City of Seattle

Gregory Nickels, Mayor
Department of Planning and Development
D. M. Sugimura, Director

CITY OF SEATTLE
ANALYSIS AND DECISION OF THE DIRECTOR
OF THE DEPARTMENT OF PLANNING AND DEVELOPMAENT

Application Number: 2400368

Council File Number: CF# 306574

Applicant Name: Kevin Bergsrud, representative for Seattle Department of Parks and Recreation

Address of Proposal: 7400 Sand Point Way NE

SUMMARY OF PROPOSED ACTION

Council land Use Action to establish use for future installation of fifty eight (58) light poles at Sand Point Magnuson Park on seven play fields. The proposed light poles would range in height from 65 to 85 feet and would support both a shielded conventional and a full cutoff floodlight system. The total field lighting project, for seven playfields, would include 448 luminaries including security luminaries. Environmental documents, including a Final Environmental Impact Statement, a Final Supplemental Environmental Impact Statement, and an EIS Addendum to the FEIS were previously prepared and issued by the Seattle Department of Parks and Recreation.

The following approvals are required:

Council Land Use Action – Council concept approval to waive or modify development standards for a City facility (installation of light poles and fixtures), specifically to allow additional height for structures in a single-family zone (maximum allowed, 30 feet; proposed, 65, 75, and 85 feet) SMC 23.44.012A.

SEPA – Conditioning Only - (SMC Chapter 25.05)

SEPA DETERMINATION: [ ] Exempt [ ] DNS* [ ] MDNS [X] EIS*

[ ] DNS with conditions

[ ] DNS involving non-exempt grading or demolition or involving another agency with jurisdiction.

*A FEIS prepared by the Department of Parks and Recreation was issued on July 12, 2002; the Final Supplemental EIS was issued on May 16, 2003; and the EIS Addendum was issued on December 15, 2003. DPD will consider and impose any necessary SEPA conditioning.

BACKGROUND INFORMATION

This project originally submitted to DPD on March 1, 2004 was for the future installation of seventy eight (78) light poles on nine (9) of eleven (11) proposed playfields. On June 14, 2004, the Seattle City Council passed Ordinance 121502 which approved a total of nine (9) playfields, with only seven (7) of the fields to be illuminated with artificial light. On September 27, 2004, the Department of Parks and Recreation proposed to DPD a reduction in the proposed lighting to reflect the reduction in playfields that was part of the City Council legislation. That change eliminated six (6) of the 65-foot poles and fourteen (14) of the 75-foot poles which originally had been proposed and resulted in 180 fewer luminaries dedicated to playfield illumination. In addition, the project included thirty six (36) 40-foot tall parking lot poles, some with single and some with double luminaries for a total of fifty four (54) luminaries, as well as thirty nine (39) 40-foot roadway lighting poles, each with single luminaries. The proposed thirty six (36) parking lot poles at 40 feet in height and containing 54 luminaries as well as the thirty nine (39) roadway poles, each at 40 feet in height and supporting a single luminary each was eliminated as a part of this proposal at the written request of the Parks Department on November 15, 2004.

BACKGROUND DATA

Site and Vicinity Description

The proposal site is located just north of the southern edge of Sand Point Magnuson Park which is located along the western edge of Lake Washington in northeast Seattle. The Park (which includes the entire project site) is located within the former boundaries of the Puget Sound Naval Station, which primarily included land that was used for a military airfield. Title for a major portion of the former naval facility was transferred to the City of Seattle in 1970. The Park currently includes a total of 352 acres, including 30 acres within the property boundaries of the park administered by entities other than the City of Seattle Department of Parks and Recreation. Existing uses within that portion of the park affected by this proposal include two separate areas with multiple grass-surfaced athletic fields, six tennis courts. Two picnic areas, park roadways and parking lots, trails, and extensive, unmanaged open space areas. The larger park site includes a number of vintage naval station buildings, some of considerable size. Other park facilities include a boat launch, a beach area and an off-leash dog exercise area. The National Oceanic and Atmospheric Administration (NOAA) occupies a large site developed with several large building on land that was part of the former naval air station just to the north of the park.

The entire playfield area is zoned Single Family 7200 (SF 7200), as are some of the immediately adjacent properties. There is a portion of the larger Park site immediately to the west of the playfield area which is lowrise residential (L-3), as is a portion of land just south of 66th Street. Other land south of 65th Street as well as water-wards, including land within the boundaries of the Park is zoned Single Family 9600 (SF 9600). The bulk of the properties west of the park across Sandpoint Way NE are zoned Single Family 5000 (SF 5000). While the land within the park is relatively flat, with some dune-like characteristics, the land west of the park rises steeply in elevation, providing many of the residential structures built on the hillside with views over the park and over Lake Washington, located at the park's eastern edge.

Portions of the proposal site are mapped in the Department of Planning and Development *Environmentally Critical Area Folios* as occurring in an Environmentally Critical Liquefaction Area, Environmentally Critical Fish and Wildlife Habitat Conservation Area as defined by Chapter 25.09 of the Seattle Municipal Code. In addition, the overall development site contains or is adjacent to identified wetlands as also defined by Chapter 25.09. Since the current proposal is a proposal for Council to waive development standards only (the allowable height of lighting poles) and not a proposal for development per se, the proposal is not subject directly to Critical Area regulations. Subsequent proposal for actual installation of the lighting poles and luminaries will be subject to the application submittal requirements, general requirements and development standards described in SMC 25.09.060, unless otherwise exempted.

Proposal Background

The portion of Sand Point Magnuson Park to be improved through this proposal is located east of Sandpoint Way NE and to the north of the extension of NE 65th Street which runs along the southern edge of the park. The *Sand Point Magnuson Park Drainage, Wetland/Habitat Complex and Sports Fields/Courts Project*, presented as the preferred alternative in the Final EIS which was issued on July 12, 2002, showed 11 play fields, all with synthetic playing surfaces and all illuminated with artificial, pole lighting. Following an appeal of the adequacy of the Final EIS and a remand by the City Hearing Examiner, the Parks Department issued a Final Supplemental EIS. The supplement, issued in May 2003, addressed, at the Hearing Examiner's direction, the sole issue of the impact of sports field *noise* on wildlife. In response to environmental issues raised within the context of the appeal, however, the Parks Department elected to modify the operational aspects of the sports field component of the proposal as well as to modify selected design characteristics. Nonetheless, the fields remained 11 in number, all served by artificial, pole-mounted illumination.

Subsequently the Parks Department modified both program and design to illuminate only nine of the eleven sports fields, the status at the time DPD received this proposal. After the passage of Ordinance 121502 by the City Council, on June 14, 2004, which approved a total of nine (9) playfields, with only seven (7) of them to be illuminated with artificial light, the Department of Parks and Recreation proposed to DPD a reduction in the proposed lighting to reflect the reduction in playfields that was part of the City Council legislation. As noted above, that change eliminated six (6) of the 65-foot poles and fourteen (14) of the 75-foot poles which originally had been proposed and resulted in 180 fewer luminaries dedicated to playfield illumination. In addition, the project originally included thirty six (36) 40-foot tall parking lot poles, some with single and some with double luminaries for a total of fifty four (54) luminaries, as well as thirty nine (39) 40-foot roadway lighting poles, each with single luminaries. The proposed thirty six (36) parking lot poles at 40 feet in height and containing 54 luminaries as well as the thirty nine (39) roadway poles, each at 40 feet in height and supporting a single luminary each was eliminated as a part of this proposal at the written request of the Parks Department on November 15, 2004.

Project Description

The sports field lighting system to be employed would consist of 1,000-watt floodlight luminaries (bulbs and fixtures) mounted to poles (light standards) surrounding seven of the proposed new fields. The light standards would typically be 75-feet in height, although some 65-foot and 85-foot light standards would be used at the baseball fields. The number of light standards per field would range from 6 to 10, based on the size, intended use, and configuration of the field. Each standard in turn would support a light fixture array of 6 to 15 individual luminaries. Altogether, 58 light-standards, varying in height from 65 to 85 feet and supporting a total of 448 luminaries or lighting fixtures, including security lighting fixtures, would be installed around the playfields approved by Ordinance 121502 (June 14, 2004), according to the submitted plans.

The sports field lighting would be designed to a Class IV lighting level, as recommended by the Illuminating Engineering Society of North America (IESNA) standard RP-6. Class IV is the lowest of the four light levels described in RP-6. This design level would provide an average light level at the playing field surface of 20 to 30 foot-candles (a foot-candle, or fc, being defined as a lighting level of 1 lumen distributed uniformly over an area of 1 square foot), depending on the specific requirements for each field. The soccer and rugby fields would require 25 foot-candles average maintained, whereas the baseball fields would require 30 foot-candles average maintained for the infield areas and 20 foot-candles average maintained for outfield areas.

In brief, the lighting system would be designed to limit spill light and glare by raising the floodlight mounting heights from the code maximum 30 feet to heights varying from 65 to 85 feet. This would allow for the use of full-cutoff luminaries, which do not emit any direct light above the plane of the luminaries, on most fields. The lighting system on the majority of the fields would incorporate full-cutoff, forward throw floodlights mounted on 75-foot light standards. The baseball fields would use shielded conventional floodlights and would incorporate the latest available technology in reflector and shielding design. The selected pole heights of 75 and 85 feet on the larger baseball fields allows for steeper aiming angles for the shielded conventional floodlights. The steeper angles provide for more effective use of luminaire shielding, which reduces the amount of glare as well as the amount of light spillage.

The lighting system would be operated by an automatic programmable lighting control system. The lights for each field would be operated separately so that lights could be turned off when a particular field was not in use. The system would have the capability of being operated from a remote location.

Egress and security lighting would consist of full cutoff luminaries mounted near the top of each sports field lighting standard, avoiding the need to install additional poles specifically for egress lighting. This lighting system would allow a low level of egress lighting after the principal field lighting had been turned off. The egress/security lights would be turned off shortly after the completion of scheduled field use each evening.

The lighting system for each field would be operated independently, so the number of lighting systems in use at any given time would correspond to the actual demand for fields in use.

Public Comment

The public comment period for the Council Land Use Action described in this proposal, namely, to waive development standards for a public facility (specifically, to allow structures (the lighting standards or poles) to exceed 30-feet in a single-family zone), began on March 10, 2004 and was extended by request through April 7, 2004. The Department received approximately twenty letters and in excess of a hundred emails regarding the proposal; all were opposed to some aspect of the project, with most comments concerned with the quantity of illumination and the potential for glare.

The public comment period corresponded roughly with the timing of a Council hearing on the approval of the overall project identified by the Seattle Department of Parks & Recreation as the Sand Point Magnuson Park Drainage, Wetland/Habitat Complex and Sports Fields/ Courts Project. Because of this, many of the written comments received by DPD ranged broadly over a range of issues associated with the proposed development of the new sports fields at the park and not just lighting. In addition, many of the comments directed at illumination of the fields were directed at the quantity of luminescence rather than specifically with the height of the poles and the mounting height of the lighting fixtures.

Additional Background Information

Athletic fields have always been an important part of the City of Seattle's Parks system. Beginning in the late 1970s, however, the Parks Department found that demand had grown due to increases in adult sports leagues and especially by the participation by women and girls in a variety of sports, a trend which appears to have continued. In addition, demand for sports facilities to serve soccer, ultimate frisbee, rugby, and lacrosse has driven the need for additional field capacity. This expansion in participants has been accompanied by a demand for increased year-round rather than single-season participation in most of the sports activities.

Because of the limited availability of new open spaces for active recreation within the city and the need to increase scheduling capacity, the Parks Department commissioned a lighting study to develop a predictable method for the planning, design, and development of athletic field lighting systems within the City of Seattle. A portion of the study (McGowan Broz Engineers/DMD, 2001) analyzed the impacts of extending sports play into the evening at City-owned facilities and included a section on Recommended Sportsfield Lighting Performance Standards. These standards focus specifically on a portion of the study titled *Light Trespass – Spill Light*. The standards are described as follows:

> "The maximum maintained vertical illuminance level for spill light must not exceed 0.8fc (initial 1.1fc) at the residential property line.
>
> "The designer shall undertake initial vertical illuminance calculations on a line along the edge of the properties and roadways as defined by the City to establish compliance with the 0.8fc level. The levels shall be calculated at five feet above grade."

For this project, the Parks Department considers these recommendations the primary design and performance parameters. Parks has incorporated equipment specifications and calculations of the

predicted levels of illuminance at the residential property lines surrounding the project site to fall within those recommended in the study.

ANALYSIS—LAND USE DECISION

Public parks are City facilities permitted outright in single-family zones. As is the case with many public facilities, the development standards of this zone constrain the public parks in ways that hamper their fundamental purpose. The Seattle Land Use Code sets a base height limit for structures in Single Family Zones at 30 feet (SMC 23.44.012). The Seattle Parks Department seeks a Council modification of the height development standards of the Single Family Zone as they relate to the proposed light poles. The proposed luminaries are designed to function properly at a mounting heights of anywhere from 65 to 75 feet in order to reduce the impacts of spill light and to provide adequate illumination for sports play at the proposed new playfields. The proposed lighting system would not function properly if held to zone height limit of 30 feet. It is for situations like this that 23.76.064 of the Seattle Municipal Code includes provisions to allow the City Council to waive or modify applicable development standards, accessory use requirements, special use requirements or conditional use criteria for City facilities.

In making a recommendation to Council, SMC 23.76.050 charges the Director to draft an evaluation of the proposal based on the standards and criteria for the approval sought and consistency with the applicable goals and objectives of Seattle's land use policies as referenced in SMC Chapter 23.12, the City's SEPA policies and any other applicable official City policies.

Outside of consistency with the SEPA policies, which are adequately described in the Parks Department's Environmental documents, the Land Use Code and Comprehensive plan policies do not speak directly to the issues of exterior lighting as described in SMC 23.44.008H which attempt to reduce the adverse impacts from incompatible land uses. In this case, the park use is both permitted and compatible with surrounding residential uses. The general development standards for uses permitted outright simply state that "Exterior lighting shall be shielded and directed away from residentially zoned lots". Applicable code and policy language does exist within SMC 23.44, however, to inform the Director's evaluation of this project.

On Feb 20, 2001, Ordinance 120266 was adopted by City Council to allow taller lighting standards for public school playfield lighting where necessary to improve safety for athletic participants and minimize impacts of glare and light spill. Set forth in this Ordinance and the amended Code sections are criteria that represent the most recent thinking with regard to this issue. Section 23.44.017B6 of the Code reads:

> *Light standards for illumination of athletic fields on new and existing public school sites will be allowed to exceed the maximum permitted height, up to a maximum height of one hundred (100) feet, where determined by the Director to be necessary to ensure adequate illumination and where the Director determines that impacts from light and glare are minimized to the greatest extent practicable. The applicant must submit an engineer's report demonstrating that impacts from light and glare are minimized to the greatest extent practicable. When proposed light standards are reviewed as part of a project*

being reviewed pursuant to Chapter 25.05, Environmental Policies and Procedures, and requiring a SEPA determination, the applicant must demonstrate that the additional height contributes to a reduction in impacts from light and glare.

This application is not for playfield lighting on a Public School site and therefore is not eligible for this height exception process. With regards to the project's anticipated impacts, however, this code section is informative as it describes a situation under which additional pole height should be granted. The Director finds this section to be the code or policy language that is most apposite and that upon which a recommendation might be predicated. The following is a brief response to those impact areas that should be considered as described by the single family section of the code.

Spill Light

The additional mounting height for the proposed floodlights will allow lights to focus more directly downward, thus, containing more of the light on the field. This principle is elementary to reducing spill light. Spillover light can be quantified and measured. Parks contends that over 95 percent of the spill light coming directly from the sports field luminaries would land on areas immediately adjacent to the fields and inside the park boundaries. Some spill light would extend toward the wetlands/habitat buffer area immediately adjacent to the sports field. But spill light can be controlled through a combination of luminaire placement on mounting poles, aiming angles, light intensity and distributions, pole placement and pole height. The Parks Department proposes to light the Sand Point Magnuson Park sports fields to the Illuminating Engineering Society of North America (IESNA) level IV, the lowest intensity level and that intended for recreational play with few spectators.

As noted above, under "Additional Background Information," the Parks Department has adopted a sports field lighting standard with a guideline that the maximum light level at the nearest residential property line should not exceed 0.8 vertical foot-candles maximum maintained (1.1 foot-candles initial). All the sports fields included in this application as proposed to be developed with new light standards and luminaries would appear to meet this standard. Consequently, the proposed action would not result in adverse spill light impacts for residential properties adjacent to the park and project site.

Glare

Glare is the sensation produced by luminance within the visual field that is sufficiently greater than the luminance to which the eyes are adapted, and which can cause annoyance, discomfort, or loss in visual performance and acuity. Glare can be either direct or reflected glare. It is sensitive to the relational position of the viewer; a light source which prevents one observer from seeing can be helpful to a different observer at the same time. Glare depends not only on the viewer's orientation but on what the viewer is trying to see and on the distribution of intervening terrain, vegetation, buildings and media. The primary sources of glare from the proposed action would be direct glare from the luminaries and reflected glare (luminance) from park surfaces, in particular the synthetic athletic field surfaces.

Unlike spillover light, the impacts of glare are difficult to quantify, since varying conditions cause the level of impact to vary. These include ambient light levels, the reflective characteristics of surfaces, and atmospheric conditions. Since light intensity decreases in proportion to the square of the distance between the luminaire and the viewer, at any point within or outside the park the existence and amount

of direct glare will be dependent on the distance from the sports field. While viewers at considerable distances from the sports fields could be exposed to direct glare, the illuminance level of the direct glare would not exceed the 0.8 foot-candle light standard adopted by the City.

The potential for direct glare can be evaluated (and mitigation provided for) based on the mounting height, aiming angle and design of the particular luminaire. In this instance a substantial portion of the glare impact has been mitigated in the design (including the optimal height) of placement of the luminaries.

The viewer's higher horizontal relationship above the level of a luminaire aimed downward will expose a viewer to less of the light coming from the light source. Since the play fields are located between 35 and 40 feet above sea level, viewers at elevation above approximately 115 feet above sea level would not be exposed to direct glare from any of the althletic fields except the larger baseball/softball fields which will use shielded rather than full cutoff floodlights. Since the shielded floodlights do not completely cut off the light above the luminaire, direct glare would be visible even from horizontal elevations above the height of the fixtures outside the park, depending on the viewer's orientation relative to the aiming of the floodlights.

As noted in the Final Environmental Impact Statement, the terrain rises noticeably to the west of the project, outside the confines of the park. The single-family residential areas west of the Burke-Gilman trail and generally at elevations above 125 feet would be exposed to direct glare from portions of the shielded floodlights serving the baseball fields. The area would not be exposed to direct glare from the cutoff luminaries, nor from the shielded floodlights that are aimed eastward. Other locations outside the park could experience direct glare from a portion of the light assemblies depending on the circumstances of each residence. In addition, the sports field lighting system would be visible from more distant viewing locations with clear lines of sight to Sand Point Magnuson Park, including those on the eastern side of Lake Washington.

As noted in the Final Environmental Impact Statement (FEIS) and in Appendix H, some direct glare from the sports field lights would also occur on-site within the transitional housing area of the Sand Point campus, particularly at Building 224 (Santos Place), which is situated essentially at the level of the playfields. Because there is little intervening vegetation between Building 224 and the playfields, views to the east from the structure would be fully exposed to direct glare from virtually all the lit fields. The Buildings known as 26N and 26S would also be exposed to direct glare from the fields lights, as would be buildings 330,331, and 332, although intervening mature trees intervening between the latter buildings and the sports field would be expected to filter exposure to direct glare. Also, some units in the Radford Court student-housing complex would have exposure to direct glare from the sports field lighting.

Nighttime use of participant sport playfields necessitates that the Parks Department provide for levels of illumination at the ambient field level that will ensure the safety of the participants. The Final Environmental Impact Statement acknowledged that the proposed development of the lighted sports fields would result in significant light and glare impacts. Certain mitigation measures, however, have been built into the design of the lighting system. These include:

- use of full-cutoff lighting fixtures wherever possible;
- use of shielded lighting fixtures in remaining situations;
- meeting Department of Parks and Recreation requirements for maximum allowable light trespass levels from sports fields;
- using higher poles and luminaire mounting heights to permit more downward aiming angles and greater control of the light and should prove to be an acceptable incremental change relative to the existing development and substantially mitigated by the shielded floodlight technology. The luminaries would be aimed down to the field as much as possible to control this direct glare. With regards to glare impacts, increased mounting heights will increase the effectiveness of the floodlight shielding and decrease the visibility of the lamps at offsite locations. The luminaires are adjustable, and the project specifications should call for final adjustments after installation to address issues of glare.

Skyglow

Skyglow is not specifically regulated by the Seattle Land Use Code. It is increasingly considered as a form of pollution, especially endemic to urban and metropolitan areas and clearly observable from space satellite photos. Closer to earth, it is usually more pervasive and persistent and affects a broader area than do objectionable odors or noises. It is considered a bane of astronomers, both professional and amateur. More generally, it is a condition that negatively impacts those who may choose to do so from viewing or contemplating the stars. The formula is simple: the greater the amount of skyglow, the fewer the number of visible stars.

Skyglow, or night-sky light pollution, occurs when lighting is not reflected downward and directed only to the area to be illuminated. It also occurs when reflected, downcast light is bounced upward from reflective surfaces. Some mitigation of skyglow is possible through utilization of fixtures that direct the light downward by means of reflectors. In addition, large scale, regional mitigation of skyglow has been demonstrated to decrease through implementation of municipal and metropolitan model lighting codes. Reflected light off the lighted surface, however, remains a culprit. The most effective mitigation for area-specific skyglow, is a light switch and a policy and program that eliminates the luminaries at a specific hour of the night and which may provide for dark nights, nights when no illumination of the playfields is permitted.

The Director finds, with regard to the skyglow problem, that a policy and program for a scheduled cut-off for field illumination and a dark night on Sundays, as conditioned in Ordinance 121502, will effectively mitigate some of the impacts of skyglow and provide, in a consistent and predictable manner, an opportunity, albeit diminished, for scientific and other interests in the night sky to be realized. Given the provision for "dark" Sundays, the skyglow problem on that day will be no worse than the existing condition.

In sum, it has been the experience of DPD in the evaluation of other sports field lighting proposals that it is possible to reduce sports field lighting impacts not only through the technological mitigation measures noted above but through operational mitigation measures as well. Chief among these is the restriction of

the hours of sports field operation. Although the EIS analysis assumes field use to 11:00 PM and use of the lighting system varying seasonably from 2.5 to 7 hours per day, a significant reduction in impact would be effected by restricting operations to 10 PM (as has been done in Ordinance 121502), the hour the City's noise ordinance recognizes as appropriate for a significant reduction is allowable decibel levels for noise. Fuller and more significant mitigation for controlling the impacts of light can be achieved through voluntary or other imposition of a "dark night," with no permitted lighting of the play fields, again as in the condition of Ordinance 121502 of June 14, 2004, which calls for a "dark" Sunday.

Traffic, Noise and Parking

This application is only to allow the height of lighting standards with their luminiares to extend from 65 to 85 feet above the finished grade at the edges of the playfields. While clearly more directly related to environmental issues such as glare, light trespass and night-sky pollution, the question of the height of the poles and their fixtures is only tangentially related to elements of traffic, noise and parking. These are more directly within the purview of the concept approval of multiple playfields through Ordinance 121502. The environmental documents submitted with the application, however, do address in more detailed terms the impacts of artificial illumination, regardless of the height of its source. The additional play time enabled through nighttime artificial illumination is anticipated to increase traffic, the demand for parking, and the ambient noise levels in the area. These impacts were not anticipated to be significant in the Parks Department's Environmental analysis. The extended time for play at Sand Point Magnuson Park would not go beyond 10:00 PM; lights would be permitted to remain on at utilized fields only until 10:15 to allow for safe existing; after that only security lighting would be allowed. This would provide ample time for orderly exiting prior the park's standard closing time of 11:00PM. The existing and reconfigured parking in the approved Master Plan can easily accommodate the additional vehicles in the evening hours and spillover parking is not likely. Existing and anticipated traffic, parking and noise conditions are not onerous and the additional scheduling would be reasonably compatible with the park use and purpose.

Conclusion

Controlling light spill-over and glare in sports field lighting is an extreme technical challenge, requiring the highest quality in design and the use of state-of-the-art lamps and luminaries. One variable in successful control of both spill-over and glare would appear to be the ability to mount selected luminaries on poles of a variety of heights, depending upon the area in need of illumination. For this reason, the model code and Outdoor Lighting Code Handbook of the International Dark Sky Association recommend against limiting pole heights in outdoor lighting codes. The height of the poles is but one essential variable, but not the controlling one, for the design of successful lighting of sports fields, a design which at once secures evenly distributed safe and adequate light levels while reasonably mitigating spill-over and glare. The Director finds, with regards to light and glare, the rationale for increased pole height is consistent with the most similar codes and policies. The Engineer's Report-Lighting Analysis submitted by the Parks Department with this application clearly shows that higher mounting heights will result in less spill-light at the adjacent residential properties and that glare impacts will be minimized by the use of full cutoff luminaries in most applications. In addition, the impacts will be mitigated to the greatest extent

practicable by the Parks Department's own design criteria which limit the proposal to a maximum maintained vertical illuminance level for spill light must not exceed 0.8 footcandles (initial 1.1 footcandles) at the residential property line. The shielded floodlights proposed for the baseball fields, however, selected to provide safe illumination for sport participants at the field level, do not completely shut off the light above the level of the fixture. Direct glare from these fixtures will be visible above the level of the luminaire from outside the park, and the amount of glare will depend upon site specific view corridor and atmospheric conditions.

In making a recommendation to Council, SMC 23.76.050 charges the Director to draft an evaluation of the proposal based on the standards and criteria for the approval sought and consistency with the applicable goals and objectives of Seattle's land use policies as referenced in SMC Chapter 23.12, the City's SEPA policies and any other applicable official City policies.

Outside of consistency with the SEPA policies, which are discussed at length in the environmental documents prepared by the Parks Department, the Land Use Code and Comprehensive Plan policies do not speak directly to issues of the height of lighting standards in City parks. SMC 23.44.017 B6 allows light standards for illumination of athletic fields on public school sites in single family zones to exceed the maximum permitted height (30 feet) of the single family zone up to a maximum of 100 feet, when it is demonstrated that the additional height would contribute to a reduction in impacts from light and glare.

Public or private parks and public playfields are principal uses permitted outright in single family zones. In this case, the play field use is both permitted and compatible with surrounding residential uses with impacts of height, bulk and scale adequately mitigated through siting and design considerations.

The proponent has considered the relationship of the project to the surrounding area in siting, design of the proposed light poles. The proponent's design constraints limit both spill light and glare and offer some mitigation for the effects of skyglow. As proposed, the use will be compatible with current and future uses in the vicinity and is consistent with the SEPA and Land Use Policies of the Seattle Municipal Code. The Director recommends that the modification for additional height for poles and luminaries along the margins of the various sports fields be granted, as proposed.

RECOMMENDED DECISION - COUNCIL CONCEPT APPROVAL

It is recommended that the proposed waiver to allow poles up to 85 feet in height at this City Facility be **GRANTED.**

RECOMMENDED CONDITIONS - COUNCIL CONCEPT APPROVAL

It is recommended that the Parks Department should be required to provide a detailed Illumination Management Plan to include detailed technological and programmatic controls on any lighting system that will be installed at Sand Point Magnuson Park. This Plan should describe technological and

program controls to limit the lighting of each field to evenings when play is scheduled, limit play to the hour of 10:00 PM, and limit illumination of the playfields to Monday through Saturday evenings. It is further recommended that this Illumination Management Plan shall be appended to any building permit applications submitted to DPD for field lighting installation at Sand Point Magnuson Park.

ANALYSIS - SEPA

The Drainage, Wetland/Habitat Complex and Sports Fields and Courts Project, of which the proposed field lighting is a part, has undergone a full environmental review in accordance with Washington State SEPA requirements. The environmental review includes the issuance of a Final Environmental Impact Statement (FEIS) in July 2002, which was appealed. A Supplemental Environmental Impact Statement (FSEIS) was prepared and issued in May 2003 at the direction of the City of Seattle Hearing Examiner. The scope of the FSEIS was limited to additional analysis of the impacts of noise generated from the sports fields and the impacts of this sportsfield noise on wildlife. The FSEIS did not identify any further impacts or mitigation measures associated with light and glare.

The SEPA Overview Policy (SMC 25.05.665) clarifies the relationship between codes, policies, and environmental review. Specific policies for each element of the environment, and certain neighborhood plans and other policies explicitly referenced, may serve as the basis for exercising substantive SEPA authority. The Overview Policy states, in part, "Where City regulations have been adopted to address an environmental impact, it shall be presumed that such regulations are adequate to achieve sufficient mitigation" subject to some limitations. Under such limitations or circumstances (SMC 25.05.665 D) mitigation can be considered. Short-term and long-term adverse impacts are anticipated from the proposal.

Short-term Impacts

The following temporary or construction-related impacts are expected: 1) temporary soil erosion; 2) the possible disturbance of wildlife adjacent the site from construction noises); 3) increased noise, dust and vibration from construction operations and equipment; 4) increased traffic and parking demand from construction personnel; 5) tracking of mud onto adjacent street from construction personnel; 6) intermittent conflicts with traffic adjacent to the site from construction vehicles; and 7) consumption of renewable and non-renewable resources. These impacts are not considered significant because they are temporary and/or minor in scope (Section 25.05.794, SMC). Although not significant, the impacts are adverse and for that reason are addressed by City Codes and/or ordinances, and State of Washington regulations, specifically:

- Building Code (construction measures in general)
- Stormwater, Drainage and Grading Code (temporary soil erosion).
- Noise Ordinance (construction noise)

Compliance with these applicable codes and ordinances will be adequate to achieve sufficient mitigation and further mitigation by imposing specific conditions is not necessary for these impacts.

Long-term Impacts

Potential long-term impacts that may occur as a result of this project include 1) increased bulk and scale from the additional lighting standards; 2) an increase in ambient noise due to increased play activity; and 3) increased energy consumption. The latter two impacts are only related indirectly to the height of the illumination, the subject of this application; they are more properly related to the presence and quantity of artificial illumination required by the overall project. Nevertheless, these long-term impacts are not considered significant because the impacts are minor in scope and are otherwise mitigated by constraints imposed through project design.

Other impacts not noted here as mitigated by codes or conditions (increased ambient noise; increased traffic and parking demand) are not sufficiently adverse to warrant further mitigation by condition. Impacts from light and glare, however, were noted in the EIS as to warrant conditioning, so a brief discussion of those impacts is warranted.

Light and Glare

SEPA policies state with regards to Light and Glare that:

> *It is the City's policy to minimize or prevent hazards and other adverse impacts created by light and glare. If a proposed project may create adverse impacts due to light and glare, the decisionmaker shall assess the impacts and the need for mitigation.*

Mitigation of these impacts is subject to the Overview policy. If mitigation is warranted, SEPA provides that mitigation measures can be imposed that limit the area and intensity of illumination, limiting the location or angle of illumination, limiting the hours of illumination and requiring additional landscaping. The Parks Department has imposed several of theses measures as design parameters for the project as described in the foregoing analysis, chief among them the height of the light standards themselves. Furthermore, as a recommended condition of the Council Approval of the waiver of development standards, the Parks Department would be required to provide an Illumination Management Plan to be instituted as part of any eventual construction approval. This Plan would describe technological and program controls to limit the lighting of each field to evenings when play is scheduled, limit play to the hour of 10:00 PM, limit illumination of any of the playfields to fifteen (15) minutes after the 10:00 PM limit of play, and limit illumination of the playfields to Monday through Saturday evenings. With that recommended Illumination Management Plan in place, no further mitigation is warranted.

Summary

In conclusion, as disclosed in the environmental documents prepared by the applicant, several impacts on the environment would result from the proposed development. Existing codes and policies successfully address some of these impacts. Other impacts are mitigated by the design heights of the light standards themselves, as discussed above. Still other impacts, although significant and adverse, will be mitigated by the applicant's limiting the days and the hours of artificial illumination on the proposed play fields. Therefore both short term and long term impacts will be sufficiently mitigated.

RECOMMENDED CONDITION(S) – SEPA

None.

RECOMMENDED CONDITION(S) - COUNCIL CONCEPT APPROVAL

It is recommended that the Parks Department should be required to provide a detailed Illumination Management Plan to include detailed technological and programmatic controls on any lighting system that will be installed at Sand Point Magnuson Park. This Plan should describe technological and program controls to limit the lighting of each field to evenings when play is scheduled, limit play to the hour of 10:00 PM, and limit illumination of the playfields to Monday through Saturday evenings. It is further recommended that this Illumination Management Plan shall be appended to any building permit applications submitted to DPD for field lighting installation at Sand Point Magnuson Park.

Signature: (signature on file) Date: February 21, 2005
Michael Dorcy, Land Use Planner
Land Use Division

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