



Jesuit High School of Sacramento Stadium Lighting

Jesuit High School of Sacramento (“Jesuit” or “JHS”), via its Board of Trustees, proposes to install a state-of-the-art field lighting system at Marauder Stadium (“Project”), courtesy of Project sponsors Teichert and Collins Electrical. This document provides background information on Jesuit High School, a description of the proposed amendment to an existing Conditional Use Permit, and a justification for the proposed Project.

Background

Jesuit High School was founded in 1963 and is sponsored by the California Province of the Society of Jesus, a Roman Catholic order of priests and religious. It is located at 1200 Jacob Lane in the Sacramento County Carmichael/Old Foothills Farms region. Enrollment over the past decade has ranged between 960 – 1,090 students supported by 130 faculty and staff. JHS prides itself on providing an academically rigorous college-preparatory education, typically with 99-100% of graduates going immediately to college, and 85% to four-year institutions. Jesuit is also well recognized as an athletic force with a storied history of regional and state championships in numerous sports.¹

The campus is nearly fifty-one (51) acres and includes fifteen (15) buildings, practice and playing athletic fields, and parking spaces for 554 vehicles. Primary ingress/egress is at 4660 Fair Oaks Boulevard, a signalized intersection. Country Oaks Pet Hospital is the only commercial enterprise that shares a common boundary with JHS. All other common boundaries are shared with single-family residences.

Marauder Stadium consists of an artificial turf field sized for football, soccer, and lacrosse, with an eight-lane synthetic track surrounding the field perimeter. The stadium also includes a freestanding scoreboard to the west and shot put and discus venues on the stadium’s perimeter. The home stands, located on the north side of the field, have a capacity of 2,000, and the visitor stands have a capacity of 1,000. The stadium site also includes a building with a concession stand, restrooms, a mechanical room, and changing areas for student-athletes utilizing the pool. The track and field are used by JHS athletics,

¹ Jesuit High School ranked 6th in the Sacramento Bee’s 2022-2023 Regional Top 10 Football Team Rankings. Notably, out of these top ten football programs, Jesuit High School is the only school without a lighting system in their stadium. See <https://www.sacbee.com/sports/high-school/article264447831.html>.



the JHS Junior Marauder football league, Parochial Athletic League flag football, and the Parochial Athletic League Track program.

Project Description

The Project is a request for a Use Permit Amendment to allow for the installation of a new state-of-the-art, dark sky certified field lighting system to JHS's Marauder Stadium. The new lighting system would consist of four (4) light poles, two (2) 100-foot poles on the north side of the stadium and two (2) 90-foot poles on the south side, with the LED lights affixed at the top. The poles would be located at approximately the 10-yard lines and have setbacks of $\pm 208'$ from centerfield on the home side and 175' on the visitor's side. Additional code-compliant lighting will be added for the bleachers and pedestrian pathways. Construction of the Project is anticipated to be completed in one phase, lasting four to six weeks.

Importantly, the light fixtures will utilize LED technology designed by Musco Lighting, rather than the traditional metal halide fixtures, such as those at Sacramento State and El Camino High School. The new LED technology provides the following benefits:

- It utilizes a smaller point source, which allows the system to achieve maximum cut-off and light control, significantly reducing light spillage and glare to the surrounding community.
- It can operate at adjustable light levels (ranging from 15-40fc, allowing lighting to be reduced by as much as half the normal intensity, settings that can be utilized during non-competitive events (i.e., practices)).
- It is designed to meet the strict guidelines set by the International Dark-Sky Association (IDA) and, as such, will not contribute to glare or skyglow.

For a more comprehensive understanding of the lights, their design, and the manner in which the lights project onto the track and field while achieving dark-sky certification see Exhibit A.

The stadium lights will be utilized on select evenings to accommodate athletic practices and competitions, primarily during the winter months when the sun sets early or during home football games. As mentioned, lighting for practices can be provided at a significantly reduced intensity and will not be accompanied by the noise or spectators typically associated with competitions. Evening competitions with near capacity crowds



are anticipated to be held between seven (7) and ten (10) times per year. Evening competitions with a negligible crowd with minimal or no amplified sound are anticipated to be held twenty (20) to twenty-five (25) times per year. The number of games for each sport is strictly regulated by the California Interscholastic Federation (CIF) and the start times for high school competitions are similarly regulated by the league. Due to these regulations, the number of home games is limited and, as a result of mandated start times, most high school sporting events will cease no later than 9:30pm with the possibility of a handful of football competitions in the Fall that may end at 10:00pm which is consistent with the conditions of approval for other facets of Marauder Stadium, i.e. sound and scoreboard as discussed in more detail below. All use of the stadium lights will cease approximately one hour after the end of competition to allow for safe egress from Marauder Stadium. However, the extended egress lighting may be provided with reduced lumens far below that used during competition.

The requested entitlement would amend Use Permit PLNP2008-00237, which is the most current comprehensive entitlement for Jesuit. This Use Permit was previously amended in 2019 to permit an existing scoreboard and to allow JHS to operate a Public Address (“PA”) system at Marauder Stadium (PLNP2018-00190). Notably, as part of this Project, the poles to which the PA speakers are currently attached will be taken down and replaced by the new lighting system’s poles. The PA system speakers will then be rehung onto the new poles at their current authorized location and height. The replacement of the current wooden poles with new metal poles will not result in any audible modification to the approved PA. Furthermore, this Project will not alter or affect the terms of operating the PA system – including restrictions on the timing of operations and the noise levels permitted – as described and conditioned in the 2019 Use Permit amendment.

Project Objectives

JHS proposes the addition of dark sky certified LED Lighting at Marauder Stadium to achieve the following objectives:

1. Provide a feasible location at which to increase the athletic opportunities for Jesuit High School students by hosting on-campus sports competitions during the evening hours;

2. Allow for athletic practices and competition to occur after the peak afternoon hours during times with more favorable weather conditions to protect the health and safety of student-athletes, coaches and spectators;
3. Provide sufficient time, particularly for Fall and Winter sports, to train and compete without requiring student-athletes to miss excessive classroom instruction multiple times per month;
4. Spread on-campus activities over a broader period of time to reduce the number of individuals and vehicles concurrently utilizing school facilities;
5. Enhance the overall high school athletic experience for students, parents, alumni and the Sacramento community; and
6. Continue to build upon Jesuits reputation for athletic excellence by providing facilities that allow athletes to achieve peak performance.

Project Justification

The Project serves as a response to several challenges associated with JHS athletic programs, including the increasing frequency and intensity of extreme temperatures during the afternoon hours, concern with missed classroom instruction by student athletes, and the parking and traffic impacts on our residential neighbors from concurrently hosting multiple events on campus. Installation of the requested lighting system, coupled with the ability to alter the current athletic event schedule, will serve to (1) better protect the health and safety of student-athletes, (2) reduce missed class times for student-athletes, and (3) improve on- and off-site parking and circulation.

(1) Ensuring the Health and Safety of Athletics

Consistent with global trends, daily temperature levels have been increasing significantly in the Sacramento Region.² Sacramento's hottest months are June through September, during each of which, in 2022, Sacramento experience days in excess of 105° and consecutive days over 100°. Peak temperatures occur in the late afternoon at

² See <https://www.cbsnews.com/sacramento/news/sacramento-summers-hotter-longer/> (“... we could see as many as 40 days of extreme heat per year. For comparison, there tend to be about 6 to 10 days of extreme heat annually. Before the year 2000, [...] that number was as low as 4 to 5 days.”); See also <https://fox40.com/news/local-news/the-number-of-100-and-above-degree-days-expected-to-rise-in-sacramento/> (“A new climate tool projects Sacramento could be over 90 degrees for a third of the year and have nearly 50 days over 100 degrees.”); See also <https://darik.news/california/the-longest-triple-digit-heatwave-of-the-year-is-coming-to-sacramento-this-week/688374.html>; See also <https://www.capradio.org/articles/2022/08/15/longest-triple-digit-heatwave-of-the-year-arrives-in-sacramento-this-week/>; See <https://www.washingtonpost.com/climate-environment/2022/07/02/summer-2022-climate-change-heat/> for a discussion on regional temperature increase trends.

approximately 4:00pm, which is precisely when athletic practices and games are typically underway, resulting in growing health and safety concerns for athletes, coaches, staff, and spectators. It is medically proven that prolonged activity during triple-digit temperatures is unsafe for student-athletes and may result in a variety of heat-related illnesses.³ In response to a changing climate, we have already taken steps to minimize risk of illness such as moving practices to the mornings and even, at times, indoors. However, sanctioned games must occur on an appropriate field and, since a large part of high school sport is about the spectator experience and fostering school pride, games are typically held during non-school hours, most often in the late afternoon – the hottest part of the day.

The installation of the new field lighting system will permit JHS to host events and practices later in the evenings when temperatures are past their peak, which could result in a reduction of up to ten (10) degrees; that is the difference between manageable and unhealthy temperatures for physical activity.⁴ Put simply, hosting athletic events at later times will reduce the likelihood of heat-related illnesses. Therefore, the new lighting system would better protect the health, safety, and welfare of the student-athletes, as well as coaches, staff, and spectators.

(2) Reducing Missed Class Times for Student-Athletes

The ability to move events, practices, and games to later times in the afternoon and evenings is also important to a student-athlete's education. Currently, JHS's student-athletes are often required to cut their school-day short in order to be on time for games and sport-related events. This prevents student-athletes from receiving a full day of instruction, especially during their peak sport season. There is concern among parents and faculty alike that student-athletes missing substantial amounts of class time may ultimately harm their academic success.

To elaborate, while many Jesuit athletes have gone on to play college and even professional sports, the vast majority of our student-athletes do not compete beyond the high school level. Knowing this, many parents are concerned that participating in high school athletics could impact the student's academic performance. Though early dismissal has long been associated with high school sports, increased competition

³ See <https://www.cdc.gov/disasters/extremeheat/athletes.html>; See also <https://www.mayoclinic.org/diseases-conditions/heat-exhaustion/symptoms-causes/syc-20373250>.

⁴ See <https://www.sacbee.com/news/bee-curious/article261322247.html>.

surrounding college admissions has brought the issue to bear, and missed class time has become a meaningful consideration for many parents when deciding whether participation in high school athletics is a good decision their child in the long-run.

For example, CIF recently moved the high school soccer season from Fall play to the Winter months. While this aligns all statewide soccer competition to the same season (in southern California boys' soccer is already played in the Winter months), the move to Winter play in Northern California raises logistical issues related to field conditions as well as limits to daylight practice and play. JHS's soccer teams now practice and play on an upper campus field that has no field illumination. In order to play regulation time games on the upper field, start time will have to be advanced to no later than 3 p.m. and will require frequent early dismissal from classes.⁵ Soccer may have as many as thirteen home games in a season. That is thirteen times that a student athlete misses sixth period over the course of roughly three months that could be prevented by later start times at Jesuit made possible by stadium lights.

Installing lights at Marauder Stadium to allow for slightly later start times will help to reduce missed classroom instruction and ease concerns pertaining to academic performance and future college admissions.

(3) Improving Traffic and Parking Conditions in the Surrounding Community

Lastly, the installation of the new field lighting system and the postponement of student athletic events into the later hours will also be beneficial to the surrounding community by reducing traffic and spill-over parking. While Jesuit provides considerable parking on site, when multiple activities occur on campus concurrently, the entrances can back up and some people may look for parking off-campus rather than wait to enter and find a spot. For example, on Saturdays it is not uncommon for JHS to host various athletic practices and extracurricular activities which may include soccer, lacrosse, baseball, band, drama, and SAT prep, just to name a few. Participants in each of these activities occupy different areas of campus concurrently and their times overlap. The Project will enable JHS to postpone certain events to the evenings and better stagger its activities throughout the day, thereby avoiding large crowds of students, parents, spectators, etc. coming and going from campus at the same time. Temporally separating activities will reduce congestion at the points of entry by spreading vehicular trips over a broader

⁵ Some soccer games have been moved to the artificial turf of Marauder Stadium to address muddy field conditions associated with the Winter season.



spectrum of time. It will also reduce competition for parking spaces thereby helping to accommodate more school event-related vehicles onsite.

Conclusion

As indicated herein, the Project will ensure the health, safety, and well-being of student athletes and spectators alike, it will benefit the student-athletes academically, and will reduce existing traffic, circulation and parking issues for the surrounding community. Additionally, the utilization of the state-of-the art technology for the new lighting system will minimize and avoid impacts onto the nearby neighborhoods by limiting glare and spillover. Finally, the installation of the new system will not increase any impacts associated with the school's prior use authorizations, such as the PA system or authorized capacity.

For the reasons set forth above, we respectfully request the Planning Commission approve a Conditional Use Permit amendment to allow for the installation of the new dark sky certified LED lighting system at Jesuit's Marauder Stadium.