

BOARD OF ALDERMEN

ITEM NO. (2)

AGENDA ITEM ABSTRACT

MEETING DATE: APRIL 26, 2005

SUBJECT: A PUBLIC HEARING ON THE ADDITION OF LIGHTS TO THE SOCCER FIELDS AT SMITH MIDDLE SCHOOL

DEPARTMENT: PLANNING DEPARTMENT	PUBLIC HEARING: YES
ATTACHMENTS: A. RESOLUTION APPROVING THE INSTALLATION OF LIGHTS AT THE SMITH MIDDLE SCHOOL SOCCER FIELDS B. VICINITY MAP C. ORIGINAL CONDITIONAL USE PERMIT D. EXCERPT FROM THE MAY 22, 2001 APPROVED PLANS E. DEVELOPMENT AND JOINT USE AGREEMENT & AMENDMENTS THERETO F. LIGHTING PLAN FOR SOCCER FIELDS	FOR INFORMATION CONTACT: MARTY ROUPE, 918-7333 ANITA JONES-McNAIR, 918-7381

PURPOSE

When the Smith Middle School Athletic Fields CUP was approved on May 22, 2001, a condition was included requiring a public hearing before lights were added to the playfields. Pursuant to this condition, a lighting plan has been developed for the soccer fields and the Board of Aldermen has called a public hearing. The Town Staff recommends that the Board of Aldermen receive comments during the public hearing and adopt the attached resolution approving the addition of lights to the soccer fields at Smith Middle School.

INFORMATION

Background

The Board of Aldermen approved a Conditional Use Permit (CUP) on May 22, 2001 for the construction of athletic facilities adjacent to Smith Middle School (see **Attachment C and D**). At the time, it was mentioned that lights may added to the fields at a later date. The Board then attached a condition to the CUP, which requires that a public hearing be held prior to the installation of lights.

The Town of Carrboro Recreation and Parks Department currently has shared use agreements with the Chapel Hill—Carrboro Board of Education to use the recreation facilities at this and other school sites (see **Attachment E**), and Orange County is funding the installation of the lights. Because of this arrangement, the three parties worked together worked together, with a consultant, to develop a lighting plan for the soccer fields (**Attachment F**).

As the public hearing essentially fulfills an action mandated by the Board during the original approval of the CUP, staff is not considering the addition of lights to be a modification of the plans per se. As

described in the April 5, 2005 'Request to Set the Public Hearing' Agenda Item Abstract, staff advertised the public hearing in the newspaper and posted notice of the public hearing at the site. Several advisory boards (Northern Transition Area Advisory Committee, Planning Board, Appearance Commission, and the Environmental Advisory Board) were notified of the public hearing via email.

Lighting Plan

Reece, Noland & McElrath Consulting Engineers (consultant) prepared a lighting plan for fields (**Attachment F**). The plans generally exhibit compliance with the lighting provisions contained in the Town's Land Use Ordinance (LUO). Also of note, the cover sheet for the plans references a lighting plan for Efland Cheeks Elementary School (Efland Cheeks), which is in Orange County's jurisdiction, not the Town of Carrboro. In explanation, please note that Orange County requested that the consultant develop lighting plans for both fields at once in order to benefit from economy of scale. Orange County also intends to bid both projects together. Other plan sheets pertaining to Efland Cheeks have been removed from the plans received by the Board to avoid confusion; however, the final sets of plans to be placed on file in the Carrboro Planning Department, if the project is approved, may include all plan sheets. A note will be placed on these plans explaining that all references to Efland Cheeks are not subject to the Town of Carrboro's regulatory authority.

Locations

The lighting plan for the Smith Middle soccer fields includes six (6) new lighting fixtures, placed around the perimeter of the two fields (**see Attachment F, Sheet E3**). Specifically, two (2) fixtures each are placed on both the eastern and western sides of the fields, and one (1) fixture each is placed on both the northern and southern sides of the fields. The consultant carefully selected locations at each of these points so as to avoid stormwater conveyance swales. Some disturbance of the swales may be necessary during the installation of the poles, but the swales will be repaired and restored as necessary. The northern and southern fixtures are located and mounted to serve both fields.

Operations and Maintenance

The proposed control panels make it possible to either light both fields at once or to light an individual field by only engaging a portion of the lights. It is also possible to either manually operate the lights or to utilize automatic timers.

The Chapel Hill—Carrboro City Schools (CHCCS) system utilizes the fields until 4 PM Monday through Friday during the school year. Outside of that, the Town of Carrboro Recreation & Parks Department (R&PD) programs usage of the fields. Currently, the fields may be used until dark. Upon installation of the lights, R&PD plans to extend the usage hours to 10 PM every day of the week.

Maintenance responsibilities for the lights are contained in the *Development and Joint Use Agreement* (**Attachment E**). In summary, the Town of Carrboro is responsible for ordinary maintenance of the lights, and all three parties (Town of Carrboro, CHCCS, and Orange County) will divide any extraordinary costs associated with lights.

Height of Poles and Fixtures

All six (6) poles are proposed to be eighty-feet (80') tall, which also represents the highest mounted height for all proposed lights (**see Attachment F, Sheet E4**). While the LUO typically limits the height of light fixtures to fifteen-feet (15'), Section 15-243(c) of the LUO includes an exemption for the height of lights for recreation facilities provided that, to the maximum extent practicable, potential light pollution is otherwise minimized through the use of shielding and limits on the hours of use. The proposed lights do contain shields to direct light downward and minimize light pollution. Hours of use are controlled by governmental authorities (i.e.: Town of Carrboro, Chapel Hill—Carrboro City Schools, and Orange County), as further described above under Operations and Maintenance.

Light Level Measurements

Footcandle (fc) measurements are included on the plans in accordance with Section 15-243 of the LUO. An exception to the 0.2 fc limitation otherwise required at all property lines is included in Section 15-243 for recreation lights. Still, the consultant attempted to reduce the intensity of light at all property lines to 0.2 fc, as further described below. It should be noted that three existing parcels (Orange County Tax Map #'s 7.109..11A, 13, and 16C) in Carrboro's jurisdiction are viewed as one for purposes of this project. As the plans demonstrate, the light levels fall well below 0.2 fc on the southern, western, and northern property lines, and measure exactly 0.2 fc along a small portion of the property line immediately west of the fields (**see Attachment F, Sheet E3**). The light levels along the eastern property line range from as low as .01 fc to as high as 1.41 fc, due to proximity of the lights to the property line (approximately 75-feet) as well as the presence of existing lights on the adjacent soccer field (in Chapel Hill's jurisdiction), which project light over the property line.

Also of note, lighting levels on the fields themselves are designed to average thirty (30) fc, which is the industry standard for recreation play.

Conclusion

The lighting plan designed by the consultant exhibits compliance with the lighting provisions of the Town's LUO.

FISCAL IMPACT

Usage fees from the soccer fields are expected to outweigh operating costs for the lights.

RECOMMENDATION

The Town Staff recommends that the Board of Aldermen adopt the attached resolution (**Attachment A**) approving the addition of lights to the Smith Middle School soccer fields.