5)	\$ _____
Total Disturbed area (ft <sup>2</sup> )	_____ ft <sup>2</sup>
Erosion Control Area Fee-Full Erosion Control Plan <b>ONLY</b> (\$5/1000 ft <sup>2</sup> disturbed)	\$ 0.00 _____
<b>Total Fees</b>	<b>\$ 0.00 _____</b>

FEES RECEIVED  
*Office Use Only*

Date \_\_\_\_\_

Amt \_\_\_\_\_

By \_\_\_\_\_

USLE Rate (ton/acre/year) \_\_\_\_\_ Construction Start Date \_\_\_\_\_ Restoration Date \_\_\_\_\_

\*All measures to be installed prior to any other construction. No disturbance, grading, stockpiles, or borrow pits shall be allowed in park area without approval by the Parks Division prior to construction. **NO land disturbance work may proceed** until this application has been approved and a permit issued.

Section 7 ■ Landowner and Applicant Signature

I have reviewed and understand Chapter 37 of the Madison General Ordinances regarding erosion control, and I shall implement the control plan or checklist for this project as approved by the City.

As a condition of the granting of this permit, I authorize, and have the authority to authorize, City of Madison personnel the right-of-entry onto the above described premises for the purpose of inspecting and monitoring for compliance with the aforesaid ordinance.

I acknowledge by submitting this application and signing below, that I shall be responsible for compliance with MGO Chapter 37 and the conditions of this permit.

Landowner Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Applicant Signature: \_\_\_\_\_ Date: \_\_\_\_\_



# Stormwater Management Permit Application

City of Madison Engineering Division

210 Martin Luther King Jr. Blvd. ■ City-County Building Suite 115 ■ Madison, WI 53703

## Section 1 ■ Property Information

Project Name: \_\_\_\_\_

Property Address: \_\_\_\_\_

*Street* *Lot Number(s)* *Parcel Number*

*City* *State* *ZIP Code*

*Plat or CSM*

## Section 2 ■ Landowner Information

Full Name: \_\_\_\_\_

*Last* *First* *M.I.*

Mailing Address: \_\_\_\_\_

*Street* *Apartment/Unit #*

*City* *State* *ZIP Code*

Contact Phone: \_\_\_\_\_ E-Mail: \_\_\_\_\_

## Section 3 ■ Applicant Information

\*Applicant other than landowner requires a notarized statement authorizing the applicant to act as the landowner's agent. Form must be attached.

**Same as Landowner** (Check if YES, and continue with Section 4)

Full Name: \_\_\_\_\_

*Last* *First* *M.I.*

Mailing Address: \_\_\_\_\_

*Street* *Apartment/Unit #*

*City* *State* *ZIP Code*

Contact Phone: \_\_\_\_\_ E-Mail: \_\_\_\_\_

## Section 4 ■ Site Information

	<b>Total Site Area</b>	ft <sup>2</sup>
	<b>Existing Impervious Area</b> <i>(Before Project)</i>	ft <sup>2</sup>
(A)	<b>New Impervious Area</b> <i>(Impervious area added outside any existing impervious area)</i>	ft <sup>2</sup>
(B)	<b>Redeveloped Impervious Area</b> <i>(Impervious area redeveloped inside original impervious area footprint)</i>	ft <sup>2</sup>
	<b>Removed Impervious Area</b> <i>(From inside original impervious area footprint)</i>	ft <sup>2</sup>
	<b>Net Impervious Area</b> <i>(After Project)</i>	ft <sup>2</sup>

Work to be performed by (if known):  Same as Applicant (Check if YES)

Same as Landowner (Check if YES)

Construction Contact: \_\_\_\_\_

Contact Phone: \_\_\_\_\_

E-Mail: \_\_\_\_\_

**Stormwater Management Report/Plan to be attached.**  
**\*\*Please note application cannot be processed without report/plan\*\***

**Section 5 ■ Fee Calculation**

*Use information from Section 4 above for (A) and (B)*

Permit Base Fee	\$ 400.00
(A) New Impervious Area Fee (\$10/1000 ft <sup>2</sup> )	\$ 0 _____
(B) Redeveloped Impervious Area (\$5/1000 ft <sup>2</sup> )	\$ _____
<b>Total Fees</b>	<b>\$ 400 _____</b>

FEES RECEIVED  
*Office Use Only*

Date \_\_\_\_\_

Amt \_\_\_\_\_

By \_\_\_\_\_

**Section 6 ■ Stormwater Management Requirements**

- |   |  |  |   |
|---|--|--|---|
| <input type="checkbox"/> TSS Reduction:                 | <input type="checkbox"/> New Development (80%) | <input type="checkbox"/> Redevelopment (40%) | <input type="checkbox"/> Redevelopment TMDL (80%) |
| <input type="checkbox"/> Oil & Grease Removal           |  |  |   |
| <input type="checkbox"/> Runoff Rate Control/Detention  |  |  |   |
| <input type="checkbox"/> Infiltration                   |  |  |   |
| <input type="checkbox"/> Groundwater Recharge           |  |  |   |
| <input type="checkbox"/> Thermal Control                |  |  |   |
| <input type="checkbox"/> Maintenance Agreement Executed |  |  |   |

Construction Start Date \_\_\_\_\_

Estimated Project Completion Date \_\_\_\_\_

**Section 7 ■ Applicant Signature**

***I have reviewed and understand Chapter 37 of the Madison General Ordinances regarding erosion control, and I shall implement the control plan or checklist for this project as approved by the city.***

***I further, in accordance with Chapter 37, grant the right-of-entry onto this property, as described above, to the designated personnel of the City of Madison for the purpose of inspecting and monitoring for compliance with the aforesaid ordinance.***

Applicant Signature \_\_\_\_\_

Date of Application \_\_\_\_\_

*\*Applicant other than landowner requires a notarized statement authorizing the applicant to act as the landowner's agent—must be attached*



CITY OF MADISON, WISCONSIN  
**APPLICATION TO EXCAVATE IN PUBLIC RIGHT-OF-WAY  
 CONNECT TO CITY SANITARY AND/OR STORM SEWER**

**I. APPLICANT INFORMATION**

Company \_\_\_\_\_ Date of Application \_\_\_\_\_  
 Contact \_\_\_\_\_ Address \_\_\_\_\_  
 Telephone \_\_\_\_\_  
 E-mail \_\_\_\_\_ Customer Reference # (optional) \_\_\_\_\_

**II. CONTRACTOR INFORMATION**

City Prequalified Contractor to Perform Work \_\_\_\_\_  
 Contact \_\_\_\_\_ Telephone \_\_\_\_\_

**III. PROPOSED WORK**

**A. SCHEDULE** Estimated Start Date \_\_\_\_\_ Estimated Completion Date \_\_\_\_\_

**B. ADDRESS(ES) OF PROPOSED WORK**  
 \_\_\_\_\_  
 \_\_\_\_\_

**C. TYPE OF FACILITY** (Check all boxes that apply)  
 Water     Hydrant     Lead Pipe (If in conjunction with Water Utility work indicate Permit # \_\_\_\_\_)     Main  
 Sanitary     Storm     Gas     Electric     Telecommunications     Cable     Service  
 Other: \_\_\_\_\_  N/A

**D. PURPOSE**  
 Install     Repair     Replace     Cut Off     Other: \_\_\_\_\_

**E. LOCATION**  
 Travel Lane     Parking Lane     Terrace     Sidewalk     Easement/Greenway  
 Other: \_\_\_\_\_

**F. TRENCH TYPE AND SIZE**  
 Asphalt (Show total asphalt dimensions here or on accompanying sketch) \_\_\_\_\_  
 The pavement rating may be found on the City Engineering web page at <http://gis.ci.madison.wi.us/MADMAPS/GISHome.html> under the heading "Pavement"  
 Non-Asphalt (Show total non-asphalt dimensions here or on accompanying sketch) \_\_\_\_\_  
 Concrete     Sod     Other  
 Bore (Show total bore length here or on accompanying sketch) \_\_\_\_\_

**IV. CONNECTION TO CITY SANITARY AND/OR STORM WATER SYSTEM**

Connection to City Sanitary for  NEW OR  EXISTING building/facility  
 Number of Connections \_\_\_\_\_ Pipe Material \_\_\_\_\_ Diameter \_\_\_\_\_

*NOTE: If 54 or more sanitary fixture units, letter from Dane County Planning is required prior to proceeding with work.*

Connection to City Storm for  NEW OR  EXISTING building/facility  
 Number of Connections \_\_\_\_\_ Pipe Material \_\_\_\_\_ Diameter \_\_\_\_\_

**V. Will a permanent structure be placed in the public right-of-way by other than a utility?**  Yes  No  
*Note: If you respond YES to above, a copy of Street Encroachment permit must be attached in order for this application to be processed.*

**VI. Sketch showing existing utilities in relation to proposed work is attached.**  Yes  No  
*Note: Applications without a sketch cannot be processed.*

- Continued on Reverse -



In consideration of being permitted to make such excavation, the permittee hereby agrees that it will faithfully comply with the terms of the permit as issued by the City of Madison including any Special Provisions; that it will comply with all applicable statutes, ordinances, rules and regulations of the State of Wisconsin and the City of Madison; that it shall require its contractor(s) to become qualified by the City of Madison prior to starting work on this permit; that it will indemnify, defend and hold the City of Madison harmless from any and all claims, liability, loss, damage or expense incurred by the City of Madison on account of any injury or death of any person or any damage to property caused by or resulting from activity or work performed under this permit, whether caused by or contributed to by the City of Madison, its officials, its agents or employees, and that it hereby agrees to purchase comprehensive public liability insurance showing the City of Madison as an additional insured and shall provide thirty (30) days written notice to the City upon cancellation or material change in the policy with renewal certificates provided to the City for three (3) years from the date of completion of work hereunder; that it will at all times keep the place where such excavation is made properly guarded by day and lighted by night; that it will leave the street, sidewalk, alley, or terrace in as good or better condition than existed when the work was commenced; that it will have all finished concrete and asphalt work within the right-of-way performed by a licensed concrete layer or licensed asphalt paver, as the case may be; that all restoration of the street, sidewalk, alley or terrace affected by acting upon this permit shall be completed within twenty (20) calendar days of the closing of the excavation; the permittee shall guarantee their work and shall maintain it for thirty-six (36) months following the date of completion; that if this project requires a detour, it will provide the Traffic Engineer seventy-two hours notice prior to commencement of; that it agrees this permit may be voided by the City Engineer if the work is not started within a reasonable length of time after the above stated starting date; and that it will comply with Chapter 37 of the Madison General Ordinances, Erosion and Stormwater Runoff Control.

Furthermore, the permittee agrees to provide the City of Madison minimum notice as follows: (1) Forty-eight (48) hours prior to starting work and upon completion of work the permittee shall notify City Engineering at (608) 266-4514 and Traffic Engineering at (608) 266-4761; (2) Twenty-four (24) hours prior to placement of steel plates the permittee shall notify the Streets Department East at (608) 246-4532 or Streets Department West at (608) 266-4681; and (3) Forty-eight (48) hours prior to connecting to the City's sanitary sewer and/or storm water systems the permittee shall notify the City's Utility Inspector or (608) 266-4514. Please note that failure to provide adequate notice will result in re-excavating the trench at your own cost so that the City can inspect the work performed.

Date of Application \_\_\_\_\_

Signature of Permittee Representative \_\_\_\_\_

Please Print Name and Title of Permittee Representative \_\_\_\_\_

**QUESTIONS? Please contact the following City staff if you need assistance completing this application.**

<b>INSPECTION</b>	Bill McGlynn, City Engineering	(608) 266-4514
<b>TECHNICAL</b>		
STREETS	LeAnne Hannan, City Engineering	(608) 266-4057
SEWERS	Elia Acosta, City Engineering	(608) 266-4096
TRAFFIC CONTROL	Luke Peters, City Traffic Engineering	(608) 267-1969
WATER	Sue Gjertson, Water Utility	(608) 261-9832
<b>GENERAL</b>	Cindy Hemenway, City Engineering	(608) 266-6429

**Submit completed applications to Excavate in Public Right-of-Way and/or Connect to City Sanitary and/or Storm Sewer to:**

**City of Madison Engineering Division - Permit Applications  
1602 Emil Street  
Madison, WI 53713**



# City of Madison Fire Department

30 West Mifflin Street, 8<sup>th</sup> & 9<sup>th</sup> Floors, Madison, WI 53703-2579

Phone: 608-266-4420 • Fax: 608-267-1100 • E-mail: [fire@cityofmadison.com](mailto:fire@cityofmadison.com)

**Project Address:**

**Contact Name & Phone #:**

## FIRE APPARATUS ACCESS AND FIRE HYDRANT WORKSHEET

1. Is the building completely protected by an NFPA 13 or 13R automatic fire sprinkler system?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<b>If non-sprinklered</b> , fire lanes extend to within 150-feet of all portions of the exterior wall?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<b>If sprinklered</b> , fire lanes are within 250-feet of all portions of the exterior wall?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
2. Is the fire lane constructed of concrete or asphalt, designed to support a minimum load of 85,000 lbs?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
a) Is the fire lane a minimum unobstructed width of at least 20-feet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Is the fire lane unobstructed with a vertical clearance of at least 13½-feet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
c) Is the minimum inside turning radius of the fire lane at least 28-feet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
d) Is the grade of the fire lane not more than a slope of 8%?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
e) Is the fire lane posted as fire lane? (Provide detail of signage.)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
f) Is a roll-able curb used as part of the fire lane? (Provide detail of curb.)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
g) Is part of a sidewalk used as part of the required fire lane? (Must support +85,000 lbs.)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
3. Is the fire lane obstructed by security gates or barricades? If yes:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
a) Is the gate a minimum of 20-feet clear opening?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Is an approved means of emergency operations installed, key vault, padlock or key switch?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
4. Is the Fire lane dead-ended with a length greater than 150-feet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If yes, does the area for turning around fire apparatus comply with IFC D103?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
5. Is any portion of the building to be used for high-piled storage in accordance with IFC Chapter 3206.6?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If yes, see IFC 3206.6 for further requirements.			
6. Is any part of the building <u>greater than 30-feet</u> above the grade plane?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If yes, answer the following questions:			
a) Is the aerial apparatus fire lane parallel to one entire side of the building and covering at least 25% of the perimeter?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Is the near edge of the aerial apparatus fire lane between 15' and 30' from the building?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
c) Are there any overhead power or utility lines located across the aerial apparatus fire lane?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
d) Are there any tree canopies expected to grow across the aerial fire lane? (Based on mature canopy width of tree species)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
e) Does the aerial apparatus fire lane have a minimum unobstructed width of 26-feet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
f) Is the space between the aerial lane and the building free of trees exceeding 20' in heights?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
7. Are all portions of the required fire lanes within 500-feet of at least (2) hydrants?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<i>Note: Distances shall be measured along the path of the hose lay as it comes off the fire apparatus.</i>			
a) Is the fire lane at least 26' wide for at least 20-feet on each side of the hydrants?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
b) Is there at least 40' between a hydrant and the building?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
c) Are the hydrant(s) setback no less than 5-feet nor more than 10-feet from the curb or edge of the street or fire lane?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
d) Are hydrants located in parking lot islands a minimum of 3½-feet from the hydrant to the curb?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
e) Are there no obstructions, including but not limited to: power poles, trees, bushes, fences, posts located, or grade changes exceeding 1½-feet, within 5-feet of a fire hydrant?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
<i>Note: Hydrants shall be installed and in-service prior to combustible construction on the project site.</i>			

Attach an additional sheet if further explanation is required for any answers.

This worksheet is based on **MGO 34.503** and **IFC 2012 Edition Chapter 5 and Appendix D**; please see the codes for further information.

# Edgewood High School Of Sacred Heart SO

Madison,WI

## Lighting System

Pole / Fixture Summary						
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
F1-F2	80'	80'	8	TLC-LED-1150	9.20 kW	A
		15'	2	TLC-BT-575	1.15 kW	A
		50'	1	TLC-LED-1150	1.15 kW	A
F3-F4	80'	80'	8	TLC-LED-1150	9.20 kW	A
		15'	2	TLC-BT-575	1.15 kW	A
<b>4</b>			<b>42</b>		<b>43.70 kW</b>	

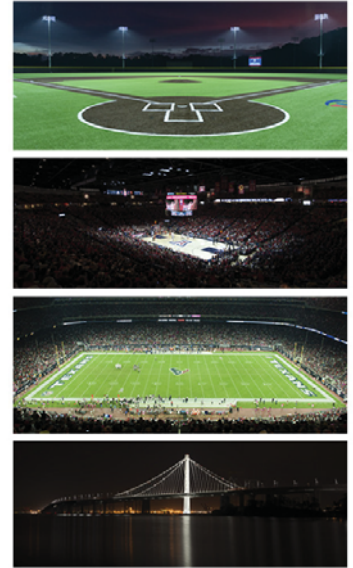
Circuit Summary			
Circuit	Description	Load	Fixture Qty
A	Football	43.7 kW	42

Fixture Type Summary							
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>81,000	>81,000	>81,000	8
TLC-LED-1150	LED 5700K - 75 CRI	1150W	121,000	>81,000	>81,000	>81,000	34

## Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Blanket Grid	Horizontal	6.25	0	47	0.00		A	42
Bleachers	Horizontal	14.2	11	20	1.77	1.29	A	42
Football	Horizontal Illuminance	32	26	45	1.75	1.23	A	42
Property Line	Horizontal	0.03	0	0.23	2607332.00		A	42
Soccer	Horizontal Illuminance	32.6	26	46	1.81	1.25	A	42
Track	Horizontal Illuminance	8.76	1	18	29.34	8.76	A	42

## From Hometown to Professional



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2019 Musco Sports Lighting, LLC.

**EQUIPMENT LIST FOR AREAS SHOWN**

QTY	LOCATION	Pole		MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
		SIZE	GRADE ELEVATION					
2	F1-F2	80'	-	15'	TLC-BT-575	2	2	0
				50'	TLC-LED-1150	1	1	0
				80'	TLC-LED-1150	8	8	0
2	F3-F4	80'	-	15'	TLC-BT-575	2	2	0
				50'	TLC-LED-1150	8	8	0
				80'	TLC-LED-1150	8	8	0
4	TOTALS					42	42	0

**Edgewood High School Of Sacred Heart SO**  
Madison, WI

**GRID SUMMARY**

<b>Name:</b>	Football
<b>Size:</b>	360' x 160'
<b>Spacing:</b>	30.0' x 30.0'
<b>Height:</b>	3.0' above grade

**ILLUMINATION SUMMARY**

MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
<b>Guaranteed Average:</b>	30
Scan Average:	32.01
Maximum:	45
Minimum:	26
Avg / Min:	1.25
<b>Guaranteed Max / Min:</b>	2.5
Max / Min:	1.75
UG (adjacent pts):	1.31
CU:	0.46
No. of Points:	72

**LUMINAIRE INFORMATION**

Color / CRI:	5700K - 75 CRI
Luminaire Output:	52,000 / 121,000 lumens
<b>No. of Luminaires:</b>	42
Total Load:	43.7 kW

Luminaire Type	Lumen Maintenance		
	L90 hrs	L80 hrs	L70 hrs
TLC-BT-575	>81,000	>81,000	>81,000
TLC-LED-1150	>81,000	>81,000	>81,000

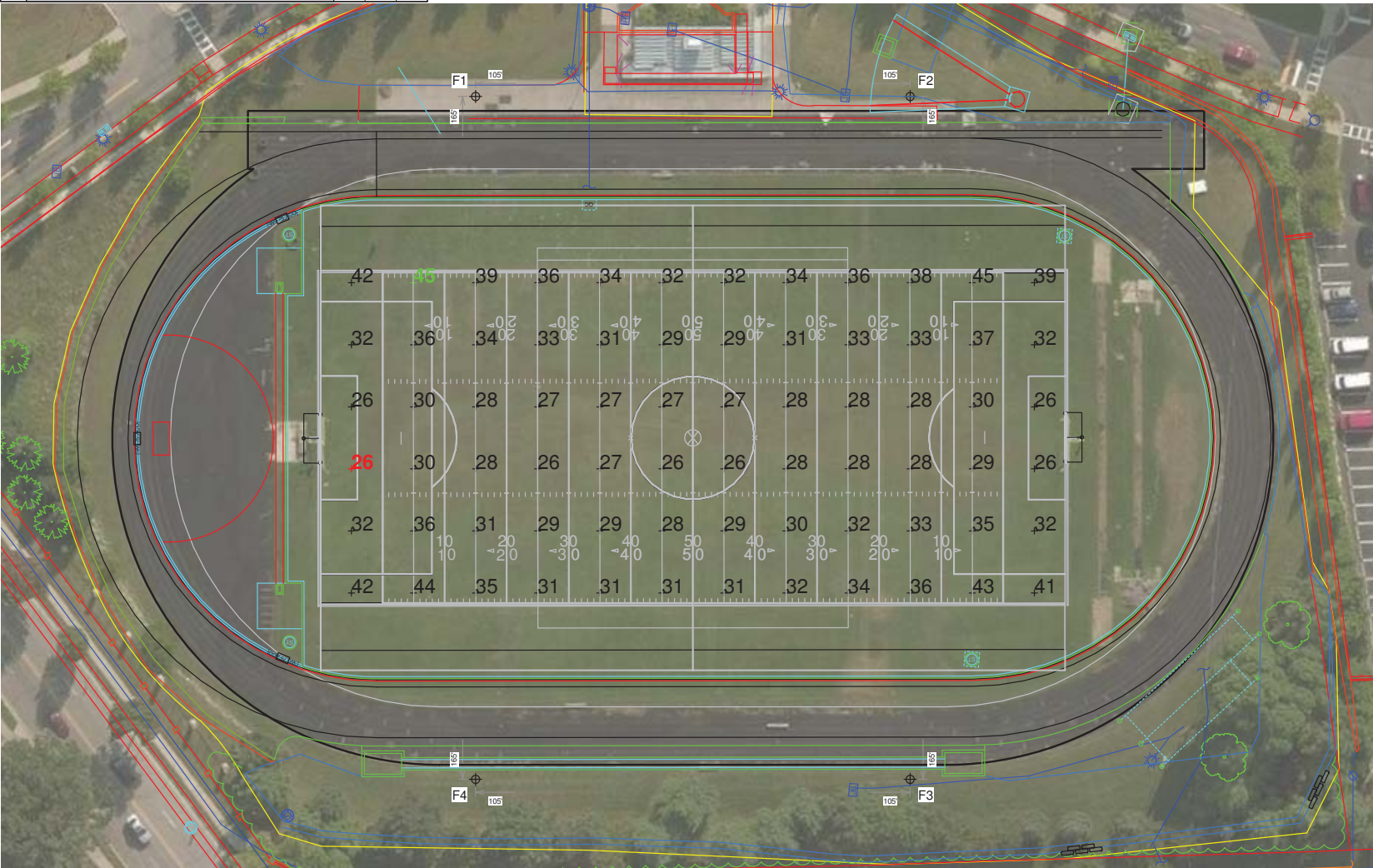
Reported per TM-21-11. See luminaire datasheet for details.

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



SCALE IN FEET 1 : 50



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

ENGINEERED DESIGN By: Connor Ramstead • File #172583D • 21-Feb-19



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2019 Musco Sports Lighting, LLC.

**ILLUMINATION SUMMARY**

**EQUIPMENT LIST FOR AREAS SHOWN**

QTY	LOCATION	Pole		MOUNTING HEIGHT	Luminaires			
		SIZE	GRADE ELEVATION		LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	F1-F2	80'	-	15'	TLC-BT-575	2	2	0
				50'	TLC-LED-1150	1	1	0
				80'	TLC-LED-1150	8	8	0
2	F3-F4	80'	-	15'	TLC-BT-575	2	2	0
				50'	TLC-LED-1150	8	8	0
				80'	TLC-LED-1150	8	8	0
4	TOTALS					42	42	0

**Edgewood High School Of Sacred Heart SO**  
Madison, WI

**GRID SUMMARY**

Name: Track  
Size: Irregular  
Spacing: 30.0' x 30.0'  
Height: 3.0' above grade

**ILLUMINATION SUMMARY**

MAINTAINED HORIZONTAL FOOTCANDLES

Entire Grid  
Scan Average: **8.76**  
Maximum: 18  
Minimum: 1  
Avg / Min: 14.47  
Max / Min: **29.34**

UG (adjacent pts): 0.00  
CU: 0.08  
No. of Points: 47

LUMINAIRE INFORMATION

Color / CRI: 5700K - 75 CRI  
Luminaire Output: 52,000 / 121,000 lumens  
No. of Luminaires: **42**  
Total Load: 43.7 kW

Lumen Maintenance

Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-BT-575	>81,000	>81,000	>81,000
TLC-LED-1150	>81,000	>81,000	>81,000

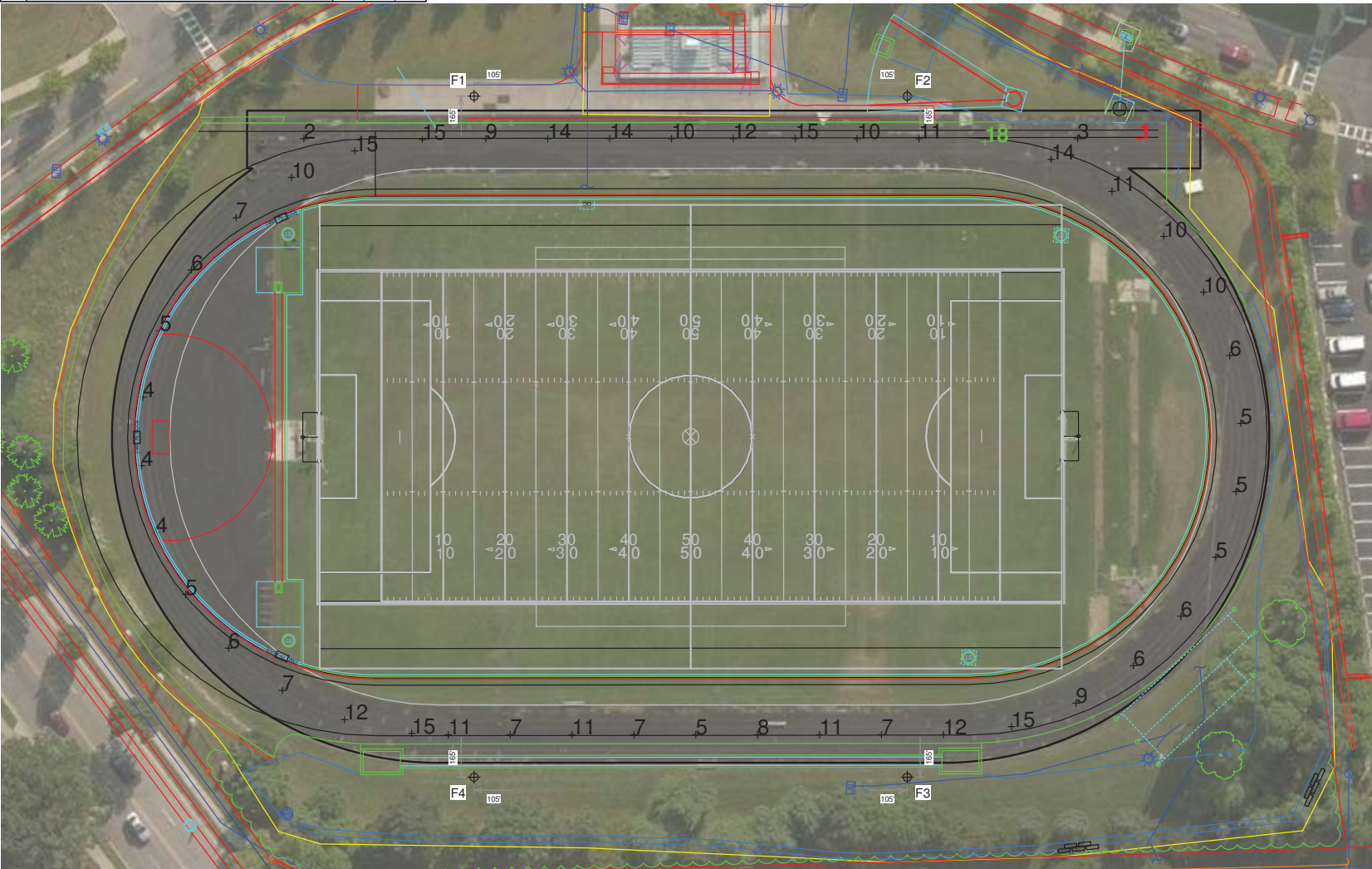
Reported per TM-21-11. See luminaire datasheet for details.

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



SCALE IN FEET 1 : 50



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

ENGINEERED DESIGN By: Connor Ramstead • File #172583D • 21-Feb-19



Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2019 Musco Sports Lighting, LLC.

**ILLUMINATION SUMMARY**

**EQUIPMENT LIST FOR AREAS SHOWN**

QTY	LOCATION	Pole		MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
		SIZE	GRADE ELEVATION					
2	F1-F2	80'	-	15'	TLC-BT-575	2	2	0
				50'	TLC-LED-1150	1	1	0
				80'	TLC-LED-1150	8	8	0
2	F3-F4	80'	-	15'	TLC-BT-575	2	2	0
				50'	TLC-LED-1150	8	8	0
				80'	TLC-LED-1150	8	8	0
4	TOTALS					42	42	0

**Edgewood High School Of Sacred Heart SO**  
Madison, WI

**GRID SUMMARY**

<b>Name:</b>	Soccer
<b>Size:</b>	360' x 225'
<b>Spacing:</b>	30.0' x 30.0'
<b>Height:</b>	3.0' above grade

**ILLUMINATION SUMMARY**

MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
<b>Guaranteed Average:</b>	30
Scan Average:	32.55
Maximum:	46
Minimum:	26
Avg / Min:	1.27
<b>Guaranteed Max / Min:</b>	2.5
Max / Min:	1.81
UG (adjacent pts):	1.38
CU:	0.63
No. of Points:	96

**LUMINAIRE INFORMATION**

Color / CRI:	5700K - 75 CRI
Luminaire Output:	52,000 / 121,000 lumens
<b>No. of Luminaires:</b>	42
Total Load:	43.7 kW

Luminaire Type	Lumen Maintenance		
	L90 hrs	L80 hrs	L70 hrs
TLC-BT-575	>81,000	>81,000	>81,000
TLC-LED-1150	>81,000	>81,000	>81,000

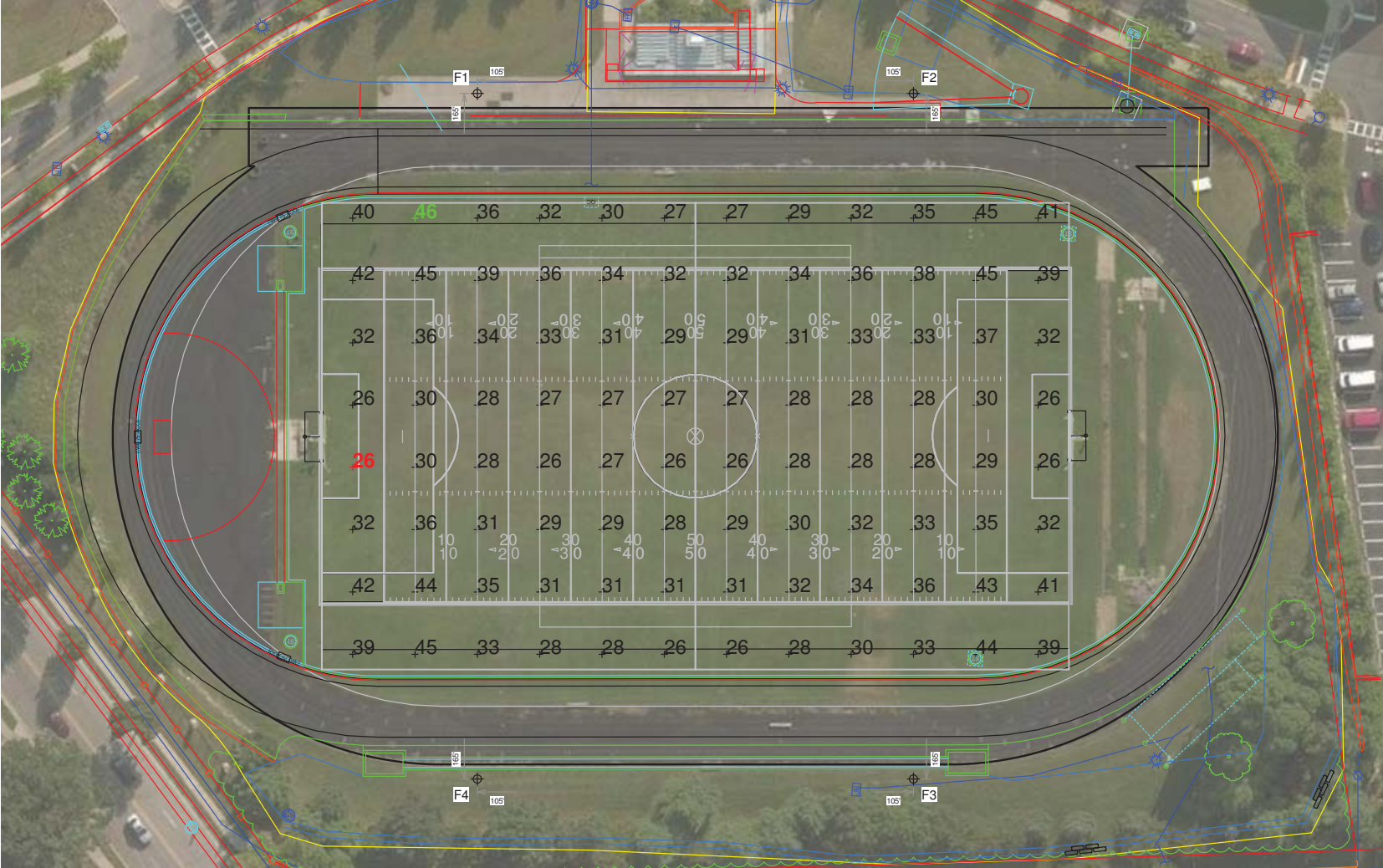
Reported per TM-21-11. See luminaire datasheet for details.

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



SCALE IN FEET 1 : 50



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2019 Musco Sports Lighting, LLC.

**EQUIPMENT LIST FOR AREAS SHOWN**

QTY	LOCATION	Pole		MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
		SIZE	GRADE ELEVATION					
2	F1-F2	80'	-	15'	TLC-BT-575	2	2	0
				50'	TLC-LED-1150	1	1	0
				80'	TLC-LED-1150	8	8	0
2	F3-F4	80'	-	15'	TLC-BT-575	2	2	0
				80'	TLC-LED-1150	8	8	0
4	TOTALS					42	42	0

Edgewood High School Of Sacred Heart SO  
Madison, WI

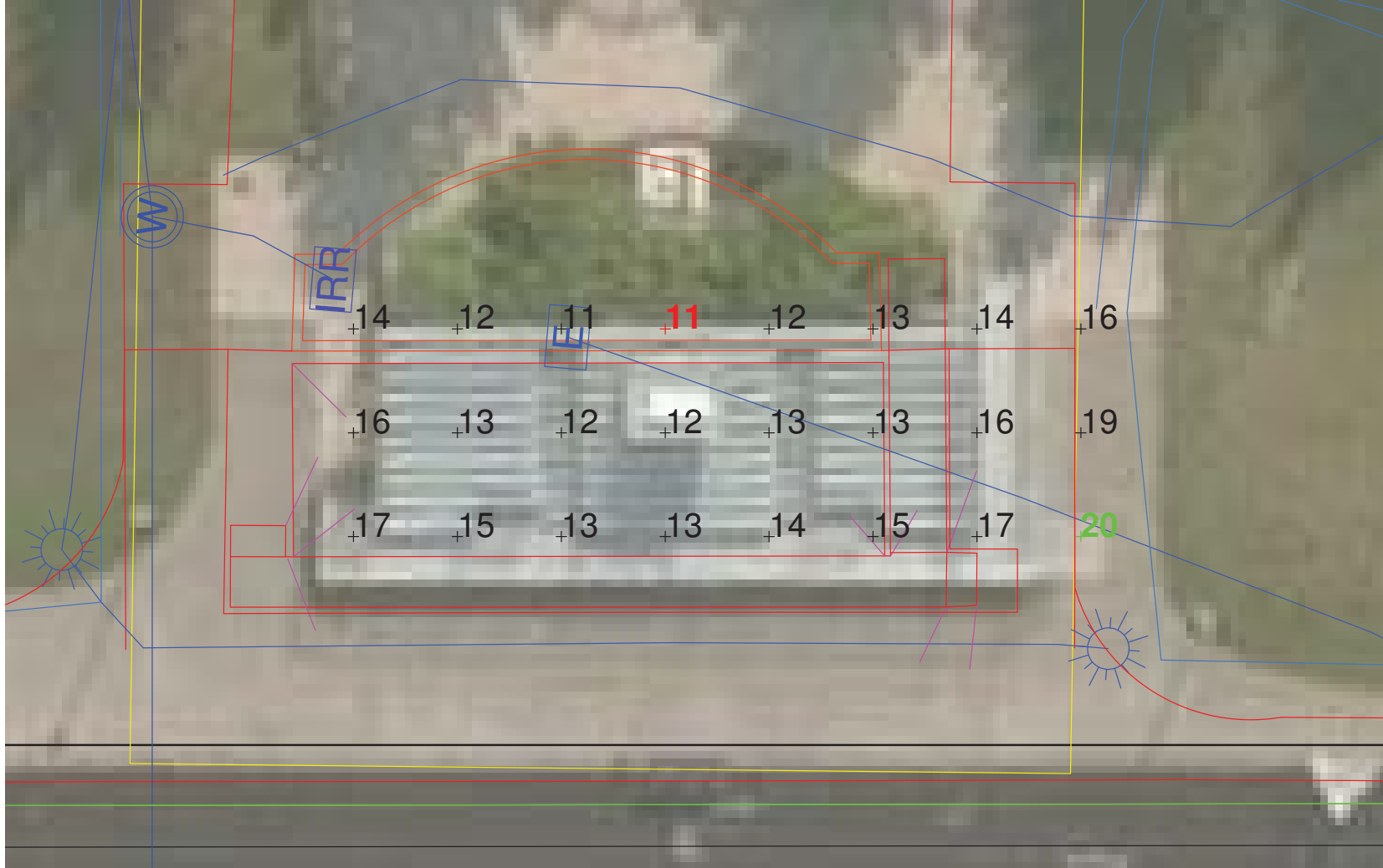
**GRID SUMMARY**

<b>Name:</b>	Bleachers
<b>Size:</b>	360' x 225'
<b>Spacing:</b>	10.0' x 10.0'
<b>Height:</b>	3.0' above grade

**ILLUMINATION SUMMARY**

MAINTAINED HORIZONTAL FOOTCANDLES			
Entire Grid			
<b>Scan Average:</b>	14.18		
Maximum:	20		
Minimum:	11		
No. of Points:	24		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	52,000 / 121,000 lumens		
<b>No. of Luminaires:</b>	42		
Total Load:	43.7 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-BT-575	>81,000	>81,000	>81,000
TLC-LED-1150	>81,000	>81,000	>81,000

Reported per TM-21-11. See luminaire datasheet for details.



**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

SCALE IN FEET 1 : 10



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

ENGINEERED DESIGN By: Connor Ramstead • File #172583D • 21-Feb-19



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2019 Musco Sports Lighting, LLC.

**ILLUMINATION SUMMARY**

**Edgewood High School Of Sacred Heart SO  
Madison,WI**

**GRID SUMMARY**

Name: **Blanket Grid**  
Size: **360' x 225'**  
Spacing: **30.0' x 30.0'**  
Height: **3.0' above grade**

**ILLUMINATION SUMMARY**

MAINTAINED HORIZONTAL FOOTCANDLES

Entire Grid

Scan Average: **6.25**  
Maximum: 47  
Minimum: 0  
No. of Points: 713

LUMINAIRE INFORMATION

Color / CRI: 5700K - 75 CRI  
Luminaire Output: 52,000 / 121,000 lumens  
No. of Luminaires: **42**  
Total Load: 43.7 kW

Luminaire Type	Lumen Maintenance		
	L90 hrs	L80 hrs	L70 hrs
TLC-BT-575	>81,000	>81,000	>81,000
TLC-LED-1150	>81,000	>81,000	>81,000

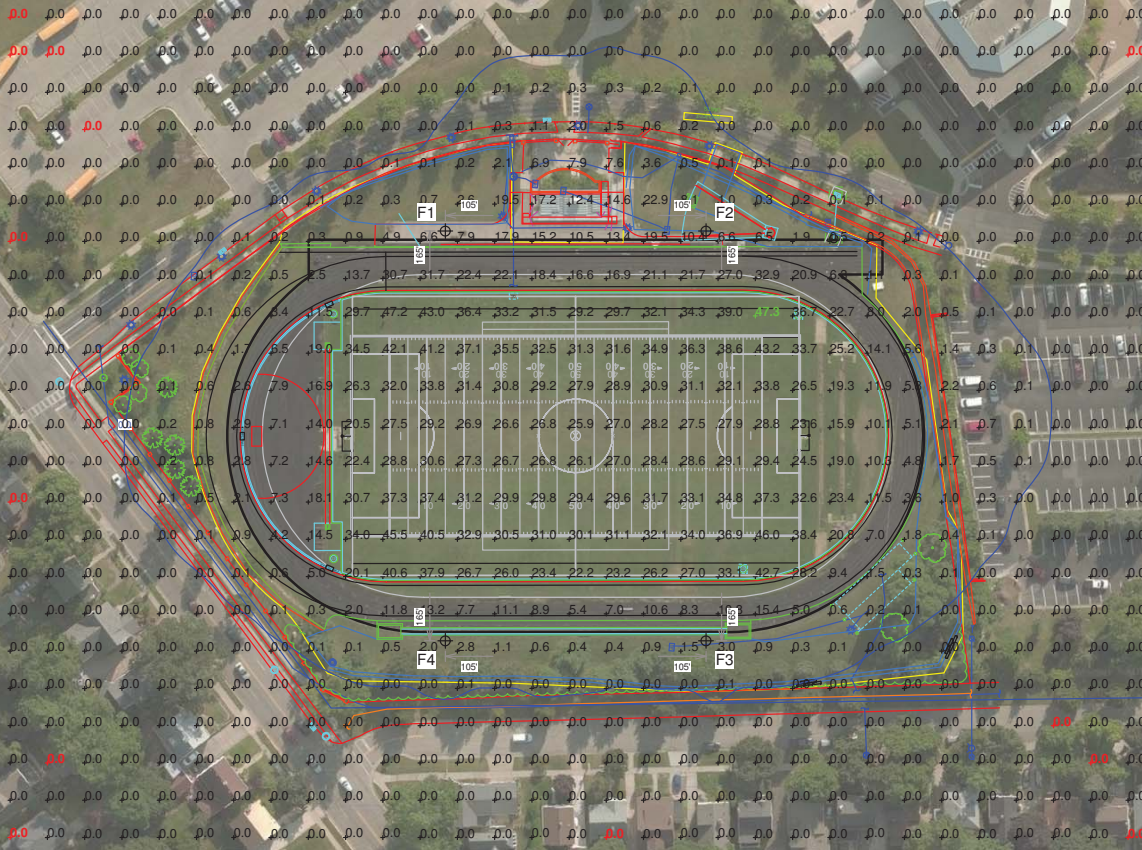
Reported per TM-21-11. See luminaire datasheet for details.

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

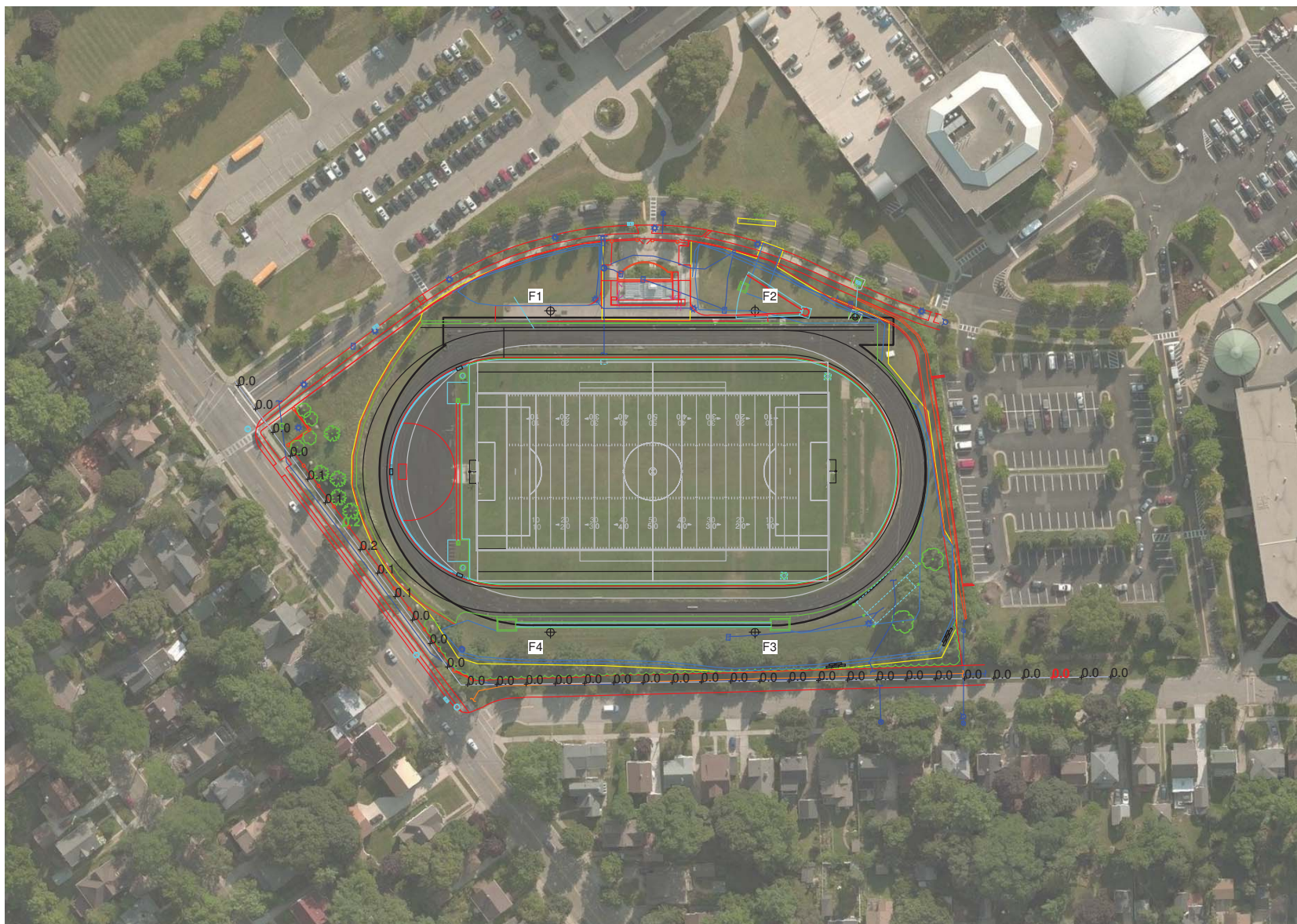


Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



**ILLUMINATION SUMMARY**





**Edgewood High School Of Sacred Heart SO**  
Madison, WI

**GRID SUMMARY**

<b>Name:</b>	Property Line
<b>Spacing:</b>	30.0'
<b>Height:</b>	3.0' above grade

**ILLUMINATION SUMMARY**

HORIZONTAL FOOTCANDLES	
Entire Grid	
<b>Scan Average:</b>	<b>0.0301</b>
Maximum:	0.23
Minimum:	0.00
No. of Points:	36

LUMINAIRE INFORMATION	
Color / CRI:	5700K - 75 CRI
Luminaire Output:	52,000 / 121,000 lumens
<b>No. of Luminaires:</b>	<b>42</b>
Total Load:	43.7 kW

Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-BT-575	>81,000	>81,000	>81,000
TLC-LED-1150	>81,000	>81,000	>81,000

Reported per TM-21-11. See luminaire datasheet for details.

**Guaranteed Performance:** The ILLUMINATION described above is guaranteed per your Musco Warranty document.

**Field Measurements:** Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

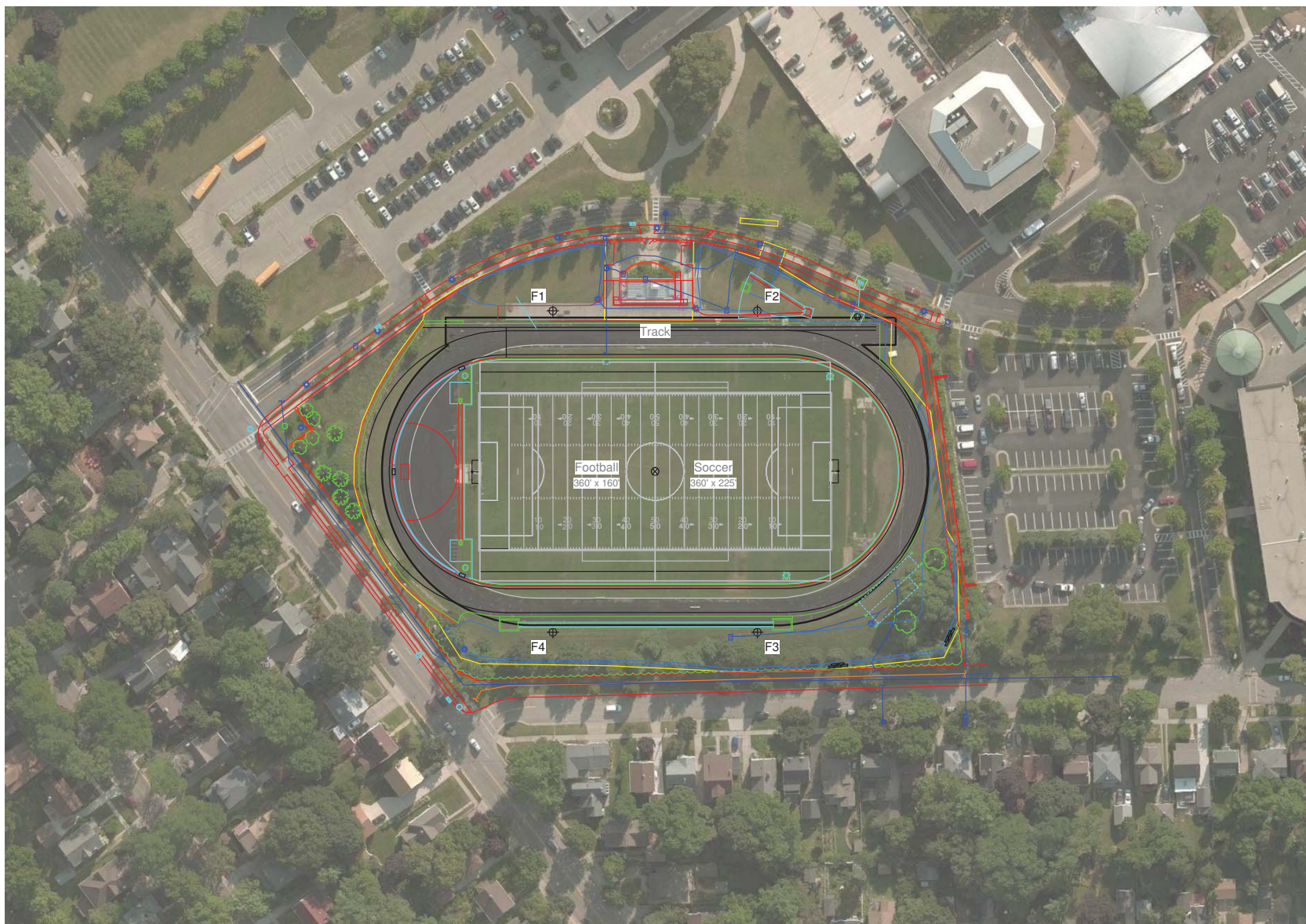


Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2019 Musco Sports Lighting, LLC.

**ILLUMINATION SUMMARY**



**Edgewood High School Of Sacred Heart SO  
Madison, WI**

**EQUIPMENT LAYOUT**

**INCLUDES:**

- Football
- Soccer
- Track

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

**Installation Requirements:** Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

**EQUIPMENT LIST FOR AREAS SHOWN**

QTY	LOCATION	Pole		Luminaires		
		SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY/ POLE
2	F1-F2	80'		15'	TLC-BT-575	2
				50'	TLC-LED-1150	1
2	F3-F4	80'		80'	TLC-LED-1150	8
				15'	TLC-BT-575	2
4				80'	TLC-LED-1150	8
<b>TOTALS</b>						<b>42</b>

**SINGLE LUMINAIRE AMPERAGE DRAW CHART**

Ballast Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)					
	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	480 (60)
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	480 (60)
TLC-BT-575	3.4	3.2	2.9	2.5	2.0	1.8
TLC-LED-1150	6.8	6.5	5.9	5.1	4.1	3.7



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2019 Musco Sports Lighting, LLC.

**Edgewood High School Of Sacred Heart SO  
Madison,WI**

**GLARE IMPACT**

Summary

Map indicates the maximum candela an observer would see when facing the brightest light source from any direction.

A well-designed lighting system controls light to provide maximum useful on-field illumination with minimal destructive off-site glare.

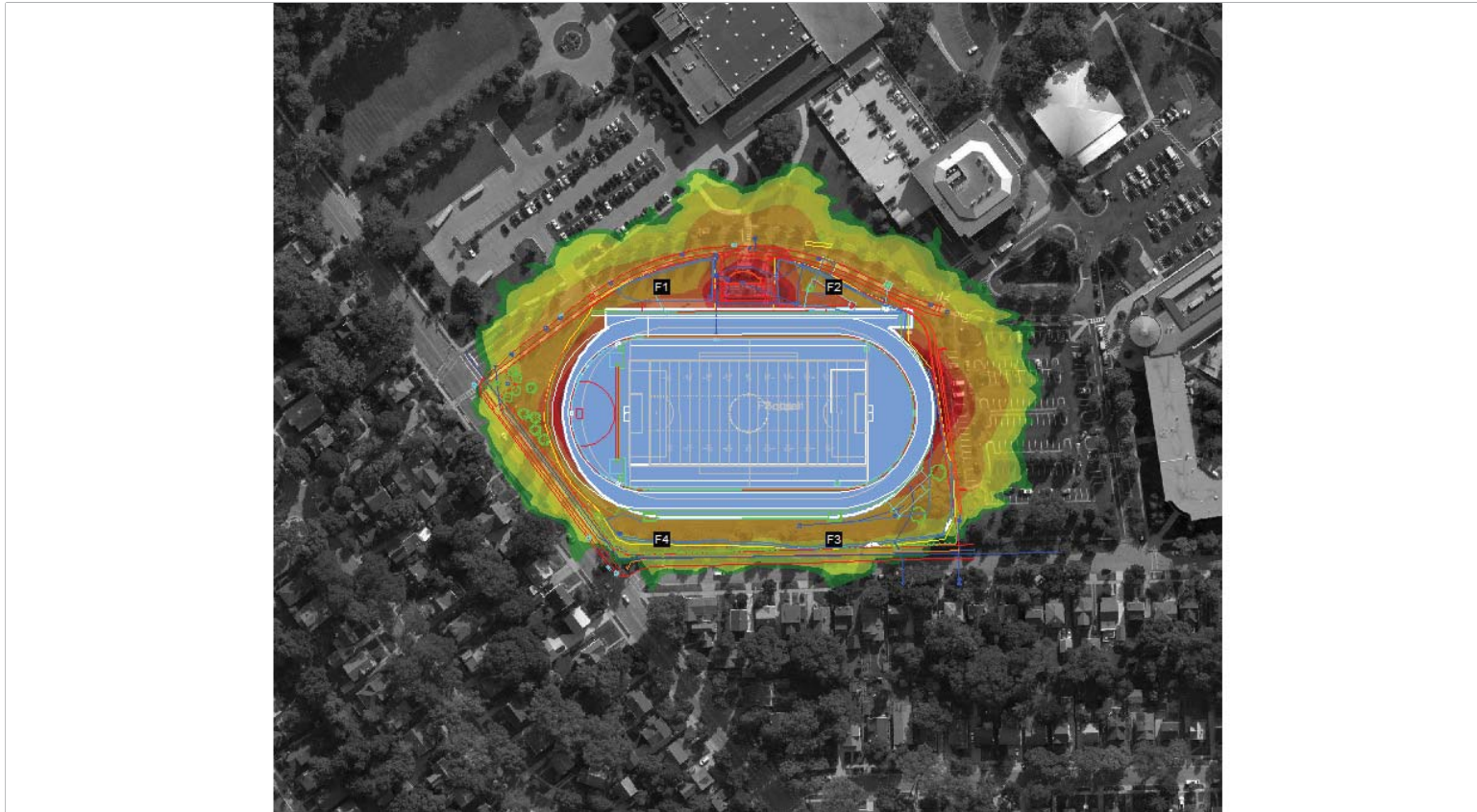
**GLARE**

Candela Levels

**High Glare: 150,000 or more candela**  
Should only occur on or very near the lit area where the light source is in direct view. Care must be taken to minimize high glare zones.

**Significant Glare: 25,000 to 75,000 candela**  
Equivalent to high beam headlights of a car.

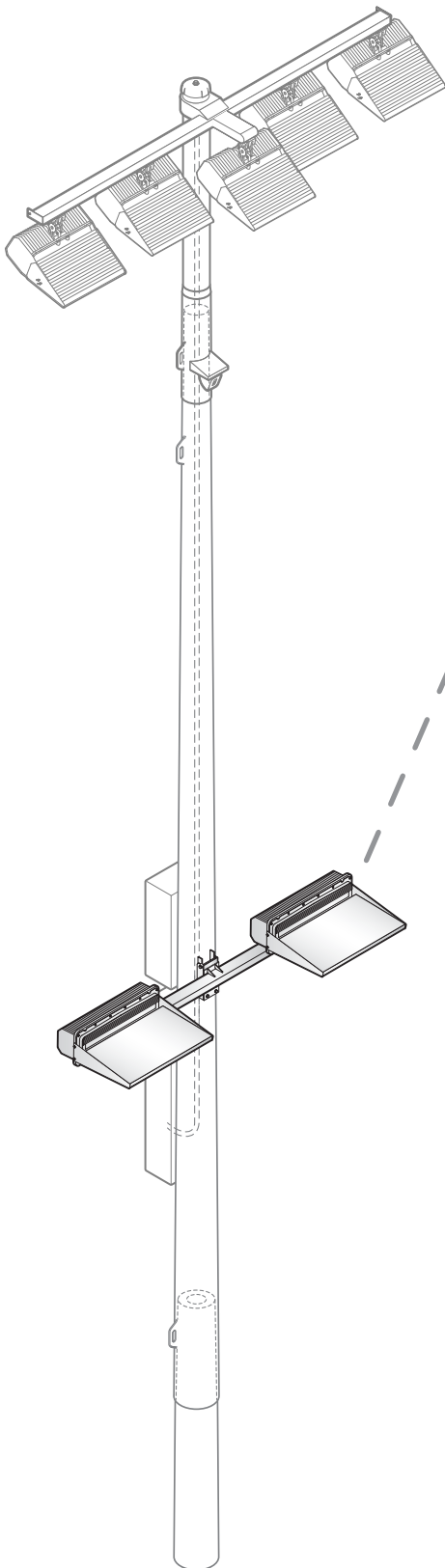
**Minimal to No Glare: 500 or less candela**  
Equivalent to 100W incandescent light bulb.



**We Make It Happen.**

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2019 Musco Sports Lighting, LLC.

## Luminaire and Driver Components – TLC-BT-575



### Luminaire Data

Weight (luminaire) .....	34 lb (15 kg)
UL listing number .....	E338094
UL Listed for USA / Canada .....	UL1598 CSA-C22.2 No.250.0
Ingress protection, luminaire .....	IP65
Material and finish .....	Aluminum, powder-coat painted
Wind speed rating (aiming only) .....	150 mi/h (67 m/s)

### Photometric Characteristics

Projected lumen maintenance per IES TM-21-11

L90(8.5k) .....	>51,000 h
L80(8.5k) .....	>51,000 h
L70(8.5k) .....	>51,000 h
CIE correlated color temperature .....	.5700 K
Color Rendering Index (CRI), typical .....	.75
Color Rendering Index (CRI), minimum .....	.70
Lumens <sup>1</sup> .....	.52,000

Footnotes:

1) Incorporates appropriate dirt depreciation factor for life of luminaire.

All components from foundation to poletop are designed to work together in Light-Structure System™ to ensure reliable, trouble-free operation.

## Luminaire and Driver Components – TLC-BT-575

### Driver Data

#### Electrical Data

Rated wattage<sup>1</sup>

Per driver..... 575 W

Per luminaire..... 575 W

Number of luminaires per driver..... 1

Starting (inrush) current..... <40 A, 256  $\mu$

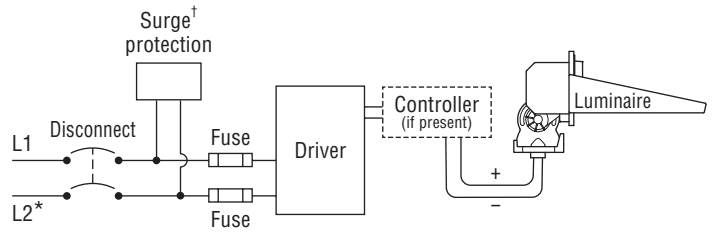
Fuse rating..... 15 A

UL ambient temperature rating,  
electrical components enclosure ..... 50°C (122°F)

Ingress protection,  
electrical components enclosure ..... IP54

Efficiency..... 95%

### Typical Wiring



\* If L2 (com) is neutral then not switched or fused.

† Not present if indoor installation.

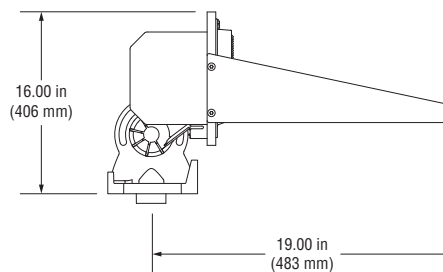
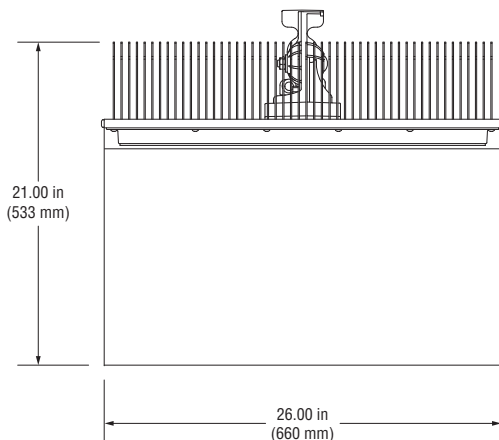
	200 Vac 50/60 Hz	208 Vac 60 Hz	220 Vac 50/60 Hz	230 Vac 50 Hz	240 Vac 50/60 Hz	277 Vac 60 Hz	347 Vac 60 Hz	380 Vac 50/60 Hz	400 Vac 50 Hz	415 Vac 50 Hz	480 Vac 60 Hz
<b>Max operating current<sup>2</sup></b>	3.30 A	3.17 A	3.00 A	2.87 A	2.75 A	2.38 A	1.90 A	1.74 A	1.65 A	1.59 A	1.38 A

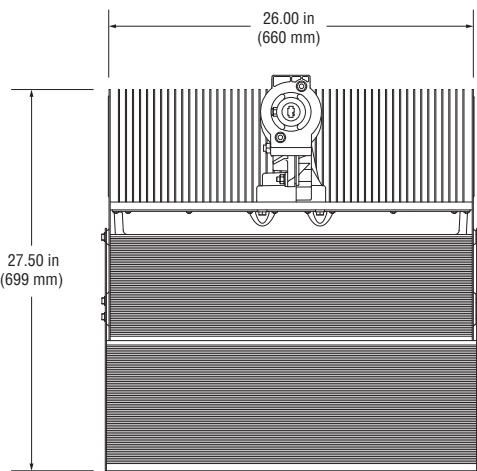
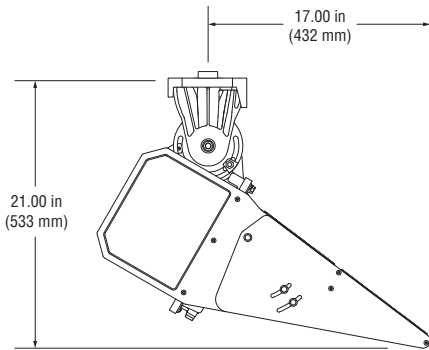
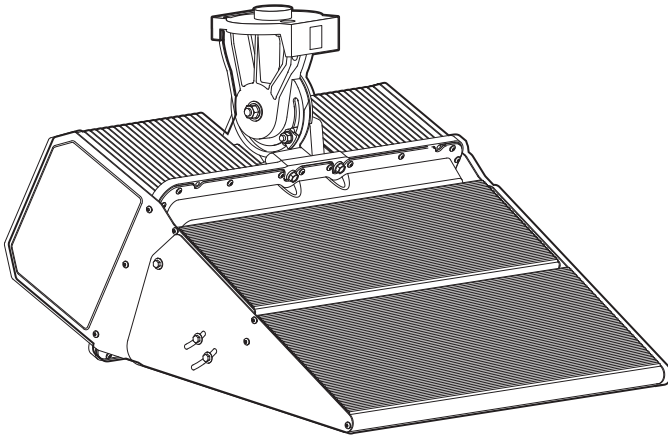
Footnotes:

- 1) Rated wattage is the power consumption, including driver efficiency losses, at stabilized operation in 25°C ambient temperature environment.
- 2) Operating current includes allowance for 0.90 minimum power factor, operating temperature, and LED light source manufacturing tolerances.

#### Notes

1. Use thermal magnetic HID-rated or D-curve circuit breakers.
2. See Musco *Control System Summary* for circuit information.





**Luminaire Data**

Weight (luminaire) ..... 80 lb (36 kg)  
 UL listing number ..... E338094  
 UL listed for USA / Canada ..... UL1598 CSA-C22.2 No.250.0  
 Ingress protection, luminaire ..... IP65  
 Material and finish ..... Aluminum, powder-coat painted  
 Wind speed rating (aiming only) ..... 150 mi/h (67 m/s)  
 UL ambient temperature rating, luminaire ..... 50°C (122°F)

**Photometric Characteristics**

Projected lumen maintenance per IES TM-21-11  
 L90(8.5k) ..... >51,000 h  
 L80(8.5k) ..... >51,000 h  
 L70(8.5k) ..... >51,000 h  
 CIE correlated color temperature ..... 5700 K  
 Color Rendering Index (CRI), typical ..... 75  
 Color Rendering Index (CRI), minimum ..... 70  
 Lumens<sup>1</sup> ..... 121,000

Footnotes:

1) Incorporates appropriate dirt depreciation factor for life of luminaire, at stabilized operation in 25°C ambient temperature environment.

## Driver Data

## Typical Wiring

### Electrical Data

Rated wattage<sup>1</sup>

Per driver..... 1,150 W

Per luminaire..... 1,150 W

Number of luminaires per driver..... 1

Starting (inrush) current..... <40 A, 256  $\mu$

Fuse rating..... 15 A

UL ambient temperature rating,  
electrical components enclosure ..... 50°C (122°F)

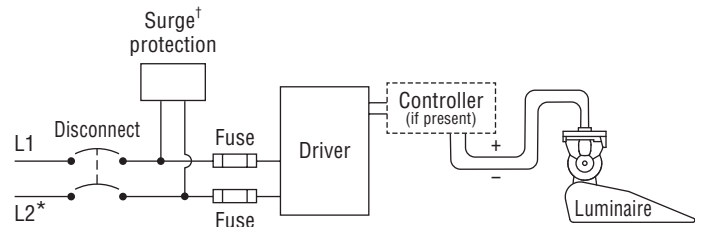
Ingress protection,  
electrical components enclosure ..... IP54

Efficiency..... 95%

Dimming mode..... optional

Range, energy consumption .....20 – 100%

Range, light output......25 – 100%



\* If L2 (com) is neutral then not switched or fused.

† Not present if indoor installation.

	200 Vac 50/60 Hz	208 Vac 60 Hz	220 Vac 50/60 Hz	230 Vac 50 Hz	240 Vac 50/60 Hz	277 Vac 60 Hz	347 Vac 60 Hz	380 Vac 50/60 Hz	400 Vac 50 Hz	415 Vac 50 Hz	480 Vac 60 Hz
<b>Max operating current<sup>2</sup></b>	7.11 A	6.83 A	6.46 A	6.18 A	5.92 A	5.13 A	4.10 A	3.74 A	3.56 A	3.43 A	2.96 A

Footnotes:

- 1) Rated wattage is the power consumption, including driver efficiency losses, at stabilized operation in 25°C ambient temperature environment.
- 2) Operating current includes allowance for 0.90 minimum power factor, operating temperature, and LED light source manufacturing tolerances.

Notes

1. Use thermal magnetic HID-rated or D-curve circuit breakers.
2. See Musco Control System Summary for circuit information.



**Katherine R. Rist**

Foley & Lardner LLP  
150 E. Gilman Street  
Madison, WI 53703  
Tel: 608.258.4317  
Email: [krist@foley.com](mailto:krist@foley.com)

**From:** Elliott, Michael <[michael.elliott@edgewoodhs.org](mailto:michael.elliott@edgewoodhs.org)>  
**Sent:** Friday, November 2, 2018 10:29 AM  
**To:** Rist, Katherine R. <[KRist@foley.com](mailto:KRist@foley.com)>  
**Subject:** Fwd: Edgewood Highschool Athletic Field Use and the Adopted Master Plan

Katie

Here is the email from Matt.

Mike

----- Forwarded message -----

**From:** Tucker, Matthew <[MTucker@cityofmadison.com](mailto:MTucker@cityofmadison.com)>  
**Date:** Fri, Oct 26, 2018 at 11:32 AM  
**Subject:** Edgewood Highschool Athletic Field Use and the Adopted Master Plan  
**To:** Brian Munson <[bmunson@vandewalle.com](mailto:bmunson@vandewalle.com)>, Elliott, Michael <[michael.elliott@edgewoodhs.org](mailto:michael.elliott@edgewoodhs.org)>  
**Cc:** Parks, Timothy <[TParks@cityofmadison.com](mailto:TParks@cityofmadison.com)>, Stouder, Heather <[HStouder@cityofmadison.com](mailto:HStouder@cityofmadison.com)>, Arntsen, Allen <[district13@cityofmadison.com](mailto:district13@cityofmadison.com)>

Brian, Mike- The purpose of this message is to follow-up on our conversation earlier this week about the current usage of the athletic field, as that use relates to the adopted master plan for the Edgewood campus.

After the neighborhood meeting of Wednesday October 17, I became aware of the extensive use of the athletic field at the northwest corner of the site. I also closely reviewed the [adopted Master Plan](#), to determine how language in the master plan relates to the athletic field usage. Specifically, in the “Open Space Plan” (section 3.8) the approve master plan identifies the athletics field to be used for “team practices, physical education practices.” The lack of any further language in this section, or any other language in sections of the adopted Master Plan, leads me to the interpretation that current programming and usage of the field is operating outside of the allowances of the adopted Master Plan.

If you wish to continue the current level of programming on the field for 2019 and beyond, I believe that you will need to pursue an amendment to the approved Master Plan. I would be happy to talk with you, Alder Arntsen, and the neighborhood liaison committee, should you choose to explore a Master Plan amendment to expand the use of the athletic field. If you decide to continue with the current idea for a stadium expansion at the athletic field, you will also need to include language in this amendment that would incorporate allowing the current level of usage of the field to be allowable and continue.



The master plan does include some language contemplating future needs for the institution and its users. In the “Future Needs of Campus Institutions” (section 3.1) subsection on Athletics, reference is made to the lack of athletics and fitness space and to the difficulty of obtaining sites for off-campus and on-campus recreation. This section includes the language that “Multiple solutions, both on-and off-campus, will be necessary to meet these needs.” This language does not explore the broader neighborhood or community needs that Edgewood appears to be attempting to address with the usage of the athletic field, however, the absence of reference to the broader community would not prohibit the broader discussion on expanded use of the facility for other community users from taking place.

Let me know if you have any questions.

## **Matt Tucker**

Zoning Administrator

Building Inspection Division



**215 Martin Luther King jr Blvd. STE 017**

Madison, Wisconsin 53701-2984

Telephone: 608 266 4569

Email: [mtucker@cityofmadison.com](mailto:mtucker@cityofmadison.com)

[www.cityofmadison.com/bi](http://www.cityofmadison.com/bi)

--

Michael Elliott

President

Edgewood High School of the Sacred Heart

2219 Monroe St. Madison, WI 53711

(608) 257-1023 x 103

[edgewoodhs.org](http://edgewoodhs.org) | [facebook.com/EdgewoodHS](https://facebook.com/EdgewoodHS)

The preceding email message may be confidential or protected by the attorney-client or work-product privileges. It is not intended for transmission to, or receipt by, any unauthorized persons. If you have received this message in error, please (i) do not read it, (ii) reply to the sender that you received the message in error, and (iii) erase or destroy the message and any attachments or copies. Any disclosure, copying, distribution or reliance on the contents of this message or its attachments is strictly prohibited, and may be unlawful. Unintended transmission does not constitute waiver of the attorney-client privilege or any other privilege. Legal advice contained in the preceding message is solely for the benefit of the Foley & Lardner LLP client(s) represented by the Firm in the particular matter that is the subject of this message, and may not be relied upon by any other party. Unless expressly stated otherwise, nothing contained in this message should be construed as a digital or electronic signature, nor is it intended to reflect an intention to make an agreement by electronic means.

---

This e-mail and any attachments may contain privileged or confidential information. This e-mail is intended solely for the use of the individual or entity to which it is addressed. If you are not the intended recipient of this e-mail, you are hereby notified that any copying, distribution, dissemination or action taken in relation to the contents of this e-mail and any of its attachments is strictly prohibited and may be unlawful. If you have received this e-mail in error, please notify the sender immediately and permanently delete the original e-mail and destroy any copies or printouts of this e-mail as well as any attachments. To the extent representations are made herein concerning matters of a client of the firm, be advised that such representations are not those of the client and do not purport to bind them.



Department of Planning & Community & Economic Development

## Building Inspection Division

Madison Municipal Building, Suite 017  
215 Martin Luther King Jr. Blvd.  
P.O. Box 2984  
Madison, Wisconsin 53701-2984  
Phone: (608) 266-4551  
Fax (608) 266-6377  
[www.cityofmadison.com](http://www.cityofmadison.com)

February 27, 2019

Michael Elliot  
President, Edgewood High School  
2219 Monroe Street  
Madison, WI 53711

RE: Edgewood Athletic Field, Lighting Permit and Sound System Installation

Michael,

On Friday, February 22, the Building Inspection Division accepted a lighting plan filed by Forward Electric on behalf of Edgewood High School, to install lighting for the school's field. Those plans will be reviewed for compliance with MGO Section 10.085, and if the plans comply, electrical permits will be issued when requested.

The City believes this permit can be issued without requiring amendment of the approved 2014 Master Plan. However, over the past weekend, I received a copy of the letter sent to "Edgewood Family" and a "Frequently Asked Questions" document relating to the institutions' present interest to install lights and an amplified sound system at the field (copy attached). These letters indicate that Edgewood intends to use the lights and sound system to host night games at the facility.

Based on the information the City currently has regarding the historical use of the facility, it would appear that the intended use of the facility as outlined in your letter to the "Edgewood Family" and detailed in the "Frequently Asked Questions" document would conflict with the approved 2014 Master Plan for the site, which limits use of the facility to "team practices, physical education classes" (Page 42, Section 3.8, Open Spaces Plan).

The purpose of this letter is to inform you that the issuance of any lighting permit under MGO sec. 10.085 does not change the City's position that the use of the facility under the master plan is limited to "team practices, physical education classes."

Sincerely,

A handwritten signature in black ink, appearing to read "Matt Tucker".

Matt Tucker  
Zoning Administrator  
City of Madison

February 22, 2019

Dear Edgewood Family,

Thank you for your support over the past two years as we worked diligently to enhance the Goodman Athletic field. Clearly, we are all motivated to find solutions that give our student athletes and the entire Edgewood community a true home field experience, while maintaining a strong relationship with our neighbors and the surrounding community. Your support has been invaluable for our students, our staff and for us as a Board of Trustees.

The comprehensive process required to continue a nearly century-long history of playing games at Edgewood has been extremely complex. We are grateful to the dedicated staff, consultants, city officials and neighbors who have worked collaboratively to navigate this deliberate, thoughtful and inclusive process. As Dominican heritage reminds us – the best approach is to study, reflect and then act. That philosophy has guided our approach.

Throughout this process, for example, we have engaged in multiple conversations with our neighbors and city officials to ensure we followed the Master Plan guidelines and were respectful of those around us. We conducted thorough research, adjusted proposals based on our discoveries and sought compromises to ensure the best possible outcome. And, we met or exceeded every requirement outlined by local ordinances and the Master Plan. Ultimately, we gained a better understanding of the ordinances that govern what we can do on our property and identified a more streamlined approach than the one we had previously been pursuing.

At this time, the Board of Trustees has made the strategic decision to table our Master Plan amendment for Plan Commission consideration. We took this action in order to continue our conversations with our neighbors – at their request – and to better focus on the Goodman Athletic Complex improvements allowed through existing city ordinances versus those that require an amendment to our Master Plan.

Based on the fact that installation of outdoor lighting is regulated by city ordinances and not regulated under the current Master Plan, the Edgewood Board of Trustees recently approved moving forward with a formal application to the city for the LED lighting technology. This technology exceeds city lighting requirements and does not require an amendment to our Master Plan. We also approved installing upgrades to the amplified sound system, which is also allowed under city ordinances. These improvements continue our commitment to meet or exceed city requirements and will enrich our long-standing tradition of hosting a variety of sporting events on our grounds.

Based on the outcomes of numerous studies conducted as part of this exhaustive process, we believe we can move forward not just under the letter of the law, but also in good faith, knowing there will be minimal negative impact from these actions. As demonstrated by the studies conducted as part of this process, for example, we know the following:

- The proposed LED lighting technology exceeds city lighting requirements;
- The directional, amplified sound system custom-designed for the site meets all city sound requirements and would improve the current public address system being used;
- Crowd noise will be consistent with similar facilities in Madison according to the professional sound study that used actual topography and anticipated crowd size from the actual site;
- Improvements to the Goodman Athletic Complex will **not** have an impact on the environment, as concluded by the environmental study conducted within the past two months.



---

While the complexities of navigating this exhaustive process resulted in an unintended lack of communications from us to you, we believe the careful, reflective work has been worthwhile. It has resulted in identifying options that will allow our students to have a true home field in 2019 and afford our leadership team appropriate time to continue working with the city and our neighbors to discuss options and conditions for the potential future addition of a permanent structure for seating, storage, restrooms and concessions.

We remain committed to ensuring Edgewood maintains its position as a valued community asset while striving to provide the best, most robust experience for our students. Again, we sincerely appreciate your support and look forward to keeping you updated as we continue to move through the process.

Sincerely,

Edgewood High School Board of Trustees

**Lynne Sexten, Board Chair**  
Agrace HospiceCare  
President & CEO

**Michael Elliott '77**  
Edgewood High School  
President

**Steve Krantz '89**  
Princeton Group  
VP Operations

**Sam Ballweg '97**  
Endres Manufacturing Co.  
President

**James Hegenbarth**  
Park Bank  
President & CEO

**Tom Merfeld**  
CUNA Mutual Group  
CFO

**Matt Braun '94**  
Oakwood Corporation  
VP Investments

**Maggie Hopkins, OP**  
Edgewood College  
VP Dominican Life & Mission

**Ted Richards**  
Strand Associates, Inc.  
CEO

**Sharon Brolin**  
Sinsinawa Dominican  
Associate

**James Imhoff III '93**  
Universal Home Protection  
President

**Jay Sekelsky**  
Madison Investment Advisors  
Chief Investment Officer

**Kristin Dewey '06**  
The QTI Group  
Executive Recruiter

**Gwendolyn Jones**  
Madison College  
Marketing/Continuing  
Education

**Kelli Thompson**  
Wisconsin State Public  
Defender's Office  
Attorney

**Sandra Docter**  
Madison College  
Assoc. Dean, School of Applied  
Science, Engineering, Tech

**Tom Klein**  
Oakbrook Corporation  
Sr. Director, Commercial  
Real Estate

**Marykay Zimbrick**  
Community Volunteer

---

February 2019

**Edgewood High School Goodman Athletic Complex  
Answers to Frequently Asked Questions**

**Q: Why did Edgewood High School table its addendum to the Master Plan with the Plan Commission?**

**A:** Two specific issues lead to the decision to table our addendum to the Master Plan with the Plan Commission:

- One of our neighborhood associations specifically requested that we postpone our public hearing with the Plan Commission in order to discuss additional options in further detail;
- The very real challenge of identifying scheduling options for our athletic program in 2019 led us to explore alternatives that are not regulated by zoning code or the master plan. Those options include lighting and sound upgrades. These do not require an amendment to the Master Plan and would not require Plan Commission or City Council approval.

**Q: Don't lighting and sound upgrades to the Goodman Athletic Complex require an amendment to the Master Plan?**

**A:** Installation of outdoor lighting and permits for sound amplification are *not* regulated by the zoning code or master plans. Chapters 10 and 24 of the City ordinances, respectively, regulate the process for installing outdoor lighting and identifying acceptable sound levels. Memorial High School upgraded lighting on its athletic field in 2018 by complying with the requirements of Chapter 10.

**Q: If lighting and sound did not require an amendment to the Master Plan, why did Edgewood High School include these items in its recent addendum request to the City Plan Commission?**

**A:** When we first began exploring the option of installing a permanent structure for seating, concessions, restrooms and storage over two years ago we were instructed by city staff that we needed to amend our Master Plan for these upgrades. We also believed at the time that lighting and sound would require an amendment. It was not until recently that we learned that lighting and sound were regulated by City ordinances and did not require an amendment to the Master Plan.

**Q. Is Edgewood High School still pursuing amendments to its Master Plan?**

**A:** If the Edgewood High School Board of Trustees believes it is in the best interest of the school and its athletic programs to continue pursuing a permanent structure for seating, concessions, restrooms and storage we will need to continue the formal amendment process outlined in our Master Plan. This process would include additional conversations with our neighbors.

**Q. Is Edgewood High School planning to host night games at the Goodman Athletic Complex if the permit for lighting is granted by the City?**

**A:** Yes. Edgewood leadership has been up front for years about the continued desire to have a true home field that would enrich our athletic program by hosting night games. The latest LED lighting

---

technology that we are proposing to install will minimize glow, light spill and glare. This new technology, along with the height of the poles in our plans, will ensure lighting from the limited number of night games will not go beyond our property. The plan meets and even exceeds the city lighting requirements.

**Q. Are the number of night games going to be limited as discussed during the Master Plan amendment process with neighborhood associations and elected officials?**

**A:** City zoning does not limit the number of night games that can be played on school facilities that are zoned as a Campus Institutional District. Edgewood, like all Madison High Schools, is zoned Campus Institutional.

The limitation on the number of night games was part of the negotiation process between Edgewood High School, the neighborhood associations and the city regarding the request for an amendment to the Master Plan that would allow for the installation of a permanent structure for seating, concessions, restrooms and storage. If the Board of Trustees decides to move forward with the requested amendment to the Master Plan for a permanent structure, it is our assumption the dialogue regarding Edgewood High School's willingness to voluntarily limit the number of night games would continue.

**Q. Doesn't the Master Plan only allow Edgewood High School the ability to hold practice games and physical education programs at the Goodman Athletic Complex?**

**A:** Edgewood High School has an almost century-long continuous history of playing games and other activities on its athletic field. In 2013, Edgewood, like all Madison High Schools, was zoned as a Campus Institutional District. Under this zoning designation, indoor and outdoor sports are a clearly defined acceptable use.

**Q. What about the concerns raised by neighbors regarding the upgrades Edgewood High School is proposing to the Goodman Athletic Complex?**

**A:** Throughout this process, we have engaged in multiple conversations with our neighbors and city officials to ensure we followed the Master Plan guidelines and were respectful of those around us. We conducted thorough research, adjusted proposals and sought compromises to ensure the best possible outcome. And, we met or exceeded every requirement outlined by local ordinances and the Master Plan.

Our application for outdoor lighting under city ordinance and our upgrade to our sound amplification system reflect and address the issues raised by our neighbors. Our intent is to continue discussions with our neighbors on the permanent structure, a sound barrier and other items that would require an amendment to the Master Plan.

**Q. If Edgewood's application for lighting is approved by the city, how soon would the high school install the lights and begin hosting night games?**

**A:** The installation of the new LED technology on the Goodman Athletic Complex field would need to occur by the spring of 2019 in order to accommodate spring athletic programming.

September 30, 2019

Nathan J. Wautier  
Direct Dial: 608-229-2249  
nwautier@reinhartlaw.com

HAND DELIVERED

Permit Counter  
Department of Planning and Community and  
Economic Development  
215 Martin Luther King Jr. Blvd.  
Madison, WI 53703

To Whom It May Concern:

On behalf of Edgewood High School of the Sacred Heart, attached please find an application ("Alternative Application") for outdoor lighting in compliance with City of Madison Ordinance Section 10.085 "Outdoor Lighting." The Alternative Application makes three revisions to an approved application for the same address submitted on or about February 22, 2019 (the "Existing Approved Application"). The revisions lower the height of the four light poles from 80 feet to 68 feet, reduce the foot candle illumination intensity, and remove "punt" lighting.

The Alternative Application is being submitted because an electrical permit for installation of lights from the City pursuant to the Existing Approved Application has not been issued. As a reminder, the Existing Approved Application is identical to an application submitted and used to issue twelve 80 foot light poles with "punt" lighting at James Madison Memorial High School in 2018.

Regardless, if the City intends to continue to withhold an electrical permit under the Existing Approved Application, please use the attached Alternative Application to issue an electrical permit allowing Edgewood to install outdoor lighting in full compliance with City of Madison Ordinance Section 10.085 "Outdoor Lighting."

Best regards,

REINHART BOERNER VAN DEUREN s.c.



Nathan J. Wautier





2219 MONROE STREET • MADISON, WI 53711-1999  
608.257.1023 • 608.257.9133 (Fax) • edgewoodhs.org

December 3, 2019

Dear Plan Commission,

As you know, the proposed repeal of the ordinance establishing the Edgewood Campus Master Plan came before the Madison Plan Commission on November 11, 2019. At that meeting, there were a number of claims made about Edgewood, the Master Plan, and Edgewood's students' use of the on-campus athletic field that were inaccurate. These statements clearly had an impact on the Plan Commission's deliberations and vote. However, because the November 11th Plan Commission meeting was closed for public comment, Edgewood had no ability to correct the record during the meeting. This letter will provide facts about those claims.

**Claim # 1:** A vote for repeal of the ordinance adopting Edgewood's Master Plan would be a vote to repeal "all the neighborhood contributions that have been made since Edgewood's first Master Plan was developed in 1997 because they're subsumed into the current Master Plan" in sections 4.2 and 4.3.

**Facts:** The agreements between Edgewood and the neighborhood associations are not part of the Master Plan. In a memorandum prepared for Plan Commission by the Planning Division dated March 24, 2014, the Planning Division stated that the neighborhood agreements "are included in the plan by reference," but qualified "that the City is not specifically a party to the agreements in section 4.2 and 4.3, and enforcement of those agreements rests outside of the City's zoning powers." (See Planning Division Staff Report, dated March 24, 2014, p.7 (attached).)

**Claim #2:** A limit on outdoor lighting is included in the Master Plan.

**Facts:** The Master Plan does not make any commitment on outdoor lighting beyond the commitment to follow the City's generally applicable standards for pedestrian safety, building code requirements, and dark sky compliant light fixtures. (See Master Plan § 3.6.7, p.40.) As the Zoning Administrator stated at the November 11th meeting, the Master Plan simply calls for "compliance with the City's lighting ordinance that talks about lighting of buildings and lighting of areas." The Zoning Administrator also stated that compliance with the City's lighting ordinance is judged by measuring glare and light "castoff past the lot line", and confirmed that Edgewood's light levels are "acceptable" within this standard.

**Claim #3:** The noise produced from the use of the athletic field violates the law.

**Facts:** Edgewood has never received a noise ordinance violation from activities on its athletic field and is in compliance with the City's sound ordinances. Edgewood has not erected any permanent sound or public address infrastructure. It uses rudimentary, portable devices to make short announcements at a reasonable volume during daytime games and track meets. There is no evidence that the decibel level of those announcements is higher than at any other outdoor high school athletic complex. Additionally, the Zoning Administrator confirmed at the November 11th meeting that the City and Edgewood have discussed the use of this equipment for making announcements during games. He also confirmed that "[t]he City's noise ordinance doesn't relate to [sound from portable, temporary equipment] like it does to . . . fixed equipment noises, like point of sound noises. So the discretion of the noise is at the authority of the Police Department to determine if the noise is disturbing the peace."

**Claim #4:** The neighborhood has indicated that they would support "reasonable daytime use" and has encouraged Edgewood to apply for an amendment that would allow that.

**Facts:** Edgewood has had the right to unlimited daytime use of its athletic field since 1927. The neighborhood association's offer to negotiate limited daytime use is therefore not a compromise, but rather an effort to reduce Edgewood's use of its athletic field below its historical use. Again, all of the City's public high schools have the right to unlimited use of their athletic fields both day and night. This "compromise" would therefore bar Edgewood from being treated the same as the City's public high schools.

**Claim #5:** Edgewood has dramatically increased the "frequency and intensity" of use of its athletic field in 2019, but only hosted 4 to 5 games a year before adopting the 2014 Master Plan.

**Facts:** As an initial matter, the number of games Edgewood plays on its athletic field is not relevant. The repeal of the Master Plan is, in the words of City Attorney Mike May, designed to "place [Edgewood] on equal footing with other high schools." All of the City's public high schools can and do play as many games as they want on their athletic fields, day or night. There is no evidence that Edgewood uses its field any more or less frequently than other Madison high schools.

The degree to which Edgewood used its field before 2019 was also not accurately presented. Since at least 1989, Edgewood has used its field, track, and the surrounding green spaces on a daily basis during the Spring and Fall seasons for outdoor practice (weather permitting), complete with coaches' whistles, drills, and scrimmages. Practices are every bit as "intense" as games. Each year during the 1990s and 2000s, Edgewood regularly hosted football and soccer games on the field, and hosted multiple high school, parochial grade school, and youth league track and field meets on its track. Edgewood has never counted the number of powderpuff flag football or ultimate frisbee games held on its campus because those activities are sponsored by

student clubs, not the athletic department, but both have been regularly held outside on Edgewood's campus for decades.

The recent increase in games on the athletic field coincided with needed improvements completed in 2015, including synthetic turf, an updated track, and a modern scoreboard. Edgewood now has a state of the art athletic facility on its campus that was properly permitted and approved by the City – of course Edgewood is using it more. The only reason the number of games held today is greater than the 25-year period before the Master Plan was enacted is that the quality of the field before the improvements was not sufficient to sustain that level of use. The increased use of the field since completion of the upgrades is not unique to Edgewood. High schools nationwide are experiencing an uptick in the use of their athletic fields as they add new sports to their athletic programs and make their fields available to other programs in their communities, like Edgewood has.

**Claim #6:** Edgewood played games on the field after being told that games weren't allowed.

**Facts:** The City has repeatedly agreed that games could continue on Edgewood's athletic field while the legal processes remained pending. First, after the City issued Edgewood a notice of violation in April 2019, Assistant City Attorney John Strange told Edgewood's attorneys that per M.G.O. § 28.205(5)(d), enforcement of the alleged zoning violation would be stayed pending the outcome of Edgewood's petition to the Zoning Board of Appeals. Second, on July 12th, after the ZBA denied Edgewood's petition, City Attorney Mike May sent a letter to Edgewood's attorneys, stating that the City "will take no further enforcement steps" without notice and that Edgewood "does not face the threat of any prosecution or other enforcement actions by the City." Third, the City and Edgewood entered into a stipulation in the federal lawsuit, which the judge adopted as an order, that the City "will not take any enforcement action against Edgewood pertaining to its use of its athletic field without first giving Edgewood 90 days' written notice." Copies of the ordinance, letter from the City Attorney, and the federal court stipulation are attached.

**Claim #7:** Edgewood took advantage of the Master Plan to streamline the development outlined in the Master Plan, and wants to jettison the Master Plan now that it has achieved its development goals.

**Facts:** Of the 20 planned development projects outlined in the Master Plan, Edgewood has received formal approval for only three (excluding projects added to the Master Plan by amendment). Should Edgewood wish to complete one of the remaining 17 projects in the Master Plan, it will need to do so through the City's conditional use permitting process. That is intended to be a more difficult and time-consuming process than the limited architectural review that would occur if the Master Plan remained in place.

It is our hope is that this information will help you to make a determination based on the facts and standards that govern your deliberations.

Finally, omitted from the presentation and discussions during the November 11th meeting was any consideration of the interests and well-being of the thousands of children and young adults that attend school on the Edgewood campus every day. These are the souls that we have made it our mission to educate and cultivate, and it is for them that the three Edgewood institutions seek to repeal the ordinance establishing its Master Plan. **It would be a shame if inaccurate claims and subjective views of the public interest prevailed over the right of Edgewood's students to be treated equally with students at the City's public high schools.**